

Enmeshed in Naturecultures: A Personal–Global Journey

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Journey

ACCORDING TO THE OXFORD ONLINE DICTIONARY, the word *journey* has two meanings.¹ First, “an act of travelling from one place to another,” a meaning that conveys a sense of movement, the physical journey itself, and a deliberate trip or modern-day pilgrimage from one locale to a destination. Second, journey can mean “a long and often difficult process of personal change and development,” though equally taken to mean processes of collective change at organizational levels. In this paper, I explore my sense of journey with regard to work being undertaken to better address the interconnectivity of cultural and natural heritage at global, national, and local levels of heritage management and practice. In doing so, I draw on both meanings of the word *journey*: that is, my perspectives as transformed by processes of personal and collective journeying and informed by global travel.

These perspectives are shaped by both my scholarly research and practice in the fields of archaeology and heritage studies. Importantly, my perspectives on nature–culture integration have been informed and influenced by my engagement with the work of two global non-governmental organizations (NGOs): ICOMOS (International Council on Monuments and Sites) and IUCN (International Union for the Conservation of Nature). I am the current President of the ICOMOS–IFLA² International Scientific Committee on Cultural Landscapes (ISCCL). The ISCCL comprises 160 members from more than 50 countries and is one of ICOMOS’s 28 specialist scientific committees whose roles are to gather, investigate, and disseminate information concerning principles, techniques, and policies related to heritage conservation.³ I am also a member of the Specialist Group on Cultural and Spiritual Values of Protected Areas (CSVPA), a group within the World Commission on Protected Areas (WCPA) of IUCN, which is currently developing best practice guidelines and an edited volume concerned with conservation, management, and governance,⁴ as well as being a member of the WCPA Specialist Group on Protected Landscapes. By way of personal background, I am an Anglo-Australian, born in Kenya and, since the age of seven years, a citizen of Australia. Over more than 30 years I have worked within protected area and Aboriginal heritage agen-

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cies across Australia. In the period 2015–2017 I was a lecturer in the Master of Museum and Heritage Studies program at the University of Sydney.

Conceptualizing naturecultures⁵

For more than a decade, I have held the view that nature and culture, as constructed in Western epistemologies, needs to be better integrated in the management of landscapes, including those within protected areas. For me, nature and culture are not separate or even linked domains, but rather they are mutually constituted: that is, nature and human culture have always evolved one with the other in ways that are so intertwined as to be impossible to meaningfully disassociate. This thinking results from three key influences: first, my work for more than two decades in the protected area system in Australia, where different legislative, administrative, and management systems operate for each of the domains of natural, indigenous, and non-indigenous heritage; second, work with Australian Aboriginal people who hold very different cosmologies or worldviews from Western Enlightenment constructs; and, third, working in the cross-disciplinary field of cultural landscapes, both in Australia⁶ and internationally (Figure 1).

However, I have begun to theorize or conceptualize naturecultures as mutually constituted only in the last decade or so. In addition to writings by scholars such as Lynn Meskell⁷ and Denis Byrne,⁸ my thinking draws from my doctoral research.⁹ This research project was undertaken over the period 2010–2014 and, although not directly concerned with naturecul-

Figure 1. Old Currango Homestead (c. 1880s), Kosciuszko National Park, Australia. The restored homestead sits within a cultural landscape where cultural and natural values are interconnected and inseparable. (Steve Brown)



tures, it provided me with concepts and a language to articulate my views on the topic. My thesis is a critical study of the concept of place-attachment in Australian heritage practice and its application in this field. The field studies I undertook for the project related to the connections that Anglo-Australians have toward domestic homes and gardens within the New South Wales (NSW) protected area system and were based on interviews with people who had created, cared for, and/or experienced such designed landscapes. My broader concern was that the connections and deeply held feelings that individuals hold for such special places were not being respected in the process of park management and, on occasion, diminished where nature conservation and indigenous heritage management was privileged over non-indigenous heritage attributes and values.

Place-attachment in the practice of heritage is typically characterized as a form of intangible heritage arising from interactions, connections, or “associations”¹⁰ that exist between people and place. In my research I traced how this meaning borrows from concepts in developmental psychology and cultural geography and argued that the idea of place-attachment is often applied uncritically in heritage conservation because the field lacks a body of discipline-specific theory. It was my thesis that place-attachment can be conceptualized in a way that is more amenable to effective heritage management practice than is currently the case. I proposed a concept of place-attachment that draws on a notion of intra-action and theories of attachment, agency, and affect. I defined *place-attachment* as a distributed phenomenon that emerges through the entanglements of individuals or groups, places, and things. The findings from the collected interviews, I suggested, offered support for a concept of place-attachment as “entanglement.” To my mind, *entanglement* is a word that captures the interconnectivity between people’s feeling for places and things (their homes or gardens, for example) and, in relation to naturecultures, entanglement encapsulates the idea that nature and culture are mutually constituted and conceptually are problematic to separate.

My position on entanglement draws from the work of feminist philosopher Karen Barad’s concept of agential realism¹¹ and architect-philosopher Manuel Delander’s application of Deleuzian assemblage theory.¹² I am also influenced by historian Nicholas Thomas, who adopts an “entanglement framework” to explore how objects become entangled in colonialism,¹³ and archaeologist Ian Hodder, who applies a “bridging concept” of entanglement to the analysis of archaeological data.¹⁴ I found the concept of entanglement useful in conceptualizing the way people’s feelings become entwined or interconnected with, for example, the plants in their gardens—the plants that signify or embody happy or sad life-events, or have been gifts from close friends, or reminders of a loved one who had passed away. Thus attachment-as-entanglement expresses the inseparability of human feelings and emotions from individual plantings or specific species (some native, some introduced). That is, entanglement is a useful construct for conceptualizing human emotion and meaningful objects (including plants) as interwoven rather than separate.

I subsequently found that much of the conceptual material I drew on and developed in my thesis could be applied to framing issues concerning nature–culture integration. The idea of nature and culture, and therefore natural heritage and cultural heritage, as separate and distinct domains has a long history in Western thinking.¹⁵ Such thinking derives from

constructing a series of opposites or binaries that include not only nature–culture, but also tangible–intangible, past–present, human–nonhuman, plant–animal, etc. Entanglement is a concept able to be used to resist such binaries and, in the case of naturecultures, to dissolve the distinction between them because in any given landscape they are co-constituted or folded together.

Connecting Practice

The UNESCO (United Nations Educational, Scientific, and Cultural Organization) Convention Concerning the Protection of the World Cultural and Natural Heritage (World Heritage Convention) is a leading instrument in the recognition and management of cultural and natural heritage. Yet despite 45 years of operation, the work of the convention continues to treat these domains as separate and divided.¹⁶ Connecting Practice was a project devised and implemented by IUCN and ICOMOS, both advisory bodies to the World Heritage Committee. Tim Badman (IUCN) and Kristal Buckley (ICOMOS) coordinated the project, which aimed “to explore, learn and create new methods that are centered on recognizing and supporting the interconnected ... character of the natural, cultural and social values of highly significant landscapes and seascapes.”¹⁷ Connecting Practice adopted a practice-led approach whereby representatives of IUCN and ICOMOS worked collaboratively at World Heritage-listed properties.¹⁸ The intended outcome of the work was to “define practical strategies to deliver a fully connected approach to considering nature and culture in the practices and institutional cultures of IUCN and ICOMOS, in order to deliver advice that will achieve better conservation and sustainable use outcomes that reflect the perspectives, interests and rights of custodians and local communities.”¹⁹ I had the privilege of participating in three components of the Connecting Practice project during its first phase, which ran from 2013–2015. These included: the initial expert roundtable to frame the initiative (Switzerland; January 2014); fieldwork in Mongolia (October 2014); and the concluding expert workshop hosted by the International Academy for Nature Conservation on the Isle of Vilm, Germany (March 2015).

The initial two-day expert roundtable was held at IUCN’s headquarters in Gland, Switzerland. Although I had been a member of the WCPA since 2010, this was the first time I had directly engaged with the work of the commission. It was an opportunity to meet with an experienced and knowledgeable group with a shared concern to improve working relations between IUCN and ICOMOS and, ultimately, to achieve improved outcomes for the safeguarding and sustainability of heritage places and their attendant communities. I was mindful, like many at the meeting, of the impacts that the “divide” between nature and culture in World Heritage processes and practices was having for non-Western nations (e.g., China²⁰) and indigenous groups (including Australian Aboriginal people). One of my contributions to this workshop was to introduce the concept of entanglement and to discuss with participants its relevance as a countering concept to a nature–culture dichotomy.²¹

I was fortunate to be able to explore in practical terms a concept of naturecultures entanglement during the Connecting Practice fieldwork project in Mongolia. The fieldwork focused on the World Heritage-listed Petroglyphic Complexes of the Mongolian Altai,²² a three-part, serial nomination comprising extensive rock art (or rock marking) assemblages

created over a time span of more than 10,000 years. My colleagues in this work were Bas Verschuuren (IUCN; The Netherlands), Alexey Rogozhinsky (ICOMOS; Kazakhstan) and Chimed-Ochir Bazarsad (World Wildlife Fund; Mongolia). The group was selected for its members' different disciplinary backgrounds: two people with expertise in cultural heritage and two in natural heritage. Our task was to better understand each other's disciplinary-based practices and explore ways to better integrate such perspectives in relation to IUCN's and ICOMOS's World Heritage responsibilities. Up to this point, IUCN and ICOMOS typically (but not always) undertook separate evaluations of proposed World Heritage nominations for "mixed sites" (that is, properties nominated for both their cultural and natural values and attributes) and cultural landscapes (a sub-category of "cultural site" in the World Heritage system).²³

An anecdote is pertinent here! There was a moment during the field trip while at Aral Tolgoi, a place widely recognized for its engravings of extinct animal species, including rhinoceros and ostrich (Figure 2). Because the rock art can be difficult to see, there is a risk of walking on it. At one point I called to Bas to warn him that he was close to stepping on a deer motif. Bas responded immediately, telling me (correctly as it turned out) not to stand on the endangered alpine juniper plants. It was obvious to each of us what our disciplinary gazes privileged!

For me the Mongolian trip was an incredible experience, not just because of the challenging physical journey undertaken, but also for the collective and personal intellectual journey it entailed. Three observations illustrate these points. First, the rock markings speak to the deep-time as well as contemporary relationships between humans and other animal species.²⁴ Consequently, in listing the Petroglyphic Complexes of the Mongolian Altai as a cultural site and cultural landscape, physical attributes (such as the rock engravings) and their related cultural features are privileged in site management over powerful natural attributes, including wildlife species found in this landscape. These include the very animals, such as snow leopard, ibex, Argali wild sheep, and domesticated horses, that are represented in the rock markings! For me, separating material from interconnected natural attributes misrepresents the holistic and entangled nature of cul-



Figure 2. Aytkhaan Atai points out engraved image to Bas Verschuuren at Aral Tolgoi rock art site. (Steve Brown)

ture. In practical terms, this can lead to a disconnected management regime where cultural values deemed to be of universal value (rock art) may become separated from exceptional biodiversity and agro-biodiversity values, the latter including domesticated horses, sheep, and yaks.

Second, as illustrated by the locally sacred mountain of Shiveet Khairkhan,²⁵ separating physical landscape features from their spiritual meanings to contemporary and past local communities is problematic. Shiveet Khairkhan (Figure 3) is, in IUCN terminology, a sacred natural site—a place of rich and diverse nature that has special spiritual significance to individuals and communities.²⁶ The veneration of Shiveet Khairkhan is derived from ancient shamanic traditions (often relating to human–animal interactions) as well as subsequent Buddhist traditions. Under such religious systems, Shiveet Khairkhan is subject to traditional forms of spiritual practice and governance—for example, nomad herdsman do not allow hunting on the mountain of local ibex and Argali sheep. Thus, as illustrated in the case of Shiveet Khairkhan, the separation of cultural from socio-natural values is artificial and fails to acknowledge the powerful entanglements experienced within lived-in landscapes.

Third, and further emphasizing the lived-in nature of landscape, the Mongolian Altai has a deep-time and continuing tradition of nomadic herding. Mobile pastoralism is likely to have been practiced in this region for almost 4,000 years (evidenced, for example, in Bronze Age rock art). Despite the changing ethnic composition of nomad herders over this time, the art/mark-making traditions continued, though they were not necessarily continuous, as

Figure 3. In front of Shiveet Khairkhan sacred mountain (center back). Back row from left: Alexey Rogozhinsky, Steve Brown, Kh. Erdembileg. Front from left: Chimed-Ochir Bazarsad and Aytikhaan Atai. (Bas Verschuuren)



evident in changes in art styles and motifs depicted. Associated with mobile pastoralism are locally specific knowledge, skills, and practices, such as hunting with eagles, a practice with a history more than 2,000 years old. There is also a relatively new phase of rock-marking taking place, most evident at locations where names, dates, and copies of millennia-old motifs are apparent. The reasons for the renewed practice, whether as place-marking, spiritualism, and/or graffiti, are unclear. However, they illustrate that rock art, no matter what age, has contemporary meanings for local nomad herder communities. Nevertheless, the World Heritage listing squarely locates rock art as of-the-past and of “other” people.

For me, the Mongolian Altai was filled with amazing sights, a great deal of learning from hosts and companions, and, at times, feelings of sensory overload. The following extract, based on my field notes of 17 October 2014, evokes something of this experience, including the ways in which people and place, nature and culture, are entangled.

Deep-time stone features cover valley floors. Sculpted faces gaze eastward. Rock markings evoke other worlds at present places. Cameras accumulate memories. Strips of blue and white cloth flap wildly. Wood structures entomb Kazakh “sleeping” places. Snow-capped peaks jut into blue sky. Warmly dressed nomads herd sheep, goats, cattle, horses, and yaks. Motorbikes and horse-riders weave between ancient alignments of standing stones. A solar panel powers a computer. Taste of yak cheese; the sharp warmth of vodka. Dung fuels stoves. Sleep on decorated felt carpets. Larch trees stand brown against winter snow. Ice thickens on stream surfaces. Ice cracks beneath the Russian jeep. Icy winds whip the landscape. Men handsome in military uniform. Summer hay fields deep in snow. A young Golden Eagle trained to hunt. Ibex navigate the side of a sacred mountain; their ancestors etched into rocks below. The skulls of Argali sheep gathered together. Displaced stones at illegally excavated burials. There is beauty, power, danger, and vibrancy in this landscape, in things, in people. The landscape is alive.

Nature–Culture Journey

In September 2016, IUCN and ICOMOS collaborated on a joint Nature–Culture Journey at the IUCN World Conservation Congress held in Honolulu, Hawaii.²⁷ The Journey, which focused on connecting natural and cultural heritage practice, consisted of a dedicated stream or theme of more than 50 presentations and discussions over four days.²⁸ For me, this was a truly engaging event because of the diverse formats of the sessions (typically focused on dialogue over presentation) and the level of participant engagement and enthusiasm. For the purpose of this paper I discuss one of the Journey sessions.

“Constructing Resilience: The ‘Nature’ and ‘Culture’ of Food Cultivation in the Landscape and Seascape”²⁹ was a two-hour workshop convened and moderated by Jessica Brown, Nora Mitchell, Renu Saini, and me.³⁰ The workshop aimed to “share experiences, strengthen key partnerships, and consider ways that traditional cultural and ecological practices can be more sustainable and better align with international processes, including World Heritage and the United Nations Sustainable Development Goals.” More specifically, the workshop sought

to “gain a better understanding of resilience in the context of socio-ecological systems for food production; and identify strategies and good practice for sustaining and restoring these systems.” Four case studies were presented: Denis Rose and Tyson Lovett-Murray, Gunditjmara Traditional Owners, on the resilience of the eel aquaculture practices within the Budj Bim Cultural Landscape, Australia; Roger Samba and Georgie “Bic” Manahira on the role of community leadership in rebuilding small-scale fisheries in Madagascar; Masahito Yoshida on traditional rice-farming landscapes of Japan; and Alejandro Argumedo on potato cultivation in the southern Peruvian Andes. The second half of the session, facilitated by Delia Clark, comprised small group discussions on key questions related to indicators of resilience, lessons from the case studies, and ways to disseminate shared knowledge and experience arising from the workshop.

This was my favorite session of the IUCN World Conservation Congress—not only because it was a collaboration across specialist groups of ICOMOS and IUCN (that is, ISCCL and the WCPA Specialist Group on Protected Landscapes), but also because of the inspiring stories told by the presenters. For example, the Budj Bim Cultural Landscape is within the traditional “Country” of the Gunditjmara Aboriginal people. *Country* is an Aboriginal-English word that refers to a knowledge system and concept with a whole-of-landscape meaning.³¹ For contemporary Australian Aboriginal people, the concept of “caring for Country” is a complex notion related both to personal and group belonging and to maintaining and looking after the ecological and spiritual well-being of the land and of oneself. Caring for Country in Aboriginal cosmology is a phrase encompassing all parts of the landscape and seascape, as well as people and non-human species, the latter typically regarded as the kin or relatives of living and ancestral humans. A sense of the Aboriginal concept of Country as “place of belonging” and the relationship of stories to Country can be gained from Aboriginal people telling and explaining traditional stories.

The importance of the Budj Bim Cultural Landscape is described in the following terms.

The Budj Bim Cultural Landscape includes evidence of one of the world’s oldest known aquaculture systems. Gunditjmara people constructed an extensive and technologically sophisticated aquaculture system on the Budj Bim lava flow. Gunditjmara people were able to harvest and farm large quantities of the migrating short finned eel (*Anguilla australis*) while maintaining a sustainable eel population by manipulating seasonal flooding through the creation of stone channels. Archaeological excavations at the Budj Bim Cultural Landscape conducted by McNiven and Bell (2010)³² ‘provide evidence for ... an early phase of channel construction by removal of basalt bedrock blocks at least 6600 years ago, and two recent phases of channel rock wall construction within the past 600–800 years.’ The age of the aquaculture system, its degree of preservation and completeness, and the continuity of Gunditjmara traditional practices make the Budj Bim Cultural Landscape an exceptional, organically evolving heritage site and continuing cultural landscape.³³

The values underpinning the Budj Bim Cultural Landscape are dependent on understanding that cultural and environmental systems are entangled, as expressed in the idea of Country. These systems include Gunditjmara law, knowledge, social practices, the aquaculture system, the volcanic and hydrological systems, and the ecological and biological systems, particularly relating to eels. In brief, the Budj Bim Cultural landscape is an “intensively manipulated eco-cultural landscape.”³⁴

The Nature–Culture Journey of the 2016 IUCN World Conservation Congress concluded with a statement of commitments, expressed in a document titled *Mālama Honua—To Care for Our Island Earth*.³⁵ The Hawaiian expression, *Mālama Honua*, means “to take care of and protect everything that makes up our world: land, oceans, living beings, our cultures, and our communities.” The statement recognizes naturecultures as vital for addressing contemporary conservation challenges and, furthermore, explicitly recognizes heritage as both natural and cultural. For me, this applies to the Australian Aboriginal idea of Country and the inseparability of naturecultures as is evident in the example of the Budj Bim Cultural Landscape.

The IUCN–ICOMOS work of journeying now has a new destination. In December 2017, a Culture–Nature Journey will be convened as part of the ICOMOS Scientific Symposium in Delhi, India.³⁶ The final form of this new journey is currently taking shape (more than 150 submissions were proposed), but will mirror its World Conservation Congress twin by emphasizing dialogue and engagement over presentation. For me, this will be an exciting and innovative moment for ICOMOS. It will provide a further opportunity for ICOMOS and IUCN members to become more familiar with each other’s perspectives and explore ways for individuals from both organizations to practice together.

Toward a theory of practice and a practice of theory

As discussed here, efforts to improve the integration of naturecultures in the field of heritage has been the subject of a number of practitioner-led, global projects. These include the IUCN–ICOMOS Connecting Practice project, which has a World Heritage focus, as well as two collaborative, symposia-style, international “journeys”—one held as part of the IUCN 2016 World Conservation Congress and the second scheduled for the ICOMOS 2017 General Assembly.³⁷ Being actively involved in the work of both ICOMOS and IUCN has enabled me to recognize some of the many issues and challenges faced in these projects and to collectively explore opportunities for greater levels of collaboration and mutual understanding across the cultural and natural heritage domains.

In this journey, as both traveler and learner, I have found a need to consider heritage theory and practice together. The “problem” of the nature–culture dualism—derived from Western-centered origins and extended through colonial impositions—is in itself a “wicked problem,” which is to say it is difficult if not impossible to resolve because cause and effect relations are complex and solutions not clear-cut. There are no grand solutions. Therefore, and out of necessity, there has been and is a strong emphasis on “learning-by-doing” approaches as a way to tackle the issues of nature–culture segregation in the field of heritage conservation. Thus in the ICOMOS and IUCN spheres, particularly with respect to World Heritage,

work has sought to achieve incremental change, with particular focus on the processes and practices of, and relations between, these global actors. Nevertheless, in line with recent commentary by Wallace and Buckley,³⁸ I argue there is a concurrent need to advance conceptual frameworks in ways that can guide and inform practice.

As presented here, it is in the idea of entanglement (coupled with the ethical dimensions of care and respect) that I see opportunities for a more inclusive heritage management practice that acknowledges and works to counter artificial separations between natural and cultural heritage. Conceiving entanglement as mutually constituting is at one level difficult to conceptualize, but on the other hand is recognizable. This can be seen, for example, in the relations between contemporary nomads and the landscape within the Mongolian Altai, and in the relations between the Gunditjmarra and their ancestral Budj Bim Cultural Landscape. I find it exciting that much can be learned from such people–landscape relations. However, this learning is, for me, not about “othering” unfamiliar cultural contexts (or denigrating Western experiences), or reifying an overly simplistic binary of Western versus non-Western (in particular indigenous) constructs as either divided (nature–culture) or holistic (naturecultures). Rather, the learning project concerns finding ways forward in addressing the pervasive separations of nature–culture in global, national, and local heritage regimes.

In this regard I continue to journey in the sense of “personal change and development,” including within my own local cultural and heritage context. Specifically, I am referring to the 140-acre (56-hectare) property that I have owned for more than a year. The property, named Gozinta after my paternal grandfather’s farm in Kenya, is largely covered by native vegetation and is located 125 miles (200 km) southwest of Sydney, Australia. The property is notable for the presence of traces of past Aboriginal occupation, the remains of a pre-1895 farming settlement, a contemporary olive orchard, and a huge diversity of plant and animal species, including the glossy black cockatoo (listed as “vulnerable” under local legislation) and the critically endangered pale yellow doubletail orchid. There is a challenge here in finding connectivity between, first, local experience and global learning, and, second, conceptual frameworks of entanglement and my own cultural context; and, finally, recognizing ways to care for the land that support the entangled attributes and values of naturecultures.

Acknowledgments

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Endnotes

1. English Oxford Living Dictionaries, “Journey.” Online at <https://en.oxforddictionaries.com/definition/journey>.

2. IFLA is the acronym of the International Federation of Landscape Architects.
3. *Eger-Xi'an Principles for the International [Scientific] Committees of ICOMOS* (2008). Online at http://www.icomos.org/isc/pdf/Eger-Xian_Principles_07-2008.pdf.
4. Information online at <https://csvpa.org>.
5. In this paper I use *naturecultures* to recognize that humans, non-humans, and landscape are intimately bound (that is, integrated or entangled), while *nature-culture* is used to indicate nature *and* culture as binaries or separate domains.
6. Steve Brown, "Applying a Cultural Landscape Approach in Park Management: An Australian Scheme," *PARKS: The International Journal of Protected Areas and Conservation* 18(1): 99–110 (2012).
7. Lynn Meskell, *The Nature of Heritage: The New South Africa* (Malden, MA: Wiley-Blackwell, 2012), 13–36.
8. Denis Byrne, Sally Brockwell, and Sue O'Connor, "Introduction: Engaging Culture and Nature," in *Transcending the Nature Culture Divide in Cultural Heritage: Views for the Asia Pacific Region* (Terra Australis no. 36), Sally Brockwell, Sue O'Connor, and Denis Byrne, eds. (Canberra: ANU Press, 2013), 1–12.
9. Steve Brown, "Place-Attachment in Heritage Theory and Practice: A Personal and Ethnographic Study," Ph.D. thesis, The University of Sydney. Online at <https://ses.library.usyd.edu.au/handle/2123/15976>.
10. Australia ICOMOS, *Australia ICOMOS Charter for Places of Cultural Significance*, Article 1.15, online at <http://australia.icomos.org/wp-content/uploads/The-Burra-Charter-2013-Adopted-31.10.2013.pdf>.
11. Karen Barad, *Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning* (Durham and London: Duke University Press, 2007). Coined by Barad, *agential realism* is a theory that reconceptualizes the process by which objects are examined and knowledge created in scientific activities. My interest in this concept lies in Barad's contrast between *inter-action* and *intra-action* (2007: 33). *Inter-action* assumes that there are separate individual agencies (e.g., nature *and* culture) that precede their interaction. In contrast, *intra-action* recognizes that distinct agencies do not precede, but rather emerge through, their *intra-action* (i.e., *naturecultures*).
12. Manuel DeLander, *A New Philosophy of Society: Assemblage Theory and Social Complexity* (New York: Continuum, 2006). Philosophers Gilles Deleuze and Felix Guattari initially developed assemblage theory. DeLander developed the theory to provide a bottom-up framework for analyzing social complexity.
13. Nicholas Thomas, *Entangled Objects: Exchange, Material Culture, and Colonialism in the Pacific* (Cambridge, MA: Harvard University Press, 1991). In this volume, Thomas is concerned with complex "inter-actions" between people (typically European collectors) and indigenous artifacts.
14. Ian Hodder, *Entangled: An Archaeology of the Relationships Between Humans and Things* (Chichester: Wiley-Blackwell, 2012). Hodder draws on archaeological evidence from Çatalhöyük, a 9,000-year old settlement in central Turkey, to investigate ways in which

people and things (houses, objects, practices) are entangled in order to understand the early structuring of agricultural societies.

15. Byrne et al., “Introduction: Engaging Nature and Culture”; Rodney Harrison, “Beyond ‘Natural’ and ‘Cultural’ Heritage: Toward an Ontological Politics of Heritage in the Age of the Anthropocene,” *Heritage & Society* 8(1): 24–42 (2015); Lesley Head and Joachim Regnéll, “Nature, Culture and Time: Contested Landscapes Among Environmental Managers in Skåne, Southern Sweden,” in Simon Haberle and Bruno David, eds., *Peopled Landscape: Archaeological and Biogeographic Approaches to Landscapes*, Terra Australis no. 34 (Canberra: Australian National University Press, 2012), 221–237; Meskell, *The Nature of Heritage*.
16. Christina Cameron and Mechtild Rössler, *Many Voices, One Vision: The Early Years of the World Heritage Convention* (Farnham, Surrey, UK: Ashgate, 2013), 58–71.
17. IUCN–ICOMOS, *Connecting Practice Project: Final Report*, online at https://www.iucn.org/sites/dev/files/content/documents/connecting_practice_report_iucn_icomos.pdf; Kristal Buckley and Tim Badman, “Nature+Culture and World Heritage: Why it Matters,” in *Exploring the Cultural Value of Nature: A World Heritage Context*, Christina Cameron and Judith Herrmann, eds. (Montréal: Université de Montréal, 2014), 105–121; Leticia Leitão and Tim Badman, “Opportunities for Integration of Cultural and Natural Heritage Perspectives Under the World Heritage Convention: Towards Connected Practice,” in *Conserving Cultural Landscapes: Challenges and New Directions*, Ken Taylor, Archer St. Clair, and Nora J. Mitchell, eds. (New York: Routledge, 2015), 75–89.
18. See Leitão in this issue for further discussion of this project.
19. IUCN–ICOMOS, *Connecting Practice Project*, 14.
20. Feng Han, “Cultural Landscape: A Chinese Way of Seeing Nature,” in *Managing Cultural Landscapes*, Ken Taylor and Jane Lennon, eds. (New York: Routledge, 2012), 90–108.
21. Kristal Buckley and Tim Badman, “Nature+Culture and World Heritage,” 119.
22. UNESCO, “Petroglyphic Complexes of the Mongolian Altai,” online at <http://whc.unesco.org/en/list/1382>.
23. The World Heritage Committee adopted the category of “cultural landscape” in 1992.
24. “Deep-time” is a concept of geological time, but more recently has been co-opted by historians to include the very long period of human history (or deep-history) before extant written records.
25. Esther Jacobson-Tepfer and James Meacham, “The Sacred Mountain Shiveet Khairkhan (Bayan Ölgii aimag, Mongolia) and the Centering of Cultural Indicators in the Age of Nomadic Pastoralism,” *Annals of the Association of American Geographers* 107(2): 499–510 (2016).
26. Bas Verschuuren, Robert Wild, Jeffrey A. McNeely, and Gonzalo Oviedo, eds., *Sacred Natural Sites: Conserving Nature and Culture* (Washington: Earthscan, 2010).
27. Some 10,000 participants representing governments, civil society, indigenous, faith and spiritual communities, the private sector, and academia attended the Congress. It featured over 1,000 events covering 22 different themes.

28. The program of sessions for the IUCN World Heritage and Nature–Culture Journey is online at https://www.iucn.org/sites/dev/files/n-c_wh_journeys_programme.pdf.
29. Online at <https://portals.iucn.org/congress/session/9689>.
30. This was a joint session supported by the ICOMOS–IFLA International Scientific Committee on Cultural Landscapes (ISCCL) and the IUCN WCPA Specialist Group on Protected Landscapes.
31. Rodney Harrison, “Beyond ‘Natural’ and ‘Cultural’ Heritage,” 29–30.
32. Ian McNiven, Joe Crouch, Thomas Richards, Kale Sniderman, Nic Dolby, and Gunditj Mirring, “Phased Redevelopment of an Ancient Gunditj–mara Fish Trap over the Past 800 Years: Muldoons Trap Complex, Lake Condah, Southwestern Victoria,” *Australian Archaeology* 81(1): 44–58 (2015).
33. UNESCO, “Tentative List: ‘Budj Bim Cultural Landscape,’” online at <http://whc.unesco.org/en/tentativelists/6167/>.
34. Ibid.
35. Online at <http://whc.unesco.org/en/news/1563>.
36. ICOMOS, 19th General Assembly and Scientific Symposium, online at <http://icomosga2017.org>.
37. While not discussed here, it is important to note that the IUCN–ICOMOS collaborations are also supported by the work of the International Centre for the Study of the Preservation and Restoration of Cultural Property (ICCROM), as evidenced in a number of related workshops. For example, see <http://www.iccrom.org/international-course-on-linking-nature-and-culture-in-world-heritage-site-management/>.
38. Paulette Wallace and Kristal Buckley, “Imagining a New Future for Cultural Landscapes,” *Historic Environment* 27(2): 42–56 (2015).

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