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Learning from World Heritage: Lessons from 'International Preservation & Stewardship of Cultural & Ecological Landscapes of Global Significance,' the 7th US/ICOMOS International Symposium

Introduction

THE UNITED STATES COMMITTEE of the International Council on Monuments and Sites (US/ICOMOS) hosted its 7th annual symposium, titled "Learning from World Heritage: Lessons from International Preservation & Stewardship of Cultural & Ecological Landscapes of Global Significance," from 25 to 27 March 2004 in Natchitoches, Louisiana. Gathering professional papers through a widespread call, sixteen presentations addressing a breadth of cultural and natural resources in many nations were selected from the eighty proposals received.

The 7th US/ICOMOS Symposium focused on lessons from the preservation and conservation of cultural landscapes, protected areas, heritage areas, biosphere reserves, and mixed resources of national and global significance. The symposium sought to explore the challenges of preserving landscapes of ecological and cultural significance, using the framework of World Heritage experience. This is a rapidly emerging field that has redefined conceptual as well as managerial approaches and principles in conservation and preservation and has begun to thrust the natural and cultural heritage professions into unprecedented cooperation. Thus, for the first time in the US/ICOMOS symposium's history, culture preservationists joined with nature conservationists in a fruitful discussion. A multi-disciplinary group of 123 professionals from twelve nations met to share experience, draw lessons, and address issues surrounding the interface of nature and culture in the landscape. Drawing upon work concerning cultural and natural landscapes in recent years, and the inscription of 35 cultural landscapes on the World Heritage List from 1993 to 2003, complex presentations and discussions explored a wide range of landscape preservation and conservation issues.

Opening session papers presented an overview and context for the symposium, including cultural and natural landscape categories and status, current World Heritage status and progress in heritage landscape protection, and approaches to protection and stewardship from Australia and

Argentina. Papers addressing the planning and development of pilgrims' paths in Ireland, history and plans for the Champaner Pavagadh Sanctuary in India, and a recommendation for Iraqi heritage identification and preservation presented a range of issues related to complex landscapes. Issues in the designation of worldwide inspirational landscapes were explored. Chinese World Heritage natural landscapes, the Chinese conception of nature, and landscape and cross-cultural misconceptions leading to unexpected results were presented. The unique character, scenery, and cultural and biological diversity of productive lands and challenges facing agricultural landscapes were highlighted, with presentations on the rice terraces of the Philippine Cordilleras, the Japanese farmer as gardener, and the multiple resources of the Agave and Tequila agricultural and production landscapes of Mexico. Preserving, revitalizing, and shaping heritage communities into the future was the topic of a USA national heritage areas paper and one addressing the rebuilding of tribal lands and community at the Blackfeet Indian Land Trust. The range of reciprocal benefits resulting from student service learning in Czech Republic heritage landscapes addressed further issues.

At the closing session the *Natchitoches Declaration on Heritage Landscapes, 27 March 2004,* was ratified by the assembly. This important declaration states: "There is a convergence of natural and cultural values in the landscape, and a growing recognition that the traditional separation of nature and culture is a hindrance to protection and is no longer sustainable. Further heritage landscape protection is required at the local, national and global levels in order to transmit these universally valuable heritage landscapes to future generations." The term "heritage landscapes" was used in this declaration to embrace the combined natural and cultural resources inherent in the landscape recognizing that either or both may be of outstanding universal value. The declaration urges national and local authorities, as well as institutions and international organizations, but especially ICOMOS and its partners, the World Conservation Union (IUCN) and the International Center for Conservation and Restoration of Cultural Property (ICCROM), to press forward a series of initiatives around the protection of heritage landscapes using a holistic approach, interdisciplinary collaboration, response to threats, community engagement, and national and international cooperation to address the multiple values inherent in heritage landscapes and the multiple voices to be included in their protection and management.[1]

World Heritage Overview

As background for readers with varying degrees of familiarity with the UNESCO (United Nations Educational, Scientific, and Cultural Organization) World Heritage structure, the Convention Concerning the Protection of World Cultural and Natural Heritage was adopted by the General Conference of UNESCO in 1972. The purpose of the convention is to recognize properties of outstanding and universal value. As of 2004 there are 176 states parties adhering to the convention and 134 nations have properties inscribed on the World Heritage List. This degree of recognition and cooperation makes the World Heritage Convention the most universal international legal instrument for global protection of cultural and natural heritage. It is an important vehicle for global understanding and peace.

UNESCO consults with three World Heritage advisory bodies: for natural properties, IUCN, based in Gland, Switzerland;

for cultural properties, ICOMOS, based in Paris; and for cultural properties restoration and training, ICCROM, based in Rome. Even the structure of these advisory bodies expresses the traditional separation of nature and culture in the consideration of globally important resources.

Globally, 788 properties are listed as World Heritage sites that have been deemed to be of universal value. Addressing a series of criteria that have evolved over the past 32 years, there are 611 properties listed principally for their cultural values, 154 natural properties, and 23 mixed or combined natural and cultural property listings. In 1973, the first inscription was of the Galapagos Islands, based on natural values. The inclusion of only 23 mixed sites, embodying both natural and cultural values, in 30 years of application indicates that the confluence of natural and cultural values was not well understood, widely accepted, or specifically targeted for inscription under the original criteria. The densest concentration of inscribed properties is in the European nations, while Central American countries demonstrate a significant cluster, as do the African Gold Coast nations.[2]

A natural property nominated for inclusion in the World Heritage List will be considered to be of "outstanding universal value" if it meets one or more of the following criteria[3] and fulfills the conditions of integrity laid out by the convention. The property must represent:

(i) Major stages in the earth's history, record of life, geology, landforms, or physiography;
(ii) Ongoing ecological and biological processes in evolution, in either terrestrial and aquatic communities;
(iii) Superlative natural phenomena, exceptional natural beauty, or aesthetic importance;
(iv) *In situ* natural habitats significant for conservation of biological diversity.

A cultural property nominated for inclusion in the World Heritage List will be considered to be of "outstanding universal value" if it meets one or more the following criteria[4] and the test of authenticity. The property must:

(i) Represent a masterpiece of human creative genius;
(ii) Exhibit an important interchange of human values, over time or within a cultural area, on developments in architecture or technology, monumental arts, town planning, or landscape design;
(iii) Bear a unique or exceptional testimony to a cultural tradition or to a civilization which is living or which has disappeared;
(iv) Be an outstanding example of a type of building or architectural or technological ensemble or landscape which illustrates (a) significant stage(s) in human history;
(v) Be an outstanding example of a traditional human settlement or land use which is representative of a culture (or cultures), especially when it has become vulnerable under the impact of irreversible change;
(vi) Be directly or tangibly associated with events or living traditions, ideas or beliefs, or artistic and literary works of outstanding universal significance.

These criteria, or earlier versions of them, have been applied to the analysis of nominations put forward by state parties for inscription. In 2004, the criteria were substantially revised to address all properties, both cultural and natural. This is a

clear expression of the growing integration of cultural and natural values in recognizing outstanding global resources.[5]

World Heritage in the United States

In order to shed some light on the preservation construct for World Heritage sites, the example of the United States may be helpful. All of us in the preservation field and many owners of antique properties are familiar with the National Register of Historic Places. National Register listing is the honor roll of properties of local, regional, or national significance and contains some 73,000 listings. By contrast, the designation of a National Historic Landmark recognizes nationally significant properties that are not only historically important to our country but have a high degree of integrity, meaning that they embody the character and qualities that were present when they acquired historic importance. There are some 2,300 National Historic Landmarks, representing a mere 3.2% of the number of National Register listings. In the United States, conceptualizing heritage at the territorial level has led to the rapid growth of heritage areas and corridors as tools for both preservation and community development. The relatively new national heritage areas program has designated 24 communities or multiple community areas of the nation as embodying heritage values.

A further narrowing of this type of recognition is seen in the twenty World Heritage sites in the United States, all of which have been judged to meet various criteria for global universal value by World Heritage experts. Olympic, Yellowstone, Redwoods, Yosemite, Grand Canyon, Carlsbad Caverns, Mammoth Cave, Great Smoky Mountains, Everglades, and Hawaii Volcanoes national parks, along with two USA–Canada transboundary protected areas, Waterton–Glacier International Peace Park and the Kluane/Wrangell–St. Elias/Glacier Bay/Tatshenshini–Alsek complex, comprise the natural listings. The eight cultural sites include Mesa Verde National Park, Pueblo de Taos, Chaco Culture National Historical Park, Cahokia Mounds State Historic Site (all first peoples' sites of prehistoric and archeological value), the Statue of Liberty, Independence Hall, La Fortaleza and the fortifications at San Juan, and Thomas Jefferson's Monticello and the University of Virginia. These properties represent less than 1% of the National Historic Landmark count of approximately 2,300. Hence a pyramid of heritage preservation hierarchy is formed, with a broad base of local and regional properties of heritage value, 73,000 National Register listings; an elite group of nationally important ones, 2,300 National Landmarks; and a small representation of cultural heritage of global significance, 8 cultural properties inscribed on the World Heritage List.

There is a parallel pyramid of protected areas designated for natural values, ranging from local and state parks to national parks, national forests, and nature preserves, and thence to the dozen natural properties noted above that are inscribed on the World Heritage List. Many of our local and national parks are also express cultural values. The recognition of mixed values and the management for both was a theme throughout the symposium. The U.S. National Park Service defines cultural landscapes as a geographic area associated with a historic event, activity, or person, or exhibiting other cultural or aesthetic values. When presenting to the public in our work at Heritage Landscapes, we indicate that valued cultural landscapes are places where nature and culture have interacted to shape a place over time, the results of the interaction have imbued heritage values, and the

cultural landscape is worthy of our respect and stewardship to preserve and conserve it into the future.

It is curious that there is such a limited recognition of World Heritage designation in the United States. In contrast, consider Australia. As Jane Lennon indicates in discussing her country, "Today the 15 World Heritage areas in Australia are household names, icons of popular heritage and major tourist destinations but only after bitter contests with a variety of communities and commercial interests. World Heritage in Australia has been a very political issue." Particularly with the global economic engine of heritage tourism as a growing focus in the initiatives of many nations, World Heritage inscription is widely touted elsewhere, but remains unknown to many Americans.

World Heritage Cultural Landscapes

Since the adoption of the World Heritage Convention in 1972, a rich international discussion strongly influenced by the heritage policies of its 176 state parties, including the United States, have shaped consensus on its criteria and operational guidelines. Reciprocally, World Heritage policies and principles have returned home to every country to refine and enhance each state party's ability to address the complexity of its cultural and national heritage. A major influence in this exchange was the search in recent decades by preservation and conservation stewardship professionals for methods to protect and interpret areas whose significance is inextricably bound to both natural and cultural resources. In 1992, after a decade of extensive debate, the World Heritage Committee introduced cultural landscapes into the convention's operational guidelines with definitions and a structure that enables nominations of cultural landscapes of universal value to the World Heritage List. The criteria defined three types of cultural landscapes, which are noted here with the number of times each criteria has been applied to the thirty-six cultural landscapes listed from 1993 to 2003:

- *Designed cultural landscape*, one created under a plan at a specific time (8);
- *Evolved cultural landscape*, one which is in either an *Evolved Relict* form that is no longer inhabited (3), or in an *Evolved Continuing* form where inhabitation and the actions of humanity continue to shape the landscape (22);
- *Associative cultural landscape*, one related to spiritual beliefs, art, or literature (7).

The watershed decision to include cultural landscapes recognized the inextricable links between people and places, culture and nature, the tangible physical aspects of heritage and intangible societal traditions and practices. As Mechtild Rössler states in her symposium paper:

> In 1992 at Santa Fe, after extensive discussions, World Heritage Cultural Landscapes criteria were adopted to address the combined works of humanity and nature.... It also provided a new focus on the key areas of tomorrow's crops. At the same time innovations were introduced with the acceptance of traditional custodianship and customary land tenure in World Heritage protection. These developments both on the conceptual and operational levels have shown the stewardship role of World Heritage conservation with far-reaching impact for other conservation instruments.[6]

The first cultural landscape listing, inscribed in 1993 under the associative criteria, was Tongariro National Park, New Zealand, the Maori sacred mountains. "The [World Heritage] Committee recognized that these mountains have cultural and religious significance for the Maori people and represent the spiritual links between this community and its natural environment. It was the first time that a natural World Heritage site received international recognition for its intangible cultural values."[7] In addition, there are several World Heritage properties, listed prior to 1992, which could be inscribed under cultural landscape criteria. For example, Lennon indicates that heritage in Australia has been perceived as nature and Aboriginal culture, with misconceptions arising. She discusses the original nomination and listing of Ayers Rock under natural criteria, using the European name for this geological site, with subsequent re-nomination as *Uluru* under cultural criteria with redefined boundaries developed in consultation with the Aboriginal peoples who shaped this cultural landscape. Lennon states: "Four of Australia's World Heritage Areas (Kakadu, Uluru, Willandra Lakes and Tasmanian Wilderness) are inscribed as 'mixed sites' for their Indigenous cultural World Heritage values, in addition to their natural values. These mixed site listings require the integrated management of both the cultural and natural values."

From the perspective of local and indigenous peoples, the hands of people on the land and the continued application and sustainability of traditional practices is also a component. As stated by Rössler:

> With the inclusion of cultural landscape categories in 1992, the World Heritage Committee recognized traditional management systems, customary law and long-established customary techniques to protect the cultural and natural heritage. Through these protection systems World Heritage sites contribute to sustainable local and regional development.
>
> Cultural landscapes are particularly vulnerable to social, economic and environmental changes. The maintenance of the fabric of societies, traditional knowledge and indigenous practices are vital to their survival. In many cases, cultural landscapes and sacred natural sites are of vital importance to the protection of intangible values and heritage. World Heritage cultural landscapes and sacred properties can be models in effective landscape management, excellence in conservation practices and innovation in legislative protection. They are places where we can learn about the relation between people, nature and ecosystems and how this shapes culture, identity and enriches cultural, and in some cases, biological diversity.

Since 1992 ICOMOS and IUCN have collaborated increasingly on the identification, designation, and protection of landscapes embodying both natural and cultural resource values. Within ICOMOS, the territorial concept of cultural itineraries has been effectively expanded to address assemblies of non-contiguous territories unified by an overarching theme. The effectiveness of defragmenting protective mechanisms through consolidation of valued heritage into broader protected territories is indicated by the diversity of cultural landscapes and cultural itineraries recently inscribed on the World Heritage List. From

this milieu, multiple values and voices emerge, along with the related challenges of diverse resources, large-scale distribution, changing culture, community character, resource protection, and sustainability, among others.

IUCN, Cultural Landscapes, and Protected Areas

Cultural landscapes often embody both cultural and natural values. As Adrian Phillips has written, many World Heritage cultural landscapes coincide with protected areas recognized by IUCN. IUCN has defined protected areas as "areas 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."[8] The resources conserved in protected areas are valued for biodiversity and sustainable development, among other environmental values. There are six IUCN protected area management categories:[9]

- Ia, strict nature reserve, managed for science;
- Ib, wilderness area, managed for wilderness;
- II, national park, managed for ecosystem protection and recreation;
- III, natural monument, managed for conservation of specific natural features;
- IV, habitat/species management area, managed for conservation through management intervention;
- V, protected landscape/seascape, managed for conservation and recreation; and
- VI, managed resource protected area, managed for sustainable use of natural ecosystems.

Phillips notes that this typology is a useful construct that increasingly is being adopted by national governments. "A growing number of countries have integrated it within their domestic legislation or policy relating to conservation and protected areas. Only a few weeks ago, at the Seventh Conference of the Parties to the CBD [Kuala Lumpur, Malaysia, February 2004], this IUCN system was given intergovernmental support."[10]

The United Nations' most recent listing of protected areas, prepared for the World Parks Congress, Durban, South Africa, September 2003, records some 102,102 sites covering an area of 18.8 million km^2, designating 11.5% of the earth's lands and less than 1% of the marine environments. The lack of representation of certain types of landscape is a source of concern, with limited savannah, lakes, and temperate forests, for example. Nonetheless, Phillips notes that "this is an impressive achievement and represents a major commitment by countries to protect their natural heritage. It is also a great gift to the new century, giving peoples and governments development and conservation options, which would otherwise have been lost."[11]

Phillips has found that many World Heritage cultural landscapes are listed for both natural and cultural values, and/or coincide with protected areas of various categories, most often with national designation. He states:

> In the case of three of these, Tongariro, Uluru and Mt Perdu, natural values are so important that the area has been inscribed as a World Heritage property for these as well as for cultural values. These three areas, and another 16 of the 36 sites on the list, are recognized as national parks or designated as other kinds of protected areas under

national legislation. In other words, more than half of all World Heritage Cultural Landscapes currently inscribed on the UN List have natural values that are considered sufficiently important to merit their designation, by national or provincial authorities, as protected areas.

This assessment solidifies the case for multiple-value consideration of properties with intertwined cultural and natural resources. From another position, there are World Heritage cultural landscapes that have natural values that remain unrecognized and without protected area designations, and for which further assessment and protection are required. A common issue in properties with multiple values is the ascendancy of one set of values over another, rather than an appropriate balance of recognition and protection for all relevant values. In light of that challenge, IUCN has developed procedures for identifying natural values in cultural landscapes, which, in summary, attempt to:

- Reflect specific techniques of sustainable land use within characteristics and limits of the natural environment;
- Embody a specific spiritual relationship to nature;
- Maintain or enhance natural values in the landscape;
- Demonstrate traditional forms of land use supporting the biological diversity of wild species, domesticated animals, and cultivated crops;
- Embody outstanding natural beauty and aesthetic values; and
- Provide evidence of a unique past relationship between humanity and nature.

The conservation and management of protected areas also reflects shifting paradigms, which Phillips skillfully demonstrated as being a contrast of considerations between past and present (Table 1). The obvious challenge is for IUCN and ICOMOS to move forward in collaboration, seeking to identify and reflect both natural and cultural values of not only World Heritage properties but to apply the same constructs to national and regional protected areas and cultural landscapes globally.

International Case Studies from the Symposium

Argentina and World Heritage. Presented by Maria Susana Pataro, the case of Argentina offers a national perspective. A country with 23 provinces and a capital city in a federal district, a land area of 3,761,274 km^2, including an Antarctic region and islands, and a population of 36 million, Argentina contains a variety of heritage resources. Adopting the convention in 1978, it has eight sites, four cultural and four natural, on the World Heritage List. The forming of a national World Heritage committee and continuing engagement at national, regional, and international levels has presented organizational challenges. There is a firm basis for addressing heritage preservation. Pataro states that "in 1994 the Argentine National Constitution was amended and the new text included an Article that clearly recognized the preservation of the natural and cultural heritage as a value to be promoted." Argentina has engaged in the World Heritage dialogue, for example through participation in the debates and adoption, in 2002, of the Budapest Declaration, expressing the interrelationships among conservation, sustainability, and development.

The first cultural landscape listed in South America was the Argentine Quebrada de Humahuaca, a major trade route used for over 10,000 years, running from

Topic	*As it was: protected areas were …*	*As it is becoming: protected areas are …*
Objectives	• Set aside for conservation • Established mainly for spectacular wildlife and scenic protection • Managed mainly for visitors and tourists • Valued as wilderness • About protection	• Run also with social and economic objectives • Often set up for scientific, economic, and cultural reasons • Managed with local people more in mind • Valued for the cultural importance of so-called "wilderness" • Also about restoration and rehabilitation
Governance	Run by central government	Run by many partners
Local people	• Planned and managed against people • Managed without regard to local opinions	• Run with, for, and, in some cases, by local people • Managed to meet the needs of local people
Wider context	• Developed separately • Managed as 'islands'	• Planned as part of national, regional, and international systems • Developed as 'networks' (strictly protected areas, buffered and linked by green corridors)
Perceptions	• Viewed primarily as a national asset • Viewed only as a national concern	• Viewed also as a community asset • Viewed also as an international concern
Management techniques	• Managed reactively within short timescale • Managed in a technocratic way	• Managed adaptively in long-term perspective • Managed with political considerations
Finance	Paid for by taxpayer	Paid for from many sources
Management skills	• Managed by scientists and natural resource experts • Expert-led	• Managed by multi-skilled individuals • Drawing on local knowledge

Table 1. Shifting paradigms in protected area designation and management: a comparison of the "old" with the "new." Source: Adrian Phillips, "Turning Ideas on Their Head: The New Paradigm for Protected Areas," *The George Wright Forum* vol. 20, no. 2 (2003), p. 20.

the high Andean land to the plains. It was inscribed in 2003 as the culmination of an extensive process involving local communities. A cooperative multinational effort on the Qhapaq Nan (Inka Trail) Project includes Argentina, Bolivia, Chile, Colombia, Ecuador, and Peru. In the spirit of the Budapest Declaration and with a strong posture on community involvement, Argentina took an early role in supporting the transboundary Qhapaq Nan Project. The trail crosses through seven provinces in Argentine territory alone. This large-scale, linear project is an example of the expanded concept of World Heritage that cultural landscape thinking has fostered.

In Argentina as elsewhere, economics and tourism play a notable role in heritage preservation. Pataro states: "The dramatic social and economic situation of the country, that exploded by the end of December 2001, led to a chaotic period during which several changes occurred within different areas of the government, creating a time of discontinuity for those involved in heritage protection."[12] Following on the political shifts, the economic changes that decreased the value of the peso increased tourism in Argentina. As a result, "In December 2003, there was a 35% increase in tourism, the most visited sites being: the Patagonia Region, with the Glaciar Perito Moreno and the Peninsula Valdes, the Iguazu Falls in Misiones, and the Northwest, with the Quebrada de Humahuaca—three of our eight planetary jewels." Increased tourism, while adding economic value, applies increased pressure to natural and cultural resources, potentially degrading valued sites. These pressures also fuel the need for contemporary facilities that can be designed adjacent to rather than within the core resource areas and designed for harmony with the resources and region, but which are often placed adjacent to core areas and developed with incompatible and jarring styles or scale. Success in drawing visitors can therefore threaten the very resources that draw them.

Australia and World Heritage. As noted previously, there is broad recognition among the populace of Australia regarding World Heritage. This country of coastlines, unique species, and impressive interior lands has set aside 4,100 protected areas for nature conservation, which is 8% (60 million ha) of its land area. The Register of the National Estate currently lists some 13,000 properties for heritage conservation. The Burra Charter, other charters and advisory tools, and the work of preservation professionals in Australia have been forward-thinking and useful as models to other nations. For example, both natural and cultural heritage are addressed in the *Environment Protection and Biodiversity Conservation Act 1999.* Lennon indicates that "the matters of national environmental significance are: World Heritage properties, Ramsar wetlands of international importance, listed threatened species and communities, migratory species protected under international agreements, nuclear actions, and the Commonwealth marine environments."[13]

A transformation of the preservation process has taken place in recent decades from a top-down, government-mandated process to one that engages the populace, to include the traditional owners, local indigenous people. This involvement is moving toward a community partnership in assessing conservation value and formulating heritage management decisions. These practices, proving useful for World Heritage sites, are being transferred to protected area conservation and management as well.

From a national perspective, Lennon indicates that the natural resources of the country and the Aboriginal imprints are

widely perceived as Australian heritage. However, this national focus limits the consideration of global significance. The movement to develop a national list of properties of heritage significance could serve to establish national historical contexts. Progressing from these contexts, the international significance of resources could be considered more holistically. For example, Lennon states: "The Royal Exhibition Buildings, Melbourne, [have] been nominated this year and the nomination of the Sydney Opera House is still under development as is a nomination of places exemplifying outstanding values in relation to convict history."

In terms of tourism, Australian World Heritage is highlighted through aggressive marketing. Early World Heritage designation battles, amid predictions of economic disaster for the logging and mining industries, pitted forces opposing international interference against those for inscription. Some twenty years later, attitudes have turned about, with a clamor for more World Heritage designations. Evidence of increased tourism and economic benefit, with an average visitor expenditure of $4,000, and 4.93 million visitors in 2000 and some 4.74 million visitors in 2003, is fueling this change in attitude. It should also be noted that terrorism, war, and Asian health threats effected a decline in Australian tourism and were beyond national control.

Pilgrimage routes, India and Ireland. Places of pilgrimage are imbued with meaning and association. The issue of pilgrimage, unlike that of heritage tourism, is based on spiritual beliefs. The act of pilgrimage takes a corporeal form in the tangible world, but the process of pilgrimage is intangible and contributes to salvation beyond this life. Heritage resources in both India and Ireland were explored.

Amita Sinha explored issues and solutions for the 2004-inscribed cultural landscape of Champaner Pavagadh Cultural Sanctuary, Gujarat, India.[14] The protected area (6 km^2) is focused on the volcanic Pavagadh hill, which rises 830 m over an otherwise flat landscape. An important pilgrimage destination for Hindus is the Kali temple at the Pavagadh summit. Sacred sites link the goddess to earth. Jain temples and a Muslim tomb add religious eclecticism to the site. The multireligious import, environmental degradation, remains of Champaner (a 15th-century city), needs of local communities, and an influx of some 2 million pilgrims annually combine in a complex milieu requiring a multidimensional solution. This project of the University of Illinois brought professors, students, and local authorities together in a planning and design process focused on sustainability and pilgrimage-based heritage tourism. Diverse heritage resources permeate the area, with the archeological resources of Champaner and the sacred elements of the hill, including tombs, shrines, temples, and water tanks. Farming and grazing communities inhabit the ruins of Champaner and the plateaus of Pavagadh hill. Water is a scarce resource and rainfall scours unstable areas of the pilgrimage path. Inadequate planning legislation is also a stumbling block. Solutions strive to respect the historic and traditional character of the pilgrimage route, improve local communities, and absorb high-visitation impacts. In summary, Sinha notes: "We advocate a landscape management solution that integrates the needs of both the resident community and transient visitors, the urban fabric with the complex environmental ecosystem, and the buildings with the equally expressive intervening spaces." This should be coupled with "site-specific design solutions that promote access to the layered experience of landscape and

express the identity of the diverse sects and religions (Hindu, Jain, Muslim) that have historically embellished the area."

The identification, demarcation, management, community engagement, and sustainability of a network of medieval Christian pilgrim routes in Ireland was presented by Tomas O Caoimh.[15] The identification and development of a series of recognizable Irish pilgrims' paths that access a series of sacred sites was the overriding project objective. Community development, heritage tourism, and increased awareness of both cultural and natural resources along these routes were sought. The research on several pilgrimage routes used in medieval times to sacred sites proceeded with a focus on seven paths:

- *St. Kevin's Way,* from Hollywood to Glendalough in County Wicklow;
- *St. Declan's Way,* from Lismore to Ardmore in County Waterford;
- *Cosán na Naomh* or The Saints' Road, from Ventry to Mount Brandon in County Kerry;
- The *Slí Mhór* or Great Way, from Lemanaghan to Clonmacnois in County Offaly;
- The *Tóchar Phádraig* or St. Patrick's Causeway, from Ballintubber to Croagh Patrick in County Mayo;
- *Lough Derg,* pilgrim path to the shore of Lough Derg in County Donegal, site of St. Patrick's Purgatory; and
- *Turas Cholmcille* or Colmcille's Round, traditional pilgrim rounds in Glencolmcille, County Donegal.

Research findings indicated some evidence of use as early as the sixth and seventh centuries, prior to the establishment of Christianity in Ireland. Known sacred sites, Ordnance Survey maps, and field monuments were used to verify routes. The planning process considered authenticity of alignment along with issues of ecologically sensitive, safe passage along busy roads, access over private property, and proximity of services for pilgrim path users, with contemporary routes being adjusted accordingly. Eventually five paths were developed with marking systems and local information through intensive community involvement. Engagement of local communities has enhanced pride of place and increased ownership and an understanding of preservation needs of the pilgrims' paths, thus achieving the primary goals of the Heritage Council. In conclusion, O Caoimh states:

> Across our planet there are many landscapes which are sacred to the people who inhabit them, [and] many of them provide a way for pilgrims making a journey to a sacred site, a journey which is also sacred in itself for those making it. Pilgrimages are said to be responsible for the largest gatherings of human beings on the planet. Whether it is the *haj,* a journey to Benares, walking on the Camino to Santiago or on the medieval pilgrim routes in Ireland, pilgrimage is an activity very much part of the human story. At the Heritage Council in Ireland we believe that we have learned much from this project, which has had an impact right across our work, and we are very happy, now and for the future, to share what we can of what we have learned.

Student learning, Czech Republic. Penn State University's Department of Landscape Architecture sponsors a Czech program of on-site learning partnering with the Silva Tarouca Research Institute. Brian Orland reported on an exchange program

that had eight students participating in studying and problem solving for target landscapes within Cesky Raj (Bohemian Paradise) region in the northern Czech Republic (Figure 1).[16] This area, a tourist destination for two centuries, is of geological interest with sandstone cliffs, caves, tunnels, and rock windows. It was proposed for listing as a natural property and is a Czech Protected Area, but the traditional Bohemian villages, chateaux, castles, ruins, and designed and agricultural landscapes comprise a cultural heritage of import. Management practice cannot proceed in Czech protected areas until local land use plans are completed and approved, but the skills required to produce such plans are lacking at the local level, hence the value of a professor and graduate student team in shaping elements of such a plan. The student team used field study of issues, development of graphics, team problem solving, and intensive community workshops to address the issues of both cultural and natural resource protection and to provide an example of a targeted planning process that systematically collects and applies information to the resolution of management issues. Approaches in landscape and visual character analysis were modeled, addressing such issues as managing viewsheds, maintaining traditional village form while accommodating growth, retaining and revealing traces of the local strip field patterns, and other relevant issues. For example, at Castle Humprect in Sobotka managers sought a plan for the surrounding forest that would "defuse a conflict of interest between the foresters' production practices, protection of the historic monument, and conservation of nature and historic landscape character." Orland goes on to state: "The liaison of State agency, community and University may provide a model for assisting emerging countries in their goals for protecting heritage landscapes and at the same time meeting important educational goals."

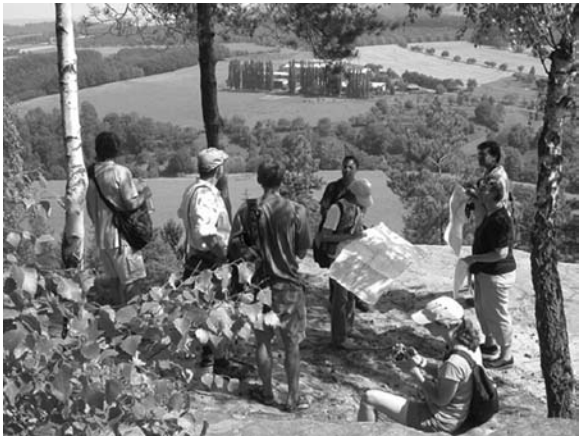

Figure 1. Czech students taking part in field session on landscape analysis. (photo courtesy of the author)

International interest in the heritage of Iraq. In his paper addressing the rich heritage of Iraq at risk from armed conflict, Salim Elwazani stressed the role of the international community in preservation advocacy and action.[17] The ancient Mesopotamian landscape, one of the cradles of civilization, holds a wealth of incomparable and valuable heritage resources that are vulnerable. Elwazani reports that "the military confrontations that have engulfed the region in the last few decades have accelerated the pace of danger not only for the defenseless ancient sites, heritage areas, and monuments, but also for the 'sheltered' archeological collections." The development of an indicative list of resources and movement toward World heritage nominations were called for. Viable protection mechanisms for both environmental and cultural resources at risk are urgently

needed. Engagement of the international community was seen as the solution. In a late-breaking presentation on the situation in Iraq, Alvin Rosenbaum focused on potential opportunities for local work programs that would address heritage preservation, environmental restoration, recovery from conflict, and a return to peace. Within the complexity of the situation, creative project development to address all these issues was taking form.

Traditional agriculture—Philippine Cordilleras Rice Terraces. The Philippine Cordilleras Rice Terraces were the first property inscribed on the World Heritage List as an "evolved continuing" cultural landscape where people live and interact daily with heritage resources. These dramatic, beautiful compositions of small rice paddies framed by low walls on steep slopes (Figure 2) were created by rice-farming peoples over time and are thought to be some 2,000 years old. This majestic agricultural landscape of rice terraces is spread over 20,000 km^2, or 7% of the Philippine land area, in the provinces of Kalinga–Apayao, Abra, Benguet, and Ifugao. The conservation, current use (or lack thereof), and integrity of these terraced areas vary widely.

Figure 2. Landscape of rice terraces in the Philippine Cordilleras. (photo courtesy of the author)

The farming and management of the rice terraces are linked to water supply for irrigation and forest conservation for watershed protection and building materials through traditional tribal practices within each hamlet. Inscribed for cultural values, ecological values and the lessons of traditional practices are also inherent in the rice terraces of the Philippine Cordilleras. Phillips enlarges on this by observing: "Although the rice terraces are not recognized under national law as a protected area within the IUCN system, in fact they manifest many of the characteristics of a Category V protected area [i.e., protected landscape]; indeed they are given as a case study in IUCN's published advice on this topic.... Strategies for its future management should draw on experience in the management of many Category V protected areas elsewhere in the world. Examples are: integration of rice growing with ecotourism; the development of new markets for rice and rice wine from the region; and capacity building among the local community based on traditional values."

With access limited by steep slopes, rice farming at high altitudes in small paddies is

a strenuous and difficult work of manual labor. Among the risk factors for conservation and sustainability of the resources and their unique character are the breakdown of tribal practices, out-migration of younger people, and importation of nontraditional tools and materials. In his presentation, Augusto Villalón itemized a comprehensive planning approach: "Program components were: (a) natural hazard management, (b) agricultural management, (c) watershed management, (d) water management and irrigation, (e) transport development, (f) tourism development, (g) socio-cultural enhancement, (h) livelihood development, (i) institutional development." It is clear that the perpetuation of traditional practices unique to this cultural landscape is required to sustain the resources. However, management challenges are significant, with changes in management structure and organization since World Heritage status hindering both continuity and availability of resources for conservation. Placed on the List of World Heritage in Danger in 1999, the Rice Terraces of the Philippine Cordilleras are truly at risk from multiple factors. In closing, Villalón stresses that "unless national authorities see the need to simultaneously preserve the integrated network of culture, nature, agriculture, and environment that are the elements to preserving the site, only little gains can be achieved and the cultural landscape will deteriorate into disrepair."

Traditional agriculture—Mexico Tequila District. The cultivation of blue mezcal, or *mezcal azul,* in fields, plantations, and other early tequila production sites comprises a sizable agricultural and industrial system in the Tequila Volcano region of Mexico (Figure 3). In western pre-Hispanic Mexico, two types of alcoholic beverage were prepared, derived from agave from fermented juices and cooked agave hearts. Cooking the *tatemado,* the center core of the plant, produced a form of sugar. Wells and circular ovens used in fermentation are dispersed over the landscape. In a visually stunning presentation by Ignacio Gómez Arriola and Francisco Javier López Morales, the complex system of agave field patterns (Figure 4), tequila plantations, transportation routes, production facilities, and social traditions were demonstrated to have developed from before Spanish contact to the present in this evolved continuing landscape.[18] The nomination of the Tequila region cultural landscape is in progress. As a context for its possible inscription, the medieval vineyards of Wachau in Austria and Hungary, the Loire Valley landscape of France, the Cuban tobacco plantations of the Valley of Viñales, the Portuguese Alto Douro wine region, and the Philippine Rice Terraces already have been inscribed on the World Heritage List. The complex system of resources that comprises the Tequila region is an example of an agricultural and indus-

Figure 3. Typical agave field in the Tequila Volcano Region of Mexico. The plants are a striking shade of blue. (photo courtesy of the author)

Figure 4. Aerial view shows agave field patterns. (photo courtesy of the author)

trial heritage that is unique and of high heritage value to Mexico and quite possibly to the world.

Traditional agriculture—the Japanese farmer as gardener. "The farmer is a good gardener for Japan."[19] In Japan the entire surface of the available land has been cultivated, tended, and shaped into a scenic, aesthetically pleasing cultural landscape (Figure 5). In the spring, rice paddies reflect the sky as bright green growth emerges. In each view a landscape of fields, paddies, canals, terraces, and mountains is seen. Productivity and rural beauty are the goals of the Japan Ministry of Agriculture, expressed in the motto "Aiming for a stable food supply and a beautiful country." However, the agricultural landscape and the traditional rural culture that supports it are threatened by various forces. Increased development overtakes farmlands, while rural revitalization projects create new patterns and bring nontraditional architecture into rural areas. Declining farm incomes and out-migration from rural to urban areas make agriculture less viable. However, the Japanese people value fresh, tasty, farm-grown foods. Some interesting techniques are being applied to these issues. Modest grassroots approaches by rural citizens as well as grander Ministry of Agriculture initiatives are being directed to rural preservation issues. For example, rice is a dietary staple, and a program providing for rural rice paddy cultivation by city families at an annual fee that is less than the cost of the purchase of the rice has had some success. In addition, as Mary Humstone notes, "Urban–rural exchange programs give urban people a chance to experience rural life while also helping to

Figure 5. Japanese thatch harvest. (photo courtesy of the author)

preserve some of Japan's most beautiful landscapes. With help from the Ministry of Agriculture and organizations such as the Japan National Trust, many rural communities have set up exchanges with urban residents, who volunteer to repair terraces, roads and canals, and help with planting and harvest."

Japanese building traditions are based on local climate and materials (Figure 6). These yield, as Humstone observes, "significant features of the cultural landscape including rice storage buildings, storehouses for household goods (*kura)*, barns and other farm outbuildings, irrigation canals and ponds built to heat water from the mountains for irrigating rice fields, rural shrines, stone markers, some inscribed with haiku, and even self-service vegetable stands." The designation of historic rural villages as preservation districts to include landscape features has made government restoration grants available. While preservation and conservation efforts in Japan have most often focused on important shrines, palaces, gardens, and scenic landscapes in the past, recently a new direction was signaled by the designation of two rice terraces as "Places of Scenic Beauty." This action has led to broader consideration of how to identify and protect notable agricultural landscapes. Humstone notes that "the government is also considering adding a new category, Cultural Landscapes, to its 'Historic Sites and Monuments' division, which currently includes Historic Sites, Places of Scenic Beauty and Natural Monuments."

Figure 6. Traditional Japanese farm. (photo courtesy of the author)

Programs promoting rural villages recognize both the tangible and intangible resources of village beauty and traditions, giving awards "for places that not only look beautiful, but also have kept or rekindled community traditions, or that have diversified and strengthened their agricultural base." Direct marketing programs promote increasing farm incomes. As always, a concern raised is the potential to degrade village culture and traditions through these programs.

China and cross-cultural miscommunication in natural area protection. The Chinese view, with its origins in Confucianism and Taoism, includes humanity and nature. As Feng Han states, "Scenic and Historic Interest Areas are the places where the natural beauty and cultural elements are at 'perfect oneness' and present the Chinese perceptions of Nature, namely, beautiful, peaceful, full of human spirituality, and embracing human beings." In China, the naming of the national park system as *scenic and historic interest areas* rather than *nature reserves* expresses these values. In opposition to this harmony of nature and humanity, Western thinking positions nature as apart from humanity and the wilderness is revered as a place separate from people. Even the term *cultural landscape* poses a quandary for the Chinese. As Han notes, "The core of the concept of cultural landscape that is aimed at broadening the view

of the landscape towards settlement and all interfaces between humans and Nature and beyond the aesthetic, the past, and 'wilderness' in the West, is not widely accepted by the Chinese because of the lack of theoretical understanding of contemporary cultural landscape."

Traditionally, wilderness is not a type of natural setting or a concept understood or valued in China. Nature is aesthetically pleasing and human influenced. Han electrified the symposium audience with her statement that "the Chinese believe artistic re-built Nature is more beautiful than the original one, based on their tradition of great aesthetic achievements." However, with global influences being brought to bear on China to a degree, a yearning for wilderness is now in evidence and a debate over the unity and separation of nature and culture is in play.

Added to this friction is the recent review of two World Heritage sites designated for natural values where foreign review teams found increased development as a threat to the natural resources and were critical of the burgeoning growth in the inscribed areas. The Chinese government response to the critique was to pursue removal of development, including traditional villages, at a high cost. In the Wulingyuan Scenic and Historic Interest Area, designated in 1992, a 1998 report by UNESCO noted that it was "overrun with tourist facilities, having a considerable impact on the aesthetic qualities of the site"; agriculture and urbanization were also cited. In response, "the Central and Provincial Governments of China decided to demolish 340,000 m^2 of recently built facilities and artificial scenic spots to respond to the Committee's critics in the five years beginning in 2001; and to remove or resettle 1,791 people from 546 families from 2001 to 2003 in order to restore the natural ecosystem." Shocked reaction followed Han's disclosure of the resistance, confusion, and questions raised by the mandate to "move [people] out of the land where they have lived for generations and why their existence is an 'ecological and visual impact on the nature'. They are also worried about how to survive in a new strange world [away from their] mountain with limited financial compensation from government." Similarly, in the Jiuzhaigou Valley Scenic and Historic Interest Area, the 1 million annual visitors prized the colors of the water and unique natural scenery. An ecological restoration program that removed tourist facilities, with reconstruction limited to adjacent lands, followed degradation and development. Again, a costly process was pursued, resulting in wrenching changes. Han explains:

> The price of the removal of all tourism facilities and the prohibition of grazing of the local minorities is the disappearance of culture. Traditional local life formed ... five thousand years ago has been totally changed. It was once a living cultural landscape with nine minority villages living in this valley (the meaning of [the] name of Jiuzhaigou Valley) [with] their own customs, grazing and farming generations by generations. Now they still live [on] this site but their existence has become a tourist gaze, [and they have become] the tourists' image of minorities and herdsmen. They stopped their traditional life of living in Nature, in return for the high economic benefits from the local government. Tourism has eliminated the need for the natural resources 'exploitation' that they formerly lived on.... While the local people are los-

> ing their homeland, we are losing our living culture; we are creating 'dead culture' (museums) while we are killing living culture.

These two examples from China are complex, but clearly they highlight cultural differences and target the potential missteps in application of natural and cultural values as judged by those outside of a culture.

Financial Support

While individual project efforts can be cited in the emerging conjunction and/or collision of natural and cultural resources and their identification, documentation, preservation, use, and management, there are pervasive limitations of funding at all levels. Traditional sources of support in both the public and private sectors respond to either natural or cultural resources activities. Rössler recommends support from donors in exploring the interaction of natural and cultural resources and in providing support for their safeguarding. Pataro noted that it would be desirable to increase awareness about the intertwined relationships between conservation and development (and, I would add, economic viability and sustainability) among international financial institutions. Donors to the UNESCO World Heritage Fund should direct funding toward cultural landscape programs. Lennon targets the gap between private and public with her comment that, in Australia, "while much practical conservation effort over the last decade has occurred at whole-farm and water catchment levels through the federally funded National Heritage Trust identifying and protecting remnant vegetation, there has been little effort at regional landscape protection and in managing delineated cultural landscapes either on private property or in public land reserves. Since 1996, the Trust has invested $1.4 billion to help local communities support the sustainable management of Australia's natural resources through Landcare, Bushcare, Coastcare, and Rivercare programs."[20] Funding remains a challenge; however, the ability to point to comparable funded programs and a level of international attention to the subject of cultural and natural resource stewardship is an advantage.

Conclusions and Declaration

The papers presented and extensive dialogue among presenters and attendees at the 7th US/ICOMOS Symposium was, as intended, a highly interesting and useful platform for learning form each other. As a plethora of issues emerged in a variety of forms, it became clear that a declaration could be crafted that would aid us all in our efforts. In closing her paper, Mechtild Rössler brought us this useful quote: "Biodiversity should be appreciated in terms of human diversity, since different cultures and people ... confront and perceive biodiversity in different ways. This is due to their distinct heritage and experiences, which are translated into knowledge systems, cultural expressions and language, and which enrich and transform the environment, landscapes and especially biodiversity."[21] Multiple values—cultural and natural, tangible and intangible, historical, ecological, and social—were stated and explored. It was widely agreed that multiple voices—traditional, local, regional, national, international, multicultural, and professional, and those of students, politicians, and citizens—need to be brought to continuing exchanges. Identification and documentation need to be followed by adequate planning in a holistic approach. Recognizing that the quality of life and experience of places is enriched greatly by the shared global heritage of cultural and natural land-

scapes, we affirmed in the *Natchitoches Declaration on Heritage Landscapes, 27 March 2004,* that the traditional separation of cultural and natural resources within our shared legacy of heritage landscapes was no longer sustainable. Within the variety of cultural frameworks, patience and insight are required in listening, understanding, and acting on the many facets of protection of heritage landscapes.

Endnotes

[1] A compact disk with the program, declaration, introductory paper by the author, speaker papers, PowerPoint presentations, and descriptions of some field sessions is available from US/ICOMOS (info@usicomos.org).

[2] An interactive world map of sites is at http://whc.unesco.org/.

[3] World Heritage natural property criteria are excerpted from documents (2003) that can be found on the World Heritage website (URL above). For the purposes of this paper, the author has summarized the criteria wording.

[4] Cultural property criteria are also drawn from the World Heritage website. For the purposes of this paper, the author has summarized the criteria wording.

[5] As noted by Mechtild Rössler, chief, Europe & North America, UNESCO World Heritage Centre, in her remarks to the symposium.

[6] Mechtild Rössler, "World Heritage—Linking Cultural and Biological Diversity," 7th US/ICOMOS Symposium, 2004. Hereinafter, all papers cited are from the symposium unless noted otherwise.

[7] Ibid.

[8] Adrian Phillips, "World Heritage Cultural Landscapes—An Overview of the Natural Values." Phillips serves as vice chair for World Heritage of the IUCN World Commission on Protected Areas (WCPA).

[9] IUCN, *Guidelines for Protected Area Management Categories* (Gland, Switzerland, and Cambridge, U.K.: IUCN and World Conservation Monitoring Centre, 1994).

[10] See the CBD website, www.biodiv.org.

[11] Phillips, "World Heritage Cultural Landscapes—An Overview of the Natural Values."

[12] Maria Susana Pataro, "Implementation of the World Heritage Convention in Argentina." Pataro is with Argentina's Ministry of Foreign Relations, International Trade, and Worship.

[13] Jane L. Lennon, "Paris Down Under—World Heritage Impacts in Australia." See also www.environment.gov.au/epbc.

[14] Gary Kesler, D. Fairchild Ruggles, Amita Sinha, and James Wescoat, Jr., "Champaner Pavagadh Cultural Sanctuary, Gujarat, India: Challenges and Responses in Cultural Heritage Planning and Design." Sinha is a professor in the Department of Landscape Architecture, University of Illinois at Urbana–Champaign, USA.

[15] Tomas O Caoimh, "The Pilgrims' Path: Promoting Sustainable Development of Walking Routes through Sacred Sites in Ireland." O Caoimh is with the Heritage Council of Ireland.

[16] Cecelia Rusnak, Brian Orland, and Jan Hendrych, "Reciprocal Benefits of Student Service-Learning in Addressing the Needs of Heritage Landscapes." Orland is head of the Department of Landscape Architecture, Penn State University. The project was a partnership with the Silva Tarouca Research Institute for Landscape and Gardening, Pruhonice, Czech Republic.

[17] Salim Elwazani, "Identification and Preservation of the Iraqi Heritage Areas: The International Hand."

[18] Ignacio Gómez Arriola and Francisco Javier López Morales, "The Agave Landscape and the Ancient Tequila

Industrial Installations: A Proposed Mexican Cultural Landscape."

[19] This old saying was used as the title of Mary Humstone's paper "'The Farmer is a Good Gardener'—Lessons from Japan." Humstone is at the University of Wyoming, USA.

[20] See www.nht.gov.au/overview.html.

[21] Juan Mayr, "Cultural Diversity and the Environment," unpublished report (2003).

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