Words from the GWS Student Summit
Jennifer Palmer • 111

Letter from Woodstock
Point Reyes: A Landscape Indivisible?
Rolf Diamant • 113

The Heart of the Matter:
New Essential Reading on Parks, Protected Areas, and Cultural Sites
Reviewed by Jerry Mitchell • 120

Nature–Culture Journeys: Exploring Shared Terrain
Nora J. Mitchell, Jessica Brown, and Brenda Barrett, guest editors

Introduction: Nature-Culture Journeys—Exploring Shared Terrain
Nora J. Mitchell, Jessica Brown, and Brenda Barrett • 123

Further Considerations of Community, Culture, and Change
Melia Lane-Kamahele • 128

A World Heritage Perspective on Culture and Nature—Beyond a Shared Platform
Susanna Kari and Mechtild Rössler • 134

Nature–Culture Interlinkages in World Heritage: Bridging the Gap
Peter Bille Larsen and Gamini Wijesuriya • 142

Building Capacities in Asia and the Pacific: The Experience of the UNESCO Chair on Nature–Culture Linkages at the University of Tsukuba, Japan
Maya Ishizawa, Nobuko Inaba, and Masahito Yoshida • 154

The Cultural and Spiritual Significance of Nature in the Management and Governance of Protected Areas
Edwin Bernbaum • 168

Exploring Agricultural Heritage Landscapes: A Journey Across Terra Incognita
Nora J. Mitchell and Brenda Barrett • 180

Bridging the Divide Between Nature and Culture in the World Heritage Convention: An Idea Long Overdue?
Letícia Leitão • 195
Nature–Culture Journeys: Exploring Shared Terrain (cont’d)

Reflections on the Nature–Culture Journey
William Pencek • 211

Enmeshed in Naturecultures: A Personal–Global Journey
Steve Brown • 216

An Urgent Journey: Realizing the Potential of Integrated Nature–Culture Approaches to Create a Sustainable World
Andrew Potts • 229

Mālama Honua—To Care for Our Island Earth
A Statement of Commitments from the Nature–Culture Journey Participants at the IUCN World Conservation Congress, Hawai’i 2016 • 238

On the cover: Marsh–Billings–Rockefeller National Historical Park (Vermont, USA) is a good example of a landscape where nature and culture are closely interwoven. (Rolf Diamant)
Dear GWS members and friends,

One of the reasons I was so inspired to step into the role as new executive director of the George Wright Society is because I sincerely believe in the next generation of leadership in parks, protected areas, and cultural sites. Recently, I was fortunate enough to come together with a selection of these emerging leaders at this year’s GWS Student Summit: Human Dimensions of the Wildland–Urban Interface.

Our GWS Student Summits are truly special events that bring together various GWS Student Chapter members from across the country. The event is entirely planned and designed by students to help cultivate strong professional ties, exchange best practices and science, and work specifically on real-world issues faced by protected area managers.

To tell you the truth, I wasn’t quite sure what to expect. Imagine twenty graduate and undergraduate students from six different universities roadtripping from Kansas and Montana, flying coast to coast from North Carolina, South Carolina, and California, trekking to a mountain top at 10,000 feet near Salt Lake City, Utah. We even had three international students representing India, Ecuador, and Brazil! Throw in the leadership of Dr. Matthew Brownlee and Dr. Kelly Bricker, special guest lecturers and mentors from the US Forest Service, local municipalities, businesses, and nonprofits, and let’s just say—nothing short of magic happens.

In just three days’ time, the students assisted in an impactful service project of cleaning up a mountain top, worked with a videographer to develop a GWS outreach reel, spotted moose and other wildlife, exchanged knowledge of social and natural sciences, and created five new research initiatives and future publications that focus on the theme of the summit.

During our time together, I thought a lot about the spirit of George Melendez Wright. As students engaged in hard conversations about controversial issues that put pressure on parks and protected areas management, I quietly reflected on the fact that many of these students were the exact same age George Melendez Wright was when he became the first chief scientist
for the Wildlife Division of the National Park Service. At one point, under the light of the full moon above an alpine silhouette, I imagined how proud and encouraged he would be if he were still alive today, standing side by side with these students. To me, that is the spirit of the George Wright Society.

Personally speaking, the summit was a chance to witness a shared vision for a united effort across disciplines, generations, and cultural differences, through sincere connection and care. Every student at the summit held such a deep passion for protecting wildlife, wilderness, and culture. They expressed a common dream of protecting the integrity of these cherished places, nationally and internationally, for all people to explore and fall in love with.

To current and future GWS student members, the George Wright Society looks forward to supporting your vision for many years to come. Thank you for being such creative and outspoken leaders in our community!

Kind regards,

Jennifer Palmer, Executive Director
George Wright Society
I have often thought about writing something on Point Reyes National Seashore but held back. A principal reason was that there never seemed to be a break in a successive chain of legal storms that rolled in over this lovely, beleaguered seashore that might afford an opportunity to step back and do one’s sums—assessing what has been gained and lost over decades of conflict and what the future may hold.

Changing circumstances, however, have overcome my reticence. Several years have passed since the National Park Service (NPS) decision not to extend the Drakes Bay Oyster Farm lease was upheld in federal courts, and a settlement was recently announced ending a separate lawsuit that threatened the continuation of more than a century and a half of agriculture at Point Reyes. This settlement has at least temporarily lifted the cloud of litigation that has hung over the 71,000-acre seashore for the past decade or more. These developments coincide with the publication of Laura Watt’s comprehensive new book *The Paradox of Preservation: Wilderness and Working Landscapes at Point Reyes National Seashore* (which I shall review in a future *George Wright Forum* ) that hopefully will inspire thoughtful dialogue on the seashore’s past and future. And lastly, given the theme of this issue of *The George Wright Forum*, it seemed an auspicious time to make a few observations on the indivisible values of Point Reyes National Seashore, and by extension, the larger meaning of national parks today.

Almost 40 years ago I worked on a general management plan for the seashore as a young landscape architect. This was almost a decade before some in NPS began seriously thinking about rural historic districts and cultural landscapes. The plan, however, did sparingly acknowledge Point Reyes’ 100-year-old dairy farms and suggested, given public support, that “this use will continue indefinitely.”1 Over time, cultural landscapes began being recognized by NPS as bona fide cultural resources and certainly my own views on their value evolved...
during my tenure as superintendent of Frederick Law Olmsted National Historic Site and Marsh–Billings–Rockefeller National Historical Park. At Marsh–Billings–Rockefeller we adopted third-party certification systems for the park’s historic managed woodland that promoted and interpreted responsible environmental and social practices on this forested cultural landscape. In 2006, I was asked to help prepare an NPS publication looking at ways small family farms and producers of traditional hand-made crafts can be good stewards of the land, maintaining the character and integrity of national park cultural landscapes. In a chapter about Point Reyes I mentioned several ranchers currently raising grass-fed beef, among them Kevin Lunny, who was also in the process of acquiring and upgrading the Johnson oyster farm in Drakes Estero. Renamed Drakes Bay Oyster Farm, the property would soon become the focus of an escalating controversy that reached all the way back to Washington when NPS decided not to extend the 40-year lease on the property, set to expire in 2012. Instead, NPS moved to fold the 2,500-acre estero (identified as “potential wilderness” by Congress in 1976) into the 30,000-acre Phillip Burton Wilderness Area.

The NPS action triggered a firestorm that was amplified in the media, particularly social media, bitterly dividing the environmental community as wilderness advocates squared off against supporters of sustainable agriculture. The conflict created much heartache for many people who sympathized with both objectives and sought to avoid a “take no prisoners” approach, hoping in vain for compromise. In adjacent rural communities emotions ran high, often estranging neighbors with opposing views from one another.

As the struggle over the lease renewal became increasingly bitter and personal on both sides, several NPS colleagues complained to me that our publication had included a photo of Lunny alongside rancher Dave Evans. I believed then as I believe today that demonizing people on an opposing side of a high-profile debate carries long-term costs, inevitably generating
the kind of intense polarization and animosity that we see far too much of in this country today. The credibility of the National Park Service is only strengthened when national parks appear unbiased, do not defensively recoil from complexity and ambiguity, and always treat everyone, even people who challenge NPS decisions, with respect.

When Secretary of Interior Ken Salazar denied the lease renewal for the oyster farm in 2012, he extended an olive branch to the park’s long-established ranching community, which was increasingly worried about its future. Salazar recognized the deep historical roots of the dairy and cattle ranches at Point Reyes and sought to re-assure this community that NPS would work with them. In particular, the secretary pledged a new NPS ranch management plan aimed at extending the term of farm leases for up to 20 years (some ranches had been operating on year-to-year permit extensions). Such a step would greatly enhance economic security and viability for the 24 ranching families remaining in the park’s pastoral zone. This 18,000-acre pastoral zone (20% of the seashore)—the heart of a dairy farming landscape at Point Reyes dating back to the 1860s—was identified in the park’s enabling legislation. It was anticipated that the ranch management plan would further cooperation between ranchers and NPS and encourage farming practices that improve the land and better protect park resources. The plan would also promote greater sustainability, including organic certification and energy efficiency.

However, just as the last remnants of the oyster farm were being hauled away from Drakes Estero and that controversy appeared to be winding down, the promised NPS ranching management plan and new leasing arrangements were stopped in their tracks by a lawsuit, filed in February 2017, by a trio of environmental nonprofits—the Center for Biological Diversity, the Resource Renewal Institute, and the Western Watershed Project. These organizations sued to block the ranch plan and implementation of longer-term leases, arguing for a more thorough park-wide assessment of the impact of grazing on water quality, wildlife habitat, and public recreational access. Though the plaintiffs stated that they were only seeking greater environmental review of ranching activities, some people have questioned whether the ultimate goal is really to end agriculture at Point Reyes.

In July, an agreement was reached between the three environmental groups, NPS, and local ranchers that halted the litigation, and appeared to offer something for everyone. The parties agreed that the park would continue to renew ranch leases for five-year terms. The seashore would also, in lieu of the ranching plan, complete an amendment to its 1980 general management plan (GMP). According to NPS, the GMP amendment would still consider management actions brought up in the suspended ranch plan such as “agricultural diversification, increased operational flexibility, the promotion of sustainable operational practices, and succession planning.” However, it was agreed that the GMP amendment would, in addition, consider planning alternatives that might scale back or even end agriculture at Point Reyes. NPS was given four years to complete this new plan.

As the clock is once again reset at Point Reyes, I will use this 17th Letter from Woods stock to offer a few observations of my own.

The early groundwork done for the ranch management planning appeared promising. As the new GMP amendment planning process is launched at Point Reyes, I sincerely hope
NPS will follow through on the pledge made by Point Reyes Superintendent Cicely Muldoon when that earlier ranch plan was launched—to have the park and ranchers work together to “strengthen our shared stewardship of these lands.”

There is now an opportunity to create what has always been missing at Point Reyes (and which was notably absent in our 1980 GMP)—a more intentional and mutually beneficial working partnership between NPS and the ranch community. To see how such reciprocity can work, it is instructive to take a closer look at the successful Countryside Initiative leasing program at Cuyahoga Valley National Park. Of course, Point Reyes, in coastal California, and the Cuyahoga Valley, in the heartland of Ohio, are different in many respects, but there is still much to be learned from the latter’s initiative, started in 1999, that has revitalized their historic farming community. In particular, attention should be given to Cuyahoga’s experience with 60-year farm leases, encouraging organic “environmentally friendly” farming practices, farmers’ markets, and cooperative educational and visitor programming.

I believe NPS can use the GMP amendment planning process to encourage a much-needed dialogue on the indivisible web of natural and cultural attributes and values found at Point Reyes. Without a stake in pending litigation, NPS is free to host a long-overdue dialogue that can broaden the frame of reference and vocabulary of various interested parties. Such a conversation would focus attention on the complete assemblage of seashore resources—including the value of a peopled cultural landscape with a ranch community that represents a living, tangible connection to Point Reyes history. Referring to the work of this community as generic “commercial cattle ranching” misses this cultural/historic connection by a mile and overlooks the fact that the seashore’s iconic pastoral scenery is still maintained by grazing.

Figure 2. Goat herd, Cuyahoga Valley National Park. (National Park Service)
The challenge facing Point Reyes, as with so many other national parks, is when nature and culture, in effect, overlap each other and constantly interact in both useful and sometimes problematic ways. As Watt points out in her new book:

The continuing presence of cattle ranches on Point Reyes’ rolling grasslands offers a vision of how working landscapes—places characterized by ‘an intricate combination of cultivation and natural habitat,’ maintaining a balance of human uses and natural forces—should be recognized as part of both natural and cultural heritages worth protecting.... Point Reyes offers the suggestive possibility of protecting all types of heritage resources together, as a landscape whole, rather than separately.5

What makes Point Reyes so unusual is its fascinating variety and complexity. There are beaches, grasslands, lighthouse facilities, tide pools, working ranches, early maritime radio structures, archaeological sites, streams and wetlands, scenic roads and trails, and an extraordinary variety of animals and plants. The elusive prize is to connect experiences that have too often been separated and compartmentalized in people’s minds and, as Watt says, recognize “that the wild and the pastoral can not only coexist but also strengthen each other.”6 The seashore can continue to provide a wide range of recreational, educational, and wilderness experiences for the body and mind, as well as an opportunity to see how our food can be grown in an environmentally and socially responsible manner that conserves natural and cultural heritage. Point Reyes can become a powerful example of what a more sustainable future might look like someday beyond the boundaries of a national park.

Figure 3. A mosaic of habitat at Point Reyes: in the foreground, quail use a boardwalk through a wetland; in the background, pasture. (Rolf Diamant)
There are legitimate concerns about the state of farming at Point Reyes. On a recent spring visit to the seashore I was troubled by the appearance of some of the ranches where I saw evidence of long-deferred maintenance. Longer-term leases from NPS would certainly help with securing loans and other funding needed to upgrade ranch facilities and overall management practices. The irony is not likely lost on many people, particularly the ranchers themselves, that postponing a decision on issuing more economically viable 20-year leases—for a minimum of another four years while the plan is completed—will probably only exacerbate existing challenges they face. In any case, there is an opportunity with the GMP amendment—as before with the interrupted ranch management plan—to take a fresh look at ways to establish a more proactive, cooperative, and mutually beneficial relationship between ranching families and the seashore.

I have a few suggestions for staffing the GMP amendment planning team. I would strongly recommend against a “business as usual” approach for pulling together a team. This recent agreement, for better or for worse, has given NPS yet another opportunity to finally get it right at Point Reyes when there still may be just enough residual public trust and good will to transcend a growing polarization that can all too easily propel a bitterly contested plan into the hands of Congress or the courts to resolve. I would suggest to NPS to treat this planning process like a major fire or hurricane—all hands on deck—like John Cook’s mobilization of the NPS Alaska Task Force in the 1970s. NPS should be drafting its best and brightest from across the service for this effort. It is vital that seashore personal who know the park and community the best give this process their all, even if NPS may have to backfill some of their regular duties. In particular, spend time looking at the example of Cuyahoga Valley and,

Figure 4. Historic ranch, Point Reyes National Seashore. (Rolf Diamant)
if possible, recruit someone from the Marin Agricultural Land Trust, or a similar organization knowledgeable about sustainable agriculture and partnerships, to help. And last but not least, there needs to be someone on the team experienced in the stewardship of park cultural landscapes.

Historian Dwight Pitcaithley reminds us that “the National Park System today is vastly different from the one envisioned and managed by Stephen T. Mather and Horace M. Albright…. The complexity of issues confronted by park and program managers today could not have been envisioned by the first generation of Park Service administrators.” Point Reyes National Seashore has always presented NPS with an unusual opportunity to expand the concept of what a national park can be. Deborah Moskowitz, president of the Resource Renewal Institute, commenting on the July agreement, recalled the contributions of President Franklin D. Roosevelt, who, in her words, “vastly expanded the national parks system as a way to create jobs and convey hope during the hardships of the Great Depression.” Roosevelt envisioned national parks providing spectacular scenery but also meaningful work, ecological diversity, history, craftsmanship, and recreational opportunities. Later on, wilderness was added to this growing mosaic of park values. Today, in our continuously changing, climate-challenged world, parks also provide opportunities for real-world learning, cultural continuity, and lessons about social justice, resilience, and more sustainable ways to live and work. Much of Point Reyes is a landscape that can be meaningful to people on so many different levels—indivisible now—hopefully indivisible for a long time to come.

Endnotes

Reviewed by Jerry Mitchell

Engineering Eden tells the story of the death of Harry Walker, a young Alabama man killed by a grizzly bear in Yellowstone in 1972, and of the trial that followed. In parsing the testimony and histories of the men who testified in trial, including eminent biologists Frank Craighead for the plaintiffs and Starker Leopold for the defense, Jordan Fisher Smith picked at the threads of conflict between influential people, as well as the struggles within the National Park Service (NPS) to redirect and revise its management of wildlife and natural resources. Nowhere were those struggles greater in the decades before Harry Walker’s death than in Yellowstone, where the increasing complexities of managing elk and bear had consumed the attention of park managers. Engineering Eden is the story of a death, but it is also a story of how wildlife and resource management policy came to exist, and how it evolved, scientifically, ideologically, and practically. Smith followed the threads of conflict and complexity back to where early efforts occurred, in some cases Yellowstone, but in others, Glacier, Yosemite, Sequoia, the Gila Wilderness, etc. It is the story of failures and successes by the National Park Service and other agencies, and it is the story of people—some quite heroic—who tried their best (egos aside) and, through those failures and successes, brought about needed change. Jordan Fisher Smith paints an epic picture of national park management and the scientists—in some cases, families of them—and their bodies of work, and those of their protégées, that led to the creation and evolution of policy and the effective practices that continue today over vast landscapes.

The book begins with the first day of a trial known as Martin v. United States, concerning the death of Walker. We get to know Walker, his family, and their Alabama dairy farm, and we learn that Walker left—only 19 days before he died—to find himself. We get to know the attorneys who would face off in court, and we’re introduced to the principals who would testify. The author describes the substance of the testimony by Frank Craighead and Starker Leopold, informing us of the conflicts that existed at the time. Then, while he has our attention, Smith takes the next exit, pulls onto seemingly unrelated backroads, taking us back in time, arriving at a place that gives important context to the larger story. I admit, there were
times early in the book when I thought he’d gotten sidetracked, but he arrived at his destination, and I understood why we were there. Using this approach, Smith painted the policy landscape from the days of George Melendez Wright, through Adolph and Olaus Murie and others, to current times.

From the coming of age of Frank and John Craighead, to their days doing bear research at Yellowstone, Smith captures their character, accomplishments, and the back stories behind their eventual conflicts with officials at the park. Similarly, he describes the influences on Starker Leopold from his father, ecologist Aldo Leopold, and how those influences shaped the guidance Starker would give the National Park Service.

Frank and John Craighead had articles in National Geographic magazine at a young age, but they achieved celebrity status in the ’60s through National Geographic’s television programming covering their bear research in Yellowstone, which had started in the ’50s. The Craigheads were confident and accustomed to overcoming challenges—as Smith describes in his history of them. In the years before the trial, their relationship with NPS had become a challenge (an understatement). The Craigheads’ recommendations took one direction, while the Park Service’s management of Yellowstone bears took another. Following the release of the Leopold Report, which had been written by a committee chaired by Starker Leopold, Yellowstone had wrestled with addressing not just the management of bears, but also of elk. While the Leopold Report gave much-needed guidance to the national park system, there were no easy answers to the issues at Yellowstone. The park staff adjusted and readjusted their management, caught between public expectations and controversy and the various perspectives of scientists—including that of the Craigheads. They eventually came up with a management concept referred to as “natural regulation,” which assumed that the balance of nature was intact at Yellowstone, that you couldn’t see it work until you stopped constantly doing things to it.

In the ’50s, ’60s, and ’70s, the consequences of Yellowstone predator control were at their peak. Populations of elk had exploded and range and ecosystem conditions had deteriorated. While many saw the removal or reduction of elk as the solution, all options were controversial. NPS had difficulty finding one the public would get behind, and it might have been under those pressures that the staff began developing, in 1967, their hypothesis/policy of “natural regulation.” Natural regulation supposed that elk herds were self-regulating units, which even in the absence of predation could not grow beyond the limits of their habitat.

In the same period, dumps were closed in Yellowstone, in part because of the Leopold Report. The Craighead brothers warned there might be dire consequences if the dumps were closed without weaning bears off them as their source of food. Because of the willingness of the Craigheads to air their grievances publicly, NPS distanced itself from them and eventually revoked their permits for research in the park. Ignoring the Craigheads’ advice, NPS developed its natural regulation hypothesis/policy to justify its actions (or lack of actions, to let nature take its course).

While rangers at Yellowstone contended with a growing bear crisis, the science staff seemed pleased with the bear and elk management situations, or so they reported to the likes of Starker Leopold, who at first accepted their conclusions and supported their management
direction. It was during these times that Harry Walker and a friend arrived at Yellowstone. I don’t believe Smith considers the Walker case to have been the hinge-pin in the revision/evolution of NPS wildlife management policy (several wildlife-related deaths and other events are described in his book, including at Glacier, Yosemite, and Sequoia and Kings Canyon, which were confronting their own bear issues), but possibly as the best lens through which to look at the implications, servicewide.

I confess that, when I first flipped through *Engineering Eden*, I was skeptical. I suspected it would portray NPS management as being simply hands off, only protection. That was something I contended with over much of my career as an NPS natural resource professional, from co-workers in the ’70s to others such as state wildlife commissioners I’d meet at North American Wildlife Conferences. When Smith first mentions the Leopold Report he seems almost circumspect, and I wondered if he intended to indict it for agency failings. As a kid, I found inspiration in the Craigheads, but it was with the Leopold Report, I admit, that I found the bearings for my own career. I saw it as telling us not just to protect but to restore and to manage, and that’s what I focused on, never considering the words “vignettes of primitive America” to mean a static condition. Primitive America was dynamic, shaped by processes, and over the course of my career I worked in (and fought for) countless efforts to restore systems and to restore processes. While Smith documents that Starker at first supported the natural regulation approach at Yellowstone, he also came to question, and nudge, and expect better science. He also prodded NPS to manage. There is a beautiful scene Smith describes near the end of the book, where the Sequoia superintendent and a small group of his staff—including David Graber, Starker Leopold’s last grad student—met with Starker at Berkeley, seeking more guidance (for their already established fire program) than he had put in the Leopold Report. Leopold told them at that point they probably knew more about the subject than he did. In Graber’s words, quoted by Smith, “Starker said there would be no second coming.” They were in charge, and they needed to make their best judgments based on the best information they had and get on with it.

I didn’t know all the people in this book, but I knew many, both scientists and rangers, and I know their accomplishments. I appreciate how objectively Smith treats the personalities. He captures their strengths, even in those associated with failures. We’re only human, and we give it our best shot, do our best to use the science available to us, in ways that serve the parks we’re responsible for. Sometimes we make mistakes. We work in places the public loves, so the issues become controversial, and complex. Sometimes we think too hard, or seek easy answers. We fail. We succeed. We make our mistakes, but we learn from them—or someone else does. Sometimes egos get in the way. Reputations suffer, as does credibility, but Smith—in this epic portrayal—somehow shows all fairly, even if their failures and conflicts made it necessary for others to bring about the needed change. What is tragic, and made the sober thinking necessary, is that Harry Walker died.
In 2013, the traditional voyaging canoe Hōkūle‘a set sail from Hawai‘i on a round-the-world journey using only traditional Polynesian way-finding techniques, including observations of the stars, the sun, the ocean swells, the winds, birds, and other signs of nature. After a journey of over 60,000 miles, visiting more than 23 countries and territories and 150 ports, the Hōkūle‘a returned to Hawai‘i on 17 June 2017. The wayfarers carried a message of Mālama Honua—a Hawaiian expression meaning “to care for our island earth”—and gathered ideas to meet the challenges facing our world today.

In September 2016 another journey occurred with similar intentions to those of the Hōkūle‘a—one at the IUCN (International Union for Conservation of Nature) World Conservation Congress in Hawai‘i. In the Hawaiian spirit of Mālama Honua, people traveled from around the world to share ideas and learn from each other’s innovations in order to better address the earth’s many conservation challenges. As part of this Congress, a four-day “Nature–Culture Journey” explored the interconnections between nature and culture through over 50 related sessions. Drawing inspiration from the depth of knowledge and experience in Hawai‘i, participants in the Nature–Culture Journey delved into the growing understanding that natural and cultural heritage are inextricably linked in many landscapes and seascapes, and that lasting conservation of such places depends on better integration of these “entangled dimensions” in all aspects of planning and management.

Convened every four years by IUCN, the World Conservation Congress focuses on addressing some of our greatest challenges today, such as tackling climate change, conserving biodiversity, and achieving food security. In 2017, the conference theme was “Planet at the Crossroads,” highlighting the urgency of ambitious, coordinated action on behalf of the planet. This ten-day Congress, which featured over 1,000 events on diverse topics, was attended by some 10,000 people from all over the world, representing governments, civil society organizations, indigenous communities, faith and spiritual communities, the private sector, and academia.
Hawai’i was a particularly appropriate venue for this gathering, as there is a long history of people adapting to their natural environment on these eight small islands in the middle of the Pacific Ocean (Figure 1). As Melia Lane-Kamahele observes in her article, the congress provided an opportunity to showcase Hawai’i as a microcosm of culture, place, and conservation challenges, and to share with the world its experience with culturally rooted means of fostering stewardship. These are expressed in Native Hawaiian traditions such as *Aloha ʻĀina* (mutual respect for one another and a commitment of service to the natural world) and *Kuleana* (care, responsibility and stewardship of the lands and seas).

The Nature–Culture Journey touched on a broad array of conservation issues, while examining how to better understand the interconnectedness of nature–culture and how to apply this understanding to more effective conservation. This thematic issue of *The George Wright Forum,* “Nature–Culture Journeys: Exploring Shared Terrain,” brings together a variety of perspectives on the connection between nature and culture from contributors who had participated in the gathering in Hawai’i. As co-editors we are pleased that the compilation brings out many voices from different fields and diverse geographies. While this compilation is not a comprehensive review of the many dimensions of this complex theme, the articles assembled here tease out key issues, reflect on areas of progress, and flag up new directions. They provide a rich overview of many of the challenges—and opportunities—of integrating nature and culture in conservation. It is our hope that this sampling of the deliberations from the Nature–Culture Journey conveys a sense of the collegiality and spirit of exploration that characterized this international gathering. We further hope that it will help to advance the dialogue.

**Learning from a range of perspectives**

Given the myriad ways that the Nature–Culture Journey drew on Hawai’i’s rich experience with nature–culture interlinkages, it is fitting that this compilation begins with an article offer-

---

**Figure 1.** Hawaiian fishpond on the eastern shore of the island of O‘ahu. This advanced form of aquaculture is unique to the islands and many of the ponds are used to this day. (Brenda Barrett)
ing a Hawaiian perspective. Melia Lane-Kamahele presents the experience of several Native Hawaiian communities with community-based stewardship based on people’s connections to land and to traditions, such that the *kuleana* grows out of engagement at the deepest level. She observes that in the traditional conservation systems of Hawai‘i “there is no separation between *kama‘aina* (people of the land) and the land, only their relationship.”

Several of the collected articles reflect on and discuss the World Heritage Convention, which explicitly recognizes the value of both culture and nature. We begin these reflections with an essay providing a perspective from the UNESCO (United Nations Educational, Scientific, and Cultural Organization) World Heritage Centre by Susanna Kari and Mechtild Rössler. Their article examines the intent of the World Heritage Convention to provide a framework to consider both culture and nature and the interconnectedness of the two concepts. The paper analyzes how, through guidance and practice, the intrinsic relationship of culture and nature has been represented through a variety of developments in World Heritage, such as inclusion of the cultural landscape designation, the recognition of the role that people play in managing their environment, and the launch of the World Heritage Sustainable Development Policy. Co-authors Peter Bille Larsen and Gamini Wijesuriya argue that now is the time to re-examine and re-frame the interdependency of culture and nature. Noting that the dichotomy between sectors is an historical artifact of a more westernized worldview, they observe that dominant models of heritage are increasingly being questioned—in conservation practice generally, and in World Heritage in particular. As they write, “heritage thinking in both natural and cultural fields has moved from ideas of freezing heritage as ‘static’ values and attributes to one of recognizing heritage as dynamic, interrelated and complex.” The challenge, they suggest, is to create new institutional practices and even a new language to deal with the broader linkages that are found in all World Heritage sites.

The next several articles examine how the fault line between nature and culture has had an impact on different segments of global heritage and explore how this can be addressed. Maya Ishizawa, Nobuko Inaba, and Masahito Yoshida report on a series of capacity-building international workshops for young heritage conservation professionals offered by the University of Tsukuba in Japan and partners, with a special focus on Asia and the Pacific region. The workshops are envisioned as a means of better understanding and developing new approaches to integrating conservation of cultural and natural heritage, and as a platform for international exchange among heritage practitioners. The first two workshops in the four-year series focus, respectively, on agricultural landscapes and sacred landscapes. Noting that nature has deep spiritual and cultural significance around the world, Edwin Bernbaum considers its potential to inspire and revitalize the connections between people and protected areas. His definition of the spiritual and cultural significance of nature encompasses “the inspirational spiritual, cultural, aesthetic, historic, social, and other meanings, values, knowledge, and associations that nature in general and natural features in particular, ranging from mountains and rivers to forests and wildlife, evoke for people.” He suggests that a deeper understanding of this significance, and the related values it carries for people, is essential to effective management and protection of landscapes. Nora Mitchell and Brenda Barrett highlight the growing recognition of agricultural heritage landscapes through an array of designations, and
the serious challenges facing these landscapes. They describe several emerging initiatives to meet these challenges, including developing resilience indicators, adopting landscape-scale approaches, and drafting principles concerning rural landscapes as heritage. All of these essays highlight the inseparable role of nature and culture, as well as the important role of communities in stewardship.

Three more papers reflect on personal journeys inspired by the writers’ work on the ground, and further informed by the literature and by deliberations during the Nature–Culture Journey. William Pencek of US ICOMOS (the United States Committee of the International Council on Monuments and Sites) reflects on personal experience that led him as a cultural heritage professional to broaden his horizons and adopt an expansive view of culture and nature. He observes that his role in supporting the Nature–Culture Journey confirmed the necessity for this perspective. Reflecting on their experience with World Heritage, Steve Brown and Letícia Leitão each explore the challenges and opportunities of advancing more integrated approaches to nature and culture within the convention. Both Brown and Leitão write about their participation in the Connecting Practice initiative, a joint project of IUCN and ICOMOS that brings together interdisciplinary practitioner teams to explore, learn about, and create new methods centered on recognizing and supporting the interconnected character of the natural, cultural, and social values of highly significant landscapes and seascapes.

In the final article in this collection, Andrew Potts offers a broad perspective on the Nature–Culture Journey, noting the potential value of holistic approaches to addressing global challenges. He argues that there is a growing sense of urgency for the nature and culture sectors to work together to address these challenges, specifically by advancing integrated nature–culture solutions to help achieve targets set by global frameworks such as the UN Sustainable Development Goals, the Paris Agreement on Climate Change, and the Sendai Framework for Disaster Risk Reduction.

Thoughts on lessons learned
While it is beyond the scope of this issue to synthesize all of the findings of the Nature–Culture Journey, this collection of papers identifies some recurring themes. One is the central role of the World Heritage Convention as the international framework that continues to define the standards for heritage conservation. Although there is progress still to be made in addressing nature and culture interlinkages, it is promising that the World Heritage Convention has proven to be able to adapt as concepts have changed over time. Therefore, it is critical that our growing understanding of the dynamic nature of biocultural landscapes inform World Heritage processes and practice. Briefly, some other themes emerging from this compilation include the need to build capacity of practitioners, the sacred and spiritual dimensions of nature, the role of traditional ecological knowledge, and the contribution of agricultural heritage landscapes to ensuring resilient food systems.

As each of our contributing authors indicates, the real issue is not simply achieving a more comprehensive understanding of the intersection of nature and culture. Ultimately, the aim is for conservation—informed by a more integrated perspective of heritage in all of
its manifestations—to contribute significantly to tackling the pressing challenges facing our planet, including climate change, human migration, and food security/sovereignty.

**Looking ahead**

Participants in the Nature–Culture Journey in Hawai‘i not only forged new professional connections across disciplines, they also proposed a road map to improve conservation practice through better recognition of the interlinkages of nature and culture. This outcome can be found in the Journey’s closing communiqué: “Mālama Honua—To Care for Our Island Earth” (reprinted as the closing article in this issue). Inspired by the spirit of the Hōkūle‘a voyage, this statement of commitments recognizes the vital importance of the interlinkages of nature and culture, and calls upon actors from both sectors to work together and adopt integrated nature–culture solutions to address urgent global challenges.

The IUCN–ICOMOS Nature–Culture Journey now has a new destination. One of the commitments in the Mālama Honua communiqué requests ICOMOS to continue the Journey at its next General Assembly. Planning for a “Culture–Nature Journey” at the ICOMOS gathering in December 2017 (Delhi, India) is now underway and will provide a forum for continuing the dialogue so critical to advancing good conservation practice. At the upcoming Culture–Nature Journey in Delhi, practitioners from both sectors will have an opportunity to take their next steps together, exploring shared terrain.

**Acknowledgments**

The Nature–Culture Journey was jointly coordinated by IUCN and ICOMOS, with the assistance of US/ICOMOS, and in collaboration with UNESCO and other partners. We also want to acknowledge the leadership of Tim Badman and Andrew Potts, focal points for IUCN and ICOMOS respectively, in creating the Nature–Culture Journey, as well as the many contributions from participants that actualized this vision. Highlighting examples of conservation from around the world, Journey sessions demonstrated that, through collaboration, more successful conservation can be imagined and implemented.

[Ed. note: All photos appearing in this special issue are the copyrighted material of their respective creators and are reprinted here with their permission.]

**Endnotes**

2. See http://www.iucnworldconservationcongress.org/.

_Nora J. Mitchell, P. O. Box 787, Woodstock, VT 05091; norajmitchell@gmail.com_

_Jessica Brown, 275 High Road, Newbury, MA 01951; jbrown@oldtownhill.org_

_Brenda Barrett, 2260 Rudy Road, Harrisburg PA 17104; Brendabarrett88@gmail.com_
Further Considerations of Community, Culture, and Change

Melia Lane-Kamahele

I Ka Wā Mamua, I Ka Wā Mahope
(Where We Come From—our past, present, and future)

In the cool of the early evening when the sky has turned from the alaula of sunset to the purple blue of night, Manaiakalani rises in the west and travels to meet the sunrise. The hook of the demigod Maui that captured the sun is a constant reminder of the inseparable linkages of culture and nature, our biocultural environment.

We are separate, yet for all time entwined—we are defined by our connections to place and people, to resources and events, language, and outcomes. The World Conservation Congress (WCC) in Hawai‘i in 2016 provided a showcase for a microcosm of culture, place, challenges, communication, and sharing, as well as opportunities to explore our commonalities and our differences and how to continue to move forward in an ever-changing environment over which we have limited control. The WCC showcased our commonalities of ocean, islands, people, and cultures.

To accomplish much we must work together. How we structure those models and examples and ways of doing are given many names. One of them is kuleana—the uniquely Hawaiian concept of a reciprocal relationship between a person who is responsible and the thing that he or she is responsible for. This responsibility comes from engagement at the deepest, visceral level and it takes many forms and models. The engagement happens both individually and collectively. We can call it co-management, or that we are an alliance, or a consortium, a hui, a collective, an ʻohana.

What is important is that we keep our joint perspective, continuing to work together and embracing change. In Hawai‘i we have continued this tradition and the work moves forward. There are so many examples of collaboration and culturally competent and appropriate communication, teaching, sharing, and community engagement across all levels and generations—local, community, academic, regional, national, and international.

The critical components in this process involve acknowledging the role and definition of communities in conservation, recognizing multiple knowledge systems (cultural, place-based,
contemporary scientific) and the importance of co-production of partnerships, knowledge, and community-based management. Within this process it is also important to acknowledge that we are the community and to recognize that as members of a community we may disagree about conservation issues.

When looking back at traditional Hawaiian conservation systems, whether it be the ahupua’a and konohiki, the kapu system, or farming and fishing cycles of planting and harvest, it is attachment, engagement, and integration of culture and place that have sustained our lifeways across generations and time. There is no separation between kama‘aina (people of the land) and the land itself.

The recently completed Mālama Honua (Caring for Our Planet Earth) worldwide voyage by the traditional sailing canoe, Hōkūle‘a, was the embodiment of the ultimate nature–culture journey (Figure 1). The canoe utilized non-instrument navigation to circle the globe, a journey of four years and more than 40,000 nautical miles, covering 23 countries and territories and calling at more than 150 ports to share the importance of community, culture, the Promise to the Pae ‘Aina, and a promise to future generations. The journey crossed lands, waters, time, and cultures and continues to resonate with and inspire people locally and globally.

Figure 1. The Hōkūle‘a is a re-creation of a Polynesian double-hulled voyaging canoe that most recently completed a three-year circumnavigation of the planet carrying the message of Mālama Honua, the Hawaiian practice of caring for their land, oceans, culture, and people. (Polynesian Voyaging Society and ‘Ōiwi TV)
When the Hawai‘i Conservation Alliance (a consortium of more than 25 organizations, agencies, and community groups) decided to focus its 20th anniversary conference around the theme of the integration of natural and cultural resources, biocultural ecosystems, and multi-generational perspectives, it made a commitment to look at Hawai‘i and Pacific issues in an integrated context. This represented a paradigm shift in terms of the level of engagement, one that broadened and expanded the conservation conversation to embrace a larger, more inclusive collaboration across both landscapes and seascapes leading up to the WCC in 2016 and beyond. Examples of this integrated, upscaled process can be found in both small community organizations and major collaborations.

While an international focus was brought on the Hawaiian Islands during the voyage of the Hōkūle‘a and the WCC, there were a number of ongoing partnerships in Hawai‘i that also exemplified the nature–culture journey and shared the many lessons we have learned and continue to learn. By adopting the core values and common sense of our kūpuna (elders), Hawaiian communities have used culture to connect in adaptive and flexible ways that will have impacts for many generations.

Kanewai and our community
Kanewai Spring (Figure 2) is one of the last functioning freshwater springs on the east side of the island of O‘ahu, located along Kalanianaole Highway in the ahupua‘a of Kuliouou. In July 2017, a community nonprofit, the Maunalua Fishpond Heritage Center, along with the Trust for Public Land and other partners, community groups, and families, celebrated the completion of a seven-year journey to purchase the property, which will now be stewarded in perpetuity.

It was the culmination of years of work by hundreds of volunteers (from keiki to kūpuna) to clear the trash, remove the weeds, learn about the history of Kanewai, and restore the spring. Clear freshwater now flows to the ocean, to the Kanewai Fishpond, the Paiko Wildlife Refuge, and Maunalua Bay. Native species and seaweed have returned to the system; and, as

Figure 2. (Left) Kanewai Spring as it appeared in the 1930s. (Photographer unknown; image courtesy Ian Lind) (Below) The restored spring today. (Trust for Public Land)
one looks at these accomplishments, having an appreciation for the saying that “water is life,” *ola i ka wai*, could not be truer.

This project is an example of a successful nature–culture journey that engaged people, place, community, and resources to chart a way forward together to ensure a sustainable beneficial outcome. The three major lessons from this community project include the need for passionate, committed multi-generational community members who want to perpetuate values; for the courage, commitment, and perseverance to lead a vision; and for communication that invites inclusion, understanding, flexibility, and strength. As one participant said:

> The *kūpuna* have passed this *kuleana* on to us, and we will pass our *aloha ʻaina* [love and commitment to the land] to our *keiki* and the many children who will visit the spring and learn about its history and the important role it plays in the life cycles of fish, *limu* [seaweed] and native marine life.

**The Pacific Islands Climate Change Cooperative (PICCC): Small islands and big impacts**

The Pacific Islands Climate Change Cooperative (PICCC) is one of 22 Landscape Conservation Cooperatives (LCCs) that form a network of resource managers and scientists who share a common need for scientific information and interest in conservation. Each LCC brings together federal, state, and local governments along with indigenous communities, nongovernmental organizations, universities, and interested public and private organizations. The LCC partners work collaboratively to identify best practices, connect efforts, identify science gaps, and collaborate on conservation planning and design. By building a network that is holistic, collaborative, adaptive, and grounded in science, the LCCs are working to ensure the sustainability of the economy, land, water, wildlife, and cultural resources in the face of climate change and other large-scale issues.

PICCC is a consortium of more than 20 federal, state, and local agencies, organizations, community groups, and educational institutions. They fund cutting-edge research and projects that inform adaptation by management partners and decision-makers. The goals of these projects are to provide a range of services and tools to help managers in Hawai‘i and the Pacific make informed decisions for the conservation of natural and cultural resources. By working to achieve the co-development of knowledge, PICCC helps managers reach biocultural adaptation and conservation objectives in the face of climate change impacts and ongoing threats such as fire, land conversion, and invasive species.

In Hawai‘i, PICCC funded a community-based project, the Molokai Climate Change Collaboration, as part of the Ka Honua Momona (The Bountiful Earth) effort on the island of Molokai. The project provides support for the development of programs to engage and educate people about climate change adaptation, their resources, and management and stewardship integrated through a biocultural perspective. The aim is to help restore the community to *momona* or abundance, which is part of Molokai’s cultural tradition. What follows is a description of the project based closely on materials provided by organizers.
For the past decade, the grassroots nonprofit Ka Honua Momona (KHM) has been caring for two ancient loko iʻa, traditional fishponds (Figure 3), located in the ahupuaʻa of Kami-loloa and Makakupaia just a few minutes east of Molokai’s main town, Kaunakakai. The work has entailed a great deal of effort: removing invasive mangroves and marine algae, rebuilding kuapā (fishpond walls), repairing mākāhā (sluice gates), and restocking native fish species in the ponds. Through the years the group has cleared shoreline areas that act as habitat for native water birds, opened up freshwater springs, re-established and maintained mangrove-free zones, and restored a greater degree of function to both the Aliʻi and Kalokoʻeli fishponds—all without the aid of heavy machinery.

These accomplishments represent an immense amount of work powered by thousands of school kids, community volunteers, and visitors that have joined KHM in its stewardship efforts. Together, they are restoring momona to these natural and cultural treasures. Muddy banks are slowly becoming sandy, sedimentation levels are dropping, water quality is improving, and prized Hawaiian mullet are spawning and flourishing once again within the fishpond walls.

Over time KHM’s kiʻupuna, cultural practitioners, and leadership began to recognize changes in the natural world that seemed to be out of sync with normal patterns. The texture of ʻeleʻele, a native limu, was more soft and slimy than usual. The highest tides of the year washed above the top of the kuapā, exceeding levels from the previous years during which KHM had been caring for the ponds. The behavior patterns of certain marine species, and conditions in general, seemed to be more variable and unpredictable.

As folks began to talk with others, it appeared that KHM was not alone in its observations and questions. Furthermore, local, national, and global dialogue was increasingly turning to the cumulative impacts of carbon emissions, global warming, rising sea levels, and other large-scale environmental changes. This myriad of phenomena, collectively termed “climate change,” was emerging within the global consciousness as the greatest threat ever faced by humankind.

The project brought together Hawai‘i climate change scientists, traditional fishpond managers from the island of Molokai, and other natural resource managers to work together as a team to share scientific and cultural knowledge and identify adaptive management strat-
egies to prepare for climate change for two of the ancient fishponds on Molokai. This was accomplished through a series of workshops, development of a strategic plan for the ponds and upland areas, development of a curriculum for the island’s elementary school students, and creation of a community engagement protocol to help climate scientists work with other communities throughout Hawai‘i and the Pacific.

Conclusion

In helping to facilitate community discussions and empowerment, along with fostering lessons learned and best management practices, the partnership between PICCC and KHM, like the Kanewai Spring project, has been a success and lays the groundwork for future collaborative engagement, with communities investing in their future, their resources, and their ‘ohana on their own terms and in a biocultural context.

Education and learning from our elders, along with access to knowledge from communicating and sharing, is critical to our survival as Native Hawaiians. It is through these engagements across time and generations between communities, place, and people that we are able to personalize relationships. By talking story and hearing the stories we keep the connections alive, connections that become timeless. In that way, our nature–culture journey continues.

There is only here, there is only now, there is only us. — Ms. Claire Ku

Melia Lane-Kamahele, P.O. Box 53, Honolulu, Hawaii 96810; melia.lanekamahele@gmail.com
Conceived with the fundamental notion that heritage is both cultural and natural, the World Heritage Convention provides a well-defined and compelling framework to examine the interlinkages between culture and nature. The interest of researchers and practitioners alike is reinforced by the fact that the World Heritage Convention is one of the most comprehensively documented legal instruments on heritage ever adopted. The World Heritage List, comprising 1,073 properties to date, illustrates a remarkable journey in the evolution of heritage as defined in the context of one intergovernmental agreement. In the course of this journey one can explore how the connections between culture and nature have been perceived over time in the implementation of the convention.

Although all World Heritage properties reflect heritage in its many diverse forms, the World Heritage system shines a brighter light on some aspects of that heritage than it does on others, focusing on those that are understood to possess “Outstanding Universal Value.” The tension between the two “realities” is often a source of criticism, and has at times prevented the convention from harnessing its full potential to govern heritage.

As described by Larsen and Wijesuriya in their article elsewhere in this issue of The George Wright Forum (originally published in 2015 in issue 75 of World Heritage devoted to the theme “Culture–Nature Links”), the limitations of the World Heritage system to address the interconnected values of culture and nature are well understood and largely explained by the history and the evolution of the 1972 convention. After all, the Convention Concerning the Protection of the World Cultural and Natural Heritage was crafted almost half a century ago as a global intergovernmental treaty intended to identify, protect, conserve, present, and transmit to future generations the irreplaceable cultural and natural heritage having Outstanding Universal Value as part of the world heritage of humankind as a whole. The 1972 convention text ratified by 193 states parties remains unchanged today, but its interpretation continues to be much debated (Cameron and Rössler 2013).

Nevertheless, over time new aspirations and the evolving practice of heritage conservation have shaped the interpretation of the convention and its implementation. To reflect new concepts, knowledge, and experience, the World Heritage Committee has revised the
Operational Guidelines for the Implementation of the World Heritage Convention almost 30 times since the adoption of the convention. Key concepts such as monitoring procedures (e.g., reactive monitoring and periodic reporting) as well as management provisions and new types of heritage (e.g., cultural landscapes) were included in the Operational Guidelines, documenting the advances of scientific discussions and hands-on experience on the ground. Many of these changes, such as the merging of the cultural and natural criteria for nominating properties to the World Heritage List, which emerged from a series of talks on linking nature and culture (von Droste et al. 1999), have reconstructed the convention’s architecture. With the inclusion of cultural landscape categories in 1992, the convention became the first international legal instrument on the protection of this form of heritage that recognizes the interaction between people and their environment. Others followed, such as the European Landscape Convention (Florence 2000). The World Heritage Convention therefore can set international standards on heritage conservation, which focuses attention.

When revising the Operational Guidelines in 2015, the committee decided to include (in paragraphs 40 and 123) further references to local communities and indigenous peoples. This was done in particular to encourage states parties to involve them in the conservation and management of World Heritage properties, to prepare nominations with the widest possible participation of stakeholders, and to demonstrate the free, prior, and informed consent of indigenous peoples. These changes strengthen opportunities to influence governance and management of World Heritage properties from the outset, and to accommodate local aspirations and values, which may bring more diverse notions of heritage into the management of World Heritage.

Although some policy decisions were long overdue, over the years various case studies from diverse regions of the world (e.g., de Merode et al. 2004) have been documented that demonstrate how the intrinsic relationship between nature, culture, and people is part of the very character of many World Heritage sites, and how this relationship influences how these places are interpreted, used, and managed. For example, the Laponian Area World Heritage site in Sweden, inscribed as a “mixed” property, is a case where the national authorities and the traditional owners, the Sami, negotiated for years to agree on the site’s co-management (Green 2009). The process led also to the recognition of the Sami’s traditional knowledge of their fragile Arctic homeland, which is critical to safeguarding the World Heritage site in the face of climate change (UNESCO 2008). The case reveals that even in places where local and “universal” values are aligned, real-life conservation is a complex and ongoing endeavor.

The amendments that were approved by the committee in 2015 represent a step forward, following a series of earlier efforts to bridge World Heritage policy and heritage realities on the ground. This evolution culminated in the adoption of the “Policy on the Integration of a Sustainable Development Perspective into the Processes of the World Heritage Convention” by the 20th General Assembly of the states parties in November 2015 (Resolution 20 GA 13). In contrast to the ongoing reflection concerning processes for mixed nominations (Decision 41 COM 9B), which focuses on procedural and process matters, the policy proposes a more fundamental shift in the implementation of the convention due to its holistic character.
The policy encourages states parties to (1) recognize and promote the inherent potential of World Heritage properties to contribute to sustainable development across all its dimensions, including environmental sustainability, inclusive social and economic development, as well as peace and security—which are interdependent and mutually reinforcing; and (2) work to harness the collective benefits for society, also by ensuring that the conservation and management strategies are aligned with broader sustainable development objectives. In so doing, the policy inevitably sets new expectations for heritage conservation and management. It emphasizes a holistic and integrated approach, thereby serving as a tool to better appreciate the interlinkages between nature and culture with a view to balancing conservation and development needs, while maintaining the Outstanding Universal Value of World Heritage properties.

The adoption of the sustainable development policy represents a major opportunity for states parties and practitioners to use World Heritage as a platform to develop and test new approaches that demonstrate the relevance of heritage for sustainable development, thereby contributing towards the implementation of the United Nations’ Agenda 2030 for Sustainable Development. Following the adoption of the policy in 2015, the integration of a sustainable development perspective into the processes of the convention has been moving forward. During its last two sessions, the committee closely examined progress on implementation of the policy. The progress reports prepared by the UNESCO (United Nations Educational, Scientific, and Cultural Organization) secretariat to the committee provide an insightful account of the activities that relate to implementation of the policy, particularly as regards capacity-building, dissemination, and mainstreaming.

At its last session in July 2017, the committee also examined general issues on the state of conservation of World Heritage properties, presenting a global and analytical overview. The document included a sub-section on integrated approaches for the conservation of natural and cultural heritage, reflecting the growing interest by states parties and practitioners to apply such approaches for effective management of World Heritage properties. Mindful of the potential positive impact of integrated approaches, the committee noted these efforts with
appreciation and encouraged their continuation and further elaboration, in accordance with the World Heritage sustainable development policy (Decision 41 COM 7).

Another major step toward integrating a sustainable development perspective was the committee’s decision in 2017 to approve a revised questionnaire format for the third cycle of periodic reporting, which mainstrea.ms the theme into the reporting obligations of states parties and their World Heritage properties (Decision 41 COM 10A). The revised format now includes questions relating to the implementation of the sustainable development policy, which provides a tool for awareness-raising, and calls for a global review of progress made and activities to be undertaken. In addition, by establishing clear links between the implementation of the convention and of the 2030 agenda for sustainable development, the revised format provides an opportunity for data-gathering for the agenda.

Notwithstanding this progress, the implementation of the sustainable development policy will be a long-term endeavor, one that will require translating its principles into operational procedures and practical guidance, as well as introducing major changes in the daily management of sites. The convention’s governing bodies (mainly the World Heritage Committee and General Assembly of States Parties) have also expressed the expectation that this will eventually involve introducing further changes to the Operational Guidelines.7

These developments demonstrate that integrated approaches to cultural and natural heritage are making headway into the statutory and operational work of the convention, including nomination, monitoring, and reporting processes. This opens up new opportunities.
to acknowledge the work that many practitioners and managers at World Heritage properties have been carrying out—in some cases for decades—and to mainstream these approaches to other heritage sites through appropriate guidance and capacity development. Although the ongoing debate on the policy and processes of the convention is crucial, the most tangible achievements in cherishing and safeguarding heritage in all its manifestations continue to be made on the ground at heritage sites in all regions. As management requirements become more complex and funds increasingly scarce, further progress will require strengthened partnerships across and beyond the heritage community.

Despite pressing global challenges, such as climate change, encouraging progress continues to be made and new opportunities are emerging. UNESCO is committed to supporting countries and sites in their efforts to fulfill the UN 2030 Agenda, which integrated, for the first time, the role of culture across many of the 17 sustainable development goals (SDGs), by ensuring that culture is integrated into sustainable development strategies at the national and local levels. This work was spearheaded by the preparation of a UNESCO global report on culture for sustainable urban development, *Culture: Urban Future*, launched in October 2016 at the UN Conference on Housing and Sustainable Urban Development (Habitat III, Quito, Ecuador). Applying an integrated approach in its review of UNESCO’s conventions that cover various aspects of culture and creativity—ranging from tangible and intangible

---

**Figure 3.** The ruins of the Ancient City of Sigiriya World Heritage site in Sri Lanka lie on the steep slopes and at the summit of a granite peak standing some 180 m high—the “Lion’s Rock,” which dominates the jungle from all sides. (Our Place—The World Heritage Collection)
heritage, to the diversity of cultural expressions and creative industries, to the fight against the illicit trafficking of cultural goods—the report features 111 inspiring case studies from around the world.

The new capacity-building efforts carried out through the World Heritage leadership program—led by ICCROM (International Centre for the Study of the Preservation and Restoration of Cultural Property) and IUCN (International Union for Conservation of Nature) and implemented in partnership with ICOMOS (International Council on Monuments and Sites) and the UNESCO World Heritage Centre—support novel interdisciplinary skills in heritage management, and aim to develop guidance for integrated and holistic management approaches that applies equally to natural, cultural, and mixed World Heritage properties. Since 2010, UNESCO and the secretariat of the Convention on Biological Diversity have collaborated in a joint program on the links between biological and cultural diversity, bringing out synergies among the culture-and biodiversity-related conventions. The World Heritage Centre’s long-standing partnership with the UNDP (UN Development Program) Global Environment Facility’s small grants program, which supports engagement of local communities in stewardship of World Heritage through community-based conservation and livelihood activities (COMPACT) in turn serves as an operational example of methods of participatory planning and benefits-sharing, adaptable across all types of properties.

The Nature–Culture Journey of the 2016 IUCN World Conservation Congress in Hawai‘i concluded with a call for commitments titled Mālama Honua—To Care for Our Island Earth. The statement acknowledged the important legacy of the World Heritage Convention in having explicitly recognized heritage as both natural and cultural, reminding us of the ways in which people interact with nature. Therefore the convention also became a major global platform, bringing people together from both culture and nature disciplines.

As was evident in the rich debate and dialogue that took place in Hawai‘i, and as reflected in the articles featured in this thematic issue, the legacy of the 1972 World Heritage Convention continues to influence and set new standards for heritage conservation. One of its most important features, to integrate cultural and natural heritage into one instrument, presents both a challenge and a great opportunity: experts from different disciplines can work together, learn from each other, and pursue dialogue across cultural, geographical, and other divides. It can be a stepping stone for peace-building and ensuring a sustainable future for generations to come.

With the adoption of the World Heritage sustainable development policy, however, the cross-fertilization between the nature and culture sectors, although valuable in its own right, may no longer be sufficient for ensuring the effective conservation of World Heritage. In light of the challenges and opportunities of today’s world, achieving this aim will require reaching out to societies in new and innovative ways.

Endnotes
1. The World Heritage Centre maintains an extensive database on all World Heritage properties on its website: http://whc.unesco.org/en/list/. The data include over 3,300 reports on the state of conservation of the properties that have been examined by the
World Heritage Committee since 1979; these are available online at http://whc.unesco.org/en/soc/.

2. This issue can be consulted in full at http://whc.unesco.org/en/review/75/.

3. These had included the adoption of the Budapest Declaration in 2002 that recognized the linkages between heritage protection and the well-being of people, the inclusion of the “communities” as the fifth strategic objective for implementation of the World Heritage Convention in 2007, and the celebration of the 40th anniversary of the convention in 2012 dedicated to the theme of “World Heritage and Sustainable Development: The Role of Local Communities.”


5. Document WHC/16/40.COM/5C (UNESCO, 2016) and Document WHC/17/41.COM/5C (UNESCO, 2017) present the progress reports prepared by the UNESCO Secretariat.


7. Decision 39 COM 5D; Resolution 20 GA 13.

8. See also the article by Potts in this issue of The George Wright Forum on the potential of integrated nature–culture approaches to help achieve the SDGs.

9. The COMPACT methodology has been documented in World Heritage Paper no. 40, Engaging Local Communities in Stewardship of World Heritage, available online at http://whc.unesco.org/en/series/40/. See also Brown and Hay-Edie 2013 for a compilation of case studies from the COMPACT initiative.

References


**Susanna Kari**, UNESCO World Heritage Centre, 7 Place de Fontenoy, 75352 Paris CEDEX 07 France; s.kari@unesco.org

**Mechtild Rössler**, UNESCO World Heritage Centre, 7 Place de Fontenoy, 75352 Paris CEDEX 07 France; m.rossler@unesco.org
Nature–Culture Interlinkages in World Heritage: Bridging the Gap

Peter Bille Larsen and Gamini Wijesuriya

Whereas many stress the originality of the World Heritage Convention in linking the conservation of nature and culture in a single instrument, it is increasingly under attack for sustaining the divide. However, divisions between nature and culture are not universal. Indeed, it is considered that nature and culture are very often complementary and inseparable. Cultural identities have been forged in specific environments, just as many creative works of humankind are profoundly inspired by the beauty of natural surroundings. Such linkages have also been recognized outside the World Heritage domain.

Although the connection between nature and culture has appeared continually in the history of the convention, and much action is being undertaken in this realm, this article argues that the time has come to revisit current policies and practices and thus to respond to a major opportunity to reassert the contribution of World Heritage to the effective and equitable protection of cultural and biological diversity. This may, for example, recognize the inherent aspects of interdependency as well as stimulate the cross-fertilization of experiences and practices being developed by the cultural and natural heritage sectors.

The United Nations Environment Programme (UNEP) estimates that between 150 and 200 species are lost every day. In comparison, it is estimated that one language dies out every two weeks.¹ If linguistic diversity is taken as a proxy for cultural diversity, such losses together with the degradation of biodiversity are not only among the urgent global challenges of our times, but can be seen as interconnected phenomena. Targets to integrate traditional knowledge and practices alongside participation in the Convention on Biological Diversity illustrate the growing global understanding of interlinkages, but also the continuous challenges to reverse trends of decline.² From this perspective, heritage interlinkages are not merely about co-evolving landscapes, cultures, and practices, but a cross-cutting reality that makes the role and contribution of the World Heritage Convention a major concern.

Many positive actions have been undertaken within the World Heritage processes from the inception of the convention. These include a variety of policies adopted by the World Heritage Committee and activities by its advisory bodies (ICCROM, the International Centre for the Study of the Preservation and Restoration of Cultural Property; ICOMOS, the International Council on Monuments and Sites; and IUCN, the International Union for Conservation of Nature) collectively and individually. Indeed, this issue was triggered by one

such activity started collectively by all three advisory bodies and the World Heritage Centre involving the development of a course module for World Heritage practitioners on nature–culture interlinkages.³

Gaining momentum

First, the recent trend towards bridging or connecting heritage is not accidental, but signals how dominant modernist models of heritage are being questioned. In the academic field, the nature–culture dichotomy has long been under attack.⁴ It is increasingly seen as a cultural expression of a distinct historical period rather than a universally valid split pertinent for heritage classification.

Second, the use of the World Heritage Convention has increasingly been internationalized beyond its European mainstay. Furthermore, shifting expert understandings and post-colonial notions of heritage values⁵ defy the split between nature and culture. From Australian engagements with Aboriginal notions of Country and landscape to Buddhist temples and sacred mountains in Sri Lanka,⁶ heritage realities covered by the convention today challenge narrow concepts of nature and culture. This is equally true in the European context.⁷

Third, heritage thinking in both natural and cultural fields has moved from ideas of freezing heritage as “static” values and attributes to one of recognizing heritage as dynamic, interrelated, and complex. The lived everyday dimension of heritage is no longer an anomaly, but often recognized as an integral dimension of specific values and landscapes.⁸
field of protected area conservation, much “transboundary” work is being undertaken in relation to spiritual and sacred values, and other cultural dimensions. In particular, the field of biocultural diversity promoted by UNESCO (the United Nations Educational, Scientific, and Cultural Organization) has stressed the interrelated and co-evolving nature of biological and cultural systems, values, and practices. The recognition of natural and cultural dynamics as intimately connected also require a rethink of conservation practice.

Fourth, heritage specialists are increasingly recognizing the limitations of their own domains of expertise. A growing critique from civil society, not least indigenous peoples, also underlines the need to shift from heritage as an exclusive expert domain towards one building on local community perspectives and values that often defy narrow nature–culture distinctions. Where nature conservation just a few decades ago was dominated by natural scientists and management experts, it today includes indigenous and local community voices often stressing interlinkages through local knowledge, livelihood practices, and age-old landscape connections. In many cultural sites, the significance of natural values and local socio-environmental dynamics are equally gaining importance.

Fifth, at present, we need to recognize that cultural and natural heritage sectors have developed many tools and methods, often in isolation from each other. Management planning tools using a values-based approach to heritage management and UNESCO’s Enhancing our Heritage (EOH) toolkit are among many that can be shared for the benefits of both sectors. While practitioners may sit at opposite sides of the table, much can be shared for the benefit of more effective heritage management.

Figure 2. The cone-shaped volcano is Mount Ngauruhoe at Tongariro National Park, New Zealand. (Laura Beasley)
In sum, a major drive is under way to rethink the boundaries between nature and culture as:

- embedded and connected rather than isolated qualities;
- constituted relationally rather than unique and distinct properties;
- a dynamic web of processes rather than fixed elements;
- a field for experience sharing and mutual learning.

Whereas the nature–culture dichotomy has evolved into separate heritage fields and domains of expertise, there is today a growing understanding that heritage sites are not made up of isolated natural or cultural attributes split into separate realities, but are intertwined, connected, and constituted of relationships. Heritage thinking has matured in its appreciation of the complex interconnections between values both cultural and natural, attributes, and the people living in and around World Heritage sites regardless of whether they manifest Outstanding Universal Value (OUV) only.

**Recognizing management impasse and new avenues**

As the number of sites now exceeds 1,000, the World Heritage system is today at a crossroads where four decades of success are challenged, among other factors, by a deepening gap between nature and culture. In practice, the majority of national management bodies are split according to natural and cultural sectors. Where national agencies are responsible for both fields, expertise, line agencies and regulatory arrangements often remain split between nature and culture. Such institutional divides are tied to the historical developments of the heritage fields, where their marriage in the World Heritage Convention was more of a historical coincidence or concurrence of parallel processes than their integration as such. Furthermore, the defining articles of the convention keep natural and cultural heritage as separate domains by situating humanity, history, and construction in the cultural field, contrasting these with natural features.

Whether concerning nature or culture, it is increasingly obvious that the “culture of World Heritage” and the institutional infrastructure built up over the years cannot merely be viewed as a further addition of protection and international support. In 2013, the debate erupted once again in the World Heritage Committee session in connection with the Pimachiowin Aki mixed site nomination from Canada. Committee discussions were concerned with the “bonds that exist in some places between culture and nature” and concluded that more work was needed. A questioning of the nature divide is taking hold, where inscription criteria, nomination practices, management planning, and evaluation procedures are no longer considered neutral procedures but constitute transformative practices in need of reform.

The sheer upgrading of national heritage to the common heritage of humankind entails social effects and transformation of the very fabric of heritage. Cases of heritage recognition fueling divides between cultural and natural practitioners, nationalism, conflict, dispossession, or commodification have challenged the very meaning of World Heritage. This is, we argue, more than a simple working misunderstanding, and in practice runs the risk of undermining not only the legitimacy of the World Heritage system, but equally so the very interlinked
fabric that constitutes and sustains the OUV.

It is becoming obvious that questions of interlinkages are critical to the integrity and authenticity of both natural and cultural sites (although authenticity is limited to cultural sites in World Heritage processes) as well as management. The integral role of local values and connections for the OUV is being rehabilitated, no longer as superfluous local flavor, but as a basic ingredient. Studies in the field of biocultural diversity are particularly important in demonstrating such interlinkages. This even raises questions not only about the integrity of all sites but also about the “authenticity” of natural sites. Spiritual values, cultural conservation practices, traditional ecological management knowledge, and stewardship practices are just some examples of nature–culture interlinkages not only valuable in themselves, but equally critical to ensure the wholeness and integrity of the site as such. They may not meet any World Heritage criterion but nonetheless form inseparable entities for management.

Cultural landscapes and mixed sites: learning from practice

The year 1992 is often highlighted as a breakthrough in terms of nature and culture linkages, in particular the introduction of “cultural landscapes,” where human interaction with the natural system has formed the landscape and created a window of opportunity. With its three categories—created landscapes, organically evolved landscapes, and associative cultural landscapes—the cultural landscape has arguably opened up a whole new range of connections, recognizing that interplays and dynamism exist with traditional ways of life and livelihoods both in terms of material implications as well as cases of “associative cultural landscapes” where (inmaterial) cultural, religious, or spiritual associations are at stake. Tongariro National Park in New Zealand became the first World Heritage cultural landscape to recognize Maori values and linkages in the landscape (based on the cultural criteria of the Operational Guidelines to the Implementation of the World Heritage Convention).
The recognition of categories of cultural landscape was not simply a move to further integration, but also led to further separation. Whereas the introduction of cultural landscapes led to explicit attention to nature–culture linkages, changes made in natural criteria that same year removed existing language pointing to interaction and combinations from the natural criteria. “Man’s interaction with his natural environment” was removed from former natural criterion ii (currently criterion viii) leaving “ecological and biological processes” as defining elements. In similar terms, exceptional combinations of natural and cultural elements disappeared from former natural criterion iii (current criterion ix). Furthermore, cultural landscapes as a category of heritage are recognized only under cultural criteria i–vi of the Operational Guidelines.

This has in many cases caused interlinkages to become invisible in attempts to “pitch” or retrofit local realities within global categories. The division of labor between natural and cultural specialists in the World Heritage arena has left nomination teams with the creative production of retrofitting interconnected heritage values and practices into “pure” natural and cultural language. The emphasis resulting from this reorganization of heritage values around global significance has downplayed the importance of interlinkages except in cases

Figure 4. Natural and Cultural Heritage of the Ohrid region (the Former Yugoslav Republic of Macedonia) is one of the oldest human settlements in Europe. (Amer Demishi)
where these have been seen as adding value to the nomination dossier (cultural landscapes or mixed sites) and non-binding discussions taking place between ICOMOS and IUCN at the time of the evaluations.

As one site manager explained, “We initially presented both natural and cultural values, but experts advised us to rework our dossier and only concentrate on natural values.” The site was eventually listed, yet the manager is only now seeking to incorporate longstanding cultural dynamics into landscape management.

The World Heritage community has long been aware of this trend. States parties are easily driven to focus on single-criterion qualities when defining Outstanding Universal Value for immediately recognizable attributes, thus sticking to either natural or cultural criteria without having adequate institutional support and incentives to address other linkages. The fact remains that many nomination processes are urged to downplay interlinkages in order to portray global significance except where interlinkages are seen as “added value.” As Papayannis argues,13 this has led to obvious omissions in World Heritage designation.

Another attempt to bridge the divide has involved the creation of one set of inscription criteria while emphasizing that these should not function as a “straitjacket.”14 While united inscription criteria in theory allow for the recognition of integrated values, in practice procedures maintain a divide with sets of natural and cultural criteria “owned” and evaluated separately by IUCN (criteria vii to x) and ICOMOS (criteria i to vi) respectively.15 Cultural landscapes are inscribed under cultural criteria only and evaluated separately by ICOMOS.16

The practice of “mixed sites,” inscribed for both natural and cultural values, reappearing at times through renomination processes, offers obvious potential to expand beyond the single-criterion gaze. In fact mixed sites remain a small minority in the bigger picture, making up only 3% of the World Heritage List. The challenge is threefold. First, nominations are required to demonstrate the OUV for both natural and cultural values. As a result, mixed sites only concern a subset of natural and cultural values considered to have OUV, thus limiting the potential application. Second, mixed sites do not necessarily address interlinkages, but merely recognize juxtaposition. Cultural and natural values may co-exist, yet values are assessed by separate teams, management may be undertaken separately through distinct agencies, and it is not unusual to find separate management plans in place. Third, there are limited incentives to nominate mixed sites given the in-built emphasis on outstanding singularity. States parties may avoid mixed nominations because they are considered too complex. Even mixed sites that have been nominated in the past, as a result of separate recommendations by the advisory bodies, have prompted the states parties to opt for listing under the more favorable recommendation, thus completely overlooking the other.

There are today 85 properties with four transboundary properties listed as cultural landscapes. There are 31 mixed properties, some of which overlap with the former. There is now a widespread perception that a significant number of existing sites would have qualified as cultural landscapes if nominated today.

The inclusion of additional criteria may in effect be encouraged in some sites, yet is unlikely to be relevant for the vast majority of interlinkages. Whether in terms of cultural landscapes or mixed sites, the “add-on” approach of inserting more nature or culture is
challenging. Cultural landscapes and mixed sites rely on a separation between nature and culture as value that can or may be bridged. Mixed sites require both values to be present, whereas cultural landscapes involve a specific outstanding combination of nature and culture interlinkages. As a result, everyday interlinkages in the vast majority of sites occupy an uncomfortable grey zone…. In practice, interlinkages are repeatedly under-represented compared with their actual significance, with far too little space for recognizing their significance outside the models of mixed sites and cultural landscapes. Still, much can be learned from specific management efforts and experience.

While nominations and renominations for combining cultural and natural values in the World Heritage process form one part of the equation, the other challenging part is the management of both values together. Indeed, management approaches have to be oriented towards integrating all values, be they World Heritage or of local cultural and natural significance. It is in this context that the recognition of inherent aspects of interdependency, as well as experiences and practices being developed by the cultural and natural heritage sectors, can bring added value for more effective management of World Heritage sites.

**Looking ahead**

World Heritage practitioners have struggled with the nature–culture divide for decades. Nature–culture linkages, we suggest, are not exotic exceptions, but part of the very fabric and lifeline of living heritage across the majority of World Heritage sites. Whereas only a minority of sites are considered as cultural landscapes or mixed, all sites display varying forms of interlinkages of either a tangible or intangible nature. The new trend is therefore not just about linking nature and culture—they are linked in multiple ways. The challenge is about creating a new space, new institutional practices, and a new language to address interconnected natural and cultural values. Can we move towards dynamic nomination and management practice, where World Heritage recognition of OUV supports rather than undermines age-old connections, knowledge practices, and evolving interlinkages between nature and culture? Can World Heritage shift from being islands of protection to offer an active contribution to wider cultural and natural landscape integrity? As we recognize the massive power and transformative potential of the heritage complex, can such energy be shifted from displacement to empowerment, from disconnection towards interlinkages? Different approaches may be considered. These questions were addressed at a workshop devoted to developing the curriculum mentioned above for an international training course on addressing interlinkages in managing World Heritage by the advisory bodies and the World Heritage Centre. A week-long course module was implemented for both cultural and natural heritage professionals as part of the ICCROM course on Conservation of Built Heritage (CBH14).

The “rethinking model” discussed in Larsen and Wijesuriya’s report on the course requires a rethink of heritage concepts by recognizing their cultural basis and bias. It suggests bringing on board new categories and language to move beyond the divide. Ranging from the categories used to the ways we collaborate, a thorough rethink is warranted. It is about bringing World Heritage out of a Eurocentric legacy and reconciling OUV with local values...
and connections. In contrast, the integration approach discussed does not question the separation between nature and culture, but rather questions the way in which approaches to natural and cultural heritage are being implemented independently from each other. Responses may involve cultural sites “adding” natural values to their equation, or vice versa, natural sites recognizing cultural values and attributes without necessarily questioning the respective heritage categories as such. The “synergy approach” does not question the divide between nature and culture, yet suggests that there is room for cross-fertilization and synergy building between the two heritage sectors. In contrast, critical approaches challenge World Heritage with regard to the way it is framed and institutionalized, and its social effects. At stake are not simply “local” cultural or natural heritage values, but the values and cultural practices of the (global) heritage sector potentially displacing other values and practices, neglecting rights, transforming power relationships, and/or leading to commodification. Addressing nature and culture interlinkages in this respect requires addressing and harnessing the power inherent in these dynamics.

Debates have today reached a stage where they are no longer about only recognizing linkages as a distinct type of World Heritage (cultural landscapes) or as juxtaposed values

Figure 5. Rock Islands Southern Lagoon (Palau) consists of numerous large and small forested limestone islands, scattered within a marine lagoon protected by a barrier reef. The remains of stonework villages, as well as burial sites and rock art, bear testimony to the organization of small island communities over some three millennia. (Matt Kieffer)
(mixed sites), but about recognizing the variety of interlinkages found in all World Heritage sites. They also recognize that if heritage management does not take these into account, OUV and the conditions that maintain it may be lost. This has implications for strengthened notions of authenticity and integrity. It entails re-embedding OUV in the everyday fabric of connections, which allowed specific attributes to emerge and persist in the first place. As institutional limitations are encountered, new horizons for practice that sustain and support vital embedded linkages are being spearheaded across the globe.  

Three immediate steps are needed to reinforce this work.

A first step involves recognizing the legacy of divides and taking up a more inclusive approach. This requires a far more integrated and holistic approach to values assessment and the interlinked and embedded nature of attributes, and will also contribute towards securing equitable and cultural representation on the World Heritage list.

Second, new tools and mechanisms are needed to assess connections and map various forms of knowledge and practices from the stages of assessment and nomination towards the identification of management responses. This entails the mobilization of contextual perspectives such as local and indigenous knowledge systems and practices.

Third, more than a top-down conceptual paradigm shift of heritage experts, there is a need to define spaces in which to engage everyday stewards and rights-holders on World Heritage matters, beyond the actual identification of interlinkages. This entails an emphasis on leveling the playing field when values are described and decisions made regarding World Heritage. Much can be learned from the emerging practices of consent-based inscription and participatory management in this respect.

World Heritage may trigger massive tourism flows, media coverage and commoditization and, this being the case, it is now urgent to render World Heritage more connected to the “affairs of life.” It is all about amplifying our understanding of the foundations of OUV and the subtle processes that constitute and sustain heritage of global significance over time. There is ample room for action with practitioners on the ground.

The course module mentioned above, developed by the advisory bodies as part of the World Heritage Capacity Building Strategy adopted by the committee at its 35th session, is ready to bring heritage practitioners from both cultural and natural heritage sectors into one learning process interacting over a period of two to four weeks to trigger new collaborative approaches.

[Ed. note: This article originally appeared in April 2015 in World Heritage issue 75. It is republished here by permission of the UNESCO World Heritage Centre.]

Endnotes


15. Ibid., 12.

16. Letícia Leitão and Tim Badman, “Opportunities for Integration of Cultural and Natural Heritage Perspectives under the World Heritage Convention: Towards Connected


Peter Bille Larsen, University of Lucerne, Frohburgstrasse 3, Room 3.A14, P.O. Box 4466, 6002 Lucerne, Switzerland; peter.larsen@unilu.ch

Gamini Wijesuriya, International Centre for the Study of the Preservation and Restoration of Cultural Property (ICCROM), Via di San Michele 13, Rome, Italy
Building Capacities in Asia and the Pacific: The Experience of the UNESCO Chair on Nature–Culture Linkages at the University of Tsukuba, Japan

Maya Ishizawa, Nobuko Inaba, and Masahito Yoshida

Introduction

The role of cultural and natural heritage in supporting sustainable development is increasingly being recognized, as is clearly demonstrated by the emergence of World Heritage as a leading program of UNESCO (United Nations Educational, Scientific, and Cultural Organization) globally. Efforts to designate and conserve World Heritage properties have grown dramatically in the course of the forty-plus years of implementation of the Convention Concerning the Protection of the World’s Cultural and Natural Heritage, also known as the 1972 World Heritage Convention (UNESCO 1972). The convention brings together the protection of cultural and natural heritage; however, it also defines the concepts separately (in Articles 1 and 2), and names two advisory bodies for the evaluation of nominations to the World Heritage List. Contemporary conservation approaches also tend to separate cultural heritage protection from natural heritage protection, treating them as two different fields of practice. Globalization processes have amplified this tendency, which is further reinforced at national and international levels through legislation, charters and agreements. The resulting challenges in managing World Heritage properties (as well as other kinds of sites) have made evident the need for exchange between heritage practitioners from the two fields of practice, as well as the need to go beyond sectoral and disciplinary divisions. Increasingly, professionals and researchers find that the linkages between nature and culture are fundamental for the general understanding of heritage as well as its long-term conservation and management (Beresford and Phillips 2000; Fowler 2003; Brown et al. 2005; Bridgewater et al. 2007; Mitchell et al. 2009; Taylor and Lennon 2011; Aprile et al. 2015; Larsen and Wijesuriya 2015).

Faculty of the World Heritage Studies at the Graduate School of Comprehensive Human Sciences at the University of Tsukuba, Japan, composed of cultural and natural heritage researchers and practitioners, are addressing these challenges by creating an international and interdisciplinary space for further research and reflection on integrated approaches to heritage conservation. Based on this idea, the UNESCO Chair on Nature–Culture Linkages in
Heritage Conservation was established as a joint endeavor within the Certificate Programme on Nature Conservation (CPNC). In collaboration with the advisory bodies to the World Heritage Committee (ICCROM, the International Centre for the Study of the Preservation and Restoration of Cultural Property; IUCN, the International Union for Conservation of Nature; and ICOMOS, the International Council on Monuments and Sites), and with the support of the UNESCO World Heritage Centre, in 2016 the UNESCO chair launched the first in a series of Capacity-Building Workshops on Nature–Culture Linkages in Asia and the Pacific (CBWNCL). Their purpose is to contribute to the World Heritage Capacity Building Programme by developing new approaches toward integrated conservation of cultural and natural heritage (IUCN et al. 2012: 3–4). These capacity-building workshops explore nature-culture linkages, focusing on theory and practice in Asia and the Pacific Region. The development of this program benefits from engaging with global initiatives such as “Connecting Practice,” which works towards a more integrative process for the evaluation of the nominations to the World Heritage List (IUCN and ICOMOS 2015), and the World Heritage Leadership Programme (led by IUCN and ICCROM and supported by the government of Norway), which trains practitioners from both sectors to exchange methods for assessing and managing the conservation of both natural and cultural heritage. The curriculum combines theoretical elements with real-world experience through presentations by the participants of case studies from their own work and field visits to cultural landscapes in Japan. The week of field visits is a core component, during which the course participants conduct practical work and collaborate in interdisciplinary teams on case-study assignments. Thus, participants are able to understand issues and approaches being adopted in the field from both the natural and cultural heritage perspectives, and to explore the interlinkages between them.

The UNESCO Chair on Nature–Culture Linkages aims to serve as a research unit for this new interdisciplinary challenge and as a platform for international exchange among heritage practitioners from both sectors, with a special focus on Asia and the Pacific region. In this article, we introduce the program and briefly describe a series of capacity-building workshops envisioned over four years, beginning with the inaugural workshop on agricultural landscapes that was conducted in 2016. Following an introduction to the workshops’ background, objectives, and themes, we report on the 2016 capacity-building workshop and its findings. Looking ahead, we discuss the program’s future themes and expected results.

The workshops
The need to protect heritage holistically is crucial for the sustainability of conservation. Consequently, it is important to take into account not only monuments and specific heritage features but also their larger context, including the surrounding landscape/seascape. The landscape approach has emerged as a way to study and understand both cultural and natural heritage and their interrelationships in wider contexts and taking into account larger territories. Even though the concept of “landscape” can be understood differently from the perspective of different disciplines (Antrop 2006; Besse 2009), it is clear that, compared with other categories of cultural heritage such as monuments or historical city centers, it is concerned with extensive areas of land and/or sea. These landscapes and seascapes can carry
both cultural and natural values reflecting a human relationship over time with the natural environment. Therefore, the concept of landscape plays a key role in understanding the need to reinforce the linkages between nature and culture sectors in the field of conservation.

The capacity-building workshops focus on the exploration of landscapes and, more specifically, cultural landscapes, as they make evident the need to consider natural and cultural values as well as local communities and their relationship with their environments. The conceptual framework of the CBWNCL relies on the complementary perspectives offered by the IUCN protected landscape approach (Brown et al. 2005), and the World Heritage cultural landscapes approach (Mitchell et al. 2009). This framework emphasizes community-based, or people-centered, approaches to conservation, whereby local communities play the central role in heritage conservation (Kothari et al. 2013; Court and Wijesuriya 2015). It adopts a biocultural lens in order to better understand the complexities of landscapes. The practical part of the workshop is based on the Japanese experience. Japan has developed a conservation system in which the interlinkages between nature and culture are foundational. Both natural and cultural sectors of heritage conservation practice implement legislation that promotes the safeguarding of natural heritage based on its cultural values, and cultural heritage embedded in natural protected areas. In particular, the Law for the Protection of Cultural Properties, enacted in 1950 under the Agency for Cultural Affairs, and the National Park Law of 1957, under the Ministry of Environment, show that cultural values of nature are important for the conservation of both cultural and natural heritage. Moreover, the interdependence between human societies and their environments is embedded in the Japanese concept of satoyama/satoumi (village and mountain/village and sea), illustrating the importance of recognizing society’s positive impacts in fostering biodiversity and healthy socio-ecological systems (Takeuchi 2003; Nature Conservation Bureau 2009; Duraiappah et al. 2012; Watanabe et al. 2012). The concept of satoyama/satoumi represents the human strategy of inhabiting Japanese nature, where small societies are built by combining the elements of rice agriculture and nature worshiping fostered by Shinto beliefs and creating a landscape characterized by paddy fields, mountain forests, or rice terraces that end in the sea (in the case of satoumi).

The workshops are open to young professionals and mid-career practitioners from Asia and the Pacific region who have a minimum of five years of experience in the natural and/or cultural heritage sectors and who are involved in the management of cultural or natural heritage sites—specifically, sites that are relevant to the theme of the workshop. Fifteen participants are selected for each workshop based on an application process; in addition, five graduate students from the University of Tsukuba are invited to join the group of participants each year.

The objectives of the CBWNCL are to:

- Strengthen theoretical knowledge regarding landscapes and their relevance in connecting conservation practices between natural and cultural heritage professionals;
- Visit and exchange experience with local site managers and residents in areas where landscapes are protected and conserved through a variety of approaches, initiatives, and governance systems;
• Reflect on nature–culture linkages, considering the natural and cultural values of landscapes in general, and of the participants’ case-study sites in particular;

• Identify key issues for the conservation of landscapes in Asia and the Pacific that can be addressed by following an integrated nature–culture approach; and

• Establish interdisciplinary networks among heritage practitioners in the region and beyond.

Over the course of four years, the CBWNCL workshops will address four key themes, selected based on their relevance to the interlinkages of natural and cultural values, as well as of human communities and nature. These are: agricultural landscapes (2016), sacred landscapes (2017), disasters and resilience (2018), and mixed cultural and natural sites (2019).

In September 2016, the series of capacity-building workshops was inaugurated with an international symposium and a field visit to the Noto Peninsula, a region of Japan rich in traditional agricultural landscapes, and the Historical Villages of Shirakawa-go and Gokayama, a site inscribed on the World Heritage List in 1995. Participants from 11 countries in Asia and the Pacific and beyond, representing both natural and cultural heritage sectors, gathered with international and Japanese experts to explore nature–culture linkages in heritage conservation under the theme of agricultural landscapes.

Agricultural landscapes
Agricultural landscapes have been defined in the context of the World Heritage Convention as testimonies to humanity’s interaction with the land, and as unique examples of coexistence and interaction between people and nature (Aprile et al. 2013). These heritage landscapes are places where cultural and natural values are present and interrelated, providing evidence of human communities’ struggle for survival in extreme climatic and environmental conditions and, in some cases, serving as models of sustainable land use systems. However, it was not until the category of cultural landscape was introduced into the Operational Guidelines of the World Heritage Convention in 1992 (with the sub-category of organically evolved landscape) that the inherent Outstanding Universal Value (OUV) of some agricultural landscapes began to be recognized.

Currently, a number of national and international initiatives aim to protect or promote the sustainable development of agricultural landscapes and traditional farming systems in the face of challenges, including the industrialization of agriculture and climate change. Examples of these were presented and discussed during the 2016 CBWNCL. In addition to the World Heritage Convention, the Convention on Biological Diversity has encouraged and supported a number of initiatives related to the conservation of biodiversity, including agrobiodiversity, in agricultural landscapes. For instance, the Satoyama Initiative, launched by the Ministry of Environment of Japan and the United Nations University in 2009 (Nature Conservation Bureau, 2009), focuses on these as socio-ecological systems whose importance for the sustainable development of communities is in close relation to sound natural resources management. The Globally Important Agricultural Heritage Systems (GIAHS) program, an initiative launched by the Food and Agriculture Organization of the United Nations (FAO)
in 2002, is concerned with the dynamic conservation of biodiversity through the preservation of traditional rural systems around the world. The European Landscape Convention, adopted by the Council of Europe in 2000, promotes landscape management and planning at all scales, giving value to everyday landscapes due to their importance for local communities (Council of Europe 2000). Each of these global initiatives approaches the stewardship of agricultural landscapes from diverse perspectives and value systems. In parallel, there are diverse value systems of the human communities that inhabit these places, sustaining and caring for their agricultural landscapes.

These themes were explored more deeply at the workshop through a discussion of case studies presented by the course participants, and through the field visits to the Noto Peninsula, and to Shirakawa-go (Figure 1) and Gokayama. The fieldwork gave participants an opportunity to learn about agricultural landscapes in Japan from a practical perspective. As an introduction to the GIAHS designation of the Noto Peninsula in Ishikawa prefecture, participants visited one site and two projects, where they observed traditional practices and discussed issues with local managers. Below we discuss these site visits and some observations.

Shiroyone Senmaida is located in Oku-Noto, and the history of the “thousand terraces” of this rice-growing landscape pre-dates the Edo period (AD 1603–1868). The economy of this area was diversified between forest timbering, salt-producing, and rice production. As a village located between the mountain and the sea, communal values were very strong and society flourished. While the community maintained its prosperity over many generations, currently this area is suffering from depopulation. Nevertheless, tourism to the area has increased, especially since 2011, when Shiroyone Senmaida was designated as a place of

Figure 1. Ogimachi village in Shirakawa-go. (Jessica Brown)
scenic beauty under the Law for the Protection of Cultural Properties of Japan. At the same time, with fewer people in the area and farming the land, the lack of an agricultural workforce threatens the continuity of these historic agricultural terraces. Shiroyone Senmaida is an example of a *satoumi* landscape currently confronting the consequences of industrialization, urbanization, and the high economic growth of Japan. As young people migrate to the cities, the aging population living in rural areas is unable to maintain the paddy fields by themselves.

In Shiroyone Senmaida the CBWNCL participants worked as volunteers in the harvesting of the rice terraces in the GIAHS site, joining in an event organized by the Terrace Conservation Executive Committee of Wajima City (Figure 2). Working alongside volunteers from communities throughout the area, the participants had a chance to experience the tough work of rice cultivation, and to understand, first-hand, the difficulties of maintaining this landscape in the context of the depopulation of the surrounding rural areas. They learned about the work of the volunteer group Aikoukai, which works with the Shiroyone Senmaida Landscape Conservation Council and helps support the maintenance of the terraces by funding the rice production through a sponsorship system based on membership dues.

During a visit with the Hagino family, the group learned about the Maruyama-Gumi (Maruyama Team) project also located in Oku Noto. The rural town of Mii where the Maruyama-Gumi project is based (Figure 3) is also facing the challenge of maintaining rice cultivation despite a diminishing workforce. They learned that the challenge for rural Japanese communities such as Mii lies not only in maintaining the agricultural fields, but also in sustaining many other elements composing these landscapes, such as their traditional wooden architecture and forests. The interactions between the life in the village, the climate, the
paddy fields, the water irrigation systems, and the forest generate a diversity of habitats for fauna and flora, as well as a diversity of crops that have been traditionally celebrated with special dishes, festivals, and rituals. Moreover, this region is well known for being the habitat of the crested ibis, an endangered species that used to live in Mii. The abandonment of these rural areas due to outmigration is therefore impacting biodiversity, since the satoyama landscape and its associated biocultural processes are not continuing their established cycles but rather are being degraded and eroded.

Yuki Hagino, one of the leaders of the Maruyama-Gumi project, followed the Noto Satoyama Meister Training Program at the University of Kanazawa. She told the participants about how she began a community-based biodiversity monitoring project, involving the inhabitants of the town of Mii and other communities, alongside Japanese and foreign researchers. They invited people of different ages and backgrounds to participate in order to understand the changes in the landscape, based on villagers’ local knowledge, and to relate this to scientific knowledge. Members of the team learn from villagers about the variety of species that are also related to cultural expressions, such as the Aenokoto festival, or to food preparation in general. During their visit with the Maruyama-Gumi project, the CBWNCL participants learned about how the Maruyama Team integrates the conservation of biodiversity with the safeguarding of local knowledge and intangible cultural heritage.

The experience of visiting these rural areas in Japan, some under legal protection and others not, illustrated to the course participants a challenge that can also often be found in
their home countries. At the same time, they were able to witness how these challenges are being addressed in Japan, and learn methods that may be replicable in their own countries. Moreover, they shared with local residents and site managers their own experience, nurturing a mutual exchange of knowledge.

Among the conclusions of the workshop were several key points related to the development of a heritage conservation approach based on nature–culture linkages. First, conceptually, cultural landscapes are key to understanding the nature–culture linkages and the evolution of the World Heritage Convention. This category has shown that while the convention cannot be modified, there are opportunities to adapt it and make it more inclusive and contemporary through the Operational Guidelines and the implementation of programs (Ishizawa et al. 2017). Agricultural landscapes offer good examples to explore the challenges raised by the recognition of cultural landscapes. Secondly, disciplinary and cultural/language differences need to be acknowledged in order to effectively approach the nature and culture sectors, local communities, and heritage practitioners. Thirdly, synergies between and among institutions need to be fostered by the practitioners of different sectors. Institutional structures tend to be rigid and difficult to modify; therefore heritage practitioners must also act at the local level. Fourthly, progress towards a more inclusive and contemporary World Heritage system is being accomplished gradually, and it is in the hands of young professionals—such as those participating in the CBWNCL program—to continue these endeavors. Capacity-building and leadership development is therefore fundamental.

Further discussion during the conclusion of the workshop focused on problems in agricultural landscapes. Participants observed that infrastructure development is eroding the surroundings of heritage sites and threatening the sites themselves. Also, depopulation is a common problem facing agricultural landscapes throughout Asia and the Pacific, where rural areas are being deserted and traditional agricultural practices abandoned. This hinders intergenerational transmission and continuity of traditional and local practices related to agriculture, leading to the loss of traditional knowledge and also of biodiversity.

The workshop participants and resource persons explored strategies for solving these problems, reflecting on examples that are already being implemented in Japan and elsewhere. In particular, they noted the value of programs that involve younger generations in the maintenance of agricultural landscapes, the inclusion of traditional knowledge in school curricula, and the development of ecotourism initiatives. One proposal that emerged from the discussions was to expand the concept of community more widely—for example, considering visitors, neighboring villages, and related urban areas as potential parts of the conservation community concerned with a particular landscape. The group stressed the need to clearly define conceptual frameworks in order to promote fluid communication between officials and locals, and between cultural and natural heritage practitioners. Furthermore, the group recognized that conservation strategies should focus more attention on governance, to allow stakeholders to be involved in the relevant processes and to help build consensus.

Thus, the group confirmed that conservation and management of agricultural landscapes requires a people-centered approach, since an agricultural landscape cannot continue without the people that work it and shape it by living within it. Any other idea of conser-
vation will not be effective. Further, the group noted the value of taking a complementary biocultural approach that identifies and embraces the linkages between cultural and natural cycles in the agricultural practices (such as festivities, beliefs, rituals, and communal organizations). Sustaining biodiversity is instrumental for the resilience of communities and their landscapes, and these processes must be regenerated, especially in the face of climate change. Moreover, community-based governance empowers identity and community cohesion, allowing practices that foster biodiversity to continue. Consequently, the sustainability of agricultural landscapes will depend on the continuity of the practices that shaped them. At the same time, it is essential to recognize that landscapes are dynamic, and the focus should be on understanding change, adaptation, and resilience.

Sacred landscapes
The 2017 theme of the CBWNCL is *sacred landscapes*, and that will be the focus of the next capacity-building workshop, slated for September 2017. While there are many types of sacred sites that are of significance to people, the workshop will focus on the theme of sacred landscapes in order to explore the nature–culture linkages inherent in these places. The IUCN publication *Sacred Natural Sites: Guidelines for Protected Area Managers* (Wild and McLeod 2008) defines the term “sacred site” as embracing areas of special spiritual significance to peoples and communities, and the term “sacred natural site” as corresponding to those areas of land or water having special spiritual significance to peoples and communities (see Bernbaum in this issue). In the workshop context, the term “sacred landscapes” will be used to describe those areas where nature–culture linkages are represented by the spiritual values that communities assign to these environments. Many of these landscapes are of high biodiversity value because, for example, they contain pristine forests, or have traditional management systems that sustain a complex of species, or are inhabited by rare species, or are defined by unique geological features. In essence, these landscapes hold cultural as well as natural values, and these values must be taken into account by any conservation effort. There are many such sites on the World Heritage list.

Many challenges arise in the conservation of this type of heritage. They represent a rich diversity, but they can also be subject to conflict between different groups holding different beliefs regarding the same or similar place. Moreover, pilgrimages and tourism often converge on sacred sites, and this convergence can cause conflict or, in some cases, types of uses that result in environmental, economic, or cultural impacts. There are many efforts being made to address these challenges within both the natural and cultural heritage sectors at national and international levels. For instance, in 2012 the UNESCO Initiative on Heritage Sites of Religious Interest was launched. Several activities led to the development of this program. One of them was the Thematic Expert Meeting on Asia–Pacific Sacred Mountains held in Wakayama, Japan in 2001. It gathered experts from the region and from ICCROM, ICOMOS, IUCN, and the UNESCO World Heritage Centre. This meeting resulted in a series of recommendations addressing the possibilities for nominating sacred mountains in the Asia and Pacific region, as well as proposing important management actions, such as creating guidelines for visitors to sacred sites and promoting “culture-based environmental conserva-
tion” (UNESCO 2001). Moreover, the UNESCO Man and the Biosphere Program considers sacred sites as the oldest protected areas on the planet, vitally important for the safeguarding of cultural and biological diversity (Schaaf and Lee 2006). In 2003, ICCROM organized a Forum on Living Religious Heritage, and in 2005, the ICOMOS General Assembly called for the establishment of an International Thematic Programme for Religious Heritage. In 2011, the ICOMOS General Assembly passed a resolution on the protection and enhancement of sacred heritage sites, buildings, and landscapes, while in 2008 UNESCO and IUCN published the guidelines for protected area managers of sacred natural sites (Wild and McLeod 2008). As these programs and initiatives demonstrate, both the cultural and natural heritage sectors have been continuously engaged in the discussion.

Participants in the upcoming capacity-building workshop will visit the Sacred Sites and Pilgrimage Routes of the Kii Mountain Range in Mie, Nara, and Wakayama prefectures, a World Heritage cultural landscape since 2004. This area holds great significance for the spiritual history of the Japanese nation. It hosts three major mountains that each have been serving as centers for important spiritual traditions: Buddhism, Shinto, and Shugendo. Koya-san in Wakayama prefecture is the core of esoteric Buddhism or Shingon. Kumano in Mie prefecture is a region of great importance for the Shinto tradition. Yoshino, located in Nara prefecture (Figure 4), is the spiritual center of the ascetic practices of Shugendo, which combine Buddhist and Shinto beliefs. Moreover, in these mountains pilgrimage routes have originated and evolved, initially as paths for travels by emperors and nobility, and by worshippers and ascetic practitioners, and, currently, as trekking routes for tourists. Reflecting

Figure 4. Yoshino village, center of Shugendo practices in the Kii mountain range. (Maya Ishizawa)
on these case-study sites and the conservation challenges they face, workshop participants will observe and analyze how these different religions relate to the environment. They will explore the interlinkages between spiritual values and natural values, and will consider how the sacred values of these landscapes can help (or not help) support the conservation of nature.

The goal of the 2017 capacity-building workshop will be to identify key issues challenging the conservation of sacred landscapes, and to explore how adopting approaches based on nature–culture linkages could contribute to the sustainability of their conservation. We expect to clarify, through case studies brought by participants, the commonalities and differences in conservation systems in countries of Asia and the Pacific. In this connection, we will be interested in exploring whether a regional approach to sacred landscapes might be adopted. Finally, we intend to explore ways in which traditional practices of sacredness might be usefully applied in the conservation of landscapes.

Further exploration
In 2018, the CBWNCL will focus on the theme of disasters and resilience, and will address the challenges of climate change and natural disasters affecting heritage landscapes. In exploring this theme we expect to elucidate how the understanding of the relationship between natural and cultural values in vulnerable areas can contribute to the conservation of biological and cultural diversity in developing resilience. Finally, in 2019, the workshop will focus on mixed cultural and natural heritage sites in order to explore the questions emerging from the nominations and evaluations of sites that hold both natural and cultural criteria. How can the interrelation of cultural and natural values be recognized and assessed?

Currently, we are developing a series of proceedings for each of the capacity-building workshops in order to document the case studies, deliberations, and conclusions coming out of these international, interdisciplinary sessions. The first proceedings have been compiled as a special issue of the Journal of World Heritage Studies of the University of Tsukuba (Ishizawa et al. 2017). The 13 case studies presented by participants of the 2016 CBWNCL, along with an overview report of the workshop, compose this issue, soon to be available. Based on the results of these pilot capacity-building workshops, we envision the development of a Manual for Nature–Culture Linkages in Heritage Conservation for Asia and the Pacific.

As mentioned previously, legislation and institutional frameworks promoting the division of cultural and natural heritage are difficult to change but might be progressively adapted over time. However, in the meantime practitioners from both sectors can learn to work together and exchange ideas and strategies right now. The research unit of the UNESCO Chair on Nature–Culture Linkages at the University of Tsukuba intends to provide a space for this exchange. Based on the exploration and dialogue fostered by the workshops, we aim to build capacities and develop a network of heritage practitioners who are aware of nature–culture linkages and willing to cooperate with colleagues from other sectors. Furthermore, we aim to identify gaps and areas where further research is needed, especially since Asia and the Pacific is a very diverse but underrepresented region in the World Heritage List. We believe that sharing the Japanese experience, while exchanging with practitioners of the region and beyond, will contribute to the development of capacities in Asia and the Pacific countries and
will also enrich the experience of Japanese practitioners, students, and the local communities visited during these workshops. In this way, we expect to promote cooperation among the heritage sectors of nature and culture, bringing together culturally diverse groups of practitioners with different disciplinary backgrounds, and among researchers, practitioners, students, and locals living in heritage sites, thereby enlarging and nurturing an extended conservation community.

Endnotes

1. The UNESCO Chair was officially established in 2017, but activities related to the project started in 2016.
2. For additional information see https://www.iucn.org/theme/world-heritage/our-work/world-heritage-projects/world-heritage-leadership.
3. The workshops are also open to a limited number of participants from other regions.
5. Experts invited by the University of Tsukuba as resource persons for the workshop, various different sectors of practice and partner institutions, were: Gamini Wijesuriya, project manager of the Sites Unit at ICCROM; Jessica Brown, executive director of the New England Biolabs Foundation and chair of the IUCN–WCPA [World Commission on Protected Areas] Protected Landscapes Specialist Group; and Kristal Buckley, lecturer at Deakin University in Australia and World Heritage advisor to ICOMOS.
11. See http://nc.heritage.tsukuba.ac.jp/UNESCO-Chair/.

References


**Maya Ishizawa**, University of Tsukuba, Human and Social Sciences Building B215, 1-1-1 Tennodai, Tsukuba, Ibaraki, 305-8571 Japan; maya@heritage.tsukuba.ac.jp

**Nobuko Inaba**, University of Tsukuba Cooperative Research Building A205, 1-1-1 Tennodai, Tsukuba, Ibaraki, 305-8571 Japan; inaba@heritage.tsukuba.ac.jp

**Masahito Yoshida**, University of Tsukuba, Human and Social Sciences Building B213, 1-1-1 Tennodai, Tsukuba, Ibaraki, 305-8571 Japan; yoshida_masahito@heritage.tsukuba.ac.jp
The Cultural and Spiritual Significance of Nature in the Management and Governance of Protected Areas

Edwin Bernbaum

Introduction

To gain the lasting support of the general public as well as local communities, protected areas need to ground their programs of interpretation, management, and conservation in not only solid scientific research and practice, but also deeply held spiritual, cultural, and aesthetic values and ideas that will engage and inspire people to care for nature over the long term and, when necessary, make sacrifices to protect the environment. Without this kind of enthusiastic and enduring support, no matter how good the science and how bold the law, protected areas, including national parks and even World Heritage sites, will lose the special place they hold in the public imagination and elected officials will reduce the funding needed for their adequate operation and for their very existence. This occurred recently when the state of California proposed closing a large number of state parks when faced with a major governmental budget deficit. It was only the outcry of the general public, and the actions of organizations representing their interests, that prevented many park closures, which would have had disastrous consequences for the environments as well as for the infrastructures of the affected parks (Dolesh 2012).

A key threat to continued public support of many protected areas is their limited visitor base. Most visitors to US national parks, for example, are middle-class white Americans and foreign tourists. Relatively few of the so-called minorities—African Americans, Hispanic Americans, and Asian Americans—visit US national parks (Floyd 2001; Finney 2014). With demographic change occurring in the United States, these ethnic groups are rapidly gaining political and economic influence. In California, minorities taken as a whole are now the majority of the population in most metropolitan areas (Armendariz 2011). If protected areas do not engage minorities, they will not develop an interest in supporting these areas and conserving nature, and the future of protected areas will not be ensured.

Many protected areas have sites that are sacred or have other special significance for indigenous peoples and indigenous traditions. Rather than interfere with traditional practices at these sites, protected area managers need to welcome and involve indigenous peoples in interpretation and management as key stakeholders. Having lived in and interacted with the
environments of these natural areas for centuries or millennia, many indigenous peoples and local communities have knowledge and experience that can contribute greatly to conservation. Managers need to acknowledge and respect their values, traditions, ideas, and ancestral ties to the land and to work with indigenous cultures to develop their support, for example through programs of co-management (Leaman 2013). In parallel, there is growing recognition that many protected and conserved areas are governed and managed by indigenous and local communities, for example as indigenous and community conserved areas, or “ICCAs” (Borrini-Feyerabend et al. 2013).

The task of engaging people in protected areas faces, therefore, three major challenges, which can be framed in the form of three questions: (1) how to build deep-seated, long-lasting support for protected areas and conservation; (2) how to broaden the limited visitor base of many protected areas; and (3) how to respect and engage indigenous peoples for whom parks contain sacred and other cultural sites of special significance.

The spiritual and cultural significance of nature has a key role to play in helping address the first challenge by inspiring or revitalizing connections between people and protected areas. By “spiritual and cultural significance of nature,” I mean the inspirational spiritual, cultural, aesthetic, historic, social, and other meanings, values, knowledge, and associations that nature in general and natural features in particular, ranging from mountains and rivers to forests and wildlife, evoke for people. I have chosen the word “significance” to emphasize the inclusion of knowledge and meaning as well as feelings and values. It’s also important to note that the expression “spiritual and cultural significance of nature” refers to nature in its broadest sense, not just sacred natural sites, although it includes the latter.

Nature has deep spiritual and cultural significance in cultures around the world that can help address the second challenge of diversifying the limited visitor base of many protected areas. People throughout Latin America look to mountains as sacred sources of water and healing (Bernbaum 1997). The graceful cone of Mount Fuji has come to symbolize the country of Japan and the quest for beauty and perfection that lies at the heart of Japanese culture (Bernbaum 1997). The sacredness of trees in cultures as diverse as those of India and Ghana has inspired people to maintain the biodiversity of sacred groves around the world (Barrow 2010; Ortsin 2015). Shanshui, the term for landscapes and landscape painting in China, means “mountains and rivers,” pointing to the importance of these two basic components of nature in Chinese art as well as life (Bernbaum 1997).

By highlighting the spiritual and cultural significance of nature in cultures around the world, programs of outreach and interpretation can establish links with the cultural backgrounds of diverse ethnic groups. As the case studies from North America below clearly indicate, the cultural and spiritual significance of nature also provides an important way of addressing the challenge of engaging and involving indigenous peoples and local communities in interpretation and management of parks that include places and natural features of sacred, cultural, and historical significance for them.

The spiritual and cultural significance of nature in interpretation
A program that I directed at The Mountain Institute (www.mountain.org) from 1998 to 2008
provides case studies of various ways of using the spiritual and cultural significance of nature to engage people with national parks. The program we initiated in 1998 worked with a number of US national parks, including Yosemite and Hawai‘i Volcanoes, both World Heritage sites. We developed interpretive and educational materials and activities based on the evocative spiritual, cultural, and aesthetic meanings and associations of natural features in mainstream American, Native American, Native Hawaiian, and other cultures around the world.

**Yosemite National Park exhibit on major national parks.** At Yosemite National Park we collaborated with interpretive staff on an exhibit on 58 major national parks organized around the theme of the inspirational value of nature and wilderness (Figure 1). Each park had a panoramic picture and a plaque with a brief paragraph describing the park and the dates it was first established as a protected area and then designated as a national park, if there was a difference. The Mountain Institute provided an inspirational quote appropriate to the park, ranging from the voices of conservationists, such as John Muir, to Cherokee storytellers and Native Hawaiian elders. The quotes were highlighted just below the descriptions of each of the parks.

To set the tone for the exhibit, I wrote an introductory panel with the following text:

> The unspoiled sanctuaries of wilderness and nature preserved in our national parks have an extraordinary power to awaken a profound sense of wonder and awe. The ethereal rise of a peak in mist, the smooth glide of an eagle in flight, the bright

---

**Figure 1.** Exhibit on 58 major national parks at Yosemite National Park. (Chris Stein / National Park Service, Yosemite National Park)
slant of sunbeams piercing the depths of a primeval forest—such glimpses of natural beauty can move us in inexplicable ways that open us to a reality far greater than ourselves. There, outside the artificial routines of routine existence, lies an awe-inspiring realm of wild mystery, governed by forces beyond our control. In coming to national parks, many seek to transcend the superficial distractions that clutter their lives and experience something of deeper, more enduring value (Bernbaum 2006).

As this introduction to the exhibit demonstrates, the spiritual experience of nature does not need to imply a belief in a deity or divine creator. It is open to everyone, be they religious, agnostic, or atheist. All that is necessary is a sense of wonder and awe, of being in the presence of something greater than oneself, such as the vastness of the star-filled sky or the beauty of a flower.

As an example of the brief descriptions of each park with dates of establishment and designation, the plaque for Yosemite National Park reads at the top:

**Yosemite Grant, California 1864**

Glacier-carved granite peaks and domes rise high above broad meadows, while groves of giant sequoias dwarf other trees and wildflowers in the heart of the Sierra Nevada Mountain Range. Lofty mountains, alpine wilderness, lakes, and waterfalls, including the nation's highest, are found here in this vast tract of scenic wildland. 761,266 acres

**Later Designations**

Yosemite National Park — 1890
World Heritage Site — 1984
Wilderness (93%) — 1984

To bring out the inspirational nature of Yosemite National Park, The Mountain Institute provided the following evocative quote from John Muir, the conservationist and naturalist most closely associated with its creation:

I invite you to join me in a month’s workshop with Nature in the high temples of the great Sierra Crown beyond our holy Yosemite. It will cost you nothing save the time and very little of that, for you will be mostly in Eternity.

This quote, from a letter Muir wrote to the Transcendentalist philosopher Ralph Waldo Emerson in 1871, evokes the sense of timelessness experienced by many in the quiet contemplation of nature that can fill one with spiritual feelings of wonder and awe.

**Hawai‘i Volcanoes National Park painting competition and radio program.** As the seat of two of the world’s most active volcanoes, Kilauea and Mauna Loa, Hawai‘i Volcanoes National Park is connected in Native Hawaiian tradition and the public imagination with the fire goddess Pele. For Native Hawaiians, she is associated with many natural features, ranging from the fiery lava to various species of flora and fauna native to the area (Spoon 2005). A
group of Native Hawaiian elders known as the Kupuna Committee was working with the park superintendent advising on cultural matters. They expressed concern that the painting of Pele in the main visitor center did not portray the fire goddess in a culturally appropriate manner. A Haole (non-Native Hawaiian) had painted it in the 1920s and had depicted her without reference to Hawaiian culture. Pele had a Western-looking face and her hair was blazing yellow, so that she looked like a blonde surfer from California (Figure 2). The elders wanted to replace her with a painting of Pele more in accord with their traditions. The Mountain Institute had funds from a grant from the Ford Foundation to make it possible. We worked with the Kupuna Committee and interpretive staff to put out a call for people to submit paintings of Pele for the elders to judge and to choose a winning entry.

Figure 2. Painting of Pele by D. Howard Hitchcock (1927) that had been on display at the Kilauea Visitor Center, Hawai‘i Volcanoes National Park, until 2003. (National Park Service, Hawai‘i Volcanoes National Park)
The park sent the call out in a news release, and the two main newspapers in Hawai’i published front-page articles on the contest (Wilson 2003; Thompson 2003). Soon after the park staff learned to their surprise that all the art stores on the Big Island of Hawai’i were sold out of supplies. The park was inundated with what they called a “tsunami of art”—more than 140 paintings. The Kupuna Committee chose the winning entry for its depiction of Pele with a serene, compassionate expression on her face and two objects in her hands representing important stories connected with her activities (Figure 3). For Native Hawaiians, rather than being a wrathful deity associated with volcanic eruptions, she is a benevolent, life-giving goddess who creates new land with her lava.

The park had originally planned to display the remaining entries in the Volcano Art Center, but that venue had space for only about 14 paintings. The various partners in the

*Figure 3.* Painting of Pele by Arthur Johnsen (2003) selected by Native Hawaiian elders to replace the painting by Hitchcock. (Courtesy of the estate of Arthur Johnsen)
The project chose 67 paintings from among the more than 140 submitted, and spread them throughout the park in the Jagger (geology) Museum, Volcano House (the hotel on the rim of Kilauea crater), and the Volcano Art Center in an exhibit titled “Visions of Pele.” The exhibit remained up for five weeks, and the artists had a chance to expose their work to the general public and sell their art.

In another issue of concern, the Kupuna Committee wanted to let visitors know before they even entered the park that they were entering a special place sacred to Native Hawaiians, so they would not treat it disrespectfully as a mere recreation area or outdoor amusement park. I attended a meeting with Native Hawaiians on the park’s interpretive staff in which they were talking about conveying this message by installing large signs and striking Polynesian sculptures outside the entrance to Hawai‘i Volcanoes National Park. I had driven that morning past a sign well before the park that said something like “Tune into 640 AM on your radio for park information.” I suggested they add an introduction about the special importance of Hawai‘i Volcanoes National Park to the existing radio program that almost everyone entering the park listened to for information on where to see lava flowing and what else to do and see. Since the cars had to wait in line at the entry station and most people spent a lot of time driving around the park, the staff had a captive audience. The interpreter in charge of the radio program was Native Hawaiian, and he composed the following introduction that blended together in a particularly sensitive way the spiritual and physical characteristics of the park and linked the concept of wahi kapu, or sacred area, to the more familiar idea of a World Heritage site:

Aloha and welcome to Hawai‘i Volcanoes National Park. You may notice a change in the plant and animal life, climate, or maybe the way you feel as you enter the park. Don’t be surprised; this is a common occurrence. For centuries people have felt the power and uniqueness of this place. Hawaiians call it a wahi kapu or sacred area. You are in the domain of Pele, the volcano goddess. She is embodied in everything volcanic that you see here. This is also home to a forest full of species that are found nowhere else on earth and two of the world’s most active volcanoes. Hawai‘i Volcanoes National Park is now a World Heritage Site, a modern term for a wahi kapu, recognizing its importance to all of us.

The introduction to the radio program provides a useful model of an inexpensive way parks and protected areas can use the spiritual and cultural significance of nature for native peoples to engage a large number of visitors and promote support for treating the environment with respect.

Among the lessons learned from these and other projects at various US national parks are the following. It’s important for interpretation to focus on inspiring and enriching experience rather than simply conveying information, and to promote mutual respect and appreciation for different points of view. Interpretive materials and activities need to generate multiple messages for different audiences rather than a single message. To avoid imposing views on visitors, it’s critical to leave the final interpretation up to them: “What meaning does it have for you?” Interpretation of indigenous views and traditions should be made contemporary.
by using the living voices of traditional elders and storytellers. Appealing to the cultural and historical backgrounds of diverse ethnic groups can be an effective means of interesting them in coming to parks and protected areas.

The cultural and spiritual significance of nature in the management and governance of protected areas

In 2014, the International Union for Conservation of Nature (IUCN) Specialist Group on Cultural and Spiritual Values of Protected Areas (CSVPA) that I co-chair initiated a project to extend the spiritual and cultural significance of nature from interpretation to the conservation, management, and governance of protected areas (http://csvpa.org/cultural-spiritual-nature-programme/). Toward this end, the CSVPA conducted a series of workshops at the IUCN World Parks Congress in Sydney, Australia, in November of that year. The purposes were to: (1) bring protected area managers together with representatives of indigenous traditions and local communities, mainstream religions, and organizations representing the general public; (2) gather ideas and start to develop a training module to promote the role of the cultural and spiritual significance of nature in the conservation, management, and governance of protected areas; and (3) establish a network of people interested in lending support and sharing experiences and ideas for working together on projects and activities that integrate the cultural and spiritual significance of nature into protected area management and governance.

This project builds on work the CSVPA and its affiliates, the Sacred Natural Sites Initiative (www.sacrednaturalsites.org) and the Delos Initiative (www.med-ina.org/delos/), have done with sacred natural sites, but broadens the scope to include the spiritual and cultural significance that nature in general has for people in both traditional and modern societies. By being as inclusive as possible, including the general public and mainstream religions as well as indigenous traditions and local communities, the project has the potential for reaching a wide audience and a large number and variety of protected area. Mainstream religions (e.g., Christianity, Islam, and Buddhism) have millions of followers who can be and have been inspired by their religious leaders to support measures that protect the environment. As the history of environmental organizations such as the Sierra Club in the United States demonstrates, the general public can be galvanized by inspirational messages to influence government policies and the activities of private companies affecting parks and other protected areas (Cohen 1988).

Subsequent workshops with the International Academy for Nature Conservation on the Island of Vilm, Germany, in 2016 and 2017 (Figure 4), and as part of the Nature–Culture Journey at the World Conservation Congress (WCC) in Hawai‘i in September 2016, have focused on developing IUCN best practice guidelines in tandem with training modules and workshops on integrating the cultural and spiritual significance of nature into the management and governance of protected and conserved areas. The strength of this approach lies in the synergies between developing and testing the guidelines and modules and encouraging the actual implementation of the guidelines, which will probably require some adaptation at regional or national scales to be applicable on the site level.
The workshop at the WCC in Hawai‘i was a key part of the Nature–Culture Journey that IUCN and ICOMOS (the International Council on Monuments and Sites) jointly sponsored to encourage ways to bring nature and culture together to improve the effectiveness of the nomination, designation, and management of World Heritage sites. This effort, epitomized in the mission of the CSVPA, builds on the growing recognition that considering the interconnections of nature and culture is important as most natural sites have cultural components and significance, while many cultural sites have natural features and meanings. Up until recently there has been a sharp division between natural and cultural World Heritage sites. This is paralleled in the work of IUCN and ICOMOS, as advisory bodies to the World Heritage Committee in evaluating World Heritage nominations. The Connecting Practice initiative is working on bridging the divide between IUCN and ICOMOS over nature and culture (see, for example, articles in this issue by Steve Brown and Letícia Leitão).

The following general principles for promoting the cultural and spiritual significance of nature in the management and governance of protected areas are based on review of case studies and emerged from the workshops held on the island of Vilm in 2016 and 2017:

1. Include, recognize, respect, and acknowledge the diversity of the cultural and spiritual significance of nature in protected areas.
2. Promote transparency and build relationships by engaging and involving all those who hold, transmit, or are responsible for cultural or spiritual knowledge.
3. Create a secure and safe environment in which culturally appropriate and inclusive processes can be found that allow the best management of the protected area.
4. Be mindful that culture, religion, and spirituality change with time and place, that the cultural and spiritual significance of a place may only become apparent at unexpected scales, and that any particular protected area is embedded in much wider networks and histories.

5. Adopt a holistic approach that recognizes and encourages reciprocity, multiple responsibilities, and rights.

6. Cultivate and foster networks of support that promote the cultural and spiritual significance of nature and protected areas through education, practice, craft, art, and so on (Figure 5).

7. Recognize the key role that the cultural and spiritual significance of nature can play in promoting environmental conservation and enabling biophysical, social and spiritual regeneration, resilience and adaptation.

Figure 5. Hula dancers in ritual dedicated to Pele in Hawai’i Volcanoes National Park. (Edwin Bernbaum)
Guidelines for specific situations and diverse stakeholders are being developed to implement these general principles.

**Conclusion**

Despite its critical importance to conservation, relatively little guidance exists on how to work with the cultural and spiritual significance of nature. The outputs of training modules and IUCN best practice guidelines will be among the first of their kind at the global level, contributing to further opportunities to advance the Nature–Culture Journey of IUCN and ICOS. The modules and guidelines have the potential to reach a very broad and diverse range of people and a large number of different kinds of protected and conserved areas. Looking to the future, a deeper understanding of the cultural and spiritual significance of nature could also enrich the understanding of World Heritage sites inscribed for their outstanding universal natural values, as well as sites inscribed for their cultural values. This can have significant impacts by making management and governance of protected and conserved areas more sustainable, inclusive, and equitable, especially for the next generation.

[Ed. note: This article is adapted from a chapter in *Science, Conservation, and National Parks*, edited by S.R. Beissinger, D.D. Ackerly, H. Doremus, and G.E. Machlis; published by the University of Chicago Press, 2017.]

**References**


Edwin Bernbaum, The Mountain Institute, 1846 Capistrano Avenue, Berkeley, CA 94707; ebernbaum@mountain.org
Exploring Agricultural Heritage Landscapes: A Journey Across Terra Incognita

Nora J. Mitchell and Brenda Barrett

Authors’ note
This article explores the values and challenges of agricultural heritage landscapes, which represent a journey across terra incognita as we venture onto less familiar terrain. Over the last several years, we have joined a group of colleagues—including other contributors to this issue—who are considering agricultural heritage landscapes in the wider context of conservation and sustainability. Discussions during the Nature–Culture Journey at the IUCN (International Union for Conservation of Nature) World Conservation Congress in September 2016 inspired us to reflect further on what we can learn from this type of landscape, in particular, about the interconnections of nature and culture. We hope that this article will encourage further work to identify and recognize important agricultural heritage landscapes around the globe as well as in North America and will support efforts to sustain their multiple values and benefits.

Introduction
Conservation of agricultural heritage landscapes is receiving increased recognition and attention worldwide. The term “agricultural heritage landscapes” is used here to describe productive landscapes that are created and sustained by communities and have natural and cultural heritage values. These landscapes, shaped and sustained by communities, are rich in interrelated cultural and natural heritage values and are often described as complex, dynamic biocultural systems. While agricultural heritage landscapes are receiving increased recognition by a variety of international and national programs, today they face many serious challenges. Several sessions in the Nature–Culture Journey¹ provided an opportunity for an exchange of ideas on this type of landscape.² This article reflects on that dialogue and, in particular, on some of the serious threats to the sustainability of these landscapes. In addition, this article highlights some of the emerging initiatives that have been developed in response to these challenges. For example, research is now being conducted to better understand these agricultural systems and to develop indicators of their resilience. Landscape-scale conservation ef-
forts have begun to recognize the value of working with agricultural heritage landscapes as an
important component of a regional strategy. The authors of this article are associated with an
ICOMOS (International Council on Monuments and Sites) initiative on World Rural Land-
scapes that seeks more recognition for agricultural landscapes and new ideas to enhance
their long-term sustainability. These resilient and adaptive agricultural heritage systems also
have much to contribute to achieving the United Nations (UN) Sustainable Development
Goals on food sovereignty and security and for informing a transition to a more sustainable
agriculture around the world.

**Agricultural heritage landscapes are complex biocultural systems**
The heritage values of these working landscapes are created and sustained by people on the
land, over long periods of time, and are reliant on traditional ownership and management
and governance systems (Brown and Kothari 2011; Kothari et al. 2013; see Ishizawa et al. in
this issue). Biocultural practices that continue to evolve have shaped adaptable and resilient
production systems and also created characteristic land use patterns and a distinctive sense
of place. In addition to providing food and other products, these landscapes sustain com-
unities and support local livelihoods and provide many other benefits including essential
ecosystem services such as biodiversity, including agrobiodiversity, as well as food sovereign-
ty and security (Bélair et al. 2010; Altieri and Koohafkan 2013; Gu and Subramanian 2014;
Landscapes for People, Food and Nature 2015; Subramanian et al. 2017; FAO n.d.; Interna-
tional Partnership for the Satoyama Initiative 2017a).

Agricultural heritage landscapes produce food and other products in a manner that is
shaped and sustained by local and indigenous communities interacting with their natural
environment. The result of this interaction has been called a “biocultural landscape” defined
as “an intertwined holistic system that has been shaped by human management over long
periods of time” (The Christensen Fund n.d.). This is based on the concept of “biocultural
diversity,” defined by Terralingua (Maffi and Woodley 2010; Terralingua n.d.) as

> the interlinked diversity of life in nature and culture, an integrated whole formed by
biodiversity, cultural diversity, and linguistic diversity. Diversity in this fuller sense is
the multi-faceted expression of the creative force and potential of life in both nature
and culture, a wellspring of vitality and resilience for life on the planet (Maffi and
Dilts 2014: 7).

As indicated in these definitions, these ongoing complex biocultural interactions are in-
creasingly referred to as “systems.” The Food and Agriculture Organization of the UN (FAO)
has defined “globally important agricultural heritage systems” (GIAHS) as “remarkable land
use systems and landscapes which are rich in globally significant biological diversity evolving
from the co-adaptation of a community with its environment and its needs and aspirations for
sustainable development” (FAO n.d.: 3; emphasis added).

The term “social-ecological system” is often used to describe the interactions between
culture and nature (Bélair et al. 2010; van Oudenhoven et al. 2011; Perez-Soba and Dw-
yer 2016; Subramanian et al. 2017). When applied to agricultural landscapes, these might
be more accurately labeled “cultural–ecological–social–economic systems,” reflecting their complexity and representing more completely their range of values and intertwined systems. More simply, they can be called “biocultural systems.” As ICOMOS advisor Susan Denyer has written, “Cultural landscapes are about dynamic forces and dynamic responses which have both physical and intangible attributes.... All of these have the capacity to evolve” (quoted in Rössler 2008: 50).

It is also important to emphasize that local and indigenous communities are integral to these biocultural systems as they sustain the system and its resilience over time. As communities have significant leadership roles in agricultural heritage landscapes, it is critical to have a community-based and people-centered approach that respects governance systems and is conducted in close cooperation with associated communities (Brown and Kothari 2011; Kothari et al. 2013; Brown 2015; Larsen and Wijesuriya in this issue). As this discussion demonstrates, nature and culture are so intertwined and mutually influential within these dynamic systems, they provide an excellent example of landscapes with multiple values and illustrate the concept of “entanglement” (see Leitão and Brown articles in this issue).

Recognition of agricultural heritage landscapes
Agricultural heritage landscapes are diverse and found in many parts of the world. For example, there are centuries-old forms of cultivation that have shaped the land into rice terraces and vineyards, agropastoral practices including transhumance that have developed patterns of use over extensive areas, and a wide range of indigenous agricultural practices that have specifically adapted to the varied ecosystems around the globe (Brown et al. 2005; Taylor and Lennon 2012; UNESCO World Heritage Centre 2013; Zogib 2013; Taylor et al. 2015). Fortunately, there are a number of international and national programs that are working to recognize and help maintain the diverse values of these places, usually through an inventory and designation process and, in some cases, support for ongoing stewardship. A brief description of several of these programs is included below; however, this listing is not intended to be comprehensive.

Under the UNESCO World Heritage Convention sites of Outstanding Universal Value can be inscribed on the World Heritage List if they meet specific criteria (UNESCO World Heritage Centre n.d.). Prior to 1992, nominations of agricultural heritage landscapes to the World Heritage List proved to be difficult as there was no framework for recognizing places defined by the interaction of nature and culture (Cameron and Rössler 2013). For example, the iconic English Lake District (Figure 1) was proposed in 1987 for World Heritage inscription as a mixed site, under both cultural and natural criteria; however, this nomination was deferred so that the World Heritage Committee could seek more guidance on evaluation for this type of site. In 1992, the World Heritage Committee recognized cultural landscapes as eligible for the World Heritage List in the Operational Guidelines for the Implementation of the World Heritage Convention (Mitchell et al. 2009; UNESCO World Heritage Centre 2016). Agricultural heritage landscapes can now be considered as a type of “organically evolved continuing cultural landscape” retaining “an active social role in contemporary society closely associated with the traditional way of life, and in which an evolutionary process is still in
progress” with “significant material evidence of its evolution over time” (UNESCO World Heritage Centre 2016: Annex 3, paragraph 10 (ii)). In 2016, the Lake District was again nominated, this time as a cultural landscape, and was inscribed on the World Heritage List. Today, a number of agricultural heritage landscapes are inscribed as cultural landscapes on the World Heritage List, including the vineyards of Italy’s Cinque Terre, Hungary’s Tokaj wine region, and China’s Honghe Hani Rice Terraces (UNESCO World Heritage Centre 2013; UNESCO World Heritage Centre n.d.).

UNESCO’s Man and the Biosphere (MAB) is another global program that recognizes working farm and forest landscapes (UNESCO MAB n.d.). MAB has developed an international network of biosphere reserves that include terrestrial, marine, and coastal ecosystems, each nominated by a national government. Many of these biosphere reserves are large and may contain considerable agricultural heritage uses such as traditional cropping, livestock herding, and forestry. In addition, IUCN’s framework of protected area management categories recognizes the importance of the interactions of people and nature over time, in particular through Category V, protected landscapes and seascapes (Brown et al. 2005; Dudley and Stolton 2012; Dudley 2013). In the management of Category V protected areas safeguarding those interactions is important to sustaining the biocultural diversity of these places, including wild and agrobiodiversity values, spiritual values, and other cultural values (Mitchell and Buggey 2000; Phillips 2002; Mallarach 2008; Amend et al. 2008; Brown 2015; Dudley et al. 2016). In countries worldwide this protected area management category is used at the national, regional, and local level to designate places that often have rich agricultural heritage.

Beginning in 2002, FAO started identifying GIAHS around the world (FAO n.d.; Figure 2). The objective of the GIAHS is to enhance global awareness of “remarkable land use systems and landscapes” including agricultural biodiversity and knowledge systems that also have important heritage values. These GIAHS are selected based on criteria such as provision of local food security, the presence of high levels of agrobiodiversity and associated bio-

Figure 1. Nestled between mountains, the landscape of valleys of the English Lake District, added to the World Heritage List in 2016, have been shaped by an agro-pastoral land use system. (Brenda Barrett)
logical diversity, and the existence of stores of indigenous knowledge and ingenuity regarding management systems (Koohafkan and Altieri 2011; FAO n.d.).

In addition, there are programs and policy frameworks at the national and regional level. Europe, in particular, is well known for rural development policies that emphasize community well-being, economic vitality, and equity (Brasier et al. 2012). The 2000 European Landscape Convention advances cooperation on research, planning, and management of the everyday landscape and is the first international agreement of its kind (Council of Europe n.d.). A number of countries have created programs to designate and conserve nationally important working rural landscapes. In both the United Kingdom and France, for example, these designation programs focus on conservation of large-scale landscapes, recognizing the critical role people have played and continue to play in shaping the landscape and conserving its natural and cultural values. England and Wales have two designations for conserving large-scale working landscapes: national parks and areas of outstanding natural beauty (there are 13 of the former and 38 of the latter; Barrett and Taylor 2007).

In the United States, the National Park Service has developed policies for cultural landscapes in national parks and has established standards to evaluate the significance of rural and other landscapes (Mitchell and Melnick 2012). Guidance has been prepared on identifying rural historic districts, first for agricultural landscapes and later for traditional cultural properties (Parker and King 1998; McClelland et al. 1999). There are a number of national parks and national heritage areas that include agricultural landscapes, reflecting the significant role agriculture played in the history of this country. For example, there are initiatives to recognize, interpret, and sustain agriculture in national parks such as Marsh–Billings–Rockefeller National Historical Park (Vermont), Cuyahoga Valley National Park (Ohio), Grant–Kohrs Ranch National Historic Site (Montana; Figure 3), and Canyon de Chelly National Monument (Arizona; Figure 4) (Diamant et al. 2007; Mitchell and Barrett 2014; Mitchell
and Barrett 2015). Many of these parks work closely with partner organizations and involve the local community as well. However, relatively limited attention has been given to the cultural and natural heritage values of agricultural landscapes outside of national parks or through agricultural policy.

Conservation challenges for agricultural heritage landscapes

The Nature–Culture Journey at the IUCN World Conservation Congress in September 2016 in Hawai‘i offered people involved in various aspects of agricultural heritage to meet and share ideas. As noted previously, discussions during several sessions in the Nature–Culture Journey identified a number of challenges as well as some opportunities to broaden the current scope of conservation thought and practice to intentionally address agricultural heritage landscapes.

Despite the number of designations that exist for agricultural heritage landscapes (described in the previous section), they continue to face mounting threats, most notably from climate change and market globalization. These landscapes are also at risk from increasing urbanization and declining rural populations, loss of food sovereignty and security, ever-increasing dominance of industrialized agricultural practices, and loss of biological diversity and agrobiodiversity. In addition, since these landscapes are a product of dynamic biocultural systems, they are continually influenced by shifting rural social, economic, and ecological conditions. These driving forces can undermine long-standing agricultural land uses that have shaped the landscape and supported rural livelihoods (Gu and Subramanian 2014; Landscapes for People, Food 2015; Mitchell and Barrett 2015). These circumstances have increased the need for a public dialogue on related issues such as the nature and pace of landscape change, the role of governmental designation and management, and the need for more integrative strategies and new types of collaborative governance for conservation.
One fundamental challenge is that the entangled nature–culture values and the dynamic systems that sustain agricultural landscapes are not widely understood and appreciated. As a result, most conservation efforts do not include consideration of agricultural heritage landscapes and associated communities. In particular, it has been observed that a perspective on agricultural landscapes as complex, adaptive biocultural systems has not yet been incorporated into conservation practice (van Oudenhoven et al. 2011). In addition, as associated communities play a key role in these biocultural systems, it is important to incorporate “a more concerted shift to participatory management that not only includes communities, but also supports and relies on their ways of using and maintaining landscapes” (van Oudenhoven et al. 2011: 155). Such “people-centered approaches” to conservation were a recurring topic in the Nature–Culture Journey (Kothari et al. 2013; Brown 2015; Wijesuriya and Thompson 2016).

In many cases, conservationists find themselves in opposition to agricultural practices that are environmentally destructive. These experiences have contributed to the general misperception that any type of agriculture is fundamentally incompatible with conservation. This misperception is exacerbated when the heritage values of certain agricultural landscapes are overlooked or when it is automatically assumed that any type of human activity is problematic. For example, natural resource or land use studies often refer to “human activities in ecosystems as disturbances, focusing largely on their negative impacts … resulting in a … pervasive view of all agriculture as inherently damaging to biodiversity and ecosystems” (van Oudenhoven et al. 2011: 155).

**Emerging new initiatives**

In response to these challenges, a number of initiatives have emerged...
and several that were discussed during the Nature–Culture Journey are highlighted here. Fortunately, additional research is focused on better understanding of agricultural heritage landscapes, examining the types of interventions that are part of traditional biocultural systems and assessing the benefits to nature conservation (Amend et al. 2008; Mallarach 2008; Dudley and Stolton 2012; Gu and Subramanian 2014; Dudley et al. 2016). These research findings have contributed to re-evaluation of the contributions from agricultural landscapes. Perhaps one of the most dramatic shifts in perspective occurred when strategies for the Convention for Biological Diversity (CBD) identified agricultural heritage landscapes (there referred to as socio-ecological production landscapes) as an important component for meeting its targets (Bélair et al. 2010; CBD 2010). It is significant that the CBD recognizes agrobiodiversity as a component (Amend et al. 2008). As a result, the biodiversity strategy is based not only on pristine environments, such as wilderness, but also recognizes that “human-influenced areas, such as socio-ecological production landscapes ... can contain rich sustainable practices and traditional knowledge” (Bélair et al. 2010: 5).

It is important to be able to make a distinction between the ecological impacts of agricultural land use practices that are beneficial and those that are detrimental. This has prompted researchers to work on a common framework and development of social-ecological indicators of resilience that can be used to assess land use impacts and influence strategies to prevent loss of biocultural diversity (van Oudenhoven et al. 2011; Gu and Subramanian 2014; Mononen et al. 2016; International Partnership for the Satoyama Initiative 2017a, 2017b). These indicators can inform conservation efforts and it can be argued that “the future success of conservation will depend on our ability to understand, harness and support those practices that are beneficial to the maintenance of the diversity and resilience of natural ecosystems, while changing those that are not” (van Oudenhoven et al. 2011: 155).

There is a growing call—in the US and around the world—for conservation on a landscape scale to effectively protect wildlife habitat, provide corridors for climate change–influenced migration, sustain cultural heritage, and enhance regional and global resilience (National Academies of Sciences, Engineering, and Medicine 2016). While landscape-scale conservation is challenging, it offers opportunities for links with agricultural heritage landscapes. Today, it is understood that ecosystems and ecological dynamics extend across geographic and political boundaries (Network for Landscape Conservation n.d.). Similarly, agricultural lands often contain cultural connections that make up an important piece of the puzzle for any large-landscape conservation effort. In particular, traditional land use practices and livelihoods, such as ranching, farming or subsistence harvesting, often cover large areas and span public, private, and tribal lands. Thus agricultural heritage landscapes can play an important role in formulation of conservation strategies for large landscapes that must encompass a mosaic of protected areas, forests, and farms.

Although this is a still a new approach, some promising work is being done to incorporate agricultural lands—ranches and farms specifically—into this large-scale approach. In the Chesapeake watershed in the US, for example, indicators have been developed to track farmland preservation as part of larger landscape conservation goals for improving water quality in the bay (Chesapeake Conservancy n.d.; Figure 5). The Crown of the Continent initiative
on the Canada–US (Alberta–Montana) border has developed a ranch conservation program along the Rocky Mountain Front and in the Blackfoot Valley that has been an important part of the conservation strategy. Preserving land for both wildlife and family farming has helped to build local support for making continuous connections across large landscapes and along important corridors (The Nature Conservancy n.d.). The recently formed Network for Landscape Conservation is focused on supporting and advancing the practice of landscape scale conservation and has made integrating cultural and working landscapes into this new approach one of its priorities (Network for Landscape Conservation n.d.).

To increase understanding of the role and contributions of agricultural heritage landscapes, the ICOMOS–IFLA (International Federation of Landscape Architects) International Scientific Committee on Cultural Landscapes (ISCCL)³ launched an initiative on World Rural Landscapes to create a network of colleagues from many countries around the world (ICOMOS–IFLA ISCCL n.d.). This initiative takes a comprehensive view of rural landscapes, noting that many traditional land uses reflect resilient and sustainable systems. These practices respect the natural characteristics of the land, maintain biodiversity, and retain a region’s cultural diversity.

The World Rural Landscape initiative has drafted the “ICOMOS–IFLA Principles Concerning Rural Landscapes as Heritage”⁴ to encourage and guide recognition and sustainability of rural landscapes. These principles:

Figure 5. Conserved farmland in the Chesapeake Bay watershed is now counted as an asset that contributes to the improvement of the bay’s water quality. (Chesapeake Bay Office, US National Park Service)
view rural landscapes through the lens of heritage;
• highlight the cultural, natural, social, spiritual, and economic values of rural landscapes;
• specifically address the rights of indigenous and local communities; and
• recognize the contribution or rural landscapes to biocultural diversity and sustainable agriculture.

The draft principles outline an action agenda to better understand, protect, and sustainably manage rural landscapes and their heritage values, emphasizing the importance of sharing knowledge of these landscapes broadly. This agenda weaves together many important strands, such as the need to draw upon local knowledge of environmental conditions, provide regional food security, develop shared governance, and improve agricultural policy. These draft principles are now under review as a doctrinal text for ICOMOS. Further discussion on these draft principles will take place at the 2017 ICOMOS General Assembly.

Concluding remarks
This paper gives an introduction to the complexity—and urgency—of recognizing and sustaining agricultural heritage landscapes. Given their diverse interconnected values, these agricultural landscapes represent an important area of heritage conservation, addressing biodiversity and agrobiodiversity conservation as well as contributing to the vitality and way of life of associated communities. The interwoven nature–culture values and dynamic biocultural systems of these landscapes must be more widely understood and appreciated. Efforts to develop and apply indicators that demonstrate the conservation value and resilience of working landscapes can also play an important role.

Given the nature of the challenges facing agricultural landscapes, it is critical that these landscapes are part of larger regional conservation efforts embracing the principles of World Rural Landscapes and guidance from other related initiatives. In addition, agricultural heritage landscapes can also make vital contributions to heritage tourism, food sovereignty, and food security. Knowledge and production from these adaptive and resilient biocultural systems also offer a path to achieving more sustainable agriculture, as called for in the UN Sustainable Development Goals (UN General Assembly 2015; see also Potts in this issue). Given the value and vulnerability of these important places, it is time to give more attention to agricultural heritage landscapes. The upcoming Culture–Nature Journey at the 2017 ICOMOS General Assembly and Symposium will offer a valuable opportunity to continue this dialogue.

Endnotes
1. The program of sessions for the IUCN World Heritage and Nature–Culture Journey can be accessed at: https://www.iucn.org/sites/dev/files/n-c_wh_journeys_programme.pdf.
2. Examples include “Advancing Sustainable Agriculture at the Nexus of Nature and Culture,” online at https://portals.iucn.org/congress/session/9772; “Constructing Resilience: The ‘Nature’ and ‘Culture’ of Food Cultivation in the Landscape and Seascape,” online at https://portals.iucn.org/congress/session/9689; and “People-
Centered Approaches to Conservation of Natural and Cultural Heritage,” online at https://portals.iucn.org/congress/session/10316.

3. The ISCCL has 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 (see Brown in this issue).


5. ICOMOS General Assembly and Symposium, see http://icomosga2017.org/.

References


Brown, Jessica, Nora Mitchell, and Michael Beresford, eds. 2005. The Protected Landscape


Nora J. Mitchell, P.O. Box 787, Woodstock, VT 05091; norajmitchell@gmail.com

Brenda Barrett, 2260 Rudy Road, Harrisburg PA 17104; brendabarrett88@gmail.com
Bridging the Divide Between Nature and Culture in the World Heritage Convention: An Idea Long Overdue?

Letícia Leitão

Introduction

The dichotomy between natural and cultural heritage under the World Heritage Convention endures 45 years after its adoption. The convention is often hailed as the leading international instrument for conservation that brings together cultural and natural heritage; however, a truly integrated consideration of these two dimensions is yet to be achieved. For most of the convention’s history, cultural and natural heritage have been conceptualized and implemented as parallel but largely separate worlds. The underlying issues behind this divide reflect how cultural and natural heritage were defined from the start and continued to be interpreted over the years, and how institutional divisions reinforce that dichotomy.

This article examines how the World Heritage Convention was conceived through a dichotomous process and has been implemented as such ever since. Attempts over the years to achieve a more integrated approach to the consideration of cultural and natural heritage have never been able to fully break down the division between the two fields. This is because the ideological changes that were introduced always conformed to the dichotomy rooted in Articles 1 and 2 of the convention, which define what will be considered as “cultural” and “natural.” The notion of natural heritage, in particular, has been limited by an interpretation deriving from the fact that Article 2 does not make any references to interactions between humans and nature. On the other hand, Article 1, which defines cultural heritage, does. Hence, any aspects of World Heritage related to interactions between humans and nature is interpreted as being admissible under the convention’s cultural criteria. As a result, natural heritage criteria make no references to combinations of natural and cultural elements or to humans’ interaction with the environment, although previously they did. These World Heritage criteria also do not reflect the International Union for Conservation of Nature’s (IUCN’s) protected areas definition, which recognizes cultural values across all protected area categories, including human modifications to landscape character in Category V protected landscapes/seascapes. (See Box 1.)

While the division between cultural and natural heritage is deeply embedded, there are some promising initiatives underway that could help articulate a vision where the two fields

© 2017 George Wright Society. All rights reserved.
(No copyright is claimed for previously published material reprinted herein.)
ISSN 0732-4715. Please direct all permissions requests to info@georgewright.org.
are not perceived as an either/or proposition but reflect the full spectrum from pristine nature to pure culture. In addition, some promising ideas for changing aspects of conservation practice are emerging.

The reflections included here are influenced by my personal experience having worked with different aspects of the World Heritage system, both in the cultural and natural heritage fields. Some of these reflections are still a work in progress and are therefore subject to change, revision, and rethinking in the future. They also build upon my experience as coordinator of the joint IUCN–ICOMOS (International Council on Monuments and Sites) “Connecting Practice” project between 2013 and 2016. This project is aimed at exploring,

---

**Box 1. World Heritage Convention, Articles 1 and 2**

**UNESCO**

*Convention Concerning the Protection of the World Cultural and Natural Heritage*

Adopted by the General Conference at its seventeenth session, Paris, 16 November 1972

I. Definition of the Cultural and Natural Heritage

Article 1

For the purpose of this Convention, the following shall be considered as “cultural heritage”:

monuments: architectural works, works of monumental sculpture and painting, elements or structures of an archaeological nature, inscriptions, cave dwellings and combinations of features, which are of outstanding universal value from the point of view of history, art or science;

groups of buildings: groups of separate or connected buildings which, because of their architecture, their homogeneity or their place in the landscape, are of outstanding universal value from the point of view of history, art or science;

sites: works of man or the combined works of nature and man, and areas including archaeological sites which are of outstanding universal value from the historical, aesthetic, ethnological or anthropological point of view.

Article 2

For the purposes of this Convention, the following shall be considered as “natural heritage”:

natural features consisting of physical and biological formations or groups of such formations, which are of outstanding universal value from the aesthetic or scientific point of view;

geological and physiographical formations and precisely delineated areas which constitute the habitat of threatened species of animals and plants of outstanding universal value from the point of view of science or conservation;

natural sites or precisely delineated natural areas of outstanding universal value from the point of view of science, conservation or natural beauty.

learning about, and creating new methods of recognition and support for the interconnected character of the natural, cultural, and social value of highly significant land- and seascapes and affiliated biocultural practices (IUCN and ICOMOS n.d.).

The World Heritage Convention is the combination of separate initiatives, and its “architecture” reflects that

The World Heritage Convention is the result of two separate, and ultimately reconciled, initiatives: the United Nations Educational, Scientific, and Cultural Organization’s (UNESCO’s) efforts in the 1960s towards developing a Convention Concerning the International Protection of Monuments, Groups of Buildings and Sites of Universal Value, and IUCN’s proposal for a Convention on Conservation of the World Heritage. Both included some combination of natural and cultural heritage. The definition of “monuments, groups of buildings and sites” included in the first draft documents developed by UNESCO covered “natural sites of aesthetic, picturesque or ethnographic value or with associations in history, literature or legend” while “mixed sites” were defined as the “result of the combined work of nature and man” (UNESCO 1968: 21). The terms “natural sites” and “mixed sites” were later replaced by “sites or landscapes” since it was considered that “the former [did] not correspond to a concept common to all States and the latter [added] nothing to the idea of ‘urban sites or rural sites’” (UNESCO 1969: 29). IUCN’s draft referred principally to natural areas, but areas that had been changed by humans could also be considered for World Heritage (IUCN 1971: 1).

In 1972, under the leadership of UNESCO, the two proposals were merged and a new structure was created where cultural and natural heritage were given equal importance by including two definitions, of similar length and including three subparagraphs, in Articles 1 and 2 of the convention (Batisse and Bolla 2005: 75). However as Michel Batisse argued, To be sure, the definition of World Heritage may have been worded so as to give equal value to both sides, while its implementation may have re-enforced and perpetuated a distinction, even rivalry, between culture and nature (Batisse and Bolla 2005: 35).

This distinction introduced in Articles 1 and 2 was reinforced by the decision to adopt two different sets of criteria to assess the Outstanding Universal Value of the properties to be inscribed on the World Heritage List—one for cultural heritage and one for natural heritage. ICOMOS and IUCN, as advisory bodies to the World Heritage Committee, framed the first concepts and wording for the criteria based in their field of expertise. These first drafts of the criteria made no explicit reference to interactions between culture and nature, with the exception of a small reference in relation to potential examples of the application of natural criterion (i) (UNESCO 1976: annex IV).

Records of the first session of the World Heritage Committee, held in Paris, France, in 1977, show that the division between cultural and natural heritage was a concern from the beginning, leading the Committee to recommend that
A special effort should be made to include in the World Heritage List properties which combine in a significant way cultural and natural features demonstrating the interaction, between man and nature. At the stage of nomination, where possible, natural areas should be extended so as to include cultural monuments or sites, derived from and influenced by the natural environment; similarly, areas containing cultural monuments or sites should be sufficiently extended to cover the natural landscapes or man-modified landscapes which formed their original setting (UNESCO 1977: 6).

The natural criteria were consequently modified to add a cultural dimension, including references of “cultural evolution,” “man’s interactions with his natural environment,” “areas of exceptional natural beauty,” and “combinations of natural and cultural elements.” Later, some of these changes were considered inconsistent with the definition of natural heritage included in Article 2 of the convention, and so were removed (Cameron and Rössler 2013: 37–38).

Based on these sets of cultural and natural criteria, the first properties were inscribed on the World Heritage List in 1978. Properties proposed under cultural criteria were considered cultural properties and evaluated by ICOMOS and those proposed under natural criteria were considered natural properties and evaluated by IUCN. Properties proposed under both sets of criteria—now called “mixed” properties, though at the time the term was not used yet—were evaluated by both ICOMOS and IUCN but separately. This division in mandates, although rooted in the expertise of each organization, added another layer to the separation between the two fields.

**How maintaining separate sets of criteria and evaluation processes reinforces the divide between natural and cultural heritage**

The first mixed properties included on the World Heritage List were Tikal National Park in Guatemala in 1979, Natural and Cultural Heritage of the Ohrid region in the former Yugoslav Republic of Macedonia in 1980, and Kakadu National Park and Willandra Lakes Region, both in Australia, in 1981. In 1984, the World Heritage Committee debated several problems about this category of properties. The rapporteur for that session, Lucien Chabason, considered that the *Operational Guidelines for the Implementation of the World Heritage Convention* did not give specific guidance to state parties on such properties. He introduced the notion of rural landscapes, reflecting on “the question of identification of exceptionally harmonious, beautiful, man-made landscapes as epitomized by the terraced rice-fields of S.E. Asia, the terraced fields of the Mediterranean Basin or by certain vineyard areas in Europe.” Chabason considered that these rural landscapes could meet natural criterion (iii), which included references to “exceptional combinations of natural and cultural elements” and that this criterion “would have to be extended to facilitate the identification of such properties.” The IUCN representative reacted by calling attention to the fact that one of IUCN’s protected area categories is “protected landscapes,” which consider those modified and maintained by humans. These discussions led the committee to request “IUCN to consult with ICOMOS
and the International Federation of Landscape Architects (IFLA) to elaborate guidelines for the identification and nomination of mixed cultural/natural rural properties or landscapes” (UNESCO 1984: 7).

This task force based its reflections on Articles 1 and 2 of the convention, which define what is to be considered as cultural and natural heritage. Reporting to the committee in 1985, the task force conveyed “its unexpected discovery of a serious flaw in the Committee’s working tools by pointing to inconsistencies between the Convention text and the evaluation criteria” (Cameron and Rössler 2013: 62). While Article 1 identifies two circumstances where natural attributes can be taken into account in determining the significance of a property—first for groups of buildings “because of their place in the landscape” and secondly for sites that illustrate “the combined work of nature and man”—Article 2, on the other hand, makes no concession to cultural elements in assessing whether or not a natural property is of outstanding universal value and, strictly within the definition, it is only the natural features unmodified by human intervention which determine the acceptance of a natural property (UNESCO 1985: 3).

The task force also noted that until then only a few properties had been inscribed for both sets of criteria, and, while the convention did not consider such properties, it did not exclude them either. Hence, based on its interpretations of Articles 1 and 2, the task force considered that ICOMOS’s evaluations could take into account certain natural aspects of cultural properties, but the same could not be said for IUCN’s, which should assess natural properties purely on their natural attributes. Therefore it recommended that separate evaluation processes should be maintained for properties whose cultural and natural values are distinct and appear equivalent (UNESCO 1985: 3). This decision reinforced the practice of IUCN and ICOMOS conducting their evaluations in parallel rather than jointly.

Nominations concerning landscapes where neither culture nor nature are predominant were considered more difficult. The task force noted such landscapes deserved international recognition and provisions should be made for situations where culture and nature were “married.” To make the cultural and natural criteria more consistent with its findings, the task force proposed changes to them. Cultural criteria were to include references to “exceptional associations to cultural and natural elements,” particularly by expanding criterion (v). The wording in natural criterion (iii) was to be modified along the same lines, by having “associations” instead of “combinations” of natural and cultural elements, which in practice deliberately mirrored the revised cultural criteria, recognizing that there were areas where both cultural and natural considerations were interrelated (UNESCO 1985: 4–5).

Although these changes were not introduced at the time, they set the stage for later developments in relation to the recognition of cultural landscapes. In 1994, all references to cultural elements were removed from the natural criteria, since they were considered inconsistent with the definition of natural heritage under Article 2 of the convention. At the same time, the reference to “the combined work of nature and man” in Article 1 became the underlying definition of cultural landscapes. The cultural criteria were also changed; however, none of the changes included explicit references to interactions or combinations between cultural
and natural elements. It was not until 2005, as part of a major revision of the *Operational Guidelines*, that references to the interaction between culture and nature were reintroduced by adding “human interaction with the environment” in (cultural) criterion (v) (Leitão and Badman 2015: 79). It is interesting to note that these changes were introduced precisely under this criterion, in line with what had been suggested in 1985 by the task force working on mixed sites and rural landscapes.

In addition, the revisions made in 2005 brought together all the cultural and natural criteria into a single set numbered from (i) to (x). This was, however, mainly a renumbering procedure, with former natural criteria (i) to (iv) renamed criteria (vii) to (x), although not in the same order. While a single set of criteria makes the distinction less apparent, the underlying division remained. Properties nominated under criteria (i) to (vi)—including cultural landscapes—are still considered cultural properties and are evaluated by ICOMOS; properties nominated under criteria (vii) to (x) are considered natural properties and are evaluated by IUCN. Properties nominated as cultural landscapes are considered cultural properties and thus are evaluated by ICOMOS, with IUCN providing recommendations with respect to their natural values. Properties nominated under both sub-sets of criteria are still evaluated separately by ICOMOS and IUCN, although significant efforts to have been made to improve collaboration between the two organizations in this area, as discussed later in this article.

**Cultural dimensions in IUCN’s protected areas categories**

The notions of cultural and natural heritage have evolved and expanded since the World Heritage Convention was adopted in 1972; therefore, continuing to base important contemporary World Heritage concepts and processes in those original notions is inconsistent with current conservation theory and practice. Over the years, continuous revision of the *Operational Guidelines* allowed changes to the wording of the criteria, but not enough to move beyond initial limitations and divisions. To this day, natural criteria do not include references to the interaction of people and nature. This can no longer be attributed to a definition of nature as pristine areas that exclude human interaction with the environment, as illustrated in different IUCN protected areas categories. As noted by the IUCN representative back in 1994, when the World Heritage Committee discussed the problems associated with mixed properties, the organization’s system of protected areas management categories did not exclude cultural considerations. Although there is also a long history of conceptualizing nature and culture as separate in protected areas (Feary et al. 2015: 103), IUCN’s categories of protected areas have grown much more inclusive; some of them explicitly recognize the interaction of people and nature, that certain human modifications of nature contribute to landscape character, and that those interactions can sometimes help sustain nature and associated values (see Box 2).

The first concerted effort by IUCN to develop a categories system for protected areas dates back to 1977, coinciding with the same period when the World Heritage criteria were being developed. The new system, published in 1978, was made of ten categories, defined mainly by management objective, not by level of importance. This system included “protected landscapes,” which recognized the interaction of people and nature. There was, however, no definition of “protected area” and the limitations of the system soon became apparent.
In 1994, the IUCN General Assembly approved a revised system of categories and the following definition of protected areas:

An area of land and/or sea especially dedicated to the protection and maintenance of biological diversity, and of natural and associated cultural resources, and managed through legal or other effective means (Dudley 2013: 4).

In addition to the recognition of the interaction of people and nature in several of these categories, the definition of “protected area” made references to culture but only as “cultural resources.” Since 1994, a number of additional changes have been made, including to the definition of a protected area, now considered as

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 (Dudley 2013: 8).

The current six categories of protected areas (see Box 2), and the guidelines for its application, are the result of an intensive process of consultation and revisions led by IUCN’s World Commission on Protected Areas between 2006 and 2008. The categories are based primarily on management objectives and imply a gradation of human interactions (Figure 1).

All IUCN protected area categories recognize cultural values but none of the natural World Heritage criteria (vii) to (x) do. This can only be attributed to the perpetuation of an interpretation of natural heritage under World Heritage that was determined decades ago and has not kept pace with developments in the wider nature conservation field.

**Experiences linking cultural and natural heritage as part of the Connecting Practice project**

The recognition of cultural landscapes and mixed sites under the World Heritage Convention has been a step in the right direction toward addressing the dichotomy between natural and cultural heritage, but limitations still prevail. Cultural landscapes are still recognized as cultural properties and mixed sites are defined as follows:

Properties shall be considered as “mixed cultural and natural heritage” if they satisfy a part or the whole of the definitions of both cultural and natural heritage laid out in Articles 1 and 2 of the Convention (UNESCO 2016: paragraph 46).

This interpretation is still basically the same as discussed by the World Heritage Committee back in 1985.
At present, there are only 35 mixed properties included on the World Heritage List, representing less than 4% of the total properties inscribed. Few sites are nominated as mixed properties and even fewer are inscribed as such. Since mixed properties are evaluated separately by IUCN and ICOMOS, their recommendations might differ, which can result in the inscription of the property only for its cultural or natural values. For instance, the Central Highlands of Sri Lanka were nominated as a mixed site but inscribed only under natural criteria. Conversely, the Delta of Saloum in Senegal was nominated as a mixed property but inscribed under cultural criteria only.

In 2013, the nomination of Pimachiowin Aki (Canada) “raised fundamental questions in terms of how the indissoluble bonds that exist in some places between culture and nature can be recognized on the World Heritage List, in particular the fact that the cultural and natural values of one property are currently evaluated separately (UNESCO 2013: decision 37

---

**Box 2. IUCN protected area management categories (Dudley 2013).**

**Ia Strict Nature Reserve:** strictly protected areas set aside to protect biodiversity and also possibly geological/geomorphical features, where human visitation, use and impacts are strictly controlled and limited to ensure protection of the conservation values. Such protected areas can serve as indispensable reference areas for scientific research and monitoring.

**Ib Wilderness Area:** usually large unmodified or slightly modified areas, retaining their natural character and influence without permanent or significant human habitation, which are protected and managed so as to preserve their natural condition.

**II National Park:** Category II protected areas are large natural or near natural areas set aside to protect large-scale ecological processes, along with the complement of species and ecosystems characteristic of the area, which also provide a foundation for environmentally and culturally compatible, spiritual, scientific, educational, recreational, and visitor opportunities.

**III Natural Monument or Feature:** set aside to protect a specific natural monument, which can be a landform, sea mount, submarine cavern, geological feature such as a cave or even a living feature such as an ancient grove. They are generally quite small protected areas and often have high visitor value.

**IV Habitat/Species Management Area:** to protect particular species or habitats and management reflects this priority. Many Category IV protected areas will need regular, active interventions to address the requirements of particular species or to maintain habitats, but this is not a requirement of the category.

**V Protected Landscape/ Seascape:** A protected area where the interaction of people and nature over time has produced an area of distinct character with significant, ecological, biological, cultural and scenic value: and where safeguarding the integrity of this interaction is vital to protecting and sustaining the area and its associated nature conservation and other values.

**VI Protected Area with Sustainable Use of Natural Resources:** conserve ecosystems and habitats together with associated cultural values and traditional natural resource management systems. They are generally large, with most of the area in a natural condition, where a proportion is under sustainable natural resource management and where low-level non-industrial use of natural resources compatible with nature conservation is seen as one of the main aims of the area.
COM 8B.19).” Therefore, the committee requested that the World Heritage Centre examine options to address this issue, in consultation with the advisory bodies.

Coincidentally, IUCN and ICOMOS had just launched a new joint project called “Connecting Practice,” which, as noted earlier, focused on new methods of recognizing and supporting the interconnected character of highly significant land- and seascapes. One of the short-term objectives of the project was to explore and define practical strategies to deliver a more integrated approach to considering nature and culture in the practices and institutional cultures of IUCN and ICOMOS as advisory bodies to the World Heritage Committee.

As mentioned before, for mixed properties IUCN and ICOMOS carry out their evaluations separately. The visit to the property as part of the assessment takes place jointly, but different professionals represent each of the organizations, working from different terms of reference and creating independent mission reports. Therefore in the first phase of the Connecting Practice project (2013–2015), IUCN and ICOMOS tested how to carry out missions that could be truly joint activities involving interdisciplinary teams. Following a “learning by doing” approach, IUCN and ICOMOS undertook fieldwork in three World Heritage properties: the Petroglyph Complexes of the Mongolian Altai (Mongolia), inscribed as a cultural property; Konso Cultural Landscape (Ethiopia), also a cultural property even if recognized as a cultural landscape; and Sian Ka’an (Mexico), inscribed as a natural property. Lessons learned from this first phase of the project were published online and included in the report to the World Heritage Committee in response to its request to the questions raised on mixed properties. Some of the measures suggested included joint briefing of mission teams, requests for supplementary information on nominations agreed to jointly by IUCN and ICOMOS, and joint briefing of both World Heritage panels on the results of the missions and reviews.

The second phase of the project (2015–2017) translated lessons learned into practical interventions. This phase involved only two case studies: Hortobágy National Park–the Puszta (Hungary), designated as a cultural landscape, and Maloti-Drakensberg Park (South Africa/Lesotho), a mixed property.

As coordinator of the Connecting Practice project at the time, I was deeply involved with the fieldwork in both case studies, and in particular that taking place in Maloti-Drakensberg Park, where I participated as a team member in the two visits to the property (Figure 2). One of the key elements of the fieldwork involved assessing the interconnected character of the natural, cultural, and social values of the property. This required a consideration of the wider range of values of the park, beyond its Outstanding Universal Value, the focus of the inscription of the property on the World Heritage List.

Maloti-Drakensberg Park is considered to be of Outstanding Universal Value because:

- its rock art is outstanding both in quality and diversity of subject, representing a masterpiece of human creative genius (criterion I; Figure 3);
- it bears a unique testimony to the San people, who lived in the mountainous Drakensberg area for more than four millennia (criterion iii);
- it contains areas of exceptional natural beauty, with soaring basaltic buttresses, incisive
dramatic cutbacks, and golden sandstone ramparts (criterion vii; Figure 4); and
it contains significant natural habitats for *in situ* conservation of biological diversity
and globally threatened species (criterion x).

Although the inscription focused on this particular set of values, the property has a wider
range of values that are part of its natural and cultural richness and need to be equally consid-
ered by the governance and management systems in place.

*Figure 2.* (Top) Connecting Practice team during first visit to Maloti-Drakensberg Park.
*Figure 3.* (Bottom) Rock art, Game Pass Shelter, South Africa. (both Letícia Leitão)
In order to understand the overall significance of the property, our team carrying out the fieldwork adopted a three-step methodological approach for structuring the values assessment, particularly in order to be able to focus on the interconnections between the different values. First, we examined which values justified the inscription of the property on the World Heritage List, that is, the different elements of the Outstanding Universal Value of the property. Second, because the property is a mixed site, we then looked at the relationships between the natural and cultural values that justified the inscription. Third, we tried to understand what other significant cultural and natural values are part of the property’s overall significance and how these are interconnected with the Outstanding Universal Value of the property.

Our findings showed that the relationships between the cultural and natural values that supported the inscription are not self-evident, but occur at a deeper level and are only revealed through detailed study using evidence from a range of sources and concepts drawn from several disciplines. Once these relationships were better understood, we could identify strong interconnections between the values that supported the inscription and other significant values for which the property is actually managed, such as, for example, water production.

This three-step methodological approach pushed team members to focus on the interconnections between values rather than separately identifying and describing those values. Doing so also helped us avoid ranking the values into different levels of significance, preventing a situation in which some values were regarded as predominant and others not requiring consideration. The interdisciplinary nature of the team was fundamental to this process. People with different backgrounds often think quite differently about a particular topic, creating
knowledge barriers that can make it difficult to understand the relationships between the natural and cultural values. Instead of looking at this diversity of viewpoints as a constraint, we embraced it. Different experiences and knowledge of particular aspects of the property, when combined, allowed us to understand interconnections that as individuals we wouldn’t have otherwise considered.

While this exercise in itself was extremely helpful to gain a deeper understanding of the overall significance of the property, we also wanted to explore how it might help strengthen governance and management arrangements in ways that could potentially lead to better conservation outcomes. Because Maloti-Drakensberg Park is a transboundary property between South Africa and Lesotho, there are bilateral agreements between the two countries that add to the complexity of the management system. In the case of the portion of the World Heritage property in South Africa, it became clear to our team from our first visit that the governance and management systems in place contributed to the divide between natural and cultural heritage. The management authority in that part of the property is Ezemvelo KZN Wildlife, which is a juristic entity for the management of nature conservation. In addition, under the national system of classification of protected areas (which is based on IUCN’s system of protected areas management categories), as a park the area is managed as a Category II but also comprises wilderness areas, therefore Category I.

Prior to the inscription, Ezemvelo was already managing the park, so when it was inscribed as a mixed property in 2000 the organization accumulated additional responsibilities for managing the cultural heritage. Since Ezemvelo does not have the institutional and professional capacity to do so, it entered into an agreement with Amafa AkwaZulu-Natali, a provincial heritage agency, to provide support for cultural heritage management. Initially this agreement was seen as temporary, until Ezemvelo could build its own capacity to take over the main responsibility for managing the cultural heritage as well. Collaboration between the two institutions over the years has helped, but lack of institutional capacity to manage cultural heritage within Ezemvelo persists and Amafa does not have the necessary resources on its own to provide the level of support that is needed.

When the team discussed these issues during the first visit, it was clear that changing the status quo would not be possible. After gathering a better understanding of the situation, particularly during the second visit, the team realized that the way forward was through strengthening existing institutional and planning arrangements rather than try to change them. Oscar Mthimkhulu, the site manager of the property, was instrumental in this process. He proposed using the upcoming revision of the management plan as an opportunity to define a more integrated approach to the cultural and natural heritage of the property and create a common framework for Ezemvelo and Amafa to work better together. As expressed in his own words:

Being part of the Connecting Practice offered us a unique opportunity to realize a need to develop one all-encompassing and “genuine” Integrated Management Plan for the Park, which will allocate equal significance and equal status to both the natural and cultural values of the Park. The Park will then be managed using one plan, which seeks to align natural and cultural values and also incorporate the
inherent social values. Previously, the Integrated Management Plan was implemented as an overarching management plan, and the Cultural Heritage Plan operated as a subsidiary operational plan. Essentially, this approach was imbalanced and did not equally promote and protect all the values that the site encompasses. The former approach was conflicted theoretically although it may have thrived and balanced in practice (Mthimkhulu, personal communication).

Conclusions
The fieldwork in Maloti-Drakensberg Park—supported by similar findings from other fieldwork carried out under the Connecting Practice project—offers several insights on how to achieve a more holistic approach to the consideration of cultural and natural heritage.

- First, World Heritage properties have a multiplicity of values, cultural and natural, that is not fully captured in the designation since the focus is on Outstanding Universal Value. Like any other designation, be it international or national, the inscription of a property on the World Heritage List focuses on a particular set of values. However, this should not be interpreted as excluding other values of the property, either cultural and natural, which need to be equally considered as part of the overall significance of the property.

- Second, values assessments should emphasize the interconnections between values. Although it is important to identify different categories of values, describe them, and even rank them, understanding how values are interrelated and even co-dependent helps to recognize them as part of a complex “whole” that is richer than the individual component parts.

- Third, a deeper understanding of how values are interconnected can help develop management approaches that recognize and protect that complex “whole” and overcome potential shortcomings that certain designations or listing processes might generate.

- Fourth, addressing institutional divisions that contribute to a separation between cultural and natural heritage is as important as tackling conceptual divisions between the two fields. Institutions are often built upon organizational cultures, interests, decision-making processes, and policies that are essentially mono-disciplinary or based on closely related disciplines, and which impede integrated conservation practices. Such institutional arrangements were developed over decades and can therefore only be changed gradually. Promoting collaboration between institutions, and carrying out joint interdisciplinary projects such as Connecting Practice, are crucial to developing a community of practice whose shared conservation interests can help lessen the dichotomy between natural and cultural heritage.

Since the adoption of the World Heritage Convention in 1972, the notions of cultural and natural heritage have evolved and expanded considerably. Despite this progress, the two fields still operate in parallel and largely separate worlds. As expressed by Michel Batisse:

It is regrettable that the potential of the Convention to integrate culture and nature in our happy-go-lucky, mercantile civilization has not been properly explored. This
may be due to the fact that the two sides remained too isolated and even opposed when it came to the criteria of inscription on the List or perhaps because many countries and their representatives on the [World] Heritage Committee do not fully appreciate the natural dimension of the common heritage (Batisse and Bolla 2005: 37).

Additional changes to the World Heritage criteria could potentially help bridge the divide between natural and cultural heritage; however, this will always remain an incomplete task as long as cultural and natural heritage continue to be conceptualized as a dichotomy. We need to develop new concepts that build upon the full continuum of humans’ interactions with nature, ranging from areas set aside to preserve nature from significant direct intervention by humans; to biocultural landscapes, representing intertwined holistic systems that have been shaped by human management over long periods of time; to the isolated monument. We also need to learn more from those cultures and worldviews, including those of many indigenous peoples, that do not conceptualize nature and culture as separate.

Projects such as Connecting Practice offer hope that a more holistic approach can be achieved in the near future. When ICOMOS and IUCN launched the project in 2013, Connecting Practice was one of the few international initiatives addressing this challenge. Since then, similar efforts have spread all over the world. The Nature–Culture Journey, a subtheme also co-sponsored by IUCN and ICOMOS at the IUCN World Conservation Congress (held in Hawai‘i, United States, in September 2016), featured over 50 sessions showcasing experiences from all over the world as to how professionals and organizations are working towards defining new methods for a connected approach between natural and cultural heritage. Later this year, the Scientific Symposium that will take place during the 19th ICOMOS General Assembly, to be held in Delhi, India, in December, will also include a Culture–Nature Journey as one of its subthemes.

Endnotes
1. The opinions expressed in this article are those of the author alone and do not necessarily reflect the official policy or position of IUCN and ICOMOS or any other organization.
2. IUCN’s proposal was based on an initiative by the United States to create a “World Heritage Trust,” an idea that emerged from a White House Conference on International Development in 1965 (for further information see Cameron and Rössler 2013: 17–20 and Holgate 1999: 106–107).
3. Michel Batisse, with his colleague Gérard Bolla, working respectively in the Sciences and Cultural sectors of UNESCO, oversaw the negotiations for drafting of the final version of the World Heritage Convention.
4. This reference was made in relation to examples of the major stages of earth’s evolutionary history where “[s]ites such as Olduvai Gorge in Tanzania would serve to demonstrate where natural and cultural heritage come together to illustrate the emergence of pre-man within the context of the plants, animals, climate and other factors influencing evolution” (UNESCO 1976: annex IV).
5. These changes were introduced in revisions of the criteria between 1976 and 1980.
6. This property was originally inscribed in 1979 as a natural property only.
10. The team was composed of Letícia Leitão, the coordinator of the Connecting Practice project; Carlo Ossola, representing IUCN and with expertise on biodiversity; John Kinahan, who represented ICOMOS in the first visit; Aron Mazel, who represented ICOMOS in the second visit and is an expert in rock art; Ntsizi November, who has expertise on the legal and institutional frameworks of South Africa; Thulani Mbatha, from the Department of Environmental Affairs of South Africa; Nony Andriamirado from the African World Heritage Fund; and Oscar Mthimkhulu, the site manager of the component part of the property in South Africa. In addition, several other colleagues from the management authorities joined the team throughout the visits.
11. The definition of "biocultural landscape" presented here is the one used by the Christensen Fund. For further information see https://www.christensenfund.org/experience/biocultural-landscape/.

References


**Leticia Leitão**, Kronprinsensgade 14, 2; 1114 Copenhagen K, Denmark; letmarlei@gmail.com
Reflections on the Nature–Culture Journey

William Pencek

The human race is challenged more than ever before to demonstrate our mastery, not over nature but of ourselves. — Rachel Carson

Just weeks after I began work as executive director of US/ICOMOS, the US National Committee of the International Council on Monuments and Sites, the Nature–Culture Journey kicked off in September 2016 at the World Conservation Congress (WCC) in Honolulu. A joint initiative of the International Union for Conservation of Nature (IUCN) and ICOMOS, US/ICOMOS was a major contributor to the Journey. I was a late registrant to the 10,000-person WCC, which is a global-in-scope, quadrennial convening of the world’s conservation community. I attended because of the significant role US/ICOMOS played in planning and execution of the Nature–Culture Journey, a thematic, 50-session mini-conference within a much larger international conference.

As of this writing I am a “youthful” baby boomer, a product of the 1960s, questioning everything. I knew before I finished high school that I wanted to work to identify, protect, and maintain the best of what surrounds us to make sure that life in our shared communities only got better. My bookshelves still hold the texts of my undergraduate schooling. Rachel Carson, Jane Jacobs, Charles Reich, Aldo Leopold, Theodore Roszak, and Carlos Castaneda are as fresh and tangibly accessible to me in their non-digital pages as in my iPhone. They helped shape my life and professional choices. And in my life and work I have confronted and attempted to address the challenges presented by the nature/culture divide in many different, often subtle ways, as many of us on the front lines have.

In my work, the premier example of this is heritage areas. Although just a handful of US states have statewide heritage area programs, there are 49 national heritage areas created by Congress and served by the National Park Service. Heritage areas provide an exceptional, not-fully-appreciated framework for recognizing, protecting, and investing in natural and cultural resources in large landscapes of outstanding value that we live in, and hope to live in in the future. The Maryland Heritage Area Program, which I helped establish and now 21 years old, may be the most rigorous and financially generous of all of the programs, requiring not

---

© 2017 George Wright Society. All rights reserved.
(No copyright is claimed for previously published material reprinted herein.)
ISSN 0732-4715. Please direct all permissions requests to info@georgewright.org.
only the completion of a detailed management plan for recognition, protection, investment in, and sustainability of natural and cultural resources, but the formal adoption of that plan by all of the governing bodies encompassed by the designated area as part of their own master development plans (Figure 1).

In both my professional and volunteer life, I came to recognize that to effectively manage growth and change in human communities and steward cultural and natural heritage requires both an inside game and an outside game. I became a founding board member of my state’s 1000 Friends group, which advocates at all levels for a more environmentally and economically sustainable future that creates opportunities for all citizens through better development patterns. And I increasingly believe it is our personal lifestyle choices—the most basic demonstration of our mastery over ourselves, which Carson observed—which is the most important. Joel Kotkin, David Rusk, Alvin Toffler, Richard Florida, and others now live happily on my bookshelves along with Rachel Carson.

Experiencing the Nature–Culture Journey and participating in the many sessions dedicated to it at the WCC helped me learn even more. If we are lucky, this happens to us—especially if it informs and influences an area of our lives about which we are passionate and in which we are fortunate to work—and we can continue to see better every day. The Journey was launched as a response to the growing recognition that the construction of a nature/culture divide in the way we—especially those of us on the front lines—steward the earth’s cherished resources is a symptom of larger processes that have put us on an unsustainable path. Workshops on “People-Centered Approaches to Conservation of Natural and Cultural Heritage” and “Integrating Indigenous Values and Perspectives into Conservation” and “Constructing Resilience: The Nature and Culture of Food Cultivation in the Landscape and Seascape” are just a small sample of the smorgasbord of Journey offerings that brought together professionals from a wide range of cultural and natural disciplines.

One prominent program that reflects the nature/culture divide is World Heritage. The 1972 World Heritage Convention recognized the value of both cultural and natural heritage

Figure 1. The Baltimore National Heritage Area takes on the nature/culture divide head-on with its Kids in Kayaks program in Baltimore Harbor. The inseparability of natural and cultural heritage resources is central to these people-centered programs, which touch thousands of largely minority children each year. (James Chang/National Park Service, Chesapeake Bay Office)
and established a process to inscribe those properties of Outstanding Universal Value on a list of World Heritage Sites. That list (initiated in 1978 with 12 listings, including Mesa Verde and Yellowstone national parks) in 2017 was still characterized by definitions, constructs, and processes that place the 1,073 World Heritage sites overwhelmingly in two buckets, “Cultural” (832 sites) or “Natural” (206 sites). It goes without saying that if Mesa Verde (Cultural) and Yellowstone (Natural) were being nominated and listed today, there would be considerable consternation in selecting one or the other bucket.

Since 1979, just 35, or 3.26%, of the World Heritage sites have been recognized as mixed sites, properties that are significant for both natural and cultural outstanding universal value. Papahānaumokuākea in Hawai‘i was added to the World Heritage List in 2010 and is the only US mixed site. WCC conferees were fortunate to be in Hawai‘i to bask in the afterglow of President Obama’s quadrupling, a week earlier, of the area of the Papahānaumokuākea Marine National Monument under the Antiquities Act. Papahānaumokuākea is the largest marine protected area in the world and a spiritual and cultural landscape, and its expansion was one magnificent way to celebrate the first-ever US convening of the WCC. For the “true believers” in the Nature–Culture Journey, the stars were aligned as never before to see and understand the world anew and dissolve the nature/culture divide.

Perhaps the most significant outcome of the Nature–Culture Journey is the Mālama Honua—To Care for Our Island Earth. This statement of commitments was developed by Journey participants in Honolulu, and signed by many at the closing event of the Journey and in a follow up event at the 2017 George Wright Society conference in Norfolk, Virginia. It is an inspired start. It pledges those who have signed on, among other things, to recognize that cultural and natural diversity and heritage are seriously threatened around the world by challenges including climate change and that integrated nature–culture approaches improve conservation outcomes, foster cultural diversity, and support human well-being.

I eagerly anticipate the upcoming Culture–Nature Journey, at the ICOMOS General Assembly in New Delhi in December, where many discussions initiated in Hawai‘i will conti-
ue. I look forward to conversations with colleagues who, since the Nature–Culture Journey in Hawai‘i, have also been thinking about what specific areas of improvement can be made in our ways of thinking. During this Journey, I hope we will make substantial progress on the maturation of essential perspectives and components of conservation that consider both natural and cultural values. I will join our global community of front-liners to explore ways to bridge the nature/culture divide in our work, so key to the sustainability of life on the planet.

The Mālama Honua contains great, spirit-lifting prose. If it feels so right intellectually and emotionally, so obvious to you, that you are not alone. That is, in part, because in decades of natural and cultural heritage conservation work at the local, state and regional level we have begun to crack the code by discovering and implementing many good practices that break down the nature/culture divide that are eminently scalable and adaptable worldwide. It is some of this past work as well as some new revelations shared in Honolulu that I and others will explore in Delhi.

In conclusion, all of us have great additional examples from our work and experience around the world that can be brought to the dialogue at Culture–Nature Journey and in the months and years ahead. But there are a few types of activity that hold special interest for me as we move forward. Most are tethered to the need to demonstrate mastery over ourselves as individuals as well as the organizations we represent:

- **Move across the culture/nature divide and put people at the center.** In inventorying, identifying, and implementing best practices, we should look broadly at the many successes in the cultural and natural heritage conservation realm. I have met too many cultural heritage professionals, especially and not surprisingly those involved with regulatory programs, whose work placed site or object preservation at the center as an end goal rather than the people and communities whose lives should be demonstrably enriched by that work. And I have met too many natural heritage professionals, especially and not surprisingly those whose work involved land acquisition, who would limit energies to the more “natural” or “unspoiled” site or resource, undervaluing natural resources that may have greater intrinsic community connections (e.g., past industrial or resource management activity; closer proximity to population centers; etc.). At a time when humans are looking for “One Square Inch of Silence,” and confronting a ton of plastic garbage for every person on earth, continuous striving for nature/culture solutions is the very least we can do for ourselves. Mālama Honua is a starting point. We likely will need new vocabulary, new prescriptive principles, and new performance measures, but these are exciting challenges.

- **Embrace the old and the new.** Mālama Honua recognizes that we need to celebrate the inherent value of indigenous and local knowledge. Science is increasingly verifying for place after place the wisdom of the elders and how we would be wise to pay attention. In multiple sessions at the Nature–Culture Journey and GWS2017 conference, this became abundantly clear. Nevertheless, we must continue to stretch the limits of the new. For example, the advantages of using modern technologies to crowd-source nature/culture conservation solutions has been highlighted by US/ICOMOS in *With a World*...
of Heritage So Rich: Lessons from Across the Globe for US Historic Preservation in its Second 50 Years. And we need more of our colleges and universities to provide graduate degrees in heritage conservation that incorporate natural and cultural subjects and studies, resulting in trained heritage professionals for whom the disciplines are merged.

- **Walk the walk.** Remember the inspired enthusiasm that got you into this line of work in the first place, but clear any remaining scales from your eyes. Know that as a front-liner you are doing the essential work of stewarding the planet every day and take responsibility in your personal life to reflect  Mālama Honua. Regularly evaluate how you are mastering yourself.

We live on a small, amazing, fragile, resilient planet. US/ICOMOS is committed to continuing the Culture–Nature Journey, in partnership with ICOMOS, other national committees of ICOMOS, IUCN, and other organizations to advance this important work. The challenges are great but the potential rewards of the Journey are much greater.

**William Pencek,** US/ICOMOS, 1307 New Hampshire Avenue NW, Washington, DC 20036-1531; bpencek@usicomos.org
Enmeshed in Naturecultures: A Personal–Global Journey

Steve Brown

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-
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 naturecultures**

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 Australia 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 Meskell and Denis Byrne, my thinking draws from my doctoral research. 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” 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 realism and architect-philosopher Manual Delander’s application of Deleuzian assemblage theory. I am also influenced by historian Nicholas Thomas, who adopts an “entanglement framework” to explore how objects become entangled in colonialism, and archaeologist Ian Hodder, who applies a “bridging concept” of entanglement to the analysis of archaeological data. 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. 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 fold-ed 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., China\(^ {20}\)) 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. Aytkaan 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, 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. 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 herdsmen 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 herdsmen 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 Aytkhaan 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.


**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. 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. 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” was a two-hour workshop convened and moderated by Jessica Brown, Nora Mitchell, Renu Saini, and me. 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. 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) 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.
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.”

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. 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. 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. 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 Gunditjmara 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
There are numerous people who have shaped and influence my perspectives on the entanglement of naturecultures, including the many I have met and worked with in ICOMOS and IUCN. Beyond those specifically mentioned in the paper, I thank Aytkhaan Atai (Director of the Mongol Altai Range Special Protected Areas Administration) and Kh. Erdembileg (Mongolian National Commission for UNESCO). I also thank Nora Mitchell, Jessica Brown, and Brenda Barrett for the invitation to submit a paper to this edited journal edition and for their comments that have contributed to improving the clarity of the paper.

Endnotes
2. IFLA is the acronym of the International Federation of Landscape Architects.


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.


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.


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).


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.

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


18. See Leitão in this issue for further discussion of this project.


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.


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.
30. This was a joint session supported by the ICOMOS–IFLA International Scientific Committee on Cultural Landscapes (ISCCCL) and the IUCN WCPA Specialist Group on Protected Landscapes.
34. Ibid.
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/.

Steve Brown, School of Philosophical and Historical Inquiry (SOPHI), Brennan MacCallum Building (A18), The University of Sydney, NSW 2006 Australia; steve.brown@sydney.edu.au
An Urgent Journey: Realizing the Potential of Integrated Nature–Culture Approaches to Create a Sustainable World

Andrew Potts

All culture remains tethered to the biosystem, and the options within built environments, though they free us by shifting our dependencies around, provide no final release from nature... Humans live in a technosphere but remain residents in a biosphere.¹

Koi i nā pō‘ai pili ao ola a pili mo‘omeheu e hana pū ma nā pilikia nui o ka honua a kakou e ‘alo nei ma o ka hooholomua ‘ana i mau hanana pili ao ola a pili mo‘omeheu I mea e kō ai nā UN Sustainable Development Goals, ka Paris Agreement, ka Sendai Framework, a me ka New Urban Agenda o Habitat III.²

Embedded in the new United Nations Sustainable Development Goals is an urgent message for the conservation community: addressing the planet’s looming crises requires better integrated nature–culture approaches and on a global scale. Collaboration among professionals working across the spectrum of natural, cultural, and social values carried on the planet’s land- and seascapes has, of course, long been accepted as an element of good conservation practice. After all, these values, together with their affiliated biocultural practices, are interlinked. Yet few would deny that a divide has persisted between so-called “nature” and “culture” practitioners and their policies³—and this divide has come at a cost to conservation outcomes. The adoption of the UN (United Nations) Sustainable Development Goals (SDGs; Figure 1) is a powerful indicator that this cost is one that the world is increasingly unable to bear.

The SDGs (as well as related global charters such as the UN New Urban Agenda) recognize that our planet is at the crossroads and set out urgent sustainability objectives to guide humanity’s path. Importantly, they also recognize that integrated nature–culture approaches can advance these objectives by improving conservation outcomes, fostering biological and
cultural diversity, and supporting the well-being of contemporary societies in both urban and rural areas. Such recognition, at the highest policy levels, creates both a profound opportunity and a formidable responsibility for all those working in the nature conservation, heritage safeguarding, and culture fields. Integrated approaches are needed at all stages—identification, documentation, conservation, protection, management, and presentation. But how can practitioners from these diverse backgrounds, along with the stakeholders they serve, come together to achieve better nature–culture integration in the stewardship of the places we value?

This question was at the center of the Nature–Culture Journey, an unprecedented gathering of hundreds of experts and practitioners that occurred as part of the 2016 World Conservation Congress held by the International Union for the Conservation of Nature (IUCN). The Journey, a linked series of over 50 sessions, was designed to help improve the state of conservation practice through better recognition of the interlinkages of nature and culture and to strengthen interdisciplinary professional networks. Over the course of a week, Journey participants discussed strategies, such as using protected areas as laboratories of innovation; the need to scale-up and -out landscape approaches; how to valorize traditional knowledge and indigenous science in decision-making; and how to overcome professional silos.

The Journey went beyond tactics to focus on the potential of integrated nature–culture approaches to make substantive contributions to solving a host of problems. When are the natural values of a protected area key to the resilience of a far-away city? What types of environmental evidence are locked in a site’s tree rings, skeletons, glaciers, and lake sediments that could help scientists extend their analyses backward in time to enhance our understanding of climate? How can traditional knowledge, for example the heritage of water, be harnessed as a source of contemporary resilience in the face of sea level rise? How are culture and spirituality vectors for promoting sustainable living in harmony with nature? What is the contribution of biocultural diversity to food sovereignty?

The Journey’s outcome document, entitled Mālama Honua—To Care for Our Island Earth, provides a road map for how the promise of nature–culture approaches can be realized for the sustainability of our planet in general and the achievement of the SDGs in particular. With the trust of the world reposed in such global frameworks as the SDGs and in the

Figure 1. The UN Sustainable Development Goals (SDGs) set out a series of objectives to guide the world to a sustainable future. An integrated nature–culture approach can advance these goals by improving conservation outcomes, fostering biological and cultural diversity, and supporting the well-being of contemporary society.
collective professional practice of nature and culture constituencies, some of the Journey’s work is shared here in hopes that it will hasten the attainment of that prize.

**Background: Nature–culture approaches, the SDGs, and a planet at the crossroads**

Rapid urbanization, wealth inequality, globalization, and the attendant loss of human identity present grave threats to the well-being of human communities and all life on earth. Excessive and insensitive development reflects the abandonment of sustainable patterns of land use, consumption, and production, developed over centuries if not millennia of slow co-evolution of human communities and their environment. At the same time, the ecosystems that underpin our well-being are collapsing. Species are becoming extinct at unprecedented rates and our climate is in crisis. Together, these trends are increasing the risks of disasters, conflict, and displacement. “We live in a time of tremendous change, the nature and extent of which is the subject of intense debate. At the heart of this debate is the clash of immediate human needs with their long-term impacts on the planet’s capacity to support life.”

Against this backdrop and after years of dialogue, in late 2015 the UN General Assembly adopted the 2030 Agenda for Sustainable Development. With its 17 SDGs and attendant 169 targets, these Global Goals (as the SDGs are sometimes known) are arguably the most ambitious and holistic development framework ever conceived. While the SDGs’ adoption by the countries of the world was itself historic, not to be overlooked is the unprecedented, explicit recognition given in the SDGs to the fundamental role that nature, culture, and heritage play in human development. From goals on climate change (Goal 13) and oceans (Goal 14), to those focusing on inclusive education (Goal 4) and productive employment (Goal 8), nature and culture suffuse the Global Goals.

More surprising, perhaps, is the recognition given to the interlinkages between natural and cultural values. “We acknowledge the natural and cultural diversity of the world” reads the preamble, and this emphasis is borne out across the document. An example is Goal 15, which addresses terrestrial ecosystems, land use, and biodiversity loss. In targeting the conservation and sustainable use of ecosystems and their services, as well as the integration of ecosystem and biodiversity values into government processes, Goal 15 invites us to focus on the interrelation of people and nature. Equally so does Goal 12, which addresses sustainable consumption and production, as in Target 12.8 that focuses on “lifestyles in harmony with nature.” Arguably, though, nowhere is the nature–culture interlinkage made more express than in SDG Target 11.4.

One of the seven targets making up the groundbreaking new “Urban Goal” (Goal 11), Target 11.4 calls for “making cities and human settlements inclusive, safe, resilient and sustainable by strengthening efforts to protect and safeguard the world’s cultural and natural heritage.” This phrasing recalls the 1972 UNESCO (United Nations Educational, Scientific, and Cultural Organization) World Heritage Convention, whose full title is the Convention Concerning the Protection of the World Cultural and Natural Heritage and whose policies have long recognized that sites often include and integrate elements of both natural and cultural significance. Indeed, the World Heritage Committee has itself sought to stimulate the development of new methods and strategies to better integrate nature and culture within the
implementation of the convention, although challenges remain. One promising effort in this regard has been the “Connecting Practice” initiative, a joint project of IUCN and the International Council on Monuments and Sites (ICOMOS; see articles in this issue by Leitão and Brown). Target 11.4 extends these considerations far beyond the rarified precincts of World Heritage to all cities and human settlements.

The SDGs coordinate with several other global charters adopted as part of the UN’s Agenda 2030 process, including the Paris Agreement adopted by the parties to the UN Framework Convention on Climate Change, the Sendai Framework for Disaster Risk Reduction, and the Habitat III New Urban Agenda. These charters not only reflect an emerging development paradigm that views sustainability in more humanistic and ecological terms but also speak, to varying degrees, directly to the role of nature, culture, and heritage in this shift. This vision embraces the reality that we live in a world of complex, interdependent systems and acknowledges that changes to these systems can either enhance or degrade resilience. They point to the need for profound transformations in our patterns of living, production, and consumption, while recognizing that cultural heritage can guide choices that promote development in ways that support and even enhance our planet’s natural systems.

The IUCN World Conservation Congress and planning the Nature–Culture Journey

The adoption of these global charters helped focus the world’s attention on resiliency and sustainability in the face of urgent challenges. This emphasis in turn helped to inspire the theme for the 2016 quadrennial IUCN World Conservation Congress: Planet at the Crossroads. In explaining its choice of themes, IUCN stated: “[w]ith a timeframe of 15 years, the world has committed to deliver the Sustainable Development Goals—an ambitious agenda for improving human living conditions for all. There is a real sense of urgency in this call to action, as many believe there is a closing window of opportunity to effect meaningful change in Humanity’s trajectory.”

The SDGs’ promise, IUCN said, could only be achieved through an enhanced understanding of the planet’s complex life-support systems and the predominant global trends currently acting upon them—urbanization, economic growth, burgeoning consumption, disappearing biodiversity, wealth inequality, climate change, and population growth among them.

This same sense of urgency helped create an impetus for using the 2016 Congress to address the need for more integrated nature–culture approaches. The congress’s location in the heart of the Pacific Ocean and the generous Aloha spirit of the people of Hawai’i provided an optimal setting. Native Hawaiian traditions like Aloha ‘Āina (mutual respect for one another and a commitment of service to the natural world) and Kuleana (care for, responsibility for, and stewardship of the lands and seas) helped shift the focus from a perceived division between nature and culture to one that highlighted the nexus between biological and cultural diversity, and how their conservation and sustainability require an understanding of “modern” knowledge that includes traditional wisdom.

And thus, the Nature–Culture Journey was born. From the beginning, the Journey organizers had two key objectives. The first was that the planning and execution of the Journey would itself be a model of connecting practices. Biologist and architects, anthropologists and
oceanographers, indigenous and “western” scientists were encouraged to form new partnerships and plan sessions in cross-functional ways. Each session also brought relevant IUCN commissions, themes, and expert groups together with related ICOMOS scientific and national committees, some collaborating for the first time.

The Journey planners also sought to highlight and emphasize the broad range of contexts, settings, and themes in which the better integration of nature and culture held particular promise. Ultimately, a joint IUCN–ICOMOS curatorial committee selected a variety of emphases, including:

- Rights-based approaches, equity, and equitable and effective governance.
- Cultural landscapes and biocultural landscapes.
- Climate change adaptation and resilience, including learning from ecology, culture, history, and ancestral voices.
- Indigenous science, and local and traditional cultural and ecological knowledge (inter-generational transfer of traditional knowledge; using, linking, and reconciling traditional knowledge with western scientific approaches).
- The role of local natural resource management systems and local dynamic cultural systems/heritage in the conservation of nature.
- Nature–culture linkages in the urban and peri-urban contexts.
- Ecosystem goods and services; inclusion of dynamic cultural processes—valuing broader socio/economic/health benefits for local and traditional communities.
- World Heritage and protected area processes—recognition of interlinkages of natural and cultural values; partnerships and management.
- Integrating social and cultural dimensions into large-scale ocean conservation.

Mālama Honua: The Nature–Culture Journey Outcome
Journey participants issued “Mālama Honua,” a statement of personal commitments and observations rooted in their Journey experience (Figure 2).\(^1\) Mālama Honua includes a sobering recognition that cultural and natural diversity and heritage are seriously threatened around the world by a number of challenges, including climate change. It goes further in arriving at the conclusion that the very culture/nature divide the Journey had assembled to address was itself a symptom of larger processes that have put the earth on an unsustainable path. At the same time, participants acknowledged the wealth of inspiring examples of harmonious approaches to nature and culture shared at the Congress that demonstrate place-based approaches, governance, and equity; show respect for the rights of indigenous peoples and local communities; and strengthen traditional institutions.

A recurring theme across the Journey was the potential for the adoption of landscape-, biocultural landscape-, and ecosystem-based approaches to drive better integration of natural and cultural values and practitioners. Both cultural and biological diversity are already accepted as central components of these approaches. Journey participants reviewed case studies where landscape approaches had this effect and others where either cultural or natural values and/or professionals had not been meaningfully engaged despite a “landscape” label.
Even with their promise, landscape approaches are not in use in a variety of places, from protected areas to historic urban centers. *Mālama Honua* calls for new working methods and practices that bring together nature and culture to achieve conservation outcomes on a landscape scale, while promoting the leadership, participation, resilience, and well-being of associated communities.

Journey participants also examined the potential of integrated nature–culture approaches, including landscape approaches, not just by category of protected area or type of cultural resource but more thematically across a variety of global trends and challenges. A few examples highlight the exciting potential.

**Ending hunger, achieving food security, and promoting sustainable agriculture.** The need to provide food for people has resulted in the intensification and industrialization of agriculture, including aquaculture, while traditionally farmed areas, practices, biocultural diversity, and natural ecosystems have been lost, and water resources have been depleted and degraded. Participants in the Journey felt strongly that food sovereignty and cultural survival depended on the emergence of unified landscape models for managing food production areas, including integrated urban and territorial planning. Linkages between agrobiodiversity, wild biodiversity, and cultural diversity were also emphasized. They also discussed people-centered conservation strategies that connected food production and consumption patterns. This will require bringing together currently fragmented organizations and initiatives.
and strengthening governance systems, including integrating nature and culture regulatory systems.

**Climate change.** The Paris Agreement confirms that the world community now accepts the reality of climate change, the current and projected impacts, and the difficult fact that greenhouse gas emissions from all sources must be reduced. It also acknowledges notions of climate justice and recognizes the value of ecosystem services and the importance of ensuring the integrity of all ecosystems (including oceans) and the protection of biodiversity, carbon sinks, and reservoirs. Nature and culture have much to offer and are generally closely aligned. Both present models of conservation and both are components of a comprehensive approach to climate change mitigation and adaptation. Ecosystem-based adaptation, often drawing on traditional place-based knowledge, helps reduce people’s vulnerability to climate change impacts.

Journey participants shared a concern for the ethical, economic, and cultural implications of natural capital approaches; for just and effective governance of conservation; and for support of diverse knowledge systems, which represent critical tools for climate response. They discussed the role iconic spiritual, cultural, and nature values can play as a source of social cohesion and as a guide to climate adaptation. Journey sessions emphasized that heritage sites possess paleoclimatology data that extend the archive of weather and climate information back by hundreds of years. Participants spoke to the parallel insights that nature and culture bring to addressing the unavoidable impacts of climate change, from refugia and wildlife corridors to climate mobility, migration, and human displacement. The need for better models of valuing both ecosystem services and cultural heritage was discussed, as was the challenge of measuring impacts on them in terms of non-economic loss and damage.

**Urbanization and resilient cities.** It is noteworthy that arguably the most explicit interlinkage of natural and cultural values found in the SDGs occurs in Goal 11, which focuses on making cities and human settlements inclusive, safe, resilient, and sustainable. This emphasis is carried forward in the UN’s New Urban Agenda, which sets new global standards for how we plan, manage, and live in cities and provides guidance for achieving the SDGs. Section 38 of the New Urban Agenda says:

> We commit ourselves to the sustainable leveraging of natural and cultural heritage, both tangible and intangible, in cities and human settlements, as appropriate, through integrated urban and territorial policies and adequate investments at the national, subnational and local levels....

The agenda also lays out commitments for addressing the ecological and social functions of land, adopting ecosystem-based solutions, addressing sustainable consumption and production patterns as well as healthy lifestyles in harmony with nature, building urban resilience, reducing disaster risks, and mitigating and adapting to climate change in cities and human settlements.

Participants felt that the potential for nature-based solutions may be less well developed in the urban context while cultural landscape approaches can be less robust in monument-intensive urban cores. The Journey examined how to leverage nature–cultural coalitions in...
such circumstances. Participants felt that a town’s natural attributes and processes (i.e., its setting) is the genius loci from which a city emerges. If this relationship were better understood, it could unlock benefits for resilience planning. “If we recognized the entanglement of nature and culture and their inseparability,” participants said, “we would manage cities differently.” “Historic urban landscape” (HUL) and protected area approaches to cities were compared. There was agreement that we needed to value the people that can work “across the divide” and that issues such as climate change and disaster risk reduction can be a catalyzing force to accelerate and structure nature–culture collaboration in the urban context.

**Conclusion**

A growing body of evidence establishes that integrated nature–culture approaches can advance sustainability by improving conservation outcomes, fostering bio- and cultural diversity, and supporting the well-being of contemporary societies. The promise of these approaches is such that policy-makers have now incorporated them into the SDGs and other global charters. The Nature–Culture Journey gave cross-functional teams of practitioners, experts, and stakeholders an intensive opportunity to examine not only paths towards achieving such integrated practice but also insights into how to calibrate that work to the ambitions of the Global Goals.

While Journey participants were generally aware of the SDGs and the expectations they hold for conservation professionals, Mālama Honua calls for a renewed appreciation of the direct connection between conservation work and addressing the urgent challenges we face. It calls on the nature and culture sectors to work together to address these challenges specifically by advancing integrated nature–culture solutions correlated to achieving the UN Sustainable Development Goals, the ambitions of the Paris Agreement, and the objectives of the Sendai Framework and the New Urban Agenda.

And finally, Mālama Honua signatories each committed themselves to advancing the transformation of conservation in their own work by reaching across professional disciplines and continuing these conversations with colleagues and communities, and engaging future generations. This is perhaps the least that any of us could do, but it also may prove to be the most important.

**Endnotes**


2. Mālama Honua—To Care for Our Island Earth: A Statement of Commitments from the Nature–Culture Journey Participants at the IUCN World Conservation Congress, Hawai‘i 2016. Online at https://www.iucn.org/files/m%C4%81lama-honua-%E2%80%93-statement-commitments-nature-culture-journey. (“Call on the nature and culture sectors to work together to address the urgent global challenges we face, by advancing integrated nature–culture solutions to the achievement of the UN Sustainable Development Goals, the Paris Agreement, the Sendai Framework, and Habitat III’s New Urban Agenda.”)

4. The Nature–Culture Journey was organized by IUCN, ICOMOS, and the United States National Committee of ICOMOS (US/ICOMOS). It was supported by the US National Park Service, the state of Hawai‘i including its Department of Land and Natural Resources, and the Norwegian Ministry of Climate and Environment. The assistance of other supporting organizations, including the International Centre for the Study of the Preservation and Restoration of Cultural Property (ICCROM), the UNESCO World Heritage Centre, as well as dozens of ICOMOS national and scientific committees and IUCN commissions, themes, and expert groups, is gratefully acknowledged.


7. Ibid.

8. Ibid. (emphasis added).


10. The Nature–Culture Journey benefitted from the richness of over two dozen other Congress journeys, including ones focusing on the SDGs more generally and on World Heritage. Of special note is the Spirituality and Conservation Journey. This journey was grounded in a recognition that the world’s rich diversity of cultures and faith traditions, including the wisdom embodied in indigenous worldviews and traditions, are a major source of ethical values and provide insights into ways of valuing nature.

11. Mālama Honua.


Andrew Potts, Nixon Peabody LLP, 799 9th Street NW, Suite 500, Washington, DC 20001-4501; apotts@nixonpeabody.com
Mālama Honua—To Care for Our Island Earth

A Statement of Commitments from the Nature–Culture Journey Participants at the IUCN World Conservation Congress, Hawai‘i 2016.

Mindful of urgent challenges that have placed our Planet at the Crossroads, we, the participants in the Nature–Culture Journey at IUCN’s World Conservation Congress assembled in Honolulu, Hawai‘i, in September 2016:

**Acknowledge** the *kama‘āina*—people of the land—where we have gathered;

**Acknowledge** the generous spirit of *aloha* of the people of Hawai‘i in providing a timely space to broaden our horizons and enhance our understanding of the integral relationship of nature and culture;

**Acknowledge** the relevance of the Hawaiian cultural concept of *kuleana*—care, responsibility and stewardship of the lands and seas;

**Commend** the Nature–Culture Journey for creating an opportunity for people from many different backgrounds to exchange knowledge and practices that further advance the interconnectedness of nature and culture in the conservation and management of places important to people around the world;

**Reflect upon** the diversity of perspectives presented during the Nature–Culture Journey that illustrate the ways in which nature and culture are entangled in landscapes/seascapes providing a framework in many contexts including sustainable agriculture, food sovereignty and the well-being of urban environments;

**Recognize** the spiritual and sacred dimensions of nature and culture, and commend the dialogue and outcomes of the Spirituality and Conservation Journey, that contributed to our reflections;

**Value** the inspiring examples of harmonious approaches to nature and culture shared at the Congress that demonstrate place-based approaches, governance and equity, respect for the rights of indigenous peoples and local communities, and strengthen traditional institutions;

**Recognize** our deep concern that cultural and natural diversity and heritage are seriously threatened around the world by a number of challenges including climate change, and that the construction of the culture/nature divide is a symptom of larger processes that have put us on an unsustainable path;

**Recognize** that our planet is at the crossroads and that there is compelling evidence that integrated nature–culture approaches improve conservation outcomes, foster cultural
diversity, support the well-being of contemporary societies in urban and rural areas, and advance sustainability objectives;

**Recall** the potential afforded by existing international treaties such as the UNESCO World Heritage Convention, which explicitly brings together nature and culture, as well as culture and biodiversity related conventions, declarations and other international documents that set global standards;

**Celebrate** the increasing recognition of the inherent value of indigenous knowledge, localized place-based learning and on-ground experience;

**Recognize** the profound contribution that natural and cultural heritage make toward the achievement of the UN Sustainable Development Goals, the Paris Agreement, the Sendai Framework, and Habitat III’s New Urban Agenda, and the fundamental need to better link nature and culture to achieve that potential;

**We therefore—**

**Call for** new working methods and practices that bring together nature and culture to achieve conservation outcomes on a landscape scale, while promoting the leadership, participation, resilience, and well-being of associated communities;

**Call on** the nature and culture sectors to work together to address the urgent global challenges we face, by advancing integrated nature–culture solutions to the achievement of the UN Sustainable Development Goals, the Paris Agreement, the Sendai Framework, and Habitat III’s New Urban Agenda;

**Commit** ourselves to advancing this transformation of conservation in our own work by reaching across professional disciplines and continuing these conversations with our colleagues and communities, and engaging future generations;

**Call upon** IUCN to develop and adopt a policy on understanding and incorporating cultural values and practices in nature conservation as resolved by the 2008 IUCN World Conservation Congress;

**Call upon** ICOMOS to further develop its activities for incorporating natural values and practices in cultural heritage, and to continue this Nature–Culture Journey collaboration and conversation at its General Assembly in New Delhi, India, in 2017;

**Call upon** ICCROM to continue its leadership in capacity building and continue to develop programs which emphasize interlinkages in the management of cultural and natural heritage and the role of communities, particularly through the implementation of the World Heritage Leadership program, launched at this IUCN World Conservation Congress;

**Call upon** ICOMOS, IUCN, ICCROM and UNESCO to expand and deepen their long history of collaboration to transform approaches and methods in natural and cultural heritage conservation to effectively meet the tremendous challenges being faced today.
Call upon governments, local authorities and practitioners to implement joint approaches that advance synergies among Conventions, legal frameworks and international instruments for safeguarding cultural and biological diversity;

Call upon donors, non-government organizations, civil society, and the private sector to advance the important relationship of nature and culture;

Call upon academic institutions to develop interdisciplinary research and education programs on the integral relationship of nature and culture that support re-imagining and transforming the practice of conservation, and to share this knowledge in plain language to the widest possible audiences;

Invite people around the world who are engaged in nature–culture conservation to join us in this commitment and apply the principles within their own communities.

Nature–Culture Journey was jointly coordinated by IUCN and ICOMOS with the assistance of US/ICOMOS and in collaboration with a wide range of partners.