in the hills for corn to mature (in a short growing season of about 105 frost-free days), nor too far into the lowlands to lack water for gardening or domestic use.

The Spaniards built a church and a convent at Abo in the 1620s, developed large fields of winter wheat (possibly the first in North America) and Spanish-style mission gardens, and used the local Tompiros as a labor force. It was the third ecclesiastical hacienda in the area. But drought ended everything around 1674, as at Las Humanas and Quarai, although the Pueblos' form of settlement planning had worked well for centuries before the arrival of the Spanish. Subsequently, these high-altitude (above 6,000 feet) towns fell into decay until the 1820s, when late-colonial-era Spanish settlers returned to Abo and Quarai. The Lucero brothers, Miguel and Juan, set up a hacienda system again in the ruins of the church at Quarai, staffed with workers from the Rio Grande valley. But only European-style farming returned with them. The old Tiwa style of small-scale gardening was never resumed.

The towns of Quarai, Abo, and Gran Quivira, all part of the Salinas Pueblo Missions National Monument, give a sense of the complexity and sophistication of landscape development, site planning, and garden design in early New Mexico. Because of the dryness of the climate, which preserves landscape constructs so visibly, and because they developed little or not at all after 1675, these towns can teach us much today. But carefully thought-out landscapes are more common in the Southwest than many people imagine. In the foothills of the Jemez range north of Albuquerque, for instance, the Tewa, Keres, and Jemez people created a famous series of grid gardens (rock-bordered plots much like chessboards in appearance), as well as terrace gardens. And the Tano people along Galisteo Creek south of Santa Fe developed refined reservoir systems to catch the rainwater and snowmelt coursing down their hillsides and direct it to the stony, clay-laden soil of their garden plots in this long valley.

We might say, then, that a measured look at Quarai can help us to understand the importance of careful landscape planning and design in the ancient Pueblo world. And at Quarai there is a particular bonus, the complex of Spanish colonial buildings at the east end of the town: the residence of an *encomendero*, or commissioner, with its courtyard; a rectory with planting terraces; a pond with waterworks and an orchard; and perhaps the most beautiful ancient sandstone church in the region, built by the Indians themselves. The contrast of Spanish gardening and landscape constructs next to those of the early Pueblo people – all of them seeming to stand still in time – is one of the most wonderful in the Southwest. – Baker H. Morrow

The Nature of Culture: In Search of the "Real" Landscape of Petra

It is all too often written that John Lewis Burckhardt "discovered" the ancient city of Petra in 1812. Of course, the site's very existence indicates that the area was well known long before that. The ruins of this Nabataean-Roman metropolis are nestled along a *wadi*, or seasonal watercourse, deep in the Jibal al-Sharah, the Sharah Mountains of southern Jordan. Today, they constitute the Petra Archaeological Park, which covers 26,171 square hectares (roughly one hundred square miles) and is dotted with the remains of Neolithic, Bronze Age, Nabataean, Roman, Byzantine, Mameluke, and Ottoman civilizations – and much in between and since. In recent decades, the region has hosted dozens of international archaeological research and conservation projects. Since being designated a UNESCO World Heritage Site (WHS) in 1985, Petra has become a popular tourist destination as well. In 2007 Petra was voted one of the "New Seven Wonders of the World."

This wealth of cultural heritage is nestled into an unearthly landscape where three continental plates collide, elevation drops fifteen hundred meters within five kilometers, and biotic zones tumble from arid Mediterranean and Irano-Turanian steppe to Sudanian savannah within a single kilometer. The dreamlike landscape of sandstone geological formations, rugged purple granite mountains, and steep, narrow canyons opens out to sweeping views over Wadi 'Araba and the mountains of the Negev beyond. Petra's landscape has been the object of human preoccupations and projects for more than ten millennia: the cliffs are scored and tunneled with prehistoric copper mines, riddled with tomb complexes and god-niches, pocked with cisterns, and runneled with aqueducts. Deforestation began thousands of years ago when fuel was needed for copper-smelting and bronze-making. It is impossible to walk fifty meters without touching some trace of human lives and passions and ingenuities.

UNESCO employs ten criteria for selection as a World Heritage Site. The first six criteria are for cultural significance, the remaining four for natural significance, including:

> (vii) to contain superlative natural phenomena or areas of exceptional natural beauty and aesthetic importance;
>
> (viii) to be outstanding examples representing major stages of earth's history, including the record of life, significant on-going geological processes in the development of landforms, or significant geomorphic or physiographic features.

Petra, however, was designated a WHS for its cultural significance; its cultural remains are protected under UNESCO rules, but not the landscape context critical to its magnificence. Just as the city is literally carved from the mountains and wadis, this tumble of mountains shapes the civilization: in different landscape Petra would be a different city. It is inscribed into the cliffs and gorges, fashioned of that austere desert stone so ingeniously managed as human habitat by the Nabataeans.

Unfortunately, Petra's natural landscape is under pressure from every direction: by encroaching unplanned development, inappropriate agricultural practices, and the bundled processes of overgrazing, devegetation, topsoil loss, and diminishing water resources which together constitute desertification. But UNESCO has taken action in response to these issues only occasionally, instead inclining to protect the existing landscape context from "intervention." In part, this is because the theoretical framework in which such actions are being considered is deeply inappropriate to the site.

The Petra Archaeological Park Operating Plan (PAPOP), which includes a section on Natural Resource Management, was developed by the United States Park Service in 2000 and adopted as Petra's regulatory and policy document by UNESCO in the Brasilia session of the World Heritage Committee in summer 2010. PAPOP proposes to manage Petra as "wilderness," in the sense that the word is employed by the U.S. Parks service, to be protected from "intervention." The section on natural resource management opens with the following statement:

> The natural resource management policies of Petra Archaeological Park are aimed at providing present and future generations with the opportunity to enjoy and benefit from natural environments evolving through biological and physical processes that are minimally influenced by human actions… The primary management objective for all natural systems in Petra Archaeological Park will be the protection of natural resources and values for appropriate types of public enjoyment while ensuring their availability to future generations. These values include "naturalness." As used herein, the term "natural" denotes minimal human influence.

The same language pertains throughout the document. The discussion is premised on the notion that Petra is wilderness, and thus that a *laissez-faire* approach, discouraging "intervention," is desirable. PAPOP proposes to manage Petra as virgin wilderness with intact "natural systems"; and yet this is a landscape which fails nearly every criterion to qualify

as the kind of wilderness such a management approach is intended to protect.

The United States' National Wilderness Preservation System (NWPS) defines "wilderness" and ways of assessing its integrity. "Surveying a century of wilderness literature," write the authors,

> 'wildness' is the essence of wilderness, and it is composed of two essential qualities – naturalness and freedom from human control. . . . The essential attributes that determine naturalness are the degree to which the land retains its primeval composition, the degree to which land remains free of artificial structures, and the degree of its purity or lack of pollution.

These attributes are further elaborated as "natural composition," "unaltered structure," "purity," "the capacity to provide opportunities for solitude," "remoteness," and "uncontrolled processes."

Admittedly, by many standards Petra is wild: empty, undeveloped, uncrossable by road, mostly inaccessible even on camel- or horseback. There is no settled community within the park, which has a population of less than half a person per square mile. Yet in other ways this is the antithesis of virgin wilderness; humans have exerted *some* kind of control here – forestry, agriculture, grazing, and the construction of buildings – for ten thousand years. Petra Region is home not only to the famous Nabataean, Roman, and Byzantine remains of Petra and its extensive outlying communities, but also to more than ten thousand years of settlement by pastoralists and agriculturalists. Founded over twelve thousand years ago, the Neolithic settlement at Beidha, also protected under the WHS enlistment, is one of the earliest organized communities in the world. Archaeological evidence dates the cultivation of grain at Beidha to the earliest Neolithic – as much as ten thousand years ago – and the domestication of goats to Pre-pottery Neolithic B – over eight thousand years before the present. The structures are still visible and coherent today, and Beidha is only one of a string of such early sites within Petra.

In terms of "naturalness" as it is defined by the NWPS scholars, Petra again fails to qualify. What is "primeval" in a land that has been home to humans for more than twelve millennia? Artificial structures are obviously an important element of the landscape: the fabulous city of Petra itself, the outlying caravan station of Siq al-Barid, Neolithic Beidha, Byzantine settlements, Nabataean farms and presses, a couple of Mameluke castle-forts – the inventory continues literally for pages. It is difficult to construe what "purity" might actually mean in such a context (although, outside the central tourism area, Petra is relatively free of pollution). But there is probably no single foothold in Petra Region that has not been trod again and again by humans and their livestock over the past twelve millennia.

At the same time, what will it mean *not* to intervene in this fragile and threatened landscape? The web of natural systems is presently spiraling downward, no longer able to sustain itself under the pressure of desertification. Groundwater resources are threatened throughout Jordan due to overextraction for irrigation purposes. Throughout the Petra Region springs have successively gone dry or receded drastically over the past two decades. Unplanned development is producing urban sprawl, especially around the principal community of Wadi Musa. In Ma'an District, which includes Petra, 39 percent of the population is under the age of fifteen. Fertility rates in Jordan as a whole average 3.8 children per woman, but in rural and lower-income areas, and especially the south, where the Petra Region is located, the average edges up toward 4.9 per woman. These statistics suggest that before 2030 the demand for housing in the Petra Region will double and the population will more than double.

Perhaps most profound is the devastation of vegetation cover throughout the region and, indeed, throughout Jordan. Clearing for agriculture, grazing, and fuel consumption have combined to denude much of the region. As noted, the grazing of small ruminants in Petra dates back eight thousand years: goats – and the tents of their keepers – are an inescapable feature of Petra's landscape. Since the 1970s, however, the construction of new roads has enabled livestock owners to truck water and supplemental feed into ever-remoter areas, increasing grazing pressure regionwide. Along with the increasing settlement of most bedouin, the phenomenon of truck herding facilitates keeping herds on the same range throughout the year, allowing the vegetation no chance for recovery.

An enormous additional strain has been placed on Jordan's rangelands since the Gulf War, with the addition of some 1.5 million head of livestock owned by refugee bedouin. It is now common to see large herds of camels and bedouin tents of eastern tribes camped in the Petra region throughout the summer; they only return to their native ranges with the onset of the rainy season.

The Jibal al-Sharah, like much of Jordan, has been largely stripped of its forests in little more than a century. The famous travel writer Charles M. Doughty, whose books were fodder for T. E. Lawrence, wrote in the 1880s of what is today northern Petra Region:

> This limestone moorland, of so great altitude, resembles Europe, and there are hollow park-like grounds with evergreen oak timber. . . . We began to descend over a cragged lime-rock, beset with juniper.

Of his 1902 journey from the Jordan Valley floor up Namala pass through Beidha (*sik al-Beda*) and on into Hisheh, the Czech geographer Alois Musil wrote, "The butm-trees (*Pistacia atlantica*), which begin at an elevation of about 400m, diminished by 600m further on and the dark luzzab, or `ar`ar, (*Juniperus phoenicia*) appeared." Musil also provided a striking photograph looking up the Namala siq from the south – the siq is crowded with mature trees.

Then the area was significantly deforested between 1904 and 1908 for the construction of the Hejaz Railway from Damascus to Madina. During its construction a giant Ottoman encampment moved slowly south, accompanying the extension of the line. As many as 7,500 people inhabited the construction camps, bringing with them a village-sized demand for fuelwood. The subsequent demand for firewood to fuel steam engines was pressing enough that in 1915 a thirty-six kilometer spur line was laid from the `Unaizah station north of Ma`an into the Hisheh forest, now within the Petra Region.

The blame for the region's deforestation cannot be assigned solely to the Ottomans, however. Within living memory, there was enough forest to hide in during shootouts sparked by Ottoman and tribal feuds. The forest was an important economic resource as well. It was not uncommon for a head of household to cut down a pistachio tree and load it onto two donkeys; cross Wadi 'Araba to the West Bank to sell it in exchange for dry goods such as tea, coffee, sugar, and soap; work wage labor for some cash; and then "hunt his way back" to Wadi Musa to provision his family for several months. Local timber was used for both firewood and construction until the 1960s, when concrete became the preferred building medium in the region.

The need for firewood for subsistence cooking and heating is still a reality for Petra's fully nomadic bedouin. Winters in the upper reaches of Petra Region are bitterly cold – it usually snows at least once each winter, and often more. The needs of these tent families must be addressed if devegetation is to be halted. In a study of deforestation conducted from 2003 to 2006 in an area of 10.69 hectares (26.4 acres) within the Petra Region, it was concluded that there had been a 58 percent decline in forest from 1924 to 2002. Between 2003 and 2006

Historic Petra and its surrounding landscape.

alone, the documented decline was 4.23 percent.

Without its forests, the land grows ever drier. Today the sprawling town of Wadi Musa is creeping up the steep slopes, precipitous roads snake over stony, treeless hillsides, and massive retaining walls hold the mountainsides in place. In the surrounding country the hills are cleared of shrubs yearly for winter firewood, and the denuded soil can no longer bank rainwater. Climate change has shifted weather patterns. The gentle, widespread rainfall once characteristic of gentler Mediterranean winters has been replaced by more isolated and violent storms; now the water runs straight off the bare stone, carrying the topsoil and seedbank with it. Wadi Musa was traditionally an agricultural village, but crops once rain-fed are no longer sustainable. Throughout the region dead orchards patch the slopes. Shepherds still tend their flocks on the diminishing range, but there are many wry jokes, such as "organic, stone-fed lamb." Each tree hosts a tiny microclimate, including its understory vegetation. As trees and shrubs disappear, soil is impoverished and swept away, rainwater runs off into Wadi 'Araba down the sheer rock faces, livestock graze deeper and deeper into what vegetation remains. Not to intervene in these processes is a decision to lock the ecosystem into decline.

Ironically, in light of Petra's UNESCO designation, the greatest threat to the region may be the impact of tourism – both local and international. Local weekend recreation revolves around grill picnicking, called *hash ou nash*. Typical *hash ou nash* involves one or more households loaded into several vehicles, ideally accompanied by several square meters of plastic *hasira* mats, upholstered foam pads for lounging, plastic chairs and tables, ten-gallon water jugs, towels, tubs, dish soap, marinated meats and salads, prepared *qahwah saadah* (Bedouin coffee), tea paraphernalia, soft drinks, and often toys, bicycles, balls, and goalposts for football. *Hash ou nash* generally occupies the part of the day between *dhuhur* prayer (around noon), when the men come home from mosque, and sundown. In its most extreme form it includes livestock and butchering implements, with trailer rigs and buses full of people and equipment, and even tractors dragging water tanks.

Jordanian society outside of Amman is still very rural, conservative Sunni Muslim, and recreation tends to be intensely family-focused. Outdoor picnics are inexpensive, and they offer an opportunity for the women to get out of the kitchen, especially on a hot day, and to socialize with other families and groups from outside their own neighborhoods. Perhaps most importantly, *hash ou nash* offers easy, safe entertainment for the squadrons of children. It is a common occurrence to count over one hundred vehicles along a five-kilometer stretch of road in the most popular areas. Although weekends, especially Fridays (the day of congregational prayer service at the mosques), are by far the most popular days for *hash ou nash*, groups can be found picnicking any day of the week, throughout the year. Although rain keeps people indoors, a sunny snow day will bring people out in droves. Part of the fun of *hash ou nash* is the full-scale production it involves, and part of that project is firewood gathering. The cumulative devastation is immense.

Hash ou nash is also good business: increasingly tourist camps, camping excursions, and special events claim quantities of locally harvested firewood for international tourism. These quantities are hard to calculate, because tour operators are understandably not forthcoming about the sources of their firewood. Whereas local picnickers typically tear down branches and strip trees of their bark, tour operators chainsaw trees accessible to roads. On the first sunny weekend of 2006, for example, two-thousand-year-old *Juniperus phoenicia* were cut down along the Namala Pass.

These are not "natural environments evolving through biological and physical processes minimally influenced by humans," as the management plan puts it. They are instead environments declining rapidly as a result of human influence. In 2004 the site was estimated to account for as much as 10 percent of Jordan's GDP; in 2007, inundated with tourists following the "New Seven Wonders" hype, Petra was drawing some 77,000 visitors a month. Accommodating these visitors has required constructing new buildings, overextracting water from aquifers, camping in riparian habitats and at the edges of Nabataean reservoirs, and escorting them through ancient and modern gardens, fields, and terraces. Petra's existing natural context is profoundly stressed and degraded, and to freeze this landscape as it was in 1985 – much less as it is in 2015 – would be catastrophic.

Cultural-heritage conservation professionals would not dream of advocating such an approach to the built environment. Untold millions, advanced technologies, and admirable human resources have been spent researching and conserving the famous facades of the city, the frescoes of Siq al-Barid, and the Neolithic and Byzantine sites of Petra. Are these not interventions in the landscape? There is an imposing edifice of theory and methodology undergirding the conservation of the cultural past, but the scaffolding which supports their natural contexts is dismayingly flimsy. Landscape interventions require the same rigor of thought that archaeological conservation entails.

At the same time, non-intervention is a fantasy – a passive construction of an unintentional landscape. In fact, the listing as a World Heritage Site – that very "protection" – has changed the landscape dramatically. Tourism has constructed a landscape of hotels, restaurants, and souvenir shops; widened roads to accommodate tour buses; and built a wastewater treatment plant and subsequent 10-hectare agricultural project inside the park's boundary so that visitors can be hosted inside the "protected area."

And what of the people who live here? Petra Region, like Jordan as a whole, is dotted with bedouin encampments. What defines bedouin in the early twenty-first century is matter of some debate, but I refer to families who occupy tents full-time, move seasonally, and live primarily from the proceeds of their livestock (goats, sheep and camels). While it is inaccurate to romanticize the bedouin as "one with nature" (if anything they are pitted ruthlessly against the harsh envi-

ronment), they are dependent on environmental balance for water and pasture. A century ago, before southwest Asia was carved into nations with borders, the bedouin moved through pasturing circuits contingent on pasture and water, spending the winters in regions with perennial water supplies and seasonal pasture, and moving toward the cultivated, wetter highlands in the summers, grazing harvest stubble and taking advantage of cooler altitudes. National borders have complicated these circuits, for example cutting Jordanian bedouin off from the perennial watering grounds of Wadi Sirhan, now in Saudi Arabia. The advent of motorized transportation has allowed water and supplemental feed to be trucked into remote areas, meaning that herds stay too long in one place, overgrazing already sparse vegetation. An environment out of balance has unbalanced an ancient set of lifeways. Petra and Wadi 'Araba were in some ways a classic context for seasonal migration – the farmed, watered highlands offering cooler pasture in the summer, Wadi 'Araba a warmer and ephemeral winter home. The deforestation and urbanization of Petra has had a massive impact on the bedouin.

In 2005 UNESCO designated the "cultural space" of three bedouin tribes of the Petra Region – the Sa'idiyyin, the Bidoul, and the 'Amaariin – as treasures of Intangible Cultural Heritage. But what of their tangible natural space? The inscription recognizes that "the bedu of Petra . . . have preserved specific knowledge related to the flora and fauna of the area, traditional medicine, camel husbandry, tent-making craftsmanship, and tracking and climbing skills." All of this knowledge is ineluctably contingent on the natural landscape. Additionally, bedouin culture is defined by pastoralism, so it would seem that at least one branch of UNESCO by implication expects grazing and habitation (prohibited by PAPOP) of the Petra Archaeological Park. Nonintervention, allowing the natural systems to decline further, damages the habitat of the human treasure they have moved to protect. Defining the wilderness of Petra in terms of human absence has not made sense for several thousand years and still doesn't.

And yet this recognition of the importance of bedou heritage points the way to a broader conception of management intervention in Petra. Conservation of habitat for the bedouin would by implication entail conservation of the natural resources that their traditional way of life depends on. For example, working to restore the biomass that underpins pastoralism and the species diversity that supports traditional medicine would require range management, habitat restoration, and afforestation "interventions." Successful projects implemented in other parts of Jordan demonstrate that biomass, biodiversity, and livestock productivity can be enhanced through community-based rangeland initiatives.

Such programs are, undeniably, interventions; steppe vegetation must be re-seeded and trees must be planted. Moreover, it would be neither practical nor desirable to attempt to restore the landscape to the way it looked when Petra was inscribed as a World Heritage Site in 1985. Some "historic species," such as *Juniperus phoenicia*, may no longer be able to survive the changed hydrological regime. Climate change has resulted in different rainfall patterns – so the forest will also look different than it did in the deeper past. Petra has been changing for thousands of years, and changing exponentially in the past century. It is impossible to freeze its life in the year it was recognized as "world heritage." The challenge is whether to decide to manage change or just to let it happen.

What of intervention, then – how do we implement intentional design interventions in such a momentous historical landscape? The ideal, even romantic, conception of pristine wilderness that undergirds NWPS and PAPOP does not provide a charter for managing a landscape such as Petra's. Whereas cultural heritage management almost universally ascribes to the 1964 Venice Charter for the Conservation and Restoration of Monuments and Sites, what is the landscape architect's Venice Charter for the conservation and restoration of historic natural landscapes? As soon as we call a landscape historic, we place it within cultural memory and narrative. How we think about the landscape – how we idealize and imagine it – designs and constructs it. The Petra even of 1985 has vanished. The landscape has changed continually over millennia. If we are to intervene, to design, which Petra will we imagine, construct?

Perhaps our Petra problem can be located in the initial distinction between cultural and natural heritage. The notion that the natural is by definition "minimally influenced by human actions" immediately establishes a kind of subject/object, human/environment dichotomy that may simply be inappropriate to any place on the planet these days and certainly to most of the Old World. In the Petra Region, a methodology that recognizes a continuum of human presence as part of the ecosystem could, if properly implemented and assertively managed, ensure both the enhancement of biodiversity and the sustainability of traditional human lifeways. Petra would remain magnificent, stark – even bizarre. But the humans who live here, grappling with the austerity of the high desert, might hang on. – Erin Addison

The Landscape as Ruin: The Resiliency of Design

The meaning of the word "ruin" has its origins in the idea of fallen stones. When we frame an object as a ruin, we reclaim it *from* a fall into decay and oblivion and often *for* a form of cultural attention and care that elevates the value of that object. –Michael S. Roth

As an archaeologist of landscape architecture, I am drawn to the ways in which acts of design – making one's sign or mark on the land – endure or are erased over time. Although we think of gardens and parks as ephemeral, due to the lifespan of their vegetation, the underlying designs can endure with surprising resiliency. Might we expand our understanding of ruins from architectural ruins in a landscape to the landscape itself as a ruin? This essay explores the decay and persistence of landscape architecture, from small courtyard gardens to urban parks, field systems, and planned cities. While the original materiality of the design is lost, sometimes the design endures – no longer expressing its original purpose but nonetheless recording the original conceptual plans of the designer. Can these lines in the landscape prompt the kind of contemplation of imagined pasts and future trajectories that ruins inspire?

To the viewer on the ground, the vigorous nature of vegetation tends to disguise the subtle remains of past designed landscapes. So while we readily appreciate the drama of a ruined abbey or temple, the bounds of former gardens, parks, and fields leave little to contemplate. The advent of aerial photography, however, particularly after the First World War, revealed ruined landscape features that had hitherto remained undetected. John Bradfield, in his book *Ancient Landscapes* (1957), gathered these images and introduced the landscape as a relict, a palimpsest of prior designs visible from a height. In Britain, for example, one might see the circular huts of Iron Age villages expressed as crop marks – the field's plants growing at different rates due to the structures and ditches buried below. The Roman practice of *centuriation* – redrawing boundaries for the purpose of colonizing new territories – is also clearly visible in Europe, the Near East, and North Africa.

Christopher Taylor went on to refine the analysis of these landscapes, particularly in Britain, by bringing the viewer back to the ground and explaining how to interpret the details of fields, boundaries, and woodlands: how to "read" the landscape. In his book *The Archaeology of Gardens* (1983), he demonstrates the way in which the buried terraces and geometries of seventeenth-century formal gardens, turfed over

a landscape-architectural practice in association with his sons John and Frederick Law Olmsted Jr. With their participation, he continued a demanding career until nearly the end of his life. Continually crisscrossing the country by train, he designed park systems, college campuses, the grounds of the 1893 World's Columbian Exposition in Chicago, and private estates, including Biltmore, George Washington Vanderbilt's 8,000-acre Gilded Age demesne in Ashville, North Carolina, with its French château-style mansion by Richard Morris Hunt.

Thanks to the Library of America's publication of *Frederick Law Olmsted: Writings on Landscape, Culture, and Society*, the reader who does not have space to shelve or time to read the nine-volume series of the Olmsted's complete papers can grasp the range of his work. Here he appears in the round not just as an unparalleled exponent of nineteenth-century Romanticism in landscape design but also as a chronicler of the tumultuous historic events to which he was an eyewitness and an articulate voice for the moral salvation of the nation at a time as critical to its future well-being as that of the present.

– Elizabeth Barlow Rogers

This review is also published in the March 2016 issue of *The New Criterion*.

Awards

2015 John Brinckerhoff Jackson Book Prize Winners

Anthony Acciavatti
Ganges Water Machine: Designing New India's Ancient River
Applied Research + Design Publishing, 2015

Charles E. Beveridge, Lauren Meier, and Irene Mills
Frederick Law Olmsted: Plans and Views of Public Parks
Johns Hopkins University Press, 2015

Pierrette Hondagneu-Sotelo
Paradise Transplanted: Migration and the Making of California Gardens
University of California Press, 2014

Mark Laird
A Natural History of English Gardening
Yale University Press, 2015

Finola O'Kane
Ireland and the Picturesque: Design, Landscape Painting, and Tourism, 1700-1840
Yale University Press, 2013

Robert Riley
The Camaro in the Pasture: Speculations on the Cultural Landscape of America
University of Virginia Press, 2015

R. Bruce Stephenson
John Nolen: Landscape Architect and City Planner
University of Massachusetts Press, 2015

Ron Williams
Landscape Architecture in Canada
McGill-Queen's University Press, 2014

2015 David R. Coffin Publication Grant Winners

John Dixon Hunt
John Evelyn: A Life of Domesticity
Reaktion Books

Elizabeth Kryder-Reid
California Mission Landscapes: Race, Memory, and the Politics of Heritage
University of Minnesota

Dean Cardasis
James Rose
Library of American Landscape History

Mohammad Gharipour
Gardens of Renaissance Europe and the Islamic Empires: Encounters and Connections
Pennsylvania State University Press

Contributors

Erin Addison, an historian and landscape architect, has lived and worked in Jordan since 1994. Currently she focuses on contemporary water concerns and sustainable development in arid landscapes and on economic development in communities that host significant archaeological sites. The holder of a M.L.A. from the University of Arizona and a Ph.D. in religious studies from the University of California, Santa Barbara, she is the author of *Documenting Deforestation at Sadd al-Ahmar, Petra Region, Jordan: 1924-2011* (2011).

Kathryn Gleason is a professor of landscape architecture at Cornell University, where she is also a member of CIAMS, the Cornell Institute for Archaeology and Material Studies. Known for her explorations of the origins of landscape architecture in western culture, she has conducted archaeological excavations of ancient gardens and designed landscapes around the Roman Empire, most recently at ancient Stabiae (near Pompeii, Italy), Petra (Jordan), Caesarea (Israel), and later period sites at Nagaur, Rajasthan (India), and Zuni, New Mexico (USA).

Laurie Olin is a professor of landscape architecture at the University of Pennsylvania and founding partner of OLIN, a landscape architectural firm in Philadelphia. He is the author of *Across the Open Field: Essays Drawn from English Landscapes* (1999) and coauthor of *La Foce: A Garden and Landscape in Tuscany* (2001) and *Vizcaya: An American Villa and its Makers* (2006). The designer for the transformation of Bryant Park and Columbus Circle in New York City, the grounds of the Washington Monument in Washington, D.C., and the new Getty Center in Los Angeles, he received the American Society of Landscape Architects Medal for Lifetime Achievement in 2011.

John A. Pinto is the Howard Crosby Butler Memorial Professor of the History of Architecture, Emeritus, in the Department of Art and Archaeology at Princeton University and a Fellow of the American Academy in Rome. His research interests center on architecture, urbanism, and landscape in Rome, especially in the eighteenth century. Among his publications are *The Trevi Fountain* (1986), *Hadrian's Villa and its Legacy* (coauthored with William L. MacDonald, 1995), and *Speaking Ruins: Piranesi, Architects, and Antiquity in Eighteenth-Century Rome* (2012). He is the co-curator of the Morgan Library and Museum exhibition *City of the Soul: Rome and the Romantics* (June 17 through September 11, 2016).

Baker H. Morrow, FASLA, is a practicing landscape architect and Professor of Practice of Landscape Architecture at the University of New Mexico. He is the co-editor of *Canyon Gardens: The Ancient Pueblo Landscapes of the American Southwest* and the translator of *A Harvest of Reluctant Souls: Fray Alonso de Benavides's History of New Mexico, 1630*.

Frederic C. Rich, former partner and now of counsel to the law firm Sullivan & Cromwell in New York City, is the author of *Christian Nation* (2013), a dystopian novel about the theocratic ambitions of Christian fundamentalist politics (W. W. Norton, 2013). His latest book, *Getting to Green: Saving Nature: A Bipartisan Solution* (W. W. Norton, forthcoming April, 2016) is about environmental politics. He discovered the Neander Valley while doing research for a second novel, in which *Homo neanderthalensis* plays an important role.