The Incorporation of Aboriginal and Torres Strait Islander Perspectives into Sustainability Governance

First Author: Katherine Wood, Student, Monash University (corresponding author)

wood.katie01@gmail.com

(+61) 423313599

151/95 Rouse Street, Port Melbourne

Victoria 3207

Australia

Second Author: Dave Griggs, Professor, Monash University

Abstract

Australia's natural environments are more threatened today than they have ever been before. It is apparent that current, western-centric sustainability governance systems are not sufficient to allow Australia's environments to flourish.

The environmental knowledge and philosophy of Australia's Aboriginal and Torres Strait Islander Peoples presents an opportunity to reconstruct our sustainability governance systems. Aboriginal and Torres Strait Islander Peoples promote a holistic conceptualisation of the interdependence between the economy, the environment, society and culture. This helps to break down artificial separations between these spheres as well as between humans and nature, between the urban and the remote and between the inauthentic and the traditional. Such separations are apparent in the way we construct and govern our environments and are at the core of what is preventing truly sustainable development.

Incorporating Aboriginal and Torres Strait Islander perspectives into sustainability governance systems would also lead to a greater emphasis on community participation, natural systems and traditional forms of land-use in our approach to sustainability concerns. Furthermore, it would combat the common association of economic development with social exclusion, disconnection from Country and the loss of Traditional Knowledge for Aboriginal and Torres Strait Islander Peoples.

This paper firstly explores the environmental knowledge and philosophical perspectives of Aboriginal and Torres Strait Islander Peoples. It then highlights how these perspectives can be used to break-down a number of unproductive segregations within the contemporary sustainability paradigm and why it is important to do so. Finally, it discusses both conceptual and practical examples of exactly what this could look like in the context of sustainability governance.

Introduction

Australia's natural environments are more threatened today than they have ever been before. Continual reductions in biodiversity, dangerous levels of pollution, poor water quality and climate change highlight that current sustainability discourses and practices are not sufficient.

Part of what is preventing a more productive and flourishing relationship between humans and the environment is a number of segregations found within the Western conceptualisation of sustainable development. Sustainable development in its current form perceives the economy, society and the environment as separate, whilst only somewhat intersecting, spheres. These segregationist habits penetrate Western views of human-nature

relationships more broadly, encouraging notions of nature as separate to and under the control of humans to further their economic endeavours.

Other apparent polarisations have occurred between humans versus nature, between urban versus remote environments and between Western and Aboriginal and Torres Strait Islander identities. The former are seen as within the human, rational and dominant realm whilst the latter are assigned to the natural, inferior realm, frozen in essentialisms and exclusively subject to ideologies of conservation and authenticity. These separations fail to appreciate the complexity and fluidity of these spheres. As a result, our approaches to sustainability governance are characterised by Western-centric, narrow-minded and socio-culturally exclusive methods.

What is needed is the incorporation of alternative cultural perspectives of sustainability and human-nature relationships. Aboriginal and Torres Strait Islander environmental knowledge and philosophy is captured within the term 'Caring for Country'. Caring for Country offers the dominant culture new and innovative ways to interact with nature and manage its resources for economic, environmental, social and cultural prosperity.

This paper aims to highlight the many benefits that will ensue from incorporating Caring for Country into sustainability governance systems. It will first explore the meaning of Caring for Country. Secondly it will highlight how Caring for Country can be used to deconstruct the harmful segregations implicit within dominant sustainability governance structures and why it is important to do so. Finally, it will examine a number of ways Aboriginal and Torres Strait Islander environmental philosophies could be applied to sustainability governance both conceptually and practically.

A note on terminology

In this paper, the description of 'Western' is used to indicate ideas, peoples and cultures descending from Anglo-European origin which have dominated and continue to dominate the philosophies, structures and institutions of society[1]. The demarcation 'Aboriginal and Torres Strait Islander Peoples' is employed to refer to the First Nation Peoples of Australia. This paper recognises that this terminology collapses a vast number of specific individuals, communities and Traditional Owner groups throughout Australia[2]. However, more localised nomenclature has been avoided to maintain clarity and the relevance of Caring for Country for widespread application to sustainability governance systems.

The term 'Traditional Owners' is defined in this paper as a community of Aboriginal or Torres Strait Islander descent that has a common spiritual affiliation to a particular site or piece of land[3]. This affiliation endows them with the primary spiritual responsibility for and right to forage over that land as per Aboriginal and Torres Strait Islander tradition[4]. 'Traditional Ecological Knowledge' is understood as a 'cumulative body of knowledge, practice, and belief, evolving by adaptive processes and handed down through generations by cultural transmission'[5].

Throughout this paper a number of artificial categorisations and dichotomies are explored and challenged. In order to do so, it must use language that may be interpreted as supporting such segregation. However, the employment of terms such as the economy,

---

[1] Val Plumwood, "Decolonisation Relationships with Nature," *PAN: Philosphy Activism Nature* 2 (2002): 7–30.
[2] Anita Heiss, *Am I Black Enough For You* (Random House Books, 2012), 4.
[3] *Aboriginal Land Rights (Northern Territory) Act*, 1976.
[4] Ibid.
[5] Melanie Zurba and Fikret Berkes, "Caring for Country through Participatory Art: Creating a Boundary Object for Communicating Indigenous Knowledge and Values," *Local Environment* 19, no. 8 (September 14, 2014): 823, doi:10.1080/13549839.2013.792051.

society, culture and environment or Western and Aboriginal and Torres Strait Islander does not seek to further entrench separation. Rather, it is an acknowledgement that whilst these terms are identifiable entities or have elements to be identified with, it is crucial that this phenomenon does not translate into the hyper-separation of artificially imposed categories that limit our relationships with ourselves, each other and our environments. A constructive conversation about the deconstruction of such strict categories must be undertaken with this nuance.

Further, it should be noted that segments of this paper's discussion surrounding Aboriginal and Torres Strait Islander culture and Caring for Country may appear to succumb to colonial essentialisms. However, its exploration of Aboriginal and Torres Strait Islander knowledge and philosophy is largely informed by academic and non-academic literature written by Aboriginal and Torres Strait Islander Australians themselves. Additionally, some statements may seem to be homogenising Aboriginal and Torres Strait Islander's Peoples and cultures. However, it is intended that the explorations of this paper are understood as stemming from one particular framework or account of Aboriginal and Torres Strait Islander environmental perspectives, i.e. Caring for Country. In reality, Aboriginal and Torres Strait Islander identities and relationships with nature are complex, diverse and forever evolving and interacting with contemporary experiences. Finally, the ideas put forward about what Caring for Country is and how it can be applied to sustainability governance must be interpreted as malleable suggestions. These suggestions should be subject to the approval and influence of Aboriginal and Torres Strait Islander individuals and communities for a diverse range of contexts and needs.

Exploring the Meaning of Caring for Country

Aboriginal and Torres Strait Islander environmental knowledge and philosophy is captured within the term 'Caring for Country'. Caring for Country is an approach to the sustainable management of land and sea Country that encapsulates a set of rights, responsibilities and cultural practices[6]. These are handed down through generations of Traditional Owners in the form of customary law and knowledge[7]. Aboriginal and Torres Strait Islander claims to land and sea Country are manifestations of a deep commitment to fulfilling these rights and responsibilities[8]. Caring for Country is also an act of respect for one's ancestors and their contribution to the vitality of Country as well as a commitment to preserving a culture and knowledge system that spans over 50,000 years[9].

The Dreamtime Stories are the primary medium through which customary laws, kinship systems and totem relations are communicated across generations[10]. These stories specify human obligations to their local environment with respect to resource management and symbolise an inseparable and innate human-nature relationship of reciprocal care[11]. In this

---

[6] W. R Atkinson, "A Holistic View of Land & Heritage, Working Paper," *Department of Political Science, Univeristy of Melbourne*, 2004, 1–14; W. R Atkinson, "Relationship between Land, Water & Yorta, Yorta Occupation" (Research Paper, prepared for Yorta Yorta Nations Inc., 1997).

[7] Atkinson, "A Holistic View of Land & Heritage, Working Paper"; Jessica Weir, Claire Stacey, and Kara Youngetob, "The Benefits Associated with Caring for Country," Literature Review (Canberra: Australian Institute of Aboriginal and Torres Straight Islander Services prepared for the Department of Sustainability, Environment, Water, Population and Communities, 2011), 1; Zurba and Berkes, "Caring for Country through Participatory Art," 823.

[8] Atkinson, "A Holistic View of Land & Heritage, Working Paper"; Weir, Stacey, and Youngetob, "The Benefits Associated with Caring for Country."

[9] Atkinson, "A Holistic View of Land & Heritage, Working Paper."

[10] Zurba and Berkes, "Caring for Country through Participatory Art," 824.

[11] R Baker, J Davies, and E Young, "Managing Country: An Overview of the Prime Issues," in *Working On Country - Contemporary Indigenous Management of Australia's Lands and Coastal Regions* (Melbourne: Oxford University Press, 2001), 4–5; Zurba and Berkes, "Caring for Country through Participatory Art," 824.

context, kinship systems extend beyond inter-human relationships and include land, sea and all non-human species[12]. A totem is a particular animal or plant to which a person or Traditional Owner group is specifically related[13]. That person or group is trusted with protecting the spirit of that totem. This involves the preservation of all stories and ceremonies connected to that totemic species[14].

The act of fulfilling obligations to Country nourishes not only environmental welfare, but also economic, social and cultural vitality[15]. Under Caring for Country these realms cannot be separated and are instead entirely interrelated and interdependent. This holistic approach emphasises that not only are cultural, environmental, economic and societal systems not in opposition to one another, but they are necessary for each other's survival[16]. Such a view sheds light on Western perceptions of nature, and in particular wilderness, as being detached from the human realm[17]. Within Western paradigms wilderness has positive connotations of pristine beauty, untouched by human exploitation[18]. Wilderness is to be conserved and protected from human endeavours to reap the profits of nature's fruits[19]. In contrast, Caring for Country asserts that wilderness areas are places of disconnection and catastrophe where humans have neglected their responsibilities and betrayed the land[20]. Country does not require protection from human endeavours of economic productivity and social prosperity. Rather, natural resource use for these purposes should revitalise Country, in turn allowing Country to reciprocate with economic, social and cultural support[21]. An example of this is the practice of firestick farming where traditional burning techniques facilitate the germination of a number of native tree species, thus improving their productivity as an economic resource whilst enriching these native forests[22].

Aboriginal and Torres Strait Islanders' relationship with Country is analogous to the relationship between a parent and child or between a brother and sister. In this way, the loss of or inability to carry out one's duties to Country along with the simultaneous, abhorrent experience of watching from the sidelines as others fail to do so, is significantly traumatic for Aboriginal and Torres Strait Islander Peoples[23]. Disconnection from Country and lack of access to ones' rightful resources is often cited as a primary contributor to the socio-economic disparities experienced by Australia's First Peoples[24]. There are additional fears that without the continuation of traditional practices such as plant harvesting, burning and

---

[12] Aboriginal Education and Training Directorate, "Caring for Place - Caring for Country: Teacher's Booklet" (Darlinghurst, NSW: NSW Department of Education and Training, 2005), 16; Deborah Bird Rose, "Judas Work," *Environmental Philosophy* 5, no. 2 (2008): 51–66.

[13] Aboriginal Education and Training Directorate, "Caring for Place - Caring for Country: Teacher's Booklet."

[14] Ibid., 17; Deborah Bird Rose, *Wild Dog Dreaming: Love and Extinction* (University of Verginia Press, 2011).

[15] Baker, Davies, and Young, "Managing Country: An Overview of the Prime Issues."

[16] O Goston and A Chong, "Living Wisdom: Aborigines and the Environment," in *Aboriginal Australia* (University of Queensland Press, 1994), 1230129; Zurba and Berkes, "Caring for Country through Participatory Art," 827.

[17] William Cronon, "The Trouble with Wilderness: Or, Getting Back to the Wrong Nature," *Environmental History* 1, no. 1 (January 1996): 7, doi:10.2307/3985059; Rose, "Judas Work," 51–52.

[18] Cronon, "The Trouble with Wilderness."

[19] Ibid.

[20] Rose, "Judas Work," 52.

[21] Ibid., 51–52; Weir, Stacey, and Youngetob, "The Benefits Associated with Caring for Country," 3.

[22] Goston and Chong, "Living Wisdom: Aborigines and the Environment."

[23] Atkinson, "A Holistic View of Land & Heritage, Working Paper"; Rose, *Wild Dog Dreaming: Love and Extinction*.

[24] Atkinson, "A Holistic View of Land & Heritage, Working Paper"; Weir, Stacey, and Youngetob, "The Benefits Associated with Caring for Country."

native species protection, the retention and intergenerational transmission of Traditional Ecological Knowledge will be under serious threat[25].

Breaking Down the Segregations of Contemporary Sustainability Governance

The following discussion will explore a number of unproductive segregations that exist within Western paradigms of sustainability governance. These separations stand in the way of our ability to successfully manage sustainability outcomes. Each may be challenged through the incorporation of Caring for Country into sustainability governance.

Since the Brundtland Report of 1987 Western sustainability governance has been approached through the lens of 'sustainable development'. The Brundtland Report dictated what is now considered the standard definition of sustainable development as 'meeting the needs of the present without compromising the ability of future generations to meet their needs'[26]. Sustainable development is often understood as an endeavour to simultaneously nurture the wellbeing of current and future generations as well as the spheres of the economy, society and the environment. Doing so requires ongoing consideration for the social, environmental and intergenerational trade-offs of contemporary economic progress[27]. Within this conceptualisation of sustainable development we see a tendency to view these aspects of welling as separate, whilst somewhat intersecting, spheres[28]. This hyper-separation of the environment, economy and society leads to technologically driven attempts to continue rapid economic progress without degrading surrounding environments and communities 'too much'. There is no questioning of the mantra of progress for progress's sake, no thought given to the potential limits to growth and no vision that economic development could or should nourish and support environmental and social prosperity.

As previously stated, Caring for Country challenges the autonomy of the economy, society and the environment. Thus the so called 'trade-offs' between these realms no longer have meaning as we realise that each exists to nurture one another and become stronger by doing so [29]. There is no economy without the environment, no environment without society, no society without the economy and so on. Such ideas are counter-intuitive to Western paradigms which tend to portray that whilst humans depend on the environment, the environment would continue to survive, and perhaps be better off, without human existence[30]. This misunderstanding is precisely why our relationship with the natural environment is failing[31]. It depicts humans as separate to and in control of nature, thus justifying the commodification and exploitation of nature for the purpose of economic production and wealth[32].

---

[25] Atkinson, "A Holistic View of Land & Heritage, Working Paper"; Weir, Stacey, and Youngetob, "The Benefits Associated with Caring for Country," 1; Zurba and Berkes, "Caring for Country through Participatory Art," 822.

[26] World Commission on Environment and Development, "Our Common Future - A/42/427 Annex - UN Documents: Gathering a Body of Global Agreements," 1987, http://www.un-documents.net/wced-ocf.htm.

[27] Bill Hopwood, Mary Mellor, and Geoff O'Brien, "Sustainable Development: Mapping Different Approaches," *Sustainable Development* 13, no. 1 (February 2005): 2, doi:10.1002/sd.244.

[28] Bob Giddings, Bill Hopwood, and Geoff O'Brien, "Environment, Economy and Society: Fitting Them Together into Sustainable Development," *Sustainable Development* 10, no. 4 (November 2002): 187, doi:10.1002/sd.199.

[29] Giddings, Hopwood, and O'Brien, "Environment, Economy and Society."

[30] Ibid., 191.

[31] Plumwood, "Decolonisation Relationships with Nature."

[32] G. Harward-Nalder, M. Grenfell, and others, "Learning from the Quandamooka" (Royal Society of Queensland, 2011), 495, http://search.informit.com.au/documentSummary;dn=553183892918452;res=IELHSS; Plumwood, "Decolonisation Relationships with Nature"; Rose, *Wild Dog Dreaming: Love and Extinction*.

The segregation of humans and nature has encouraged an additional segregation between the urban and the remote. This artificial dichotomy locates environmental concerns and nature itself in a far-off distant land[33]. As such, conservation and sustainability become attempts to freeze our natural environments in their pristine, untouched state, protected from society's thirst for economic gain[34]. It only takes a brief moment to realise how nonsensical this really is. Firstly, human activity takes place within the environment, all our actions affect the environment and our survival would not be possible without the environment. Secondly, the majority of Australians, who identify both as Aboriginal and Torres Strait Islander or otherwise, reside in urban environments[35]. As such, human contact with nature and its associated benefits is more likely to occur in urban spaces rather than regional and remote settings[36]. Finally, there are many opportunities for humans to encounter nature in urban environments such as parks, street trees, private and public gardens, nature strips and other examples of urban greenspace[37]. The delusion that we are somehow separated from nature in our urban spaces only feeds notions of human dominance and thus risks the continued justification of deleterious environmental impacts. Additionally, it focuses our conservation efforts exclusively on the remote and regional, thus distracting us from the serious environmental concerns that face urban environments[38].

The conceptual separation of remote and urban environments has implications for Aboriginal and Torres Strait Islander identities. In Australia cultural stereotypes of the 'authentic Aborigine' living in harmony with nature in the outback, clean of the vices of economic development have been particularly damaging for Aboriginal and Torres Strait Islander Australians living in urban centres[39]. Aboriginal and Torres Strait Islander Peoples who engage in contemporary society, living and interacting with Western institutions and structures of thinking are seen as void of culture and stripped of their spiritual identity [40]. In reality, urban-based Aboriginal and Torres Strait Islander Peoples and their cultures are still present and still carry laws and responsibilities as custodians of their land[41]. The incorporation of Caring for Country into sustainability governance for both remote and urban environments alike formally exposes the falsehood of stereotypes which project Aboriginal and Torres Strait Islander identities and cultures as only relevant to remote and regional areas of Australia[42]. It also highlights the dynamism and heterogeneity of culture and identity and begins to appreciate that Aboriginal and Torres Strait Islander Peoples possess a multitude of distinctive life histories, experiences, cultural connections and expressions[43]. In

---

[33] Cronon, "The Trouble with Wilderness."
[34] Giddings, Hopwood, and O'Brien, "Environment, Economy and Society," 189.
[35] Guy Barnett, Michael Doherty, and Matthew Beaty, "Urban Greenspace: Connecting People and Nature," *ENVIRONMENT* 13 (2005): 1; Lesley Head et al., "Culture as Concept and Influence in Environmental Research and Management," *Conservation and Society* 3, no. 2 (2005): 258; Henrique Mercer et al., "Eight Examples of Using Indigenous Knowledge for Uban Biodiversity," *Sustainable Cities Collective*, February 11, 2015, http://www.sustainablecitiescollective.com/nature-cities/1043231/bright-side-indigenous-urbanization-biodiversity.
[36] Barnett, Doherty, and Beaty, "Urban Greenspace."
[37] Ibid.
[38] Head et al., "Culture as Concept and Influence in Environmental Research and Management," 258.
[39] Melinda Hinkson, "Encounters with Aboriginal Sites in Metropolitan Sydney: A Broadening Horizon for Cultural Tourism?," *Journal of Sustainable Tourism* 11, no. 4 (2003): 302.
[40] Bronwyn Fredericks and others, "Urban Identity [The Identity of Urban Indigenous Australians.]," *Eureka Street* 14, no. 10 (2004): 30.
[41] Hinkson, "Encounters with Aboriginal Sites in Metropolitan Sydney," 296; I. Watson, "Sovereign Spaces, Caring for Country, and the Homeless Position of Aboriginal Peoples," *South Atlantic Quarterly* 108, no. 1 (January 1, 2009): 27–28, doi:10.1215/00382876-2008-021.
[42] Hinkson, "Encounters with Aboriginal Sites in Metropolitan Sydney," 302.
[43] Ibid.

this way we can begin to develop a broader, multi-layered and more genuine understanding of Australia's identity as a nation[44].

Engaging environmental philosophies outside the centres of power will not only inject creativity into our sustainability solutions but also support social equity. Incorporating alternative views into sustainability governance structures creates a form of eco-socio-cultural democracy[45]. This is a democracy in which a number of diverse cultural perspectives can contribute to the dominant sustainability paradigms that shape people lived realities[46]. Such an avenue to involve and empower Aboriginal and Torres Strait Islander Australians, among other marginalised groups in society, can work towards alleviating experiences of oppression and disadvantage[47]. Throughout Australia's history, Aboriginal and Torres Strait Islander communities and cultures have been pushed to the fringes of society in an attempt to justify the legal fiction of terra nullius and establish Western dominance[48]. As Australia has developed, Aboriginal and Torres Strait Islander views have been continually excluded from the core frameworks and decision making processes that have shaped the nation[49]. As such, many individuals fail to see their voices reflected in either the physical or political landscapes of Australia[50]. Fully engaging Aboriginal and Torres Strait Islander Australians in the governance structures that determine our economic, environmental, social and cultural future can counteract this. It will also combat the frequent association of Australia's development with disconnection from Country and the loss of the Traditional Knowledge and practices for our First Peoples[51].

Additionally, having a multitude of voices embedded in sustainability endows it with meaning for all people's everyday lives. Rather than being imposed from the outside, community members can take ownership of sustainability solutions. In this way, sustainable development initiatives become relevant and sensitive to the complexity of desires and priorities held by the very individuals whose behaviour is so crucial to the success of these endeavours.

It is clear from this discussion that sustainable development requires a fourth tier to its triple bottom line, that is; culture[52]. Culture is often perceived as a subdivision of society. However, it is this paper's stance that culture is no more a subdivision of society than society is a subdivision of culture. More importantly, society is no more a subdivision of culture as economic and environmental views are subdivisions of culture. Culture is a set of beliefs, practices and often unarticulated assumptions which underlie human relations with their animate and inanimate surroundings[53]. Culture shapes the way we form and interact within our societies, the attitudes we have towards economic progress, the value we place on the

---

[44] Ibid.

[45] Hopwood, Mellor, and O'Brien, "Sustainable Development," February 2005.

[46] Bill Hopwood, Mary Mellor, and Geoff O'Brien, "Sustainable Development: Mapping Different Approaches," *Sustainable Development* 13, no. 1 (February 2005): 26, doi:10.1002/sd.244.

[47] Ibid.

[48] Jane M. Jacobs, *Edge of Empire Postcolonialism and the City* (London and New York: Routledge, 1996); Marcia Langton, "What Do We Mean by Wilderness?: Wildnerness and Terra Nullius in Australian Art," *Sydney Papers, The* 8 (1996): 10–31.

[49] Megan Davis, "Treaty, Yeah? The Utility of a Treaty to Advancing Reconciliation in Australia," *Alternative Law Review* 31 (2006): 127–36.

[50] Ibid.; Rau Hoskins, *Our Faces in Our Places: Cultural Landscapes - Maori and the Urban Environment in Re-Thinking Urban Environments and Health* (Wellington, N.Z.: Public Health Advisory Committee, 2008).

[51] Mercer et al., "Eight Examples of Using Indigenous Knowledge for Uban Biodiversity."

[52] R Hill et al., "A Cultural and Conservation Economy for Northern Australia," A Proof-of-Concept Study (Australian Conservation Foundation prepared for Australian Government Land & Water Australia, January 2008).

[53] Head et al., "Culture as Concept and Influence in Environmental Research and Management," 252.

environment and the approaches we take to protect, conserve, restore or support it [54]. We must realise that current notions of sustainable development and human-nature relationships are culturally constructed. Once we have done this, we can begin to reinterpret sustainability governance through alternative cultural lenses and repair these relationships. In fact, sustainable development's power to address the world's most fundamental challenges hinges on this reconceptualization.

Conceptual and Practical Examples of Applying Caring for Country to Sustainability Governance

Specific applications of Caring for Country to Western sustainability governance radiate from the recognition that the above segregations are both false and unhelpful.

One specific conceptual example of how Caring for Country can be applied to sustainability concerns the reconceptualization of our attitudes towards science and technology. Western perceptions of technology often embody desires for mass, global production that extends beyond function or usefulness[55]. In contrast, whilst Aboriginal and Torres Strait Islander scientific knowledge and technology has become more complex and expansive over time, this evolution has been within the limits of one's immediate geographical location as well as one's spiritual and physical necessity[56]. As such, there is no excessive over production, no redundancy and no waste. Most importantly, there is no impersonal exploitation of resources in places completely distinct from the responsible relationships that exist between people and their Country[57]. Technology is an extension of the self, to nourish oneself and one's Country[58]. As a result the impacts of such technology are bound to personal responsibility. Even renewable energy technologies require the extraction of finite materials to harness this energy and thus have flow on consequences for the surrounding environments that we must take into account. This is in contrast with the practices of our globalised world which allow for the exploitation of foreign lands without having to experience the consequences of such exploitation[59]. Allowing Caring for Country to reshape Western perceptions of technology is not a matter of simplistically doing away with global production and returning to self-sufficient local-production[60]. Rather it is a realisation that we must become responsible and extend forms of value and care for those non-local places that are affected by our technologies of production and consumption[61]. Producers and consumers alike must take the initiative to inform themselves regarding how their practices can harm or benefit the people and places that nourish their existence.

Resource use could also be conceptualised very differently with the assistance of Caring for Country. The dominant framework of natural resource management views nature purely in utilitarian terms[62]. Natural resources are deemed as alienable materials to feed economic production. For example, there is a tendency to see water as merely a resource that must be available for consumption at all times. This has led to dire conditions for natural systems

---

[54] Ibid., 251.

[55] Goston and Chong, "Living Wisdom: Aborigines and the Environment," 4.

[56] Ibid., 3.

[57] Banjo Clarke, *Wisdom Man* (Melbourne: Penguine, 2003), 10; Val Plumwood, "Shadow Places and the Politics of Dwelling," *Australian Humanities Review, Eco-Humanities Corner*, no. 44 (2008), http://www.australianhumanitiesreview.org/archive/Issue-March-2008/plumwood.html.

[58] Goston and Chong, "Living Wisdom: Aborigines and the Environment," 3.

[59] Plumwood, "Shadow Places and the Politics of Dwelling."

[60] Ibid.

[61] Ibid.

[62] Plumwood, "Decolonisation Relationships with Nature."

such as the Murray Darling River[63]. The river is rapidly blocking up with silt, filling and emptying with the ocean tides. This is due to heightened demands for irrigation where farms, towns and factories constantly pump more water than would have ever naturally flowed through the river system[64]. A system of damming and flooding that counters the river's natural cycles means that the wetlands are dry when they should be wet and wet when they should be dry[65]. There is little appreciation for the natural patterns of the river or environmental flows that nourish the surrounding ecosystems, so dependent on the river system[66]. In contrast, water is viewed as a vital part of the cultural continuation of the Yorta Yorta people, the Traditional Owners of the land surrounding the Murray Darling River[67]. There is widespread support in the region for a water regime that emulates the natural wetting and drying patterns and the reinstatement of seasonally favourable flooding events to improve the water quality of the Murray[68].

But what could these reconceptualisations mean in practice? Firstly, in the development of our living environments in remote, regional and urban settings, the incorporation of Caring for Country principles would see a greater emphasis on creating opportunities to strengthen community relationships[69]. For example there would be more community centres, facilities, parks, reserves and walkways[70]. This would encourage greater community participation, collaboration and cohesion as well as reconnect people with their responsibilities and obligations to their fellow community members[71]. Community members would be more involved in the design of their lived environments and have avenues to show leadership and take responsibility for the health of these environments. For instance, local councils could set up programs for community monitoring of natural environments, encourage individuals to contribute to rain-tank collection systems or install rooftop solar in their homes[72]. Towns and cities could be reorientated such that important environmental landmarks and restoration projects lay at their centre[73]. Native vegetation could be reintroduced in culturally significant areas to enhance cultural values and provide traditional food and medicinal resources[74]. Such practices would stress humans' connectedness and reliance on nature and have the added benefit of reducing erosion, runoff and contamination whilst creating new habitats and supporting biodiversity[75]. We would also see the employment of low-impact technologies which not only provide services at low environmental cost but also give back to the environment such as swale systems for stormwater, grey-water recycling systems and passive solar design[76].

Around the world, there are examples of attempts to meaningfully incorporate Indigenous or Traditional Ecological perspectives into the physical planning, design and practices of

---

[63] Bill Neidjie, "Introduction," in *Kakadu Man* (NSW: Mybrood P/L, 1985), 35–38; Deborah Bird Rose, "Multispecies Knots of Ethical Time," *Environmental Philosophy* 9, no. 1 (2012): 138; Geoff Strong, "A River Runs Through It But for How Much Longer," *The Sunday Age*, June 7, 1998.
[64] Strong, "A River Runs Through It But for How Much Longer."
[65] Ibid.
[66] Ibid.
[67] Atkinson, "Relationship between Land, Water & Yorta, Yorta Occupation."
[68] Ibid., 6.
[69] Garth Harmsworth, "The Role of Maori Values in Low-Impact Urban Design and Development (LIUDD)," Discussion Paper (Palmerston North: Landcare Research NZ Ltd., n.d.), http://www.landcareresearch.co.nz/publications/researchpubs/harsworth_maori_LIUDD.pdf.
[70] Shaun Awatere et al., "Tū Whare Ora: Building Capacity for Māori Driven Design in Sustainable Settlement Development" (Research Report, Landcare Research, Hamilton, New Zealand, 2008), http://www.tearanga.maori.nz/cms/resources/TuWhareOraFinalReport-1.pdf.
[71] Ibid.
[72] Ibid.
[73] Ibid.
[74] Harmsworth, "The Role of Maori Values in Low-Impact Urban Design and Development (LIUDD)."
[75] Ibid.
[76] Awatere et al., "Tū Whare Ora."

sustainability. Traditional agro-ecological knowledge has been used to combat the negative effects of the drawdown zone in Wuyang Bay of Hangfeng Lake. Hangfeng Lake is the second largest urban lake in China and was recently designated an urban wet-land park[77]. Negative impacts of drawdown zones include soil erosion, habitat and cultural heritage loss, and aesthetic degradation. A modified pond-land terrace land/water use (MLPT) system was used to maximise ecosystem services based on a combination of the local practices of paddy terrace and dike-fish pond farming with modern ecological restoration design analysis[78]. The system comprises of water retention ponds at the top, vegetation fields in the middle and a reservoir lake at the bottom. The design was developed through a consultation project with residents around the site regarding their agricultural practices and techniques to reduce runoff and soil erosion[79]. The implementation of the MLPT system was shown to reduce resource depletion, lake pollution risks, soil erosion, and nutrient flow and improve the integrity of natural and managed ecosystems[80]. Additionally, there was broad community support for the MLPT system with locals reporting exhilaration to have their agricultural practices featured in an urban park and willingness to participate in the expansion and maintenance of the system[81].

In Cape Town, South Africa conservation officials worked with the Rasta Bossiedoktors (traditional bush doctors) to plant a number of Indigenous plants of medicinal significance on the Seawinds open-access street garden[82]. This process took place in a number of low income areas and served to strengthen both ecosystem resilience and empower local communities[83]. The project added to the aesthetics of the areas, increased the value of the residential streets, supported biodiversity and opened up avenues for communication and collaboration between the Rasta and conservationists[84].

The city council of Auckland, New Zealand has an independent Maori Statutory Board and a Pacific People Advisory Council to ensure their consideration of Maori and Pacific Islander interests, priorities and values within urban planning[85]. The city also has a Maori Strategy and Relations department which sees that obligations towards the Maori people are met. Consequently, the Auckland City Council has developed a sustainable urban design framework with the ultimate goal of encapsulating the city's unique Maori, Pacific and multicultural history and identity[86]. This includes the combining of Maori values and approaches within Western-centric architecture, design and engineering in order to achieve a socially, culturally and environmentally sensitive design[87].

Australia has already partially recognised the value of Caring for Country for sustainability outcomes. Australia has over 70 declared Indigenous Protected Areas (IPA) which offers opportunities for Aboriginal and Torres Strait Islander People to care for Country[88]. Each IPA is actively managed by its Traditional Owners who work to protect their land's plants, animals and cultural sites through a combination of traditional and contemporary

---

[77] Chundi Chen et al., "Restoration Design for Three Gorges Reservoir Shorelands, Combining Chinese Traditional Agro-Ecological Knowledge with Landscape Ecological Analysis," *Ecological Engineering* 71 (October 2014): 584, doi:10.1016/j.ecoleng.2014.07.008.
[78] Ibid.
[79] Ibid., 586.
[80] Ibid., 595.
[81] Ibid.
[82] Mercer et al., "Eight Examples of Using Indigenous Knowledge for Uban Biodiversity."
[83] Ibid.
[84] Ibid.
[85] Ibid.
[86] Ibid.
[87] Ibid.
[88] The Australian Government, Department of the Environment, "Declared Indigenous Protected Areas - Case Studies," n.d., http://environment.gov.au/indigenous/ipa/declared/index.html.

environmental resource management techniques[89]. The Working on Country programs are another example where local Aboriginal and Torres Strait Islander communities have been recognised as valuable contributors to the protection and conservation of Australia's natural and cultural heritage. Working on Country employs more than 680 Indigenous rangers in approximately 95 Ranger teams across Australia to deliver environmental outcomes[90]. The practices undertaken within IPA's and Working on Country programs include the removal of invasive species, native re-vegetation, improvement of water quality, protection of native fauna, traditional harvesting and burning techniques, biodiversity management and ecosystem monitoring [91].

The above initiatives in Australia are extremely valuable in their ability to deliver documented economic, environmental, social and cultural benefits[92]. However, they are generally circumscribed to remote or regional Australia, areas that are deemed sufficiently pristine to warrant conservation. These are also areas that are outside the spheres of economic power and are therefore seen as acceptable spaces over which Aboriginal and Torres Strait Islander Peoples may exert some influence or control[93]. As such, the exclusive application of Caring for Country to sustainability outcomes in remote and regional Australia can be interpreted as yet another contemporary manifestation of the Australian, dominant culture's tendency to marginalise and neglect both its First Peoples and those natural environments that do not satisfy its notions of wilderness.

Conclusion

The environmental philosophy and knowledge of Aboriginal and Torres Strait Islander Peoples, encapsulated in the term Caring for Country, has much to offer Western sustainability governance structures. Reconceptualising sustainable development through the lens of Caring for Country liberates a number of dangerous segregations within Western sustainable development discourses. This includes the barriers resurrected between the economy, society, culture and the environment, between the urban and the remote and between the traditional and the inauthentic that have been so counterproductive for human-nature relationships. It also appreciates the importance of including a diversity of cultural perspectives into our decision making processes so that our political and physical landscapes do not exclusively reflect voices within the centre of power.

Caring for Country could be applied to Western sustainability governance structures in a multitude of ways. Our lived spaces could be designed to support community participation and collaboration. Programs could be developed to motivate leadership and community ownership over sustainability outcomes. Traditional techniques could be used to reimagine economic development in ways that nourish communities and environments rather than degrading them. Technology and resource use could be entirely reworked to encourage greater awareness of society's reliance on and emotional connectedness with the local and global environments that nourish our existence. It is the application of Caring for Country to sustainability on a global scale that will be the most challenging yet most valuable and warrants further exploration.

---

[89] Ibid.

[90] Australian Government Department of the Environment, "Working on Country - Home Page," February 6, 2015, http://www.environment.gov.au/indigenous/workingoncountry/.

[91] Anthony C. Grice, Jacob Cassady, and David M. Nicholas, "Indigenous and Non-Indigenous Knowledge and Values Combine to Support Management of Nywaigi Lands in the Queensland Coastal Tropics," *Ecological Management & Restoration* 13, no. 1 (2012): 93–97.

[92] Weir, Stacey, and Youngetob, "The Benefits Associated with Caring for Country."

[93] Jacobs, *Edge of Empire Postcolonialism and the City*; Langton, "What Do We Mean by Wilderness?: Wildnerness and Terra Nullius in Australian Art."

There are a number of examples Australia can turn to around the world where dominant sustainability paradigms have drawn from Traditional, Indigenous Knowledge in ways that have supported sustainability outcomes and given meaningful agency to these communities. Australia has begun to appreciate the value of Caring for Country for sustainability governance in remote and regional environments. However, Aboriginal and Torres Strait Islander Peoples continue to be excluded from the centres of power that determine the economic, social, environmental and cultural development of this country. The unqualified recognition of the right of Aboriginal and Torres Strait Islander Australians to be engaged in decision making processes that affect their futures can provide avenues to rectify this.

The success of sustainable development requires a significant shift in dominant, Western, technocratic views of the world. Continuing to separate our lived realities into distinct compartments of economic, social, environmental and cultural, of humans and nature, of urban and remote and of inauthentic and traditional will deliver the same unsustainable results. It is time to engage in a trans-cultural, trans-disciplinary worldview that recognises all humans everywhere as part of a wide web of connections and responsibilities to both our environment and each other.

References

Aboriginal Education and Training Directorate. "Caring for Place - Caring for Country: Teacher's Booklet." Darlinghurst, NSW: NSW Department of Education and Training, 2005.

Aboriginal Land Rights (Northern Territory) Act, 1976.

Atkinson, W. R. "A Holistic View of Land & Heritage, Working Paper." *Department of Political Science, Univeristy of Melbourne*, 2004, 1–14.

———. "Relationship between Land, Water & Yorta, Yorta Occupation." Research Paper, prepared for Yorta Yorta Nations Inc., 1997.

Australian Government Department of the Environment. "Working on Country - Home Page," February 6, 2015. http://www.environment.gov.au/indigenous/workingoncountry/.

Awatere, Shaun, C. Pauling, R. Hoskin, and S. Rolleston. "Tū Whare Ora: Building Capacity for Māori Driven Design in Sustainable Settlement Development." Research Report, Landcare Research, Hamilton, New Zealand, 2008. http://www.tearanga.maori.nz/cms/resources/TuWhareOraFinalReport-1.pdf.

Baker, R, J Davies, and E Young. "Managing Country: An Overview of the Prime Issues." In *Working On Country - Contemporary Indigenous Management of Australia's Lands and Coastal Regions*, 1–23. Melbourne: Oxford University Press, 2001.

Barnett, Guy, Michael Doherty, and Matthew Beaty. "Urban Greenspace: Connecting People and Nature." *ENVIRONMENT* 13 (2005): 1.

Chen, Chundi, Colin Meurk, Jilong Chen, Mingquan Lv, Zhaofei Wen, Yi Jiang, and Shengjun Wu. "Restoration Design for Three Gorges Reservoir Shorelands, Combining Chinese Traditional Agro-Ecological Knowledge with Landscape Ecological Analysis." *Ecological Engineering* 71 (October 2014): 584–97. doi:10.1016/j.ecoleng.2014.07.008.

Clarke, Banjo. *Wisdom Man*. Melbourne: Penguine, 2003.

Cronon, William. "The Trouble with Wilderness: Or, Getting Back to the Wrong Nature." *Environmental History* 1, no. 1 (January 1996): 7. doi:10.2307/3985059.

Davis, Megan. "Treaty, Yeah? The Utility of a Treaty to Advancing Reconciliation in Australia." *Alternative Law Review* 31 (2006): 127–36.

Fredericks, Bronwyn, and others. "Urban Identity [The Identity of Urban Indigenous Australians.]." *Eureka Street* 14, no. 10 (2004): 30.

Giddings, Bob, Bill Hopwood, and Geoff O'Brien. "Environment, Economy and Society: Fitting Them Together into Sustainable Development." *Sustainable Development* 10, no. 4 (November 2002): 187–96. doi:10.1002/sd.199.

Goston, O, and A Chong. "Living Wisdom: Aborigines and the Environment." In *Aboriginal Australia*, 1230129. University of Queensland Press, 1994.

Grice, Anthony C., Jacob Cassady, and David M. Nicholas. "Indigenous and Non-Indigenous Knowledge and Values Combine to Support Management of Nywaigi Lands in the Queensland Coastal Tropics." *Ecological Management & Restoration* 13, no. 1 (2012): 93–97.

Harmsworth, Garth. "The Role of Maori Values in Low-Impact Urban Design and Development (LIUDD)." Discussion Paper. Palmerston North: Landcare Research NZ Ltd., n.d. http://www.landcareresearch.co.nz/publications/researchpubs/harsworth_maori_LIUDD.pdf.

Harward-Nalder, G., M. Grenfell, and others. "Learning from the Quandamooka." Royal Society of Queensland, 2011. http://search.informit.com.au/documentSummary;dn=553183892918452;res=IELHSS.

Head, Lesley, David Trigger, Jane Mulcock, and others. "Culture as Concept and Influence in Environmental Research and Management." *Conservation and Society* 3, no. 2 (2005): 251.

Heiss, Anita. *Am I Black Enough For You*. Random House Books, 2012.

Hill, R, E. K. Harding, D Edwards, J O'Dempsey, D Hill, A Martin, and S McIntyre-Tamwoy. "A Cultural and Conservation Economy for Northern Australia." A Proof-of-Concept Study. Australian Conservation Foundation prepared for Australian Government Land & Water Australia, January 2008.

Hinkson, Melinda. "Encounters with Aboriginal Sites in Metropolitan Sydney: A Broadening Horizon for Cultural Tourism?" *Journal of Sustainable Tourism* 11, no. 4 (2003): 295–306.

Hopwood, Bill, Mary Mellor, and Geoff O'Brien. "Sustainable Development: Mapping Different Approaches." *Sustainable Development* 13, no. 1 (February 2005): 38–52. doi:10.1002/sd.244.

———. "Sustainable Development: Mapping Different Approaches." *Sustainable Development* 13, no. 1 (February 2005): 38–52. doi:10.1002/sd.244.

Jacobs, Jane M. *Edge of Empire Postcolonialism and the City*. London and New York: Routledge, 1996.

Langton, Marcia. "What Do We Mean by Wilderness?: Wildnerness and Terra Nullius in Australian Art." *Sydney Papers, The* 8 (1996): 10–31.

Mercer, Henrique, Viviana Figueroa, Andre Mader, Montreal Hillel, and input from UNU-IAS, UN-Habitat & UNEP. "Eight Examples of Using Indigenous Knowledge for Uban Biodiversity." *Sustainable Cities Collective*, February 11, 2015. http://www.sustainablecitiescollective.com/nature-cities/1043231/bright-side-indigenous-urbanization-biodiversity.

Neidjie, Bill. "Introduction." In *Kakadu Man*, 35–38. NSW: Mybrood P/L, 1985.

Plumwood, Val. "Decolonisation Relationships with Nature." *PAN: Philosphy Activism Nature* 2 (2002): 7–30.

———. "Shadow Places and the Politics of Dwelling." *Australian Humanities Review, Eco-Humanities Corner*, no. 44 (2008). http://www.australianhumanitiesreview.org/archive/Issue-March-2008/plumwood.html.

Rau Hoskins. *Our Faces in Our Places: Cultural Landscapes - Maori and the Urban Environment in Re-Thinking Urban Environments and Health*. Wellington, N.Z.: Public Health Advisory Committee, 2008.

Rose, Deborah Bird. "Judas Work." *Environmental Philosophy* 5, no. 2 (2008): 51–66.

———. "Multispecies Knots of Ethical Time." *Environmental Philosophy* 9, no. 1 (2012): 127–40.

———. *Wild Dog Dreaming: Love and Extinction*. University of Verginia Press, 2011.

Strong, Geoff. "A River Runs Through It But for How Much Longer." *The Sunday Age*, June 7, 1998.

The Australian Government, Department of the Environment. "Declared Indigenous Protected Areas - Case Studies," n.d. http://environment.gov.au/indigenous/ipa/declared/index.html.

Watson, I. "Sovereign Spaces, Caring for Country, and the Homeless Position of Aboriginal Peoples." *South Atlantic Quarterly* 108, no. 1 (January 1, 2009): 27–51. doi:10.1215/00382876-2008-021.

Weir, Jessica, Claire Stacey, and Kara Youngetob. "The Benefits Associated with Caring for Country." Literature Review. Canberra: Australian Institute of Aboriginal and Torres Straight Islander Services prepared for the Department of Sustainability, Environment, Water, Population and Communities, 2011.

World Commission on Environment and Development. "Our Common Future - A/42/427 Annex - UN Documents: Gathering a Body of Global Agreements," 1987. http://www.un-documents.net/wced-ocf.htm.

Zurba, Melanie, and Fikret Berkes. "Caring for Country through Participatory Art: Creating a Boundary Object for Communicating Indigenous Knowledge and Values." *Local Environment* 19, no. 8 (September 14, 2014): 821–36. doi:10.1080/13549839.2013.792051.