



Values in nature conservation, tourism and UNESCO World Heritage Site stewardship

Janne J. Liburd & Susanne Becken

To cite this article: Janne J. Liburd & Susanne Becken (2017) Values in nature conservation, tourism and UNESCO World Heritage Site stewardship, Journal of Sustainable Tourism, 25:12, 1719-1735, DOI: [10.1080/09669582.2017.1293067](https://doi.org/10.1080/09669582.2017.1293067)

To link to this article: <https://doi.org/10.1080/09669582.2017.1293067>



Published online: 08 Mar 2017.



Submit your article to this journal [↗](#)



Article views: 1068



View Crossmark data [↗](#)



Citing articles: 5 View citing articles [↗](#)

Values in nature conservation, tourism and UNESCO World Heritage Site stewardship

Janne J. Liburd^a and Susanne Becken^b

^aCentre for Tourism, Innovation and Culture, University of Southern Denmark, Kolding, Denmark; ^bDepartment of Tourism, Griffith University, Gold Coast, Australia

ABSTRACT

This paper seeks to understand the complex values held by those involved in Protected Area and World Heritage stewardship. Using IUCN Protected Area categories, a values framework is developed and applied to demonstrate how values guide stewardship in protected areas. In-depth interviews with key tourism operators, public sector managers and other stakeholders from the iconic World Heritage Site and tourism destination, Australia's Great Barrier Reef (GBR) reveal how shifting ideologies and government policies increased pressures on nature, resulting in new alliances between stewards from the tourism sector and national and international organisations. These alliances were built on shared nature conservation values and successfully reduced increasing development pressures. Three distinct phases in this process emerged at the GBR, which were driven by personal values held by tourism industry representatives, and their recognition of tourism's reliance on nature for business success. Changing mainstream ideologies and political values can erode World Heritage and Protected Areas, and recalibrate values – including the universal values on which World Heritage Sites depend – towards more anthropocentric interpretations. The values framework presented here could be a powerful tool for stewards involved in conservation to remind those who merely manage and govern of the original nature-focused values.

ARTICLE HISTORY

Received 7 June 2016
Accepted 27 January 2017

KEYWORDS

Stewardship; values; IUCN; tourism; UNESCO World Heritage; Great Barrier Reef

Introduction

Tourism has long been at the core of a controversial debate in protected natural areas around the commercial use of nature versus its conservation, reflecting the inherent complexity of the tourism–nature relationship, the critical influence of contextual factors, and dynamic changes in both the human and natural elements of the system. The tourism sector is not the only interest group involved in questions surrounding nature conservation, and tourism stakeholders often work alongside dedicated resource managers, community groups, non-governmental organisations (NGOs) and Indigenous people, all of whom have value-based belief systems. The values of those groups are important; they comprise the people that support protection of parks – or not (Jones & Shaw, 2012). It, therefore, becomes imperative to study the value dynamics that contribute to the tourism sector taking a more or a less symbiotic stance to nature, rather than focusing on a fixed-in-time arrangement of system attributes, interests and powers (Espiner & Becken, 2014).

How do human beings value nature? Values can be seen as determining priorities, as internal compasses or as springboards for action resembling moral imperatives that implicitly or explicitly guide action (Oyserman, 2001). Importantly, dominant values, and the paradigms in which they are embedded, change over time (Becken, 2016). And values have a geographic expression, a question discussed later in this paper.

Over the past centuries, the dominant Western view of nature has shifted substantially from a hostile view of nature to be controlled by man, followed by a nineteenth-century romantic view in awe of nature, to one of conservation or wise use (Larrère, 2008). Each of these positions reflects a philosophical separation of man from nature. Highlighting different philosophical stances, Urry (1995) divided humans into either “exploiters” or “stewards” of nature, and Harrison (1996) identified the “blue greens” (who favour a market approach), “red greens” (who mix some form of environmentalism with some form of socialism) and “really (or radical) greens” (who refuse to see nature reduced to a set of resources ready to be consumed or destroyed) (p. 69).

To gain deeper understanding about how we construct values and meanings of nature, Tribe and Liburd’s (2016) conceptualisation of a knowledge force field is informative. They identify the factors creating the knowledge system as government, ideology, global capital, position and person. Governments have the power to define, select and fund areas for protection. Tribe and Liburd (2016) refer to “ideology” in a broad sense to cover the influence of both tacit and explicit value systems. Ideas of neo-liberalism and capitalism are covered under ideology, but “global capital” has a material dimension and exerts its direct power through money and its indirect power through influence. “Position” encompasses geographic location, institutional or organisational affiliation as well as language, national and cultural communities. “Person” indicates our inability to escape our embodied selves (Crouch, 2000). As human beings we carry with us autobiographies, socialisation, culture, gender, sexual orientation, instinct, our senses (Tribe & Liburd, 2016, p. 54) and thus our values. The point about the force field is that seemingly interest-free values about nature are subject to multiple forces that shape and make stewardship of nature, including both global and local ones (Becken & Job, 2014).

Natural World Heritage Sites are globally recognised as the world’s most important Protected Areas (PA) (International Union for Conservation of Nature [IUCN], 2016a). There are 238 natural World Heritage Sites in the world representing about 0.1% of the total number of PAs globally and 8% of the combined surface area covered by PAs (IUCN, 2016a). The Great Barrier Reef (GBR) in Australia – the focus of this research – is one of the most iconic World Heritage Sites. The GBR World Heritage Site is a natural asset of global significance and home to the world’s most diverse marine and terrestrial ecosystems. Based on a mix of different IUCN categories, the GBR is zoned to ensure an appropriate balance between ecosystem protection and economic use. It is managed under a complex governance structure that involves several Australian Federal and State Government Agencies, including the GBR Marine Park Authority (GBRMPA). In addition, a large number of natural resource management bodies, industry groups, communities and individuals are involved in GBR stewardship. Despite the protection in place, ever since its World Heritage designation in 1981, scientists have been concerned about declines in the environmental integrity of the GBR (De’ath, Fabricius, Sweatman, & Puotinen, 2012). Several Reef Water Quality Protection Plans (2003 and 2009, Queensland Government, 2014) have been implemented, and partnerships and taskforces have been formed, but the GBR continues to degrade (GBRMPA, 2016).

The GBR attracts over 2.2 million international and 1.7 million domestic visitors annually (Tourism Research Australia, 2015), generating economic benefits for Australia of AU\$6.4 billion (Deloitte Access Economics, 2013). The Reef’s tourism industry inherently depends on a healthy natural environment, and is also likely to benefit from the World Heritage brand value. Following the 2012 UNESCO mission to potentially add the GBR to the List of Endangered World Heritage Sites, the risk of losing the World Heritage brand triggered concerted action by the tourism sector. The perceived symbiosis between tourism and nature conservation was epitomised in the following statement by the Chief Executive Officer of the Queensland Tourism Industry Council: “A strong argument can be

made that World Heritage Areas that have high visitation levels are more likely to remain protected and well managed as a result of political and commercial pressure” (Gschwind, 2013, p. 178).

The principal motivation for this research is to identify values connected to the World Heritage status and the PA itself, and understand how these values have driven and continue to drive the stewardship alliances of the GBR. Stewardship alliances can be more or less formalised, but they are likely to be strategic, as they reflect “purposive arrangements between two or more independent organisations that form part of, and are consistent with participants’ overall strategies, and contribute to the achievement of their strategically significant objectives that are mutually beneficial” (Pansiri, 2008, p. 101). The distinction between stewardship and governance, the act of governing, is important. Governance denotes a “conceptual and representational role of the state in the coordination of socio-economic systems” (Hall, 2011, p. 439). The concept of governance is void of meaning without the centrality of the state, even if issues of network relationships and public–private partnerships are involved (Rhodes, 1997). Informal governance is exercised by stewards who care, display loyal devotion and identify with the conservation of PAs beyond their own and state interests. Examining the role of values in PAs is a novel way of understanding the different IUCN protection categories. The values linked with the different categories serve as moral compasses to verify how (well) an area is protected. Interpreting values as a guide for actions (Kollmuss & Agyeman, 2002) then also allows using such a value framework as a tool to ensure ongoing stewardship and conservation in the face of shifting dominant political ideologies.

The role of values is central to World Heritage Sites, which are unique PAs because they are based on the complex concept of Outstanding Universal Value (OUV) (UNESCO, 1972, 2007). Whilst many values are often local, tribal or national, the concept of universal values, by definition, should be relevant to everyone, including visitors from around the world. While “conventional” PAs may face changing values over time, such changes are more complex for World Heritage Sites. This is so because they are determined multinationally, and universality should be especially resistant to change. The relevance of understanding OUV is critical for World Heritage Sites in the day-to-day *realpolitik* of governance, where local and national stakeholders are in control, with only occasional, but potentially powerful inputs from UNESCO in Paris representing those universal values. The IUCN and UNESCO enjoy a long-standing trajectory that includes co-drafting of the 1972 World Heritage Convention text and the IUCN is explicitly recognised within the Convention as the technical Advisory Body on nature to the World Heritage Committee (IUCN, 2016b). Thus, attaching values of nature to the IUCN categories aligns well with the philosophy that underpins the OUV of World Heritage Sites.

In the following parts of this paper, a literature review unpacks the underpinning values that guide PA stewardship, and an original IUCN values framework is developed and explained. After introducing the methodology employed, the analysis of stakeholder interviews uncovers a range of values and actions that evolved in the course of three distinct phases at the GBR: pre 2012, from 2012 to 2014, and post 2014. Emphasis is given to the acute crisis in the middle phase, when the Reef was at great risk from industrial development but had reduced protection from the Government.¹ The values framework is applied to demonstrate how mainstream values changed and how, in response, GBR stewards from the tourism industry shifted alliances based on shared values to successfully fend off neo-liberal pressures. The paper concludes by arguing that the values framework can be used by anyone interested in PA management as a compass to assess and steer long-term stewardship that assures conservation of biodiversity and site integrity beyond parochial interests and changing governance regimes.

Protected areas, tourism and World Heritage

The following presents a classification of PAs and focuses on the values of nature that guide stewardship. An original value framework derived from the IUCN protection categories is presented.

Protected area categories and values

The designation of PAs is not a neutral undertaking. Framing a particular area deemed to be of national or international significance in itself is influenced by government, power, ideology, capital and ultimately by somebody in a position able to sanction and legally uphold nature conservation. Endorsing specific spaces, events, accounts and ecologies is a powerful display of selective renderings of history by government, a display that may be read as symbols used in contemporary identity creation. It is selective because the historic events chosen include but a fraction of all happenings that have taken place over a particular time span. Therefore, protected area designation can be understood as resulting from an accumulation of power, ideology and meanings ascribed to a space. Place construction of PAs is both a cultural concept and a practical project. It is cultural because shared meanings and values are continuously attributed to specific environments. The processual approach signifies that these are open to multiple interpretations, management and values, which may be contested and adapted over time.

The widely accepted definition of a PA by the EUROPARC Federation (see www.europarc.org/) and the IUCN (2000, p. 11) states: “A clearly defined geographical space, recognised, dedicated and managed, through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values.” The IUCN (2008) identifies seven management categories to distinguish the specific aims, objectives and concerns of PAs. Detailed definitions and management actions typically involved can be found at <https://www.iucn.org/theme/protected-areas/about/protected-areas-categories>.

Table 1 captures the definitions and primary objectives, and lists related law and policy tools. It also adds and names six anthropocentric values of nature, developed uniquely for this research. For example, IUCN Protected Area Categories 1a and 1b represent strict preservation, which means that nature is perceived as having intrinsic value. This value of nature is referred to as “man of nature”. If nature is a resource to be used by man, as seen in IUCN Category 6, it is named “man above nature”.

Category 1a: areas must conserve outstanding ecosystems, species or geodiversity through strict management. Nature has intrinsic value. Termed “man of nature”, humanity is only one of many other living organisms. In practical PA management terms, human intrusion is mainly for scientific purposes to inform management. Category 1b aims to preserve wilderness areas undisturbed by significant human activity.

Category 2: national or marine parks protect biodiversity, ecological processes and support recreational activity. Through management policies and strict monitoring, the term “man in nature” values education and controlled activities in nature.

Category 3: areas protect specific natural features through legislation and monitoring. “Man with nature” values the relationship between human beings and the environment but is largely alienated from nature aside from planned or occasional visits.

Category 4: protection of specific habitats or species through active intervention is valued by “man for nature”. Management measures are taken to protect flora and fauna from invasive species, and various forms of animal population control may be in place.

Category 5: protection of distinct ecological, biological or cultural importance is founded on man’s longitudinal interaction with nature. “Man and nature” represents co-existence that makes use of monitoring and traditional management techniques.

Category 6: conservation of ecosystems and habitats is linked to cultural practices that allow for balanced, low-level non-industrial utilisation, including “traditional” agriculture and forestry. Nature is valued, using the term “man above nature”, where nature is a resource for human use although not for “industrial” exploitation or intensive “modern” farming.

Table 1 draws attention to PA categories and management tools, in combination with the anthropocentric values that guide nature conservation. In all of the IUCN categories, nature is seen as manageable and predictable by man (Plummer & Fennell, 2009), represented in particular by “man and nature” and “man above nature”. Supported by well-established concepts such as carrying capacity and sustainable yield, law and policies are predicated in a hierarchical, technologically based and

Table 1. Protected area values framework.

IUCN Category	Definition	Primary objective	Law and Policy	Values of Nature
1a. Strict Nature Reserve and 1b. Wilderness Areas	Strictly protected areas set aside to protect biodiversity and possibly geological/geomorphical features.	To conserve regionally, nationally or globally outstanding ecosystems, species and/ or geodiversity features.	Legislation and Treaties. National and international policies and treaties. Management mainly for science.	<i>man of nature</i> Human use and impacts are strictly controlled and limited. Nature has intrinsic value. No recreational visitation is allowed.
2. National Park, including Marine Reserves	Large natural or near natural areas set aside to protect large-scale ecological processes and recreation.	To protect natural biodiversity, ecological structure, supporting environmental processes.	Policy development: Setting legal standards, strict monitoring.	<i>man in nature</i> A foundation to protect and promote education. Controlled environmentally and culturally compatible recreation is possible.
3. Natural Monument or Feature	Conservation of specific natural features.	To protect specific outstanding natural features. Many enjoy high visitor value.	Compliance and Watchdog. Legislation and monitoring.	<i>man with nature</i> Recreational visits to pay tribute to specific features. These may involve education.
4. Habitat/Species Management	Protection of particular species or habitats.	To maintain, conserve and restore species and habitats.	Compliance and Intervention. Policy options, litigation, prosecution.	<i>man for nature</i> Bans on killing specific species, habitat management. Recreational activities encouraged.
5. Protected Landscape/ Seascape	The interaction of people and nature over time has produced a distinct area with significant ecological, biological, cultural and scenic value.	To protect and sustain important landscapes/ seascapes and other values created by interactions with humans.	Devolution of control. Monitoring. Traditional management practices, civil suits.	<i>man and nature</i> Co-existence. Protection of distinct areas with a pronounced mandate for sightseeing and recreational activities.
6. Protected Area with sustainable use of natural resources.	Conservation of ecosystems and habitats together with associated cultural values and traditional natural resource management systems.	To protect natural ecosystems and sustainable use when mutually beneficial.	Natural resource management.	<i>man above nature</i> Low-level, non- industrial use of natural resources. Tourism compatible with nature conservation.

Source: Adapted from Dudley (2008) and Brockington, Duffy, and Igoe (2008, p. 11).

linear fashion (Holling, Gunderson, & Ludwig, 2002; Plummer & Fennell, 2009). However, behaviours are not predictable and the real world does not operate in a mechanistic way (McDonald, 2009). Without recognition of the dynamic complexities of both nature and shifting values, such reductionist views of the world will fail to deliver the agreed conservation goals. Arguably, a holistic understanding of PA management is needed that is accountable against moral imperatives that lie beyond mere governance of those in charge at the time. This discussion continues below in relation to PA stewardship, tourism and UNESCO World Heritage.

Stewardship

The concept of stewardship differs from stakeholder and agency theories, both of which find their justification in self-preservation, economic motives and a pragmatist, rational approach to management (Bernstein, Buse, & Bilimora, 2016; Donaldson & Davis, 1991; Freeman, Wicks, & Pamar, 2004). In other words, stakeholder and agency theories have a strong individualistic focus, which can jeopardise the greater environmental and societal good. Stewardship theory does not reject individual

motivations, but suggests that those involved gain benefit by putting the interests of others above their own and pursuing actions that generate their own intrinsic rewards (Neubaum, 2013). Neubaum (2013) defines stewardship as “caring and loyal devotion to an organization, institution, or social group” (p. 2). The concept of stewardship thus puts emphasis on the people involved in conservation efforts, their personal values and dynamic interrelations.

The formal governance arrangements at UNESCO World Heritage Sites are often complemented by stewardship that involves alliances across local, national and international levels. Appreciating the dynamic nature of tourism in World Heritage Areas, these alliances are constituted in and through shifting ideologies, government, global capital, position and the persons influencing policies. Stewardship alliances between those holding similar values of nature may be central to ensuring PA resilience and integrity over time (Becken, 2013; Plummer & Fennell, 2009; Scharin et al., 2016). We hypothesise that the nature values of those who act as stewards are less vulnerable to change and erosion, as they are deeply anchored in personal eco-centric ideologies. Changes in alliances are then evidence of adaptive processes in response to the increasing vulnerabilities of exposed systems and the potential for disruption and crises (Espiner & Becken, 2014).

Tourism and World Heritage

Two interdependent dimensions of biodiversity preservation and levels of visitation underpin the IUCN classification system for PAs (Whitelaw, King, & Tolkach, 2014). Numerous insightful studies have analysed the meanings, management and use of PAs (e.g. Day et al., 2012; Liburd, 2006; McCool, 2009; Plummer & Fennell, 2009). Common to all these studies are the importance PAs have acquired as tourist destinations, against a background of growing popularity of “eco-” or “nature-based” tourism (Holden, 2015). However, the negative impacts sometimes associated with visitation and profit-seeking tourism businesses may be incompatible with nature conservation. Such a “use–conservation gap” (Jamal & Stronza, 2009, p. 171) can be illustrated by a Category 1 “man of nature” protected ecosystem, which over time opens up for human use by “man above nature”, where the same ecosystem becomes a recreational resource.

The overarching goal of the UNESCO’s 1972 *Convention Concerning the Protection of the World Cultural and Natural Heritage* was the protection and preservation of cultural and natural properties of “OUV”. The OUV emphasis on valuing distinctive places refers to sites that are sufficiently exceptional to transcend national boundaries now *and in the future*. The permanent protection of the World Heritage Sites is of “the highest importance to the international community as a whole” (UNESCO World Heritage Centre, 2012, para. 49). The nomination, OUV classification and inscription processes for new World Heritage Sites that exist between the nation states and UNESCO speak of largely non-contested influence by government, ideology and global capital. However, World Heritage Areas, and the people who govern or protect them, do not exist in a value-free vacuum. Indeed, and as this paper will demonstrate, it seems implausible that the inscription and management of a World Heritage Site escapes the usual pressures arising from changing political systems, commercial demands and conflicts, and evolving governance arrangements. If previously agreed values function as imperatives that guide moral action, attention needs to be cultivated to the multilevel dynamics of PA management, associated values and the hitherto neglected role of (local) stewards.

This paper argues that a more holistic approach to PA management can emerge through recognition of the values held by people who devotedly care, beyond individualistic or commercial gain, while not excluding the latter. These stewardship dynamics are best understood through a value-based research approach.

Methodology

This research explores the perceptions of the values that tourism operators and managers hold in relation to the GBR World Heritage Site. To reduce the risk of being overly prescriptive, and as a result

missing potentially important emerging issues, a qualitative approach was adopted. The relativist ontology underpinning the work assumes that reality is socially constructed, even if particular elements of this reality (e.g. the environmental quality of the Reef) may be measurable by objective approaches. What is important here is to understand how GBR stakeholders perceive its status as a World Heritage Site, and to identify the different values and ideologies that underpin such perceptions, including their ability to engage in day-to-day *real-politik* of PA governance. The analysis will also seek to uncover whether stakeholders see themselves as stewards and whether such self-proclaimed role is linked to strongly nature-based values.

Informant interviews

The data collection for this research was conducted between December 2014 and March 2015. To begin with, leading tourism representatives involved in the GBR were identified and contacted for an in-depth interview. A list of members of the GBRMPA's Tourism Reef Advisory Committee was used to identify key individuals. Further interviewees emerged using snowball sampling from recommendations provided by the key stakeholders first interviewed. This process also brought in managers involved in GBR governance, and ultimately resulted in 13 in-depth interviews, each ranging between 30 and 120 minutes. Whilst this is a relatively small number, it is important to note that the interviewees were leaders in their field (typically Chief Executive Officers) who collectively had accumulated considerable expertise, experience and insights, including into historic changes in the political environment, governance structures, partnerships, organisational and personal relationships, and who had been through previous crises. Table 2 provides an overview of key informants.

Interviews started out by broadly discussing what World Heritage status meant to the interviewee. This was followed by a discussion of stakeholder networks, and the extent to which these were influenced by the GBR's status as a World Heritage Site. Interviewees were asked to explore the idea of a "worst" case scenario for the Reef. This method has been found useful in previous research (Liburd, 2007). Scenarios are stories, which describe an imaginary sequence of actions and events (Rosson & Carroll, 2002). Asking for a worst case scenario prompted interviewees to first reflect upon their personal and professional motivations, on the many actors involved, the various preservation tools available, the possible loss of World Heritage status, and ultimately on the Reef itself. Having reflected upon what could go wrong, the recent (2012–2014) crisis of increasing development pressure by the resources sector, effectively opened up new imaginations of Reef stewardship.

Interviewing continued until a point of saturation was reached (Dwyer, Gill, & Seetaram 2012), and interviews were transcribed verbatim, except for three interviews where notes were taken. Interviews were then coded for emergent themes using content analysis, a commonly employed tool that is useful for uncovering knowledge and new insights from the participants' perspective (Jennings, 2010, pp. 211–213). Based on repeated readings of the textual transcriptions, UNESCO World

Table 2. Informants.

Type of organisation	Position	Place of interview	Recorded
Marine Tour Operator	CEO	Cairns	Tape, 43 minutes
Marine Tour Operator	Marine Biologist and educator	Cairns	Tape, 54 minutes
Marine Tour Operator	CEO	Port Douglas	Tape, 66 minutes
Island Resort	CEO	GBR	Tape, 58 minutes
Industry Association	CEO	Brisbane	Tape, 45 minutes
Industry Association	CEO	Cairns	Notes
State-level tourism organisation	Manager	Brisbane	Notes
GBRMPA	Manager	Cairns	Phone/notes
Ecotourism Consultant	CEO	Brisbane	Notes
Certification programme	Manager	Brisbane	Phone/notes
Destination Marketing Organisation	CEO	Cairns	Notes
University	Academic/marine tourism expert	Gold Coast	Informal interview, notes
University	Academic/protected area expert	Brisbane	Informal interview, notes

Heritage, person, position, government, ideology, shifts, crisis and temporal dimensions imposed coding themes based on theory. Secondary materials were sourced from newspapers, online newsletters, campaigns and GBR information brochures to further contextualise findings. Numerous meetings were held between the researchers in person in Australia and Denmark, and via Skype, during the entire research process. There was ongoing discussion of the material and critical evaluation of counter evidence between the authors.

The reflective research process was also influenced and assisted by the involvement of one of the researchers in the State of Queensland's Ministerial Taskforce on GBR Water Quality. The Taskforce worked from May 2015 until June 2016 to provide advice and recommendations to the Minister for Environment and Heritage Protection and Minister for National Parks and the Great Barrier Reef and the Queensland Government on issues related to water quality targets, management strategies and programmes, investment priorities, and monitoring activities. The researcher's particular role was to engage with the tourism sector and facilitate communication between scientists, the Queensland Government and tourism organisations. The interaction with other Taskforce members, as well as with consulted tourism stakeholders, further deepened the researchers' understanding of key issues, relationships between people and organisations, and values held by those involved in the Reef stewardship.

Results

The researchers' engagement with the GBR over several years, and the insights gained from the interviews, helped identify three distinct phases, which emerged as changes in formal and informal value perceptions of GBR conservation and UNESCO World Heritage (see below). Changes in government, ideology and global capital, notably in the form of resource extraction and port expansion, were instrumental in defining the shifting phases. Over the years, the tourism industry has publicly expressed concern about the GBR's health and potential negative impacts of its declining health on tourism during neo-liberal governance in 2012–2014 (McLennan, Becken, & Moyle, 2015).

Based on historical accounts of the informants, and underpinned by previous publications, reports and media coverage, it became clear that the force field shaping and making stewardship of the GBR was substantially different before 2012, compared with the years thereafter. The force field as defined through government, ideology, global capital, position and personality, seemed to change substantially again in 2015, with a change in government, a declining mining industry and a booming tourism sector. The focus of analysis is on the acute crisis in 2012–2014, but the other phases are considered as well, as they critically highlight the dynamic nature of PA stewardship. The crisis prompted action at multiple levels of stewardship. We illustrate how the shifting stewardship alliances at local, national and international levels, and over time, were informed by the values assigned to nature that were strategically mobilised in GBR conservation efforts.

Phase I (pre 2012)

Prior to 2012, tourism to the GBR had been in a state of decline and the industry was hampered by the global financial crisis, lack of business confidence and reduced strategic "position" prompted by the boom in mining activities. The weak position of tourism during this phase has been analysed from various perspectives. For example, McLennan et al. (2015) examined media reporting on the "two-speed economy", finding that tourism was often framed as a (likable) underdog compared with the more powerful and successful resources sector. The Australian mining boom and the "Dutch Disease" that affected tourism as a result of increased exchange rates and labour mobility were discussed in detail by Pham, Jago, Spurr, and Marshall (2015). During the Labour-led Queensland government (Premier Anna Bligh from September 2007 to March 2012), the decline of the environmental integrity of the GBR appeared to be tolerated. One tourism consultant interviewed suggested that the southern part of the Reef was in such poor condition that the added pressure from urban land use and resource extraction "might result in sacrificing the southern end". In this quote, the IUCN protection categories appeared void of meaning, but his "position" as tourism consultant was

obvious when he swiftly added: “So you better see it before it disappears.” This “man above nature” valuation was reiterated by the tourism consultant when asked about the meaning of the World Heritage status, which he deemed “very important for the Reef and tourism benefit from the World Heritage listing”. During Phase I, the tourism sector was able to maintain business as usual at the World Heritage Site by adapting to the gradually declining quality of the GRB.

Industry leaders at Tourism Events Queensland and the Queensland Tourism Industry Council also appreciated that World Heritage was a strong brand, which “enhanced the unparalleled natural attraction and recognition of the GBR internationally”. They agreed that World Heritage had limited significance within Australia, and that the tourism industry ought to use the brand to champion the conservation of nature: “We simply haven’t made enough of it. Perhaps it’s because conservation is the driver of World Heritage and that tourism is dominated by marketeers?” This quote reveals how the tourism sector may have perceived World Heritage protection to be at odds with business interests, but now identified an opportunity to align these mandates based on “man and nature” values. This is supported by the Tourism Events Queensland manager who speculated that insufficient innovation and the low profit margins of Reef operators could widen the gap between conservation and use: “The tourism industry rests on their laurels. They need to be ahead of the market.” The underpinning “man and nature” value here aligns industry use of the WH brand, not only for marketing and business purposes, but also with conservation itself. The Queensland Tourism Industry Council expert further explained: “brand promotion sounds like gimmicky marketing, that’s not what it is. It is to give value to the proposition (...) more buy-in, more political support (...) and educating the visitors of the broader implications of GBR conservation”. Here, the knowledge force field “position” (Tribe & Liburd, 2016) is helpful in understanding how an industry CEO promotes business that can also be underpinned by strong “personal” “man with nature” values to protect the Reef, as a universally distinct area with a pronounced mandate for sightseeing and educational activities.

A small family tourism business operator using the GBR, positioning himself as “man in nature”, reflected on his more than 20 years of professional experience:

I’m a skipper, I’m a dive instructor and committed to environmental best practices both working within it as a means of making a living and showing off the natural environment for the opportunity to educate and for others to experience it who have a feel and an interaction with nature, which is quite powerful.

Dedicated to “continuing a path of sustainability which makes good business sense”, he actively promoted education and controlled, environmentally compatible recreation. Redirecting stewardship responsibilities towards government, he added: “But I feel disappointed that, in a political environment, sustainability is pretty low on the agenda.” Other interviewees similarly suggested how government had failed to mitigate Reef deterioration: “So they preach to us that we have to sustainably manage our sites, but they’re not sustainably managing, and they need to come to terms with it, the fact that they need to.”

The citations by industry operators and CEOs show how the declining health and lagging conservation of the GBR appeared to be tolerated by the tourism sector during Phase I, but also that formal GRB governance is subject to a mounting critique. The urgency heralded by the small family business operator reflects Giddens’ (2009) paradox of climate change. Giddens argued that since we were not unduly affected by the outcomes of climate change, we failed to act, but when we would be pressed into action by its consequences, it would be too late to do anything about them. A parallel can be drawn with the deterioration of the GBR. The tourism industry and government were aware of the declining health of the Reef, but instead of acting, the deterioration was allowed and vindicated by “man above nature”.

Phase II (2012–2014)

The second phase identified from the interviews was one of the crises. The key reason was international intervention into Australia’s governance of the GBR. In addition to ongoing declines of environmental parameters, such as coral cover and nitrogen loads, the catalyst for increasing problems was

increasing industrial activity from the resources sector in proximity to the GBR World Heritage Site. Large-scale port development and expansions, and concomitant increases in dredging and shipping activities, became centre stage in global media coverage that raised questions about Australia's efforts to protect the GBR. The port developments were to happen in fragile marine areas and the dredging activity was feared to substantially increase turbidity and sedimentation with major negative impacts on marine life and, in particular, on coral (Becken, McLennan, & Moyle, 2014).

Notably, the failure to inform the UNESCO World Heritage Committee of several proposed industrial developments prompted a UNESCO–IUCN reactive monitoring mission in March 2012 (Brodie & Waterhouse, 2012). The mission led to the process of considering adding the GBR to the UNESCO List of World Heritage in Danger. The number and extent of the development proposals presented a high risk to the integrity and conservation of the GBR's OUVs. These developments were also received with great concern by the tourism sector, which feared repercussions from negative publicity at a global scale.

The 2012 UNESCO mission coincided with a change of state government, in which the conservative National Party (March 2012 to February 2015) took over; thus aligning ideologically with the conservative National Party Federal Government. Explicit support of major industrial and resource sector projects and simultaneously lowered priorities for environmental protection prompted environmental NGOs to launch major campaigns for the protection of the GBR. The Green Party supported those campaigns by providing so-called fact sheets, strongly criticising both the Federal Prime Minister (Tony Abbott) and the Queensland Premier (Campbell Newman) at the time (The Greens, 2015). Media coverage (e.g. Peatling, 2012) centred on quotes such as the Queensland Premier Newman's "We will protect the environment but we are not going to see the economic future of Queensland shut down." This ideological shift in "government" of the value of nature as a resource to be exploited, rather than conserved by man, included the GBR.

To the surprise of several tourism stakeholders, GBRMPA aligned itself with government when allowing dredging activities at Abbot Point. Abbot Point is a coal export port close to the Whitsunday Islands, which is a major GBR tourist destination. Criticising GBRMPA, a family business operator lamented:

We have to have integrity otherwise everything else you've been doing doesn't mean anything. They are managing it; they are responsible for it. So to put a stamp of approval on dredging - it's totally unhelpful. (...) An environmental agency should never give endorsements for something that's politically incorrect.

The operator accused GBRMPA for failing to meet their obligations to adequately govern an IUCN category 2 (i.e. "man in nature") marine reserve. The operator's reference to "politically incorrect" (possibly meaning 'morally incorrect') uncovers the conflicting values that guide neoliberal governance of PAs (i.e. "man above nature") as opposed to stewardship by "man in nature" that lies beyond state and self-interests.

Still, a GBRMPA manager maintained that "World Heritage is our core obligation to UNESCO." She welcomed the long-standing partnership with the tourism industry, including the newly appointed Tourism Reef Advisory Committee, effective zoning, licensing and monitoring programmes. When prompted about a worst case scenario, the GBRMPA manager's response was unequivocal: "Thankfully I can't really imagine one! We have zoning plans, 30% are green zones, even the high use areas have limits to growth. Fishing is regulated. I have full confidence in our management arrangements moving forward." The underpinning rationality based on cause and effect in PA management represents a "man above nature" value. It is interesting how the "position" of the GBRMPA manager prevented her from taking a critical stance, just as the rhetoric reflects her organisational affiliation. Different to some of the other interviewees, she did not disclose "personal" values that could potentially challenge the official, organisational "position" and government "ideology". The acute crisis exposed how rational PA management and governance differ from stewardship as a values-based ethic, the latter of which is deeply anchored in eco-centric values. These values are perhaps less prone to change, which will be explored next.

In response to the erosion of the original IUCN protection categories, lacking preservation of the OUVs and clashing values of nature, the GBR operators abandoned their long-standing alliance with GBRMPA. One of the largest marine tour operators, annually carrying about 400,000 tourists to the Reef, explained how the Association of the *Australian Marine Park Tourism Operators* (AMPTO) lobbied ministers, the Federal Government and affirmed: "We're probably the people who got the government to change their position. (...) Admittedly that attracted a lot of the attention of some of the green, greener groups." Referring to the industry alliance with green organisations, such as the World Wildlife Foundation, the marine tourism operator emphasised how they had "similar concerns to some of the greener groups without necessarily sharing all their concerns or exaggeration to achieve an outcome."

Despite different "ideologies" and "positions", the tour operators and environmental organisations strategically aligned values of "man of nature", "man in nature" and "man and nature" against the natural resource depletion represented by "government" and the "global capital" of the mining industry. The goal-driven alliance between the green organisations and the GBR tourism operators strategically invoked the IUCN–UNESCO protection values (i.e. category 2 and the OUVs) during the crisis of GBR stewardship. Often the proactive support was driven by personal values, rather than official "stakeholder" roles.

The director of the large-scale marine tour company, for example, was personally proud of the World Heritage status, but made a clear separation between the values of a private "person" to the commercial "position" and the World Heritage brand value in overseas markets. Similar positions were held by industry representatives and the person responsible for coordinating "Reef community education" at a smaller tour operator. She stated:

Personally, World Heritage to me opens up that we live on a planet and it's a global community. For the business perspective obviously, it's very important because it's a drawcard that the Reef is World Heritage listed and the tourists know that.

According to several informants, pride in the World Heritage brand or nature conservation value do not appear to be part of the dominant Australian "ideology", and the educator went on to explain that their tour operation's education programmes was orientated towards marginalised Aboriginal communities. She passionately conveyed "man in nature" values, where nature has both intrinsic and spiritual value.

Here it becomes obvious how personal and professional values may or may not align, and that these values can be strategically utilised depending on the context and situation at stake. The fluidity between personal versus professional values was surprisingly revealed by an industry association representative. He initially claimed not to be proud of the World Heritage status, emphasising that "it meant nothing to the tourism operators". However, when prompted to imagine a worst case scenario, he referred to the neo-liberal government as "environmental vandals!" He acknowledged "the Reef as an iconic type World Heritage Area, like the Galapagos Islands" and went on to argue how the GBR is endangered, but responsibly protected by the local tourism operators. The first citation alludes to World Heritage as having no commercial value. This allusion shifts radically in the subsequent statement, which become more personal and recognised outstanding ecosystems, species or geodiversity, underpinned by a "man of nature" value and a sense of tourism stewardship.

Recognising the importance of stewardship, another industry representative explained: "Mooring sites is the best stewardship model for us and the Reef, especially as the damage from anchoring is eliminated. Shared moorings don't offer the same felt responsibility" (because shared sites bear a tragedy of the commons risk, where individual operators feel less responsible). The "felt responsibility" and referral to stewardship by the tourism operators represent values of "man in nature", "man with nature" and "man for nature". These values of nature range from conserving and restoring specific outstanding natural features and species. His understanding of stewardship was clearly underpinned by care and loyal devotion to the GBR by the GBR operators. The industry association representative expressed his faith in national legislation that adheres to the original IUCN designation

and the role of the tourism industry as watchdog, but not in the GBRMPA or the neo-liberal government as stewards of the GBR.

The crisis culminated when local GBR stewards from the tourism industry shifted alliances away from Government to green advocacy groups, based on shared values across national and international contexts to successfully fend off neo-liberal pressures in court. In 2014, UNESCO delayed their decision about adding the GBR to the List of World Heritage in Danger. In follow-up discussions, as part of the GBR Water Quality Taskforce consultation, several of the original tourism industry interviewees passionately reiterated the value of the World Heritage status as a “man in nature”, and the critical role that tourism played in battling port development decisions.

Phase III (post 2014–2016)

In 2015, UNESCO formally recognised the noticeable increase in Government commitment to Reef protection and an observation period was established. More specifically, UNESCO requested an update to be sent to their advisory body about progress, documented in the *Reef 2050 Long Term Sustainability Plan* (2016), and that the full Committee be informed of the state of the conservation of the GBR in 2020 (Department of Environment, 2015). This new phase coincided with a change in the Queensland Government. Labour regained leadership from the National Party, which brought an augmented focus on environmental conservation. This included a restructuring of Government with the formation of Queensland’s first Office of the Great Barrier Reef based on the Department of Environment and Heritage Protection. The Office reports to the Minister for the Environment and Heritage Protection, who is also the Minister for National Parks and the Great Barrier Reef. Aligned with preservation of the integrity of the GBR OUVs, the new Government committed to a ban on sea dumping of capital dredge spoil within the GBR World Heritage Site, and provided an additional AU\$100 million over five years to address the issue of deteriorating water quality. The GBR Water Quality Taskforce was asked to advise the Minister on how to best invest this additional funding. The “ideological” shift in “government” conservation of PAs and the GBR reflects “man and nature” and “man for nature” values, which promote coexistence and habitat management based on a conservation commitment to maintain species and natural environments.

In parallel with the change of Government, substantial economic restructuring could be observed. Export of resources declined substantially and the end of the mining boom were visible in trade statistics. In November 2015, the *Sydney Morning Herald* asked whether “services exports fill the mining hole?” pointing to substantial “growth in net exports of services, with tourism and education playing a ‘starring role’” (Cauchi, 2015, p. 1). Indeed, tourism reached record growth rates compared to the previous year, for example, with an increase of 14.8% in arrivals to North Queensland, the main hub for GBR tourism (Tourism Events Queensland, 2015). With tourism strategically repositioned on the economic agenda, the political importance of protecting both the GBR and the (growing) tourism industry were purposefully connected.

The new “man and nature”, “man for nature” alliance became apparent at domestic as well as international events, including *World Environment Day 2015*, where the Queensland Tourism Industry Council organised an event focused on the GBR that specifically linked up with the Minister for Environment and Heritage Protection and the GBR Water Quality Taskforce. The event featured a short preview of a documentary on the GBR, commissioned by the BBC’s Natural History Unit and with Tourism Australia’s sponsorship of the BBC’s world renowned presenter, Sir David Attenborough. The documentary was part of a major advertisement campaign by the tourism industry, and was also used as a vehicle to attract more support for saving the Reef, evidenced by its pre-screening at the Paris Climate Summit (COP 21) (see Scott, Hall, & Gössling, 2016).

These activities reflect a call by two tourism stakeholders for a joint communication strategy that not only brings together all the tourism operators “up and down the Reef so that they sing from the same sheet”, but strategically coordinates with non-tourism bodies, such as the Department of Environment and Heritage Protection, which share similar conservation values. The ability of the tourism

sector to tap into global networks, social media and tell “success stories of Reef protection”, according to one tourism manager, highlights the importance of value-based collaborations that strengthen PA stewardship.

Against the background of UNESCO’s decision to maintain the GBR’s World Heritage listing, and increased global attention to protect the GBR, tourism was able to regain momentum in charging a new “position” for the industry and its symbiotic relationship with the GBR. The new position comfortably accommodated the prevailing underpinning (personal) values of “man in nature” and “man and nature” held by many tourism stakeholders. Furthermore, the conservation-focused position provided flexible space for those who value World Heritage in “person”, and those in “positions” to value World Heritage as a brand with combined commercial and conservation interests. The consultation with tourism stakeholders as part of the Taskforce outreach re-emphasised perceptions that tourism operators see themselves as the key stewards of the GBR, working proactively to protect it, beyond state or own commercial interests while not excluding these.

At the same time, and whilst a realignment of the partnership alliance between the tourism industry and the GBRMPA could be observed, tourism stakeholders began to distance themselves from environmental lobby groups whose strong campaigns were perceived as “damaging to our tourism industry”, according to an industry representative. The strategic alliance between the green organisations and the tourism operators, which had been necessary during the acute UNESCO crises in Phase 2, had become redundant. A regrouping with “government” based on realigned values appeared more effective in the immediate, post-crisis context.

Conclusion

First and foremost, the contribution of this article is the development of an original value framework based on the IUCN’s PA categories and management tools. The Protected Area Values Framework identifies the PA categories and management tools and corresponding anthropocentric perspectives of nature that guide conservation. The values framework offers an important tool for ensuring greater understanding of, and reflexivity in, nature conservation, tourism and UNESCO World Heritage stewardship.

Second, the analysis demonstrates the importance of a dynamic and holistic understanding of PA stewardship, which lies beyond state governance and formal site management. The importance of governance in implementing sustainable tourism and heritage conservation has long been recognised (Bramwell, 2011; Bramwell & Lane, 2011). Better stakeholder involvement has frequently been introduced as a key to success and implementation of more sustainable practices (e.g. Waligo, Clarke, & Hawkins, 2015). Hitherto, the resilience and strategic importance of local stewards in PA conservation, and their ability to engage in day-to-day *real-politik* of governance have been neglected. Stakeholders may have different stakes over time, but extant research has failed to understand how they care and show loyal devotion to a conservation task beyond individual gains. A deeper, more holistic and also dynamic understanding of PA and World Heritage Site governance can be qualified through the notion of stewardship and underpinning anthropocentric values of nature, which may be strategically mobilised at multiple levels.

Third, to gain deeper understandings about how humans construct the values and meanings of nature which influence stewardship of PAs, a knowledge force field was applied. The force field of the tourism knowledge system is determined by government, ideology, global capital, position and person (Tribe & Liburd, 2016). The combination of the force field and values framework made it possible to exemplify how seemingly interest-free values about nature are subject to various forces that shape and make PA stewardship. The systemic recognition of shifting alliances based on shared values of nature was particularly appropriate in the face of crisis, where rational management approaches by “man above nature” proved insufficient to counter the continued deterioration of the World Heritage GBR.

By identifying values of nature among tourism operators in one of the world's most iconic destinations, the UNESCO World Heritage GBR, it became evident why new stewardship alliances emerged during a period of system crisis from 2012 to 2014. The pre- and post-crisis framed the strategic changes, notably how local tourism operators allied with international environmental conservation organisations and UNESCO against formal government (state, federal and GBRMPA) and industrial activity from the resources sector in, or in close proximity to, the GBR. The 2012–2014 crises prompted the GBR tourism operators to shift stewardship “position” from a more pragmatic one of tolerating decline (e.g. “man and nature”) to one of open dissent, mainly based on personal values of “man of nature” or “man in nature”. The potential power of mobilising tourism stewards is reflected by the Water Quality Taskforce (State of Queensland, 2015) interim report that states: “The Taskforce’s vision for the Reef’s future is that it will be healthy and resilient and continue to support an iconic and wondrous ecosystem, world class tourism, viable industries and sustainable communities” (p. 33). This quote also indicates a renewed alignment between Government and the tourism industry in the third phase identified in this research.

A future system crisis is likely to demand new stewardship alliances. This is to be expected in a complex adaptive system, which may, once again, be prompted by the continued degradation of the iconic World Heritage Site. In May 2016, concerted action from 175 tourism operators in the *Brisbane Times* (2016) criticised “government” for favouring “global capital” from the resources sector and failing to act on what they labelled a “disaster needing urgent action” (Branco, 2016, p. 1). The tourism representatives called on the Federal government:

to rule out any financing, investment or help with associated infrastructure for the Abbot Point coal terminal expansion and Adani’s controversial Carmichael mine, the largest in Australia. They pointed the finger at climate change, calling for investment in renewable energy projects, particularly in regional Queensland and a ban on any new coal mines. (Branco, 2016, p. 1)

The wider implications of this research for the governance systems for World Heritage Sites and PAs are several. Understanding the shifting values of nature, tourism and UNESCO World Heritage stewardship reveals potential for advancing PA management mechanisms, and the possibilities for real-world engagement. These insights are of pivotal importance to other UNESCO World Heritage Sites to proactively engage in systemic changes at multiple levels, whether triggered by climate change, site management or competing interests in PAs. Local stewards and PA managers may utilise the values framework as a compass to help steer and guide action if the original designation category, including OUVs, are compromised by neo-liberal (or other) ideologies, for instance, to increase visitation or use of nature. In particular, UNESCO and World Heritage Site managers should be warned against compromising conservation values.

This article helps us better understand how to make progress in PA management. Researchers are encouraged to more deeply explore the changing political, commercial and conservation *real-politik* of management and governance to help advance holistic PA stewardship. Future research is needed on how and why values change over time, about the possible need to recognise both immutable and adaptable values, and equally about how to reconcile universal versus national and local values. The Protected Area Values Framework reveals philosophical values of nature, and offers guidance for real-world engagement, but also the radical possibilities of values-based research in tourism and nature conservation towards more sustainable futures (Liburd, 2010). Future research also needs to consider philosophical values other than the Western one from which this particular research was conducted, and there might be scope to look at stewardship values in the many urban World Heritage Sites around the world.

Note

1. The declining quality of the GBR and port developments approved by both the Federal and State Governments triggered an acute (environmental and public relations) crisis beginning in 2012. The crisis not only involved an

intervention by UNESCO, but also led to global media coverage on the Reef and its “death by a thousand cuts” (Shafy, 2013). The Port of Gladstone, where substantial dredging has occurred, received particular attention (Becken et al., 2014).

Disclosure statement

No potential conflict of interest was reported by the authors.

Notes on contributors

Janne J. Liburd is a professor of tourism and the director of the Centre for Tourism, Innovation and Culture at the University of Southern Denmark. Janne is the chairman of the UNESCO World Heritage Wadden Sea National Park. By ministerial appointment, she serves on the Danish National Tourism Forum, charged with developing the first strategy for tourism in Denmark. She is a cultural anthropologist: her research interests are sustainable tourism development, innovation, national parks and tourism higher education.

Susanne Becken is a professor of sustainable tourism and the director of the Griffith University Institute for Tourism in Australia. Susanne is on the editorial boards of five tourism journals, and has published widely on the topics of sustainable tourism, climate change, energy and water use, tourist behaviour, environmental policy, risk management and protected areas. She recently advised the Queensland Government as an expert on the Great Barrier Reef Water Science Ministerial Taskforce and is on the Air New Zealand Sustainability Advisory Panel.

References

- Becken, S. (2013). Developing a framework for assessing resilience of tourism sub-systems to climatic factors. *Annals of Tourism Research*, 43, 506–528.
- Becken, S. (2016). Evidence of a low-carbon tourism paradigm? *Journal of Sustainable Tourism*, doi 10.1080/09669582.2016.1251446
- Becken, S., & Job, H. (2014). Protected areas in an era of global-local change. *Journal of Sustainable Tourism*, 22(4), 507–527.
- Becken, S., McLennan, C., & Moyle, B. (2014). *World Heritage Area at risk? Resident and stakeholder perceptions of the Great Barrier Reef in Gladstone, Australia* (Griffith Institute for Tourism Research Report Series No. 2). Retrieved 25 January 2017 from https://www.griffith.edu.au/__data/assets/pdf_file/0004/614596/Report-2-World-Heritage-Area-at-Risk-GBR.pdf
- Bernstein, R., Buse, K., & Bilimoiira, D. (2016). Revisiting agency and stewardship theories. *Nonprofit Management & Leadership*, 26(4), 489–498.
- Bramwell, B. (2011). Governance, the state and sustainable tourism: A political economy approach. *Journal of Sustainable Tourism*, 19 (4&5) 459–477.
- Bramwell, B., & Lane, B. (2011). Critical research on the governance of tourism and sustainability. *Journal of Sustainable Tourism*, 19 (4&5) 411–421.
- Branco, J. (2016). Great barrier reef tourism operators beg for change. *Brisbane Times*. Retrieved 13 May 2016 from <http://www.brisbanetimes.com.au/queensland/great-barrier-reef-tourism-operators-beg-for-action-on-bleaching-20160506-goom2s.html>
- Brockington, D., Duffy, R., & Igoue, J. (2008). *Nature unbound. Conservation, capitalism and the future of protected areas*. London: Earthscan.
- Brodie, J., & Waterhouse, J. (2012). A critical review of environmental management of the ‘not so Great’ Barrier Reef. *Estuarine, Coastal and Shelf Science*, 104–105(0), 1–22.
- Cauchi, S. (2015, August 2017). Australian dollar still too high for post-mining economy. *Sydney Morning Herald*. Retrieved 20 February 2016 from <http://www.smh.com.au/business/markets/currencies/australian-dollar-still-too-high-for-post-mining-economy-20150817-gj0ilt.html>
- Crouch, D. (2000). Places around us: Embodied lay geographies in leisure and tourism. *Leisure Studies*, 19(2), 63–76.
- Day, J., Dudley, N., Hockings, M., Holmes, G., Laffoley, D., Stolton, S., & Wells, S. (2012). *Guidelines for applying the IUCN protected area management categories to marine protected areas*. Gland: IUCN.
- De'ath, G., Fabricius, K.E., Sweatman, H., & Puotinen, M. (2012). The 27-year decline of coral cover on the Great Barrier Reef and its causes. *Proceedings of the National Academy of Sciences*, 109(44), 17995–17999.
- Deloitte Access Economics. (2013). *Economic contribution of the Great Barrier Reef*. Townsville: GBRMPA.
- Department of Environment. (2015). *Reef 2050 long-term sustainability plan*. Canberra: Commonwealth of Australia.

- Donaldson, L., & Davis, J.H. (1991). Stewardship theory or agency theory: CEO governance and shareholder returns. *Australian Journal of Management*, 16(1), 49–65.
- Dwyer, L., Gill, A., & Seetaram, N. (Eds.). (2012). *Handbook of research methods in tourism: Quantitative and qualitative approaches*. Cheltenham: Edward Elgar.
- Espiner, S., & Becken, S. (2014). Tourist towns on the edge: Conceptualising vulnerability and resilience in a protected area tourism system. *Journal of Sustainable Tourism*, 22(4), 646–665.
- EUROPARC Federation and the International Union for the Conservation of Nature. (2000). IUCN Protected Areas Categories System: EUROPARC and WCPA, Grafenau, Germany. Retrieved 13 January 2015 from http://www.iucn.org/about/work/programmes/gpap_home/gpap_quality/gpap_pacategories/
- Freeman, E.R., Wicks, A.C., & Pamar, B. (2004). Stakeholder theory and “the corporate objective revisited”. *Organization Science*, 15(3), 364–369.
- Giddens, A. (2009). *The politics of climate change*. London: Polity Press.
- Great Barrier Reef Marine Park Authority. (2016). *Great barrier reef outlook report 2016*. Townsville: Author.
- Gschwind, D. (2013). Valuing our iconic heritage areas: How the industry can support keeping the outstanding exceptional. In P. Figgis, A. Leverington, R. Mackay, A. Maclean, & P. Valentine (Eds.), (2012). *Keeping the outstanding exceptional: The future of world heritage in Australia*. Sydney: Australian Committee for IUCN.
- Hall, C.M. (2011). A typology of governance and its implications for tourism policy analysis. *Journal of Sustainable Tourism*, 19(4–5), 437–457.
- Harrison, D. (1996). Sustainability and tourism: Reflections from a muddy pool. In L. Briguglio, B. Archer, J. Jafari, & G. Wall (Eds.), *Sustainable tourism in islands and small states* (pp. 69–88). London: Pinter Press.
- Holden, A. (2015). Evolving perspectives on tourism’s interaction with nature during the last 40 years. *Tourism Recreation Research*, 4(2), 133–143.
- Holling, C.S., Gunderson, L.H., & Ludwig, D. (2002). In quest of a theory of adaptive change. In L.H. Gunderson & C.S. Holling (Eds.), *Panarchy* (pp. 3–24). Washington, DC: Island Press.
- International Union for the Conservation of Nature. (2008). IUCN protected areas categories system. Retrieved 13 January 2015 from http://www.iucn.org/about/work/programmes/gpap_home/gpap_quality/gpap_pacategories/
- International Union for the Conservation of Nature. (2016a). Natural World Heritage: Facts and figures 2016. Retrieved 28 October 2016 from https://www.iucn.org/sites/dev/files/fact_sheet_wh_2016_desert.pdf
- International Union for the Conservation of Nature. (2016b). Terms of reference for the IUCN World Heritage Panel. Retrieved 28 October 2016 from File://sdu-data0.c.sdu.dk/staff/liburd/SDU/Publikationer/JoST%202017%20GBR/IUCN%202015%20tor_for_iucn_world_heritage_panel.pdf
- Jamal, T., & Stronza, A. (2009). Collaboration theory and tourism practice in protected areas: Stakeholders, structuring and sustainability. *Journal of Sustainable Tourism*, 17(2), 169–189.
- Jennings, G. (2010). *Tourism research* (2nd ed.). Milton: John Wiley & Sons.
- Jones, R., & Shaw, B. (2012). Thinking locally, acting globally? Stakeholder conflicts over UNESCO World Heritage inscription in Western Australia. *Journal of Heritage Tourism*, 7(1), 83–96.
- Kollmuss, A., & Agyeman, J. (2002). Mind the gap: Why do people act environmentally and what are the barriers to pro-environmental behavior? *Environmental Education Research*, 8(3), 239–260.
- Larrère, C. (2008). Scientific models for the protection of nature. In L. Garnier (Ed.), *Man and nature-making the relationship last* (Biosphere Reserves – Technical Notes 3) (pp. 28–31). Paris: UNESCO.
- Liburd, J.J. (2006). Sustainable tourism and national park development in St. Lucia. In P.M. Burns & M. Novelli (Eds.), *Advances in tourism research: Tourism and social identities: Global frameworks and local realities* (pp. 155–176). London: Elsevier.
- Liburd, J.J. (2007). Sustainable tourism, cultural practice and competence development for hotels and inns in Denmark. *Tourism Recreation Research*, 32(1), 41–49.
- Liburd, J.J. (2010). Sustainable tourism development. In J.J. Liburd & D. Edwards (Eds.), *Understanding the sustainable development of tourism* (pp. 1–18). Oxford: Goodfellow Publishers.
- McDonald, J.R. (2009). Complexity science: An alternative world view for understanding sustainable tourism development. *Journal of Sustainable Tourism*, 17(4), 455–471.
- McCool, S.F. (2009). Constructing partnerships for protected area tourism planning in an era of change and messiness. *Journal of Sustainable Tourism*, 17(2), 133–148.
- McLennan, C.L., Becken, S., & Moyle, B.D. (2015). Framing in a contested space: An analysis of media reporting on mining and tourism. *Current Issues in Tourism*, doi: 10.1080/13683500.2014.946893
- Neubaum, D.O. (2013). Stewardship theory. In E. Kessler (Ed.), *Encyclopaedia of management theory* (pp. 768–769). Thousand Oaks, CA: Sage.
- Oyserman, D. (2001). Values: Psychological perspectives. In N.J. Smelser, J. Wright, & B. Baltes (Eds.), *International encyclopaedia of the social and behavioural sciences* (pp. 16150–16153). Oxford: Pergamon.
- Pansiri, J. (2008). The effects of characteristics of partners on strategic alliance performance in the SME dominated travel sector. *Tourism Management*, 29, 101–115.
- Peatling, S. (2012). UNESCO report scathing of Great Barrier Reef management. *The Sydney Morning Herald*. Retrieved 5 March 2016 from <http://www.smh.com.au/environment/conservation/unesco-report-scathing-of-great-barrier-reef-management-20120601-1zo0m.html#ixzz42CwJ1oA2>

- Pham, T., Jago, L., Spurr, R., & Marshall, J. (2015). The Dutch disease effects on tourism – the case of Australia. *Tourism Management*, 46, 610–622.
- Plummer, R., & Fennell, D.A. (2009). Managing protected areas for sustainable tourism: Prospects for adaptive co-management. *Journal of Sustainable Tourism*, 17(2), 149–168
- Queensland Government. (2014). Reef water quality protection plan – History. Retrieved 1 March 2016 from <http://www.reefplan.qld.gov.au/about/history/>
- Rosson, M.B., & Carroll, J.M. (2002). *Usability engineering: Scenario-based development of human-computer interaction*. San Francisco, CA: Morgan Kaufmann.
- Rhodes, R.A.W. (1997). *Understanding governance: Policy networks, governance, reflexivity and accountability*. Buckingham: Open University Press.
- Scharin, H., Ericsson, S., Elliott, M., Turner, R.K., Niiranen, S., Blenckner, T., ... Rockström, J. (2016). Processes for the sustainable stewardship of marine environments. *Ecological Economics*, 128, 55–67.
- Scott, D., Hall, C.M., & Gössling, S. (2016). A report on the Paris Climate Change Agreement and its implications for tourism: Why we will always have Paris. *Journal of Sustainable Tourism*, 24(7), 933–948.
- Shafy, S. (2013). "Death by a thousand cuts": Coal boom could destroy Great Barrier Reef. *Spiegel International*. Retrieved 13 March 2014 from <http://www.spiegel.de/international/world/australia-debates-how-to-protect-the-great-barrier-reef-a-900911.html>
- State of Queensland. (2015). *Full interim report, December 2015*. Prepared by The Great Barrier Reef Water Science Taskforce, and the Office of the Great Barrier Reef, Brisbane: Department of Environment and Heritage Protection.
- The Greens. (2015). Abbott vs. Newman in race to destroy Queensland's environment. Retrieved 5 March 2016 from http://christine-milne.greensmps.org.au/sites/default/files/greens_-_abbott_vs_newman_on_qlds_environment.pdf
- Tourism and Events Queensland. (2015). Tropical Nth Qld regional snapshot. Retrieved 20 April 2016 from <http://cdn.queensland.com/~media/DB2D0BCFC9C8484DBD2E2305A33E65A6.ashx?vs=1&d=00010101T000000>
- Tourism Research Australia. (2015). Research. Retrieved 20 February 2017 from www.tra.gov.au
- Tribe, J., & Liburd, J.J. (2016). The tourism knowledge system. *Annals of Tourism Research*, 57, 44–61.
- UNESCO. (1972). *Convention concerning the protection of the world cultural and natural heritage*. Paris: UNESCO.
- UNESCO. (2007). *Discussion on the outstanding universal value*. Retrieved 12 January 2016 from <http://whc.unesco.org/archive/2007/whc07-31com-9e.pdf>
- UNESCO World Heritage Centre. (2012). Operational guidelines for the implementation of the World Heritage Convention. Retrieved 1 January 2016 from <http://whc.unesco.org/archive/opguide12-en.pdf>
- Urry, J. (1995). *Consuming places*. London: Routledge.
- Waligo, V., Clarke, J., & Hawkins, R. (2015). Embedding stakeholders in sustainable tourism strategies. *Annals of Tourism Research*, 55, 90–93.
- Whitelaw, P.A., King, B.E.M., & Tolkach, D. (2014). Protected areas, conservation and tourism – financing the sustainable dream. *Journal of Sustainable Tourism*, 22(4), 584–603.