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Exploring the Boundaries of Historic Landscape Preservation





Sunshine Point Alders by Jonathan Higgins

Exploring the Boundaries of Historic Landscape Preservation

The Alliance for Historic Landscape Preservation is dedicated to the preservation and conservation of historic landscapes in all their variety, from formal gardens and public parks to rural and natural expanses. It is an interdisciplinary professional organization that provides a forum for communication and exchange of information regarding landscape change.

The Alliance was founded in 1978, when a small group of people from diverse backgrounds met at New Harmony, Indiana, to share their mutual interests and concerns about the growing field of landscape preservation. From this initial symposium came recognition of the need for increased commitment to the interdisciplinary nature of the field.

Today the Alliance is an international organization with members from more than 30 U.S. states, several Canadian provinces and Europe. Members include educators, private practitioners and representatives from non-profit organizations and government agencies. Geography, history, horticulture, landscape architecture, planning, public administration and architecture are just some of the professional specialties represented. This multi-faceted character is one of the great strengths of the Alliance (www.ahlp.org).

Exploring the Boundaries of Historic Landscape Preservation

Proceedings of the Twenty-ninth Annual Meeting of the Alliance for Historic Landscape Preservation 2007 Athens, Georgia

Edited by **Cari Goetcheus**, Assistant Professor, Department of Planning and Landscape Architecture, Clemson University, Clemson, South Carolina, United States and **Eric MacDonald**, Assistant Professor, College of Environment and Design, University of Georgia, Athens, Georgia, United States



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Georgia O'Keeffe, *Red Hills with the Pedernal (Pedernal with Red Hills)*, 1936, oil on linen, 19 3/4" x 29 3/4" inches. Collection of the Museum of Fine Arts, New Mexico. Bequest of Helen Miller Jones, 1986. Every effort has been made to trace all copyright-holders, but if any have been inadvertently overlooked, the publisher will be pleased to make the necessary arrangement at the first opportunity.

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And this is one of the major questions of our lives:

how we keep boundaries,

what permission we have to cross boundaries, and how we do so.

A. B. Yehoshua

Exploring the Boundaries of Historic Landscape Preservation: An Introduction

Eric MacDonald, Assistant Professor, College of Environment and Design, University of Georgia, Athens, Georgia, United States

Since its founding, the Alliance for Historic Landscape Preservation (AHLP) has promoted the development of theory and methodologies for investigating, interpreting, and managing cultural landscapes. The Alliance's annual meetings have played an important role in stimulating the growth of the field by providing a congenial forum for practitioners, educators, and students to share ideas about current trends and future directions in landscape preservation. The 2008 annual meeting, which marked the thirtieth anniversary of the Alliance's founding, provided the opportunity to reflect on the history of the Alliance, as well as the evolution of the field as a whole. As a prelude to that moment of retrospection, however, the planning committee for the Alliance's 29th annual meeting asked those who work with cultural landscapes to gaze in the opposite direction, toward the present and the future. The meeting was envisioned as a kind of mapping exercise—an exploration aimed at determining the current boundaries of the field by tracking its encounters with other professions and disciplines, and locating the most promising frontiers for expansion and advancement. In other words, the annual meeting was planned to offer a conceptual map of where the field of historic landscape preservation is today, and where it might be headed.

Although we began with this cartographic goal in mind, we soon realized that the concept of "boundaries" offered even greater possibilities for exploring contemporary issues and concerns within the field. This is because boundaries are the symbolic and conceptual tools that make conversation possible. To speak of boundaries is to raise basic ontological concerns: boundaries help us distinguish one thing from another, and tell us about degrees of similarity and difference. Boundaries define powers and competencies, and describe the limits of agency. In social life, they are concretized in genres, classifications, rules, codes, and typologies, and they are institutionalized in practices and norms, all of which place limits on action and behavior. Whether physical or conceptual, boundaries are always sites of contestation. They are alternately things to overcome, circumvent, and transgress, or they are things to stabilize, defend, and reinforce. "Thinking outside the box" (or any such act of transgression) may be heralded as a pioneering feat of daring and foresight by soldiers of the avant-garde, or censured as heresy by those deep in the trenches of tradition. Hence, all "boundary-work" is risky and experimental, and it is inherently, and rightly, the subject of public scrutiny and debate.

Those who work with historic landscapes are no strangers to these controversies; we confront boundaries everywhere. The effects of humans, animals, plants, water, sediment, chemicals, and innumerable other agents—regardless of whether we classify them under the headings of nature or culture—cross jurisdictional boundaries of private property, municipalities or official government land "management units" (Freyfogle 1998). Likewise, the cycles of nature and the steady flow of time show little respect for the property lines or political constructs that ostensibly divide one landscape from another. Human memory and experience also cut across divisions in the land, just as they blur or reinforce the social divides that pervade the communities inhabiting a place. When landscape managers describe sites as contested space among multiple social groups, or characterize controversies about historical interpretation as clashes between conflicting values, they are effectively articulating the existence of a boundary condition. Preservationists also cross conceptual boundaries whenever they attempt to implement any code of practice—for example, when deciding how particular landscape elements should be categorized as contributing or non-contributing to a property's historical significance, or when determining whether a particular management practice is appropriate or inappropriate.

For those who have labored to foster the cause of cultural landscape preservation during the past thirty years, the persistence of some of these theoretical and methodological problems may be disheartening. Rather than viewing these challenges as cause for apprehension, however, we might just as easily see their recurrence as a sign of life. The stubborn refusal of old problems to go away is partly what compels our field to expand

beyond the old limits of practice, making landscape preservation an increasingly active, diverse and interdisciplinary profession. Like the landscapes we preserve and protect, the boundaries of our field are fluid and continuously reconfigured. Thus, the reason for purposefully exploring boundaries is simple: they are where we are going to find the liveliest discussions, the hottest debates. They are also where we are most likely to discover something new.

With these thoughts in mind, the Alliance issued a call for papers centered on the broad theme of "Exploring the Boundaries of Historic Landscape Preservation." We hoped respondents might interpret the theme in myriad ways, and we were not disappointed. Response to the call for papers confirmed that practitioners in the field are deeply engaged in questioning boundaries, and many are embarking on experiments—both technical and conceptual—that attempt to resolve these problems in ways that push the field in new directions. The Alliance received more than thirty submittals, and most of them took the form of case studies, which allowed authors to explore boundary issues while demonstrating potential solutions. The proposals also illustrated the various niches of practice in which this exploration is taking place. While many of the abstracts dealt with projects located in North America, several reported on work in Europe, Asia, and Australia. Abstracts were received from authors in academia, as well as from practitioners engaged in both public and private sector landscape preservation. The disciplinary and professional backgrounds of respondents also provided a view of some of the more active frontiers in historic landscape preservation. Authors represented professions such as landscape architecture, archaeology, and community and economic

development. Most authors approached their topic by incorporating concepts and techniques from multiple disciplines, including anthropology, geography, sociology, ecology, public art, and literary criticism. Much as we had hoped, the papers mapped active boundaries between historic land-scape preservation and these other fields.

To determine which authors would be invited to present their work at the annual meeting, we solicited the assistance of a group of reviewers from within the ranks of the AHLP membership. All of the proposals were subjected to a double-blind, peer review process, wherein reviewers assessed the significance of each proposed paper's contribution to current debates about boundaries in historic landscape preservation. The reviewers' evaluations helped identify which proposals held the most promise for deploying the conference theme in provocative ways. Thus, the 29th annual meeting of the Alliance, held in Athens, Georgia, 11-14 April 2007, featured thirteen paper presentations that illustrated the breadth of current thinking about boundaries in historic landscape preservation, as well as the diversity of strategies for grappling with them. The result was a collection of papers that described local projects in ways that offer an overview of some of the bigger philosophical and practical challenges confronting the landscape preservation field as a whole.

The present volume contains selected papers that survey the various boundary crossings that occurred during the annual meeting. All of the papers, either explicitly or implicitly, touch upon ontological concerns. Several authors address uncertainties about what a landscape is, raising questions about the very heart of landscape preservation itself. How do we define what a landscape

comprises? Are landscapes to be engaged primarily as a form of material, tangible heritage, or are they better understood as hybrids of tangible and intangible culture? If landscape preservation is not just centered on a material resource, but is also a practice for conserving "landscapes of the mind," then how are we to go about drawing boundaries around this object that is simultaneously material and non-material, tangible and intangible? At issue are long-standing quandaries in the field, such as how to account for both tangible and intangible attributes, how to understand landscapes as products of both nature and culture, and whether to treat them as more-or-less durable artifacts or dynamic systems.

Priya Jain sets the stage for such exploration in her paper, "Preserving Cultural Landscapes: A Cross-Cultural Analysis," which considers the prospect of cultural landscape preservation in India. Jain questions whether cultural landscape preservation—at least as the practice has been codified by Western cultures through agencies such as the U.S. National Park Service and UNESCO—makes sense in a country like India. She argues that Indians traditionally have understood and experienced time, space, nature, and culture in ways that profoundly differ from how these notions are conceived in Western thought. How does one conceptualize a "historic landscape" in a culture where time is cyclic rather than linear, space is experienced as movement, nature is divine, and the cultural value of places resides not in their physical qualities but in associations manifested primarily in folklore, crafts, rituals, and symbolic references? Jain argues that these differences make the very idea of cultural landscape, as defined by both the NPS and UNESCO, largely inapplicable to the Indian context. For landscape preservation to succeed in

India, Jain concludes that "cultural landscape" cannot be accepted as a universal concept. Rather, it must be redefined in ways that correspond with the belief systems of local cultures. Ultimately, Jain's analysis highlights some of the key difficulties stemming from preservation frameworks that define and treat "cultural resources" (including landscapes) primarily as material, tangible heritage.

Uncertainty about the relative contributions of tangible and intangible elements to the creation of cultural landscapes circulates through a number of the contributions to this volume. The issue is addressed most directly in Victoria Partridge's paper, which asks what kind of preservation approach is appropriate when a landscape's cultural value stems primarily from intangible attributes and material associations that are largely ephemeral. The site of the Glastonbury Festival of Contemporary Performing Arts near Somerset, England, provides Partridge with a superb case for exploring this problem. Since 1970, the event has been staged annually at the dairy farm owned by the festival's founder and primary organizer. For most of the year the landscape is virtually indistinguishable from the numerous other farms in the region. However, during a few days each summer, the farm's fields and pastures are transformed into a vast site of pilgrimage and performance that attracts hundreds of thousands of visitors. Partridge suggests that much of the value of the Glastonbury Festival resides not in any material features of the landscape itself but rather in the legends and myths that animate the landscape, as well as the music, experiences, and memories generated by the thousands of festival goers. The Glastonbury Festival demonstrates that even in

the twenty-first century, peoples' lives continue to be profoundly affected by rituals that are situated in particular landscapes. Yet, those rituals often leave little physical evidence to suggest the important role that the festival landscape plays as a world-famous venue for music, art, and politics, particularly within contemporary youth culture. Partridge proposes that preservation efforts must center on perpetuating the relationship between the rituals and the site, which means shifting attention from the material elements of the landscape to sustaining the intangible aspects of the festival itself.

For different reasons and in different ways, the cases discussed by Jain and Partridge test the boundaries of commonsensical notions of what constitutes a historic landscape. In making a case for the importance of nonmaterial, invisible, and intangible features, these writers call into question the very definition of the term "landscape," which traditionally has privileged visible, material features (Stilgoe 1982; Cosgrove 1998; Wilson and Groth 2003). They also call attention to an implicit materialist bias in key historic preservation concepts. In assuming that landscapes are constituted primarily by material elements, for example, policy frameworks like that established by the U.S. National Historic Preservation Act of 1966 make the survival of material elements the lynchpin of historical designation and the focus of preservation interventions. The papers contributed by Jain and Partridge clearly suggest that, when considering cultural landscapes, we need to broaden our thinking about what constitutes a cultural resource and consider whether current preservation approaches unduly limit our ability to account for and sustain intangible forms of heritage.

Another source of ontological uncertainty centers on how the various building blocks of landscape are composed. Even if we hold to a strict materialist view, many of the elements of landscape seem to be animate, all of them are dynamic, and all seem to interact with one another in ways that are often unforeseen. Landscape seems to be, if anything, a chain of interactions of such complexity that we can never fully map them. Moreover, there seems to be no way to trace the linkages in order to determine precisely how big these chains are. They seem to stretch infinitely into space, just as they extend indefinitely backward in time. There appears to be no sure-fire method for assessing exactly where a particular landscape begins or ends, and no easy way for determining when its history begins or ends. Thus, several writers struggle with problems of assigning spatial and temporal boundaries to landscapes that seem inherently boundless.

Jamie Cleland's paper tackles this issue with respect to the statutory framework for preservation established by the U.S. National Historic Preservation Act. Cleland discusses the challenges involved in establishing the boundaries and assessing the significance and historic integrity of the 160-mile-long *Xam Kwatcan* trail that traverses California, Arizona, and Nevada. For centuries, regional trail systems have been central to the subsistence, trade, social, and religious life of the Native American tribes that inhabit the Lower Colorado River region. Although interstate highways, cities, modern agriculture, and dams and levees in the Colorado River system have dramatically altered the landscape, the Xam Kwatcan remains integral to the origin myths and religious practices of the native Yuman peoples. Yet, like many ethnographic landscapes, the trail encompasses a vast geographic area, and its physical

boundaries are imprecise. Moreover, the belief systems of local Native American cultures resist the very notion of assigning precise geographic boundaries to sacred places. The Xam Kwatcan appears to be yet another example of a "landscape" that is constituted primarily by intangible facets of culture, as symbolic linkages maintained through traditional Yuman song cycles, pilgrimages, and other sacred rituals weave together numerous widely-scattered sites into a single landscape. Cleland concludes that Xam Kwatcan must be conceived as "the confluence of landscapes on several scales." Indeed, "the concept of landscape scale," he suggests, "must include the understanding that an ethnographic landscape may be significant because it operates simultaneously on several scales—local, regional, and transregional." Landscapes like the *Xam Kwatcan* clearly stretch conventional notions of how landscapes are composed, yet Cleland finds that the U.S. policy framework for preservation remains viable in the face of such challenges. Unlike Jain, who argues that the U.S. framework is largely unworkable in India, Cleland suggests that it may be adapted to accommodate non-Western cultural perspectives and new approaches to delineating the boundaries of cultural landscapes.

Questions of scale—specifically the potential "bigness" and heterogeneity of cultural land-scapes—are also prominent in **Duncan Hilchey's** paper, "*Goût de Terroir*: Exploring the Boundaries of Unique Agricultural Landscapes." Hilchey focuses on the establishment of the Lake Erie Concord Grape Belt Heritage Area in New York. The "heritage area" concept has evolved during the past 25 years as a strategy for managing thematically-linked cultural resources on a regional landscape scale. Established through federal, state,

or local legislation, heritage areas typically span multiple political jurisdictions, encompass many different types of resources, and require coordination among numerous agencies as well as multiple property owners (Barrett and Taylor 2007). Hilchey argues that to date most such initiatives in the U.S. have focused on urbanized areas and industrial heritage, a bias that has left rural communities and agricultural themes underrepresented. Hilchey suggests, however, that the French ethos of *goût de* terroir—which holds that food and wine are "inextricably linked to its place of production"—offers inspiration for new thinking about what constitutes a heritage area. Indeed, the idea of linking landscape preservation with place-based products is an strategy that is beginning to receive attention in the U.S. and elsewhere (Diamant, Mitchell, and Roberts 2007). Hilchey proposes that goût de terroir represents a principle for formulating a regional landscape preservation strategy that promotes the economic viability of farms, stabilizes rural communities, and maintains the contributions of distinctive foodways and cuisines to local sense of place and culture. Moreover, such an approach implies that expanding the boundaries of historic landscape preservation entails broadening our understanding of landscapes as complex social and cultural systems.

In his paper, **Chad Nelson** similarly seeks a broader, more integrative perspective on historic landscape management. Rather than focusing on the social and cultural contexts of landscape preservation, however, Nelson is primarily concerned with the idea that landscapes are not just human artifacts but also natural systems. This is especially clear with respect to hydrologic processes. Nelson examines three historic designed landscapes in Delaware that encompass significant water-

courses: the DuPont family estates of Nemours and Winterthur, and St. Andrew's School. These sites are much smaller than the vast regional landscapes described by Cleland and Hilchey, and the precise location of their legal boundaries is not at issue. Yet each landscape illustrates how often the boundaries that humans impose upon landscapes seem to be at odds with natural systems that, like the ethnographic landscapes described by Cleland, operate simultaneously at multiple scales. These landscapes are themselves parts of hierarchically ordered drainage areas, receiving sediments and pollutants that originated from distant sources, while management practices within the landscapes themselves contribute to pollution downstream. Moreover, Nelson observes that current "best management practices" (BMPs) for protecting water quality often seem to conflict with the current BMPs for historic designed landscapes. Nelson acknowledges the value of maintaining the visual appearance of historic landscapes, yet he maintains that landscapes must be treated as dynamic ecological systems first, and as cultural artifacts second.

Nelson's insistence that historic landscape management must be rooted foremost in current ecological understanding may stir objections from those who instead would seek to minimize disruption to a landscape's historic character. For many years resource managers have clashed over the issue of whether "natural" or "cultural" values should take precedence in determining land management policies, and envoys from both sides of the debate have sought greater balance in terms of both perspective and practice (Birnbaum and Tallant 1996). Nelson's position on this issue, along with several papers in this volume, again underscores that the root of this quandary is

the apparent philosophical paradox that is landscape—a dynamic, indeterminate entity that is simultaneously a product of nature and culture. Such questions have haunted the field of landscape preservation for the past thirty years (if not longer), and the papers collected here suggest that they will not be resolved soon. It seems that no one knows, still, precisely just what a landscape is.

If the very concept of landscape remains a source of uncertainty, it is not surprising that similar philosophical dilemmas circulate around how to define the *practice* of landscape preservation. A number of papers in this volume ask questions about what kinds of knowledge and skills are necessary, and how landscape preservation is the same as or different from other environmental professions. Most authors implicitly acknowledge that landscape preservation is and will remain an interdisciplinary endeavor. They differ, however, with respect to the other disciplines and professions with which they would seek stronger alliances. In the scenario described by Nelson, for example, ecological imperatives imply that historic landscape preservation needs to become more attuned to knowledge imported from the environmental sciences. But whereas Nelson raises the status of ecological knowledge in the field, several other authors instead look for inspiration from current trends in art and design, probing the boundary between preservation, landscape design, and public art.

Catherine Evans' paper on the recent history of landscape architecture in Australia explicitly raises this prospect. Evans notes that preservation seems to be fundamental to the modern profession of landscape architecture as a whole, but she argues that a strong preservationist ethic is particularly evident in the work of Australian landscape archi-

tects during the 1970s and 1980s. Influenced by the concurrent flowering of the environmental movement during this period, Evans describes how landscape architects developed designs for new parks in the Sydney Harbour Foreshore that interpreted the indigenous landscape of the region. Working with formerly industrial sites, Australian designers incorporated local materials and native vegetation into new landscapes that expressed a sense of place and reflected an awareness of cultural identity. Evans notes that some of the key works from this formative era of Australian landscape architecture are now in jeopardy, and she argues that they deserve recognition and protection as historically important works of landscape architecture in Australia. She suggests they are significant for what they reveal about the practice of landscape architecture itself. Evans argues that "the *creation* of designed landscapes on the Sydney Harbour Foreshore is contributing to the preservation of these places as individual and historic landscapes," and she suggests that "the design process—intentionally or not—was in effect, an act of preservation that made broader contributions to the conservation of a regional cultural identity."

Evans' characterization of the design process in the parks of the Sydney Harbour Foreshore resonates with a major theme of the paper by Hanna Bornholdt and Daniel Nadenicek. In "Expanding Preservation Boundaries in a German Industrial Landscape," Bornholdt and Nadenicek report on methods used by landscape architects to analyze the urban industrial landscape of Wilhelmsburg in Hamburg, Germany. The authors note that recent redevelopment of industrial sites has profoundly shaped the development of landscape architectural practice in Germany and in other European countries. Such projects have

necessitated coordination between urban planners and engineers, and also promoted closer relationships between landscape architects and historic preservationists. The process of redeveloping industrial landscapes has demanded that new design be balanced with historic preservation goals, and hence the interaction between these fields has impelled practitioners to seek alternative methods for analyzing and understanding historic landscapes. The field of historic landscape preservation has much to learn from contemporary German landscape design, Bornholdt and Nadenicek argue. In particular they single out techniques used at Wilhelmsburg, which include Kevin Lynch-inspired site analysis, a technique known as "strollology," and a historical geography framework developed by Heinz Quasten. Bornholdt and Nadenicek conclude that such techniques hold the potential to inform the redesign of such landscapes in ways that reveal and preserve layers of a site's industrial past.

A deeper issue raised by Bornholdt and Nadenicek's paper, as well as the contribution by Evans, is whether design and preservation truly are equivalent or even compatible environmental management strategies. Bornholdt and Nadenicek's account of the redevelopment of German industrial landscapes is premised on the notion that "contrasting, interposing, newly interpreting, reconstructing, and historicizing are ... reasonable strategies for site design." The purpose of design in such contexts is "to integrate and communicate a multifaceted surface of textures, the play of light and shadow, the vibrant vegetation, the broad array of materials, and the originality and uniqueness of individual structures, all providing a rich treasury for community development." While many contemporary urban designers might readily

embrace such a goal, it is not at all certain that a majority of historic preservationists—particularly in non-European contexts—would recognize it as the "goal" of their practice. Indeed, much of the history of preservation has revolved around efforts to resist the attempts of designers (and those for whom they work) to undertake acts of "creative destruction" in cities. Modernist urban renewal was attacked for such insensitivity to history and context; much postmodern design has been criticized for its superficiality and lack of historical understanding; and attempts by artists and designers to create new works that creatively *interpret* the past often have met with derision from preservationists. Underlying the arguments advanced by both the papers by Evans and Bornholdt and Nadenicek is the premise that new design can preserve a sense of place and a spirit of the past without preserving all of the physical elements that constituted a previous, historic landscape. Is "preservation" of the past primarily a conservative, curatorial process? Or is it achieved through acts of synthetic, creative intervention?

Such questions permeate Jennifer McStotts's paper, "Preserving Walls: Cultural Landscapes with Divisive Histories," which considers the challenges involved in perpetuating landscapes that function as "contested monuments" and represent "divisive histories." She focuses on two recent attempts to commemorate such sites: the "Hildebrandt Memorial," which existed briefly near the Checkpoint Charlie museum in Berlin as a memorial to victims of the Berlin Wall, and National Park Service (NPS) efforts to preserve and interpret Manzanar, an internment camp in southern California that was built by the U.S. government to house more than 10,000 Japanese Americans during World War II. Both sites

commemorate landscapes that were created to separate different populations from one another, and both evoke painful memories from people who still have personal connections with them. The two sites represent vastly different strategies for commemorating "divisive histories," however. The Hildebrandt Memorial was a privately sponsored work of public art constructed from various materials salvaged from the original Berlin Wall, as well as new materials. Its design referenced certain formal attributes of the original wall, but it was in no way an accurate replica. Lambasted by art, architecture, and historic preservation critics, and unpopular with the public, the memorial was demolished less than a year after its construction. At Manzanar National Historic Site the NPS also confronted a landscape that retained only fragments of its World War II-era historic fabric, as well as conflicting views about historical interpretation. In contrast to the approach taken by the sponsors of the Hildebrant Memorial, however, the NPS sought input from the general public, nearby residents, former internees, and former camp administrators. Instead of reconstructing missing elements, the preservation approach focused on retaining the surviving historic features of the landscape, while camp internees were invited to add new interpretive elements to the site.

McStotts sees the Hildebrandt Memorial as a failed attempt to commemorate the divisive history of the Berlin Wall because it exhibited a blatant disregard for the authentic materials and form of the original wall, and because the process of its creation failed to engage the public. In contrast, the effort at Manzanar benefited from coordinated public involvement and careful consideration of how material interventions at the site would evoke a sense of authentic historical experience.

Her account suggests that retaining historic materials is important to evoking and interpreting an authentic sense of the past, as is understanding and maintaining objective relationships among those materials. She insists that historic materials should not be "relocated ... casually and without regard to their historic arrangement, placement or context," and advocates a conservative approach to interpretation that is limited "to immediate associations except when necessary to relate the [event] to ... its greater historical context and ... [to] contemporary events." Whereas other authors advocate a blurred distinction between the fields of preservation and design, McStotts suggests that the boundary between preservation and design in landscape preservation is a boundary that needs to be carefully policed.

In exploring linkages with other fields, a number of papers also seek to push the boundaries of specific landscape preservation practices. Another privately managed historic site provides Jillian **Cowley** with an opportunity to pursue a radically different perspective on landscape interpretation. In her essay entitled "Gender, Landscape, and Art: Georgia O'Keefe's Relationship with the Ghost Ranch Landscape," Cowley explores how landscape interpretation might benefit from insights gained from ecofeminism—an approach to analyzing the relationship between culture and the environment that has developed since the 1970s primarily in disciplines involved in cultural studies, such as literary theory. Cowley uses the landscape of Ghost Ranch, New Mexico that inspired artist Georgia O'Keeffe, as a case study of how ecofeminist concepts might open new possibilities for historical interpretation. She describes the results of a workshop held at Ghost Ranch, in which participants engaged in painting, writing, and discussions that

helped them reflect on how gender influences their perception and appreciation of the landscape. Cowley reports that at the end of the workshop most participants claimed that "exploring gender enlarged their experience of the landscape and broadened their thinking about O'Keeffe's relationship with Ghost Ranch." Cowley concludes that such experiences might become important avenues for visitors to enter into more intimate relationships with a landscape, allowing them to attain a deeper understanding of its cultural significance.

The approach articulated by Cowley, however, could hardly be more different than that advocated by **Andrew Kohr.** Kohr sees landscape history's attention to subjective experience and its deployment of qualitative critiques to be one of the field's greatest weaknesses. For Kohr, the process of understanding historic landscapes must be rooted foremost in systematic, quantitative analysis. It must be based on empirical evidence and focused on material features that are objective and directly measurable. In his contribution to the conference, "A Terrace Typology," Kohr illustrates such an approach via a preliminary process for describing terraces in antebellum plantations of the American mid-Atlantic region. Taking inspiration from attempts by archaeologists and architectural historians to develop typologies of human artifacts, Kohr demonstrates how a typology might be applied to terraced landforms at Menokin, an eighteenth-century-era plantation located in Richmond County, Virginia. Kohr's analysis of Menokin is only a preliminary application of his terrace typology, but his broader argument is for the further development of such systematic approaches to landscape description and analysis. He thus charts a course for landscape preservation practice that clearly builds upon previous

attempts to deploy classification schemes as a way to standardize and lend coherence to the landscape inventory process.

Although not as finely articulated as the classification schemes Kohr seems to have in mind, typologies are integral to NPS management guidelines for cultural resources, and they are codified in procedures for the Cultural Landscapes Inventory and Cultural Landscape Reports, as well as in several National Register of Historic Places bulletins. However, the usefulness and limitations of classifications have been widely debated within the field of historic landscape preservation (Alanen and Melnick 2000; Howett 2000). Indeed, several papers in this volume—as well as intense discussions during the annual meeting itself—suggest that there remains a high degree of ambivalence about the relative usefulness of such schemes. While classification schemes may be good techniques for cataloging and comparing the objective features of landscapes and for satisfying scientific curiosity, they may be considerably less helpful in shedding light on the profound emotional attachments that people have with specific places. Hence, whether or not one agrees with Cowley about the promise of ecofeminism, her motive resonates with an undercurrent that runs through a number of the papers collected in this volume: the idea that preservation ultimately fails if we somehow manage to keep all of the physical features of a landscape intact while permitting the erosion of all of the rituals, stories, subsistence practices, flavors, and memories—the ephemeral and intangible heritage—that created and sustained it. As hard as it may be to account for all of those troublesome, swirling emotional attachments that seem to overwhelm landscapes, we may have to admit that accounting for them is a necessary part of the practice. They are, after all, what

compel many people to contemplate landscape preservation in the first place. Perhaps this is why a desire for greater public involvement in preservation also runs through many of the papers.

The issue of public involvement in preservation is most central to the papers contributed by **Reid** Bertone-Johnson and Sarah la Cour. In his contribution to the proceedings, Bertone-Johnson describes how the Library of American Landscape History (LAHL) has recruited a network of researchers to investigate the landscape planning and design legacy of Warren H. Manning. A key figure during the formative years of the professions of landscape architecture and city and regional planning in the United States, Manning was also one of the most prolific practitioners of these professions during the late nineteenth and early twentieth centuries. The vast corpus of Manning's work, which encompasses more than 1,600 projects in thirty-four states, combined with the destruction of most of his professional papers, makes it virtually impossible for a single researcher to document Manning's career. To resolve this dilemma, the LALH has assembled a team of scholars and hired part-time staff to develop a survey tool that can be distributed to volunteer researchers via the Internet. LAHL recruited a sizable pool of researchers in locales scattered across the country who have volunteered to investigate local research materials and sites associated with Manning's career. The effort is thus fundamentally collaborative, aimed at building relationships among participants who have common interests but diverse professional and disciplinary backgrounds. Bertone-Johnson suggests that such an approach may hold potential for inducing interdisciplinary collaborations and promoting cooperation between professionals and amateurs with respect to other

kinds of historic landscape preservation efforts. Sarah la Cour also promotes a collaborative approach to historic landscape preservation. La Cour describes a recently implemented process for visual assessment and viewshed mapping in the vicinity of Saratoga National Battlefield Park in New York. Like many of the landscapes featured in this collection of papers, it seems that landscape preservation concerns do not conveniently begin or end at the official boundaries of park. Indeed, la Cour describes how recent urban development in the surrounding area is affecting the historical and aesthetic character of the battlefield, and how the continuation of these trends may significantly diminish future visitors' experiences of the landscape. Once again, the expanded scale of the landscape in question makes the prospect of preservation more complicated. In turning their attention beyond the boundaries of the park, preservationists encounter a greater number of resources that need to be taken into account, and an expanded array of property owners and other stakeholders. La Cour describes how computer technology and methods for public participation were combined to address this heightened level of complexity. Geographic Information System (GIS) technology, combined with a poll for assessing the visual preferences of the public, provided preservationists with a strategy for systematically analyzing visual resources and mapping viewsheds. These tools also allowed preservationists to promote collaboration among stakeholders and engage public participation in the project.

Both la Cour and Bertone-Johnson suggest that the practice of landscape preservation may be enhanced by adopting a collaborative and more broadly participatory approach. Perhaps public participation is an inevitable, necessary condition for success because historic landscapes and landscape preser-

vation are so difficult to "bound." Indeed, this is a theme that resonates through several papers—most notably those by Jain, Cleland, Hilchey, Bornholdt and Nadenicek, and McStotts—which prompt questions about whether the landscape preservation process needs to be more or less expert-driven.

La Cour and Bertone-Johnson also show how new technologies may facilitate more widespread public involvement. These papers suggest that we have begun to consider how electronic communication technologies might open new ways for broadening the landscape preservation movement, or providing new ways for people to experience and understand historic landscapes. They also highlight how technology pushes the boundaries of preservation practice, just as it induces changes within landscapes themselves. Technology is a vehicle for change that fits nicely with the Western conception of linear time and the notion of "progress" that—as Jain points out in her essay at the very beginning of this volume—seems to underlie the whole enterprise of historic preservation. The presumed inevitability of technological progress is undoubtedly a source of tension that runs through landscape preservation practice: to what extent are supposedly universal concepts such as "cultural landscape," or generic technologies such as GIS, applicable to the particular, idiosyncratic, and highly localized resources that we seek to preserve?

This tension is implicit, and perhaps manifested in unexpected ways, in the final paper in this volume, **Georgia Harrison's** essay on the landscape designs of Robert Marvin. A landscape architect who in 1947 established a professional practice in his hometown of Walterboro, South Carolina, Marvin has largely escaped the attention of historians who in recent years have turned their

attention to studying the evolution of modernist design during the twentieth century. Harrison observes that in contrast to other regions of the country, the southeastern United States was slow to embrace modernist architecture. Marvin. however, developed an interest in the contemporary work of landscape architects such as Garrett Eckbo, James Rose, and Thomas Church. During the 1950s and 1960s, he also incorporated ideas from the psychology of Dr. Karl Menninger into his own design philosophy. Slowly, Marvin's work influenced the attitudes of his clients, and helped modernist tenets gain broader approval within the southeastern United States. Marvin adapted modernist forms to what was essentially a regionalist mode of design. His approach sought to harmonize architecture with the unique character of the site, and his manner of working respected the social and cultural norms of the American south. Harrison's account of Marvin's career thus highlights an irony: a mode of design that strove to be universal and timeless became viable in the region only after it was reformulated to suit the idiosyncrasies of the local culture and sense of place.

Like other contributions to this volume, Harrison's paper suggests that landscape preservation, like design, may be always a *local* practice. Indeed, the old and wonderfully nebulous idea of *genius loci* may be what truly connects landscape preservation and landscape design. Perhaps it was designers' commitment to the premise of *genius loci* that slowed and conscribed landscape architecture's embrace of modernist design and perhaps it is likewise this commitment that seems to thwart the applicability of classifications, typologies, codes, and other means for universalizing the present-day practice of landscape preservation. We are

again confronted with the ambiguity that pervades landscape—an entity that appears to be partly material, but not wholly so; part objective reality, but also part subjective experience; part nature and part culture—a universal condition that is always, simultaneously local.

The thirteen papers gathered here certainly do not touch upon all of the important debates within the field of historic landscape preservation today. Nor do they settle any of the persistent uncertainties that have lingered within the field during the past three decades. Yet they nonetheless represent a convenient starting point from which to begin charting some of the more active boundaries in landscape preservation theory and practice. The discussions that occurred during the annual meeting suggested the timeliness for a concerted process of self-reflection to begin pushing landscape preservation in new directions. The final versions of the papers published here show reflection and revision prompted by discussions that occurred during the meeting, as well as criticisms and suggestions subsequently provided by peer reviewers. We hope these proceedings likewise will suggest for the reader new frontiers for exploration within the evolving field of historic landscape preservation.

References

- Alanen, Arnold R., and Robert Melnick. 2000. Why cultural landscape preservation? In *Preserving cultural landscapes in America*, ed. Arnold R. Alanen and Robert Melnick, 1-21. Baltimore: Johns Hopkins University Press.
- Barrett, Brenda, and Michael Taylor. 2007. Three models for managing living landscapes. CRM Journal 4 (2): 50-65.
- Birnbaum, Charles A., ed. 1999. Preserving modern landscape architecture: Papers from the Wave Hill National Park Service Conference. Cambridge, Mass: Spacemaker Press.
- Birnbaum, Charles A, and Sandra L. Tallant, eds. 1996. Balancing natural and cultural issues in the preservation of historic landscapes: Selected papers from the National Association for Olmsted Parks conference. *George Wright Forum*, vol. 13, no. 1. Hancock, Mich.: George Wright Society.
- Cosgrove, Denis E. 1998. Social formation and symbolic landscape. Madison: University of Wisconsin Press.
- Diamant, Rolf, Nora J. Mitchell, and Jeffrey Roberts. 2007. Place-based and traditional products and the preservation of working cultural landscapes. *CRM Journal* 4 (1): 6-18.
- Freyfogle, Eric T. 1998. Bounded people, boundless lands: Envisioning a new land ethic. Washington, D.C.: Island Press.
- Howett, Catherine. 2000. Integrity as a value in cultural landscape preservation. In *Preserving cultural landscapes in America*, ed. Arnold R. Alanen and Robert Melnick, 186-207. Baltimore: Johns Hopkins University Press.
- Stilgoe, John R. 1982. Common landscape of America, 1580 to 1845. New Haven: Yale University Press.
- Wilson, Chris, and Paul Erling Groth. 2003. The polphony of cultural landscape study: An introduction. In *Everyday America: Cultural landscape studies after J.B. Jackson*, ed. Chris Wilson and Paul Groth, 1-22. Berkeley: University of California Press.

Preserving Cultural Landscapes: A Cross-Cultural Analysis

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Abstract

During the past two decades, a variety of policy frameworks have been designed worldwide for the protection and stewardship of cultural landscapes. While the National Park Service (NPS) in the United States has developed a process for preparing Cultural Landscape Inventories and Cultural Landscape Reports to address sites under its administration, UNESCO has created its own criteria for designating cultural landscapes throughout its member countries. This paper outlines, contrasts, and critically analyzes these two approaches with the aim of exploring their applicability to the Indian milieu. Endemic notions about time, space, nature, and culture also are taken into account, and their bearing on cultural landscape preservation in India is discussed.

Keywords

Cultural landscape preservation, India, NPS and UNESCO cultural landscapes.

Introduction

Over the past century, development of the concept of "cultural landscapes" has radically redefined the way we perceive our surrounding environment. Beyond solely aesthetic perceptions of a "pleasing view of scenery," landscapes have now begun to denote the interaction of people and place (Groth 1997, 1). The most popular definition of the term "cultural landscape" is arguably the one proposed by geographer Carl Sauer in his seminal essay "The Morphology of Landscape":

The cultural landscape is fashioned from the natural landscape by a cultural group. Culture is the agent, the natural area is the medium, the cultural landscape the result. (Sauer 1925, 6)

The key impact of Sauer's work was to shift the scholarly consideration of "landscape" from a *composed image* to the *place* itself (Groth and Wilson 2003, 5). However, the perspective initiated by Sauer underwent various modifications during the last century or so. Most notable was the gravitation of scholars toward the *experience* of landscape, as opposed to its morphology (Creswell 2003, 271). During the latter half of the twentieth century, J.B. Jackson, in his prolific writings on everyday American landscapes, underscored the merits of perceiving the symbolic clues to culture that lie

hidden behind the bare morphology of landscapes (Jackson 1984). Ironically, though, this newfound emphasis on "reading" or "decoding" the landscape resulted in overemphasizing the role of vision and threatened to bring landscapes back to an "image"—although this time it was an amalgamation of not just material form, but the meaning, too, that the viewer or interpreter ascribed to the form (Tuan 1979).

Recent scholarship, however, has criticized this visual "gaze" for being highly susceptible to individual bias and representing a myopic point of view—usually that of the trained professional who treats the cultural landscape as an "object" of study.2 Moreover, some scholars felt that an undesirable outcome of this outsider's approach was the alienation of the people who lived in or actively used these landscapes. Consequently, there has been an increasing emphasis on consolidating the relationship between the "way of seeing" and the social, cultural, and political processes that create and continually redefine cultural landscapes (Cosgrove 1984). Creswell, in his essay "Landscape and the Obliteration of Practice," proposes a similar academic framework for re-conceptualizing landscapes as *practiced environments*—inherently *lived* phenomena, as opposed to representation or ideology (2003, 279). Assigning value judgments to cultural landscapes now has become a process that is enmeshed with discussions about ownership and control over interpretation of the past and

design of the future.³ Questions about who decides cultural significance and how this process plays out through appropriate methods of use, presentation, and interpretation have become critical issues. The overall impact of these rising concerns is a call for increased participation by inhabitants and user groups in the management of cultural landscapes.⁴

Application of Cultural Landscape Theories to the Cause of Preservation

The idea of landscape preservation has been characterized as an "oxymoron" (Cook 1996). This statement sums up the most popular concern that has been raised about the adoption of cultural landscape studies for purposes of historic preservation. Problems seem to arise from the fact that acts of preservation tend to protect landscapes from transforming over time, a goal which runs entirely counter to their inherently dynamic nature. J. B. Jackson, despite being one of the strongest proponents of cultural landscape studies, was known to be skeptical about their applicability to preservation. He suggested that the "beauty" of an ancient environment "comes from its having been part of the world, not from having been isolated or protected, but from having known various fortunes" (1997). Kevin Lynch voiced similar notions when he emphasized the importance of "layering"—the visible superimposition of overlapping traces from successive periods,

¹ Also see Meinig (1979) in his well-known paper, "The Beholding Eye," and Tuan (1979), "Thought and Landscape," for the primacy of vision in cultural landscape studies.

 $^{^2}$ See King (1997) "The Politics of Vision," for the importance of cultural specificity and caveats about over-reliance on vision in cultural landscape theory.

³ See the papers collected in Tomlan (1998) "Preservation of What, for Whom? A Critical Look at Historical Significance."

⁴ For an excellent example of actively involving local community residents in the decision-making and management of a historically significant cultural landscape, see Minott (2003), "Listening to Local Voices in Historic Preservation and Heritage Tourism: The Case of Emancipation Square, Spanish Town Historic District, Jamaica."

each transforming and being transformed by new additions to create something like a "collage of time" (1972, 170). Yet if we look back, it appears that cultural landscape studies were rather instrumental in helping preservation broaden its focus from singular buildings to entire districts and rural landscapes, thus enabling a redefinition of some of the prevailing, insular philosophies within preservation practice. This process, however, is far from complete, and parallel advances in the theoretical understanding of cultural landscapes continue to prompt the field of preservation to refine existing policies. The following sections provide a brief, critical overview of some of these existing cultural landscape preservation methodologies developed by two major agencies, the National Park Service (NPS) and UNESCO, with a view of exploring their applicability to the Indian context. I argue that endemic Indian conditions require that conventional parameters must be questioned, and I hope that this questioning in turn will inform, enrich, and extend the boundaries of landscape preservation throughout the world.

Cultural Landscape Preservation by the National Park Service

In the United States, the National Park Service has been the most active catalyst in the emerging cultural landscape preservation movement. Beginning with a process developed during the 1960s, the NPS solidified and defined the format and content of Cultural Landscape Inventories (CLIs) and Cultural Landscape Reports (CLRs) by the late 1990s (Page, Gilbert, and Dolan 1998). Four categories of cultural landscapes are recognized by NPS (Table 1). The standard procedure of preparing a Cultural Landscape Report (CLR),

the most comprehensive cultural landscape preservation document for sites managed by the NPS, usually involves the following parts⁵:

- Part 1: Site History, Existing Conditions, and Analysis and Evaluation.
- Part 2: Treatment
- Part 3: Record of Treatment

Part 1 includes historical description of the landscape through every historic period up to the present—compiled via archival research, oral histories, etc.—along with documentation of the landscape's existing condition. The analysisand-evaluation component of Part 1 defines one or more "period of significance," a time frame during which the cultural landscape gained its significance. To define "significance," the CLR process utilizes the National Register of Historic Places criteria (Table 2). After the establishment of period(s) of significance, the analysis-and-evaluation process then compares findings about the site's history and existing conditions to identify which landscape features contribute to the significance of the site, as per the criteria outlined in Table 2. Moreover, the analysis-and-evaluation process identifies which landscape features have sufficient "integrity" to convey the landscape's historical significance. The National Register of Historic Places defines "integrity" as the ability of a resource to convey its significance through intactness of location, design, setting, materials, workmanship, feeling, and association (Andrus, Shrimpton, et al. 2002). Thus, a landscape would possess historic integrity if the characteristics that shaped it during the historic period remain present today in much the same way as they were historically.

⁵ For additional details regarding the methodology of preparing CLRs, see Page, Gilbert & Dolan 1998.

Definition and Categories of NPS Cultural Landscapes A Cultural Landscape is defined as a geographic area, including both cultural and natural resources and the wildlife or domestic animals therein, associated with a historic event, activity, or person, or that exhibit other cultural or aesthetic values. Historic sites: a landscape significant for its association with a historic event activity, or person. (i) Historic designed landscapes: a landscape significant as a design or work of art; was consciously designed and laid out either by a master gardener, landscape architect, or horticulturist to a design principle, or by an owner or other amateur according to a recognized style or tradition; has a historical association with a significant person, trend, or movement in landscape gardening or architecture, or a significant relationship to the theory or practice of landscape architecture. (iii) Historic vernacular landscapes: a landscape whose use, construction, or physical layout reflects endemic traditions, customs, beliefs, or values; expresses cultural values, social behavior, and individual actions over time; is manifested in physical features and materials and their interrelationships, including patterns of spatial organization, land use, circulation, vegetation, structures, and objects. It is a landscape whose physical, biological, and cultural features reflect the customs and everyday lives of people.

subsistence grounds, and ceremonial grounds are included.

Ethnographic landscapes: a landscape containing a variety of natural and cultural resources that associated people define as heritage resources. Examples are contemporary settlements, such as the Martin Luther King, Jr. National Historic Site; New Orleans neighborhoods; the Timbisha Shoshone community at Death Valley; and massive geological formations, such as Devil's Tower. Small plant communities, animals,

Table 1. Definition and Categories of Cultural Landscapes. (Data from Page, Gilbert, and Dolan, 1998)

Based on these findings, Part 2 of the CLR then articulates appropriate preservation strategies for long-term management, while Part 3 acts as a retrospective technical record of all the treatment work. It is necessary to state that this process acts as a *guide* for cultural landscape preservation work in the NPS and is not intended to be a rigid doctrine. Yet it is expected that the basic activities—conducting historical research, documenting existing conditions, defining period(s) of significance, and then assessing the integrity of landscape

characteristics—do form the conceptual backbone of the process. While this process has enabled the much-needed initiation of cultural landscape preservation work at a number of NPS sites, it also has been subjected to some criticism.

Firstly, some critics warn that excessive reliance on codification has threatened to "negate the very idiosyncratic landscape qualities" that define each cultural landscape (Alanen and Melnick 2000, 17). While it is true that, in order to implement any

(iv)

policy, some level of generalization is required, care should be continuously exercised to encourage the diverse and innovative approaches that can arise on a project-by-project basis from the distinct nature of sites. Furthermore, it has been noted that NPS management of cultural landscapes tends to reshape the landscape into a standardized "National Park-scape" (Watt 2001, 55) with visitor centers, picnic tables, and other elements that are designed to comply with national standards and public expectations. Cultural landscape studies afford an opportunity to recognize and, more importantly, halt this process of standardization in an effort to maintain inherent uniqueness.

A second set of problems stems from the application of the National Register's conceptual framework, which attempts to tie historic "signifi-

cance" and "integrity" to a specific historic period, to NPS-initiated cultural landscape studies. Underlying this approach is a crucial assumption that there exists a period or periods sometime in the past when a kind of "golden age" prevailed. The trouble with this assumption is that it suggests that "a line, a date, divides the present from the past" (Howett 2000, 199). An undesirable result of this retrospective approach is a severing of our ties with the immediate past, which is considered insignificant when compared to the more distant "period of significance." Moreover, the process does not allow for changes in the meaning of "the past" with passing time.

Thirdly, concerns have been raised about the application of the National Register concept of "integrity" to cultural landscape studies. The

As defined by the National Historic Preservation Act of 1966 and the National Register criteria, to be eligible for the National Register a cultural landscape must possess the quality of significance in American history, architecture (interpreted in the broadest sense to include landscape architecture and planning), archeology, engineering and culture. To be eligible, a cultural landscape must be shown to be significant for one or more of the following Criteria for Evaluation: A. Associated with events that have made a significant contribution to the broad patterns of our history, or B. Associated with the lives of persons significant in our past, or C. Embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or D. Have yielded, or may be likely to yield, information important in prehistory or history.

Table 2. Criteria for determining significance of cultural landscapes. (Data from Andrus, Shrimpton, et al. 2002)

National Register conception of integrity places immense importance on an extant physical record of the past, at times overshadowing and even negating the presence of wholly intangible resources. Finally, the exclusion of existing usergroups from the cultural landscape documentation and management process raises concerns that it reflects the isolated views of a class of trained experts, rather than the views of the very people whose relationship to the land is being analyzed in the first place. In parks that have existing human settlements, policies have tended to discourage, if not completely remove, the influence of local residents while encouraging visitors, thus demonstrating a very ironical attitude towards human presence (Watt 2001, 82). Moreover, even when visitors are granted status as the dominant user group, they are rarely made active participants in the documentation and management of the park's cultural landscape.

To address some of the above-mentioned criticisms of cultural landscape preservation at federally-owned sites, and reflecting a growing shift in NPS ideology towards greater community participation in the preservation process, the idea of National Heritage Areas (NHAs) was launched during the 1980s. The NHA concept reflects a shift by the federal government towards greater community participation in the preservation process. Based on a grassroots model, heritage areas are large-scale, living cultural landscapes where community residents have come together around a common vision of their shared heritage. The heritage-area concept utilizes a strategy that encourages collaboration

across political and programmatic boundaries on a plan to conserve valued assets in concert with compatible economic and community development (Barrett and Taylor 2007). In the past, the NPS has played an advisory role in the management of NHAs, however this relationship has remained largely unidirectional. Conversely, the NHA model of local collaboration can also provide key opportunities for including users—both residents and tourists—in the management of NPS-controlled cultural landscapes.

Cultural Landscape Preservation by UNESCO

The United Nations Educational, Scientific, and Cultural Organization (UNESCO), an international consortium of approximately two hundred countries, maintains a World Heritage List of sites that possess "outstanding universal value" in a global context, and countries that are signatories to the Convention Concerning the Protection of the World Cultural and Natural Heritage (1972) can nominate sites for inclusion on that list. In December 1992, the World Heritage Committee recognized cultural landscapes as a category of sites within the Convention's Operational Guidelines, and by 2002, thirty World Heritage cultural landscapes had been officially recognized (Fowler 2003). UNESCO has its own categories of cultural landscapes (Table 3).

Despite similarities, certain differences do exist between the NPS and UNESCO categories. The most significant difference is UNESCO's formal acknowledgment of "continuing landscapes" as a legitimate category of cultural landscapes. This policy difference has been necessitated by the

⁶ For more information on National Heritage Areas, see U.S. Department of the Interior, National Park Service, *National Heritage Areas*, available at http://www.nps.gov/history/heritageareas/.

Definition and Categories of World Heritage Cultural Landscapes

Cultural landscapes represent the 'combined works of nature and man' designated in Article 1 of the World Heritage Convention. They are 'illustrative of the evolution of human society and settlement over time, under the influence of the physical constraints and/or opportunities presented by their natural environment and of successive social, economic and cultural forces, both external and internal.'

- (i) A *clearly defined landscape* is one designed and created intentionally by man. This embraces garden and parkland landscapes characteristically constructed for aesthetic, social and recreational reasons which are often (but not always) associated with religious or other monumental buildings and ensembles
- (ii) An organically evolved landscape results from an initial social, economic, administrative, and/or religious imperative and has developed its present form by association with and in response to its natural environment. Such landscapes reflect that process of evolution in their form and component features. They fall into two sub-categories:
 - (a) A relict (or fossil) landscape is one in which an evolutionary process came to an end at some time in the past, either abruptly or over a period. Its significant distinguishing features are, however, still visible in material form.
 - (b) A continuing landscape is one which retains an active social role in contemporary society closely associated with a traditional way of life. It is continuing to evolve while, at the same time, it exhibits significant material evidence of its historic evolution
- (iii) An associative cultural landscape is a landscape with definable powerful, religious, artistic or cultural associations with the natural element rather than material cultural evidence, which may be insignificant or even absent.

Table 3. Definition and Categories of Cultural Landscapes. (Data from Fowler 2003)

diversity of cultural contexts within which the global agency must operate. Unlike most NPS properties, many of the landscapes nominated by UNESCO continue to play a role in contemporary society that compares very closely with their role in traditional ways of life. A few problems have been identified since cultural landscapes were made a part of UNESCO designation process, however. The biggest difficulty has arisen with the stipulation that sites demonstrate "outstanding universal value," a prerequisite for inclusion on

the list. This requirement substantially overlooks the presence, and indeed significance, of multiple perceptions of value and instead tends to assume a uniform view of man and culture (Prothi-Khanna 2004). The second major criticism is based on the lopsided geographical distribution of cultural landscapes on the World Heritage List, a condition which is often taken to represent a Euro-centric predisposition towards tangible, material heritage that is incongruous with the intangible dimension of most cultural landscapes in the East. To address part of this problem, UNESCO endorsed the Nara Document on Authenticity in 1994. Conceived at a conference in Nara, Japan, the document was crucial in recognizing that definitions of the authenticity of heritage resources differ from culture to culture (and even within the same culture), thus making it imperative that heritage properties be considered and judged within the cultural contexts to which they belong, not according to predetermined, universal criteria. Finally, the dramatic (and at times undesirable) alterations that can occur as a result of UNESCO designation drastically affect the existing character of the cultural landscape and its relationship to its inhabitants. Most sites, especially in developing countries, have been found to be seriously ill-equipped for the challenge of reconciling their newfound status as tourist destinations with their residents' traditional ways of life.8 This often leads to conflicts between development needs and conservation concerns. As one of the ways to counter this problem, UNESCO has organized efforts to create a community-based, grassroots program of heritage conservation in the Asia-Pacific region known as Local Effort and Preservation (LEAP).9 In this program, local communities are encouraged to assume active stewardship over heritage resources and to develop them in a sustainable and profitable manner.

In sum, a critical examination of the cultural landscape preservation models employed by the NPS and UNESCO suggests that the way we design our preservation "tools" can strongly influence the way we tend to "package" our heritage. What lessons drawn from these models might be useful for developing a suitable approach to cultural landscape preservation in India?

Cultural Landscape Preservation in India

In the absence of any formal national policy on cultural landscapes in India, UNESCO designation is essentially the chief means by which potential sites can access organized preservation. Yet it would be faulty to assume that this centuries-old civilization has been entirely oblivious to sustaining landscapes through its own practices, traditions, and ways of life. In the pre-colonial era (as indeed in rural society even today), local populations were actively associated with their heritage, worshipping the sacred and using the secular in such a way that all that was considered of value was well lookedafter. If something fell into disuse, this meant that it was no longer valued by society (Menon 1994, 40). An awareness of the myriad ways in which people have appreciated their heritage thus can allow us to reevaluate current prevalent approaches. Accordingly, a brief investigation of endemic notions about time, space, nature, and culture in Indian society may help us explore their bearing on cultural landscape preservation in India. However, it is not intended that these notions be deemed in any way "universal," thereby misrepresenting the very diverse Indian culture as homogenous. With the extreme diversity of religious groups and communities in India, the views expressed here relate primarily to cultural groups affiliated with Hinduism, the majority religion of contemporary India.

⁷ For more information, see UNESCO, *Global Strategy for a Balanced, Representative and Credible World Heritage List* (1994) available online at http://whc.unesco.org/en/globalstrategy/.

⁸ For more information see UNESCO publication, *Managing Tourism at World Heritage Sites*, (2002) ed. A. Pedersen. Available online at http://whc.unesco.org/en/series/1/.

 $^{^9}$ More information on the LEAP program can be found at UNESCO netaid, LEAP (Local Effort and Preservation) (Asia Pacific): Cultural Heritage Preservation through Local Communities, available at http://www.unesco.org/webworld/netaid/clt/leap_apa.html .

Notions of Time

The Indian psyche has perceived time as a cyclic phenomenon since ancient times (Brandon 1965). This is very clearly corroborated by a deep faith in the theory of reincarnation—the cycle of birth, death, and rebirth, the unending chain of construction, destruction, and reconstruction—in Indian mythology and ancient literature (Pandya 2005, 12). However, although cyclic, time is not static; it is helical, evolving continuously. This cyclic view of time contrasts with the linear or historical view of time in most Western cultures and can be traced to a closer connection with biological rhythms of climatic and natural processes in older societies. 10 Lewis Mumford, crediting the mechanical clock to industrialized cultures, says that the clock "dissociated time from human events, and helped create the belief in an independent world of mathematically measurable sequences," where every instant in time becomes unique and, once past, is recognized as distinct from the present and irreplaceable in the future (1934, 15). Conversely, the cyclic view of time places greater faith in the recurrence of events and thus is less susceptible to treating the past as singular, lasting, and immutable. The cyclic viewpoint is corroborated by traditional Indian mythology, art, and sculpture, where chronological or temporal progression is often sacrificed in favor of symbolic relevance.11 An example can be seen in the iconography of representations of Lord Nataraja (Figure 1).



Figure 1. Statue of Nataraja, a classical form of Lord Shiva, is shown here, immersed in a furious dance of destruction. It depicts a dynamic balance between creation (symbolized here by the presence of the drum), destruction (symbolized by the ring of fire and the demon below), and reconstruction (symbolized by the benign open blessing hand gesture). (Photo by author)

Notions of Space

Space and time are the two basic dimensions of the phenomenal world as it is apprehended and understood by the human mind. Since ancient times in India, space has been understood not as a static entity framed by material objects, but rather as something that can be perceived only by movement through it (Pandya 2005, 20). The journey—the process of moving through space—in itself becomes the event. Corridors, thresholds, and circumambulatory passages thus assume great significance in Indian space-making. This

 $^{^{10}}$ See Nandgaonkar (1996) "History and myth in the cultural landscape: A cross-cultural perspective on preservation" for elaboration on the differences in conception of time between eastern and western societies.

¹¹ See Dehejia (1998) "India's Visual Narratives," in *Paradigms of Indian Architecture* for analysis of how time is relegated to a lesser status in historical Buddhist narratives in stone relief, terracotta panels and painted murals.



Figure 2. A newly constructed temple shrine. The otherwise modest "shikhara" atop the deity succeeds in evoking a symbolic attachment to universally revered icons such as Mount Kailash, thereby acquiring paramount cultural significance in the community, despite its apparent lack of aesthetic refinement. (Photo by author)

notion of space extends even to larger areas of land, where the concept is manifested in the proliferation of pilgrimage routes throughout the Indian subcontinent. These pilgrimage circuits tie places of significance together in a system of symbolic order. Divine and heroic narratives that are basic to Hindu textual and oral traditions are stamped on the landscape and can be read and encountered by the pilgrims en route on their journey.

Notions of Nature

Hindus, like most other prehistoric societies, view nature as a symbol of divinity. Throughout Hinduism, we find the assumption that the natural world is pervaded by powers towards whom reverence is obligatory (Kinsley 1995, 55). Accordingly, the most valued cultural landscapes derive their significance from being sacred, not from being exemplary examples of scenic beauty. Recent academic scholarship has proposed that the concept of archetypes can be used as a valuable tool in analyzing cultural landscapes in India (Sinha 2006). An archetype is a generic, idealized model from which similar instances are derived and patterned. How this concept translates into the shaping of cultural landscapes in India can be seen in the presence of some highly revered natural archetypes such as the River Ganga, Bodhi Tree, and Mount Kailash, each of which have found their way into countless manifestations in everyday landscapes over the past centuries. They are valorized in mythology, art, architecture, and literature and sustain themselves by allowing associations to be made with them in contemporary tradition. Thus, a newly constructed, modest roadside temple with a shikhara12 that symbolically refers to the form of Mount Kailash succeeds in making this connection owing to the iconic power that popular symbols enjoy in Indian culture (Figure 2).

Notions of Culture (Human-Made Entities)

Landscapes and other cultural creations (humanmade entities) in the Indian context rarely are deemed significant purely for their physical

 $^{^{12}}$ S*hikhara*, a Sanskrit word meaning summit or crest, is used in architectural vocabulary to denote the towering superstructure above the innermost sanctum in Indian Hindu temples.

elements. Rather, it is the associations that the landscape has with values defined by the culture that are perceived to be significant. Through the passage of time, these intangible associations establish themselves so strongly that the need for extant physical remains may be greatly diminished or even altogether discharged. For example, the city of Banaras in northern India is a cultural landscape that is significant for its deep religious and cultural associations, although its physical fabric has been ever-changing during the 3000 years of its existence (Eck 1999), so much so that it probably has no authenticity or integrity from purely Western historic preservation standards. Intangible forms of heritage are manifested in oral traditions and folklore, indigenous building processes, rituals and symbolic references. Such rituals and signs have the power to create notional realities, at times absolving and overwhelming the obligation of a

material construct or material reality. For example the mere smearing of vermillion powder (used in most holy ceremonies) transforms a roadside rockface into a place of reverence (Figure 3).

Recommendations for the Future of Cultural Landscape Preservation in India

How might endemic notions about time, space, nature, and culture be taken into account in the development of a cultural landscape preservation framework in India? The following recommendations represent key concepts, which in my opinion should inform cultural landscape preservation efforts in India. They are an attempt to adapt global approaches, as exemplified by NPS and UNESCO frameworks discussed in the earlier part of this paper, to the endemic Indian concepts described above.



Figure 3. A child paying his respects at a roadside shrine—an example of how religious symbols transform ordinary, everyday objects into those of reverence and cultural significance. (Photo by author)

Voicing the distinctive Indian attitude towards past time, Nehru said that India is like an "ancient palimpsest," much like the "collage of time" discussed by Lynch, on which "layer upon layer of thought and revery had been inscribed," and where all layers presently coexist to create the complex personality of India (Nehru 1946, 47). In a culture that believes in a cyclic view of time, it seems highly impracticable to use a concept like the U.S. National Register of Historic Places "period(s) of significance" to denote sometime in the "ancient past" for purposes of preservation. In India, features considered to be historically significant change over time. Not only do figures and events acquire fresh stature or fall into disgrace, but entire aspects of the past become newly worth saving or ripe for discarding (Lowenthal 1981, 220). This aspect of Indian culture calls for periodic reassessments of "periods" and "statements" of significance to be incorporated into the cultural landscape preservation process. Such steps also will ensure that the more immediate past, to which we are continuously building new ties and from which we constantly derive new values, is not lost.

In addition to modifying concepts such as "period of significance," the importance of intangible forms of heritage in India (e.g., customs, rituals, folklore, techniques, etc.)—as opposed to only tangible, material objects (e.g., buildings, landscapes, etc.)—necessitates the abandonment of universal criteria of historic "integrity" and "authenticity." As long as the associational ties between our evolving past and the present are sustained, undue importance must not be attached to preserving every surviving material vestige of the past. Assistance can be drawn in this endeavor from the Nara Document on Authenticity mentioned earlier in the paper. Moreover, to ensure that both the above-

mentioned goals are met, it is imperative that organized preservation shifts beyond the realm of a small number of elite and instead engenders wider community participation (Engelhardt 2002, 50). Only an approach based on the active involvement of current users has the potential of sustaining the cultural landscape over time and preventing its transformation into a lifeless, museum-like entity.

Finally, any attempts at cultural landscape preservation in the context of a developing country like India must be closely tied with overall infrastructure development—including (but not limited to) promoting employment, sustaining traditional crafts, and alleviating poverty. The importance of this aspect can be seen in the ongoing conservation of Jaisalmer Fort, Rajasthan, India, where it was realized that, before any steps could be taken to restore the architectural fabric and monumental buildings in the fort, it would be necessary to tie such efforts to upgrades to basic infrastructure facilities. This was done through the Streetscape Revitalization Project, which focused on measures such as cleaning residential facades and installing drains and lavatories in all streets and houses. These efforts were instrumental in winning local community support for the overall Fort Conservation Project.

Extending these broad recommendations to a methodological framework, I propose a multi-step, grassroots approach, beginning with the establishment of cultural landscape preservation as one of the obligatory duties of India's urban and rural municipal corporations (the local bodies entrusted with providing basic infrastructure facilities such as drinking water and roads). This will ensure that development and conservation go hand-in-hand right from the outset. An expert group of conser-

vation professionals may be instituted to provide technical and advisory support. This should be followed by engendering a stewardship ethic amongst the local community and the subsequent identification of pilot projects within the cultural landscape. Impact-assessment studies should predate the initiation of any actual preservation efforts. Working out a financial plan should be the next step, translating community aspirations and research results into an economically feasible financial plan and ensuring that the project(s) can be carried out with self-generated funds and minimum reliance on government sources. This generic framework draws from and reconfigures various cultural landscape preservation approaches developed by the U.S. NPS and UNESCO, and it can act as a guideline for the much-needed initiation of cultural landscape preservation in India.

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References

- Alanen, Arnold R., and Robert Z. Melnick. 2000. Why cultural landscape preservation? In *Preserving cultural landscapes in America*, ed. Arnold R. Alanen and Robert Melnick, 1-21. Baltimore: Johns Hopkins University Press.
- ----, eds. 2000a. Preserving cultural landscapes in America. Baltimore: Johns Hopkins University Press.
- Andrus, Patrick W., and Rebecca H. Shrimpton. 2002. *How to Apply the National Register Criteria for Evaluation*. National Register Bulletin 15. Washington, D.C.: U.S. Department of the Interior, National Park Service. http://www.nps.gov/history/nr/publications/bulletins/nrb15/.
- Barrett, Brenda, and Michael Taylor. 2007. Three models for managing living landscapes. CRM Journal 4 (2): 50-65.
- Brandon, S. G. F. 1965. History, time, and deity: A historical and comparative study of the conception of time in religious thought and practice. Manchester and New York: Manchester University Press.
- Cook, Robert E. 1996. Is landscape preservation an oxymoron? George Wright Forum 13 (1): 42-53.
- Cosgrove, Denis E. 1984. Social formation and symbolic landscape. London: Croom Helm.
- Creswell, T. 2003. Landscape and the obliteration of practice. In *Handbook of Cultural Geography*, ed. Kay Anderson, Mona Damosh, Steve Pile, and Nigel Thrift. London and Thousand Oaks, Calif.: Sage.
- Das, V. 1989. Difference and divisions as designs for life. In *Contemporary Indian tradition: Voices on culture, nature, and the challenge of change*, ed. Carla M. Boden. Washington, D.C.: Smithsonian Institution Press.
- Dehejia, V. 1998. India's visual narratives: The dominance of space over time. In *Paradigms of Indian architecture: Space and time in representation and design*, ed. G. H. R. Tillotson. Surrey, U.K.: Curzon Press.
- Eck, Diana L. 1999. Banaras: City of light. New York: Columbia University Press.
- Engelhardt, Richard A. 2002. Evolving concepts of world heritage: The need for new management strategies. In *A case for national policy for heritage conservation and management*, ed. R. Tandon. New Delhi: INTACH.
- Fowler, Peter. 2003. World heritage cultural landscapes: 1992-2002: A review and prospect. In *Cultural landscapes: The challenges of conservation*, ed. Paolo Ceccarelli and Mechtild Rössler, 16-32. World Heritage Paper Series, no. 7. Paris: UNESCO World Heritage Centre. http://whc.unesco.org/en/series/7.
- Groth, P. and Todd W. Bressi, eds. 1997. Frameworks for Cultural Landscape Study. In *Understanding ordinary landscapes*. 1-21. London: Yale University Press.
- Howett, Catherine. 2000. Integrity as a value in cultural landscape preservation. In *Preserving cultural landscapes in America*, ed. Arnold R. Alanen and Robert Melnick, 186-207. Baltimore: Johns Hopkins University Press.
- Jackson, J. B. 1984. Discovering the vernacular landscape. New Haven: Yale University Press.
- Jackson, J. B. 1997. Sterile Restorations Cannot Replace a Sense of the Stream of Time. In Landscape in sight: Looking at America, ed. Helen Horowitz, 366-368. London: Yale University Press.
- Keith, Michael, and Steve Pile. 1993. The politics of place. In *Place and the politics of identity*, ed. Michael Keith and Steve Pile. London and New York: Routledge.

- King, A. 1997. The politics of vision. In *Understanding ordinary landscapes*, ed. Paul Groth and Todd W. Bressi, 134-144. London: Yale University Press.
- Kinsley, David R. 1995. *Ecology and religion: Ecological spirituality in a cross-cultural perspective*. Englewood Cliffs, N.J.: Prentice Hall.
- Lowenthal, David, and Marcus Binney. 1981. Dilemmas of preservation. In *Our past before us: Why do we save it?*, ed. David Lowenthal and Marcus Binney. London: T. Smith.
- Lynch, Kevin. 1972. What time is this place? Cambridge, Mass.: MIT Press.
- Meinig, D. W. 1979. The beholding eye: Ten versions of the same scene. In *The interpretation of ordinary landscapes: Geographical essays*, ed. D. W. Meinig, 35-50. New York: Oxford University Press.
- Menon, A. G. K. 1994. Rethinking the Venice Charter: The Indian experience. South Asian Studies 10: 40.
- Minott, A. S. C. 2003. Listening to local voices in historic preservation and heritage tourism: The case of Emancipation Square, Spanish Town Historic District, Jamaica. Ph.D. diss., City University of New York.
- Mumford, Lewis. 1934. Technics and civilization. New York: Harcourt, Brace.
- Nandgaonkar, M. 1996. History & myth in the cultural landscape: A cross-cultural perspective on preservation. Master's thesis, University of Texas at Arlington.
- Nehru, Jawaharlal. 1946. The discovery of India. New York: John Day Co.
- Page, Robert, Cathy Gilbert, and Susan Dolan. 1998. *A guide to cultural landscape reports: Contents, process and techniques*. Washington, D.C.: U.S. Department of the Interior, National Park Service. http://www.cr.nps.gov/history/online_books/nps/cl_reports.pdf
- Pandya, Y. 2005. Concepts of space in traditional Indian architecture. Ahmedabad, India: Mapin; Hidden Meadows, N.J.: Grantha Corp.
- Prothi-Khanna, N. 2004. Conflicting perceptions. Seminar 542 (October). http://www.india-seminar.com/.
- Sauer, Carl. 1925. The morphology of landscape. University of California Publications in Geography 2 (2): 19-54.
- Sinha, A. 2006. Landscapes in India: Forms and meanings. Boulder: University Press of Colorado.
- Tomlan, Michael A., ed. 1998. *Preservation of what, for whom? A critical look at historical significance*. Ithaca, N.Y. National Council for Preservation Education.
- Tuan, Yi Fu. 1979. Thought and landscape: The eye and the mind's eye. In *The interpretation of ordinary landscapes: Geographical essays*, ed. D. W. Meinig, 89-102. New York: Oxford University Press.
- Wilson, Chris, and Paul Erling Groth. 2003. The polphony of cultural landscape study: An introduction. In *Everyday America: Cultural landscape studies after J.B. Jackson*, ed. Chris Wilson and Paul Groth, 1-22. Berkeley: University of California Press.
- Watt, Laura A. 2001. Managing cultural landscapes: Reconciling local preservation and institutional ideology in the National Park Service. Ph.D. diss., University of California-Berkeley.

Evaluating and Preserving the Intangible Value of Landscape: Exploring the Glastonbury Festival of Contemporary Performing Arts

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Abstract

What type of preservation can there be when the values of a landscape are not evident, but instead are created through human experience and retained in memory? When the cultural and historic value of a place is enhanced through human interaction *in* the landscape, how can one best identify the intangibles that accumulate in that place and preserve them for future generations? This paper explores such challenges at the site of the Glastonbury Festival of Contemporary Performing Arts, a landscape rich in cultural values, rooted in legends, and enhanced by contemporary ritual and collective memory. To fully capture the legacy of this unique place, management strategies and techniques are needed. The boundaries of preservation must extend beyond the tangible landscape to incorporate the ephemeral, intangible qualities revealed through ethnographic research.

Key Words

Preservation, cultural landscape, intangible value, collective memory

Introduction

There are many types of events that touch only briefly the surface of a landscape, but then become forever part of its history and identity. As we interact with our surroundings, we enhance the human value of a place by adding to its story. Often, these interactions leave a permanent or enduring physical record of human presence in the landscape. However, even when such evidence is lacking, people nonetheless may derive meaning and identity from their surroundings through the associations they bring to a site. Thus, ephemeral or transitory human occupancy may create lasting, intangible effects on landscapes that serve to define the spaces. While preservationists have methods for many of the material challenges involved in historic landscape preservation, additional tactics are needed to address the challenge of protecting important ephemeral attributes and intangible qualities.

Worthy Farm, the site of the Glastonbury Festival of Contemporary Performing Arts (GFCPA), in the county of Somerset, England, is a prime example of the need to expand beyond the boundaries of conventional landscape preservation's

primary focus on material, tangible features. The farm landscape where the festival occurs is a context where rich history is woven into the cultural values of contemporary activity. The landscape of Worthy Farm presents a challenge to identify, extract, evaluate, and perpetuate the intangible values that are integrated into this setting during the annual festival. The surrounding landscape has many characteristics of an internationally significant cultural landscape, and the festival that takes place there contributes significant intangible values. Yet the continuity of these ephemeral attributes and their setting are threatened by a management system lacking in vision. Preserving the values and heritage of this event requires examination of the bonds between the land, people, and event management in order to sustain these precarious relationships. To capture the inseparable connection of identity and memory between humans and the landscape, historic landscape preservation must stretch beyond its current fixation with the physical to include analyses of the formation of social spaces and how inhabitants interpret them.

Intangible Associations in a Cultural Landscape

The United Nations Educational, Scientific and Cultural Organization (UNESCO) and the International Council on Monuments & Sites (ICOMOS) are recognized international organizations working to preserve outstanding landscapes throughout the world. In recent years these organizations increasingly have sought to move beyond a Eurocentric focus and develop an understanding of cultural landscapes that stresses the importance of associative and intangible cultural qualities rather than material qualities. UNESCO has defined

cultural landscapes as properties that represent "the combined works of nature and of man," which also illustrate "the evolution of human society and settlement over time, under the influence of the physical constraints and/or opportunities presented by their natural environment and of successive social, economic and cultural forces, both external and internal" (UNESCO 2008, 14). UNESCO has further defined cultural landscapes according to three categories: (1) "clearly defined landscape designed and created intentionally by man;" (2) "organically evolved landscape" and (3) "associative cultural landscape" (UNESCO 2008, 96). The latter category specifically applies to landscapes that are significant "by virtue of the powerful religious, artistic or cultural associations of the natural element rather than material cultural evidence, which may be insignificant or even absent" (UNESCO 2008, 96). This definition clearly emphasizes a landscape's intangible cultural values over its material qualities.

In the United Kingdom, ICOMOS UK has adopted an approach to recognizing cultural qualities in landscapes that closely parallels the framework developed by UNESCO. The organization defines cultural landscapes as "particular landscapes that reflect interaction over time, between people and their surroundings," and it specifically recognizes "associative landscapes," which are defined as "landscapes associated with historic people or events, irrespective of other cultural qualities, and where they [sic] may be little material evidence of this association" (ICOMOS UK 2004, 3). Like the UNSECO category of associative cultural landscape, this definition is especially adaptable to the concept of intangible values. According to ICOMOS UK, some of these values may be manifested in landscapes that possess qualities



Figure 1. The Glastonbury Torr, a 500-foot mound described as a natural topographic feature with a maze of seven terraces built into its banks. (Photo by G. W. Wade and J. H. Wade, 1907)

including: (1) "Associations with myth, folklore, historical events or traditions;" (2) "Spiritual and/or religious associations, sometimes connected with remarkable topography;" (3) "Expression of aesthetic ideas/ideals/design skills;" (4) "Association with works of art, literary, pictorial or musical, that enhance appreciation and understanding of the landscape;" and (5) "Association with individual or group memory or remembrance" (ICOMOS UK 2004, 4).

The UNESCO and ICOMOS UK concepts of associative cultural landscapes acknowledge the significant non-material relationships between humans and landscapes. In the realm of landscape preservation, the importance of such qualities was recognized twenty-three years earlier in the Florence Charter for Historic Gardens, which was drafted by the ICOMOS-IFLA International Committee for Historic Gardens on 21 May 1981. This document recognized that historic gardens often express "the cosmic significance of an idealized image of the world," and it likewise defined a historic site as "a specific landscape with a memo-

rable act, as, for example, a major historic event; a well-known myth; an epic combat; or the subject of a famous picture" (ICOMOS 1982). This was a noteworthy acknowledgement that not all valuable landscape features are constructed or designed. Some are enacted and remembered.

Glastonbury Festival of Contemporary Performing Arts as an Associative Cultural Landscape

The landscape evaluated in this study exhibits several of the qualities of an associative cultural landscape as described by ICOMOS/UNESCO, drawing its greatest values from the intangible identity imbued by generations of ritual and pilgrimage. In 1970, farmer Michael Eavis organized a small music festival on Worthy Farm, his dairy farm located near a legendary national landmark, Glastonbury. His first gathering of 2,500 people began with music, art, free expression and free milk. In the thirty-eight years since the event has grown to become the Glastonbury Festival of Contemporary Performing Arts (GFCPA), an annual affair attracting hundreds of thousands of international visitors and performers, raising millions of pounds for local and international charities, and establishing itself as a cultural icon and one of the top music festivals in the world (Knight, 2006).

The region has gained much in associative value, amassed from its rich history and annual stream of visitors. The adjacent town of Glastonbury and landmark Glastonbury Torr (Figure 1) was the destination of legendary pilgrimages by King Arthur and Joseph of Arimathea (McKay 2000, 125-6). Numerous sites in the area are protected by

England's National Trust (Figure 2). This ancient history is part of its allure. This convergence of the spiritual associations with the Torr, the links to legendary figures, the sacred geography, and the difficulty of accessibility, create a palpable spiritual magnetism (Scarre 2001, 12). Today's festival participants reenact the ritual of the journey to Glastonbury, ebbing and flowing from the site in a rhythm and momentum of their own as they return year after year (Aubrey 2005, 146).

An additional intangible aspect is the cachet the festival has garnered with its multitude of highly renowned music and arts performances—it is a highly coveted venue. "Glastonbury stood, still stands, for everything bands wanted to do. It was the cool festival to play, the only one left standing, and playing on the Pyramid Stage was the absolute pinnacle" (Aubrey 2005, 92). Participants build a memorable relationship with the land and the festival events. Their experiences and "collective memory materialize[s] in the landscape" (Sheldrake 2001, 16), leaving an indelible impression in the minds of participants. As they share the same experiences together in a common setting, their impressions meld together into a series of memories and recollections of the landscape. While people are forming memories of time and place, their impact on the land is just as significant—even though it may be just as intangible. Communally, their accounts of events and the stories they recall become integrated into the history and identity of the landscape (Burgin 1996, 36).

At Worthy Farm, the ancient meets the modern and they converge, creating a space for social exchange with the characteristics of a cultural associative landscape (Figures 3 and 4). Each of these elements contributes to the individuality and valu-



Figure 2. Summit of Glastonbury Torr, a pilgrimage site managed by England's National Trust. (Photo by Jim Champion, 2006)

able identity of the GFCPA. Intangible components and festival participants have combined in a special place and time to create a cultural ritual enjoyed by thousands and recognized by many more. They are the foundation for what the festival was, what it is, and will help determine what it will become.

These intangible values are unseen by the eye but felt by generations. They are components of a nation's heritage. These values may not be manifested in physical form, but they become intangible parts of the landscape. Yet, without the proper vessel for sharing these values or a venue for their future, these intangible attributes run the



Figure 3. Worthy Farm, Somerset County, England pictured as a tranquil dairy farm awaiting the summer crowds. This pastoral canvas, contrasted with Figure 4, illustrates the ephemeral nature of a cultural flux that disappears as quickly as it appears. (Photo by Nigel Freeman, 2005)

risk of fading into the past. Each year, the growing number of festival attendees and associated logistical complications threaten both the continuation of this summer ritual and the survival of Worthy Farm itself. Without an appropriate plan of preservation, the festival could leave the hills of Worthy Farm, to linger only in the memories of those who experienced it. Opportunities for cultural expression, philanthropy, age-old ritual and national identity may be lost if no efforts are undertaken to capture the residue of those memories. If the festival moved to a different site, its essence would be lost as well. A replication elsewhere would severely lack the foundation of time and culture accumulated at Worthy Farm as "any activity developed over time engenders a space, and can only attain practical 'reality' or concrete existence within that space" (Lefebvre 1991, 115). A proper solution must sustain the farm, festival, and the intangibles they share.

Preservation Actions

The survey and analysis of intangible assets for a historic landscape challenge preservation techniques aimed primarily at the treatment of physical landscape. Preservation techniques that focus on the physical characteristics of a landscape, such as the treatment approaches outlined in the U.S. Secretary of the Interior's for the Treatment of Historic Properties, may prove helpful in preserving some physical aspects of Worthy Farm's cultural value. However, a preservation approach that addresses only tangible resources cannot fully address or sustain the richness of meanings and associations that are part of the site's role as a contemporary place of pilgrimage, ritual, and legend. Intangible attributes are not physical attributes to be rehabilitated or reconstructed. Nor are they visible designs to restore or emulate. Intangible elements create identity and character of place primarily through the beliefs, memories, and ideas of inhabitants (Figure 5). Conventional preservation tactics must be stretched and modified because the conservation efforts at Worthy Farm should address both the physical landscape and these intangible values. Alternative methodologies are needed for sustainable management and interpretation.

Preservation of intangible values at Worthy Farm begins by interpreting information gathered from the landscape's greatest resource—its inhabitants. "Involvement of associated people and communities in the identification of cultural landscapes, and the description of their values, is fundamental to an effective process for both the short- and the long-term management of these places" (Mitchell and Buggey 2000, 44). Conservation of both the legendary Glastonbury Festival of Contemporary Performing Arts and its site, Worthy Farm, must be

undertaken in tandem, and the central approach must address the interactions between human experience, memory, and place. First, information should be gathered from historic texts, oral accounts, existing publications and participant surveys to uncover the multiple resources of the site. Second, the compilation of such data into an accessible archive would help to centralize and store the festival's history. Finally, to ensure the survival of the festival, reorganization of the festival structure and land ownership should be implemented. Such reorganization could help alleviate the threat of the festival terminating because of the land owner's discretion or personal circumstances. Specific techniques and measures to accomplish these objectives are discussed below.

Survey

As a first step, an extensive survey of all available information on the history of the area and festival should be collected including maps, deeds, historic documents, photographs, legends and written accounts of the area myths. This research should follow established methodologies for documenting a cultural landscape's character-defining features, origins and subsequent development, regional and national context, and associations with important persons or events (Robinson 2005, 6). Such documentation creates the context of the site and establishes a foundation for exploring the "magic of Glastonbury." While this research of the historic setting and context



Figure 4. Worthy Farm, showing thousands of attendees and the Pyramid Stage during the GFCPA 2005. (Photo by author)



Figure 5. Festival attendees fly their flags illustrating a gathering of many nations sharing space and experience. Preservation of the cultural landscape at Worthy Farm depends not only on maintaining its tangible attributes, but also on acknowledging and perpetuating these kinds of ephemeral experiences. (Photo by author, 2005)

can be undertaken in a conventional manner, not all cultural assets of the site may be physically present. These may need to be captured through other means that are more adept at capturing the cultural landscape's ephemeral qualities.

Other resources should be added to the historical records of the festival, including oral and written histories of those who have experienced the GFCPA, as well as film and sound recordings of festival performances. One recent publication, *Glastonbury: An Oral History of the Music, Mud & Magic* (Aubrey and Shearlaw 2005), is a collection of oral histories gathered from festival organizers and performers. It assembles many stories of the production and logistics of the festival during its thirty-five year history. This book is an excellent example of a compilation of GFCPA experiences, but it only represents the perspectives of festival

producers. A similar resource could be created from the perspectives of festival attendees. This knowledge would also help preservationists understand the values, experiences, and memories of the people experiencing the festival in its historic landscape.

Recordings and films of the GFCPA performances are another significant resource. They represent the artistic presence at the GFCPA and demonstrate changing musical styles and trends. While the existing Glastonbury Festivals, Ltd., and the British Broadcasting Corporation produce films, recordings, and newspaper articles from each year's event, they are not located in a central depository. To assemble a chronological sample of performances and works of artists who played GFCPA would be to capture the essence of the festival throughout time.

Much of the information about the site and its history resides within its greatest resource—people. Thus, it will be necessary to gather evidence from these individuals rather than seeking material evidence from the site. "Places embody their history, and it is [the inhabitants] who have been, and will be, their stewards ... They know [places] from close observation as well as from cultural transmittal from one generation to the next" (Mitchell and Buggey 2000, 44). The knowledge, memories, and values associated with those who know and create the festival should be extracted through surveys. Engaging past and present festival attendees, organizers, and performers through Internet technology and festival questionnaires could collect data on festival participants' demographics, motives, sense of place, opinions, preconceptions, and experiences. All of this data may help festival organizers better understand the attendees, their festival experiences and what they consider significant. Understanding the relationship between the festival and those who know it best can illuminate this cultural experience from the inside and help preservationists focus on the most valued assets of the festival and the site.

Reveal

The actions suggested above could help capture the essence of the festival from the perspective of the people who made it what it is today. However, additional measures are needed to reveal that essence, and to translate it into a valuable resource capable of providing entertainment, historical knowledge and useful suggestions for the festival's future. Hence, another step in conserving the knowledge and history of the site should be to gather and organize all of the relevant data in one geographically centralized archive. This archive

would provide a comprehensive learning resource not only for festival organizers and attendees, but also for anyone interested in the festival culture that has developed at Worthy Farm. An accessible archive at future festivals, such as a festival history exhibit or interpretive center, would provide the opportunity to witness the decades of preceding festivals, learn the Glastonbury legacy, and contribute one's own interpretation of the event.

New forms of education, interpretation, appreciation, and entertainment at the festival and its setting can yield a better understanding of the site's history and the evolving relationship between the people and the landscape. These may include presentations of archived performances, or opportunities for participants to share their personal stories in a Glastonbury experience database. Such measures would create vehicles for festivalgoers to ponder and understand the festival's relationship to the land, themselves, and a nation's history. From this reflection, a greater appreciation of the festival and its roots could be gained and communicated throughout the festival's community. Armed with this awareness, the desire to promote sustainability for the festival may be more readily achieved.

Another positive action that could help reveal the cultural significance of the GFCPA and its land-scape—as well as provide additional support for their protection—would be national or international heritage listing of the Worthy Farm. When weighed against the aforementioned ICOMOS/UNESCO cultural landscape criteria, the cultural associations that have accumulated at the farm make it a place worthy of such designation. Also, with *The English Heritage* reorganizing its listing system into one condensed inventory of heritage

properties that includes both buildings and landscapes (English Heritage 2007), Worthy Farm may be an exceptional candidate for designation as a heritage resource at the national level. Official designation, combined with the interpretive and educational activities mentioned above, would help reveal the site's evolving cultural significance in collective memory.

Reorganization

Although it is necessary to research and reveal the full breadth of cultural values—both tangible and intangible—that have accrued at Worthy Farm, these activities alone will not be enough to perpetuate this unique landscape's life in historical and contemporary culture. In addition, a change in the structure of the festival site's ownership, management, and status could assist in protecting its future. The GFCPA is currently subject to the desires and energies of the landowner, a situation with an uncertain outlook. Michael Eavis and his family, the creators of this festival, have had a series of doubts about the coming years of the GFCPA. With some changes to the current festival arrangement, a more certain outcome could be established.

Because the site of Worthy Farm is integral to the GFCPA, it should remain as the festival setting. The Eavis family is also integral to both the festival and the land, and therefore the family should maintain control as the visionaries behind the event. However, the scale, cost, and logistics of the festival may have outgrown the capabilities of this single family. Thus, it may be beneficial to relieve the Eavis family of sole responsibility for maintaining the GFCPA and safeguarding its future. With most of the festival proceeds coming

to the farm and then redistributed to charities, it is amazing that Eavis is quoted in 2004 as still having "a million-pound overdraft on [Worthy Farm]" (Aubrey 2005, 273). While it is important to him to ensure that charitable donations are substantial, failure to secure the financial future of the farm could one day halt those contributions entirely.

Establishing a GFCPA Trust to acquire Worthy Farm could be a beneficial solution. With a portion of profits from the festival designated to an acquisition fund, Worthy Farm could be purchased from the Eavis family and become the property of a trust. The trust would then be managed by a board, chaired by Eavis, and the family could continue to use the land as a dairy farm during the year. This would allow the Eavis family to maintain a primary role in the management of the festival and farm, while also attaining the financial security necessary to sustain charitable income from the festival for years to come. Understanding that the festival is an ever-changing event is essential to its success. However, a more structured management organization, such as a nonprofit trust, could fulfill a shared vision of sustaining the festival into the future with respect to its past.

The suggestions described above provide a framework for conserving the GFCPA's two essential components—the site and the people's history. With these two elements intact, the festival will fare a greater chance of surviving the decades to come. If no attempt is made to record these values and preserve the site of the festival, the possible loss of the GFCPA will be mourned by many. It is important to acknowledge the benefits that the GFCPA phenomenon brings to contemporary culture and to the land that supports it. A passive approach

to conservation of this valuable resource would be an opportunity missed. However, the positive measures discussed above could help protect the future of a cultural icon and the landscape in which it resides. With the implementation of these conservation actions, the GFCPA may survive the years to come.

Challenging Boundaries

Using established preservation protocols have proven useful in recognizing the cultural significance of landscapes, particularly with respect to their tangible assets. Certainly, landscape preservation will necessarily depend upon the careful execution of historical research, existing conditions inventory, site analysis and evaluation of historical significance, development of a cultural landscape preservation and treatment plan, development of a management plan and philosophy, and the development of a maintenance strategy and preparation of appropriate treatment records (Birnbaum 1994). However, the full amalgamation of values at complex landscapes like Worthy Farm may be better illuminated by incorporating into the preservation process an ethnographic approach that extracts data about intangible human values and associations. Surveyed data of the festival and land may not be easily quantified, and the methods utilized may not be currently practiced in a landscape conservation context. Yet these techniques will help preservationists to better understand the festival's associated values and expand preservation practices to include analyses of the intangible values of landscapes.

References

- Aubrey, Crispin and John Shearlaw. 2005. Glastonbury: An oral history of the music, mud & magic. London: Edbury Press.
- Birnbaum, Charles A. 1994. *Protecting cultural landscapes: Planning, treatment and management of historic landscapes.* Preservation Briefs 36. Washington, D.C.: U.S. Department of the Interior, National Park Service.
- Birnbaum, Charles A., with Christine Capella Peters, eds. 1996. The Secretary of the Interior's standards for the treatment of historic properties with guidelines for the treatment of cultural landscapes. Washington, D.C.: U.S. Department of the Interior, National Park Service.
- Burgin, Victor. 1996. In / different spaces: Place and memory in visual culture. Berkeley: University of California Press.
- English Heritage. 2007. Heritage protection reform—draft heritage protection bill. http://amaxus.english-heritage.org.uk.
- Infoman. 2006. Interview with author, 23 August. Glastonbury Festivals, Ltd.
- International Council on Monuments and Sites UK (ICOMOS UK). 2004. *Cultural qualities in cultural landscapes*. London: ICOMOS UK.
- International Council on Monuments and Sites (ICOMOS). 1982. *Historic gardens (the Florence charter)*. Paris, France: ICOMOS.
- Knight, Tom. 2006. The top five festivals in the world. http://www.myvillage.com/pages/bars&music-music-festivals-glaston-bury.htm.
- LeFebvre, Henri. 1991. The production of space. Trans. Donald Nicholson-Smith. Oxford, U.K.: Blackwell.
- McKay, George. 2000. Glastonbury: A very English fair. London: Victor Gollancz.
- Mitchell, Nora, and Susan Buggey. 2000. Protected landscapes and cultural landscapes: Taking advantage of diverse approaches. *George Wright Forum* 17 (1): 35-46.
- Robinson, Judith Helm, Noel D. Vernon, and Catherine C. Lavoie. 2005. *Historic American Landscapes Survey guidelines for historical reports*. Washington, D.C.: U.S. Department of the Interior, National Park Service.
- Scarre, Christopher. 2001. Pilgrimage and place in neolithic Western Europe. In *Holy ground: Theoretical issues relating to the landscape and material culture of ritual space*. BAR International Series 956. Oxford, U.K.: Archaeopress.
- Sheldrake, Philip. 2001. Spaces for the sacred: Place, memory and identity. Baltimore: Johns Hopkins University Press.
- United Nations Educational, Scientific and Cultural Organization (UNESCO), Intergovernmental Committee for the Protection of the World Cultural and Natural Heritage. 2008. *Operational guidelines for the implementation of the world heritage convention*. Paris, France: UNESCO World Heritage Centre.

Ethnographic Trail Systems as Large-Scale Cultural Landscapes: Preservation and Management Issues

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Abstract

Native American belief systems do not distinguish geographic boundaries for revered landscapes, and the appropriate scale at which to assess ethnographic landscapes may not be readily apparent, as they range greatly from small scale to large. The cultural landscape associated with the Xam Kwatcan trail in California, Arizona and Nevada is 160 miles in length. It incorporates extant trails, associated ceremonial sites, and highly revered geographic places. This vast size raises management concerns, but Native American cultural perspectives can be clearly described and taken into account under relevant federal laws (i.e., Section 106 of the National Historic Preservation Act) using ethnographic interviews. Landscape scale is a useful construct in understanding that a place may be simultaneously significant on several scales.

Key Words

Ethnographic landscapes, Native American trails, regional-scale landscapes, southwestern United States

Introduction

It is well known that Native American ethnographic landscapes can encompass relatively large geographic expanses (Hardesty 2000; Parker and King 1992). Sacred mountains, such as Mt. Shasta in California, San Francisco Peak in Arizona, and Devils Tower in Wyoming, are examples. What is less widely appreciated is that Native American belief systems often not only refrain from delineating geographic boundaries with respect to specific revered landforms, such as mountains, but also insist on a critical interconnection among what might otherwise be considered separate landscapes. Boundary definition can be problematic for all types of cultural landscapes, but this problem can seem even more daunting when specific locations such as mountain peaks, intermontane basins, river valleys, and residential areas are inextricably interconnected through a complex belief system. In the case of Native American ethnographic landscapes, song cycles and other sacred texts often weave huge geographies together to form an interconnected whole—a whole seen by modern tribes as critical to their cultural continuity. Because of these widespread interconnections, scales for ethnographic landscape assessments can range from the relatively local to the regional and trans-regional. As a result, the appropriate scale of assessment may not be readily

apparent to non-native resource management agencies or cultural resource professionals who are not trained specialists.

This paper focuses on a large-scale regional cultural landscape associated with a trail system in the arid southwestern United States. Trails of cultural significance to Native Americans in this region range from relatively short ceremonial pathways (Hedges and Hamann 1992; Van Vlack and Stoffle 2006) to trans-regional trails that are closely tied to epic accounts of tribal history, tribal identity, and cultural continuity. A well-known example of a regional trail system is the Chacoan Road network (Hardesty 2000). Lesser-known examples, but equally daunting in scale, are the Salt Song Trail of the Paiute and Chemehuevi tribes and the Xam Kwatcan trail system of the Quechan Tribe. The Salt Song Trail traverses southwestern Utah, southern Nevada and much of southern California. The "Salt Song" tells of the trail and its surrounding landscape:

It's telling about different landmarks, different mountains, the beauty of this mountain, what it stands for, what medicines are found in that mountain. The Salt Song tells all of that. If you understood it, you'd be a scholar (Eddy 2004).

The *Xam Kwatcan* trail system, the primary focus of this paper, is 160 miles or more in length, encompasses portions of three states (California, Arizona, and Nevada), and traverses the traditional territory of multiple Native American tribes. It incorporates extant trails still visible on the desert surface, associated ceremonial sites, and elements of the natural landscape, including highly revered geographic places. A component of this trail system is currently a focus of legal action under the North American Free Trade Agreement (NAFTA),

which challenges the impact of a large open-pit mine on such a vast landscape.

The present paper concludes that when adequate ethnographic interviews have been undertaken, Native American cultural perspectives can be clearly described and taken into account under the U.S. National Historic Preservation Act (NHPA).

As defined by the National Park Service, an ethnographic landscape is an area containing a variety of natural and cultural resources, including plant and animal communities that associated people define as heritage resources (USDI, NPS-28 1998). Further, the NHPA defines a traditional cultural property (TCP) as one that is eligible for inclusion in the National Register of Historic Places (National Register) because of its association with cultural practices or beliefs of a living community that are (a) rooted in that community's history, and (b) important in maintaining the continuing cultural identity of the community (USDI, NPS, NRB 1998). By these definitions, the Xam Kwatcan trail system can be considered a significant ethnographic landscape and a traditional cultural property. Beyond these definitions, what about its scale?

The concept of landscape scale must include the understanding that a specific ethnographic landscape may be significant because it operates simultaneously on several scales – local, regional, and trans-regional. "Region" is a tricky word that may connote a variety of geographic scales, depending on the context. In this paper, I use the term "regional-scale ethnographic landscape" to denote an area that has geographic unity in terms of its natural and cultural environment and corresponds to a verifiable ethnographic construct. While a local-scale landscape might entail a particular valley or mountain range and vary in

size up to a few hundred square miles, a regionalscale landscape might encompass several mountain ranges and valleys and range up to an area of a few thousand square miles.

The Xam Kwatcan Trail System and the Trail of Dreams

Ethnographically, the Native American tribes who occupied most of western Arizona and southeastern California were speakers of related languages of the Yuman family. (Figure 1) The lowland Yuman tribes, including the Quechan, Mojave, Kamia, Cocopah, Halchidhoma, and Maricopa shared many cultural elements, including mythic traditions, cosmology, and religion. They strongly resisted missionization and continued to practice their traditional life ways through the mid-nineteenth century.

The regional environment was strongly dichotomous—the hyper-arid Sonora desert, crossed by the "linear oasis" of the Colorado River (Stone 1991). Structured by this environment, the economy was based on floodplain agriculture, fishing, and harvesting of wild plant foods. For most lowland tribes, hunting was decidedly a secondary subsistence activity. These groups traveled widely across the desert for purposes of social visitation, religious pilgrimages, trade, alliance building, and warfare (Altschul and Ezzo 1994; Forbes 1965; Forde 1931; Kroeber 1925). The construction of a regional trail system was a key component of this cultural system (Baksh 1997; Cleland and Apple 2003; Johnson 1985, 2001; Rogers 1936; Von Werlhof 1987).

The regional trail system plays an important role in the origin legends and the religious practice of the Yuman peoples. According to Quechan cultural tradition:

In the beginning ... [the Creator] Kwikumat ... created real people. ... The several Yuman tribes all descended from the top of Avikwame[Spirit Mountain near Laughlin, Nevada] and spread to their respective territories. The Quechan, however, took a special trail called xam kwatcán ('another going down'). As a result, the Quechan adopted their tribal name, which is a form of the word kwatcán (Forbes 1965, 3-4).

Thus, contemporary tribal identity is directly tied to the *Xam Kwatcan* trail.

For the lowland Yuman groups, dreaming is considered the primary road to spiritual knowledge and wisdom. Dreams are acquired during sleep, but are interpreted via mythological narratives. It is noteworthy that dreaming is also directly tied in with the regional trail system. A contemporary Quechan put it this way:

They [Quechan] were taught that dreaming enabled them to have direct contact with various supernatural beings in order to gain advice and teaching on how to solve the problems of the living. While dreaming, their souls returned [following trails] to the time of creation to learn. ... So the mountains along the Colorado River region are highly significant in regional Native American cultural and ethnic identity. Spiritual activities and events are deeply associated with numerous intaglios, petroglyphs, trails, lithic scatters, and cleared circles present along the Colorado River and surrounding hills (Cachora 1994, 14).

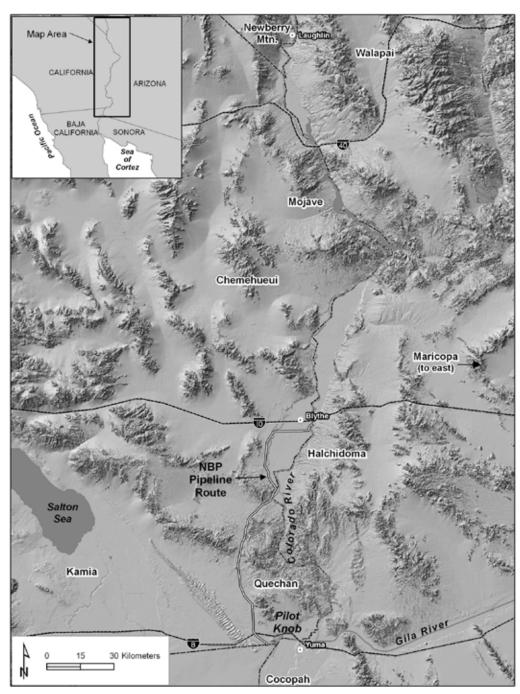


Figure 1. Native American tribes of the Lower Colorado River. (Kroeber 1925)

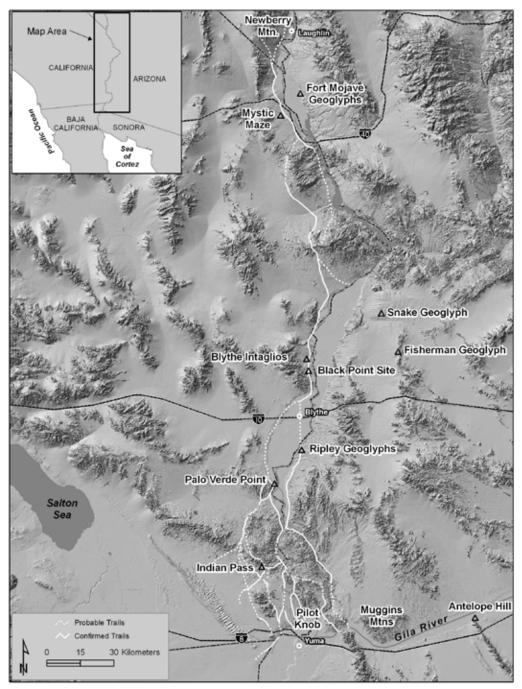


Figure 2. Map of Xam Kwatcan Trail and related places. (Baksh, 1995, 1997; Johnson 1985, 2001; Raven and Raven 1986)

Writing of the Mojave at the turn of the twentieth century, Kroeber (1925, 454-455) wrote:

[A] Mohave can not tell a story or a dream without *naming the exact spot at which each character journeyed or slept or stood or looked about* [emphasis added]...

The naming and description of distant places on the vast desert landscape was a common thread in the lowland Yuman narrative tradition, reinforcing and facilitating the culture of long-distance travel. Kroeber continued about the important connection between dreaming and narrative:

Dreams, then are the foundation of Mohave life; and dreams throughout are cast in a mythological mold. There is no people whose activities are more shaped by this psychic state... and none whose civilization is so completely, so deliberately, reflected in their myths.

Thus, myth and dreams are somewhat interchangeable but are set in real space on the landscape—a respected dreamer usually related his dreams in terms of mythic traditions, and as Kroeber noted, these mythic traditions molded lowland Yuman culture to an exceptionally high degree.

Another important connection between the trail system and traditional religious practice was the *keruk*, or cremation ceremony. The *keruk* was the most important religious ceremony and often the occasion for relatively large social gatherings (Altschul and Ezzo 1994; Forbes 1965; Forde 1931). Pilot Knob near Yuma was the site of the mythic first cremation – the cremation of the Creator god – and served as an ongoing location for major *keruks*. Following completion of the keruk, people

seeking spiritual guidance would undertake a pilgrimage from Pilot Knob to Avikwame, the creation mountain and home of the Creator, near Laughlin, some 160 miles to the north. It is said that a pilgrim could make the trip in four days, quite a feat of endurance, and a tribute to the quality of the trail system. The *Xam Kwatcan* trail system connected Pilot Knob with the creation mountain (Forbes 1965; Johnson 1985; Raven and Raven 1986) and was used in the *keruk* pilgrimage.

According to contemporary Quechan, there were two major branches of the *Xam Kwatcan* trail leading north from Pilot Knob. (Figure 2) The more easterly branch is referred to as the Medicine Trail and the more westerly branch is referred to as the Trail of Dreams (Baksh 1997). The two branches merge near a major rock art complex (Figure 3) near Palo Verde Point on the Colorado River.

Character-Defining Elements of the Contemporary Cultural Landscape

In the lower Colorado River culture area, Native American groups continue to occupy their traditional territories and maintain exceptionally strong cultural continuity, as evidenced in contemporary culture by the unbroken use of native languages, the maintenance of oral history and traditional oral narratives, the continued practice of certain ritual and ceremonial activities, and a strong identification with the land (Baksh 1997; Bee 1981; Raven and Raven 1986; Woods 2001). A strong identification with the land is typical of cultural persistence throughout southern California (Bean and Vane 1978). Tribes continue to occupy their pre-contact homeland and express a close personal affinity with



Figure 3. One of many petroglyph panels at Palo Verde Point. (Hedges in Cleland and Apple 2003)

the places of their ancestors. For many of the desert groups, not only are places in or near reservations remembered and revered, but quite distant places continue to have cultural meaning and importance. As an example, Avikwame, the creation mountain, is over 150 miles from the Quechan Reservation, but remains central in narrative, ceremony, and identity.

Lowland Yuman cultural authorities stress the interconnectedness of places and recoil from regulatory imperatives to divide the landscape and assess the resulting parts individually:

The sites in that area tie in with something that is bigger in the long run. As I've said before, the whole area along the Colorado River is sacred (Baksh 1997, 21).

The Quechan note that all the sites in their traditional range are connected spatially, culturally, and spiritually. They should not, therefore, be considered as isolated occurrences, but rather as part of a greater network of cultural heritage. As such, effects to one site create effects on all the others (Woods 2001, 20).

This point of view can be appreciated by recalling Kroeber's remark that every story and dream is manifested at specific places within the desert landscape, and that stories and dreams are central to the Yuman cultural experience.

Constructed Elements

Traditional cultural activities, some of which are ongoing, have left a coherent body of material remains on the desert landscape, connected by a largely extant trail system (Figure 4). The trail system connects cultural and natural elements, such as specific mountains, which the Lower Colorado groups identify as culturally significant. Many trails were intentionally created and are not simply a result of repeated use (Johnson 1985; von Werlhof 1987). The Native American trail system



Figure 4. Recording a portion of the Xam Kwatcan trail system. (Photo by author)

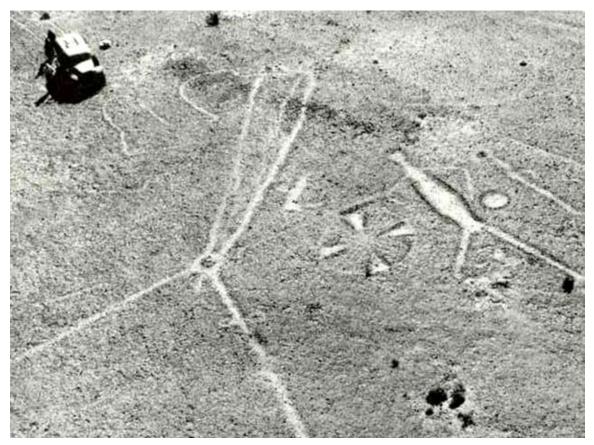


Figure 5: Historic aerial photograph of an expansive geoglyph associated with the Xam Kwatcan Trail. (Setzler and Stewart 1952)

clearly reflects the distribution of prehistoric sites in the region. A recent large-scale survey revealed that 40 percent of the 120-plus recorded prehistoric sites had trail features.

Geoglyphs and rock features constitute other important types of Native American landscape construction. (Figure 5) Geoglyphs (sometimes referred to as intaglios) are naturalistic abstract figures typically incised into the surface of the desert so that the lighter colored subsurface is exposed, creating light-on-dark images. These

figures are unique to the Sonora and southern Mojave deserts and can be expansive in scale with individual elements exceeding 30 m (100 ft.) in length (Johnson 1985). Others may measure only a meter or two across. Sonora Desert archaeologists (Johnson 1985; Von Werlhof 2004) have made a convincing case that some anthropomorphic geoglyphs represent mythological characters and events. These constructions are concentrated at locations of particular traditional significance (Altschul and Ezzo 1994; Baksh 1995; Pigniolo et al. 1997; Raven and Raven 1986). Cleared circles

and other cleared areas on desert pavements constitute another key type of cultural landscape construction encountered in areas of high cultural significance.

Elements of the Natural Landscape

Mojave historical narratives (e.g., Kroeber 1925; Kroeber and Kroeber 1973) make it clear that the lowland Yuman groups "catalogued" and remembered the names of many distant places (Kroeber and Kroeber 1973). Forde (1931) noted that the Quechan, too, remembered a vast array of named places, but did not record many of them individually. These named places had varying prominence within the core narrative literature and its correlated belief system. Not every named place rises to the same level of significance.

Several mountains had particular importance, but not all highly revered places were topographic prominences. The Indian Pass area, where two major trails (including the Trail of Dreams) crossed, was particularly esteemed as a teaching place where initiates were brought to learn arcane cultural traditions considered critical to the maintenance of Quechan culture. Mesas surrounding important peaks (Pilot Knob Mesa, for example) are considered especially sensitive and contain high frequencies of constructed cultural elements such as geoglyphs, rock rings, and cleared circles (Ezzo and Altschul 1993; Raven and Raven 1986).

Beyond the physiography of place, lowland Yuman tradition puts significant emphasis on the plants and animals native to each place. Speaking of the culturally-related Chemehuevi, Halmo (2001) noted: Given the intimate interrelationship between plants, animals, soil and water, Chemehuevi concerns for these resources are clear. Plants and animals are considered sacred resources that must be used appropriately. . . . As mentioned, all traditional Chemehuevi territory is perceived to be a sacred homeland given to the people by their Creator. Any inappropriate treatment of the land is viewed as upsetting the balance with adverse consequences.

In sum, traditional Yuman cultural beliefs interact to create the need to address an integrated cultural landscape comprised of archaeological sites, natural formations, the biotic community, and trails that is truly regional in scale. The National Park Service originally defined an ethnographic landscape as a "landscape containing a variety of natural and cultural resources that associated people define as heritage resources" (Birnbaum 1994). Contemporary Native American consultants and ethnographic testimony gathered in the early twentieth century agree that the associated people (in this case existing Yuman tribes) define an expansive, holistic landscape across the desert as an important heritage resource.

Management Issues

The immensity of regional-scale ethnographic landscapes and the insistence by many contemporary Native American spokespeople on the interconnectedness of the natural and cultural elements of these landscapes raises serious management issues. Can such a landscape be considered a cultural property under U.S. laws and regulations? If so, how would its boundaries be

determined and whose responsibility would it be to define the boundaries? Then, there is the issue of integrity. Typically, any regional-scale ethnographic landscape would have already been subject to some severe disturbance. How would one even begin to assess whether historical values still exist? In the case of the ethnographic landscape associated with the Xam Quechan trail system, three eastwest Interstate highways cross it, several modern cities have been developed within it, and the once wild Colorado River has been tamed by dams and levees, and irrigated agricultural fields have replaced wetlands and sloughs.

Having faced these issues on several major projects involving land-management decisions within this regional-scale landscape, I have come to the conclusion that most of the objections to considering regional landscapes result from a too-rigid set of assumptions as to what U.S. regulations actually say and require. Through experience, I have come to understand that current laws, regulations, and guidelines contain most of the tools necessary to come to reasonable and balanced land-management decisions that take into account Native American values.

To put this conclusion into perspective, I will examine an ongoing NAFTA claim (U.S. Department of State 2007) by a Canadian mining company denied the right to develop a massive open-pit gold mine that would have impacted the Trail of Dreams and a specific place—Indian Pass as well as the regional ethnographic landscape as a whole. The issues and regulatory processes at issue in this case are exceedingly complex, and I will only attempt to summarize some of the cultural resources issues. This could be a precedent-setting case, and its high profile is underscored by the fact

that the National Trust for Historic Preservation put Indian Pass on its most endangered list in 2002.

Indian Pass had been known since the 1920s as an area rich in archaeological material, as evidenced by surface collections and excavations conducted by Malcolm Rogers (1936, 1939, 1966; Waters 1982). However, Rogers' work was never fully reported, and many archaeologists remained unaware of the value of the area. And, no one had thought to ask the Native American tribes what they thought until the Glamis Imperial Mine was proposed.

Native American values for the area started to come to light during public scoping meetings held by Bureau of Land Management (BLM) under the auspices of the National Environmental Policy Act (NEPA). Native American representatives voiced strong opposition to the project. BLM then retained the services of a cultural anthropologist who had previous experience with lowland Yuman tribes to assess the basis of this opposition. Ethnographic interviews revealed that many Quechan were concerned about all ancestral sites in their traditional territory; too many had already been destroyed. The Trail of Dreams passes through the proposed mine area, while the Medicine Trail was already cut-through by another open-pit gold mine. The Quechan believe that the construction of the proposed mine would preclude their ability to perform the pilgrimage from Pilot Knob to the creation mountain, physically and in dreams. The Indian Pass area is also of special significance. It is a "strong" place and ancestral spirits are thought to dwell there. Landscape features were of importance, as were aspects of the constructed environment. The intersection of

the two trails is an important aspect. Additionally, and of critical importance, the Indian Pass area is a teaching place that must be visited to learn traditional cultural practices. It is the first in a series of such places. The other places would be useless if the first place were destroyed. No mitigation could lessen the cultural damage that would be done if the mine were to proceed.

My company (EDAW, Inc.) conducted the archaeological survey required to conform to both NEPA and Section 106. Suffice it to say, the archaeological data supported the Quechan claims. The proposed site for the mine was found to hold a high concentration of features of probable ceremonial significance, and these features probably span at least a thousand-year period (Pigniolo et al. 1997). A trail associated with many ceremonial features can still be seen on the ground extending from the major trail intersection through the proposed open pit mine. This trail has been identified in the field by Native Americans as the Trail of Dreams. Based partly on the impacts to traditional cultural properties, the Department of the Interior denied the permit application in January 2001. This denial was subsequently reversed, but the State of California also moved to block the project.

Attorneys and an expert witness for the mining company have been critical of some of the cultural resources findings, raising issues of fact as well as procedural issues (Sebastian 2006). Of most importance for present purposes is the issue of scale. The mining company argues that since the Native Americans are concerned about a cultural landscape that is regional in scale, the impact of the mine itself would have to be considered relatively minor, only a few square miles out of many thousands (McKee 2005).

How valid is this criticism? I think it is fair to say that it would be impossible to stop all development in a regional scale landscape just because it would adversely impact that landscape. As noted above, the area in question contains modern towns and numerous modern transportation routes. If all projects are not stopped, why would one project be singled out for denial while another is allowed to go forward? This question underscores one of the major points I want to make. In the Imperial Mine case, if the regionallevel landscape was the only issue, then it is doubtful that the government would have blocked the project. Rather, it was the confluence of landscapes on several scales at the proposed mine site that led to the government's decision. Not only was there a regional issue, there was the issue of the Indian Pass area itself and the local manifestation of the Trail of Dreams within that more restricted landscape. Although I cannot speak for Native Americans, my experience on other projects is that strident objections to projects are not raised based solely on regional concerns. While many Native Americans would prefer to see all new development restricted to previously disturbed areas, it is only when a project severely affects a more localized landscape of particular concern that the level of opposition raises to criticality.

Conclusions and Recommendations

In a more general sense, then, how is a regional scale landscape to be dealt with and managed? There might be a tendency either to panic and say "Oh, it's just too big, we can't possibly deal with it," or to shrug and say "Well, if everything is important, what difference does it make?" Neither of these reactions can be justified under current

Federal regulations and guidelines. My recommendation is to take regional cultural landscapes seriously first by acknowledging the existence of such landscapes for purposes of full disclosure. If a good case can be made for the existence of a regional scale landscape, it only makes sense that land managers and cultural resources professionals should take it into account in decision-making. Moreover, in the case of ethnographic landscapes, federal guidelines are quite clear that the concerns of the affected cultural group should be sought out and considered (Parker and King 1992). However, does this mean that a regional scale landscape should be formally evaluated for National Register eligibility as a TCP or ethnographic landscape? In my view, little would be gained in most cases by such an effort. In a rare case, such an assessment might become necessary to avoid a legal challenge, but this would not normally be the case.

What then is the proper format for taking a regional-scale landscape into account? In case of a federal undertaking subject to NEPA, impacts to the regional landscape would have to be addressed separately in the required cumulative impact assessment. This is a point that attorneys for Native American groups are beginning to recognize and advocate for. In addition, undertakings under Section 106 would address the regional landscape in the consultation documents, either in an agreement document like a memorandum of agreement or in agreeing that there would be no effect. Finally, in long-term land management programs, regional scale landscape concerns can be addressed with a formal plan for stewardship. Regional thinking would help lead the cultural resources profession toward large-scale planning similar to the ecosystem-management approach that is gaining popularity relative to rare and endangered species.

In conclusion, the idea of scale in cultural landscape analysis helps to illuminate and explain varying kinds of traditional cultural concerns: concerns dealing on the one hand with holistic regional landscapes and on the other with more localized places and their roles within the larger regional landscapes. This approach serves better to integrate Native American concerns and guide appropriate, informed management decisions. Issues of boundary determination and scale are more readily conceived and resolved within the context of a holistic landscape analysis than within a more partitive approach.

References

- Altschul, Jeffery H., and Joseph A. Ezzo. 1994. The expression of ceremonial space along the Lower Colorado River. In *Recent research along the Lower Colorado River*, ed. Joseph A. Ezzo, 51-68. SRI Technical Series no. 51. Tucson: Statistical Research, Inc.
- Baksh, Michael. 1997. Native American consultation for the Chemgold Imperial Project. Document on file with Bureau of Land Management, El Centro, and Tierra Environmental Services, San Diego, California.
- ______. 1995. Native American research plan for the Spirit Mountain study area of the Lake Mead National Recreation Area.

 Prepared for the National Park Service, Lake Mead National Recreation Area, Boulder, Nevada. Prepared by Tierra Environmental Services, San Diego, California.
- Bean, Lowell J. and Sylvia Brakke Vane. 1978. *Persistence and power: A study of Native American peoples of the Sonoran Desert.*Rosemead, Calif.: Southern California Edison Company.
- Bee, Robert L. 1981. Crosscurrents along the Colorado: The impact of government policy on the Quechan Indians. Tucson: University of Arizona Press.
- Birnbaum, Charles A. 1994. *Protecting cultural landscapes: Planning, treatment and management of historic landscapes.*Preservation Briefs 36. Washington, D.C.: U.S. Department of the Interior, National Park Service.
- Cachora, Lorey. 1994. The spirit life of Yuman-speaking peoples: Lower Colorado River between Arizona and California. In *Recent Research along the Lower Colorado River*, ed. Joseph A. Ezzo, 13-14. SRI Technical Series no. 51. Tucson: Statistical Research, Inc.
- Cleland, James H. and Rebecca M. Apple. 2003. A view across the cultural landscape of the Lower Colorado Desert. San Diego: EDAW, Inc.
- Ezzo, Joseph A., and Jeffery H. Altschul. 1993. An archaeological survey of Pilot Knob, Imperial County, California: A class III cultural resources survey and evaluation. In *Glyphs and quarries of the Lower Colorado River Valley*, ed. Joseph A. Ezzo and Jeffery H. Altschul. SRI Technical Series no. 44, part 4. Tucson: Statistical Research, Inc.
- Figueroa, Esther. 2004. *The Salt Song Trail: Bringing creation back together.* San Francisco: The Cultural Conservancy. Digital video disk (DVD).
- Forbes, Jack D. 1965. Warriors of the Colorado: The Yumas of the Quechan Nation and their neighbors. Norman: University of Oklahoma Press.
- Forde, Daryll C. 1931. Ethnography of the Yuma Indians. *University of California (Berkeley) Publications in American Archaeology and Ethnology* 28 (4): 83-278.
- Halmo, David B. 2001. Traditional Chemehuevi-Southern Paiute occupancy and use of lands and resources in the area of potential effect of the proposed North Baja gas pipeline alignment corridor: A preliminary assessment of potential impacts and cultural concerns. Lake Havasu, Calif.: Chemehuevi Tribe.
- Hardesty, Donald L. 2000. Ethnographic landscapes: Transforming nature into culture. In *Preserving cultural landscapes in America*, ed. Arnold R. Alanen and Robert Z. Melnick, 169-185. Baltimore: Johns Hopkins University Press.

- Hedges, Ken, and Diane Hamann. 1992. Look to the mountaintop: Rock art at Texas Hill, Arizona. In *American Indian rock art*, ed. Donald E. Weaver, Jr., vol. 17, 44-55. El Toro, Calif.: American Rock Art Research Association.
- Johnson, Boma. 1985. Earth figures of the Lower Colorado and Gila River deserts: A functional analysis. Phoenix: Arizona Archaeological Society.
- _____. 2001. Attachment A: Cultural resources overview of the North Baja pipeline project. In Appendix D of Cultural resources evaluation for the North Baja gas pipeline. Prepared by Archaeology Plus, Ivins, Utah. Prepared for Woods Cultural Research, LLC, Evergreen, Colorado.
- Kroeber, Alfred L. 1925. Handbook of the Indians of California. New York: Dover Publications.
- Kroeber, A. L. and C. B. Kroeber. 1973. A Mohave war reminiscence, 1854-1880. New York: Dover Publications.
- McKee, Mike. 2005. Indian tribe steps into clash over mine. *The Recorder*, October 7. http://www.law.com/jsp/ca/PubArticleCA/.
- Parker, Patricia L. and Thomas F. King. 1992. *Guidelines for evaluating and documenting traditional cultural properties*. National Register Bulletin 38. Washington, D.C.: U.S. Department of the Interior, National Park Service.
- Pigniolo, Andrew R., Jackson Underwood, and James H. Cleland. 1997. Where trails cross: Cultural resources inventory and evaluation for the Imperial Project, Imperial County, California. Document on file with Environmental Management Associates, Brea, California, KEA Environmental, San Diego, California, and BLM El Centro, California.
- Raven, Shelly, and Christopher Raven. 1986. The archaeology of creation: Native American ethnology of cultural resources at Pilot Knob. Managed and reviewed by Clyde M. Woods. Document on file.
- Rogers, Malcolm J. 1936. *Yuman pottery making*. San Diego Museum of Man Papers no. 2. San Diego San Diego Museum of Man.
- _____. 1939. Early lithic industries of the Lower Basin of the Colorado River and adjacent desert areas. San Diego Museum of Man Papers no. 3. San Diego: San Diego Museum of Man.
- _____. 1966. Ancient hunters of the far west. Ed. Richard F. Pourade. San Diego: Copley Press.
- Sebastian, Lynne. 2006. Supplemental report: Cultural resource issues, compliance and decisions relative to the Glamis Imperial Project. Rio Rancho, N.M.: SRI Foundation.
- Setzler, Frank M. and Richard H. Stewart. 1952. Seeking the secret of the giants. National Geographic 102 (3): 390-404.
- Stone, Connie L. 1991. *The linear oasis: Managing cultural resources along the Lower Colorado River.* Arizona BLM Cultural Resource Publication no. 6. Phoenix: U.S. Department of the Interior, Bureau of Land Management.
- U.S. Department of the Interior, National Park Service. 1998. NPS-28: *Cultural resource management guideline*. Washington, D.C.: U.S. Department of the Interior, National Park Service.
- U.S. Department of the Interior, National Park Service. 1998. Guidelines for evaluating and documenting traditional cultural properties. National Register Bulletin 38. Washington, D.C.: U.S. Department of the Interior, National Park Service.
- U.S. Department of State. 2007. Glamis Gold v. United States of America. http://www.state.gov/s/l/c10986.htm.

- Van Vlack, Kathleen and Richard Stoffle. 2006. Puha paths: Local landscapes and pilgrimage trails in the Southern Great Basin and Colorado Plateau. Symposium 3 at the 30th Great Basin Anthropological Conference, Las Vegas, Nevada.
- von Werlhof, Jay. 1987. Spirits of the Earth, a study of earthen art in the North American deserts. Vol. 1, The North desert. Ocotillo, Calif.: Imperial Valley College Museum.
- _____. 2004. *That they may know and remember.* Vol. 2, *Spirits of the Earth.* Ocotillo, Calif.: Imperial Valley College Desert Museum Society.
- Waters, Michael R. 1982. The lowland Patayan ceramic typology. In *Hohokam and Patayan: Prehistory of southwestern Arizona*, ed. Randall H. McGuire and Michael B. Schiffer, 537-570. New York: Academic Press.
- Woods, Clyde M. 2001. North Baja pipeline project Native American studies. Prepared for EDAW, Inc. and Foster Wheeler Environmental. Prepared by Woods Cultural Research, LLC, Evergreen, Colorado.

Goût de Terroir: Exploring the Boundaries of Specialty Agricultural Landscapes

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Abstract

Maine's wild blueberry barrens, Northern Minnesota's wild rice region, Florida's Indian River citrus district, and New Mexico's Hatch chili pepper region are examples of highly specialized agricultural landscapes in the United States. The uniquely interwoven edaphic and microclimatic conditions of these regions have given rise to working landscapes featuring clearly defined boundaries and reflecting local cultural identity that are rare in the United States and Canada. This paper explores the conservation and sustainable development of specialized agricultural landscapes through the establishment of agriculture-themed heritage areas. Using the French culinary ethos of goût de terroir (Fr: "taste of place") as a guiding theory, and its application in the Concord Grape Belt of western New York and Pennsylvania, the paper argues that these fragile agricultural landscapes, and the regional cuisine and foodways to which they contribute, offer powerful expressions of place. They are worthy of increased recognition, celebration, and stewardship—especially in an era of rapid globalization of the food system which threatens their existence. Finally, further conservation of historic agricultural landscapes is encouraged through the establishment of agriculture-themed heritage areas and historic districts.

Key Words

Goût de terroir, working landscapes, agricultural geography, geographic indicators, regional foodways, heritage areas, historic districts

Historic Agricultural Landscape Preservation and Heritage Area Development

Historic agricultural landscapes constitute a subcategory of "historic vernacular landscapes" landscapes shaped by the activities or occupancy of people residing within them (Birnbaum 1994; Melnick 1984). Historic agricultural landscapes capture the agrarian roots of Americans, spanning pre-European settlement, colonial and pre- and postindustrial epochs. These sculpted landscapes offer concrete evidence of the culture and livelihoods of a young nation, including unique regional farming activities and culinary traditions. Conserving historic agricultural landscapes and the vast cultural heritage they hold is of growing interest as they are increasingly threatened by development and abandonment (BRW 1999; Stokes, et al 1997). However, scholars and cultural resource managers have found it difficult to carry out rigorous survey and research on agricultural landscapes (McEnaney 2001). Without an original design plan for comparison, and lacking distinct boundaries or a defined local identity, vernacular agricultural landscapes may blur into the surrounding background. These problems tend to occur often and can present difficulties in survey work (California Department of Transportation 1999). Furthermore, determining what elements of the agricultural landscape are historic has proven to be especially challenging in a natural and working landscape that is constantly evolving.

These difficulties, in part, may explain why historic agricultural landscapes are rarely the core theme of a historic district. The National Register of Historic Places defines a historic district as "a geographically definable area, urban or rural, possessing a significant concentration, linkage, or continuity of sites, buildings, structures, or objects united by past events or aesthetically by plan or physical development" (National Park Service 2004). While a handful of individual historic farm properties have been designated as national register historic districts (e.g., Beringer Winery Historic District, Saint Helena, California which includes one 80acre farm, six buildings, and three structures), a review of national register listings suggests there are few historic districts that feature a multi-farm specialty agricultural landscape—that is, a true regional landscape rather than an individual farmstead. This is quite remarkable since federal historic districts (as opposed to local historic districts) generally do not pose any land-use restrictions which farmers might object to such as the use, alteration, or demolition of historic property.

National heritage areas on the other hand, have probably been a better vehicle to present agricultural landscapes as key historic themes. National heritage areas are established to provide recognition and interpretation of notable cultural, historic, natural and recreation resources of national importance. They are enacted and funded by Congress and managed by local commissions, non profit organizations, and state and federal agencies. The Cane River National Heritage Area (established 1994), for example, celebrates the tapestry of culture including Native Americans, Creoles, European Americans and African Americans drawn to the region's rich bottomland in Northwestern Louisiana. There, the vast acreages of cotton have been replaced by corn and soybeans, but vestiges of the spirit of the "Old South" can be experienced and studied. With a significantly different approach, the Silos and Smokestacks National Heritage Area (est. 1996) located in northeast Iowa, focuses on "heartland" agriculture, technological progress, and the globalization and industrialization of agriculture and the food system. Visitors learn about the development of farm equipment and biotechnology which made the United States the agricultural powerhouse that it is today. The establishment of national heritage areas in agricultural regions may be justified on the basis of economic development, as they create an environment that not only draws visitors, but also draws private capital to a region that might not otherwise secure such investment. Several surveys, for example, have shown how federal heritage area funding leverages private sector investment (National Park Service, 2006; Mosby Heritage Area Association, 2003).

The agricultural focus of the aforementioned heritage areas is very large in scale and general in scope. Indeed, much of America's agricultural landscapes are similarly vernacular, with regional boundaries (and other differentiating features) that

can only be discerned by transecting vast distances. There is however, a select group of exceptions—an easily identifiable segment of historic agriculture that stands out due to product specialization, which in turn has created unique landscapes with clearly delineated boundaries. These specialized agricultural landscapes are defined by farms that have specialized in one crop because of physical and cultural geographic advantages, including soils, microclimates, human activities, and demographic characteristics of human populations. To exploit these natural resources, farms, processors and related agribusinesses have clustered in these regions, in some case giving rise to specialized farm-building architecture. The Old World concept of terroir is a means of understanding why specialized agricultural regions exist and how landscape physiography, climate and human activities over time have contributed to their development.

Terroir: A Conceptual Framework

In its simplest terms, terroir is a traditional French culinary ethos based on the belief that some agricultural products, particularly wine, are inextricably linked to their place of production. The classic example of terroir is how the sensory attributes of wine—its flavor, color, and fragrance—reflect the environmental conditions in which the grapes are grown (Leeuwen 2006). Wine grapes grow well only in certain landscapes with unique soil and climate conditions yielding what many vinophiles profess to be the defining characteristics of the product—the taste of place or goût de terroir. Terroirists (individuals who are particularly good at detecting it) generally describe terroir as the amalgamation of soil characteristics, the amount of sunshine, temperature and rainfall, and the slope of the land (Wilson 1998). But other

factors are often noted as contributing to terroir, including managerial choices, such as the selection of rootstocks, production practices, and processing techniques (Leeuwen et al. 2004). It is believed that because all of these factors vary from region to region, or even from vineyard to vineyard, every wine has a discernable taste—its goût de terroir. In order to protect the proprietary interests of their winemakers, a number of European countries (France, Italy, Spain, and Portugal) have established geographic indicator labeling systems, such as France's appellation d'origine contrôllée or "AOC," which certify the product's regional provenance and assure its authenticity, quality, and unique taste. The most common appellation known to Americans is Champagne. According to French law no wine can be labeled "Champagne" unless it is produced in the Champagne region of France. The very same grapes produced using the same method in the United States are now called "sparkling wine" or "sparkling wine using methode champenoise."

Europeans have extended the concept of goût de terroir to artisanal foods other than wines, including meats (Parma) and sausages (Mortadella of Bologna), poultry (Label Rouge) and cheese. A blue cheese, for example, cannot be labeled "Roquefort" unless it is produced and aged in the caves beneath the village of Roquefort-sur-Soulzon, France where humidity promotes the growth of select mold spores found in the area that contribute to the world-renowned Roquefort flavor.

The concept of terroir is catching on in the United States as American taste for specialty foods such as chocolates and coffee has grown, and interest in where food comes from has increased (Teuber 2007). Researchers at the University of Vermont

recently studied the terroir of maple syrup with results indicating that taste differences between unblended maple syrups gathered throughout the state were explained by the type of bedrock—limestone, shale, or schist—(Corbett and Munroe 2006). Differences in flavor, the researchers believe, can provide opportunities for product differentiation.

Terroir and Specialized Agricultural Landscapes in North America

Terroir is perhaps most clearly expressed in the United States and Canada in the form of specialized agricultural regions, which have evolved due to unique climate and soils, as well as human experimentation and ingenuity. In the same way that precious metals and gems may only be found in certain geologic structures where special conditions exist, so too are specialized agricultural landscapes formed only in certain physiographic regions that are exposed to critical environmental and human activities. Some of these landscapes are remnant structures of the last ice age including glacio-marine contact deltas, bogs, and barrens, while others are the result of ancient inland seas underlain with limestone that provides natural soil fertility. Over time, Native Americans and European Americans gradually identified and capitalized on the natural advantages of these fertile ecological niches, and in some cases developed cultivars that were adapted to these specific locations.

There are perhaps several dozen working agricultural regions in the United States and Canada with appreciable goût de terroir. Examples include the glacially-borne wild blueberry barrens of Down East Maine, sections of which have been tended,



Figure 1. Cranberry bogs in southeastern Massachusetts. Note the housing development on the highlands adjacent to the bogs. (Image retrieved by the author from Google Earth Pro, January 24, 2008)

through burning and hand harvesting, by aboriginal Americans for centuries; the Indian River fruit district on the east coast of Florida, which thrives alongside the lagoon for which it is named; the Aroostook potato region of Maine, a limestonebased plain that is home to the last community in the U.S. to recess school in the fall so that school children can participate in the potato harvest; the wild rice region of the upper Great Lakes, in which Native American tribes continue to harvest by canoe; New Mexico's Hatch Valley, a river of green in the New Mexican desert known as the "chili pepper capital of the world;" the cranberry bogs of Plymouth and Cape Cod Massachusetts (Figure 1), which were born of glacial kettle ponds; and, Michigan's Grand Traverse tart cherry region, which juts out into northern Lake Michigan, where most of our tart cherries come from.

Unfortunately, many of these specialized agricultural landscapes are being challenged by global competition, low prices for agricultural produce, and environmental concerns. The Concord Grape

Belt of Western New York and Pennsylvania, where the author has worked during the last four years, serves as a useful case study in understanding how an agricultural region can tap its goût de terroir through heritage area development.

The Concord Grape Belt: A Case Study in Agricultural Heritage Area Development

With over 800 farms and 30,000 acres of vineyards, the Lake Erie Concord Grape Belt is among the largest grape-growing regions in North America. The neatly managed rows of vines seen along NYS Routes 5 and 20 and Interstate 90 also constitute the oldest Concord grape-growing region in the world. The Lake Erie Concord Grape Belt is where the Welch family established a grape-processing industry that would change America's breakfast table forever. It continues to be the headquarters for the world's largest grape juice processors, with a range of quintessentially American products that include juice, jams and jellies, and kosher wines.

The Lake Erie Concord Grape Belt is an area running approximately fifty miles along the southeastern shore of Lake Erie, from the village of Silver Creek in Chautauqua County, New York, southwesterly to the Township of Harborcreek in Erie County, Pennsylvania (Figure 2). The belt extends three to five miles inland, where its border follows the escarpment of the Allegheny Plateau. Grapes grow well here because of local climate and soil conditions in the Lake Erie basin. Warm air radiating off the lake is trapped along the belt in front of the plateau, protecting the region from early fall frosts and lengthening the growing season. Cool air coming off the lake in the spring delays premature budding and minimizes possible killing of the grape vines.

The escarpment of the Allegheny Plateau begins three miles southeast of the Village of Silver Creek. Any further east of this point, the ameliorating effects of Lake Erie dramatically decline since there is no escarpment to trap the warmth in the fall and maintain the cool in the spring—both conditions necessary for commercially viable vineyards (see Figure 2). Between the lake and the plateau, retreating glaciers created lakes during the last ice age which, in turn, built sand dunes and beach ridges of gravelly loam soils that today are ideal for Concord grapes (Dahlberg 1961).

History of the Concord Grape Belt

The Concord Grape Belt is perhaps the earliest large-scale industrial grape growing region in the United States. The region has undergone three primary phases in its development and is presently entering a fourth. These phases include (1) the early wine industry, (2) the table grape business, and (3) the grape juice industry. In the emerging fourth phase, the juice industry is continuing to be the major industry, but the estate winery sector is experiencing robust growth. The early wine industry began in 1818, which was the year when Deacon Elijah Fay, who hailed from Massachusetts, established the first grapes in the region (Village of Brocton) that would eventually become the Concord Grape Belt. For decades, Fay experimented with numerous varieties of grapes, including some that grew so vigorously that one vine is reported to have been trained to grow 110 feet long. Fay went on to produce the first commercial wine in the region in 1830. Numerous wine cellars were started in the region over the next few decades and Chautauqua County became a significant supplier of wine to the burgeoning populations of Buffalo, Pittsburgh, and Cleveland.

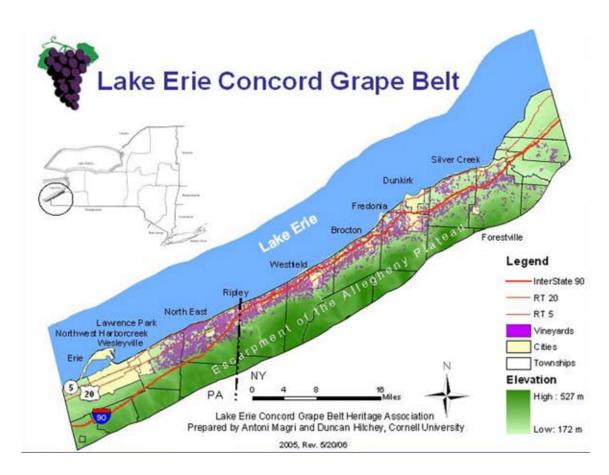


Figure 2: Map of the Lake Erie Concord Grape Belt. (Courtesy of the Lake Erie Concord Grape Belt Heritage Association)

The Fay family is also credited with shipping the first table grapes by rail to Philadelphia in the fall of 1877, thus beginning the second phase of development in the Concord Grape Belt and setting the stage for a massive table grape industry which lasted into the twentieth century. In 1886, 184 growers formed the Grape Growers Shipping Association, the first cooperative established in the Concord Grape Belt. By the turn of the century, the Concord Grape Belt was largely known for fresh table grapes which were shipped by train from its villages and towns. In addition to supplying

table grapes, during the early twentieth century an increasing quantity of the region's grapes was devoted to juice production.

The region's grape juice industry derived from the efforts of Dr. Thomas Welch, a New Jersey dentist, devout Christian, and temperance supporter, who began experimenting with methods of producing an unfermented sacramental wine for the Methodist Church during the 1870s. The product never really became popular in the religious community, but Welch's son, Charles, was

Lake Erie Concord Grape Belt Geography

The Concord Grape Belt is part of a larger grape growing region called the Lake Erie, New York, Pennsylvania, and Ohio American Viticultural Area (AVA), which extends across the entire lakeshore of Lake Erie¹. It encompasses several municipalities, including seven villages, thirteen towns and one city in New York, and four villages and two towns in Pennsylvania. All of these municipalities are connected by State Routes 5 and 20, which transect the middle of the grape belt. Route 5 is a coastal route running along Lake Erie and is part of the "Seaway Trail," a national byway with maritime character including lighthouses, harbors, historic train trestles, and shipwrecks. Route 20 was built on a beach ridge, and a leisurely drive on this highway is an excellent way to see the Concord Grape Belt.

Approximate geographic center: 42 19N 79 34 W

AVA: Lake Erie, New York, Pennsylvania, and Ohio

Boundaries: Lake Erie North; Western Allegeny

Escarpment, South; Silver Creek, East, Harborcreek, West.

Number of municipalities: 7 villages, 13 towns and

1 city in NY; 4 villages, and two towns in PA

Number of vineyards: 814

Total acreage: 30,510

Average vineyard size is 37.5 acres

Soils types: Chenengo gravel loam

Erie Lake elevation: 42 meters

Escarpment elevation: 572 meters

Climate: approximately 200 frost free days

Economic impact: \$330 million (2004)

Grape related jobs: 1,742 (2004)

Number of large juice processors: 6

Number of wineries: 14

Sources: the author, Lake Erie Concord Grape Belt Heritage Association, USDA Census of Agriculture.

convinced that the sweet, non-alcoholic bottled grape juice would be very popular with the general public. He was right. Sales took off after he shared samples of the product at the World's Columbian Exposition in Chicago in 1893. Needing a larger and more steady supply of grapes, in 1897 Charles moved the family to Westfield, New York, and established the world's first grape juice company. Soon dozens of grape processors came to the Concord Grape Belt, and Westfield became known as "Grape Juice Capital of the World" (Figure 3). Most of these companies are gone now, but the resilient cooperatives, owned by the grape growers themselves, are still in business, including the two largest grape juice cooperatives in the world—the National Grape Cooperative, which owns world renowned-brand Welch's, and the Growers Grape Juice Cooperative, possibly the oldest juice processing cooperative in North America.

Elements of the Historic Concord Grape Belt Landscape

The most significant elements of the Concord Grape Belt landscape are its vineyards, the rootstocks of which are the progeny of the original Concord grapes brought to the region from Concord, Massachusetts. The Concord Grape Belt is not one contiguous block of vineyards fifty miles long. Instead it is textured with copses of hardwoods, hedgerows, cornfields and dairy farms. One exception is a 5,000-acre block in the Town of North East, Pennsylvania, known locally as the "Sea of Grapes" (Figure 4). The vineyard rows typically run north-south, which maximizes the exposure of leaf surface to the east-west moving sun. The first mechanical grape harvester in the world was developed in the Concord Grape Belt in the 1960s through collaboration

¹ Lake Erie AVA roughly runs from the city of Buffalo to the City of Toledo, Ohio, encompassing an area of 2,236,800 acres in the states of New York, Pennsylvania, and Ohio along the shore, and on the islands of Lake Erie. This area is broken up into subdistricts—western, central, and eastern. There are over 30,000 acres of vineyards in this AVA, a majority of which are in New York's Chautauqua and Erie counties.

with Cornell University, grape processors, and the Orton family of the village of Ripley. Over the years, grape growers have developed trellises to accommodate this technology. Surprisingly, however, there are no vernacular Grape Belt barns or facilities. Grapes are neither stored nor processed at the vineyards (with the exception of wineries) and therefore barns, sheds, and the like have been constructed to suit the needs and tastes of the individual growers.

There are additional historic buildings in the Concord Grape Belt related to the grape growing and processing industry. The villages within the belt, including Silver Creek, Dunkirk, Fredonia, Brocton, Westfield, and Ripley in New York, and North East in Pennsylvania, are home to numerous grape juice processing plants. Key sites include the Welch's Headquarters building in Westfield, the original Welch's processing plant (also in Westfield), and the Elijah Fay House in Brocton. The villages also are thickly settled with an eclectic range of domestic architecture including Greek Revival, Italianate, Neocolonial, Arts and Crafts/Mission, and Eastlake, which reflect an earlier prosperity derived from the Concord grape industry. Cleveland Avenue in Fredonia is a neighborhood of more modest houses owned over several generations by Italian families who came to the region to work on the railroads and in the grape vineyards. These families still produce homemade wines, sometimes referred to as "basement wine." Some additional grape industryrelated historical infrastructure exists, but it is in questionable condition. Moreover, agricultural globalization and recent changes in the international fruit juice market portend an uncertain future for all of these unique landscape elements.



Figure 3: The Welch's Building, former home of the Welch's Grape Juice Company, now the headquarters of the National Grape Cooperative, which owns the Welch's brand. (Photo by author)



Figure 4. Sea of Grapes, Northeast, Pennsylvania, with escarpment of the Allegheny Plateau in the background. (Photo by author)

Agricultural Globalization and the Motivation to Tap the Concord Grape Belt's Historic Agricultural Landscape

Through the 1990s, consumer demand for grape juice, along with apple and cranberry juices, enjoyed good growth. However, the market began to change in 2000. China began dumping large quantities of frozen apple juice concentrate on the market, and there were fears that grape growers in Argentina would do likewise (USDA 2002). Making matters worse, North American grape growers suffered one of their worst seasons in 2001 when production fell sixty-seven percent from the previous year due to wild temperature swings during May and June. Further bad news came that year when Welch's, the processing and marketing company owned by the National Grape Cooperative, closed its general offices and old corporate headquarters at Westfield, New York, thereby eliminating fifty high-paying managerial jobs. This was a major blow to Chautauqua County, which was already suffering the fastest-declining population in New York State as part of the greater Buffalo "rust belt" regional economy. Local development organizations, Cornell Cooperative Extension, grape growers, and processors had been exploring agritourism opportunities in the Concord Grape Belt around this time, and these events simply emphasized the need to explore opportunities to reinvigorate the grape community. With help from the Department of Development Sociology at Cornell University, the group became more formally organized in 2003 and conducted a visioning exercise for the Concord Grape Belt. A wide range of stakeholders participated in the visioning session, through which they identified projects and formed committees to oversee promotion and tourism, heritage, education, culinary

bounty and inter-industry relations. The leadership group developed the following mission statement:

to promote a dynamic and expanding region built upon its Concord grape heritage and embracing all facets of the region's grape and tourism industries to collectively improve the opportunities and quality of life for all its citizens.

After completing the vision statement, committees met and developed an annual plan of work. One of the first tasks was to incorporate as the Concord Grape Belt Heritage Association, a non-profit organization with a functioning board of directors, members, and operating budget. Currently there are approximately 150 paid members including grape growers, processors, local organizations, and public officials from throughout the Concord Grape Belt. During the three years since its creation, the Concord Grape Belt Heritage Association has been very productive. The association has created communication tools including a listsery, newsletter, Concord Grape Vignettes in village store windows, a traveling display for festivals and conferences, an "I Love My Concord Grape Belt Heritage Area" Photo Contest and Show, and an educational DVD entitled, "Savor the Flavor: Romancing America's Grape." The association has also completed an economic impact study of the grape juice and winery sectors of the Lake Erie Concord Grape Belt and is currently working on the development of a visitors center and a "Grape Heritage Trail," a 100-mile interpretive trail with information kiosks, highway signage (Figure 5), bike trails (through the vineyards), roadside pull-offs, vineyard and processor tours, and restaurants. Other projects under development or consideration include a "Discovery Center," a 100-mile "Grape Belt Heritage Trail," a "Culinary

Bounty Program" to promote regional and grape-related cuisine, and a certified heritage area products program (a type of trademark that would assure the provenance of products with ingredients from the Lake Erie Concord Grape Belt). For these efforts, the Concord Grape Belt Heritage Association has received numerous awards and accolades. Perhaps its most significant achievement, however, has been securing the region's designation by the state of New York as the Lake Erie Concord Grape Belt Heritage Area.

Pushing the Boundaries of Heritage Landscape Preservation

From its inception, establishing a heritage area was a key objective of the Concord Grape Belt Heritage Association. However, the concept of a "heritage area" based on a specialized agricultural region pushed the boundaries of the conventional view of state and federal heritage areas. As part of the New York State Department of Parks, Recreation, and Historic Preservation, heritage areas promote (and to some degree protect), valuable historical property and landscapes through preservation/conservation, interpretation/education, recreation, and economic development. Yet, due to their initial focus as "urban cultural parks," New York's Heritage Areas have, over the twentyfive years of their existence, focused largely on the state's transformation from a rural and agrarian society to an industrial powerhouse with rich social, cultural, and political history. In 1994, the New York State Office of Parks, Recreation and Historic Preservation (NYSOPRHP) and the New York State legislature recognized this limitation and wisely changed the name "urban cultural parks" to "state heritage areas" to encourage regional



Figure 5. Concord Grape Belt Association member signs are appearing along Route 20 in Chautauqua County, New York. (Photo by author)

heritage preservation activities beyond the urban environment. The designation of the Lake Erie Concord Grape Belt Heritage Area is further indication of the department's commitment to the most inclusive definition of what constitutes important heritage landscapes.

With guidance from NYSOPRHP, the Concord Grape Belt Heritage Association worked through the process for New York State heritage area designation, including developing a rationale for the establishment of the heritage area, building support from stakeholders and local officials, and introducing a state legislative bill creating the heritage area through state senate and assembly representatives. Passage of the bill and signature by the governor creating the heritage area were the final steps. The Lake Erie Concord Grape Belt Heritage Area was signed into legislation on December 6, 2006, creating the nineteenth heritage area in New York State, and the first state heritage area with an agriculture theme (Figure 6). It was also the first state or federal heritage area in the United States



Figure 6. Concord Grape Belt Association, the first state heritage area focused on an agricultural product. (Photo by author)

with a single product theme (Iowa has a National Heritage Area called "Silos and Smokestacks" which is largely focused on the industrialization of agriculture in the United States). The NYSOPRHP further demonstrated it flexibility in designating the Concord Grape Belt by not requiring establishment of a commission with political appointments made by the governor. Since the Concord Grape Belt Heritage Association was so organizationally well-developed, the typical requirement to create an oversight commission was not deemed necessary. This is a precedent that may be followed in the future.

The Concord Grape Belt Heritage Association and Heritage Area are also pushing boundaries in other ways. For example, the association secured funding through the New York State Coastal Resources Improvement Program (NYSCRIP) for its interpretive automobile trail. Funds from this program typically have been used for educational media such as kiosks, maps, and brochures for coastal communities with maritime history and culture. The Concord Grape Belt Heritage Association was successful in making the case that although the Concord Grape Belt is technically not a maritime region, it is part of a larger coastal landscape, and the belt's existence is in no small way due to the climatic effects of Lake Erie.

The Concord Grape Belt also is expanding the boundaries of farmland protection. There is only limited development pressure to convert vineyards to non-farm use—primarily in the Township of North East, Pennsylvania, near the city of Erie—so there is no strong motivation to preserve vineyards

through conservation easements or the purchase of development rights. Furthermore, farmers are generally very suspicious of any programs that they believe might lead to land-use controls or a perceived taking of their land. On the other hand, strategies that promote entrepreneurship, the viability of farms, and ultimately the preservation of the region's historic landscape through market approaches are more palatable. These include regional branding, agritourism (fairs, festivals, farm and plant tours, and trails), value-added product development, public education and "buy local" campaigns, business plan development, and farm transfer programs. Additional strategies in the policy arena that might be considered include trade adjustment assistance from the USDA, rightto-farm laws, and farmer-friendly zoning that does not restrict farmer expansion into retailing, food processing, and tourism. The latter considerations are important because they affect farmers' ability to benefit from the region's growth as a tourist destination, a development made possible by the Concord Grape Belt's proximity to metropolitan Buffalo, Cleveland, and Pittsburgh.

Finally, the Concord Grape Belt Heritage
Association may also explore the development of
a "certified heritage product" branding program
in which the association serves as verifier of products as produced exclusively in the region with
authentic Concord grape ingredients. As part of
this program, the association could trademark and
license the use of a specific geographic indicator
symbol that certifies the regional provenance of
Concord grape heritage products. Such labels
and related product information can educate
consumers about unique regional agricultural
products and tap their interest in wholesome
products that improve their health and pique their

interest in where food comes from. Some possible certified heritage products include Concord grape raisins; chocolate-covered Concord raisins; dressings and vinaigrettes; varietal grape jams; chutneys; ready-made grape pie fillings; stuffed grape leaves (although Concords may not be well suited for this); grape seed oil; and grape soda, ice cream, waters, beers, and teas. Certified heritage-labeled products allow visitors to the region to take home a "taste of the Concord Grape Belt." Similarly, public schools in the region (which currently do not promote local grape products) could establish a "farm-to-school," or "processor-to-school" program that includes the utilization of product labels that tell the stories of where Concord Grape Iuice comes from.

The Administrative Challenges of Specialized Agricultural Landscapes

Agricultural heritage areas present some unique challenges—especially with regard to administrative boundaries. Agricultural landscapes are living, active, evolving landscapes that follow natural geography and boundaries of cultural affinity rather than political or municipal jurisdictions. Grape growers and processors in the Concord Grape Belt, for example, have historically ignored the state boundary between New York and Pennsylvania. Over the years, the two states have developed a means of working together despite the border. For example, the Lake Erie Grape Program is jointly administered by the agricultural experiment stations of Cornell University and Pennsylvania State University. With this precedent in mind, the authors of the legislation designating the Concord Grape Belt Heritage Area included the authorization of New York state agencies and

the County of Chautauqua to collaborate and cooperate with governmental entities in the state of Pennsylvania.

It was ostensibly hoped that Pennsylvania would establish a "sister" heritage park, but this has not worked out. Due to lack of resources, the State of Pennsylvania currently has a moratorium on establishing "heritage parks," and will not create a complementary section of the Concord Grape Belt Heritage Area at this time. The Concord Grape Belt Heritage Association could ask the Town of North East to pass a resolution creating a complementary Concord Grape Belt Heritage Park or officially annex North East as a part of the Concord Grape Belt Heritage Area via a letter of agreement or some other legal document that officially ties the Pennsylvania section of the heritage area to New York. It is probably premature at this point, but eventually a national heritage area may be part of the solution.

Global competition, erratic weather, and fluctuating prices will continue to hamper the economic sustainability and landscape integrity of the Concord Grape Belt. As an economic base industry in a region with the fastest declining population in New York, the Lake Erie Concord Grape Belt should be a high priority for economic development assistance, tourism development, and agricultural value-adding and diversification. The Lake Erie Concord Grape Belt Heritage Association (and Heritage Area), while still a fledgling development, proved it could play a critical role in moving the region toward sustainability. The organization has accomplished a number of critical tasks, and its resourcefulness and innovations (including its focus on food and agriculture, its organizational structure, its boundary definitions and its unique programs), put it on the cutting edge among heritage areas in the United States. It is also clear, however, that the future of the association and the heritage area will largely depend on their success in securing the funds to expand these initiatives.

Aside from the economic and administrative difficulties suggested above, agricultural heritage areas may face ecological and social challenges. The environmental and cultural fragility which makes specialized agricultural landscapes so unique and attractive could also hasten their deterioration as tourists "love them to death." Some landscapes, such as wild blueberry barrens or cranberry bogs, could easily be damaged by off-road vehicles, or even simple human trampling. In addition, some residents of isolated rural communities are not comfortable around people "from away," (as old-time residents from Down East Maine refer to outsiders). This presents a real challenge to the development of agritourism, ecotourism, or sustainable tourism. Finally, it should be noted that some farmers and food processors are often suspicious of government programs designed to help them. "Preservation" is a dirty word in much of farm country because many farmers fear that it will entail government control or even taking of private farmland. Even a thoughtfully worded rationale in favor of preservation may fail to convince someone who already feels government takes too much of his or her paycheck. Such resistance has surfaced in one of the newest national heritage areas, Yuma Crossing in Arizona, where the potential for landuse restrictions on farming and hunting in that region allegedly has upset some property rights groups (Remington 2008). On the other hand, farmers do generally support "conservation" of the land since it may provide direct federal payments

for making environmental improvements to the land or taking the land out of production entirely. Therefore, in specialized agricultural landscapes, it is possible that the word "preservation" will need to be replaced by the word "conservation."

Conclusion

In this era of globalization and free trade agreements, rural communities are being challenged to enhance quality of life for their residents by retaining and attracting business and tourism while not sacrificing their unique local character. These multiple objectives are difficult to achieve in today's culturally toxic environment of economic industrialization, consolidation, and competitiveness. Specialized agricultural regions are experiencing tremendous pressure to stay competitive, as are all rural areas in general. However, despite the challenges presented by crop monoculture, the shifting of production to developing countries, and the resulting periodic gluts and low prices, specialty agricultural regions have some advantages—the rich cultural capital embodied in their historic landscapes, farm structures, processing activities, and foodways. Taken together, these offer a unique taste of place for residents and tourists alike who will become more cognizant and appreciative of a specialty crop's contributions to American culture. It is hoped that in the process of sharing their way of life, farmers and agribusinesses in these historic specialty crop regions will be able to expand business and add value to their products, while becoming better stewards of these valuable local working landscapes.

In this paper, I have argued that the United States is home to a number of specialty agricultural land-scapes that are worthy of increased recognition,

celebration, and stewardship through designation as heritage areas. Few people beyond gastronomes and food historians appreciate the vast and varied world of American regional foods that have deeply place-based provenance. Indeed, locally distinct and meaningful foodways, culinary traditions and native cuisine are all at risk of becoming relegated to local libraries, historical societies, churches, and the impermanent reservoir of long-time residents' memories. In our globalized world, food and agricultural tourism based on goût de terroir may emerge as one tool for rural communities to address economic displacement and cultural homogenization. The Concord Grape Belt is one example of a historic working agricultural landscape where this strategy is being attempted, and this case study suggests that there is an untapped opportunity for community development based on regional identity and landscape preservation in other specialty agricultural regions around the country. More research and feasibility work, however, is needed to more fully test this thesis.

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References

- Birnbaum, Charles A. 1994. *Protecting cultural landscapes: Planning, treatment and management of historic landscapes.*Preservation Briefs 36. Washington, D.C.: U.S. Department of the Interior, National Park Service.
- BRW, Inc. 1999. Inventorying, managing and preserving agricultural historic landscapes in Minnesota. http://www.mnhs.org/preserve/shpo/landscape/landscape1.html.
- California Department of Transportation. 1999. General guidelines for identifying and evaluating historic landscapes. Sacramento: California Department of Transportation, Environmental Program.
- Corbett, Lee B. and J. S. Munroe. 2006. Vermont terroir: Investigating the relationship between maple syrup chemistry and bedrock lithology. Paper presented at the annual meeting of the Geological Society of America, October 22-25, in Philadelphia, Penn.
- Dahlberg, Richard E. 1961. Concord grape industry of the Chautauqua-Erie area. Economic Geography 37 (2): 150-169.
- Gade, Daniel W. 2004. Tradition, territory, and terroir in French viniculture: Cassis, France, and appellation controlee. *Annals of the Association of American Geographers* 94 (4): 866.
- Havelock, T. 2002. Chile peppers and identity construction in Pueblo, Colorado. *Journal for the Study of Food and Society* 6 (1): 45-59.
- Josling, T. 2006. The war on terroir: Geographical indications as a transatlantic trade conflict. *Journal of Agricultural Economics* 57 (3): 337–363.
- Leeuwen, C-van, P. Friant, X. Chone, O.Tregoat, S. Koundouras, D. Dubourdieu. 2004. Influence of climate, soil, and cultivar on terroir. *American Journal of Enology and Viticulture* 55 (3): 207-217.
- Leeuwen, C-van, Gerard Seguin. 2006. The concept of terroir in viticulture. Journal of Wine Research 17 (1): 1.
- McEnaney, M. 2001. Working the land: Understanding and managing our nation's agricultural legacy. *CRM Journal* 7 (7): 41-43.
- Melnick, Robert. 1984. *Cultural landscapes: Rural historic districts in the national park system.* Washington, D.C.: U.S. Department of the Interior, National Park Service.
- Mosby Heritage Area, 2003. The economic benefits of historic preservation in the Mosby Heritage Area, http://www.mosby-heritagearea.org/profitingfrompreservation.htm.
- Page, Robert. 2001. Agricultural landscapes in the national park system. Unpublished draft report prepared for the U.S. Department of the Interior, National Park Service.
- Russell, J. 2006. Harvest break: As the need for potato-pickers declines, Aroostook County questions its autumn tradition, when teenagers work the fields. *Boston Globe*, October 1.
- Remington, T. 2008. National heritage areas stealing your property and limiting your rights. Black Bear Blog. http://mainehuntingtoday.com/bbb/2008/01/14/national-heritage-areas-stealing-your-property-and-limiting-your-rights/.
- Stokes, Samuel, N., A. Elizabeth Watson, and Shelley S. Mastran, with Genevieve P. Keller and J. Timothy Keller. 1997. Saving America's countryside: A guide to rural conservation, 2nd ed. Baltimore: Johns Hopkins University Press.

- Tueber, R. 2007. Geographical indications of origin as a tool of product differentiation: The case of coffee. Paper presented at the 105th European Association of Agricultural Economists Seminar, International Marketing and International Trade of Quality Food Products, March 8-10, in Bologna, Italy.
- U.S. Department of the Interior, National Park Service. 2006. National Heritage Areas Long-term Performance Measures and Annual Performance Measures. National Park Service Heritage Areas Program. January, p. 4.
- U.S. Department of the Interior, National Park Service. 2004. Title 36—Parks, Forests, and Public Property; Chapter I—National Park Service, Department of the Interior; Part 60—National Register of Historic Places; Sec. 60.3 Definitions; Paragraph (d) Districts; Revised as of July 1.
- U.S. Department of Agriculture. 2002. National Grape says Welch's not for sale. *Rural Cooperatives*. May/June. Vol. 69, Issue 3, p. 27. United States Department of Agriculture: Rural Business-Cooperative Service.
- Wilson, J. 1998. Terroir: The role of geology, climate, and culture in the making of French wines. Berkeley: University of California Press.

Where the Water Meets the Lawn

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Abstract

Landscape designers have long sought to address the edges of water bodies in an effort to increase visual access and promote human enjoyment of the experience of water. However, as more regulations to protect the environment have been established, the challenge for current stewards of historic designed landscapes is to balance environmental regulations, specifically water quality regulations—with preservation of historic resources. This paper looks at three Delaware properties which incorporate existing watercourses into their historic designed landscapes and describes how landscape managers at each property address conflicts between environmental and historic preservation objectives.

Key Words

water, buffer, runoff, Delaware

Introduction

Delaware is home to several private institutions that contain nationally and regionally significant environmental and cultural resources. Created during the early part of the twentieth century, these formerly private homes and educational institutions hired landscape designers to sculpt their properties. These newly-crafted landscapes were both imitations of traditional European landscape design, as well as novel approaches influenced by local design sensibilities. Today these institutions are challenged with adapting to evolving standards of ecological stewardship which are sometimes in conflict with landscape preservation standards. Preferring a preservation/rehabilitation treatment approach for their historic properties, these institutions seek ways to improve environmental quality without irreversibly altering historic character. Because environmental goals are often perceived to be at odds with preservation goals, seeking to improve the ecological quality of historic designed landscapes can be considered outside the mainstream of preservation treatment approaches.

The apparent conflict between current recommendations for maintaining ecological integrity and the objectives of historic landscape preservation is clearly illustrated in respect to questions about how to manage significant water features. Landscape designers have long sought to incorporate existing

water features into their designs, and their solutions historically have tended to simplify the edges of water bodies, providing for both visual access and human enjoyment. Although water is inherently dynamic, the boundary between water and land is often hardened or "frozen" to facilitate a consistent relationship. For example, dams regulate the water level of constructed ponds; armored banks or retaining walls attempt to prevent the action of erosion; and mown grass margins allow unrestricted pedestrian access to the water's edge.

Ecologists and environmental scientists recognize that water performs critical functions in the landscape and the ecosystem at every scale, and that some of these functions are significantly modified or disrupted by the spatial relationships of traditionally-designed and managed landscapes. Current water resource "Best Management Practices" (BMPs) recommend that bodies of water be maintained with vegetated and wooded stream channels and buffer zones. These vegetated edges not only reduce sediment runoff (including fertilizers) into the water but also regulate water temperatures. Wooded and vegetated buffers, however, can result in obscuring valued water bodies from human interaction and remove the sense of close connection to the water.

This study examines these issues at three Delaware institutions that incorporate existing watercourses into historic designed landscapes: Nemours, the estate of Alfred I. DuPont; Winterthur, the estate of Henry Francis DuPont; and St. Andrew's School near Middletown, Delaware (Figure 1). As each of these properties was developed, their designers sought to take advantage of existing waterways by damming, shaping, and revealing the water. Today, as these institutions seek to manage their

properties in an environmentally responsible manner, they face the challenge of considering new construction details and management practices that better protect water quality on their own property and downstream. This paper compares and analyzes challenges faced by each property to strike a balance between protecting water quality and preserving historic landscape character. The case studies suggest that because historically significant landscapes are inextricably linked to their surrounding communities and ecosystems, it is critical that any current management and interpretation acknowledge a need for flexibility in adapting to ecological imperatives that affect the context of the historic landscapes.

Nemours

Located directly north of Wilmington, Delaware, the 225-acre Nemours Mansion and Gardens is the former home and country estate of Alfred Irénée Dupont (1864-1935) and his wives, Alicia Bradford du Pont and Jessie Ball du Pont (Robinson 2006, 7). DuPont purchased existing farms, which covered an area of high ground above the banks of the Brandywine Creek, as the site for his Nemours estate. At that time, he was vice president of the E. I. du Pont de Nemours Company at the Hagley powder mills, less than a mile away and also located along the banks of the Brandywine River. Constructed in 1909, Nemours can be considered Delaware's first high-style Country Place era mansion (Wall 1990, 271).

Du Pont hired the nationally-prominent architectural firm of Carrere & Hastings to design his home (Figure 2). Both Alfred and Alicia were of French ancestry, and they chose noble French architecture of the eighteenth century as the

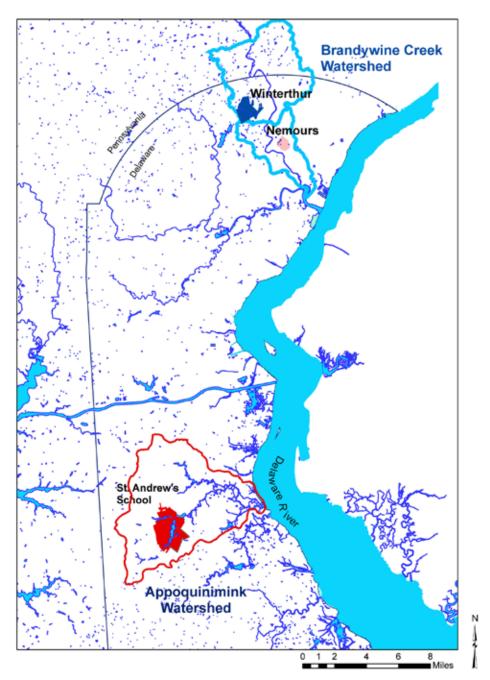


Figure 1. Context map showing location of the three case study sites along the Delaware River. Note the watershed boundaries of each property. (Courtesy of University of Delaware Multimedia Design Center)

point of reference for their discussions of house and estate design with their architects. To set the tone and character of the estate they wanted to develop at Nemours, the du Ponts drew upon their studies of the architecture and gardens of the *Petite Trianon* Palace at Versailles. At the time they were visiting Versailles and other French gardens, however, the strong geometries and formal organization of the original garden designs had been softened by the more naturalistic geometries of the 'Jardin Anglaise,' or English-style romantic garden. Consequently, the landscape design developed by the du Ponts and their architects reflected both these historic traditions.

The Nemours estate took the form of a large-scale and coherent French-inspired garden adapted to the local topography and integrated with domestic farm buildings and other features associated with the earlier agricultural landscape. For example, care was taken in the initial construction of the mansion and early gardens (1909-1910) to preserve several existing large trees in close proximity to the house, and a portion of the garden's layout was adapted to the positions of the existing trees. Although the landscape design for Nemours incorporated both symmetrical and naturalistic geometries, strong French-influenced geometries defined the main axes, while naturalistic geometries were reserved for secondary cross axes and remote areas (Figures 3 and 4). Interestingly, the English-inspired geometries which in many cases appear soft and naturalistic, were physically "set in stone" in an attempt to discourage the state of flux and transition that the picturesque English-style garden sought to emulate.

Water was abundant throughout the Nemours estate, and water features became important elements in the landscape design. Small, intimate



Figure 2. French influenced architecture of the Nemours Mansion designed by Carrere & Hastings architects. (Courtesy of Nemours Mansion and Gardens)



Figure 3. Aerial photo (c. 1927) of the Nemours Property. Note the east-west orientation of the Entry Drive and garden vista. (Courtesy of Nemours Mansion and Gardens)

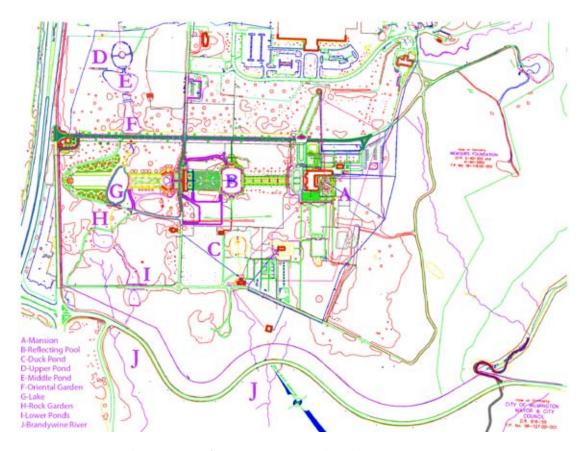


Figure 4. Nemours site plan. (Courtesy of Nemours Mansion and Gardens)

fountains and pools were designed to fit the architecture of the mansion. Vast pools and lakes were created in locations that not only took advantage of existing topography and drainage patterns, but also complemented the architecture of the mansion and created a strong axial layout of the property core. For example, a one-acre reflecting pool, created as a huge swimming and boating pool, formed a 280' x 400' rectangle with curved bays at the northern and southern ends (Figure 5). Located in an existing drainage valley, the form of the pool was influenced by the vocabulary of the mansion architecture and was cast in concrete to preserve the elegance of its form.

The gardens of Nemours grew and evolved during the next several decades. After Alicia du Pont died in 1921, Alfred continued to develop the gardens in consultation with his third wife Jessie, along with the architectural firm that his son Alfred Victor du Pont shared with Gabrielle Massena. As the gardens were developed, they were adapted to reflect changes in style and available materials, as well as the maturity of the landscape components. New design elements built upon the initial design vocabulary. For example, during subsequent periods of garden development, a chain of lakes was developed along an existing wooded stream valley as a cross-axis to the main garden vista

(Figure 6). Although the forms of these ponds diverged from the regular bilateral symmetry that characterized the majority of the Nemours Gardens, their forms were still carefully contrived. The pond edges were defined by mortared free-board walls and connected by irregular stone-lined concrete spillways that connote naturalism without actually allowing it (Figure 7).

Today the lakes and water features of Nemours have been partially compromised due to their original construction techniques as well as the long-term erosive quality of water. The Nemours Foundation faces management decisions about how to preserve the historic character of the gardens while acknowledging that some of the practices acceptable during the initial construction of the gardens—for example, using non-recirculating fountains and mown-lawn margins at the edges of the ponds—may no longer be considered responsible practices from an ecological standpoint. The foundation is currently examining options for an approach to water management that is sympathetic to the historic landscape character. In this regard, the Nemours Foundation faces challenges similar to those present at a very different historic estate located within the same Brandywine Creek watershed, Winterthur.

Winterthur

Formerly a portion of the home and country estate of Henry Francis du Pont (1880-1969) (Quigley 1997, 1), the approximately 960-acre Winterthur Museum, Garden, and Library are located north of Wilmington, Delaware. H. F. (Harry) du Pont made the most of family connections to the land in the Brandywine Valley by increasing and improving the property left to him in 1927 by his



Figure 5. Nemours Reflecting Pool and Vista. (Courtesy of Nemours Mansion and Gardens)



Figure 6. Nemours ponds. (Courtesy of Nemours Mansion and Gardens)

father, Civil War Colonel Henry Algernon DuPont (Fairbanks 1964, 91). Although H. F. du Pont's interest in the landscape of Winterthur began in childhood, his parallel interest in American decorative arts and his personal artistic sensibilities led him to create a unique naturalistic woodland garden, situated within the rural Brandywine



Figure 7. Masonry pond edges at Nemours. (Courtesy of Nemours Mansion and Gardens)

Valley landscape. He was inspired by an artistic vision of color and abundance that complements and transcends the aesthetic characteristics of the surrounding pastures, meadows, and woodlands (Figure 8).

During the 1960s, H. F. du Pont initiated the construction of a series of six ponds of varying sizes along the course of the existing Clenny/Wilson Run, the stream that crosses the Winterthur property and conveys water to the Brandywine Creek (Figure 9). The ponds were lined with clay and have naturalistic forms and constructed masonry spillways that use the vocabulary of Brandywine Valley vernacular dam construction. The ponds were created for utilitarian purposes, including irrigation, fire suppression, waterfowl culture, and livestock watering. However, their locations and their naturalistic forms also created and defined scenic vistas that connected the sixty-acre garden with the larger estate.

Striking a balance between utilitarian and aesthetic functions of the landscape has been a persistent management challenge at Winterthur. For example, although the estate functioned as a prize-winning dairy farm, the landscape was also designed and managed as a constructed work of picturesque scenery. Its garden-like character was reinforced by meticulous grounds maintenance that included regular mowing of vast lawn areas outside the gardens themselves. These lawns extended to the edges of the streams and ponds, allowing easy visual access to the waterways. In areas close to the mansion and museum, parts of the stream were armored with boulders or carefully clad in fitted stone skins for aesthetic reasons. However, for the majority of the property the waterways had earthen edges except at the masonry spillways that regulated the pond levels and stream flows. Over time, this combination of hard and soft water edges has led to periodic compromises of spillway structures, requiring maintenance and repair to prevent water from seeking a weaker route through the surrounding soils. Thus, as at Nemours, those responsible for managing the historic landscape of Winterthur have encountered difficulties with respect to maintaining the varied and dynamic character of the edges between bodies of water and land. Moreover, the quality of the water in the estate's ponds and streams is affected not only by the character of these edges, but also by the condition of the larger watershed. This aspect of the problem is aptly illustrated by the conditions at St. Andrew's School, another nearby designed landscape associated with the du Pont family.

St. Andrew's School

St. Andrew's School is an Episcopal secondary boarding school located slightly south of

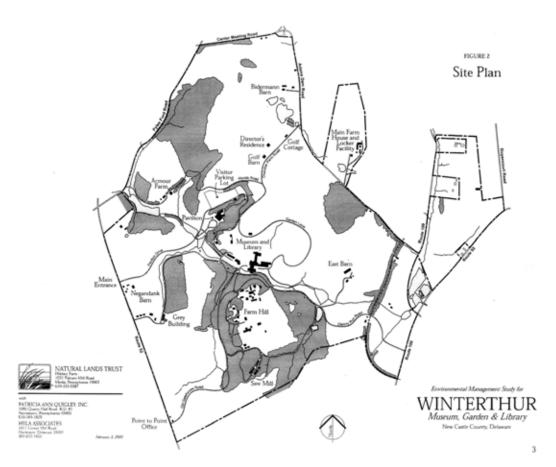


Figure 8. Winterthur site plan. (Courtesy of Winterthur Museum, Garden and Library)

Middletown, Delaware. Today the school's campus is approximately 2,200 acres of former farmland and woodlands bounding the Appoquinimink River (Figure 10). The river was impounded in 1740 to create the Noxontown Mill and Pond, named in honor of the planter and miller Thomas Noxon. The farming community of Noxontown formed an idyllic setting on the banks of Noxontown Pond, which attracted the interest of Alexis Felix du Pont (1879-1948), the founder of St. Andrew's School in 1929. The school was built quickly on the model of an English public school,

with substantial stone buildings of large, collegiate scale. The existing lake and agricultural fields served as a bucolic setting for this academic institution which sought to instill in its pupils a love of religion, nature, academic curiosity, and sport (Figure 11).

From the beginning, Noxontown Pond was an essential component of the school landscape, serving as a venue for swimming, sailing, ice-skating, and crew-rowing. Because the pond had been created nearly two centuries earlier, its banks



Figure 9. Winterthur watercourse. (Courtesy of Winterthur Museum, Garden and Library)



Figure 10. St. Andrews School Site Plan. (Courtesy of St. Andrew's School)

reflected the existing topography of the land before it was flooded. Most of the pond was bordered by steep wooded banks that buffered the water edge from the surrounding agricultural fields. The exception to this edge condition was a generous lawn that swept down from the base of the main school building to a dock (Figure 12). The edge of the pond was not visibly armored; instead the ground and lawn sloped directly to the edge of the water. Other than the main lawn, most of the pond edges were clothed in mature trees, either in a park-like or wooded setting. However, because the edges of the pond were originally valley slopes well above the Appoquinimink River, many of the banks have steep angles of approach to the water that are susceptible to erosion today.

Today Noxontown Pond continues to play a central role in the academic life of the school, both through scientific study and through the continued recreational use for swimming and rowing. Yet changes in the surrounding hydrological context have compromised both these social uses and the historic character of the pond. During the time that the school has been in operation, the Noxontown Mill has gone out of use. The associated impoundment was turned into a concrete dam with a road above it, resulting in increased sedimentation and nutrient levels that led to the eutrophication of the pond. This condition necessitated the dredging of accumulated sediments from the bottom of the pond in 1984-1985. Sediment and nutrient levels have risen since then to the point that dredging is again being considered. Furthermore, in 2006 the Rowing Regatta on Noxontown Pond was cancelled due to the explosive growth of North American Water Weed (Hydrilla canadensis) and algae. Although the farming practices used on the school's surrounding property have been upgraded to reduce sediment and nutrient loss, the pond

has continued to eutrophy at a rapid rate. Clearly, eutrophication is a process that affects the ecological health, traditional social uses, cultural value, and historic appearance of the landscape. The complexity of this problem requires a management approach that balances both ecological and historic preservation objectives.

The Challenge of Reconciling Historic Preservation and Ecological Imperatives

Historically, limited environmental regulations allowed landscape designers to manipulate the landscape carte blanche, both for good and bad. However, as more regulations to protect the environment have been established, the challenge for current stewards of historic designed landscapes is to balance environmental regulations—especially water quality regulations—with the preservation/conservation management of their historic resources. Ecologists and environmental scientists

recognize that water performs critical functions in the landscape and the ecosystem at every scale, and that some of these functions are significantly modified or disrupted by the spatial relationships of traditionally-designed and managed landscapes. As illustrated by the three Delaware landscapes discussed above, striking a balance between protecting water quality and preserving historic landscape character is not an easy task.

The complexities of these problems have prompted landscape managers to seek strategies from ecologists and environmental consultants. For example, in order to assess and improve the water quality of Noxontown Pond, St. Andrews School has consulted with the civil engineers of F.X. Browne, Inc. for recommendations on landscape management approaches. The Board of Trustees of Winterthur Museum, Garden and Library also have attempted to address the ecological concerns associated with managing the historic water features of the Winterthur land-



Figure 11. Aerial photo of St. Andrew's campus (c. 1930's). (Courtesy of St. Andrew's School and the University of Delaware)



Figure 12. Vegetation along the banks of Noxontown Pond (c. 1939). (Courtesy of St. Andrew's School and the University of Delaware)

scape. In 1996-97, Winterthur sought the advice of the Natural Lands Trust in preparing an environmental management study which included recommendations for the waterways of the Winterthur estate. As an institution, Winterthur has several tools to help it evaluate decisions about its waterways. First, sites on and below the Winterthur property are locations for an ongoing Streamwatch Program monitored through the Delaware Department of Natural Resources and Environmental Control (DNREC). This important tool allows Winterthur to track water quality over time. Winterthur is also well-equipped to assess internal institutional change; in addition to professional, full-time staff, the decisions of the institution are reviewed and guided by a board of trustees. Winterthur also requires a Landscape Modification Form be completed for any changes to the Winterthur property. This form provides a record of the intentions behind any landscape design changes. Such intentions are often subject to interpretation or loss if they are not clearly articulated by designers or property managers. Although the Winterthur property is only a small

portion of the entire Brandywine Creek watershed, it is significantly larger than the average parcel size of 200 acres within the watershed, and therefore the quality of the water exiting the Winterthur property has an impact on the Brandywine Creek. Similar contextual relationships exist between the historic landscapes of Nemours and St. Andrews School and their surrounding watersheds. Because these historically significant landscapes are inextricably linked to their surrounding communities and ecosystems, it is critical to acknowledge the need for flexibility in adapting to ecological imperatives that affect the context of the historic landscapes. Thus, the overall landscape preservation philosophy of these three institutions must be adapted to reflect their geographic context, as well as the dynamics of ecological change.

It must be acknowledged that landscapes are inherently changing entities and it is therefore impossible to keep them in a truly static condition. Although design objectives may seek to achieve a sense of balance and permanence that would otherwise be lacking in a dynamic landscape, these efforts do not render the landscape immune to the inevitable changing forces of time, growth, maturity, and decay. All the water features at these three historic designed landscapes were constructed and maintained in the best manner known at the time. Meticulous stewardship of these landscapes has been demonstrated continually through consistent grooming, regular maintenance, and use of highquality, durable materials. As the understanding of best construction and maintenance practices evolves over time, however, new management and maintenance strategies should be considered both for water bodies and historic resources. With this idea in mind, perhaps the best result that historic

preservation can achieve is a preservation of the goals and intents of the designed landscape, knowing that simply preserving the exact photographic appearance of earlier landscapes will not ultimately be effective.

Best Management Practices for Protecting Water Quality

With the above premises in mind, each institution must develop its own set of conservation and preservation priorities to guide management decisions (Quigley 1997, 10). These priorities may be ecological, historical, recreational, or programmatic. Ecological priorities would include protection of the water resources of a watershed, habitat for local wildlife, and special consideration for rare or endangered species. Historical priorities would vary from site to site: for Nemours, the priority may be the preservation of the ordered landscape design within a farming context; for Winterthur, it might include maintaining the open character of the landscape design and the integration of garden and farm landscapes; while at St. Andrew's School, the historical priorities could include interpretation of Noxontown Pond as a mill landscape and rural community, a scenic and inspirational setting for the school, and a venue for recreational activities including rowing, skating, and swimming. In the case of St. Andrews, the recreational priorities foster current recreational uses, which may or may not be the same as previous recreational uses. Programmatic priorities might include interpretation about the previous uses of the land in combination with environmental education.

Although each of the three institutions is unique in its situation and goals, all three can benefit from careful consideration of how implementing current Best Management Practices (BMP) might affect the management of individual historic landscapes. With respect to the issue of environmental water quality, BMPs are structural and non-structural measures used to reduce non-point source pollution and restore natural water drainage conditions to a developed environment (Browne 2006, 30). BMPs can be implemented either within a water body (such as chemical treatments) or within the surrounding watershed (such as vegetated buffers). In general, actions taken within the water body can achieve quicker results, but typically are a temporary fix to a problem that is the result of changes within the surrounding watershed. Therefore, it is important to consider the long-term costs and effects of individual management strategies, as well as combination of strategies.

The work of F.X. Browne and Natural Lands Trust suggests that several broad BMPs for water quality improvement and protection might be applicable to the three case study sites. The following sections consider the possible benefits and drawbacks of implementing these BMPs.

Water Monitoring

This practice has no impact on the aesthetics of the landscape but allows institutions to gauge the necessity of other BMPs. A regular water monitoring program should be implemented at Nemours, and the other two institutions should continue and increase the level of their monitoring.

Streambank and Shoreline Stabilization

Areas of erosion along earthen banks can be stabilized through a combination of bioengineering

(vegetative) and/or structural engineering techniques. Structural engineering techniques have a finite window of service, while planted stabilization of a waterway offers the potential of perpetuallyrenewing protection. In the case studies, both Nemours and Winterthur have areas of stream bank and shoreline that are currently lined with stone in concrete mortar beds. Although these can be quite beautiful, they contribute to the degradation of the water quality in their immediate vicinity and downstream. Additionally, they are subject to failure over time. When repair becomes necessary, it is advisable that mortared banks be replaced with un-mortared stone linings or vegetated banks. Although this will not preserve the exact historic appearance of the water body, it will significantly improve the habitat characteristics and better sustain the appearance and function of the landscape.

Riparian Buffers

The U.S. Forest Service recommends a ninety-five foot-wide vegetated buffer along either side of a waterway as an ideal separation from cropland or pasture (Quigley 1997, 94). This vegetative filter should be composed of three zones for maximum water quality protection; the first fifteen feet adjacent to the water body should be undisturbed forest vegetation to maintain cooler water temperatures favoring aquatic life. Ironically, the organic debris produced by waterside vegetation is valuable to the healthy nutrient cycle of the water and does not significantly contribute to eutrophication. The next sixty-foot zone should be a managed forest that promotes infiltration of water and prevents easy transmission of excess sediment and nutrients to the water body. The final twenty-foot zone of filtering should be a tall grass or shrub border. It

is important to note that while the Forest Service recommends this as an ideal buffer, narrower filter strips of trees, shrubs, or grasses can provide useful degrees of benefit.

One of the most substantial benefits that vegetative buffers can provide is discouraging nuisance waterfowl including geese (Figure 13). Although the presence of geese in limited numbers can be considered valuable and attractive, an increase in fowl populations has a significant negative impact on water quality. Geese prefer the clean and open water access provided by closely-mown lawns, and seek this in preference to taller grasses or vegetation. The movement of geese in and out of the water along the banks and the nutrients contained in their feces contribute to degraded water quality. Not only does the activity of geese negatively affect water quality, but in large numbers the geese threaten the integrity of the landscape features and water bodies. This poses a particular dilemma at Nemours, where the pond known as the Duck Pond was historically used to encourage and protect waterfowl to the extent that a fence was erected to keep away predators, and an island with protected roosting boxes used to provide security. This is an example where use and management strategies for a landscape feature merits careful reevaluation.

The greatest challenge with implementing protective buffers along waterways at all three sites is the obstruction of views and the amount of space required for development of the three-zone protective buffer. At Nemours, creating a wooded buffer along the edges of the lake would drastically affect the view from the main garden vista, and therefore does not seem justified. However, creating a fifteen- to twenty-foot wide tall grass

filter strip would provide several benefits and would be reversible at a future time if the historic character was adversely impacted. Although it would not contribute to lowering water temperatures through shading, it would reduce sediment and nutrient entrance into the ponds and would discourage geese populations. Interestingly, some of the peripheral constructed ponds at Nemours have been unintentionally allowed to develop tall grass and wooded edges in the past decade through a reduction in the maintenance schedule. Because the Upper Oriental Pond was created at a point where springs naturally occurred, the surrounding lawn areas are seasonally saturated and difficult to mow. Although the pond initially had manicured, mown edges which emphasized its perfectly circular shape (both the pond and the artificial island within it), I would argue that because it is in a remote portion of the estate it was never central to the experience and appreciation of the landscape. Allowing the banks surrounding the pond to return to a wooded condition would not significantly diminish the garden's design intentions. This would improve the habitat quality of the water source and reduce a difficult maintenance task, neither of which significantly affects the aesthetic qualities of the property.

At Winterthur, a similar challenge is faced. The open character of the landscape around the Clenny/Wilson Run stream channel is valuable for vistas into the estate, but creates serious problems including: increased water temperatures (due to lack of shading vegetation); increased erosion and sediment deposition into the waterways (due to lack of filtering from tall grasses); and increased resident geese populations. Winterthur has already started taking incremental steps to increase the quantity and width of taller grass buffers along



Figure 13. Geese on Pond. (Courtesy of Winterthur Museum, Garden, and Library)

water bodies. This has led to internal conflict as the Board of Trustees of Winterthur Museum, Garden, and Library weighs the ecological benefits of the buffers against the change in visual character that the un-mown buffers create. Taking a purely visual approach, it is true that tall grass buffers do not convey the same image of immaculate care that a closely-mown lawn provides. However, the advantages of implementing the buffers can be argued to outweigh the drawbacks in aesthetics, as grass buffers still allow the larger landscape vistas that define the landscape character to broadly connect the larger design elements. Again, any change in the visual character created by developing tall grass buffers would be reversible at a future date.

At St. Andrew's School, large portions of the boundaries of the pond are already in compliance with the BMP recommendations. Areas which should be considered for improvement include the width of the forested buffers between the pond and the adjacent farm fields and the edge of the large lawn between the school and the pond. This visual

relationship can be preserved and improved by a low filter planting which will retain views from the school to the surface of the pond while providing better filtering capabilities.

Conclusion

While the conclusions of this study may be unsettling to those who view historic landscape preservation in terms of strict adherence to the physical appearance of a landscape at an earlier point in time, it is important to recognize that landscapes inevitably change. Institutions seeking to preserve the spirit of their historic landscape must review changes in technology and ecological understanding periodically as a means of keeping the message of the historic landscape meaningful in a modern context. In the specific instance of recreational and aesthetic waterway construction, institutions must evaluate BMPs that will help preserve the ecological fabric at larger scales, even if it means modifying preservation treatments or historic details. By documenting conscious changes in strategy through the use of a written record, reversible changes to the landscape can improve environmental quality while preserving key historic landscape components and concepts. These careful changes give a landscape the flexibility to communicate to modern eyes. By monitoring and tracking environmental quality over time and modifying landscapes to compensate for ecosystem degradation, the institutions of Nemours, Winterthur, and St. Andrew's School can preserve the vital quality of their water bodies for future use and enjoyment. Written records documenting any changes in strategy will allow these changes to be reviewed in the future, thus allowing these landscapes to face the future without rejecting their rich histories.

References

- Amos, W. H. 1997. *Time to remember: A biography of St. Andrew's School from the 1950s to the 1980s.* Devon, Penn.: William T. Cooke Publishing, Inc.
- Delaware Department of Natural Resources and Environmental Control. 2003. *Piedmont Basin preliminary assessment report*. Dover, Del.: Delaware Department of Natural Resources and Environmental Control.
- Delaware Department of Natural Resources and Environmental Control. 2005. *Delaware Bay and Estuary assessment report*. Dover, Del.: Delaware Department of Natural Resources and Environmental Control.
- F. X. Browne, Inc. 2007. Noxontown Pond at St. Andrew's School: Lake management final report. Lansdale, Penn.: F. X. Browne.
- Fairbanks, J.L. 1964. The architectural development of Winterthur house, Winterthur Portfolio 1: 80-105.
- Pell, W. 1973. A history of Saint Andrew's School at Middletown, Delaware, the first thirty years: 1928/1958. New York: Clarkson N. Potter.
- Quigley, P.A. et al. 2000. Environmental management study for Winterthur museum, garden, and library. Report prepared by Patricia Ann Quigley, Inc of Norristown, PA, in association with Natural Lands Trust of Media, Penn., and Hyla Associates of Hockessin, Del.
- Robinson, R. D. et al. 2006. Conditions assessment report & early action plan for the Nemours mansion and gardens: Priority landscape areas. Report prepared by Rodney Robinson Landscape Architects, Inc., Wilmington, Del.
- St. Andrew's School. 1940. St. Andrew's School: The first decade, 1930-1940. Middletown, Del.: St. Andrew's School.
- St. Andrew's School. 1955. St. Andrew's School: A study,1930-1955. Middletown, Del.: St. Andrew's School.
- Wall, J. F. 1990. Alfred I. du Pont, the man and his family. New York: Oxford University Press.

Preservation by Design: Approaches to Landscape Preservation in Sydney Australia

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Abstract

This paper explores the proposition that the *creation* of designed landscapes on the Sydney Harbour Foreshore is contributing to the *preservation* of these places as individual and historic landscapes. The analysis of three foreshore parks aims to reveal how the design process—intentionally or not—was in effect, an act of preservation that made broader contributions to the conservation of a regional cultural identity.

Key Words

landscape preservation; landscape architecture; post-industrial parks; Sydney Harbour

Introduction

In 1979 American landscape architect Julius Fabos exclaimed in the inaugural issue of *Landscape* Australia, "Is preservation landscape architecture? It is!" (Fabos 1979, 16). Fabos reminds us that the "urge to preserve" is a central theme in the history of the profession of landscape architecture. Similarly, Ethan Carr asserts that the vision statement for the U.S. National Park Service (NPS) was based on "the underlying premise that landscape preservation could be achieved through park development... development that drew on the formal vocabulary and planning traditions of landscape park design" (Carr 1998, 79). As a leader in both landscape preservation and park design, the NPS has a strong and established association with the profession of landscape architecture, and the practice of preservation.

In Australia, the relationship between landscape architecture and preservation has evolved in a different way. Unlike the situation in the United States, there were no federal agencies like the NPS to foster a connection between preservation and landscape design. Nonetheless, preservation was an impetus for the founding of the profession of landscape architecture in Australia, and it has been a recurring theme throughout its forty-year history. This paper will explore how the creation

of designed landscapes in Australia, particularly on the foreshores of the Sydney Harbour, has contributed to the preservation of these sites and to the Harbour Foreshore as a whole. It also offers a suggestion for how strategies for historic landscape preservation and landscape design may merge into a unified practice. Ultimately, the following examples support my contention that landscape architecture is indeed landscape preservation in Australia.

It is significant that the practice of historic preservation (heritage preservation in Australia), the profession of landscape architecture, and the creation of state park service agencies emerged in Australia almost simultaneously (during the late 1960s and 1970s) along with the rise of the environmental movement (Pike 1979; Bull 2001). This was not a coincidence but rather the result of a congruence of concerns about the relationship between quality of life and the built environment. Because of this congruence, many early works of landscape architecture in Australia were motivated by the perceived need to manage change and the potential loss of landscapes in the face of expanding urban areas. Thus, the founding members of the landscape architecture profession often worked deliberately to articulate a sense of place and cultural identity within an increasingly urban context. For example, in his closing comments for the first Australian Institute of Landscape Architect's (AILA) conference in 1970, Lindsay Pryor said, "...we have, as most of us know, a quite extraordinary and in many ways unique heritage of living material, landforms and landscape which we have not sufficiently used yet in our basic landscape work" (Pryor 1970, 55). At the same conference George Seddon shared his thoughts on the importance of designing as

custodians rather than "transformers," and working with Australian genius loci (Seddon 1970). Fundamentally, these ideas inspired work that was grounded in a new appreciation of the indigenous landscape. With like minded- architects, these landscape designers, sometimes referred to as the "Sydney School" (or Sydney Bush School), were the first to express a distinct Australian identity in the built environment. More recently, academic James Weirick reinforced this notion when he described landscape architecture in Australia as expressing a need to come to terms with the "stolen land" and undo the mistakes of the past (Weirick 2006). Hence the boundary between preservation and landscape architecture in Australia is, in some cases, barely perceptible.

Landscape Preservation in Australia

If preservation has been an important theme in the history of Australian landscape architecture, has landscape played a similarly prominent role in the Australian historic preservation movement? As in the United States, historic landscape preservation in Australia faces the challenges of documentation, recognition, and the ephemeral nature of landscape itself. There are very few historic or modern landscapes recognized through the various statutory registers. To date, the World Heritage nomination process is the most visible tool for landscape preservation in Australia, if one considers landscape to encompass natural and cultural values. The current Operational Guidelines for the Implementation of the World Heritage Convention defines cultural landscapes as "cultural properties that represent the 'combined works of nature and man" and which are "illustrative of the evolution of human society and settlement over time, under the influence of the physical constraints and/or opportunities

presented by their natural environment and of successive social, economic, and cultural forces - both external and internal" (UNESCO 2008). Australia now has seventeen World Heritage listings dominated by places with unique ecosystems. Two explicitly recognize the value of cultural landscapes—Uluru-Kata Tjuta National Park, and Royal Exhibition Building and Carlton Gardens. Other entries, for example the Blue Mountains World Heritage Area and the Sydney Opera House, are places whose significance is highlighted by adjacent cultural landscapes: the villages, resorts, roads, and tracks of the Blue Mountains, and the varied foreshores of Sydney Harbour. As a group, the Australian listings on the World Heritage Register synthesize diverse values and subtleties of Australian "place," and work to promote regional, national as well as worldwide awareness and protection of vast landscapes.

At the national and state level, the Australia ICOMOS Charter for Places of Cultural Significance, known commonly as the Burra Charter, has shaped preservation practice since the 1970s (ICOMOS Australia 1999). This charter is the framework for all statutory registers in Australia. In New South Wales (NSW) statutory regulations are numerous and include the registers maintained by the NSW State Heritage Office, the NSW National Park and Wildlife Service (NPWS), and local environmental plans. The Burra Charter focuses on place, and thus seems to give generous scope and incentive to the recognition of designed landscapes. However, designed landscapes as a category represents a small proportion of protected landscapes in Australia; to date, surprisingly few historic designed landscapes appear on registers of significant places and items in Australia. For example, in a 2007 inventory of cultural landscapes

compiled for the ICOMOS/IFLA International Scientific Committee for Cultural Landscapes, Juliet Ramsay found that only twenty-three of the total 166 botanical gardens in Australia appear on various heritage registers (Ramsay 2007).

The general lack of recognition of historic designed landscapes is related to concerns about the need for a well-defined canon of Australian landscape architecture. Efforts to document and acknowledge significant works of landscape architecture have emerged only within the last few years. The first dissertation on the history of the profession was completed recently (Saniga 2004), and in 2006 the Australian Institute of Landscape Architects (AILA), in preparation for its fortieth anniversary, published a list of twenty-five significant landscapes (AILA 2006a; AILA 2006b). This was both preceded and informed by Catherin Bull's book *New Conversations with an Old Landscape* (2002), the first publication to propose a canon of post-World War II designed landscapes in Australia. In the absence of an established canon, there is little inclination nor incentive to preserve landscapes through conventional practices. However, consideration of the history of Australian landscape architecture suggests that landscape preservation has occurred in other ways—namely, through the design practices established by designers of "the Sydney School."

The Case Studies

Australia's Sydney Harbour provides a compelling setting for examining the convergence of the boundaries between landscape preservation and landscape architecture because it has been the locus of practice for many landscape architects, as well as the locus of a changing post-industrial

landscape. Until recently, the harbor was as much a working harbor as it was a recreational space, and thus strategic portions of the harbor foreshore were occupied by facilities which provided the city with fuel or protected it from invasion. As part of the post-industrial economic shift underway in Sydney since the 1970s, much of this land has been transferred to the public domain. Several of these sites have been reclaimed and re-created as public parks, to great local acclaim. These lands are fragmented and managed by an array of organizations: former Commonwealth defense land is managed by the Sydney Harbour Federation Trust; the NSW NPWS manages 393 hectares (971 acres) and visitor facilities at approximately fifteen discontinuous sites around the harbor; finally, local councils manage discrete parcels of community lands as either open space, bushland, or reserves.

Within this context, three sites—Illoura Reserve, designed by Bruce Mackenzie (1970-1981), the Wharf Amphitheatre at Bradley's Head by CAB Consulting (1998), and the BP Parkland by Clouston Associates (2001) and McGregor + Partners (2005)—illustrate the convergence of preservation and design in Australian landscape architecture. Each site is now a park that occupies former industrial land on the harbor's edge (Figure 1). The histories of these designed landscapes span a critical period following the formative years of both landscape architecture and heritage practice in Australia, so as a trio they represent a range of perspectives on the interplay, or boundary, between landscape design and preservation. Finally, each has been recognized for its cultural significance in various ways. Illoura Reserve was listed on the National Trust of Australia's (NSW) register in 1986 and the local heritage list in 2001. Both the Wharf Amphitheatre at Bradley's Head

and the BP Parkland were informed by conservation management plans, an indication that the sites were considered significant even prior to the design work under discussion here. Also, both have received awards from the Australian Institute of Landscape Architects. Lastly, the 2006 AILA Sites of Significance list included Illoura Reserve and Bradley's Head; the BP Parkland is a likely candidate when it meets the five-year age requirement.

Illoura Reserve, Bradley's Head, and BP Parkland are also examples of a distinct landscape type harbor foreshore post-industrial sites. The recovery and revisions of these former industrial sites in Sydney give preference to spatial configurations and uses that provide visual and physical access to the harbor. At the same time, each references, and thereby preserves, its industrial history in a variety of ways. At the broad scale of landscape planning, this is open space preservation through the reclamation of the urban edge constituted of the harbor foreshore. These revised landscapes are thus a significant register of cultural change during the last thirty years. The provision of a new series of open spaces around the harbor, and the resultant new opportunities for recreation reflects new social and cultural attitudes, as well as the central role of the Sydney Harbour in the public domain of the city. These landscapes also illustrate how landscape architects, through the reclamation of former industrial sites, have engaged the nature/culture dialogue that characterizes the work of the Sydney School and underlies much conventional historic landscape preservation practice.

Illoura Reserve

Formerly known as Peacock Point, the Illoura Reserve occupies a narrow strip of land on the

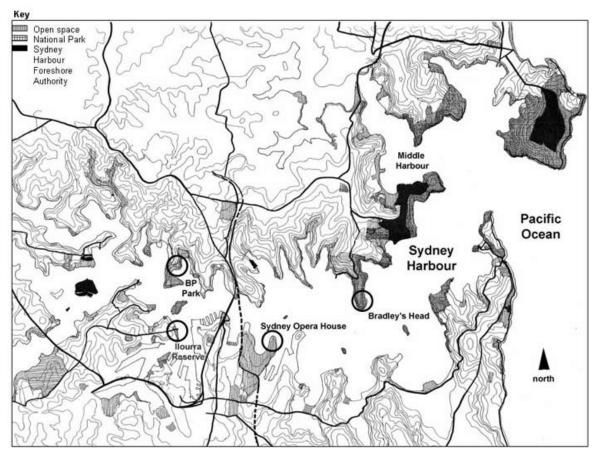


Figure 1. Open Space on Sydney Harbour Foreshore. (Drawing by Craig Burton)

southern edge of Sydney Harbour on the south-eastern edge of the Balmain peninsula, a suburb in Sydney's inner west. Through the nineteenth and early twentieth centuries, this site was modified by quarrying and levelling to accommodate a shipbuilding yard and later a coal storage facility. In 1967, foreshadowing the transition to a post-industrial economy, Peacock Point was the first parcel of land acquired by the state in an effort to establish recreational facilities and reserves around the harbors edge (Evans and Buchanan 2003, 27).

Bruce Mackenzie, commissioned by the NSW Maritime Services Board, transformed this site into a park in two phases between 1970 and 1981. Peacock Point was a new type of park for Australia. Rather than level the site to create playing fields, Mackenzie accepted and celebrated the rugged landform that characterized the site. The ruggedness was partly inherent in the sandstone geology and partly created by industrial activity, especially quarrying. Mackenzie used this topographic variety to construct a series of terraces, separated

by sandstone retaining walls (Figure 2). On one hand, these are practical approaches to providing shelter from sun and wind and framing views to city, but Mackenzie himself labelled his work the "Alternative Parkland" (Mackenzie 1976), signalling his conscious and deliberate effort to abstract the essence of the bush and integrate it into the urban context (Figure 3).

Illoura Reserve is unabashedly a re-creation—or, in preservation terms, a reconstruction—of a general interpretation of the original, environmental condition of the Balmain Peninsula and the Sydney Basin as a whole. Its significance as a designed landscape rests in the fact that it epitomized a newfound ability to use the public domain as a locus for expressing a cultural need to identify and reconnect with the pre-urban conditions of nature being erased by the city. For landscape architecture in Australia, Illoura Reserve clearly articulated—ahead of the introduction of the Heritage Act (1977 in New South Wales) and associated preservation standards and guidelines—that an ethic of preservation could inform and inspire landscape design.

Mackenzie's self-described "alternative park" was almost immediately recognized as pioneering. In

1987, only five years after its completion, the NSW National Trust proposed register listing of the site, and described it as a "seminal" work of design (National Trust of Australia, New South Wales, 1986). More recently, Leichhardt Council, the local government authority in charge of the park, listed it on its register of heritage items, noting that Illoura Reserve has both representative and landmark value (New South Wales State Heritage Office, 2003, p. 29). Finally, Illoura Reserve is the first landscape Catherin Bull discusses in her book, *New Conversations with an Old Landscape*, and is included on the AILA Sites of Significance.

Bradley's Head

Bradley's Head, also known as *Boroggi* (meaning "long tongue") Point, is a long, narrow sandstone promontory on the north side of the harbor. During the early nineteenth century it was used by European settlers for defense fortifications and as an animal quarantine station. Over the course of the twentieth century it became known as Ashton Park and was used increasingly for recreational and commemorative activities. Today the accessibility, variety and beauty of the park and Bradley's Head,



Figure 2. Illoura Reserve under construction, 1969. (Photo by Finn Thorlvaldson, courtesy of Barbara Buchanan)



Figure 3. Illoura Reserve in 2007. (Photo by author)



Figure 4. The Wharf Amphitheatre at Bradley's Head, looking southwest to Sydney Harbour Bridge and Sydney Opera House. (Photo by author, 2007)

particularly its spectacular views across the harbor to the Opera House and the Sydney Harbour Bridge, make it a popular destination (Figure 4). In 2001, Mosman Council, the local government, listed Ashton Park as a significant remnant bushland with rare aesthetic, historic, scientific and social values at the state level (NSW State Heritage Office 2007b).

In 1998, in anticipation of intense use during the Sydney 2000 Olympic Games, the NSW National

Parks and Wildlife Service (NPWS) commissioned CAB Consulting to transform a former quarry at the southern tip of Bradley's Head into an amphitheatre (Burton 2000, 306). CAB leveled the quarry floor to create a gently sloping grassy plane and installed a graceful curving spine of sandstone stairs to connect a parking lot to the wharf area. The design allows ample room for visitors to gather in large groups or individually, while the spine of stairs improves access to the water's edge. Most importantly, the design retains the historic landform—the quarry walls and the sandstone wharf—and improves physical and visual connectivity to the mid- and upper-levels of the headlands where the remnant fortifications and historic pleasure ground facilities are located (Figure 5).

The designers were particularly focused on making the most of the visual links between the headland, the water, and the Sydney Opera House by opening views into and out of the site. The prominence of Bradley's Head is a critical aspect of its cultural and environmental significance. Selectively revealing this prominence and proximity to the opera house was seen to engender an appreciation for the significance of the site. In addition, the designers, also authors of the conservation management plan, attempt to align their design ideas with the conservation aims for the site. These design ideas, however, met with resistance from the client, the NSW NPWS, because they involved the removal of vegetation to improve views into and out of the site. The regenerated indigenous vegetation at Bradley's Head is a significant value of the site. In its earlier functions as a fortification and later as a pleasure ground, Bradley's Head was cleared historically. Today it remains a singularly significant spot on Sydney's lower North Shore for enjoying spectacular views of the city, yet the

NSW NPWS prioritized the protection of natural vegetation in their 1998 Plan of Management over the conservation of scenic and landscape qualities (NSW NPWS 1998, 9). According to Craig Burton, the designer, "There were those who supported a degree of artful intervention and the need to integrate the park into the fabric of the living city. Others felt that humans should be excluded from such areas, to conserve the fragment of surviving nature..." (Burton 2000, 307). CAB Consulting was in effect arguing for the restoration of views long enjoyed but recently obscured. This debate typifies the nature/culture dialogue surrounding the reclamation of many former industrial landscapes in Sydney. At the Wharf Amphitheatre the design was as much a process of identifying and prioritizing the protection of natural and cultural values—often the focus of landscape preservation practice—as it was the artful reconfiguration of the space to a functional and beautiful place.

The BP Parkland

This fishhook-shaped sliver of sandstone was an oil storage and refuelling facility for BP Australia (British Petroleum) from the 1920s to 1994. Located on the Waverton peninsula on Sydney's lower north shore between two older parks, the BP Parkland faces southeast toward the city (Figure 6). When a 1994 state government proposal to redevelop this site as residential units caused community uproar, NSW Premier Bob Carr halted development and prepared a vision statement for the harbor foreshores. Known as "The Premier's Statement for Sydney Harbour Foreshores," this statement embraced many aspects of preservation practice: it mandated the creation of public access, the management of natural and cultural history, and the ecological regeneration of thirty-seven sites rimming the harbor (Carr 1997). The statement was quickly transformed into legislation, and the BP site was the first to be developed according to the new policy (Evans 2005).

The Waverton Peninsula Industrial Sites Strategic Master Plan (SMP), prepared by Clouston Associates and adopted by North Sydney Council in 1999, proposed transforming the site into a sequence of dramatic spaces for play. Inspired by the semi-circular tank cuttings and rugged topography exposed by the removal of the oil storage



Figure 5. The Wharf Amphitheatre at Bradley's Head from the air. (Photo courtesy NSW NPWS)



Figure 6. The BP Site in Waverton, in 1991, before demolition. (Photo courtesy NSW Lands Department)



Figure 7. BP Site Waverton, detail of excavation of concrete bund wall. (Photo Courtesy BP Australia)



Figure 8. BP Parkland in 2006, with bund wall removed and sandstone exposed. Note the new railing tracing historic path through site. (Photo by author)

tanks, the proposal envisioned the upper and lower levels and the voids of the tank cuttings as settings for diverse activities including rock climbing, large parties, and quiet contemplation of the spectacular view of the city.

The plan also identified the need for two separate studies: a Flora and Fauna Assessment and a Conservation Management Plan (Clouston Associates 1999; Hoye 2001; Godden MacKay

Logan 2000). Remediation and the removal of infrastructure progressed while these supplemental reports were underway, literally bringing new issues to the surface. First was the historical significance of the industrial artifacts themselves. While there was no question about the removal of the storage tanks, smaller elements—particularly the concrete bund walls—sparked debate. By 2000, an intense controversy surrounding the transformation of Sydney Harbour from working harbor to a recreational harbor reached a peak. In heritage practice, the debate highlighted the need to identify and conserve the industrial heritage. Thus it was no surprise that both the SMP and the conservation management plan proposed preserving the bund walls and adapting them as retaining walls to extend the site's innate nature as a viewing platform. The community, on the other hand, saw more value in revealing the sandstone topography that lay underneath. In the end, the community's desires prevailed and the walls were removed to expose broad sandstone terraces (Figures 7 and 8).

The removal of tanks and walls revealed a robust and challenging framework for the design of a new public space. The remaining industrial elements included water pipes, concrete walkways, steps, and retaining walls. These created a functional and aesthetic syntax that informed the adaptation of the site to a parkland: broad concrete paths and stairs facilitated access and accommodated large crowds; steel decks extended the site's function as a viewing platform; rubble gabion walls extended the in situ walls.

The second major issue to surface as a topic of public concern involved the reclamation of the landscape by forces of nature. The removal of the oil storage tanks resulted in rapid colonization of the slopes and cuttings at the base of the tanks by flora and fauna. The Flora and Fauna Assessment affirmed the viability of establishing a wildlife corridor on the site, thereby supporting proposals in the SMP for dense tree plantings on the upper and lower terraces of the site. This created more intense community debate about the nature of this parkland: was it a wildlife corridor or a public park? Here again, the community view prevailed, and far fewer trees were planted than proposed (Figure 9). As a result, the park that opened in 2005 is neither a wildlife corridor nor a traditional park—it is a new park specific both to its

immediate context and its regional, foreshore location (Evans 2005).

Conclusion

The designs of the Illoura Reserve, Bradley's Head Wharf Amphitheatre, and BP Parkland have contributed to the re-creation of the foreshore of Sydney Harbour as a useable, identifiable public zone. Each project offers a different response to the question of how landscape design simultaneously creates new places and preserves existing places. Illoura Reserve, the earliest of the three, anticipated



Figure 9. Photo of lower level of the BP Parkland showing newly established frog habitat at base of tank cuttings. (Photo by author, 2006)

the articulation of heritage policy and was one of the first designs by a landscape architect in the country. It was also conceived at a time of rapid urban growth and change—a time when urban and associated industrial activities carried connotations of pollution and ill health. In this social context, it is no surprise that the broad design strategy at Illoura Reserve focused on recovering, reconstructing, and integrating an idealized original landscape, one that had been lost to urban growth. It is also important to note that this original landscape was, at the time, considered to have more social and aesthetic value than the more recent industrial heritage associated with the site.

By the 1990s, heritage practice had expanded in scope and depth to consider the contributions of indigenous and industrial heritage to the making of significant places. Ecology also had emerged as the basis of conservation practice in the NPWS to demonstrate the loss of many species of plants and animals, and associated threats to environmental health. Against these developments, the design concept of tying back into the headland to strengthen connections at the Wharf Amphitheatre at Bradley's Head was a deceptively simple gesture. On one hand it speaks of an acceptance of industrial heritage and more recent histories. On the other hand, it is an expression of underlying tensions involved in negotiating heritage values, in this case between conservation of the natural vegetation and the recognition and enhancement of ongoing cultural values. At the BP Parkland, the design similarly involved a negotiation between the restoration of natural values and the preservation and adaptation of industrial artifacts. In both cases the outcomes transcended the debate: both have overlayed a robust structure with subtle adaptations of industrial elements to transform these sites

into places that are distinctly of and about Sydney Harbour.

Illoura Reserve, Bradley's Head Wharf Amphitheatre and BP Parkland reflect the evolution of practice in the fields of both landscape architecture and historic preservation. Indeed, the differences among the designs are largely explained by the temporal span they cover. Between the 1960s and the late 1990s, the conventions of preservation practice evolved toward today's focus on concepts of place; likewise, the profession of landscape architecture has focused increasingly on designing to sustain cultural, ecological, and aesthetic values. Most important of all, in spite of their different approaches to industrial heritage, all three designs have contributed to the preservation of a sense of place and context, rather than the preservation of the individual elements that constitute each landscape. This is an important distinction and the key to understanding how in Sydney Harbour, landscape design is landscape preservation.

References

- Australian Institute of Landscape Architects. October 2006. Australian Significant Landscapes. *Landmark*. Canberra: Australian Institute of Landscape Architects. 4: 7. (a)
- Australian Institute of Landscape Architects. October 2006. Sites of Significance. http://www.aila.org.au/significant (b)
- Bull, C. 2001. Valuing the contribution of landscape architectural works to Australian culture: A preliminary assessment. In Twentieth century heritage—our recent cultural legacy: Proceedings of the Australia ICOMOS conference, ed. D. S. Jones. Adelaide: University of Adelaide, School of Architecture, Landscape and Urban Design; Australia ICOMOS Secretariat.
- Bull, C. 2002. New conversations with an old landscape: Landscape architecture in contemporary Australia. Mulgrave, Victoria: Images Publishing Group.
- Burton, C. 2000. Nature as Culture: Sydney Harbour and Water as Place. Landscape Australia. 302-7
- Carr, B. 1997. Sydney Harbour foreshore statement. Sydney: Department of Urban Affairs and Planning. http://sydneyharbour.duap.nsw.gov.au/bobcarr.html.
- Carr, E. 1998. Wilderness by design: Landscape architecture and the national park Service. Lincoln: University of Nebraska Press.
- Clouston Associates. 1999. Strategic masterplan for Waverton Peninsula industrial sites. North Sydney, New South Wales: North Sydney Council.
- Evans, C. 2005. Harbourside spectacular. Landscape Australia 1:16-18.
- Evans, C. and Buchanan, B. 2003. Conserving post World War II designed landscapes in Sydney, Australia: Issues and approaches. In *Studies in Australian garden history*, ed. M. Bourke and C. Morris, vol. 1, 21-34. Melbourne: Australian Garden History Society.
- Fabos, J. 1979. Landscape architecture in the U.S. Landscape Australia 1: 12-18.
- Godden Mackay Logan, 2000. Waverton Peninsula industrial sites conservation management plan. North Sydney, New South Wales: North Sydney Council.
- Hoye, G. 2001. Flora and fauna assessment, Waverton Peninsula. Report to North Sydney Council. Sydney: Fly By Night Bat Surveys.
- ICOMOS Australia. 1999. The Australia ICOMOS charter for places of cultural significance (Burra charter). Canberra, Australia: ICOMOS Australia.
- Mackenzie, B. 1976. Alternative parkland. Landscape Australia 1: 19-27.
- National Trust of Australia (New South Wales). 1986. Listing proposal NTN.06.
- New South Wales Department of Urban Affairs and Planning. 2002. Sydney Harbour vision and strategy-SEPP 56-Sydney Harbour foreshores and tributaries.
- New South Wales National Parks and Wildlife Service. 1998. *Sydney Harbour National Park plan of management*. http://www.environment.nsw.gov.au/resources/parks/pomFinalSydneyharbour.pdf
- New South Wales State Heritage Office. 2007. State Heritage Inventory: Iloura [sic] Reserve. (a) http://www.heritage.nsw. gov.au/.

- $New \ South \ Wales \ State \ Heritage \ Inventory: A shton \ Park. \ (b) \ http://www.heritage.nsw.gov.au.$
- Pike, J. 1979. The development of the landscape architecture profession in Australia. Landscape Australia 2: 289-295.
- Pryor, L. D. 1970. Summary-education and landscape architecture. In *Proceedings of the conference: The landscape architect and the Australian environment,* 51-55. Canberra, Australia: Australian Institute of Landscape Architects.
- Ramsay, J. 2007. Inventory of heritage gardens and parklands. Unpublished report for ICOMOS/IFLA International Scientific Committee for Cultural Landscapes.
- Saniga, A. 2004. An uneasy profession: Defining the landscape architect in Australia. Ph.D. diss., University of Melbourne.
- Seddon, G. 1970. The quality of our Landscape. In *Proceedings of the conference: The landscape architect and the Australian environment*, 13-26. Canberra, Australia: Australian Institute of Landscape Architects.
- Weirick, J. 2006. Sites of significance. Public presentation for New South Wales Australian Institute of Landscape Architects, Sydney.
- United Nations Educational, Scientific, and Cultural Organisation, Intergovernmental Commission for the Protection of the World Cultural and Natural Heritage. 2008. *Operational guidelines for the implementation of the world heritage convention*. http://whc.unesco.org/en/guidelines.

Expanding Preservation Boundaries in a German Industrial Landscape

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Abstract

In recent years preservation scholars have made a case for expanding the boundaries of landscape preservation. While some landscape architectural practices and research have suggested new inventory and interpretation methods derived from the design process, most scholarship continues to emphasize more traditional preservation methods and places. In this paper we suggest the boundaries of preservation practice can be expanded by more fully embracing landscape architectural analysis and design processes that provide new insights for preserving, understanding, and interpreting landscapes.

This research focuses on the special character and identity of an exemplary urban cultural landscape in the process of significant and rapid change: Harbor City in Hamburg, Germany. Landscape architects there expanded beyond standard preservation documentation and research techniques with intuitive strategies used in the design process.

Key Words

Industry, urban, cultural landscapes, Germany, canals, hydrology, strollolgy

Introduction

While preservation scholars have made a case in recent years for more expansive thinking (Alanen and Melnick 2000), little has been written in the United States to suggest the usefulness of landscape architectural analysis and design to preservation study and practice beyond general National Park Service standards. Design with Culture, for example, argues for innovation, but continues a focus on archaeology, gardens, and great people in history (Birnbaum and Hughes 2005). Beginning in the 1990s, numerous journal articles offering new theories about necessary changes to preservation practice generally lacked any practical advice. For example, while Michael Tomlan in "Historic Preservation Education: Alongside Architecture in Academia" (1994) suggested the need for a closer alignment with design education, he offered no advice for how the process of design might be useful to historic preservation practitioners. While Yahner and Nadenicek in "Broadening the Base: History in Large Changing Landscapes" have argued for the usefulness of a landscape-based approach, their discussion is conceptual and abstract (2002). More research on successful landscape architecture projects linked to an in-depth study of the everyday landscape

might illustrate the clear benefits of a design-based strategy to expand the traditional preservation approach. The landscape architectural analysis and design approach applied in the following German case study provides evidence of the effectiveness of those methods. More specifically, a project undertaken near Hamburg demonstrates how design-based strategies are useful for understanding, interpreting, and ultimately preserving historic landscapes. The German example also suggests that enlightened development guided by landscape architects can be a means of expanding the boundaries of preservation.

Germany is rediscovering its industrial heritage. Since the 1990s, Erlebniswelten (Worlds of Experience) has revitalized industrial sites nationwide, including industrial relics, transportation infrastructure, and industrial landscapes. Many of those sites are focused on the communication of themes (an attempt to tell a story) through the landscape experience. The Ruhr region, a well-known example of industrial revitalization, was established as a new tourist destination. The intent there is to protect industrial heritage by preserving industrial artifacts and other remnants of the past. The Ruhr experiment has been highly successful, in part because it has been so heavily marketed. However, tourism and themed landscapes cannot be the only means of engaging the wealth of industrial heritage landscapes found throughout the nation.

Cultural landscape interpretation and preservation work derived from a landscape-based design model has evolved in Germany and been more readily accepted than in the United States. This is due in part to the work of German cultural and historical geographers, such as Heinz Quasten, who offer creative ways of thinking about the interaction of natural and cultural factors, the

importance of multiple meanings based in values, and the relationship of extant and vanished objects (parts) to a larger whole (Schenk, Fehn, and Denecke 1997). Wilhelmsburg, part of the Harbor City in Hamburg (Figure 1), exhibits a unique character and identity that is useful as a case study of preservation/history by design. Encompassing five interrelated canals and their associated built environments, the site is an exemplary urban cultural landscape in the process of significant rapid change.

Using techniques developed by landscape architects at the Technical University (TU) of Berlin, researchers characterized the existing and defining structural elements in the context of the landscape's historical development. An array of methods was used by the landscape architects to propose development that supported preservation and interpretation of the site. Some of these methods included intuitive design and inventory processes, along with study and documentation of the styles and material qualities of the formative structures.

History in a Rapidly Changing Industrial Landscape

Rapid change can lead to a wholesale abandonment of the past (Yahner and Nadenicek 1997). These transformation processes are being carried out with a speed and irreversibility that threaten to obliterate historical cultural remnants and symbols that have established a place's identity over a long period of time (Schenk 2001).

Deindustrialization in the wake of rapid development is exactly what is occurring in the harbor and city quarters of Hamburg-Wilhelmsburg.

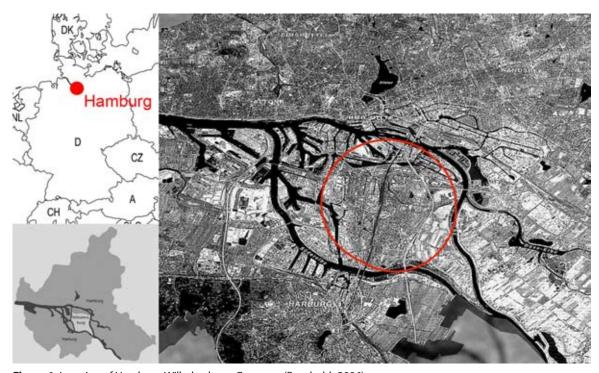


Figure 1. Location of Hamburg-Wilhelmsburg, Germany. (Bornholdt 2006)

While the production areas in harbor and city quarters might be thought of as crude unusable areas, they actually comprise a valuable and culturally rich landscape. With the encouragement of the European Spaces Development Concept (Europäisches Raumentwicklungskonzept 1999) sites like Wilhelmsburg are being restored and creatively incorporated into a newly-designed built fabric.

Changing urban spaces like Wilhelmsburg can be improved if the existing landscape palimpsest is carefully built upon. The European Landscape Convention (ELC) has provided impetus for developing in such a manner. While the ELC has often sought the protection and management of natural and pastoral landscapes, it is also concerned with

degraded rural and urban landscapes and, in general, recognizes both the beauty and utility of everyday areas representing Europe's most important complex historical, cultural, ecological, environmental and social places (Conseil de l'Europe 2004).

In incorporating past layers of industrial stories and elements into developing landscapes, it is necessary to understand what is on a site, why it exists, and how it evolved. In the Hamburg-Wilhelmsburg study, the origins of place were researched relative to the history of the waterways and land use. The topographical development and regional cultural heritage of the Elbe islands were retraced and evaluated to identify the unique characteristics and structural forms of the area.



Figure 2. Hamburg Harbor: Waterways, industrial land use, and discarded structures. (Behörde für Stadtentwicklung Hamburg, Scharf 2003)

Located along the highly divided river lowlands adjacent to the Elbe River, the island that now contains Wilhelmsburg was originally sparsely populated agricultural land. The current Elbe lowlands island structure originated in the early 1400s with the building of dams and drainage of wetlands and marshes for the purpose of cultivation and settlement. Industrial development of the western island began during the mid-nineteenth century with the opening of the Hamburg Free Port and early construction of its canals. A sophisticated canal and street network developed, oriented toward and emanating from the former tidal areas and branches of the Elbe. Several ditches, dikes and country roads added other layers to the complex and interconnected human patterns. A number of buildings were constructed within the grid-like layout of canals, railways and streets. The combination of dikes, raised areas of land, the drainage and canal network, and the corresponding industrial development formed the overall landscape structure. (Figure 2) The cultural landscape developed within the Hamburg harbor completes and enriches the Free Harbor, the Hamburg Innerharbor, the Altona Fish Harbor, and the *Billekanalrevier*.

The cultural landscape of Wilhelmsburg is defined above all by the presence of technical and mechanical structures used during the industrial heyday. These everyday objects were perceived and valued by residents in various ways. Between 1880-1930, the contrast between the industrial structures and their natural surroundings provided a pleasing aesthetic that combined organic and structured forms (Huber 1991, 3). As they were built, the Wilhelsmsburg industrial structures were admired as technical achievements. Citizens were so proud of their structures that they photographed them, made drawings of them, and sold them as color postcards. The transportation infrastructure was highly valued as it meant economic prosperity.

In the 1960s-1970s, increased ocean container-handling, ever-larger ships, and deindustrialization processes brought about permanent changes to the landscape. The need for deep water access for these large vessels forced the Hamburg Harbor along with its associated institutions to move to the Elbe River. Changing social and economic conditions further hastened the abandonment of industrial structures, canals, and railroads; the harbor landscape took on a new character of fallow fields (some damaged by chemicals), discarded structures, and infrastructure. What remains is an evocative landscape once shaped by water—a landscape of lines, ditches, canals, sluices, dikes, mounds, and flood protection structures. (Figure 3)

Due to lack of use, and resulting transformation of their meaning, the canals are almost gone from social memory and public perception.

A Holistic Approach to Analysis

The use of the word "treatment" rather than design in preservation practice is quite revealing. Treatment connotes a linear process yielding a rationally defensible approach. The methods generally applied in preservation practice are strikingly similar to the rational design process paradigm that developed during the modernist period. Since the 1980s the rational process (and associated analysis, research, synthesis, and design stages) has been thoroughly defined and critiqued (Ledewitz 1985). Design theorists, especially in the postmodern era, suggest that multiple approaches are possible as long as designers are clear and forthright in revealing the underlying values influencing their decisions. The approach applied by the German landscape architects in this case study is similar to the postmodern design process paradigm sometimes known as "concept/ test" rather than the rational process paradigm. John Lyle described the postmodern approach in Design for Human Ecosystems and other publications (Lyle 1999). He, like other design theorists in Europe and the United States, encouraged intuitive responses to the site and other types of creative engagement. According to Lyle (1999) those creative ideas were to be validated later through more traditional analysis, the second part of an iterative process of "proposing" and "disposing." The holistic approach derived from design also has the added advantage of revealing patterns and connections that might otherwise remain hidden.

In the case of Wilhelmsburg, the designer's primary goal (through a landscape architectural analysis and design approach) was to reveal the site's character and unique qualities developed as a result of water control so that information could then be used in a design proposal for the entire area.



Figure 3. Historic Waterway built in 1894. (Bornholdt 2006).

Some of the specific features located throughout Wilhelmsburg that contribute to the historic character of the site include poured embankments, quay walls, sluices, bridges, and remnant railroad structures.

In an effort to add to and expand upon the traditional preservation approach and ultimately develop a holistic perspective of the site, an intuitive technique known as "Strollology" was used during the analysis process. In a manner similar to John Lyle's methodology, Strollology allows for multiple intuitive responses to sites prior to systematic methods of analysis. The results of the Strollogy study, an associated spatial analysis, and in-depth exploration of prior and extant structural elements were checked against a comprehensive landscape-based site analysis and mapping. Those analysis results were informed and supported by extensive and thorough historical research.

The intuitively-based survey fieldwork occurred during site excursions by TU students and faculty. The "strollology method" developed by Lucius Burckhardt was deliberately chosen



Figure 4. Walk! Hiking through a district. Spatial phenomena and perceptions were captured in pictures and drawings. The students were asked to communicate the results of their intuitive observations to the residents of Wilhelmsburg in order to generate reactions and recollections from people within the community. The strollology imparted a first glance at Wilhelmsburg and helped establish a solid relationship between students, the landscape, and the population. (Astrid Zimmermann 2006)

as the preferred, intuitively-based method. In describing strollology, Burckhardt suggests that a walk is like a string of pearls as the observer moves from one area of interest (pearl) to another (Burckhardt 2005). While hiking through a district one pays special attention to locations, situations, phenomena, past and present actions, and missing components. (Figure 4)

As noted earlier, the first phase of the site engagement also included a general spatial exploration to inform the design process. Different in intent

than the standard preservation approach to understanding a site, the design-based strategy builds on the traditional survey approach by adding depth to spatial understanding. While the Guidelines for the Treatment of Cultural Landscapes specifies the importance of spaces and spatial organization, the intuitive approach used by German faculty and students resulted in much more than an inventory of spatial features (Birnbaum and Peters 1996). Through drawings and descriptions students were able to fill literal and figurative gaps and add to the conceptual understanding of place through the application of analogies and metaphors. The designers abstracted the landscape into points, lines and planes. Point elements, for example, include wharves and cranes: linear elements include riverbanks and roads; and plane elements include large industrial structures. This design approach emphasized exploring and explaining more than listing and recording, inspiring creative thinking about how structural artifacts and remnant historical landscapes might be physically and conceptually linked.

Strollology and the intuitive spatial study were supplemented by thorough research on the complex technical hydraulic engineering infrastructure and elements built in the landscape. A survey rubric was developed after the initial site inventory. Similar to traditional preservation methods a data form custom designed for this site was used to record structures and elements of the canal construction. The form captured data with respect to building form, materials, layout, and spatial distribution. The survey work included a thorough photographic recording of the cultural landscape. Structures no longer in use were carefully recorded. Additionally, cultural landscape elements were distinguished based on their func-

tions: hydraulic engineering, transportation, and residential use.

All historical elements were meticulously recorded on the data forms, which included information about location, function, formal analysis, size and dimension, historic or present use, a photographic image, and other pertinent data. Despite the breadth of information, care was taken to keep the data sheet at one page, yielding a simple yet thorough chronicle. This approach was applied to all five of the canal areas in Hamburg-Wilhelmsburg.

The extensive survey and data collection was also supported by archival findings, historic and contemporary maps and plans, research on historical construction, and interviews with people familiar with the region. Inventory and archival findings including past and present hydro-engineering infrastructure, canal cross-sections, bank reinforcement, sluices, bridges, constructions along the banks, and other environmental conditions were established and recorded on topographic maps. The historical transportation system, its typology and transformations, were also documented on topographic features maps. All of the cultural landscape features were evaluated with respect to use and potential appropriateness for the future planning and design process. The process described above suggests that these research and analysis methods are transferable to many historical urban and industrial sites where cultural meaning is paramount.

History by Design

Like many urban areas in the world, Hamburg is experiencing a "back to the center" phenomenon where lands previously used for other purposes are being converted to residential and commercial uses. As this redevelopment takes place, it is important to integrate the rich layers of the historical landscape into new design proposals. The intuitive and spatial analysis design-centered approach affords the opportunity to take advantage of the historic waterways and constructions associated with the canals such as sluices, bridges, dams, bank reinforcements, and partially intact quays in an evocative way in a new design for the site. The design goal was to reconnect the Wilhelmsburg cultural landscape to its true heritage—an agricultural landscape converted to an industrial landscape as a consequence of an evolving relationship with water.

Unfortunately, the canals for the most part are no longer recognizable landmarks in the city. Often they are hidden behind structures along the banks and easily overlooked; in many cases, their characteristics are visible only from bridges. One survey showed that residents are no longer able to identify the locations or exact condition of the canals. This may be attributed to the radical transformation of the once prosperous canals into their current state of disuse. Urban development patterns during the Wilhelminian period (1890-1918) contributed to the area's decline. Residential development during that era occurred along the banks bordering the industrial facilities; as a result the banks were abandoned, creating a physical disconnection from the canals. Today, those Wilhelminian era developments (courts) are overgrown and unfortunately don't provide any potential for development space along the riverbank zones. In the truest sense of the word, the area is spoiled.

Carefully conceived development and design, therefore, has great potential to reveal, enhance,

and even protect and perpetuate a rich history that is opaque to all but the most informed. While extensive development is rarely the preservation prescription in the United States, the guidelines of European and national legal bodies and conventions dealing with cultural landscapes provide impetus for the design approach. The reuse of ordinary and damaged sites, including industrial landscapes, is encouraged if the measures result in a sound economic strategy.

As noted earlier, the application of a designcentered preservation approach has been more readily accepted in Germany than in the United States. In determining the future use of historical elements and features at Wilhelmsburg, Heinz Quasten's (1997) qualitative historical geography process was followed. The approach included overlaying landscape contexts and a careful consideration of local identities. Following Quasten's method, the designers determined the potential for preservation based as much on the interpretive potential (what story might be told) as the condition of historic features or objects. The objects, structures, and landscapes were evaluated with respect to their previous function, technology employed, style of design, their origin, changes over time, social and economic, and cultural meaning, and the underlying rationale for their location.

Again following Quasten's methods, the landscape architects also considered the degree to which elements or structures contribute to a discernable quality of landscape and thus contribute to a larger image of place. While this is similar to identifying all the "contributing" and "character-defining features" of a site that is a standard component of the historic preservation methodology used in the United States, the design-based approach allows for innovation in interpreting the materials, forms,

layouts, and spatial distribution of elements which determines the identity of a landscape (Birnbaum and Peters 1996). New construction, if done well and with sensitivity, might actually enhance the interpretive potential of cultural landscapes.

Quasten's approach emphasizes "historic integrity" to a lesser extent than American preservation practice. The design-centered approach affords the opportunity for communication and innovative design so that people can "connect the dots" in cases where much of the original fabric has disappeared. The landscape architects, then, provided a design intended to restore historical meaning which was obscured as a consequence of largescale changes and significant development. Quality design built on the canal network pattern provides a legible system for circulation, making the canals a more visible part of the city's image. This visibility allows residents to understand more fully how the powerful forces of water management and associated enterprises shaped the landscape over time. (Figure 5)

With the intent to completely integrate the canals and other historical features into a new and more legible landscape structure, the existing riverbank paths and canals would become an integral component of daily life. The riverbank's paths would be pedestrian and bicycle friendly, serving local recreation needs. An expansion of the riverbank would not only make the canals more obvious but would also allow the creation of hiking paths and promenades, enhancing the user experience. Proposed bridges would conceptually and physically link canals dispersed throughout the site. Continued development of the Wilhelmsburg cultural landscape will require harmonizing interactions between historic structures, down to the level of designing specific sites and buildings. Certainly

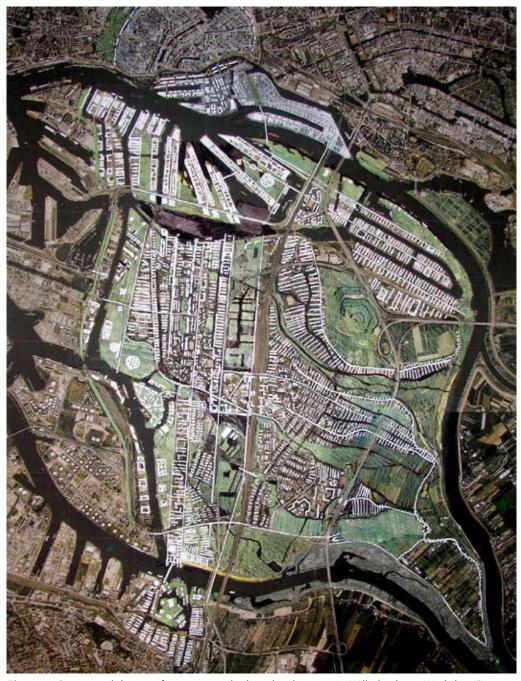


Figure 5. Conceptual drawing for a proposed urban development in Wilhelmsburg. Workshop "Leap Across the Elbe" Hamburg, 2003. (Bornholdt 2003)



Figure 6. New Building inspired by Historic Structures. Material Sheet Pile Wall, first prize in a competition Hamburg-Wilhelmsburg. Blauraum Architects Hamburg. (Hans E. H. Puhst Grundstücksverwaltung GmbH & Co. KG, Hamburg). The goal is to integrate and communicate a multifaceted surface of textures, the play of light and shadow, the vibrant vegetation, the broad array of materials, and the originality and uniqueness of individual structures, all providing a rich treasury for community development.

contrasting, interposing, newly interpreting, reconstructing, and historicizing are also reasonable strategies for site design. (Figure 6)

Conclusion

Over the past several decades, the historic preservation movement has expanded its boundaries by moving from restoring buildings of the rich and famous to preserving outdoor spaces and beginning to embrace ethnographic and vernacular landscapes. Despite this new breadth, the focus of preservation on protecting and conserving, not on redesign and reuse, has caused important opportunities for historic reinterpretation to be missed. This is unfortunate because if we are to somehow counter the negative consequences of globalization, the unique heritage of every place must be carefully

considered. Thomas Sieverts and other scholars have made a case for the importance of such work at a time when those globalizing influences seem to reach the most remote locations on the planet (Sieverts 1998).

In this paper we have argued that a more careful consideration of the landscape architectural analysis and design process might help expand preservation's boundaries even further. The ideas presented in the case study in Wilhelmsburg, Germany provide an example of how design and significant large-scale development might connect people to the heritage of place. Place attachment by its nature defies objective analysis. That is why Quasten's methods and the insights brought to the citizens through the strollology and intuitive spatial analysis experience were so insightful.

References

Alanen, Arnold R. and Robert Melnick, eds. 2000. Preserving cultural landscapes in America. Baltimore: Johns Hopkins Press.

Aufgestellt durch die Europäische Kommission 1999. Europäisches Raumentwicklungskonzept. http://ec.europa.eu/regional_policy/sources/docoffic/official/reports/som_de.htm.

Bava, Henri. 2002. Landschaft als fundament. Topos: European Landscape Magazine 40: 70-77.

Birnbaum, Charles A. and Mary V. Hughes, eds. 2005. *Design with culture: Claiming America's landscape heritage*. Charlottesville, Va: University of Virginia Press.

Birnbaum, Charles A., with Christine Capella Peters, eds. 1996. *The Secretary of the Interior's standards for the treatment of historic properties with guidelines for the treatment of cultural landscapes.* Washington, D.C.: U.S. Department of the Interior, National Park Service.

Bornholdt, Hanna. 2008. Die industriekanäle der elbinsel Hamburg Wilhelmsburg. Entwicklung und struktur wasserbaulicher landschaftselemente in urbaner kulturlandschaft. Ph.D. diss., Berlin Technical University.

Burckhardt, Lucius. 2005. Spaziergangswissenschaften/Strollology. http://www.uni-kassel.de/fb6/person/burckhardt/promenadologie.html.

Conseil de l'Europe. 2004. European landscape convention. European Treaty Series no. 176

Gunzelmann, Thomas. 2001. Die erfassung der historischen kulturlandschaft. Historische Kulturlandschaft 39: 15-32.

Huber, Benedikt. 1991. Technik für und gegen natur. Verkehrsbauten in ihrem natürlichen oder gebauten Umfeld. DISP 107: 3-6.

Lang, Lothar, ed. 1975. Wolfgang Mattheuer. Berlin: Henschelverlag Kunst u. Gesellschaft.

Ledewitz, Stephani. 1985. Models of design in studio teaching. Journal of Architectural Education 38: 2-8.

Lyle, John Tillman. 1999. Design for human ecosystems: Landscape, land use, and natural resources. New York: Island Press.

Lynch, Kevin. 1960. The image of the city. Cambridge, Mass.: MIT Press.

Quasten, Heinz. 1997. Grundsätze und methoden der erfassung und bewertung kulturhistorischer phänomene der kulturlandschaft. In *Kulturlandschaftspflege: Beiträge der geographie zur räumlichen planung,* ed. Winfried Schenk, Klaus Fehn, and Dietrich Denecke, 19-34. Stuttgart: Gebrüder Borntraeger.

Raith, Erich. 2000. Stadtmorphologie - annäherungen. Umsetzungen. Aussichten. Wien: Springer Verlag.

Schenk, Winfried. 2001. Kulturlandschaft in zeiten verschärfter nutzungskonkurrenz: Genese. Aktteure. Szenarien. *Die Zukunft der Kulturlandschaft zwischen Verlust. Bewahrung und Gestaltun*, 30-44.

Schenk, Winfried, Klaus Fehn and Dietrich Denecke. 1997. Kulturlandschaftspflege: Beiträge der Geographie zur räumlichen Planung. Stuttgart: Gebrüder Borntraeger.

Sieverts, Thomas. 1998. Was leisten städtebauliche Leitbilder? In Ohne Leitbild? - Städtebau in Deutschland und Europa Stuttgart. 22-40.

- Tomlan, Michael. 1994. Historic preservation education: Alongside architecture in academia. *Journal of Architectural Education* 47: 187-96.
- Weisshaar, Bertram. 2006. Atelier LATENT. http://www.atelier-latent.de.
- Wolf, Antje. 2006. INDUSTRIAL MINDSCAPES Erfolgsfaktoren industrietouristischer Einrichtungen. http://www.industrie-kultur.de/modules/wfsection.
- Yahner, Thomas and Daniel Nadenicek. 2002. Broadening the base: History in large changing landscapes. *Borderlands: The shared Canadian and U.S. experience*. Waterloo, Ontario: Heritage Resources Center.
- Yahner, Thomas G., and Daniel Joseph Nadenicek. 1997. Contemporary problems—historic resolve. *Landscape and Urban Planning* 39: 137 51.

Preserving Walls: Cultural Landscapes with Divisive Histories

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Abstract

Modern preservation values are broadening to include sites with contested histories. This paper explores two sites with divisive histories at the intersection where landscape preservation and monuments that make people uncomfortable intersect—the inner-city length of the Berlin Wall at Checkpoint Charlie, and the Japanese internment camp known as the Manzanar National Historic Site. Endurance of these landscapes is necessary for healing and for remembrance of the meaning and significance of the associated experience. The purpose of this paper is to argue that there must be public involvement in the commemoration and interpretation of such emotionally charged sites, and that the original historical fabric associated with them must be handled in an authentic manner.

Key Words

Japanese internment, Berlin Wall, contested monuments, divisive histories

Introduction

The preservation movement in the United States has forged a path through patriotic, aesthetic, and economic values, leaving a legacy of symbolic, beautiful, and functional buildings. Late twentieth-century preservation has expanded that tradition to include a variety of cultural resources and values, both tangible and intangible. The values most recently driving historic preservation include universal, ethnographic, and provocative educational values, as well as intervention at sites and landscapes associated with difficult histories. For example, in the southeastern United States, the role of slavery in plantation life increasingly is presented for the visitor. Resources associated with slavery are, in some cases, receiving long-overdue attention, such as at Manhattan's African Burial Ground (Tung 2002). Race and minority voices are gaining attention in interpretation (e.g., Angel Island Immigration Station, California) and landscape scholarship (e.g., Richard Schein's Landscapes and Race in the United States, Taylor and Francis 2006).

Although battlefields have always been broadly popular due to their appeal as patriotic symbols, the critical role race played in some battlefield sites has only been re-examined and interpreted within

the past twenty to thirty years, as demonstrated at Harpers Ferry National Historic Park with the Heyward Shepherd Memorial (Egan, 2007). Only after the passage of time has allowed emotions to subside has it become acceptable to undertake research on, and to interpret more fully, these more chronologically-distant sites and the variety of people who have played a role in these divisive histories. Interestingly, sites related to uncomfortable aspects of the more recent twentieth-century history are being interpreted relatively quickly despite the conflicted emotions still freshly associated with their past.² Racial, ethnic, economic, and physical boundaries, both implicit and explicit, are interpreted and commemorated more often than ever before.

This development represents the latest stage of the American preservation movement and an inclusion of values from reverence of history and historic sites to the desire for a contemplative, authentic experience. In acknowledgement of this paradigm shift, this paper explores the interpretation of two sites at the intersection of landscape preservation and building memorials that make people uncomfortable. The first site is the innercity length of the Berlin Wall at the Hildebrandt

Memorial at Checkpoint Charlie;³ the second is one of the ten internment camps built to hold Americans of Japanese descent during World War II—Manzanar National Historic Site in California.

The comparison of these two sites may seem more of a study in contrasts: the Hildebrandt Memorial was an urban site, privately developed and planned hastily, and it stood only a short time, while Manzanar is a federally managed, rural site whose interpretation was slowly developed and continues to endure. What these two landscapes share is a theme of conflict and division. Before the Berlin Wall was erected in 1961 to physically separate the German people for twenty-eight years, the relocation centers in the American West isolated individuals of Japanese descent, who had been forcefully removed from their West Coast homes in 1942 for the duration of World War II (Feversham and Schmidt 1999; Klausmeier and Schmidt 2004; Burton et al. 2002).

The rural environment of Manzanar National Historic Site has been modified by different cycles of occupation, including the orchard town of Manzanar that abandoned the site in the 1920s, the internment camp of the early 1940s (abandoned in 1945), and the National Park Service's influence since the 1990s. Both sites have lost substantial physical evidence of the time-period of division due to abandonment and changes of use, though Manzanar retains more than Checkpoint Charlie. "[L]andscapes are always in process, potentially

¹ The Heyward Shepherd Memorial was formerly known as the Faithful Slave Memorial in reference to the choice of a few slaves to fight on the side of the Confederacy in the Civil War battle at Harpers Ferry. The original plaque was particularly burdened with language telling only one side of the story and portraying the acts of particular slaves in a biased manner.

² Examples include the internment camps of World War II, Pearl Harbor, the World Trade Center, and sites related to the civil and women's rights movements. Many such sites are being listed, designated, or otherwise recognized before they reach milestones such as the National Register of Historic Places' fifty-year benchmark.

³ I first used the name Hildebrandt Memorial for this installation in "The Second Fall of the Berlin Wall: Examining the Checkpoint Charlie Hildebrandt Memorial," in *Future Anterior* 3, no. 1 (Summer 2006). The name comes from the memorial's patron, Alexandra Hildebrandt, widow of Dr. Rainer Hildebrandt (who designed the memorial and founded the museum at Checkpoint Charlie).

conflicted, untidy and uneasy" (Bender and Winer 2001); nowhere can this be seen as easily as at sites of divisive history.

The Hildebrandt Memorial

A memorial to the 1,065 victims of the German Democratic Republic border regime is located along Bernauer Straße in Berlin. This officially sanctioned memorial consists of a preserved section of the western Berlin Wall, a patrol area, "death strip," and the hinterland (easternmost) wall, all *in situ* and bounded by perpendicular metal walls to define the monument. It is viewable from a platform above the Berlin Wall Documentation Center as well as up close from ground level; when the hinterland wall was reassembled, small gaps were left to afford a view of the death strip. In addition to the official memorial site, Checkpoint Charlie owners at Friedrichstraße had promised to build a memorial when they originally developed that property in 1962. That memorial has yet to be developed.

In 2004, Alexandra Hildebrandt, widow of the late Dr. Rainer Hildebrandt, founder of the *Haus am* Checkpoint Charlie museum, built a memorial adjacent to the military checkpoint where the urban environment was shaped by the tensions of the standoff at Checkpoint Charlie in 1961 and the long-term military presence from 1961 to 1989. Created in commemoration of the victims of the "GDR border regime and the Socialist Unity Party of Germany," as well as for her late husband, the Hildebrandt Memorial was erected under an art-installation permit. The corners north of the Friedrichstraße intersection (formerly in East Berlin) were leased from their private owners, and approximately 120 wall segments were

salvaged—from unknown locations—to create a two-hundred-meter simulation of the wall along Friedrichstraße. In places, the new wall was perpendicular to where the actual wall and/or the border ran; in other locations, it was parallel but as much as ten meters away from the border. Behind the replica western wall, where the "death strip"—*Todesstreifen*—would have been behind the actual westernmost wall, the Hildebrandts' design included a field of white gravel filled with 1,065 wooden crosses. Small plaques just off the sidewalk presented the memorial to the victims and Dr. Rainer Hildebrandt.

Although the memorial was built as an art installation, unfortunately Alexandra Hildebrandt took a unilateral approach to implementing her husband's design, failing to involve the public in this site of divisive history. As a result, the design drew criticism and disfavor from both preservationists and many Berliners, and its creation and existence were burdened with negative emotion. When the lease expired, Hildebrandt refused to deconstruct the memorial, claiming alternately that there was no other adequate memorial in Berlin and that the property owners had failed in their responsibility to build a monument.

The Hildebrandt Memorial was demolished by court order less than eight months after its construction. While a few supporters protested the demolition, the critics celebrating its fall were much greater in number, ranging from those focused on the inauthenticity of the design to those resentful of Hildebrandt's personal use of a site of international importance. In this sense, the values of the resource in question—the site and the salvaged segments—were distorted to commemorate events and individuals more distantly

associated with the site; the Hildebrandt design used familiar fabric—the westernmost wall—to attract visitors and took advantage of a well-known site without addressing the division of Berlin along this physical boundary.

These and other distortions of the authentic wall earned the Hildebrandt Memorial the name "Disney Wall" in the popular media (Paterson 2004 and 2005). Figure 1 reveals some of these inauthentic details. In the foreground are the cobblestone line and plaque that indicate the border, and the memorial wall in the style of the western wall runs approximately ten meters west of the border itself; however, if there had been a wall near this location, it likely would have been twelve to fifteen meters to the north. Furthermore, because this was a border crossing, much of this area was actually devoted to armed posts and facilities for searches. The coping that tops the memorial wall is a replication, but the wall's color—white paint—is nothing more than an effort to unify the salvaged pieces of the wall into one composition.4

The memorial failed—in a commemorative and interpretive sense—in part due to the hyper-local bias of its patron, Alexandra Hildebrandt, who established the memorial without public input. Further, the effect events had on the land was dismissed, and emotions associated with the site's divisive history were not interpreted (Figure 2).

With all its failings, the Hildebrandt Memorial affords an excellent opportunity to compare its

interpretive development and process to another divisive history site—Manzanar National Historic Site in California. In contrast to the Hildebrandt Memorial, interpretive efforts at Manzanar attempted to balance the deeper, enduring message of the site and the desires of the internees and their descendants.

Manzanar National Historic Site

In February of 1942, President Franklin D. Roosevelt issued Executive Order No. 9066, authorizing commanders in the American West to establish "military areas...from which any and all persons could be excluded" in the name of military necessity. The effect was the relocation of anyone of Japanese descent from Washington, Oregon, much of California, and southern Arizona.⁵ Those relocated were processed through assembly, detention, or isolation centers before being moved to larger facilities known as relocation centers by the agency created to manage the process—the War Relocation Authority (WRA) (Burton et al. 2002). The justification at the time focused on military necessity, though some argued the relocation was an evacuation for the safety of the Japanese people. Most modern scholars believe the relocation was motivated more by racism than military necessity, though some are sensitive to the *perceived* military necessity, and a very small minority argues classified documents prove the military justification.

Regardless of the reason, over 126,000 Japanese immigrants and Japanese Americans lived in relocation centers, now commonly called internment camps, for the duration of World War II. One of

⁴ Traditionally, this wall type was unpainted, though where it appeared as the easternmost wall it was painted gray with a centered and repeating white rectangle to indicate the border; the same motif was painted on buildings and pre-existing walls where necessary to signal East Berliners to go no further.

 $^{^{5}}$ Japanese descent meant only one-sixteenth Japanese blood and included orphans, the elderly, and the infirm.

those centers is Manzanar, California. Before this period, Manzanar was a small agricultural community until the town's populace left after selling its water rights to Los Angeles. Located in the Owens Valley, the second incarnation of Manzanar was the first WRA relocation center, where 10,046 people were detained from March 1942 to November 1945 (Burton et al. 2002). The site of the camp, like the other nine of its type, was gradually closed over the course of 1945; the wood-frame buildings used for most camp structures were auctioned off for local use or materials salvage. The former internment camp sites were then largely ignored for sixty years, until the preservation of Manzanar began in the 1990s by the National Park Service (NPS).

All that remained structurally after the camp's abandonment were three permanent structures and the cemetery's obelisk; except for foundations and post-holes, above-ground evidence of the boundary defining the camp was lost from the land and invisible from a distance. At most of the camps—including Manzanar—the only permanent buildings were those built by internees. The barracks, mess halls, and community buildings were typically the temporary wood-frame buildings mentioned above, sided in tarpaper. At Manzanar, the permanent buildings were the military police and internal police sentry posts (Figure 3) and the school auditorium (Figure 4), which has been converted into an interpretive center by the NPS.

As is typical of NPS projects, there was a great deal of public outreach in planning interpretive efforts that would include local residents, former internees, and former War Relocation Authority



Figure 1. The Hildebrandt Memorial from the north (in former East Berlin). Note the interpretive plaques on the ground near the wall portion of the memorial as well as the smaller interpretive pieces (laminated paper) attached to each cross. (Photo by author)



Figure 2. The Hildebrandt Memorial looking west. In arguing for its necessity as a memorial, supporters pointed to the fact that the memorial received more visitors per day than any Berlin museum. In truth, the Haus am Checkpoint Charlie museum across the street had that claim at some points during the period the memorial was in existence, which is remarkable given its high admission charges. There is no way to know how many visitors stopped at the memorial, how many knew it was not the original wall, and how many were satisfied by their experience at the memorial. (Photo by author)

 $^{^6}$ This agricultural heritage is included in the interpretation of the landscape but is not the focus of this comparison.

staff who had worked at the site, as well as the general public. Curiously, different generations of internees held opposing views on the proper interpretation of the camp site, in part because they had different memories of the relocation.

The exhibits include messages about civil and human rights, individual internee narratives, details from all ten relocation centers, and information about the Pacific theater of WWII. The exhibit designs evoke the camp and its forms, from



Figure 3. The sentry posts of the military police (right) and internal police (middle) from the remains of the administrative complex, looking north. (Photo by author)



Figure 4. The auditorium from the northwest. The structure was in good condition when the NPS rehabilitated it into the National Historic Site's interpretive center. (Photo by author)

woodwork to lighting. One backlit display lists the internees over a silhouette of the camp's skyline—the strongest evocations of the camp's landscape in the traditional sense, though numerous exhibits point to the barren and harsh nature of the environment upon the internees' arrival.

Outside the NPS Interpretive Center, interpretation also occurs throughout the landscape, where intervention has been minimal; only limited archaeology has been done, but brush and vegetation were cleared by the NPS to improve site navigability by car and on foot. Some footpaths within the residential and administrative blocks can still be found. Like the exhibits' design, camp construction techniques are suggested in the signage marking points along the self-guided tour, which is brief—"block 12," "hospital complex," and "post office," for example—and intended only to identify building footprints and indicate other, more difficult to identify landscape features. Near the camp entrance, for example, is the outline of a baseball field.7

In addition, residential block gardens (Figure 5) are scattered throughout the camp and located at the end of blocks in the unused space between the barracks and the roadway. Most were not subsistence gardens but pleasure gardens—evidence that the Japanese and Japanese-American residents were attempting to stake their claim on the landscape and make it their home. There is no immediate intention to restore the gardens.

⁷ Baseball was popular at many camps, though some also had dojos, sumo wrestling rings, and other sport and exercise yards.

⁸ When the camps closed in 1945, some residents attempted to refuse to leave because they had made their homes in the camps for three years (all were relocated).



Figure 5. Block 12 Garden from the southwest. Most of the residential gardens remain as little more than rock formations and dilapidated concrete pools. The National Park Service plans to focus its next wave of rehabilitation efforts into these landscapes. (Photo by author)

The gardens are less intriguing than other features because they are less visible from a distance and identified rather than interpreted. In contrast, the cemetery monument is an obelisk visible from much of the camp and requires no explanation. Like the permanent structures and the gardens, the internees themselves built the obelisk. Its inscription reads: "Soul consoling tower / Erected by the Manzanar Japanese in August 1943" (Burton et al. 2002). What does it mean that internees claimed the monument strongly and in such clear terms? Much like the buildings, and more compellingly, the gardens, the cemetery monument demonstrates the internees' effect on the land and their

deepening connection to the land as their internment lengthened. Nonetheless, all of the residents buried within the camp cemetery have been exhumed, though grave markers remain. In a way, this act also marks the abandonment of the camps by not just the government but also the residents.

The need to interpret the near-erasure of the camps along with camp life is one intergenerational difference among the Japanese and Japanese Americans interned here. The first generation Japanese—*Issei*—and older Japanese Americans—*Nissei*—relocated to Manzanar would typically prefer to see the landscape left bare, as it was when

they arrived and as it was abandoned when they left. In sharp contrast, younger Japanese Americans born into and released at a young age, or not held in the camps—and to an even greater extent internee descendants—typically hope to see some camp structures reconstructed and the landscape restored. In response to the earlier generation's demands, the gardens and much of the open land have been left as they were, and other elements have been reconstructed to satisfy the younger generation of stakeholders.

As mentioned above, a visitor in the camp today will see few structures. One is the newly reconstructed guard tower. Along with the fence, the tower was reconstructed from historical evidence; both sit on the footprints of the original structures. This articulation of the boundary of the camp is accurate but only partial. The other new structure—the relocated mess hall—is, however, a glaring inauthenticity. When an air base near Manzanar closed a few years ago, the NPS raised the funds to relocate a structure they believed was original to the camp, only to discover that it was not, though it is the type of structure that would have been there. Without interpretation, the relocated building is an unexplained curiosity in the landscape. The NPS is taking action to minimize this inauthentic structure by adapting it into a model barracks as part of the reconstruction of an entire model block. Without debating the authenticity of such a plan overmuch, it is what some stakeholders hope to experience when visiting the site.

Juxtaposition and Lessons

Since the demolition of the Hildebrandt Memorial, Checkpoint Charlie has returned to two bare corners in the heart of Berlin, while the desert of Manzanar is being partially reclaimed by interpretation after more than fifty years of abandonment. Despite their differences—urban versus rural locations, World War II versus Cold War associations, etc.—these projects have much in common, including importance both to their local communities and to world heritage. The Berlin Wall (especially Checkpoint Charlie) must be remembered for its effect on German culture and urban form, and it is related to both World War II and Cold War events involving multiple countries. Similarly, the Manzanar relocation camp is of great importance to Japanese-American heritage and history, and it represents a mistake not commonly known outside of Japanese and American societies from which many world cultures can learn.

If we preserve such sites of fairly recent history, the question is, how? The Hildebrandt Memorial used authentic materials that its sponsors relocated to the memorial site without regard to their historic arrangement, placement, or context. Some would argue this use was justified, as the design's intention was artistic and not landscape preservation; this is difficult to justify primarily because the memorial topic is emotionally charged and there was no public participation in the design of the memorial. In contrast, the relocated structures at Manzanar are or will be located on the footprints of the buildings they represent, and when the NPS realized it had erroneously introduced an inauthentic structure, the agency put its reconstruction plans on hold pending further research. These steps were in keeping with a mission of upholding a national historic preservation policy that advocates the use of authentic materials and abhors historical conjecture.

Additionally, by focusing on creating a memorial without carefully evaluating the physical boundary

and its immediate consequences and history, the designers of the Hildebrandt Memorial neglected the associations that made Checkpoint Charlie famous and that directly shaped its landscape. Manzanar interpreters, meanwhile, limited themselves to immediate associations except when necessary to relate the internment to (a) its greater historical context and (b) contemporary events, such as the anti-Muslim sentiments on the rise in the United States after 2001.

Most importantly, the Hildebrandt Memorial refused to acknowledge the authentic relationships of the border landscape; elements of the memorial were placed to evoke emotion—crosses in the death strip—rather than to reflect history. The actual form of the wall system was corrupted, and the locational value of Checkpoint Charlie was ignored. At Manzanar, elements are placed to represent accurately the camp through limited reconstructions. Moreover, efforts to evoke emotion—or more accurately to encourage contemplation—largely take the form of explicit interpretation or interpretation by inaction (meaning the maintenance of the abandoned landscape as it is). An example of this is the boundary fence surrounding the camp; the choice was made to not reconstruct it, to further clarify the camp's purpose. That choice not to rebuild the fence affords the opportunity for contemplation of camp life (such as in the gardens) and evokes the emotions of secondary elements (such as the internees' arrival in a desolate, unfamiliar land, as well as the camp's erasure). Further, the effect of isolation can be experienced, though not the physical boundary itself.

In short, the Hildebrandt Memorial's design showed little respect for the wall fabric, the historical associations, the public's interest, and most of all, the cultural landscape of Checkpoint Charlie. Manzanar's NPS interpreters, in contrast, actively listened to the stakeholders and former residents of the camps, enabling compromise between perspectives and values, as well as (so far) an authentic but minimalist interpretation of the landscape. The comparison reveals that, for authentic interpretation, it is necessary to use physical remains cautiously and to focus on the associations and emotions shaping the land and our memories—something Manzanar sought and the Hildebrandt Memorial distorted. Hence, even private memorials at contested sites, if located on historic sites, must respect authentic relationships and materials and incorporate public process.

This comparison is most pertinent because of the ways both sites use original and associated period fabric in their interpretation and because the inclusion and exclusion of the public is key to each sites' efficacy. It is the authentic use of fabric at Manzanar and the public's involvement in the interpretive process that made it more successful than the Hildebrandt Memorial. Further, it is my belief that the Hildebrandt Memorial was ineffective even as public art because of its misuse of original fabric and its unilateral design process. It is especially important at sites of conflict and historic boundaries such as these that the design of the commemorative effort and the use of the site and its materials be participatory.

References

Bender, Barbara and Margot Winer, eds. 2001. Contested landscapes: Movement, exile and place. Oxford, U.K.: Berg.

Burton, Jeffery F., Mary M. Farrell, Florence B. Lord, and Richard W. Lord. 2002. *Confinement and ethnicity: An overview of World War II Japanese American relocation sites*. Seattle: University of Washington Press.

Egan, Tara Marie. 2007. The evolution of post-World War II Civil War commemoration: Intersections between race and memory at Harpers Ferry. *Lethbridge Undergraduate Research Journal* 2.

Feversham, Polly and Leo Schmidt. 1999. Die Berliner mauer heute: Denkmalwert und umgang (The Berlin wall today: cultural significance and conservation issues). Berlin: Verl. Bauwesen.

Klausmeier, Axel and Leo Schmidt. 2004. Wall remnants—wall traces. Berlin/Bonn: Westkreuz-Verl.

McStotts, Jennifer. 2006. The second fall of the Berlin wall: Examining the Checkpoint Charlie Hildebrandt Memorial. *Future Anterior 3* (1):37-47.

Paterson, Tony. 2004. Berliners angered by 'Disneyland' recreation of the iron curtain. Independent (London), 13 October.

Paterson, Tony. 2005. Berlin wall memorial has to come down, says court. Independent (London), 9 April.

Schein, Richard. 2006. Landscapes and race in the United States. London: Taylor and Francis.

Schmidt, Leo, and Henriette von Preuschen, eds. 2005. On both sides of the wall: Preserving monuments and sites of the Cold War. Berlin/Bonn: Westkreuz-Verl.

Tung, Anthony. 2002. Preserving the world's great cities: The destruction and renewal of the historic metropolis. New York: Three Rivers Press.

Gender, Landscape, and Art: Georgia O'Keeffe's Relationship with the Ghost Ranch Landscape

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Abstract

Understanding how an artist's relationship with a heritage landscape is gendered increases our appreciation of the landscape and how it is represented in art. Georgia O'Keeffe's association with Ghost Ranch, New Mexico is an example of a personal relationship that can develop between an artist and a particular landscape. To know landscape with the body, to develop an intimacy with landscape, and to communicate with that landscape are ideas from ecofeminist theory that help us understand this relationship. Findings from a workshop at Ghost Ranch confirmed that experiencing the landscape as gendered can influence an individual's artistic expression. Applying those findings to facility design and interpretive materials can encourage such exploration and deepening of experience of the landscape.

Key Words

Heritage landscapes and art, relationship with landscape, gender, ecofeminism, Georgia O'Keeffe, Ghost Ranch

Introduction

This paper explores the boundaries of historic landscape preservation by examining the expression of culture, relationship, and gender particularly the relationship between landscape and art. Although a number of landscapes associated with artists and writers have been considered for, or established as, protected areas (e.g., Weir Farm National Historic Site, the Willa Cather State Historic Site, and the Rio Chama Valley in connection with O'Keeffe), the importance of an artist's perceptions and expressions remains a minor theme within landscape preservation (USDI 1992b). By focusing on the intangible relationship between artist and place, this paper adds to the growing literature on the role of intangible elements (e.g., imagination, cultural associations, and symbolism) in how landscapes are valued and represented in art (Thompson 1995). Race, ethnicity, class, and (to some degree) age have received growing attention within recent landscape preservation scholarship (Council of Educators in Landscape Architecture 2007; Alanen and Melnick 2000; Wilson and Groth 2003; Groth and Bressi 1997), but attention to gender lags behind. As Robert Melnick stated, "Any consideration of issues of nature and culture in historic landscapes, therefore, may well take into account a broad range of analytical constructs, extending from ecofeminism

to landscape ecology . . . To be gender-blind is to deny the historical variants in landscape experience" (Melnick 2000, 23). Writers such as Dolores Hayden (2003), Doreen Massey (1994), and Vera Norwood (1993) have provided examples of the role of gender and feminist issues in analyzing the social construction of space and women's relationship with nature; and Page Putnam Miller (1992) has laid the groundwork for increasing the number of nationally significant heritage sites established due to their specific association with women's history.

However, within the field of historic landscape preservation, attention to gender has focused more on documenting women's contributions to the creation and preservation of landscapes (Huyck 1988; USDI 1992a; Eyring 2003; Cowley and Eyring 2003), rather than addressing gender dynamics (Cowley 2000; Huyck 2003; McCullough 2003). Within historic landscape interpretation programs, it is important to move beyond simply including women to an analysis of gender dynamics. The study of gender dynamics considers the experiences and viewpoints of both women and men, and explores the interrelationships of associations of both the masculine and the feminine. Gender dynamics is concerned with how gender plays a role within culturally normative concepts, social institutions, power relationships, and identity formation (Scott 1988, 43-44), as well as the role gender plays in the social construction and perception of place (Sewell 2003). This paper considers gender dynamics (e.g. how women and men address and express gender-in-the-landscape) and highlights one woman's response to landscape.

In this paper, I explore Georgia O'Keeffe's relationship with the landscape of Ghost Ranch, New

Mexico as an example of an artist's personal and intimate association with a heritage landscape. A study of O'Keeffe's writing and images indicates that gender was a subtle factor in her work, and that she held much in common with ecofeminist ways of relating to place. Findings from a Ghost Ranch painting workshop indicated that how men and women experience landscape as gendered, and how they connect with that landscape personally makes a difference to their experiences and the images they produce (Cowley 2006). The intent of this paper is not to read into O'Keeffe's work what she did not intend, but rather, to be open to whether these factors influenced her experiences and creative work. An ecofeminist perspective on O'Keeffe's relationship with the landscape might open up new possibilities for landscape interpretation and design of visitor facilities, expanding the variety of opportunities for visitors at Ghost Ranch and at other areas associated with O'Keeffe.

Concepts and Context

Heritage landscapes are geographic areas valued in connection with a community's past. They can include areas considered either natural or cultural, and need not show evidence of human manipulation (Melnick 2000; Schama 1995). Heritage landscapes associated with artists and their work may or may not be considered scenic. They focus more on aesthetic meaning than aesthetic quality. Understanding how artists' relationships with heritage landscapes are gendered may help us appreciate both the landscape and how it is represented in art. It can help us, as well, to understand our own response to the landscape and the art. Whether or not the landscape is experienced as gendered—as female, male, or androgynous—can influence artistic responses to the landscape.

Ecofeminist theory maintains that there are close connections between how women, people of color, and the poor are treated and how, in turn, the natural environment is treated (Warren 1997, xi). An example is gendering the land as female, a strong common theme in Western culture. Exploration and settlement of the U.S. West was often described as taming the virginal female earth (Kolodny 1975) or raping the land. Literary ecofeminism addresses how we can redefine the nature of our relationship with the landscape, moving away from conquering and controlling towards communication and nurturing—more of a conversation and cooperative venture between equals (Legler 1997). Relating with the landscape through one's body, developing a personal intimacy with the landscape, and communicating with the landscape (Legler 1997) can help us make this change. These ways of relating with nature are not necessarily exclusive to ecofeminists; male artists and nature writers like Walt Whitman (Whitman 1958) share these approaches. However, it is significant that the emphasis within a feminist approach focuses on ways of relating to nature important to many women.

Relating with the landscape can go beyond sight, smell, taste, and touch to involve a sense of feeling and knowing the landscape through the whole body "from the inside" (Lippard 2002)—a merging of one's whole self with the landscape. Some ecofeminists include an eroticism with this sense of merging with the land—"eros" as life- force energy, creativity, imagination, and the capacity for joy in addition to sexuality (Silko 1993). Intimacy can go beyond familiarity with and detailed knowledge of the landscape to a sense of loving the land as one would love a person. Intimacy may also entail identifying with and interacting with the

landscape in a personal way, for instance, through the act of painting. Communication with the landscape can be one-way or two-way. Viewing and describing a landscape as a "scene" is an example of one-way communication. We apply our ideas to the landscape without expecting a response. In two-way communication the artist senses the landscape "talking back" and the relationship as a kind of conversation. The potential for two-way communication is based on the belief that nature. or a landscape, is an independent, conscious being with voice and volition. Where animals and natural elements like the wind can talk with us, two-way communication can be described in terms of actual language (LeGuin 1987). In terms of sensation and belief, we feel "pulled" in a certain direction on a walk. An ecofeminist approach draws attention to the ways in which highly personal and intuitive connections to landscape evolve through direct, sensual experience.

An ecofeminist perspective also illuminates how language and culture may encourage us to associate landscape and gender in ways often subtle and unconscious. When we liken landforms to human anatomy, or associate landscape with characteristics of the feminine and masculine (e.g., soft/hard, passive/active, curvilinear/linear dualities), we are gendering—assigning gender to—the landscape. Assigning gender can reinforce gender stereotypes. For instance, columns, steep cliffs, and other vertical forms are often associated with the masculine, whereas caves, fissures, and gently rolling terrain are often associated with the feminine. In contrast to gender stereotypes, experiencing the landscape as gendered is an interactive process where we respond to "suggestions" from the landscape by intuitive or sensory rather than cognitive means. We can experience a landscape as a female,



Figure 1. Ghost Ranch, New Mexico. (Photo by author, 2005)

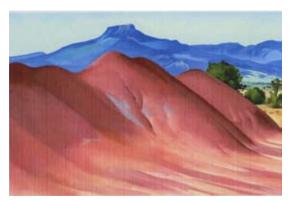


Figure 2. Georgia O'Keeffe, *Red Hills with the Pedernal (Pedernal and Red Hills),* 1936. Georgia O'Keeffe, (1887-1986). Oil on linen. 19 3/4 x 20 3/4 in. Museum of Fine Arts, Museum of New Mexico, Department of Cultural Affairs. Bequest of Helen Miller Jones, 1986.

male, or androgynous being with whom we can communicate. We can experience the landscape primarily through our bodies; and we can experience the landscape as a combination or alternation of male and female, as an animal or non-human presence without specific gender, or as gendered but not sexual, say, as paternal or maternal. Because of its awareness of these experiences and relationships, an ecofeminist perspective is especially pertinent to a heritage landscape like Georgia O'Keeffe's Ghost Ranch—a place that is historically

significant, in part, because of the complicated and intimate relationship with landscape expressed in the work of a major twentieth-century artist.

O'Keeffe and Ghost Ranch

O'Keeffe first visited Ghost Ranch in August 1934 (Figure 1), and felt an instant relationship to the dramatic colors and shapes and huge sky of the Ghost Ranch landscape. Living and working at Ghost Ranch offered O'Keeffe the privacy, solitude, and self-determination that she craved after the intense scrutiny of her life, her work, and her body in New York. She thought, "this is my world" (O'Keeffe 1981), and, "it fit me exactly" (Adato 1977). In New York, the display of Alfred Steiglitz's nude photographs of O'Keeffe had encouraged art critics to inaccurately interpret her abstract and flower images as representations of female anatomy and O'Keeffe's sexuality (Lynes 1989; Chave 1992). O'Keeffe consistently refuted claims of sexual content in her images. She insisted that she painted what she saw (O'Keeffe 1976) and this was true for her Ghost Ranch landscapes as well as her flower images. Many discussions of gender and O'Keeffe's work are limited either to supporting or refuting these sexualized interpretations (Cowley 2006), when in fact gender is present in her work in far more subtle ways. She related with landscape in ways characteristic of and important to many women and feminists. Her images illustrate a nontraditional blending of feminine and masculine forms and qualities. O'Keeffe experienced the landscape as gendered, and her intimacy with the Ghost Ranch landscape involved communication and knowing the landscape through the body. Without this understanding, major aspects of her intimacy with the landscape have been overlooked and her images misinterpreted.

O'Keeffe's writings indicate that even though she sometimes assigned gender to landscape features—she once referred to the moon as "he" (Pollitzer 1988, 148-9)—she didn't refer to the landscape as a whole as "he" or "she." For her, women and femaleness were not special and rarified aspects of nature, but were part of the whole environment. Her approach to the landscape involved gender in some subtle and non-traditional ways. For example, she combined stereotypical associations (e.g., moon = female, mountain = male) within images that portrayed a landscape with human or animal sensuousness (Figure 2). And, she made hard cliffs, bones, and distant horizons as approachable and personal as flowers.

O'Keeffe communicated with her Ghost Ranch home primarily through her senses and feelings rather than through language. Through the painting process, she combined day-to-day familiarity, relating to elements within the landscape like the Cerro Pedernal, the red hills, and the moon as companions with whom she shared her days, and a sense of two-way communication with the places she painted. When just arrived in New Mexico, she expressed a sense of communication with her new home: "... but the Mountain calls one and the desert—and the sagebrush—the country seems to call one in a way that one has to answer it" (Cowart et al. 1987, 200). Communication with nature was a matter of being with the landscape over time, of listening and observing, and of responding to colors and shapes. She reached out to the landscape through her aesthetic intensity and domestic familiarity, and at times felt that the landscape responded to her. For example, she painted the v-shaped hills outside her kitchen window, and felt that they "spoke to me quietly" (O'Keeffe 1976, 85).

O'Keeffe felt and experienced the landscape not only through her senses but also through her body as a whole. She referred to a section of red hills "... it is so bare—with a sort of ages old feeling of death on it—still it is warm and soft and I love it with my skin" (Cowart et al. 1987, 243). O'Keeffe experienced, and interacted with, landforms as alive and sensual, but not necessarily symbolic of human bodies. While some of her paintings (e.g., Figure 2) may be difficult not to read as bodies, her letters and other writings do not indicate that she made this connection. O'Keeffe sensualized the landscape as a whole (she enhanced curves and made the rough-textured hills look smooth) rather than specifically associating landforms with bodies.

Intimacy with a landscape is influenced by whether we relate to the landscape up close or at a distance, through thinking or feeling. O'Keeffe interacted with the landscape visually through her art, kinesthetically through her long walks and rides, and sensually, through feeling the wind, the soil, and also feeling colors. She related to the landscape both through her body and through aesthetic analysis, and aesthetic analysis brought her back to her feelings. Both near and far elements of the landscape caught her attention, and this was expressed in her paintings as she juxtaposed foreground and background, leaving out the middle ground (Collins 1980).

O'Keeffe was not an ecofeminist (the term was not used widely until the 1980s), but she did share ways of relating to landscape that are emphasized by many ecofeminists, and which reflect many women's experiences. She expressed a strong aversion to being identified as a feminist, principally because she wanted to avoid association with sexualized and inaccurate feminist interpreta-



Figure 3. Ghost Ranch, Red Hills site, 2005. (Photo by author)

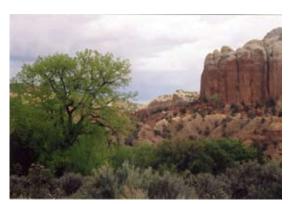


Figure 4. Ghost Ranch, Box Canyon site, 2005. (Photo by author)

tions of her work (Lynes 1992). Some feminists insisted on sexualized interpretations as much as male critics earlier in the century, but for different reasons. They wanted to herald O'Keeffe as the "foremother" of feminist art that reclaimed women's bodies as strong and vital (Chicago 1987). In actuality, O'Keeffe was very much a feminist through her actions and her belief in women's abilities and rights (Lynes 1992). O'Keeffe was one of a number of women artists during this period who, through both their lifestyles and their images, helped expand the range of what was

possible and accepted for women (Norwood and Monk 1987; Udall 1996; Dijkstra 1998). Her strong portrayals of the harsh and vast desert landscape moved the norm for women artists' subject matter even further from the earlier norm of small-scale nature and domestic scenes. An ecofeminist perspective is thus helpful both in illuminating the cultural context of O'Keeffe's art, and in opening up a unique perspective for exploring the artist's relationship to landscape. Could an ecofeminist approach be applied to create new ways for visitors to experience and appreciate the landscape of O'Keeffe's Ghost Ranch? Perhaps the answer to this question could be found in a workshop that explored landscape, gender, and interpretation.

The On-Site Workshop

The Georgia O'Keeffe Museum in Santa Fe, and The Ghost Ranch Educational Center and Retreat (Lopez 2000; M. 2002; Lynes et al. 2004; The Georgia O'Keeffe Foundation, n.d.) have educational and art programs which include painting workshops focused on O'Keeffe and contemplative walks with contemporary authors. These programs help participants understand O'Keeffe's relationship with the Ghost Ranch landscape and provide opportunities to experience the landscape in ways similar to the way O'Keeffe did. Although gender and ecofeminist ideas are not currently integrated into those programs, these themes could enrich the experiences and understanding of participants.

To see how a focus on gender and ecofeminist ideas might influence workshop participants' experiences and artwork, I conducted an on-site workshop at Ghost Ranch in May 2005. The workshop encouraged participants to consider whether

they experienced the landscape as gendered and to explore ecofeminist ways of relating with the landscape through on-site painting sessions. They were to use O'Keeffe as a model and jumping-off point to exploring their own relationship. Ten people (eight women and two men) participated in the two-day workshop. Creative sessions were held in the red hills area (Figure 3) (accessible only by prior arrangement and approval of the Ghost Ranch Educational Center), and within the Box Canyon Trail area (Figure 4).

Following my introduction to the concepts of gender and landscape, one participant explored these aspects in images (Figures 5, 6, and 7). Her images portray different overall landscape character, with the masculine landscape portrayed with straight lines and separated colors, the feminine with more curvilinear lines and blended colors, and the androgynous as a combination. Participants indicated that relating to the landscape as male rather than female was unfamiliar, but not necessarily uncomfortable. Most important to a number of workshop participants was that the landscape felt alive, and for some, experiencing the landscape as gendered made it seem even more alive. For one of the men, the experience felt like a dialogue with a living entity. He perceived both his own gender and the gender of the landscape as a flux between male and female.

Some participants were uncomfortable associating gender with landscape, perhaps because they thought they had to make a conscious decision to assign either a female or male gender. Assigning gender to the landscape (as opposed to experiencing the landscape as gendered) can impose boundaries on our experience, understanding, and interpretation, and we need to be aware if we



Figure 5. Suzanne Otter. *Masculine Landscape*. 2005. (Courtesy of the artist)



Figure 6. Suzanne Otter. *Feminine Landscape.* 2005. (Courtesy of the artist)



Figure 7. Suzanne Otter. *Androgynous Landscape*. 2005. (Courtesy of the artist)



Figure 8. Gary Wellman, no title (landscape in the Box Canyon Trail area). 2005. (Courtesy of the artist)

are doing this. Assigning a female gender to the landscape is so ingrained in the Western psyche that not being aware of how we might already be gendering the landscape is equivalent to gendering the landscape as female. By being conscious about gendering the landscape in this way, we open up to the possibility of questioning traditional gender associations. We open to new possibilities, for example, of experiencing the landscape as masculine, as a nurturing male being, or as a strong, hard, or challenging female being. This approach stretches our boundaries of understanding and experience (Nash 1996).

As with O'Keeffe, relating with the landscape through their senses and learning to know the landscape through their bodies in an intimate way was something many participants enjoyed, whether or not they experienced the landscape as gendered (Cowley 2006). During the painting session where participants focused on intimacy and communication, they felt connected to the landscape through the scale, color, dynamism, and visual power of the landscape in addition to physically feeling the textures of soil and rock. Assigning human qualities to the landscape helped some feel a closer relationship to their subject, and that communication with the landscape was possible. Two

participants' paintings are not obviously gendered (Figures 8, 9). One included a male cowboy figure, which may hint at a masculine association with the landscape (Cowley 2006).

Asked to consider whether they thought O'Keeffe experienced two-way communication with the

Ghost Ranch landscape, both men and women said that giving back to the landscape in some way was necessary for real two-way communication. It was not enough for her to have lived within and to have felt a strong emotional connection to the landscape—to love it with her skin—she had to give something back to the landscape for it to be

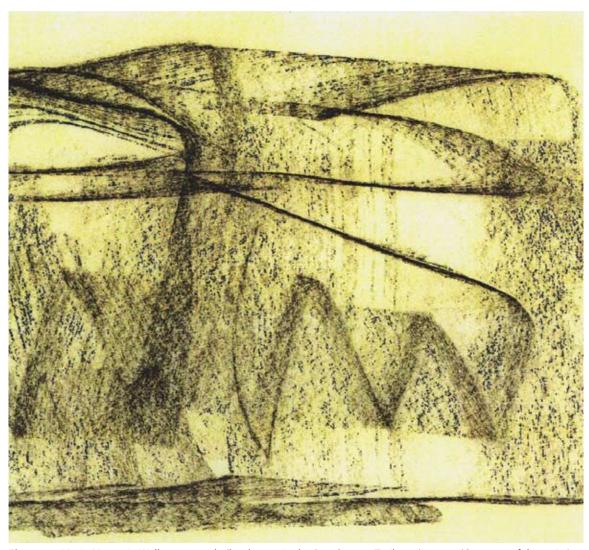


Figure 9. Maria Munguia Wellman, no title (landscape in the Box Canyon Trail area). 2005. (Courtesy of the artist)

a two-way relationship. One could argue that her paintings and the legacy of her life at Ghost Ranch are forms of giving back, since they have influenced our perceptions and valuing of the Ghost Ranch landscape, which in turn influences our appreciation of conservation efforts.

Implications for Facility Design and Interpretation

We can learn about, interact with, and appreciate heritage landscapes in many ways, including painting, writing, nature study, hiking, and meditation. The U.S. National Park Service's interpretation goals include helping "visitors to explore their own intellectual and emotional connections to the natural and cultural resources that comprise shared heritage" (Kohen and Sikoryak 2005, 4), ideally through direct contact with the tangible. The key to encouraging personal relationships with a landscape is providing as direct an experience of the landscape as possible with a minimum of distracting elements. Facility design should be minimal and simple.

In 1992, the National Park Service conducted a *Study of Alternatives* for interpretation of the O'Keeffe landscape in northern New Mexico, resulting in three alternatives. The first alternative called for a driving tour with limited trail access. The second alternative called for a minimally-designed contemplative space and trails into the landscape. The third alternative called for a substantial on-site visitor center. The second alternative - the contemplative/interpretive option— reinforces the philosophy of direct experience with minimal distraction. In a mostly natural setting like Ghost Ranch, structures, trails,

and seating are best kept rustic and naturalistic in design, with signage and interpretive waysides kept to a minimum. With interpretive materials covering historical and biographical information kept within a visitor center, natural trails leading into the landscape can provide undisturbed access to experiences, as at Ghost Ranch. Trail brochures can provide more information and stimulating questions, as the Weir Farm National Historic Site trail brochure does (Weir Farm Art Center 1994). (Figure 10).

Gendered landscape and ecofeminist ideas could be easily incorporated into this kind of trail brochure, for example, by including information on how the artist might have experienced the landscape as gendered, or by posing questions the reader might consider asking themselves about experiencing the landscape as gendered. However, it seems unlikely that a trail brochure or an exhibit in a visitors' center would be the most effective way to encourage exploration of the complex emotional connections and insights of an ecofeminist perspective. To realize the benefits of an ecofeminist interpretive strategy, alternative techniques such as intensive interpretive experiences in the form of workshops are necessary.

Joan Scott (1998, 10) provides a useful approach to exploring gender issues, which could be used in a workshop. Scott argues for moving beyond 1) including women, their points of view and contributions, to 2) articulating gender dynamics, and then on to 3) articulating a new model of gender relations that does not fall back on traditional stereotypes. For example, discussions during my Ghost Ranch workshop started with describing O'Keeffe's relationship with the Ghost Ranch

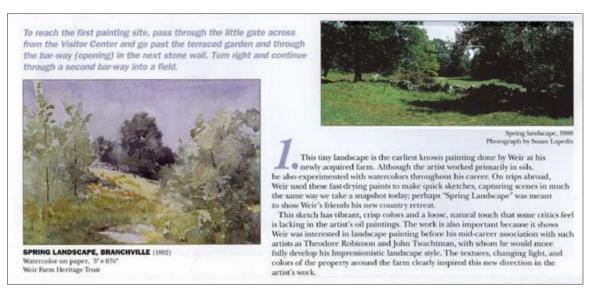


Figure 10. Weir Farm Trust, Painting Sites Trail Brochure, Stop #1. 1994. (Courtesy Weir Farm Trust and National Park Service, Weir Farm National Historic Site)

landscape (Scott's #1, including women). It then moved on to discussing how women and men in the group felt about addressing the masculine and feminine in the landscape (Scott's #2, articulating gender dynamics, albeit on a small scale). And finally, participants explored how they could experience their own relationship with the landscape, including experiencing it as gendered, using ideas that help us let go of gender stereotypes (Scott's #3, articulating a new model). Ecofeminist critique is an important corrective for stereotypes in gendered landscape interpretation. It can help remind us that stereotypes over-generalize ideas and that we must always be wary of using them as the basis for normative prescriptions of landscape.

Conclusion

Considering O'Keeffe's work in the context of gender analysis and ecofeminist ways of relating

to landscape can help us understand the nuances of how her images relate to how she lived with and experienced this landscape. The majority of workshop participants felt that exploring gender enlarged their experience of the landscape and broadened their thinking about O'Keeffe's relationship with Ghost Ranch. The workshop thus suggests that exploring how artists' relationships with heritage landscapes are gendered helps us appreciate a landscape and how that landscape is represented in art. Such exploration can even help us understand our own response to the landscape. Whether or not the landscape is experienced as gendered—as female, male, or androgynous—can influence artistic responses to the landscape. We can experience the landscape through our bodies and our senses, we can develop a personal intimacy with the landscape, and we can "communicate" with the landscape in various ways. All these relationships with place have much in common with

ecofeminist ideas, and, in turn, are key to Georgia O'Keeffe's relationship with the Ghost Ranch land-scape in New Mexico.

This expanded understanding of how visitors experience place, combined with the desire to encourage visitors to develop a relationship with heritage landscapes, can in turn influence facility design and interpretation at heritage sites. A number of important issues remain. If we expand the boundaries of our thinking to allow for nature and landscape to be identified as male or androgynous rather than predominately female, would this make us more preservation-minded? If we take a deeper look at gender and landscape dynamics - from a variety of cultural and racial points of view - how might that influence historic landscape preservation scholarship and practice? These questions and the ideas in this paper, all start with our own individual relationship with landscape. Relating with a landscape is a first step to caring about it, and caring about a landscape is a first step to caring for it.

Author's Note

The opinions expressed in this paper are based on my dissertation work, and do not represent opinions of the National Park Service.

References

- Adato, Perry Miller. 1977. Georgia O'Keeffe. New York: WNET TV. Video.
- Alanen, Arnold R. and Robert Melnick, eds. 2000. *Preserving cultural landscapes in America*. Baltimore: Johns Hopkins University Press.
- Chave, Anna. 1992. O'Keeffe and the masculine gaze. In *From the faraway nearby: Georgia O'Keeffe as icon*, ed. C. Merrill and E. Bradbury. Reading, Mass,: Addison-Wesley Publishing Company.
- Chicago, Judy. 1987. Review of Georgia O'Keeffe: One hundred flowers, edited by N. Callaway. New York Times, 13 December.
- Collins, Jane Downer. 1980. Georgia O'Keeffe and the New Mexico landscape. Master's thesis, George Washington University.
- Council of Educators in Landscape Architecture. 2007. Special Issue on race. Landscape Journal 26 (1).
- Cowley, Jillian. 2000. Gender and cultural landscapes: Notes from the National Park Service. In *Gendered Landscapes: An Interdisciplinary Exploration of Past Place and Space*, ed. B. Szczygiel et al., 157-167. University Park, Penn.: Pennsylvania State University, Center for Studies in Landscape History.
- Cowley, Jillian P. 2006. The mesa and the moon: O'Keeffe, landscape, and gender. Ph.D. diss.. University of New Mexico.
- Cowley, Jill, and Shaun Eyring. 2003. Women's history and cultural landscapes. In *Exploring a common past: Researching and interpreting women's history for historic sites*, ed. Anne M. Derousie and Susan Ferentinos, 19-25. Washington, D.C.: U.S. Department of the Interior, National Park Service, in cooperation with the Organization of American Historians.
- Dijkstra, Bram. 1998. Georgia O'Keeffe and the Eros of place. Princeton: Princeton University Press.
- Eyring, Shaun. 2003. Special places saved, the role of women in preserving the American landscape. In *Restoring women's history through historic preservation*, ed. G. L. Dubrow and J. B. Goodman, 37-57. Baltimore: Johns Hopkins University Press.
- The Georgia O'Keeffe Foundation. n.d. The Georgia O'Keeffe home and studio. Pamphlet published by The Georgia O'Keeffe Foundation, Abiquiu, New Mexico.
- Groth, Paul and Todd W. Bressi, eds. 1997. Understanding Ordinary Landscapes. New Haven: Yale University Press.
- Hayden, Dolores. 2003. The Power of Place Project: Claiming women's history in the urban landscape. In *Restoring women's history through historic preservation*, ed. G. L. Dubrow and J. B. Goodman, 199-213. Baltimore: Johns Hopkins University Press.
- Huyck, Heather. 1988. Beyond John Wayne: Using historic sites to interpret women's history. In *Western women: Their land, their lives*, ed. L. Schlissel, V. Ruiz, and J. Monk. Albuquerque: University of New Mexico Press.
- Huyck, Heather. 2003. Proceeding from here. In *Restoring women's history through historic preservation*, ed. G. L. Dubrow and J. B. Goodman, 355-364. Baltimore: Johns Hopkins University Press.
- Kohen, Richard, and Kim Sikoryak. 2005. *Interp guide: The philosophy and practice of connecting people to heritage.* Denver: U.S. Department of the Interior, National Park Service, Intermountain Region, Office of Interpretation and Education.
- Kolodny, Annette. 1975. *The lay of the land: Metaphor as experience and history in American life and letters.* Chapel Hill: University of North Carolina Press.

- Legler, Gretchen. 1997. Ecofeminist literary criticism. In *Ecofeminism: Women, culture, nature*, ed. Karen J. Warren. Bloomington: Indiana University Press.
- LeGuin, Ursula K. 1987. Buffalo gals, won't you come out tonight. In *Buffalo gals and other animal presences*. New York: Penguin Books USA.

Lippard, Lucy. 2002. Personal Communication.

Lopez, Judy (Director, The Georgia O'Keeffe Foundation). 2000. Personal communication.

Lynes, Barbara Buhler. 1989. O'Keeffe, Stieglitz and the critics, 1916-1929. Chicago: University of Chicago Press.

- ———. 1992. O'Keeffe and feminism: A problem of position. In *The expanding discourse: Feminism and art history*, ed. Norma Broude and Mary D. Garrard. New York: HarperCollins.
- Lynes, Barbara Buhler, Lesley Poling-Kempes, and Frederick W. Turner. 2004. *Georgia O'Keeffe and New Mexico: A sense of place*. Princeton and Santa Fe: Princeton University Press and Georgia O'Keeffe Museum.
- M., Jackie (Director of Education and Public Programs, Georgia O'Keeffe Museum). 2001, 2002. Personal communication.
- McCullough, Alan B. 2003. Parks Canada and women's history. In *Restoring women's history through historic preservation*, ed. G. L. Dubrow and J. B. Goodman, 337-354. Baltimore: Johns Hopkins University Press.
- Massey, Doreen. 1994. Space, place, and gender. Minneapolis: University of Minnesota Press.
- Melnick, Robert. 2000. Considering nature and culture in historic landscape preservation. In *Preserving cultural landscapes in America*, ed. Arnold R. Alanen and Robert Melnick, 22-43. Baltimore: Johns Hopkins University Press.
- Miller, Page Putnam, ed. 1992. Reclaiming the past: Landmarks of women's history. Bloomington: Indiana University Press.
- Nash, Catherine. 1996. Reclaiming vision: Looking at landscape and the body. Gender, place and culture 3 (2): 149-169.
- Norwood, Vera. 1993. Made from this earth: American women and nature. Chapel Hill: University of North Carolina Press.
- Norwood, Vera and Janice Monk, eds. 1987. *The desert is no lady: Southwestern landscapes in women's writing and art.* New Haven: Yale University Press.
- O'Keeffe, Georgia. 1939. About myself. In Georgia O'Keeffe: An exhibit of oils and pastels. New York: An American Place.
- ----. 1976. Georgia O'Keeffe. New York: Viking Press.
- ———. 1981. Interview with Laura Soullière Harrison. Audiotape, National Park Service Archives, Santa Fe, N.M.
- ——. 1987. Georgia O'Keeffe: Art and letters. ed. Jack Cowart and Juan Hamilton. Letters selected and annotated by Sarah Greenough. Washington: National Gallery of Art; Boston: New York Graphic Society Books.
- Pollitzer, Anita. 1988. A woman on paper: Georgia O'Keeffe. New York: Touchstone.
- Sewell, Jessica. 2003. Gender, imagination, and experience in the early-twentieth-century American downtown. In *Everyday America: Cultural landscape studies after J. B. Jackson*, ed. Chris Wilson and Paul Groth, 237-254. Berkeley: University of California Press.

- Scott, Joan W. 1988. Gender and the politics of history. New York: Columbia University Press.
- Silko, Leslie Marmon. 1993. "Yellow woman." Edited and with introduction by Melody Graulich. New Brunswick: Rutgers University Press.
- Thompson, George F., ed. 1995. Landscape in America. Austin: University of Texas Press.
- Udall, Sharyn Rohlfsen. 1996. Contested terrain: Myth and meaning in southwest art. Albuquerque: University of New Mexico Press.
- U.S. Department of the Interior, National Park Service. 1992a. *Georgia O'Keeffe: Study of alternatives, environment assessment.*Denver: National Park Service, Denver Service Center.
- U.S. Department of the Interior, National Park Service. 1992b. Workshop findings and recommendations: Painting and sculpture theme study workshop, June 10-14, 1991. Washington, D.C.: U.S. Department of the Interior, National Park Service.
- Warren, Karen J. ed. 1997. Ecofeminism: Women, culture, nature. Bloomington: Indiana University Press.
- Weir Farm Art Center, with U.S. Department of the Interior, National Park Service. 1994. Weir Farm historic painting sites trail. Brochure published by Weir Farm Art Center, Wilton, Conn.
- Whitman, Walt. [1892] 1958. Leaves of grass. Introduction by Gay Wilson Allen. New York: Signet Classic, New American Library, Inc.
- Willa Cather Pioneer Memorial and Educational Foundation. n.d. Country Tour brochure. Red Cloud, Nebr.
- Wilson, Chris, and Paul Groth, eds. 2003. Everyday America: Cultural landscape studies after J. B. Jackson. Berkeley: University of California Press.

A Terrace Typology

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Abstract

Terraces have been common elements in land-scape design throughout recorded Western history. Garden literature and European influence transformed colonial estates of the mid-Atlantic region of the United States into highly formal landscapes with terraces as a central feature. Despite their importance, terraces have been overlooked as an important design feature in eighteenth century American landscapes due to limited research and lack of a systematic approach to historic landscape studies. A systematic approach to the study of terraces can provide a typology, which can assist in the exploration of alternative research methodologies in historic landscape preservation.

Key Words

Preservation theory, terraces as barriers, spaces, and transitions, systematic approach to historic landscape research

Introduction

Landscape history is a relatively new field of scholarship compared to art history and architectural history. Therefore, historians of art and architecture have served as guides for the study of landscape architecture and landscape history (Hunt 1999). However, borrowing documentation techniques and stylistic criteria from art and architecture has hindered efforts to accurately preserve and interpret historic landscapes. Recent efforts by the National Park Service to establish a protocol for preserving historic landscapes (Birnbaum 1994; Birnbaum and Peters 1996) illustrate this point: *The Secretary of the Interior's Standards for the* Treatment of Historic Properties with Guidelines for the Treatment of Cultural Landscapes is a manual for the preservation of historic landscapes that mimics guidelines and language applicable to buildings, rather than establishing a unique vocabulary specific to historic and cultural landscapes. Because garden historians have applied criteria from art and architecture, instead of developing their own set of interpretive methods, descriptive protocols, and terminology, the field of historic landscape preservation has been slow to develop. John Dixon Hunt, a landscape historian, describes garden history as a discipline that focuses more on the sentimental and less on the analytical (Hunt 1999). Specifically, the current study of garden history emphasizes emotional responses to landscape and abstract concepts instead of balancing

these ideas with quantitative methodologies. Mark Leone, an archaeologist noted for his studies of terraces and ideology, reiterates this point when he describes garden history as "largely unquantitative" (Leone 1989, 46). As the field of historic landscape research matures, scholars should explore new methodologies that parallel efforts from art, architecture, and archeology, but they should not depend on these other professions for their approaches to the study of historic landscape design.

Over-simplified descriptions of landscape styles also limit the boundaries of historic landscape research, while the opposite strategy may prove to be equally problematic. Extensively analyzing individual landscapes for their nuances and unique traits limits the researcher's ability to articulate broad landscape patterns and neglects the landscape's historical context. By focusing too much on an individual landscape, historians may establish an idealized concept of a site. This prevents landscapes from being valued as a part of a broader pattern and does not account for the differences between what was imagined, what was planned, and what was actually created. The lack of balance between understanding individual sites and exploring landscape patterns leads to a dismissal of American landscapes "as unworthy, uninformed, and thus uninformative" (Leone 1989 46). It is critical to strive to understand these environments beyond the idealized landscape and explore what was planned, what was created, how it was created, and the context in which such landscapes were developed. Alternative approaches to investigating landscapes are needed to develop a greater appreciation of the significance of designed and vernacular landscapes and to broaden the boundaries of the discipline.

The creation of landscape typologies is one strategy that might help landscape historians achieve a balance between detailed description of specific sites and attention to broader contextual patterns. Typologies have proven useful in the fields of architectural history and archaeology (Glassie 1968; Thomas 1998). For example, Henry Glassie's studies of material culture in the eastern United States went beyond traditional architectural styles to focus instead on patterns of building construction. This approach yielded a wealth of information that had been previously unquantified and ignored (Glassie 1968). Although the landscape architecture field has seen the creation of typologies during the last quarter of the twentieth century, these have tended to focus on the design process and planning for future development (Crewe and Forsyth 2003; Swanwick 2002). Typologies have yet to become common practice when studying historic landscapes, but these and other systematic, quantitative techniques may expand the boundaries of historic landscape research and preservation.

Typologies may also help researchers better understand specific features of historic landscapes. For example, terraces are important components of many designed landscapes, but terraces have not been examined in a systematic, quantitative manner. Throughout recorded Western history, terraces have been a consistent feature in designed landscapes (Hunt 1986). During the eighteenth, nineteenth, and early twentieth centuries, terraces were used in residential settings to mark boundaries within the landscape. They provided physical transitions between the natural and human-made landscape and represented symbolic barriers between differing social classes. Modern society has continued to use terraces in functional and aesthetic settings, to delineate physical and social

boundaries. Terraces are therefore a landscape feature that might illustrate the broader value of techniques such as typologies to the expansion of landscape history methodologies.

Accordingly, this paper begins to explore the opportunities for expanding boundaries in landscape history research by proposing a typology that helps to better distinguish a defining landscape feature—historic designed terraces. Specifically, this paper proposes a typology of terrace construction with respect to a specific time and geography: terraces constructed between 1719 and 1860 in the mid-Atlantic region of the United States. The paper closes with a case study that shows how the typology may be applied to the analysis of a particular terrace. Although this paper is not a history of terraces, providing a historical context is a necessary first step in the preparation of a typology. The following section provides a brief overview of terraces in designed landscapes, suggesting how a typology may help relate specific terraces to broader cultural landscape patterns in the mid-Atlantic region.

Terraces in a Historic Context

Stephen Switzer, an eighteenth-century garden author, identified terraces "that lie under one another" as a significant landscape design feature (Switzer 1718). This type of terrace, referred to in this paper as "stepped terrace," was a common feature in eighteenth- and nineteenth-century designed landscapes. Although references were made to terraced landscapes in classical times, they became a much more common feature in Italian Renaissance gardens. English visitors on the grand tour saw many Italian gardens, and returned with ideas for their own gardens and

grounds (Hunt 1986). As a result, these gardens directly influenced many late seventeenth-century and early eighteenth-century English landscapes. An example of Italian-inspired terraces is evident in the formal landscape of Powis Castle in western England (Figure 1). A parallel interest in terraces developed in France and Holland during this period. For example, Andre Le Notre popularized terraces in his designs for St. Germain-en-Laye and Versailles (Blomfield and Thomas 1892; Hunt 1986). By the early eighteenth century these formal landscape features had greatly influenced European garden design.

During the eighteenth century, European writers continued to emphasize the terrace (Switzer 1718; Dézallier d'Argenville [1712]1969; and Miller 1731), and their writings likely influenced formal garden design in North America, which saw a rise of terrace construction during this era. The mid-Atlantic region, particularly the American colonies of Maryland and Virginia, became an important locus of terrace construction. A combination of regional wealth and geographical advantages of the Chesapeake region provided an ideal environment for an extensive number of designed terraced landscapes (Brown 1995; Sarudy 1998). The first record of terraces in the American colonies occurred in 1719 at the Governor's Palace in Virginia. Governor Alexander Spotswood was an avid gardener who designed stepped terraces in the palace garden that led down to an artificial canal (Kornwolf 1984; Sanford 1990). Eventually, terracing was incorporated into many Virginia and Maryland plantations such as Maycox, Sabine Hall, Mt. Airy, and Hampton (Brown 1995; Sarudy 1998). These terraced landscapes served as boundaries between different social classes and land uses and often symbolized power (Leone 1987; Leone 1996).



Figure 1. Powis Castle in England, an excellent example of European terraces. (Photo by author, 2006)

Stepped terraces remained an important element of formal residential landscapes in the U.S. into the nineteenth and early-twentieth centuries. Although terraced landscapes continued to be developed following 1860, their construction may be divided generally into two distinct periods: the Colonial Revival landscapes of the early-twentieth century and the post-World War II modern landscape movement. These later periods saw terrace designs expand beyond the traditional residential setting and throughout the entire United States. Changing social conditions and construction technologies allowed terraces to be used in residential, commercial, and civic landscapes serving more subtle and utilitarian roles.

Confining typological research to a particular time period and location allows terraces to be analyzed within distinct regional cultures. Accordingly, the typology proposed in this paper focuses on stepped terraces created between 1719 and 1860, the first major period of growth of terraced landscapes in America. During this time, terraced gardens were featured mostly in residential landscapes that transcended a number of localized cultural patterns, primarily (although not exclusively) in the mid-Atlantic and southeastern regions. Although not the purview of this paper, results of the typology can help substantiate the cultural significance of such terraces. As research continues, the typology may be adapted to later periods of terraced land-

scape growth. Moreover, the terrace typology provides an example of a systematic approach to the study of historic landscapes that expands the boundaries of the discipline.

A Terrace Typology

The terrace typology represents a foundation for creating a systematic study of terraces and other historic landscape features in the mid-Atlantic region. The terrace typology contains ten criteria for interpreting a terraced landscape. Once a site is evaluated using the criteria, an attempt is made to place the site within a broader classification. The benefit of this systematic approach is that researchers can examine and gain information through a filtering process. This process should yield more comprehensive documentation methods, more appropriate preservation practices, and more justifiable and comparable interpretations of terraces. In this respect, the typology focuses on specific patterns of design and associations. The typology is arranged so that terraces are evaluated by the following ten criteria (Table 1): (1) regional location; (2) environment; (3) geographic location; (4) water association; (5) architectural affiliation; (6) mathematical association; (7) number of flats; (8) construction; (9) additional landscape features, and (10) function. Once a site is analyzed using the above criteria, it can be categorized. If a large number of stepped terraces are documented and analyzed, the information can be synthesized and comparisons made regarding their similarities and differences. The hope is that this approach will expand the current understanding of historic designed terraces, provide a foundation for preserving and restoring terraces, and offer new avenues of study.

The following case study illustrates the application of the typology to a specific landscape and suggests how the typology may serve as a foundation for further historic landscape research. In the archaeology and design professions, the use of case studies is a critical strategy for advancing the research and design process. Case studies also help test the applicability of a typology at the site. A case study thus may help clarify the strengths and weaknesses of the terrace typology and refine the typology as a useful tool in the study of historic landscapes. The historic landscape chosen as a case study for this application of terrace typology is Menokin in Richmond County, Virginia.

The Menokin Case Study

Menokin is a late eighteenth-century plantation located on the Northern Neck region of Virginia, an area bounded by the Potomac River to the north and the Rappahannock River to the south. The history of Menokin signifies the merger of two prominent Virginia families, the Tayloes and the Lees. John Tayloe was a farmer and mercantilist who owned several properties, including the Menokin site. Tayloe incorporated the plantation into his agricultural production, and the site was used to raise his export crops and livestock (Andrews 1998). In 1769, his daughter Rebecca Tayloe met and married Francis Lightfoot Lee, who was a member of the Virginia House of Burgesses and a plantation owner (Rust and Rust 1985). Tayloe gave the Menokin tract to his daughter and her new husband as a wedding present and oversaw the construction of the residence on the site which included a central main house supported by two dependencies (Rust, III and Rust 1985).

The development of Menokin represents a significant part of Virginia's history, and it remains an excellent example of a mid-Atlantic, eighteenth-century plantation landscape (Wells and Sharp 1999). The Menokin Foundation is the steward of Menokin and oversees its continued preservation. The Menokin site has seen only minimal human

changes since the nineteenth century, resulting in volunteer and successional forest growth. During the 1990s, efforts were made to preserve the existing buildings and the rural nature of the landscape. Recent efforts have preserved the ruins of the remaining structures on the site and the surrounding natural landscape, including the

A Terrace Typology		
Regional Location	The location of the site within a broader geographic area, e.g., the Virginia Piedmont.	
Environment	The location of stepped terraces on an urban or rural site.	
Geographic Location	Location of terraces within a site, e.g., south side of house, river entrance.	
Water Association	The physical proximity or association of a body of water with a terrace.	
Architectural Affiliation	Association of terraces to the main house/architecture of a site, e.g., terraces located on the main axis of a structure.	
Mathematical Association	Mathematic formulas or common numerical patterns associated with the terraces, e.g., terraces designed using the golden section, or a mathematical equation.	
Number of Flats	The number of flat areas within a series of stepped terraces.	
Construction	The materials, percentage of slope, and techniques related to the design and construction of a terraced site.	
Additional Landscape Features	The presence of additional landscape features in a site, including mounts, water (other than bodies of water), steps, ramps, vegetation, and statuary.	
Function	The purpose of a stepped terrace design within a site, including circulation, agriculture, views, entertainment, workyard, and transition.	

Table 1. The terrace typology.



Figure 2. The main house at Menokin, currently preserved beneath a shelter. (Photo by author, 2004)

removal of some vegetation to uncover the stepped terraces. Today, a large permanent shelter covers the main building, and the surrounding landscape is preserved.

Little is known about the development of the Menokin landscape. Earlier studies, historical research, and archaeological investigations focused on the architecture and the general history of the site. A topographic survey conducted in 1998 by Tomlin and Keeper identified the existence of the terraces within a 200-foot by 200-foot perimeter of the main house. These terraces appear to have experienced minimal change beyond gradual erosion (Figure 3). The terraces located adjacent to the house ruins are a significant part of the

Menokin landscape, and they may be the sole remaining features of a formal landscape design. However, the terraces have not been documented or researched to date to determine their makeup, history, or relative importance to the site. Because of their partially-intact and preserved state and the lack of current literature on the landscape, they were chosen as a case study, which could be documented and studied using the typology approach.

The author undertook an intensive survey of the terraces in December 2004 to document the terraces through photography and measured drawings (Kohr 2005). The survey yielded some interesting early findings. First, the terraces at Menokin were not designed like other terraces in the region. Typically, stepped terrace gardens in the Colonial American landscape were symmetrical and aligned with the central axis of the house. Mt. Airy and Sabine Hall are two local examples. At Menokin there are five (and possibly more) levels that drop in elevation in two distinct directions away from the house. While some of the elevations do cross the central axis of the house, they were not constructed along the axis in a symmetrical fashion.

Secondly, early terraced landscapes were constructed with uniform depths. The terraced gardens at Carter's Grove near Williamsburg, Virginia, are one example of terraces dropping at a uniform depth along the central axis of the house. At Menokin, the terraces are not at uniform depths. Near the house, the terraces drop two to three feet. However, the lower terraces descend at depths of six to nine feet. Further archaeological investigations are needed to determine the extent of these elevation changes, and whether or not environmental and human factors have played a role in their historical development.



Figure 3: The present state of the Menokin terraces, looking west. (Photo by author, 2004)

Finally, Colonial American terraced gardens were typically consistent in their dimensions. In Antoine-Joseph Dezallier d'Argenville's *The Theory and Practice of Gardening*, the author recommends that terraces be designed with mathematical consistency (Dézallier d'Argenville [1712]1969). The terraces at Menokin have a mathematical pattern associated with them, but the lengths and widths are not consistent. Rather, they appear to form geometric rectangles of varied lengths and widths (Table 2). The lack of axial symmetry and the variable depth and dimensions of the Menokin terraces distinguish them from other terraces in the region and the time period.

Menokin Terrace Dimensions				
Terrace	Length (East-West)	Width (North-South)		
Terrace A Terrace B Terrace C Terrace D Terrace E	120 feet 90 feet 60 feet 60 feet 180 feet	60 feet 60 feet 60 feet 60 feet 30-60 feet		

Table 2. Menokin Terrace Dimensions.

Terrace Typology Applied to Menokin		
Regional Location	Richmond County, Virginia; Northern Neck.	
Environment	Rural.	
Geographic Location	Terraces are located on the south side of the house. They face both south and southwest in two directions.	
Water Association	Historically there was a view of Menokin Bay, an inlet of the Chesapeake Bay, from the southern side of the house. A small port was located below Menokin on the bay for the transmittal of goods and supplies in the eighteenth century. The terraces continue to face Menokin Bay today, but the view is obstructed by second-growth forest. The forested area has recently been given to U.S. Fish and Wildlife Service for protection.	
Architectural Affiliation	Unclear. The terraces are located directly south of the house but to date there has not been a clear visual association with the house. Terrace B extends the width of the southern elevation and this may be evidence that activities associated with the main structure took place on this terrace (Figure 4).	
Mathematical Association	The 2004 survey suggests that mathematical formulas were used in the design and construction of the terraces. The east-west length of the terraces is approximately 270 feet. The north-south width of the terraces from the house is approximately 120 feet, although there are indications that a terrace extended an additional 60 feet to the south. The terraces are arranged east to west and north to south and appear to be designed in increments of thirty feet (Table 2).	
Number of Flats	At least five flats.	
Construction	Grassed surface; composed of a silty loam; steep slopes. The material used in construction includes backfill soil, most likely originating from the construction of the main building's basement. The soil in the area is a silty loam known as a Rumsford soil that is susceptible to erosion. Grass covers the entire terraced area. The natural topography of the region suggests that the terraces were formed on the edge of a hillside that naturally drains into several ravines. The associated slopes in many cases appear to be equal to and/or greater than fifty percent (Figure 4). This type of construction required continued maintenance of the terraces to prevent erosion and excessive water runoff.	
Additional Landscape Features	None. There is no evidence of additional landscape design features associated with the stepped terraces.	

(continued)

Function

Viewpoint; transition; entertainment/work yard. Because there is little historical documentation about the terraces at Menokin, hypotheses about their actual use were based on empirical observation and scholarship of similar terraced landscapes. The terraces appear to have been designed to provide an unobstructed view of Menokin Bay to the south; many of the plantation's business transactions took place at the local port. A second function is transition. The terraces are located between the ravines and the house and its outbuildings. Whether intentional or not, the terraces were the most formal feature in the landscape and helped to connect the human and natural environments. Finally, the design of the terraces yields information about the activity that took place. Terraces A and B have a fall in elevation of approximately three feet. This suggests that human activity was greatest on Terraces A and B where the falls provide easier access and less physical boundaries. It is likely that this area was used as either an area of entertainment or for a working garden/work yard.

Table 3. Terrace Typology Applied to Menokin.

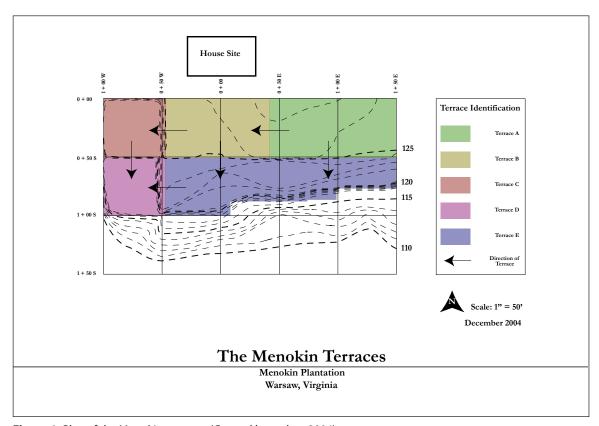


Figure 4. Plan of the Menokin terraces. (Created by author, 2004)

Applying the Terrace Typology to Menokin

The Menokin site was analyzed using the ten criteria identified in the typology (Table 3). Applying the typology to terraces at Menokin, one could define them as south facing grassed terraces serving as a viewpoint, transition, and an area for entertainment or a work yard. Several conclusions can be made regarding the Menokin terraces. First, they are indicative of someone who had an understanding of mathematics and landscape design. John Tayloe constructed Menokin and may have designed Menokin's terraces based on his experience of terraces at his Mt. Airy plantation. Second, the existence of the terraces as the only formal landscape element signifies their importance to the broader cultural landscape at Menokin. Their location south of the house and orientation towards Menokin Bay emphasizes the importance of the waterway to the success of the plantation. Moreover, the terraces were the only formal garden feature on the site, and may have served as a transition between the natural landscape and the human environment represented by the main house and its surroundings. Finally, the study suggests that archaeology is needed to determine types of activities and uses of each terrace.

Conclusion and Future Recommendations

The Menokin case study suggests that applying a terrace typology to a specific site is an appropriate approach to studying a historic landscape. This approach offers an opportunity to answer legitimate questions and organize information in a manner that can yield landscape design patterns. More exact categories may be developed once

more terraces are studied using this approach, and further refinement of the typology could help researchers explore the relationships of terraces to broader cultural landscape patterns. While the research presented in this paper is a first step, the terrace typology needs further testing on a much broader level to determine what, if any, patterns exist. Continued study of the terrace typology could be advanced in several ways. First, researchers could establish a database of all known terraced landscapes within the mid-Atlantic region. Eventually, the database could be expanded to include other parts of the United States. This would involve further on-site investigations and research. Second, the terrace typology could be expanded to encompass stepped terraces on a national level within a broader time period. This step could be accomplished by reexamining certain criteria and adding or subtracting others. Third, the typology method should be tested using additional case studies to determine how effectively the typology supports the creation of histories, preservation plans, and documentation procedures. Finally, research should continue, to investigate the value of systematic approaches to landscape history which can help the profession mature and yield new knowledge about past designed landscapes.

Going forward, typologies will be required to assist researchers in understanding newly discovered historic landscapes (Taylor 1997). Professionals studying historic landscapes should continue to seek out methods that broaden the understanding of landscapes and their importance within a cultural context. These efforts will widen the scope of historic landscape research and further legitimize the significance of historic landscapes. Furthermore, the usefulness of this approach may extend beyond the current scope of the profession.

Since the knowledge of historic landscapes comes from tangible, visible features in the landscape, more exploration of sites with similar features must be done to create a body of work for reference.

Studying human relationships within a designed landscape concentrates on the dynamic nature of the environment and the importance of designed landscapes to humans (Lanier and Herman 1997). By exploring the patterns of landscape features, scholars can expand the knowledge of human behavior and relationships within historic landscapes.

References

- Andrews, Alyson. 1998. Menokin: A cultural resource management study. Undergraduate thesis, Mary Washington College.
- Batey, Mavis. 1984. The high phase of English landscape gardening. In *British and American gardens in the eighteenth century*, ed. Robert Maccubbin and Peter Martin. Williamsburg, Va. Colonial Williamsburg Foundation.
- Beveridge, Charles E., and David Schuyler, eds. 1983. *The papers of Frederick Law Olmsted*, Vol. 3. Baltimore: Johns Hopkins University Press.
- Birnbaum, Charles A. 1994. *Protecting cultural landscapes: Planning, treatment and management of historic landscapes.*Preservation Briefs 36. Washington, D.C.: U.S. Department of the Interior, National Park Service.
- Birnbaum, Charles A., with Christine Capella Peters, eds. 1996. *The Secretary of the Interior's standards for the treatment of historic properties with guidelines for the treatment of cultural landscapes*. Washington, D.C.: U.S. Department of the Interior, National Park Service.
- Blomfield, Reginald, and F. Inigo Thomas. 1892. The formal garden in England. London: MacMillan and Company.
- Brown, C. Allen. 1995. Eighteenth-century Virginia plantation gardens: Translating an ancient Idyll. In *Regional garden design* in the United States, ed. Therese O'Malley and Mark Treib. Washington, D. C.: Dumbarton Oaks Research Library and Collection.
- Burns, John, ed. 2004. Recording historic structures. Hoboken, N.J.: Wiley and Sons.
- Chatfield, Judith. 1991. The classic Italian garden. New York: Rizzoli.
- Cosgrove, Denis. 1993. The Palladian landscape: Geographical change and its cultural representations in sixteenth century Italy. University Park: Pennsylvania State University Press.
- Crewe, Katherine and Ann Forsyth. 2003. LandSCAPES: A typology of approaches to landscape architecture. *Landscape Journal* 22 (1): 37-53.
- Davidson, Rebecca Warren. 1992. Past as present: Villa Vizcaya and the 'Italian garden' in the United States. *Journal of Garden History* 12 (1):1-28.
- Dézallier d'Argenville, Antoine-Joseph. [1712] 1969. *The theory and practice of gardening*. Translated from the French by John James. Reprint. London: Farnborough, Gregg.
- Downing, Alexander Jackson. [1842] 1967. Cottage residences, rural architecture, and landscape gardening. Reprint. New York: Century House.
- ——. [1865] 1991. Landscape gardening and rural architecture. Reprint. New York: Dover Publications.
- Downs, Arthur Channing. 1990. Edward Buckton Lamb: From Pliny, Palladio, and Fontill [sic] Abbey to American open space planning. Newtown Square, Penn.: Downing and Vaux Society.
- Elkins, James. 1993. On the conceptual analysis of gardens. Journal of Garden History 13 (4):189-198.

- Enge, Torsten Olaf and Carl Friedrich Schröer. 1992. Garden architecture in Europe. Germany: Benedikt Taschen.
- Evelyn, John. 2001. Elysium Britannicum, or the royal gardens. Ed. John Ingram. Philadelphia: University of Pennsylvania Press.
- Forest Stewardship Plan for Menokin. 2002. Richmond, Va: Virginia Department of Forestry.
- Fryberger, Betsy G. 1997. *The changing garden: Four centuries of European and American Art.* Berkeley: University of California Press.
- Glassie, Henry. 1968. *Pattern in the material folk culture of the Eastern United States*. Philadelphia: University of Pennsylvania Press.
- Hazlehurst, F. Hamilton. 1980. Gardens of illusion: The genius of Andre Le Notre. Nashville: Vanderbilt University Press.
- Hood, Davyd Foard. 1996. The renaissance of Southern gardening in the early twentieth century. *Journal of Garden History* 16 (2):132.
- Hunt, John Dixon. 1999. Approaches (new and old) to garden history. In *Perspectives on garden histories*, ed. Michel Conan, 77-90. Washington, D. C.: Dumbarton Oaks Research Library and Collection.
- ——. 1986. *Garden and grove: The Italian Renaissance garden in the English imagination: 1600-1750.* Princeton: Princeton University Press.
- ——. 1992a. Gardens and the picturesque. Cambridge, Mass: MIT Press.
- ———, ed. 1992b. *Garden history: Issues, approaches, methods.* Washington, D. C.: Dumbarton Oaks Research Library and Collection.
- Jellicoe, Geoffrey. 1995. The collected works of Geoffrey Jellicoe: The studies of a landscape designer over 80 years. London: Garden Art Press.
- Kenworthy, Richard. 1990. Published records of Italianate gardens in America. Journal of Garden History 10 (1):31.
- Kohr, Andrew. 2005. A terrace typology. Master's thesis, Ball State University.
- Kornwolf, James D. 1984. The picturesque in the American garden and landscape before 1800. In *British and American gardens in the eighteenth century*, ed. Robert Maccubbin and Peter Martin, 93-106. Williamsburg, Va: Colonial Williamsburg Foundation.
- Kryder-Reid, Elizabeth. 1994. The archaeology of vision in eighteenth century Chesapeake gardens. *Journal of Garden History* 14 (1):42-53.
- Langley, Batty. [1728] 1982. New principles of gardening. Reprint. Edited by John Dixon Hunt. New York: Garland Publishing.
- Lanier, Gabrielle, and Bernard Herman. 1997. *Everyday architecture in the mid-Atlantic*. Baltimore: Johns Hopkins University Press.
- Lawson, William. [1618]. *A new orchard and garden*. London: R. Jackson, 1618. Ed. John Dixon Hunt. New York: Garland Publishing.

- Leighton, Ann. 1976. American gardens in the eighteenth century. Boston: Houghton Mifflin Company.
- ——. 1987. American gardens in the nineteenth century. Amherst, Mass.: University of Massachusetts Press.
- Leone, Mark P. 1988. The Georgian order as the order of merchant capitalism in Annapolis, Maryland. In *The recovery of meaning*, ed. Mark Leone and Parker Potter, 235-262. Washington, D.C.: Smithsonian Institution Press.
- ——. 1996. Interpreting ideology in historical archaeology. In *Images of the recent past: Readings in historical archaeology*, ed. Charles Orser. Walnut Creek, Calif.: Alta Mira Press.
- ——. 1989. Issues in historic landscapes and gardens. Historical Archaeology 23(1): 45-47.
- ——. 1988. The relationship between archaeological data and the documentary record: 18th century gardens in Annapolis, Maryland. Historical Archaeology 22(1): 29-35
- ——. 1987. Rule by ostentation: The relationship between space and sight in eighteenth-century landscape architecture in the Chesapeake region of Maryland. In *Method and theory for activity area research: An ethnoarchaeological approach*, ed. Susan Kent. New York: Columbia University Press.
- Leone, Mark, James M. Harmon, et al. 2004. Perspective and surveillance in eighteenth century Chesapeake gardens, including William Paca's garden on Wye Island. TMs. from author's personal collection, University of Maryland.
- Leone, Marke, Julie H. Ernstein, et al. 1989. Power gardens of Annapolis. Archaeology 42 (March/April): 35-39, 74-75.
- Leone, Mark, and Paul A. Shackel. 1990. Plane and solid geometry in colonial gardens in Annapolis, Maryland. In *Earth patterns*, ed. William Kelso and Rachel Most, 153-168. Charlottesville, Va: University Press of Virginia.
- Loudon, John Claudius. [1806] 1971. A treatise on country residences. Vol. 2. Reprint. Richmond, England: Gregg International Publishers.
- Miller, Philip. 1731. Gardeners dictionary. London: C. Rivington.
- Mowl, Timothy. 2004. Gentlemen and players. Phoenix Mill, England: Sutton Publishing Limited.
- Mulligan, William. 1997. Interpretation of historic sites: An overview. http://campus.murraystate.edu.
- Rust, William F., III, and Randi L. Rust. 1985. A national register assessment of Menokin. Leesburg, Va: Loudon Archaeology Center.
- Sanford, Douglas. 1990. The gardens at Germanna, Virginia. In *Earth Patterns*, ed. William Kelso and Rachel Most, 43-58. Charlottesville, Va: University Press of Virginia.
- Sarudy, Barbara Wells. 1998. Gardens and gardening in the Chesapeake, 1700-1805. Baltimore: John Hopkins University Press.
- Swanwick, Carys. 2002. Landscape character assessment guidance. Topic Paper 1. Recent Practice and the Evolution of Landscape Character Assessment. Countryside Agency, Cheltenham and Scottish Natural Heritage, Edinburgh.
- Stipe, Robert. 1997. Historic preservation: The process and the actors. In *The American mosaic*, ed. Robert Stipe and Antoinette Lee. Detroit, Mich.: Wayne State University.

Switzer, Stephen. [1718] 1982. *Ichnographia rustica: Or, the nobleman, gentleman, and gardener's recreation.* Vols. 2 and 3. Reprint. Edited by John Dixon Hunt. New York: Garland Publishing.

Taylor, Christopher. 1997. The place of analytical fieldwork in garden archaeology. Journal of Garden History 17 (1): 18-24.

Thomas, David Hurst. 1998. Archaeology. Fort Worth, Tex.: Harcourt Brace College Publishers.

Wells, Camille, and Henry Kerr Sharp. 1999. Menokin. Charlottesville, Va: Menokin Foundation.

Wharton, Edith. 1904. Italian villas and their gardens. New York: Da Capo Press.

Developing a Historic Landscape Research Network to Uncover Warren H. Manning's Legacy

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Abstract

Warren H. Manning (1860-1938) was arguably one of the most productive and influential American landscape designers in the profession's early years. Manning worked in the landscape architectural firm of Fredrick Law Olmsted and went on to practice independently in thirty-four states, recording more than 1,600 diverse projects in his fifty-year career. Although Manning was an important figure and a creator of numerous known works, the loss of his primary records has made it difficult to understand the breadth and detail of his projects. To recover information about Manning's commissions and document their current state of preservation, the Library of American Landscape History (LALH) designed a collaborative research model that employs the skills and resources of a large research network, encourages collaboration among researchers, and uses technology to facilitate communication across geographies and research needs. Through this research model, which could be applied to any number of historic landscape research endeavors, the findings will afford an understanding of Manning's designs to pave the way for their appropriate preservation.

Key Words

Research, collaboration, technology, survey, landscape, Warren H. Manning

Introduction

Recent research suggests that landscape architect Warren Henry Manning (1860-1938) was one of the most productive and, arguably, most influential American landscape designers and planners in the profession's early years (Figure 1). Manning began his career as a horticulturist in his father's nursery and then worked as an assistant in the firm directed by Frederick Law Olmsted. He went on to practice in thirty-four states from his Massachusetts-based firms, recording more than 1,600 diverse projects in his fifty-year career. Manning's commissions covered a wide range of landscape types, from small home lots, private estates, golf courses, parks and park systems, subdivisions, company towns, institutional grounds, and amusement parks, to regional plans and even a national plan. Hundreds of Manning's designs survive, with varying degrees of integrity and preservation.

Nearly all of Manning's projects encompass aspects of both landscape architecture and planning, with

many also incorporating preservation concepts; he paid attention to both the historic and natural contexts in which he designed. His projects link the work of his mentors, Fredrick Law Olmsted and Charles Eliot (with whom he worked at the Olmsted firm), with that of his assistants, including Fletcher Steele, A. D. Taylor, Marjorie Sewell Cautley, Charles Gillette, and Dan Kiley. Although his commissions figured prominently in the landscape design achievements of the period, for the most part these have not yet been carefully studied. The destruction of most of Manning's professional documents after his death in 1938 and the farflung geographical range of his projects have made any sort of traditional research initiative nearly impossible.

With so many obstacles to overcome, a different kind of research model is needed to study Manning's work. This paper proposes one solution to the boundaries that have previously hampered historic landscape research (i.e., physical access to records in disparate locations, lack of collaboration among researchers with similar interests, up-to-date access to current research finds, etc.). By creating research linkages using technology and a common goal, the Library of American Landscape History (LALH) has designed a research model to expand on the traditional process of individual researchers conducting historic landscape research on a single site or group of sites. The model employs the skills and resources of a large number of research associates to simultaneously recover information about Manning's many built commissions and document their current state of preservation.

Although the use of technology has become common in many research-based disciplines, the



Figure 1. Warren Henry Manning (1860-1938). (University of Massachusetts—Lowell, Center for Lowell History, Warren Manning Collection)

research that was developed pushes the boundaries of historic landscape research by using the Internet and other technological tools to coordinate a large research network. The research network is working towards an understanding of Manning's design principles by documenting his existing landscape designs. As this project and the network upon which it relies continue to grow, not only are LALH efforts paving the way for appropriate preservation of Manning's landscapes, but they are also creating a research model with vast potential applications to other historic landscape research topics.

Research Project Background and Pilot Study

The Library of American Landscape History was founded in 1992 to educate and thereby promote thoughtful stewardship of the land, through the production of books and exhibitions. In its fifteenth year of not-for-profit publishing in collaboration with trade and university presses, LALH has produced twenty books and three traveling exhibitions and commissioned preeminent scholars in the field to write on a wide range of topics. Its initiatives include the American Society of Landscape Architects Centennial Reprint Series *Pioneers of American Landscape Design* and several monographs on practitioners and important sites.

The Warren Manning research project began in 2004, when LALH executive director and historian Robin Karson explored ways to conduct comprehensive research for a book about Manning's legacy. As she had learned in research for previous books and articles, only a few other scholars, notably William Grundmann and Lance Neckar, published on Manning, and none had attempted a comprehensive analysis beyond the scope of an article.

For primary sources, two repositories—Iowa State University's Park Library and the University of Massachusetts at Lowell's Center for Lowell History—house the bulk of Manning's known practice records. Unfortunately, those repository holdings represent only a small portion of his total professional work. An unknown number of documents reside with historical societies, town offices, and institutional archives, while still other records are held by the descendants of original clients or by current owners of properties on which

Manning worked. It became apparent to Karson that a research network of unprecedented size, geographic breadth, and specialization would be necessary to survey the status of Manning's projects and identify the resources needed to bring his legacy to light.

After contemplating various alternatives, Karson decided to tap her experience managing the editorial parameters of multiple contributors as co-editor of Pioneers of American Landscape Design (Birnbaum and Karson 2000). Since the scope of Pioneers far exceeded any one person's expertise, the project had drawn upon many people's experience, knowledge, skill, and work. Ultimately, the book had comprised 161 essays by 102 scholars, with LALH contributing the comprehensive guidelines, project coordination, and editorial skills necessary to create a product of uniform tone and quality. The complicated logistics inherent in any attempt to study Warren H. Manning's long, diverse, and geographically sprawling career, combined with the lack of a central repository of Manning's documents, prompted Karson to apply a research model similar to that used for Pioneers. LALH then invited several U.S. scholars to act as the core team to guide the project and assigned two part-time LALH staff members, Jane Roy Brown and Reid Bertone-Johnson, to assist with its development.

In the summer of 2005, LALH acquired an electronic copy of Manning's client list from the University of Massachusetts, Lowell, and piloted a study of twenty-five Manning projects within a twenty-mile radius of the LALH office in Amherst, Massachusetts. The pilot study tested an LALH-designed survey tool that incorporated portions of the National Register of Historic Places nomina-



Figure 2. Skinner Estate in South Hadley, Massachusetts, discovered during the pilot study. (Photo by author)

tion-form data, the Historic American Landscapes Survey (HALS) survey-form data, and several data fields from a variety of state historic preservation office surveys. The LALH survey also contained specific questions about types of projects on Manning's client list and the quantity and quality of available research materials. The survey attempted to capture enough in-depth information to assess the potential for future research while remaining manageable for researchers with limited time.

The pilot research project yielded some exciting results. Among other discoveries, the researchers

identified complex projects with high levels of historic integrity, uncovered previously unknown research-material sources, and located several extant Manning-designed landscapes. Specific examples of the discoveries include: a neighborhood of small homes in Holyoke, Massachusetts; a significant cluster of work for a single client in Middlebury and Naugatuck, Connecticut; and a large, private-estate landscape adjacent to Mount Holyoke College (Figure 2). Although surveys would not necessarily yield such fruitful results in all locations on the client list, the pilot study encouraged LALH to expand the geographic scope

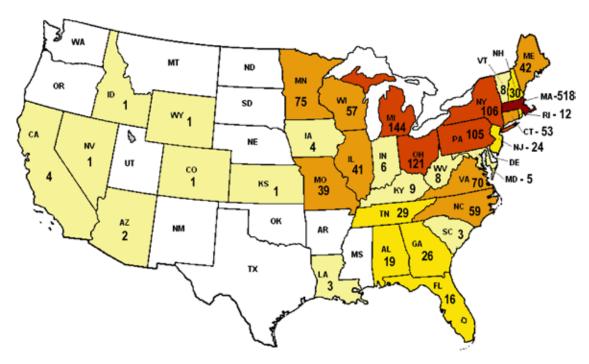


Figure 3. Distribution of Manning projects throughout the United States. (Drawing by author)

of research and explore ways to build a network of qualified research associates to bring Warren Manning's legacy to light.

The Warren Manning Research Project

To plan the prospective research network, LALH first quantified and mapped Manning's projects by state. The resulting map clearly indicated where to focus research efforts: Massachusetts, for example, contains more than 500 projects, while Arizona has only two (Figure 3). The core scholarly team was then consulted to identify which project types—such as company towns and city park systems—were particularly important to include. All of that input formed a subset of specific research priorities.

The next task was to recruit qualified researchers and organize them into a nationwide network. The researchers would need to visit local historical societies, libraries, and other repositories of regionally specific materials. LALH contacted colleagues in academia and other professions affiliated with historic landscape preservation, design, and planning to help identify potential researchers. Over the following six months, almost twenty researchers signed on to survey Manning properties in several states. During this period, Reid Bertone-Johnson was hired as project manager to track the progress of the growing network of research associates. New researchers were continually recruited through bulletins on the LALH Web site (www.lalh.org) and in publications of the Alliance for Historic Landscape Preservation, the National Association

for Olmsted Parks, the American Society of Landscape Architects, and other professional organizations. Technological and managerial skills were critical in keeping researchers apprised of new discoveries, actively engaged, and in contact with one another. Funds obtained from grants and private donations supported the work.

Since the late 1990s, when the research effort for *Pioneers* was underway, technological innovations have greatly improved, easily facilitating the organizational infrastructure needed for this large-scale, multiple-contributor research effort. The almost universal use of e-mail among researchers has streamlined communication for all involved;

online discussion groups provide semiprivate, virtual "spaces" for far-flung researchers to share discoveries and techniques; and inexpensive, easy-to-use Internet survey tools are available to collect quantities of data, including images.¹

The Manning research project used Internet technology in a number of ways. First, a dedicated Warren Manning Research Project site was created

¹ The book *Digital Land: Integrating Technology into the Land Planning Process* (Sipes & Lindhult, forthcoming) analyzes the use of technology by design firms, per results of an extensive online survey. The book demonstrated the potential benefits of Internet surveys for research purposes and influenced LALH to apply similar tools and techniques to their research model.

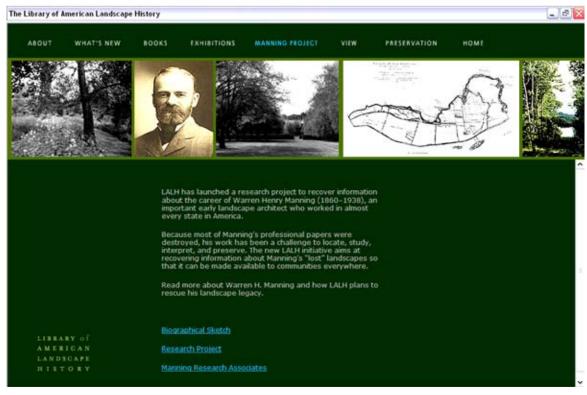


Figure 4. Warren Manning Research Project page on the Library of American Landscape History website. (Image by author)

on the LALH Web site (Figure 4). The researchproject site provides background information to prospective researchers, posts the Manning client list and field survey for researchers to download, and contains a password-protected portal for assigned research associates to file their fieldsurvey data. The field-survey data was entered into surveymonkey.com, a Web-based survey service that provides design flexibility to accommodate a variety of question- and response-types. After a researcher posts survey data about a Manning site, LALH retrieves the data from the hosting Web site and imports it into an Excel spreadsheet. Online data collection allows LALH to contact researchers with timely queries to ensure a high standard of information quality. Harvesting the information in this manner also facilitates the eventual creation of a searchable database of Manning's projects, similar to the Olmsted Research Guide Online (ORGO).

The Research Network

The Manning researchers come from a wide variety of disciplines—primarily landscape architecture, planning, architecture, and history, with an interest in each of the aforementioned fields. To recruit professors from accredited landscape architecture and planning programs, LALH solicited assistance from managers of e-mail lists and compiled its own list. Cooperation from professional groups such as the Alliance for Historic Landscape Preservation (AHLP), the American Planning Association (APA), the American Society of Landscape Architects (ASLA), and the Society of American City and Regional Planning History (SACRPH) also has led to a significant expansion of the Manning research network in both numbers and geographical scope.

The research network facilitates researchers, allowing them to connect with one another, collaborate to move the project forward, and track progress on each Manning project. Regular contact from the LALH Manning research-project manager helps to identify geographic gaps in coverage and ensures that the research associates remain motivated and do not duplicate efforts. A running list of collaborating scholars, archivists, historical societies, and material resources to facilitate the research is maintained. Mass e-mail letters containing project updates keep researchers informed on new discoveries and promulgate the sense of being part of a larger research network.

In addition to frequent e-mail contact with researchers, an online discussion forum in which researchers (and, subsequently, scholars and writers) can post queries is maintained. This tool affords the project manager the ability to distribute digital copies of finding aids or other pertinent information. For example, the recently scanned text of Warren Manning's unpublished autobiography was distributed to researchers, allowing them the capability to search the digital document for client names and other key words related to their specific projects. The digital client list originally obtained from the Center for Lowell History has been updated, based on the results of the various researchers' findings.

The network continues to grow, and researchers have now taken on a significant portion of Manning's 1,668 projects. As of this writing, 550 projects have been assigned to more than sixty active researchers, and ninety-nine completed surveys reside in the database. As geographic gaps in the research coverage have emerged, significant project types, such as city plans, have been identi-

fied within those gap areas and researchers with appropriate backgrounds (e.g., planning history) have been recruited to conduct surveys for those properties. With such a large network of active researchers, the Manning project encourages collaboration. This model of sharing information, rather than viewing information as proprietary in a competitive environment, has already proven valuable to working scholars. As Manning research associates have made discoveries, LALH has contacted scholars who had formerly pursued related research and persuaded them to join the Manning project.

The success of the diverse and dispersed network of researchers, coupled with an Internet presence and the cooperation of affiliated organizations, has allowed LALH to build widespread awareness of the Manning project. Prospective researchers with an interest in Manning or in a specific property now routinely contact LALH asking to become involved. Some targeted recruitment is still necessary, but the network of active researchers continues to grow independently as word of the project spreads. In a recent example, Elizabeth Igleheart, an instructor in historic landscape preservation practice at the Landscape Institute at the Arnold Arboretum in Boston, contacted LALH to ask how she might incorporate the Manning project into her course. Igleheart collaborated with LALH to build her curriculum around the Manning project, and her class of a dozen students became some of the project's most prolific and thorough researchers while gaining hands-on experience in historic landscape field research. Graduate students in other landscape architecture and planning programs have also participated in the Manning project as part of independent studies.

Types of Research

Thus far, three kinds of collaboration have emerged within the research network: regional, client-oriented, and subject-oriented. Regional collaboration has taken the form of small research teams working under the oversight of local "captains" appointed by LALH who coordinate the research and field queries, and identify local resources. For example, Joan Randall, staff historian for the Ohio State Department of Transportation, oversees a group of ten researchers in that state and provides LALH with frequent updates on their progress. Other such teams have formed around clusters of projects in Massachusetts, Kentucky, Maine, and Pennsylvania.

Client-oriented collaboration has developed as a result of Manning's tendency to work for a single client on multiple projects. For example, the McCormick family of the International Harvester Company hired Manning for properties in seven states. Members of the Manning research network are pursuing his projects for the McCormicks, sharing information with one another via the online discussion group and their own frequent e-mail contacts. One researcher working in Chicago, Julie McKeon, has found documents in local archives that illuminate Manning's work on McCormick family properties in Michigan and California, where other researchers are conducting surveys. Two researchers are also pursuing Manning's work for the Tufts family in Maine and North Carolina.

A few researchers in the network who have expertise in particular subject areas related to Manning's work have been drawn to collaborate, based on project types. For example, three researchers are pursuing Manning's work on his national plan,



Figure 5. Hopedale Town Park, designed 1912-1913. (Photo by author)

while others have expressed interest in analyzing Manning's planting schemes for private estates and examining his park designs. Sometimes, multiple researchers express interest in the same project or group of projects, potentially leading to conflicts within the research network. Thus far, overlapping interests have been successfully resolved, and on more than one occasion, once professionals and scholars with similar interests had been introduced, they decided to collaborate.

Conclusion

In meeting the challenge of researching a large body of work dispersed over a broad geographic area with few centralized resources, the Manning project's research model has developed into a unique approach to scholarly research in American landscape history. Facilitated by Internet-based technology, a collaborative, information-sharing approach is central to the research process. By establishing a large network of researchers, LALH has become a clearinghouse for issues, discoveries, and queries related to Manning and his work.

LALH has not only established relationships with countless small archives and property owners that hold Manning-related materials, but it has also helped connect those local repositories to the many researchers pursuing that exact information.

After eighteen months, the value of this pioneering research effort is already apparent: researchers are discovering previously unknown information about Warren Manning, his designed landscapes, and other projects with which he was involved. In some cases, researchers have located extant Manning landscapes that are largely intact; in other cases, they have uncovered new information about how Manning worked and developed such a large number of projects. As surveys are completed, LALH is identifying and resolving discrepancies in existing records, compiling the most accurate project list possible, and commenting on which projects were built and, of those, which ones remain intact.

New understanding brings new questions, and the research model's infrastructure affords the ability to efficiently pursue new questions. One such new question relates to when Manning began taking on projects independent of his work for the Olmsted firm. It is commonly held that Manning's separation from the Olmsted firm in 1896 marked the beginning of his independent work, but new evidence of Manning's work in Hopedale, Massachusetts, indicates that he took on his own projects even while employed by Olmsted. By visiting previously unknown, extant Manning landscapes, researchers are beginning to develop a more refined sense of Manning's characteristic design features and approaches to projects of similar types. Common elements, such as prominent stone walls surrounding Manning's parks, for example, and large masses of native broadleaf evergreens near springs and ponds on private estates, suggest that Manning may have worked on a property. With a clearer understanding of Manning's application of his design principles, it may be possible to appropriately protect and preserve the landscapes of his design.

The Manning project's research model has laid groundwork for other large-scale, historic landscape research projects. Few researchers in the Manning research network are interested solely in Manning's work; hence the now-established research network could later investigate the work of other under-recognized designers, or perhaps historical trends in landscape design. The Warren Manning research project model paves the way for appropriate preservation of his landscape designs by accounting for multiple layers of design and history, and providing new, richer opportunities for education. This research process also facilitates information collection, sharing, and synthesis, leading to new levels of understanding of the design tendencies of Manning and other

under-studied landscape designers and planners. This new understanding is achieved by placing researchers on the ground in as many landscapes as possible and making the information they gather readily accessible. The strategic application of technology has overcome obstacles presented by the diverse and dispersed nature of Manning's work. The network has also introduced many scholars and professionals to one another, affording opportunities for dialogue that could potentially result in future collaborations across disciplines, as well as regions.

For these reasons and others yet to be realized, the Manning project's research model will serve as a valuable case study for the use of technology to build a large and complex research project, both within and beyond the field of landscape design history.

References

- Birnbaum, Charles, and Robin Karson, eds. 2000. Pioneers of American landscape design. New York: McGraw-Hill.
- Child, Susan. 1991. Warren Manning, 1860-1938: The forgotten genius of the American Landscape. *Journal of the New England Garden History Society* 1: 29-37.
- Grundmann, William. 1989. Warren H. Manning. *American landscape architecture: Designers and places*. Washington, D.C.: National Trust for Historic Preservation, and American Society of Landscape Architects.
- Karson, Robin. 1997. Warren H. Manning: Pragmatist in the wild garden. In *Nature and ideology: Natural garden design in the twentieth century*, ed. Joachim Wolschke-Bulmahn. Dumbarton Oaks Colloquium on the History of Landscape Architecture, vol. 18. Washington, D.C.: Dumbarton Oaks Research Library and Collection.
- Neckar, Lance. 1989. Developing landscape architecture for the twentieth century: The career of Warren H. Manning. *Landscape Journal* 8 (1989): 78–91.
- Sipes, James L., and Mark S. Lindhult. 2007. *Digital land: Integrating technology into the land planning process.* Hoboken, N.J.: Wiley and Sons.

Battles of Saratoga Viewshed Inventory and Analysis

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Abstract

The Revolutionary War history of the Old Saratoga region of New York is unique in having the protection of the Saratoga National Historical Park (SNHP). Although rich in historic and scenic value, the region is one of the fastest-growing areas in the state and much of the surrounding contextual landscape is threatened by development. The identification and analysis of significant historic resources and viewsheds related to the Revolutionary War outside the existing protected area is the first step in the long-term preservation and protection of additional lands that contribute to the SNHP. Developing a preservation strategy that crosses municipal boundaries and understands and engages the diverse interests of multiple stakeholders is critical to the protection of this region for the future.

Key Words

Battlefield protection, viewshed, Geographic Information Systems (GIS), scenic analysis,

Introduction

Widely acknowledged for its rich history and scenic character, the Old Saratoga on the Hudson region of New York is also one of the fastest growing areas in the state. Beautiful farmland, breathtaking views, and critical cultural sites are being compromised at a rapid rate by development. Luckily, many of these extraordinary landscapes on which major Revolutionary War events occurred have been protected by the Saratoga National Historical Park since 1938. The circumstances surrounding the battles, siege and ultimate surrender of British General Burgoyne in July and August of 1777, considered by many historians as events that turned the tide of the war, were strongly influenced by the landscape features of the area. The topography of the region and the confluences of the Hudson River and Fish and Batten Kills, provided a unique terrain for strategic troop movements and positioning.

The identification and assessment of significant historic resources outside of SNHP boundaries provides an opportunity for a collaborative approach to their protection. Because the extent of the resources and their associated viewsheds cross six municipal boundaries (including the towns of Saratoga, Stillwater, Northumberland, Greenwich and Easton and the Village of Victory), as well as the jurisdiction of many non-profit land conservation organizations (including Saratoga

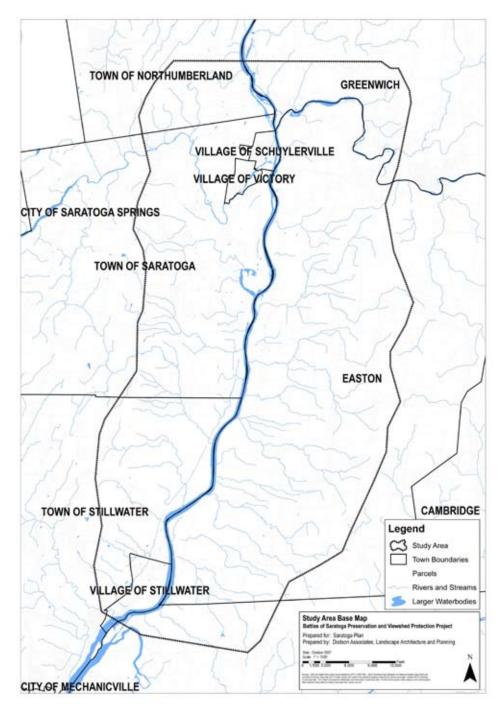


Figure 1. Battles of Saratoga location map with viewshed boundaries. (Dodson Associates, Ltd.)



Figure 2. View from Saratoga National Historical Park, Stillwater, NY. (Dodson Associates, Ltd.)

Plan, the Agricultural Stewardship Association, the Battenkill Conservancy, and the Land Trust Alliance), a unified and coordinated effort to preserve them is critical.

This paper describes the approach that Dodson Associates used to provide the inventory and analysis foundation for future development of a comprehensive historic and scenic resource preservation planning strategy. The approach included an in-depth inventory and assessment process, public participation, and mapping and visual analysis using Geographic Information System technology. As a result, historic resources were identified and

prioritized for conservation, and a basis was established for the development of a future regional, community-based preservation plan.

Inventory and Analysis

The inventory and analysis process looked at two types of resources: historic resources and scenic resources. For each resource type, existing data were identified, reviewed, and mapped. Although the data collection and analysis process was similar for both historic and scenic resources, each resource type had its own unique criteria and assessment factors, as described more fully below.

Historic Resources: Inventory

The first step in the Historic Resources Viewshed Analysis was to inventory and compile existing data from previous studies and plans that included information regarding the battles, siege, and surrender at Saratoga. This step also included secondary source data from the National Park Service (NPS) American Battlefield Protection Program (ABPP) project completed in 2001, the Saratoga County Green Infrastructure Plan, the Agricultural Stewardship Association, and input from many local town historians. In-depth research to identify new primary resource sites was not part of this scope of work.

In reviewing the data, gaps in information were found relative to the battles, siege, and surrender. In an attempt to fill some of these gaps, documents such as historic maps and diaries were reviewed at the Saratoga National Historical Park archives. To provide a regional and diverse perspective, an Advisory Committee of key stakeholders was created to inform the process. The Committee consisted of local planning professionals, representatives from Saratoga County government and several regional non-profit land trusts. With the updated data in hand the Committee, defined a historic timeframe of interest, as well as physical boundaries for the study area. The defined period of significance started generally with British and American encampments along the Batten Kill prior to General Burgoyne's crossing the Hudson River and his initial march to Stillwater in early September 1777, and continued through the surrender on October 17, 1777. The majority of historic sites associated with this timeframe are concentrated within the Hudson River Valley and the corridor formed by the topography of the north-south ridgelines.

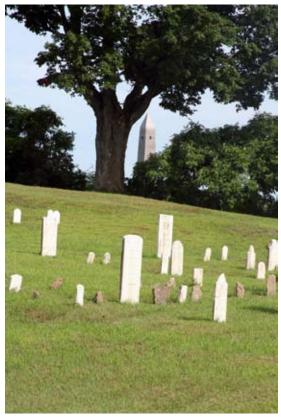


Figure 3. Cemetery and Monument at Site of Colonel Morgan's Riflemen, Saratoga, NY. (Dodson Associates, Ltd.)

Historic resources were then divided into three categories for inventory, assessment, and mapping purposes: primary resources, secondary (associated) resources, and geographic context (viewshed) resources (Table 1). All of the resources were recorded on a Historic Resources Inventory Map. During the inventory process, several additional historic sites were identified, and needed further documentation and research to determine their location and/or significance to the battles, siege and surrender at Saratoga. The additional sites were identified separately on the Historic Resource Inventory Map (Figure 4).

Categories of Historic Resources		
Primary Resources	Sites with direct historic value related to the battles, siege, and surrender at Saratoga as documented in the ABPP project, New York State (NYS) Museum State Historic Markers, and sites listed on the NYS or National Register of Historic Places. Examples of these sites included American and British troop movements and encampments outside of the SNHP boundaries, and many sites in Victory and Schuylerville relating to the siege and surrender.	
Secondary (Associated) Resources	Historic places and landscapes that have a tangible connection or contextual relationship to the battles, siege, and surrender at Saratoga. These include farmsteads such as the Becker Farm in Easton, ferry sites, historic roads, and natural or geographic features that were present and significant to Revolutionary War events related to the battles, siege, and surrender.	
Geographic Context (Viewshed) Resources	Larger geographic area that surrounds the primary and secondary historic resources and contributes to their cultural significance. This area includes the Hudson River Valley corridor from southern Greenwich to the village of Stillwater and extends out to the ridgelines to the east and west, including Willard Mountain.	

Table 1. Categories of Historic Resources

Historic Resources: Assessment

The second step in the Historic Resource Viewshed Analysis was evaluation of the resources. The assessment was based on the *U.S. Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for the Treatment of Cultural Landscapes.* The guidelines define seven factors that assist in understanding the historic value of sites and the significance of natural and man-made changes over time. Those factors include: response to natural features, change and continuity, integrity and existing conditions, and geographical context. The four factors used by the team in the process of this project are summarized in Table 2.

Based on these factors, five criteria were then defined to rate historic sites and determine their priority status for future preservation and protection activities. Those five criteria were historic significance, integrity, context, continuity, and accessibility. Within each of the five criteria there was a ranking of high, medium, and low (with related point values for each rank) to quantify the results of all primary and secondary historic resources. The criteria and the ranking system are summarized in Table 3.

Although all historic sites identified in the original ABPP project were included in the inventory, only sites not already owned by the NPS were assessed. Those owned by the NPS were assumed to meet the highest criteria and hence were considered to be of high ranking.

Factors Used to Assess Historic Resources		
Change and Continuity	The natural processes and human activities that change and shape the cultural land- scape, including the widening of roads and the loss of open space to general growth and development.	
Integrity and Existing Conditions	The physical evidence of historical features and their current condition, such as earthworks and structural remnants that are still discernable.	
Geographical Context	The surrounding cultural landscape that, through its continuity, contributes to the significance of historic sites such as the remaining farmland in Easton and Colonel Morgan's knoll above the Saratoga monument.	
Natural Features	The historic character based on human response to natural features and systems such as the Hudson River, the Fish and Batten Kills and the topography of the region including Willard Mountain.	

Table 2. Factors Used to Assess Historic Resources

From the ranking criteria and point system, the highest-ranked historic sites were those with most historical significance, highest integrity and/or the highest contextual value. Examples of those types of resources include General Fellows' lines and fortifications in Easton; Colonel Morgan's line and entrenchments in Saratoga; bridge and ferry sites along the river; and natural features of cultural significance such as the Fish and Batten Kills and Willard Mountain.

Historic Resources: Viewshed Analysis

The final step of the process was a viewshed analysis. Those historic sites with a ranking of 10-14 points were used as observation references to determine the overall geographic context and significance of the associated cultural landscape in the valley. The viewshed analysis was

conducted using GIS and the National Elevation Dataset (NED) available for download from the United States Geologic Service (USGS) Seamless Distribution System. To assist the process, a viewshed grid with a cell size of 10 meters was used within the study area along the north-south corridor between Schuylerville and Stillwater.

Although the resulting information can be displayed in a number of ways, two aspects were most useful. First, the viewshed was displayed in the simplest terms of "visible" and "not visible." Any point of land that would be visible from any one of the observation points was considered visible; this was based on topography only, not accounting for buildings and vegetation. Second, the displayed data was categorized by the number of observation points visible from any given point in the study area. The resulting map depicts a range of categories from a low ranking of no points visible (the same as

the "not visible" areas from the first map) to a high ranking of 13 points visible (the most observation points visible from a single location). This categorization allowed for the ranking of areas of land based purely on the impact they are likely to have on the collective viewshed of the historic sites. In viewing the GIS maps, note that the darkest area indicates the areas of highest sensitivity, hence highest priority to conserve.

Scenic Resources: Inventory

In order to analyze effectively the scenic landscape character within the region and its relationship to the historic resources, a scenic inventory and assessment were completed. The scenic landscape inventory began with the identification of visual districts—areas that have a cohesive visual appearance or character. The visual districts were identified through site visits, aerial photo analysis, and review of historic documents. For the purposes of this project, scenic visual districts were identified only within the historic corridor study area. Similar visual patterns and edges were identified and mapped on aerial photos. The edges of visual districts consisted of physical barriers (buildings, vegetation, terrain) or of changes in visual characteristics (land use or land cover). Visual districts can be large areas such as the stretches of farmland east of the Hudson River or small areas such as a street, neighborhood, or forestlands. Whether large or small, visual districts share a single, unified visual appearance.

Scenic Resources: Assessment

Similar to the historic resources assessment process, the visual districts were ranked by using a series of criteria. The criteria for the scenic resource

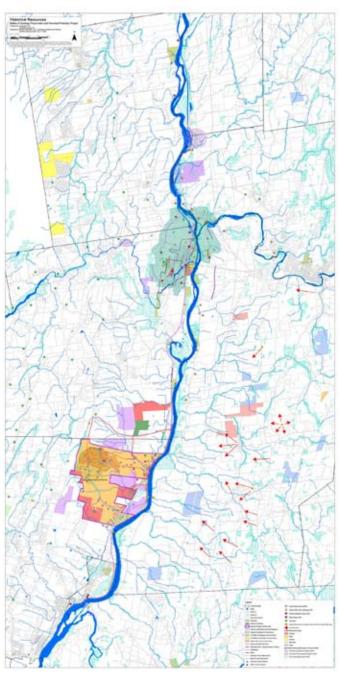


Figure 4. Historic Resources Inventory Map. Potential historic sites that will need further research and documentation are indicated on the map by a red asterisk. (Dodson Associates, Ltd.)

Criteria Used to Rank the Priority Status of Historic Resources					
Historical Significance					
High (3)	Contains direct historical significance to the battles, siege, and surrender at Saratoga based on actual events or activities that took place there.				
Medium (2)	Contains indirect historical significance to the events of the battles, siege, and surrender based on its relationship to the larger context of the Revolutionary War along the Hudson River Valley.				
Low (1)	Contains cultural significance based on its existence during the Revolutionary War period.				
Integrity					
High (3)	Contains clear physical remnants of events or activities related to the battles, siege, and surrender at Saratoga.				
Medium (2)	The general landscape configuration and character as it was during the battles, siege, and surrender is apparent.				
Low (1)	Does not contain any physical remnants or general landscape character.				
Context					
High (3)	A majority of adjacent parcels remain undeveloped and in the same general landscape character as during the battles, siege, and surrender.				
Medium (2)	Some adjacent parcels remain undeveloped.				
Low (1)	No adjacent parcels remain undeveloped.				

(continued)

Connectivity				
High (3)	Is located within one-quarter mile of another historic resource or site.			
Medium (2)	Is located within one-half mile of another historic resource or site.			
Low (1)	Is farther than one-half mile from another historic resource or site.			
Accessibility				
High (3)	Is both physically and visually accessible.			
Medium (2)	Is either physically or visually accessible, but not both.			
Low (1)	Is neither physically nor visually accessible.			

Table 3. Criteria Used to Rank the Priority Status of Historic Resources

assessment were developed by Dodson Associates in coordination with the NYS Department of State, Division of Coastal Resources Scenic Areas of Statewide Significance Program. Furthermore, a public image poll was conducted to indicate the visual preferences of the local community. The results of that poll indicated that the highestranked visual features were predominately undulating and rolling hills, cultural and historic features, agricultural land, large tracts of woodland and forest, and long views. Ultimately, seven criteria were defined for the scenic assessment: landform, vegetation, water, land use, cultural/ historic character, views, and composition. Within those seven criteria, a ranking of high, medium and low (with associated point values) was defined (Table 4).

Composite Analysis

For the final analysis, the historic value and scenic quality map layers were overlaid. Additionally, a visual threat analysis of the most historic and scenic areas vulnerable to development was prepared. Another consultant, the LA Group, identified parcels determined to be the highest priority for preservation within those lands currently owned by the SNHP in Stillwater and Saratoga.

In order to perform a composite analysis that would compare "like to like," all polygon layers from the previous maps were converted to raster so that Dodson Associates could proceed with a "raster math" analysis in ArcGIS. For the composite analysis all three datasets were reclassified to equalize the individual ranking systems to a scale of zero (0) to twenty (20). A high score

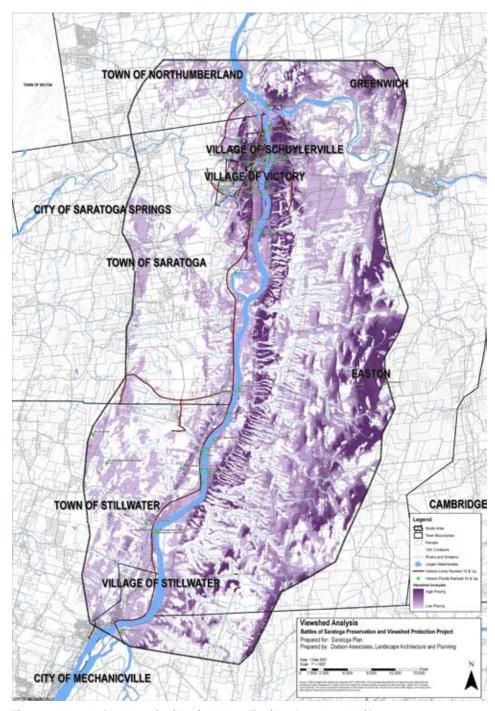


Figure 5. Historic Sites Viewshed Analysis Map. (Dodson Associates, Ltd.)

Criteria Used to Rank the Priority Status of Scenic Resources				
Landform				
Distinctive (3)	Prominently undulating hills in and along the river valley.			
Noteworthy (2)	Gentle slopes and rolling hills.			
Common (1)	Predominantly flat terrain.			
Vegetation				
Distinctive (3)	Predominantly open fields with mixed forest in the background.			
Noteworthy (2)	Large tracts of forest/vegetation in mid-ground.			
Common (1)	Scrub brush and non-distinct vegetation.			
Water				
Distinctive (3)	River predominant within foreground view.			
Noteworthy (2)	River/creek in the view.			
Common (1)	No water.			
Land Use				
Distinctive (3)	Agricultural land.			
Noteworthy (2)	Parkland, open space, and natural areas.			
Common (1)	Modern residential development and streetscapes.			

(continued)

Cultural/Historic Character				
Distinctive (3)	Predominant features related to the Revolutionary War.			
Noteworthy (2)	Other regional, cultural, and historic features.			
Common (1)	Few cultural or historic features.			
Views				
Distinctive (3)	Long and wide.			
Noteworthy (2)	Medium and/or narrow.			
Common (1)	Short.			
Composition				
Distinctive (3)	Significant unity and contrast.			
Noteworthy (2)	Some unity, contrast and variety.			
Common (1)	Lack of unity, contrast and variety.			

Table 4. Criteria Used to Rank the Priority Status of Scenic Resources

of twenty (20) represented the most visible lands from historic sites, the most scenic, and the most threatened within the individual reclassified datasets. A low score correspondingly represented the least scenic, least threatened, and least visible lands. All three of the separate datasets were combined to create a resulting dataset with values from zero (0) to sixty (60), where areas with high scores represent the most scenic, most threatened, and most visible lands. For the composite analysis, each of

the previously completed analyses was weighted equally. Each analysis can be utilized on an individual basis for planning purposes, or the analyses can be overlaid in various combinations, such as the historic and scenic layers.

Ultimately, this use of GIS allowed a rigorous viewshed analysis that lead to a refined system of conservation prioritization across political and ownership jurisdictions. Unlike other viewshed

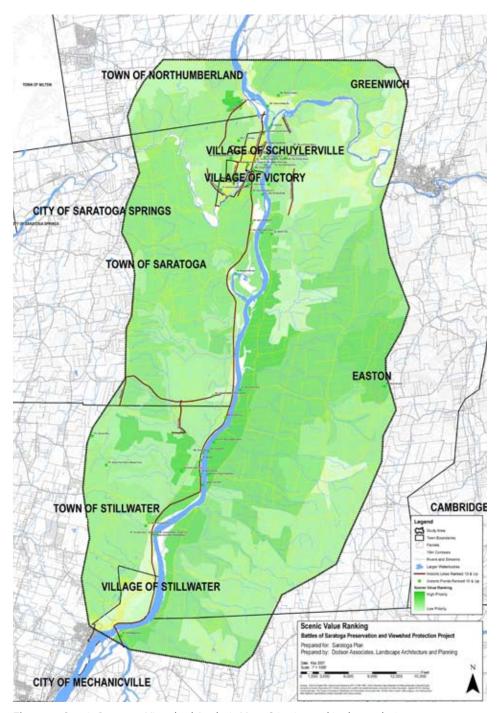


Figure 6. Scenic Resource Viewshed Analysis Map: Criteria used in the analysis process included Landform, Vegetation, Water, Land use, Cultural/Historic Character, Views and Composition. (Dodson Associates, Ltd)

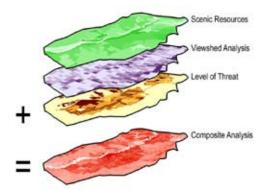


Figure 7. Composite Layered Analysis. (Dodson Associates, Ltd)

analyses which calculate the view from several points within a single parcel – such as studies done at Monticello, Mount Vernon and the Olana State Historic Site on the Hudson River in Hudson—this approach calculated viewshed extents from multiple parcels within a large geographic corridor. The composite analysis therefore identifies the cultural landscape areas and individual features with the highest priority (because they provide a broader contextual setting for interpretation of the events associated with the battles, siege, and surrender at Saratoga). These areas include much of the farmland along the Hudson River in Easton, the ridgelines that topographically define the corridor and the concentrations of historic sites in and around Schuylerville and Victory.

Conclusion

Future preservation planning activities by individual municipalities, the NPS, and private groups such as local non-profits and land trusts within the region can now focus on the conservation priority areas identified in the composite analysis. Working together, these groups can develop regional pres-

ervation strategies that protect not only their individual historic resources but the integrity of the broader contextual landscape. Already, the Saratoga and Washington County land trusts are working with the NPS and NYS to ensure the protection of farmland found to be critical to the interpretation of Revolutionary War events within the area.

The next step of the planning process is to identify specific preservation planning tools for use by both the communities and stakeholders. The plan will also develop a long-term implementation strategy for the protection of prioritized historic and viewshed resources. Working together to formulate overall preservation policies for the region will provide the most comprehensive and successful approach to the future protection of the cultural landscapes that makes this region so nationally significant.

References

- Andrus, Patrick W. 1995. *Guidelines for identifying, evaluating and registering America's historic battlefields.* National Register Bulletin 40. Washington, D.C.: U.S. Department of the Interior, National Park Service.
- Birnbaum, Charles A., with Christine Capella Peters, eds. 1996. *The Secretary of the Interior's standards for the treatment of historic properties with guidelines for the treatment of cultural landscapes.* Washington, D.C.: U.S. Department of the Interior, National Park Service.
- Cleve, Capt. Freidrich Christian. Early 20th century. Journal of the Brunswick troops in North America under the orders of General von Riedesel. Translator Unknown. Unpublished microfilm and microfiche from Lidgerwood Collection at Morristown National Historical Park. Available at Saratoga National Historical Park Archives, Stillwater, New York.
- Dodson, Harry L. 2006. Viewshed protection. In *Planning and urban design standards*, ed. American Planning Association, 622-626. Hoboken, N.J.: John Wiley & Sons.
- Lidgerwood, Translator. n.d. Journal of Brunswick: Troops in America II. Unpublished manuscript, available at Saratoga National Historical Park Archives, Stillwater, New York.
- Morrissey, Brendan. 2000. Saratoga turning point of the revolution. New York: Osprey Publishing.
- National Park Service. 2001-2002. Saratoga National Historical Park American Battlefield Protection Program inventory sheets; First Battle, Second Battle, Siege, Surrender and Great War Trail. Unpublished documents.
- The LA Group. 2006. Viewshed analysis for Saratoga National Historical Park. Unpublished report prepared for the U.S. Department of the Interior, National Park Service, Stillwater, N.Y.
- Specht, Johann Friedrich. 1995. *The Specht journal: A military journal of the Burgoyne Campaign*. Translated by Helga Doblin, edited by Mary C. Lynn. Westport, CT: Greenwood Press.
- U.S. Department of the Interior, National Park Service, Heritage Preservation Services Division. 2000. Scope and research methodology for Revolutionary War and War of 1812 historic preservation study. Washington, D.C.: U.S. Department of the Interior, National Park Service.
- U.S. Department of the Interior, National Park Service. 2005. Historic American Building Survey/Historic American Landscape Survey guidelines. Washington, D.C.: U.S. Department of the Interior, National Park Service.
- Weber, Lena. 2006. In New York State, the Olana historic viewshed analysis uses GIS. C.T. Male Associates, *ArcNews Online*, Spring. http://www.esri.com/news/arcnews/spring06articles/in-new-york-state.html.

Modernist Redesign in a Traditional Southern Context: The Robert Marvin Residence in Walterboro, South Carolina

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Abstract

During the 1950s, Robert Marvin, FASLA, experimented with the execution of his design philosophy in the construction of his residences and private office. For his residence in Walterboro, South Carolina, Marvin redesigned a small, traditional Southern house to a modernist design. Clearly inspired by his contemporaries in other parts of America, Marvin applied modernist ideas in an agrarian region that was characteristically resistant to modernist architecture and other outgrowths of industrialism associated with "Northern aggression." A traditional Southerner in breeding, manners, and social connections, Marvin was the ideal ambassador to introduce modernism to the landscape of the South.

Keywords

Case study, modernism, regionalism, conservation easements, Robert E. Marvin

Modern Architecture and Landscapes in the South

The period following World War II was a time of rapid change in social structure, economic standing, and physical development of land in the United States. Government-sponsored loans to veterans and a shortage of housing resulted in explosive growth in residential development throughout America. Many of these new houses were advertised with themes of modern convenience for modern living. For example, *Tomorrow's House: How to Plan Your Post-War Home*, a guidebook for future homeowners published in 1945, enthusiastically promoted these themes:

If you have already glanced at the pictures in this book, you will have noticed that there are no examples of the Colonial Dream House. Interiors, exteriors, furnishings, and equipment are all modern. In other words, they were built by people who haven't been afraid to change. To date, such people have put up enough modern houses to fill several books of this size. In the next five years or so, dozens of times as many

are going to be built. The Colonial Dream is approaching its end.... The swing to modern has definitely begun. All of our tremendous apparatus for influencing public opinion is tuning up for a new barrage in favor of these new houses. A new fashion in homes will be created, and the public will follow (Nelson and Wright 1945, 6).

In contrast to the keen optimism displayed here, there was resistance throughout the country to the modern forms, and nowhere was the resistance as powerful as in the South, a region deeply attached to historic styles that recalled what was considered an Edenic past. A strong sense of southern identity was characterized not only by what the region was, but also by what the region was not. Southerners recoiled from any sense of being like the North, and many Southerners associated modernism with Northern industrialism and acquisitiveness. Catherine Howett observed that the appendix to Tomorrow's House listed forty-one architectural contributors from New York, twenty-four from California, and only four from the South—one from Florida, one from Texas, and two from North Carolina (Howett 2002, 171). Key examples of early modern houses in a southern context include the Kamphoefner residence in Raleigh, North Carolina, designed for the dean of the architecture program at North Carolina State University, and the J. R. Wilkinson residence in Atlanta, designed for a founding partner of the architecture firm Stevens and Wilkinson. Architects were, evidently, the members of society most likely to risk the new design aesthetic (Howett 2002, 171).

Although there were occasional experiments in modern architecture in the South during the

mid-twentieth century, the landscape styles of the region showed even less variation from traditional forms. Southern garden design relied on traditional historic styles, gleaned from European models with predominately Renaissance, baroque and American neo-classical forms (Howett 2002, 166). The region's plantation heritage made for a strong connection to the land, with remnant gardens of tea roses and culinary herbs and boxwood-edged knot gardens abounding. Houses in the deep woods, because they recalled the rustic cabins of recreational camps or hunting lodges, were an acceptable variation on the more traditional pattern of house, formal gardens, irregular lawn, and surrounding grove of mature trees (Howett 2002, 176). For example, the settings of both the above-mentioned Kamphoefner and Wilkinson houses illustrate an untouched wildness in the landscape that is viewed through windows in idealized surroundings—scenery that dramatically contrasts with the agricultural or otherwise productive land-use practices that would have been typical of plantation life.

This reluctance to embrace modern architecture—as well as a tendency to use landscape design to conceal modern structures—was evident in the results of a national architectural competition "for the design of a realistic house for a family in Georgia," which was sponsored in 1945 by Rich's department store in Atlanta in collaboration with *Progressive Architecture* magazine. The competition's program sought entries that were responsive to the region's climate, yet non-traditional in style:

The clients for whom you are to design the house...have been studying the pages of current magazines and are sympathetically aware of the contemporary trend in design, especially with regard to its promise of comfort, convenience, and freedom from a good deal of household drudgery. They definitely do not wish conformity with any traditional "style." At the same time they are desirous that the house they build shall take its place gracefully among its older neighbors. (Rich's Atlanta 1945)

The landscape depicted in the winning entry shows some adaptations to the southern climate, but it also represents an attempt to separate the house and yard from the community with enclosing hedges and a screen wall, perhaps as much to screen the house from the neighborhood as to provide privacy for its occupants.

Because of the strong preference for traditional landscape styles among native Southerners, several early examples of modernist landscapes were introduced by clients and designers who came to the region from other parts of the country. Many of the potential clients who had the financial resources to hire designers relocated from the North either permanently or seasonally, and these homeowners often brought their favorite designers with them. The New York landscape architects Loutrell Briggs and Innocenti and Webel were part of this tradition of importing Northern talent. Modernists Garrett Eckbo and James Rose both designed gardens for Southern houses. They introduced some of the first modernist forms into the Southern landscape—such as at the Yarbrough house in Columbus, Georgia, where James Rose designed the landscape for a modernist house (itself designed by Columbus architect Rozier Dedwylder) in 1958 (Handbook 2006). Around this time, Robert Marvin likewise began experimenting with modern forms in the redesign of his own residence in rural South Carolina. Unlike his contemporaries, Eckbo and Rose, Marvin was a landscape architect who had deep social and cultural ties with the region.

Robert Marvin as Native Southerner

Within this context of the mid-twentieth-century South, Robert Marvin (1920-2001), a Fellow of the American Society of Landscape Architects (ASLA) and winner of the 2001 ASLA Gold Medal Award, was an advocate of the philosophical tenets of the modernist and, later, environmental movements. Born in the isolated, agrarian Colleton County of low-country South Carolina, Marvin was the grandson of a rice plantation farmer. He had the opportunity to observe the work of Innocenti and Webel at the Bonnie Doone Plantation, where his father was overseer. He pursued studies in horticulture and landscape architecture at Clemson University and at the University of Georgia, and in 1947 he established a practice in Walterboro, a small town within his native Colleton County.

Well connected within the remnant plantation culture and community, Marvin's first commissions were on nearby plantations. Guided by the traditional plantation texts, *Plantations of the Carolina Low Country* and *Prince Williams' Parish and Plantations*, Marvin's early designs reflected the traditional conservatism of southern landscape design. Yet Marvin was an avid reader, and he was aware of contemporary movements in design, even in the isolation of Walterboro. He seems to have been influenced particularly by Garrett Eckbo and other modernists (Harrison 2004). He credited attendance at the International Design Conference in Aspen in the 1960s, where he heard Dr. Karl

Menninger speak on mental health and the environment, as a seminal influence on this thinking. Shortly thereafter, he and his wife, Anna Lou, wrote his design philosophy: "The dominant reason for the existence of Robert E. Marvin and Associates shall be to create and design an environment in which each individual can grow and develop to be a full human being as God intended him to be" (A. M. Marvin 2003). These words bear a similarity to those written by Garrett Eckbo in Landscape for *Living*: "The product of [the designer's] efforts and inspiration is not, finally, magnificent space and beautiful enclosure, but the people who expand and grow and develop within it" (Eckbo 1950, 254). By 1964, when Marvin worked on Orange Grove, a historic rice plantation near Beaufort, he was ready to present his philosophy to his clients. For his design at Orange Grove, Marvin approached the client with ideas of "exploding the box," revitalizing the architecture to reveal views of the marshes and to make connections with the landscape—a design strategy that he had already tested at his own residence in Walterboro.

Marvin House as Experiment and Prototype

During the 1950s, when Robert Marvin redesigned his own residence in Walterboro, he was formulating his design philosophy. He believed that a home environment was a primary influence on how happy and even how successful a person might be. The home and yard should be designed to stimulate physical, emotional, intellectual, and spiritual growth. Regarding physical development, he wrote: "we know that the finest technically designed, most expensive homes of today do not necessarily develop happiness or

success in the people living in them." Regarding emotional growth, Marvin believed that humans needed environments that made them feel secure, and he worried that "Today, urban environment and technology are combining to cut man off completely from the rhythms of nature." He expressed a similar concern about the prospects for intellectual advancement, writing that "Man is becoming a slave to his society and will probably become more and more miserable unless we build an environment that encourages self-expression and some form of accomplishment which he himself achieves." Regarding spiritual growth, Marvin asserted that "Thoughtful man is awed and overwhelmed by the magnitude of the universe, but he is a living part of that universe. Nature's orderliness must be repeated in the development of the home and yard" (R. E. Marvin n.d., 1). Frank Lloyd Wright may have been an additional influence on Marvin's bias towards the interpenetration of house and garden (Howett 1993, 23), as well as on his belief that humans need to engage with the natural world in order to live happy, healthy, and productive lives (Howett 1993, 22). Much like the transcendentalists Ralph Waldo Emerson, Henry David Thoreau, and Walt Whitman, Frank Lloyd Wright and Marvin were both influenced by the American "tradition that celebrated the natural world as the arena in which self-realization and communal consciousness are both achieved" (Howett 1993, 26).

During the 1950s and 1960s, Marvin incorporated his philosophy into a design methodology. In describing his designs, Marvin wrote, "You simply cannot separate the house from the land. They have to go together." The indoor rooms and the outdoor rooms are equally important: "Some just happen to be covered and others happen not to be covered"

(R. E. Marvin 1990). The home is subservient to the site (R. E. Marvin n.d., 3), and according to Marvin, spatial division should be determined by both the needs of the inhabitants and the requirements of the physical site. When working with his clients, Marvin would interview them exhaustively to learn their aspirations, their hobbies, and their eating habits—including when they ate and what spoons they used. Then he would learn everything about the site—the trees, the views, and the sun. The best orientation, he believed, was determined in the southeast by the optimal fifteen degrees east of south. Finally, with the sum of all of this knowledge, he felt his goal was to create a "total environment" for the total needs of everyone in the family. He wrote,

For example, what would be the result if the eating area were designed with its proportions and size in complete human scale so that some of the walls were replaced by glass? Outside this room fences could be built to maintain privacy yet allow room for existing trees and shrubs to be planted so that the room relates to an outdoor area where birds and other wildlife are fed and encouraged. Suppose that on the walls in this area there were encyclopedias and other reference books so that at meals, when children asked questions, their parents could reach for a book and give immediate answers....What would happen if the formal living room were replaced with a hobby room, and if this room were developed, changed, and rebuilt as the children matured so that the hobbies of everyone were always present....There would also be a link with the outside, with patios and work areas accessible through large doors, so that hobbies could be expressed inside or outside, depending on where they fit best, but always with an emphasis towards the intellectual stimulation of self-development and self-expression in that family (R. E. Marvin n.d., 2).

These ideals were consistent with modernist design principles as they were expressed in landscape architecture during the latter half of the twentieth century. Marc Treib, in "Axioms for a Modern Landscape Architecture," identifies six features that were characteristic of modernist landscape design during this period (1993, 36-67):

- There was a denial of historical styles, with an emphasis on the design responding specifically to the site and program within the setting of an industrial society.
- 2. Space was reconsidered in a new form, emphasizing movement through free space.
- Design had a social purpose, with landscapes intended for use by people, the principal actors on the stage.
- The axis was abandoned as an organizing feature, with a new emphasis on a multiplicity of viewpoints.
- Plants were used for their individual characteristics as well as for their spatial-enclosing qualities.
- 6. The integration of the house and garden became a central theme in order to establish a strong relationship with man and nature.

These features were clearly represented in Marvin's design for his own residence in Walterboro. There,

Marvin redesigned a small, traditional house (Figure 1) within the context of an avenue of whitecolumned colonial relics. He fronted the street with a low-profile façade, painted it brown, and put granite screenings for parking in front¹ (Figure 2). The walled, backyard garden was the focus of the design, however. Marvin's early experiences on the plantation and many explorations of the low-country swamps had instilled in him a deep love for nature. He expressed that affection by utilizing the ideas of his California contemporaries, bringing the landscape inside with views through multiple glass panels, effectively stretching the length of the house. He integrated the house and garden by aligning the pavement, planters, and pergola with the mullions of the glass panels and by bringing the inside floor-patterning outside (Figure 3).

Marvin's inspiration for the redesign of his house may have been the private residence of James Rose in Ridgewood, New Jersey (Rose 1958, 116-117). Rose's living room bears many striking similarities to Marvin's living room design, including the floor pattern, plate-glass window, pergola, furniture arrangement and design, and overall spatial definition. The garden design at Marvin's residence appears to have been inspired by the series of small garden designs produced by Thomas Church. In a 1948 article in House Beautiful, entitled "Architectural Pattern Can Take the Place of Flowers," Church wrote about design techniques for visually enlarging small garden spaces. In particular, he emphasized the significance of creating pattern and texture in the landscape to



Figure 1. House similar to Marvin house prior to remodeling. (Photo by author)



Figure 2. Walterboro house exterior. (Photo by author)



Figure 3. Walterboro house interior. (Photo by author)

¹ One wonders how Marvin's neighbors reacted when he first constructed these changes. That his radical approach was accepted at the time of construction shows how well Marvin was integrated into the social network of the county.

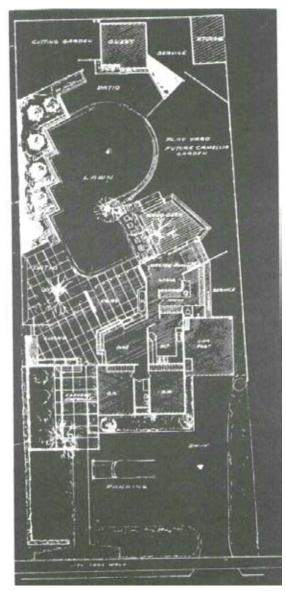


Figure 4. Walterboro house plan. (Image Robert E. Marvin)

add dynamic energy to the space. Church was well-known for his use of chevron, zigzag, and checkerboard patterns in garden design, and he suggested that those forms made dynamic

contrasts to curvilinear edges of plant beds or lawn (Harris 2002, 201-202). Marvin employed a similar strategy in his garden. Like Church's small garden designs, Marvin's garden featured a simple plane of grass located centrally within the space, a screen fence that enclosed the property, and one specimen tree placed in the garden (Figure 4).

More generally, however, Marvin's garden represented his own interpretation of the characteristic features of modernist landscape design identified by Treib. For example, the physical expression of the modernist free space in Marvin's design included details such as an overhead pergola that matched the alignment of the mullions in the glass and the floor patterning, which also extended into the outside space from the inside floor. The subdivision of interior spaces was accomplished partly by level changes and partitions, allowing the free flow of space while providing subtle spatial definition. Indoor-outdoor living areas encouraged outdoor dining, wildlife viewing, and reflection. Marvin also utilized a single specimen tree—a characteristic feature of Church's enclosed garden spaces—to provide overhead canopy and further define the outdoor room. A dark fence, partially covered by plant material, receded into the background, allowing a sense of spatial expansion, as well as security and enclosure (Figure 5). As a first application of modernist design principles, Marvin's renovation of his own home proved to be appropriate training for later projects, in which he further honed his skills that began to influence the southern modernist landscape.

Subsequent Projects

In his residence at Bray's Island, Marvin again had the opportunity to express his design philosophy



Figure 5. Walterboro house backyard. (Photo Landscape Architecture Magazine)

in both the architecture and landscape architecture. Virtually invisible from the road, the house was set within a tangle of existing vegetation. The approach, passing through a pavilion and across a bridge, separated visitors from the outside world and immersed them in the experience of the site. The interior focused on the sweeping views of the Port Royal Sound and the wildlife that animates the scene. Although construction on such a fragile site would not be permitted under today's wetland laws, the impact on the site was minimal because of the use of friction piers that provided the only contact of the structure with the land (Figure 6).

Marvin created a similar effect at his Edisto Island residence, this time with the house appearing much like a rustic hunting-cabin in the woods. Similarly,

at his office in Walterboro, Marvin again employed friction piers to intentionally showcase his design philosophy for clients to view upon arrival (Figure 7). These two structures were designed by Marvin and his associates to "knock the walls down and let nature in again. The environmental movement proves that man needs to get out of his box that technology has created. He needs to wrap his arms around nature" (R. E. Marvin, quoted in Thompson 2001, 13). In this integration of architecture and landscape, Marvin's approach may be likened to Frank Lloyd Wright's organic architecture, which was intended to be a part of nature—a "noble organic expression of nature" (Wright, quoted in Howett 1993, 22), in which the "body of the house has become an extension of the body of the earth in that place—water, rock, soil, slope, and vegetation" (Howett 1993, 25). Marvin's structures could not be



Figure 6. Bray's Island residence. (Photo Landscape Architecture Magazine)

conceived of separately from the site and thereby communicated a sense of the regional landscape.

These projects helped Marvin persuade his clients to develop their properties to similar effect, albeit on a different scale. Most notably, his professional commissions included the designs of the John A. Sibley Horticultural Center at Callaway Gardens in Pine Mountain, Georgia; of the Southern Progress Corporation in Birmingham, Alabama; of the

Jones Bridge Headquarters of Simmons Company in Atlanta; and of various projects at Sea Pines Plantation in South Carolina (such as the Heritage Club Villas and Monarch). All of these projects demonstrate a careful integration of building and site with minimal impact on the environment. Marvin's skills of persuasion and passionate ideology enabled him to convince clients to allow him to be the lead consultant on these projects, with architects deferring to his decisions.

The Challenge of Preserving Marvin's Legacy

The consideration of modernist properties as historically significant is one of the boundaries being crossed in historic landscape preservation today. Robert Marvin's Walterboro property is now fifty years old, and it meets the National Register of Historic Places' criteria for a historically significant property that has retained its original design integrity. The house remains as an expression of this influential designer's clearly-defined ideology. Along with his private residences at Edisto Island and Brays Island and his office "in the swamp," the Walterboro residence is a physical demonstration of Marvin's philosophy of design that incorporates nature for the betterment of humankind's quality of life. Marvin was a modernist in a region that was resistant to Northern industrialism and all its outcomes. His strong Southern identity, sense of regionalism, and connection to the land helped to bridge the gap between traditional and modern design for his clients. In bridging this gap, he introduced modernist ideology as well as modernist forms to the region.

Although fifty years' continuous family ownership has kept the original design intentions intact, the future preservation of Marvin's Walterboro house remains uncertain. Long-term conservation of these properties may depend largely on private efforts to secure conservation easements. Conservation easements,² or restrictive covenants,

are voluntary and private legal agreements between a property owner and an organization (usually a non-profit or government agency) that protect a property from alteration or demolition. Conservation easements obligate the property owner to maintain the property; they also structure monitoring of the property's condition, provide a means of legal action to enforce compliance with the agreed-upon terms, and remain in effect when the property is sold or inherited. In addition, easements provide tax incentives to the owner, often specify permitted repairs, provide a maintenance schedule, and limit the placement of non-historic elements. Significantly, conservation easements are not dependent upon the political variability of zoning laws (Coughlin 1981).

As the property where Marvin initially applied his modernist ideology and forms to the southern region, his Walterboro house and garden deserves to be considered for nomination to the National Register of Historic Places. If not nominated to the National Register, the site minimally deserves the protection of a conservation easement for its contribution to the transition to modern design in the South.



Figure 7. Marvin office. (Photo permission, Robert Marvin/Howell Beach Associates)

 $^{^2}$ In the Uniform Conservation Easement Act of 1981, the term "conservation easement" was defined in such a way that it included the protection of architectural and other historic resources (Morgan 1999, 10). The South Carolina Conservation Easement Act of 1991 defines terms and conditions for all easements in the state.

References

- Aguar, Charles E. and Berdeana Aguar. 2002. WRIGHTSCAPES: Frank Lloyd Wright's landscape designs. New York: McGraw-Hill.
- Beach, Howell. 2002. Interview by Sarah Georgia Harrison. May 22.
- Church, Thomas. 1948. Architectural pattern can take the place of flowers. House Beautiful 90 (1): 40-51.
- Coughlin, Thomas. 1981. Easements and other legal techniques to protect historic houses in private ownership. Washington, D.C.: Historic House Association of America.
- Eckbo, Garrett. 1950. Landscape for living. New York: Architectural Record, Duell, Sloan and Pearce.
- Handbook for the Preservation of Private Gardens. 2006. Case study, James Rose Garden, Columbus, Ga. University of Georgia Historic Landscape Preservation class project (unpublished).
- Harris, Dianne. 2002. Making your private world: Modern landscape architecture and *House Beautiful*, 1945-1965. In *The architecture of landscape*, 1940-1960, ed. Marc Treib, 180-205. Philadelphia: University of Pennsylvania Press.
- Harrison, Sarah Georgia. 2004. Design with nature: The South's evangel. In *Imprints/footprints: 2003 CELA conference proceedings*, 58-65. Athens: University of Georgia.
- Howett, Catherine. 2002. After the "other" war: Landscapes of home, north and south. In *The architecture of landscape*, 1940-1960, ed. Marc Treib, 154-179. Philadelphia: University of Pennsylvania Press.
- —.... 1993. Modernism and American landscape architecture. In *Modern landscape architecture: A critical review, Marc Treib,* 18-35. Cambridge, Mass.: MIT Press.
- Johnson, Jory and Felice Frankel. 1991. Modern landscape architecture, redefining the garden. New York: Abbeville Press.
- Marvin, Alta Mae. 2003. Interview by Sarah Georgia Harrison. July 24.
- Marvin, Anna Lou. 2003. Interview by Sarah Georgia Harrison. May 22.
- Marvin, Robert E. 1990. Outdoors and indoors as one. *The Southern Gardener*. Reproduction provided by Robert Marvin/Howell Beach office.
- Marvin, Robert E. n.d. Landscape architecture is not just planting azaleas. Manuscript provided by Robert Marvin/Howell Beach office.
- Morgan, Julie Camille. 1999. An analysis of the use of the preservation easement for historic interiors. Master's thesis, University of Georgia.
- Nelson, George, and Henry Wright. 1945. *Tomorrow's house: How to plan your post-war home now.* New York: Simon and Schuster.
- Rainey, Reuben M. 1993. Organic form in the humanized landscape: Garrett Eckbo's *Landscape for living*. In *Modern landscape architecture: A critical review*, ed. Marc Treib, 180-205. Cambridge, Mass.: MIT Press.
- Rich's-Atlanta Presents 'Georgia Builds' Architectural Competition. 1945. *Progressive Architecture-Pencil Points*, October, New York: Reinhold Publishing Corporation.

Rose, James. 1958. Creative gardens. New York: Reinhold Publishing Corporation.

South Carolina Conservation Easement Act of 1991. South Carolina Code of Laws, Title 27, Chapter 8. http://www.wildlaw.org/easements/27-8-10.html.

Stoney, John Gaillard. 1955. *Plantations of the Carolina Low Country*, ed. Albert Simons and Samuel Lapham. Rev. 4th edition. Charleston, S.C.: Carolina Art Association.

Thompson, J. William. 2001. Robert Marvin, FASLA, 1920-2001. Landscape Architecture Magazine 91 (8): 13.

——. 1997. Southern savior. *Landscape Architecture Magazine* 87 (6): 74-79, 93-95, 97.

Todd, John Reynard, and Francis M. Hutson. 1935. Prince Williams' Parish and plantations. Richmond, Va: Garrett & Massie.

Treib, Marc, ed. 2002. The architecture of landscape, 1940-1960. Philadelphia: University of Pennsylvania Press.

———, ed. 1993. Axioms for a modern landscape architecture. In *Modern landscape architecture: A critical review,* ed. Marc Treib, 36-67. Cambridge, Mass.: MIT Press.

———, ed. 1993a. Modern landscape architecture: A critical review. Cambridge, Mass.: MIT Press.

What's Next for Historic Landscape Preservation?

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Many of the issues raised by contributors to *Exploring the Boundaries of Historic Landscape* Preservation reinforce a thirty-year pattern of questioning within the field, particularly with respect to recurrent debates about whether it is possible to systematize or codify landscape preservation treatments, how to engage multiple professional disciplines and the general public in the preservation process, and how to determine appropriate interpretation and management technologies. Several authors discussed landscape preservation projects that challenge the applicability and lack of evolution in codification systems defined nearly fifty years ago. A number of contributors actively explored relationships between ethnic heritage, cultural values, and landscape preservation. Some of the papers offered a refreshing perspective of how landscape preservation is related to gender, culture, race, and economics (Wilson and Groth 2003), while others prompted questions about how historic landscapes might be maintained in the face of ongoing cultural and social changes. If such questions are hardly new ones, it is because they arise from the paradoxical nature of landscape—an entity not easily bounded because it is simultaneously product and process, artifact and system, nature and culture, "real" and socially constructed (Alanen and Melnick 2000).

While the collected papers in *Exploring the Boundaries of Historic Landscape Preservation*

constitute an extended reflection on the continued relevance of long-standing debates within the field of historic landscape preservation, they also represent an opportunity for speculation about critical issues that may affect its future. For example, ongoing research on climate change, genetic engineering, and sustainability will likely fuel continued discussion about the usefulness of thinking about landscapes in terms of nature/ culture dualism. Further innovations in communication technologies, coupled with an increased understanding of the breadth of learning methods, almost certainly will spur new ways of thinking about landscape interpretation. The development of new building materials and design technologies also will likely prompt continued exploration of how, and whether, contextual design approaches may facilitate the interpretation and rehabilitation of historic spaces. Lingering uncertainties about where to draw, assert, and transgress boundaries are thus essential to the future vitality of historic landscape preservation.

As practitioners continue to seek new ways to answer old questions, they reformulate or recontextualize those questions in ways that open up new avenues for exploration. For example, a number of papers in this volume tangentially addressed concerns such as the interplay between historic landscapes and the environmental movement, the growing importance of interdisciplinary

collaboration, and the need to address the education and training of future landscape preservation professionals and advocates. Although these concerns were not central to the papers presented in this volume, they nonetheless appear in the background. Moreover, in light of some of the social, cultural and technological changes that are clearly impacting contemporary landscape architectural and preservation practice, interest and momentum may be building toward some of these lesser worked topics and ideas in historic landscape preservation. The themes that thread through these papers, lively discussions during the annual meeting, and recent commentary on cultural landscape studies (Longstreth 2008; Birnbaum and Hughes 2005; Page and Mason 2004; Wilson and Groth 2003; Alanen and Menick 2000) all suggest that the central imperative for the field of historic landscape preservation is to incorporate an understanding and respect for the historical and cultural values of landscape into the social, ecological, economic, and political lives of individuals and communities. In other words, preservationists need to more effectively define the relevance of historic landscapes to people's everyday lives.

Defining Relevance

Although relevance has always been critical to making anything "real" and hence imperative, the field of historic landscape preservation, if it is to continue to expand, must foster an appreciation for the many ways in which cultural landscapes shape a person's experience of daily life. Accomplishing this goal means shifting our focus away from the material elements and visual character of landscapes and toward a greater emphasis on the multiple dimensions of *agency* in landscapes. This view of landscape has been articulated recently by Chris Wilson and Paul Groth (2003, 15),

who have observed that, "in one way or another, philosophical debates among cultural landscape scholars revolve around the relationship between agency and structure. ... seeing the landscape as an arena of agency and structure requires a shift from viewing landscape as the somewhat passive result of human activity to essentially an active influence on social, economic and political processes. ... This inextricably links landscape to perceptions of and actions within everyday built environments." Such an outlook also harkens back to the landscapeas-system perspective presented in D.W. Meinig's classic essay in landscape studies, "The Beholding Eye." By conceptualizing landscape as a dynamic, hybrid medium that links various human and nonhuman entities, the collective acts and performs landscape as a system of relevancy.

While such a shift in perspective is important, landscape preservationists also must recognize that the structure and agency of cultural landscapes can be revealed only by more effectively engaging in public conversations about the quality of the environments in which we live. Indeed, one of the key difficulties for landscape preservationists is the changing definition of the word "landscape." From the 1598 Dutch painters' term landschap, the word has had numerous connotations and simultaneous meanings. Today, the most pervasive understanding of the term is broadly framed by everyone from the media to academics and practitioners as context, setting or backdrop, a kind of passive medium for active manipulation by humans. Given such definition, it is hardly surprising that the public does not see landscape as a central concern or imperative. Landscape preservationists must somehow find a way of talking about landscapes that enables people to experience landscape as more than an aesthetic image, and something more than a mere setting or backdrop for human

life. Preservationists must find ways to open up new dialogs about landscapes—conversations that enable material and emotional connections to be experienced as "real." If people are not having conversations about the presence of history and culture in their landscapes, then it is impossible for them to experience those kinds of connections.

In this regard, historic preservationists might take their cue from the recent accomplishments of the contemporary environmental or "green" movement. Much of the influence of the green movement stems from the extent to which key concepts and keywords have been embraced by the general public. Recently, for example, terms such as "green" and "sustainable" have become commonplace in everyday conversations. These terms allow people to communicate a concern for the environment or a level of ecological consciousness in the course of day-to-day conversations. To characterize a particular object or practice as "green" is to relate it implicitly to a body of knowledge and values, even if the characterization itself is disingenuous. These keywords have gained currency because they are useful not only for communicating meaning, but for constructing relationships among things in the world. In both revealing and constructing relationships, words are always a means to power.

If the movement to preserve historic landscapes does not yet enjoy a degree of political and cultural influence comparable to that of the contemporary green movement, it is because comparatively few people talk about it; the "everyday world" literally does not speak our language—more pointedly, preservationists have not yet conceived how to clearly speak to the public about historic landscape preservation. Yet everyday people engage in conversations that, in unacknowledged ways, touch upon some of the concerns that are central

to historic landscape preservation. These conversations represent opportunities for preservationists to increase greater awareness of the values of historic landscapes. In particular, there are three broad contexts in which preservationists should become more actively involved in order to gain relevance: environmental sustainability, design of "place," and economics.

Historic Landscape Preservation and Environmental Sustainability

Although most design and preservation advocates interpret the word environment broadly as "built environment," including all buildings, structures and spaces between buildings as they interact and relate to the ecosystem, the public generally perceives this term more narrowly. For many people, "environment" carries ecological connotations that exclude humans and anything produced by human hands or minds. Indeed, advocates for "natural" land stewardship have done an excellent job during the past fifty years of encouraging the public to think about the environment in ecological terms. Particularly since the late 1960s, the popularization of an "ecological perspective" has translated into increased public funding for ecological science, a growth in academic programs and professional positions devoted to environmental work, an ever-expanding array of lands subject to conservation management, and a proliferation of non-profit environmental organizations and volunteer environmental restoration projects. As human society worldwide reawakens to the keen interconnectedness of ecological and cultural systems, landscape preservation advocates should learn from the accomplishments of advocates for this ecological view of the environment.

Within the ranks of conservation biologists, ecological restorationists, and others who focus on the health of natural systems, there has recently emerged an increasing awareness of the importance of engaging local communities in the stewardship process and the need to develop conservation measures that respect local cultural values. This new, more inclusive approach, or paradigm, has been called "ecosystem management." In essence, those who traditionally have focused on the "nature" side of the nature-culture dialectic have gained a greater appreciation for the need to embrace the human dimensions of the places in which they work. A similar exchange has occurred within the fields of architecture, landscape architecture, engineering, and city planning—professions that, in approaching the problem of environmental design and management, traditionally have privileged the needs and desires of humans. Both of these trends represent opportunities for advocates of historic landscapes.

Sadly, even though "sustainability" has emerged as a critical discourse within landscape architecture and building preservation—and within practically every profession that is involved with environmental management—the topic has not been prominently discussed within the field of historic landscape preservation. The field of historic landscape preservation has not yet done an adequate job of asserting itself while also relating and integrating into the various environmental fields. Because the "built environment" has already become an extremely important issue for historic landscape preservation, we collectively need to encourage more active discussion and debate about the topic, creating much-needed connection with the growing number of people who now see environmental sustainability to be a global imperative.

Historic Landscape Preservation and Design of Place

Several papers in this volume explore frameworks for understanding the continually evolving relationships between environment and culture, and the ways in which this understanding might inform the design of new spaces in old places. This is not a new concern. More than forty years ago J.B. Jackson expressed his exasperation with designers who applied landscape study too quickly, looking only at visible surface of landscape and not doing the kind of personal observation, research, or reading that lead to deeper analysis. Jackson's readers found inspiration and encouragement for contextualism and regionalism (Wilson and Groth 2003).

During the 1960s through the 1990s, inspired by the work of Jackson and other landscape scholars, designers and critics engaged in a fairly robust conversation about the tangible link between historic landscapes and design. Unfortunately, the trajectory of that conversation has shifted in recent years within the design field's current focus on ecological sustainability. In fact, a recent discussion concerning the content of a landscape architecture certification test debated the need for history questions on the exam, suggesting that historical knowledge is no longer viewed as essential to "good" design.

So, what can make history and cultural values relevant within the practice of design? Designers, although creating places for people, need to be much more engaged in designing socially, ecologically, economically and politically sustainable "place systems." Design and preservation practitioners broadly recognize that "sense of place," walkability, community setting, economic and

political structure impact people's daily lives, although the public often is unaware of these relationships. Unfortunately, even when the public considers these factors, the complex layers of cultural landscapes are not easily visible. Hence the historical and cultural values of landscapes remain underappreciated and unprotected. Expanding a designer's understanding of how people experience places as systems would make visible to both the designer and the public their relationships to historic and cultural landscape. Relating with a landscape is a first step to caring about it, and caring about a landscape is a first step to caring for it (Thayer 2003).

Perhaps one way to encourage designers to think about their work in these terms is to rehabilitate the time-honored principle of genius loci—the pervading spirit of a place. All communities have genius loci, even if it is not readily appreciated by and/or visible to residents and visitors. Is it the combination of two-story Federal style brick buildings bounding narrow streets with the overlay of urban renewal; the pastoral landscape dotted with suburban shopping centers, or the still thriving economy of merchants, cafes and big box hardware stores? Because it may be all of this and more, genius loci is difficult to deconstruct into useable design elements for "placemakers." Many generations of designers have attempted to quantify the ingredients of place; sadly, most attempts by designers to create or mimic genius loci tend to focus only on aesthetic qualities, rather than on the entire system of social, ecologic, economic and political structure of place.

Doesn't good design embrace a full understanding of "place"? If designers study and analyze genius loci in order to comprehensively understand how a place functions socially, ecologically, economically and politically, then perhaps they will be more likely to create designs that respect and enhance all of those relationships. Indeed this would reinforce the tangible link between history, cultural values, and design. Ultimately, contextual design that incorporates cultural landscapes would further assist notions of the commonplace being of value, hence respected and protected through design.

Historic Landscape Preservation and the Economy

To many people, a proposal to save a historically significant rural farmstead or an industrial landscape is perceived as an emotional response to history that is disconnected from today's economic values. It is not news that historic landscapes are not valued as critical to the economic system. A shift in the land development discourse that places other values on par with economic arguments is desperately needed. Although the idea that quality of place has economic repercussions is not new, in the current context of economic globalization the idea may be gaining greater credence and importance. Richard Florida's provocative research and writings suggest that people are more open to considering the relationships between quality of place and economic sustainability. As such, this represents an opportunity for preservationists to spark conversations that reveal how historic landscape preservation is directly connected to quality of life issues and economic vitality. Environmental design is certainly one context in which preservationists need to encourage such conversations. When designers and placemakers fully embrace the study of landscape to create places, historic landscapes can then be seen as valued, relevant and

contributing piece of the economy. Yet landscape preservationists must engage in conversations about economics that venture beyond the realm of design to consider more broadly the role of landscapes in all sorts of economic activities. Land development and land use have always been tied to economic stability or gain. For historic landscape preservation to have any kind of long lasting physical impact, especially in sensitive areas where there are no concentrations of advocates or planning mechanisms in place to assist in conservation efforts, there must be a shift in conversations about land.

Growing popular interest in food and sustainable agriculture represents one context in which landscape preservationists might succeed in achieving greater recognition of the relationships between the cultural and historical values of landscapes and economic viability. While a major principle of sustainable agriculture is minimizing the use of synthetic chemicals, of greatest importance is the ability to sustain the local economic stability of farms and ranches. By minimizing their use of external and purchased inputs and maximizing their use of locally available renewable resources, agricultural producers increase local self sufficiency and ensure a source of stable income that may allow more people to stay on the land and hence strengthen rural communities. Farm and ranch transfer programs have been created to help agricultural lands remain under the stewardship of farmers and ranchers as generations come and go. Broadly addressing marketing needs by establishing farmers' market outlets, supplying restaurants and grocers with local products, and developing Community Supported Agriculture (CSA) may empower communities to get involved in local agriculture, understand the methods and

practices of harvesting and become active participants in their food systems. Finally, a variety of laws and policies at the federal, state, and local municipal level, as well as non-profit educational efforts, address farmland conservation. Collectively, this attention to detail on a variety of scales attempts to value land for a continued use and thus make the economy a fundamental part of the sustainable agriculture equation. Similar attention to detail to the "place system" is needed by preservation advocates, so that historic landscapes can be seen as valued, relevant and contributing to economic viability.

To advance the view of landscape as a network of relations, the scale and approach of bioregionalism and ecosystem management may be an opportunity for exploring how to frame and engage historic landscape preservation. Bioregionalism brings together concerns for ecological sustainability, quality of place, and economics. Although bioregionalism is not confined to a particular discipline or vocation, it has emerged as a viable framework for thinking about the design and stewardship of both community and place (Thayer 2003). Likewise, amongst resource management experts, the paradigm of ecosystem management attempts to integrate all of the ecological, cultural, and economic values. Within both professional circles, and within the broader realm of public discourse, there exist opportunities for greater communication and collaboration, and perhaps the emergence of new ways of thinking about and implementing historic landscape management. The meshing of these approaches could potentially influence built environment policy and stewardship—looking more comprehensively at social, ecological, economic and politically designed places as systems.

Attaining Relevance

For historic landscape preservation to gain relevance in the broader world through conversations engaging other professions and the general public, it is critical to turn to conversations and actions that must occur among the various entities *within* the field to attain relevance. How do cultural landscapes become integral to our conversations on a daily basis? Those who work in historic landscape preservation need to address several different contexts simultaneously to achieve greater clarity, relevance and power. These arenas include institutional context, professional training, public involvement, technology, and politics and public policy.

Institutional Context

Landscape preservation remains a nebulous specialty, occupying ambiguous ground between historic preservation, landscape architecture, geography and numerous other disciplines. During the 1970s and 1980s, when the idea of historic landscape preservation was first gaining a foothold within the larger fields of landscape architecture and historic preservation, the development of landscape preservation theory and technology occurred largely within two interrelated institutional contexts: agencies and policies of the U.S. federal government and academic programs. Since that time, and in many ways as a result of the successful cooperation of those entities, there has been a proliferation of organizations, private consulting firms and a new class of professionals who work under the title of "historical landscape architect." New institutional actors also have emerged, such as the Library of American Landscape History, the Landscape Chapter of

the Society of Architectural Historians, and the Cultural Landscape Foundation. An increasing number of private consulting firms now take on projects dealing with historic landscapes, while agencies such as the U.S. National Park Service (NPS) have vastly increased their own capacity to effectively manage historic landscapes. These changes have resulted in a decline in the historic contractual relationships between NPS and the academy in providing such expertise. What do these trends mean for the future of the field as a whole? Is it merely expanding, or is it fragmenting in too many directions at once? If the latter, do landscape preservationists collectively need to take steps toward consolidation so that the field remains coherent?

Ultimately, it will be necessary to take on the challenge of redefining the future form of the institutional context of historic landscape preservation. The profession continues to ask hard questions about just what it is that we are and what we should be doing. A profession remains relevant even when its members fail to resolve the contradictions that motivate them; it only becomes moribund when its members stop *doing the work* that aims toward resolution.

Professional Training

The question for historic landscape preservation now is twofold: what role and responsibility does the institutional framework have in the education of young architects, landscape architects, planners, and preservationists; and what is its role and responsibility to educate the public? The need to redefine the institutional context of the field directly influences how and if one may acquire

expertise in this specialized area of historic preservation practice.

Preliminary results of how landscape preservation is taught in the academy currently suggest that there is reason to be concerned for the future of our specialty (Goetcheus 2008). A cursory review of existing academic programs in landscape architecture and historic preservation indicates trends of concern, including: a lack of interdisciplinary discourse; preservation trainees having little exposure to design, the environment or "landscape" as critical context for preservation activities; designers-in-training having little exposure to history let alone preservation philosophy; neither group exposed to the reality of economics and politics even on a rudimentary level; the alarming recent loss to retirement of academic and practitioner mentors who defined and created this profession; and, the erosion of institutional knowledge and leadership in federal agencies that historically led training efforts, placing heavier burdens on ill-prepared non-profits to define and take a leadership role in the realm of landscape preservation education

All of these trends give rise to a question that has been avoided far too long. Can and should training become more formalized? If so, this implies defined curricula, codes of practice, and policing of professional work. Where will the next generation of landscape preservationists come from? What and how will they be taught? Who will teach them and how will they gain entry into the field?

Public Involvement

The complexity of cultural landscapes inherently demands an interdisciplinary approach. Many contributors to *Exploring the Boundaries*

of Historic Landscape Preservation expressed a desire to make landscape preservation more democratic and more accommodating of public involvement. No single discipline reigns supreme in interpreting the meaning and significance of landscapes, and it is critical to engage a diversity of viewpoints in the study of every cultural landscape, from the variety of discipline "experts" who are interested in the topic to individuals who live in cultural landscapes—experts of another sort. Enhanced involvement must occur through more exchanges between discipline experts working together, as well as many more locality experts working with the variety of discipline experts. Ultimately, interdisciplinary management paradigms that afford the opportunity for baseline values of place to be reinforced encourage expansion beyond the boundaries of conventional preservation practices.

Technology

New technologies and concepts—many borrowed from other professions and disciplines—are ever-present forces in pushing the boundaries of landscape preservation. Invention of new techniques, tools and apparatus that inspire discovery of new conceptual tools can broadly address the diversity of scales and values in historic landscape preservation. This process of invention reflects the continuing influence of multiple disciplines. As these disciplines generate new ways for communicating, understanding scale, and reformulating protocols, they assist in defining new ways to approach old issues—in essence new ways to see and interact with the landscape, making the cultural landscape visible. This visibility makes historic landscape preservation relevant where technology acts simultaneously as a constraint on what is possible and as a frontier for new possibilities.

Politics and Public Policy

Richard Walker, the Marxist geographer, argues that early ideas about cultural landscapes were too evasive about the systematic forces of political economy in answering the question of who and what creates urban and rural environments (Wilson and Groth 2003, 21). To have any kind of effect on future landscapes, historic landscape advocates must jump into the fray of politics and policy at the local, regional, national and international levels. To better understand political dynamics at the local level, preservationists might learn from the practices of socially conscious landscape designers like Randy Hester. At the beginning of every project, Hester insists upon creating a power map—a depiction of the individual, group, corporation, and public agency dynamics in any place—as a way to begin to understand the network, movement and uneven relationships of power. Relationships of power often are manifested not only in conscious political actions but also in common daily practices and patterns of consumption that directly impact cultural landscapes. Landscape preservation advocates desperately need to take note of the lessons revealed by such power mapping exercises because power is formalized in both public policies and political relationships that directly affect landscape preservation efforts.

Although much landscape preservation activity occurs at the local level, this work often is guided by the historic preservation framework that is institutionalized at the national level. Thus, the future evolution of the field of historic landscape preservation demands that practitioners remain engaged in debates about the direction of these national programs and policies. Such vigilance is needed in the United States, as well as in other countries

where national-level preservation programs are less formalized. For example, the U.S. National Register of Historic Places criteria for determining historical significance and integrity are now approximately forty-five years old. Although the framework and criteria have worked well for built structures and contiguous historic resources, because the National Register criteria emphasize physical and material qualities of a resource, many preservation practitioners have struggled to employ the framework in ways that fully acknowledge ethnographic cultural values, as well as intangible values and dynamic materials of cultural landscapes. Continued engaged debate among professionals and the public on the relevance and applicability of these criteria for evaluating historic landscapes is needed. Models that may be useful, but also have their own weaknesses, include Canada's recent legislation akin to the U.S. national register framework, as well as ICOMOS and UNESCO.

Conclusion

Ultimately, for the way forward to become clearer, future forums on historic landscape preservation should be devoted to these topics and more. Such forums undoubtedly will raise new questions that will instigate broader discussions about the relationship between landscape preservation and place. While all of the papers presented at *Exploring the Boundaries of Historic Landscape Preservation* address contemporary problems that are relevant to practitioners, perhaps the greatest contribution to the field arises from the articulation of ideas that spark controversy and debate. These are the conversations that are most likely to generate fresh ideas and thereby advance exploration of the boundaries of historic landscape preservation.

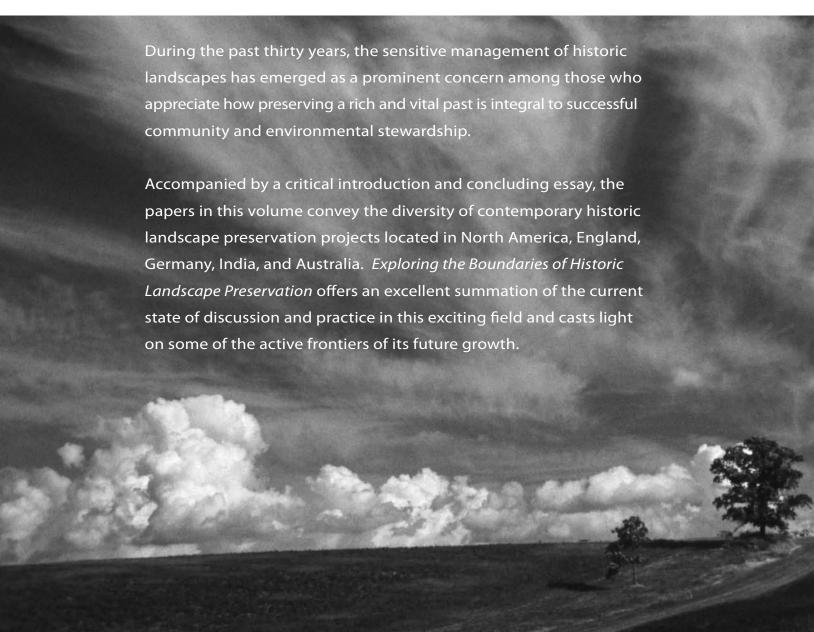
References

- Alanen, Arnold R., and Robert Melnick. 2000. Why cultural landscape preservation? In *Preserving cultural landscapes in America*. eds. Arnold R. Alanen and Robert Melnick, 1-21. Baltimore: Johns Hopkins University Press.
- Birnbaum, Charles A., and Mary V. Hughes, eds. 2005. *Design with culture: Claiming America's landscape heritage*. Charlottesville, Va: University of Virginia Press.
- Florida, Richard. 2002. The rise of the creative class: And how it's transforming work, leisure, community and everyday life. New York: Basic Books.
- Goetcheus, Cari. 2008. Landscape preservation education: Status in 2007. *Preservation Education & Research* Volume One: 15-28.
- Kaufman, Ned. 2004. Moving forward. In *Giving preservation a history: Histories of historic preservation in the United States*, eds. Max Page and Randall Mason, 313-328. New York: Routledge.
- Kraus, S. 2006. A call for new ruralism. *Frameworks* 3 (Spring): 26-29. Journal of the University of California-Berkeley College of Environmental Design.
- Longstreth, Richard, ed. 2008. *Cultural landscapes: Balancing nature and heritage in preservation practice.* Minneapolis: University of Minnesota Press.
- Meinig, D. W. 1979. The beholding eye: Ten versions of the same scene. In *The Interpretation of Ordinary Landscapes: Geographical Essays*, ed. D. W. Meinig, 35-50. New York: Oxford University Press.
- Page, Max, and Randall Mason, eds. 2004. Giving preservation a history: Histories of historic preservation in the United States. New York: Routledge.
- Rypkema, Donovan D. 2003. Historic preservation: Where we've been and where we need to go. Forum Journal 17(2): 1-5.
- Thayer, Robert L. 2003. LifePlace: Bioregional thought and practice. Berkeley: University of California Press.
- Tung, Anthony M. 2001. Preserving the world's great cities: The destruction and renewal of the historic metropolis. New York: Three Rivers Press.
- Wilson, Chris, and Paul Erling Groth. 2003. The polyphony of cultural landscape study: An introduction. In *Everyday America: Cultural landscape studies after J. B. Jackson*, eds. Chris Wilson and Paul Erling Groth, 1-22. Berkeley: University of California Press.

About the Editors

Cari Goetcheus teaches landscape architectural and cultural landscape theory and practice in the Department of Planning and Landscape Architecture at Clemson University located in South Carolina, U.S.A. She has extensive experience in the field of historic landscape preservation, having worked in both the private and public sectors. She was instrumental in enhancing the U.S. National Park Service's Cultural Landscape Inventory (CLI) and developing and implementing the Historic American Landscapes Survey Programs (HALS). Her research interests include landscape preservation education, the intersection of land planning, historic preservation and rural communities, and the impact of African-American culture on the landscapes of the Southeast. Currently, she is developing a Campus Preservation Master Plan for Clemson University, funded by the Getty Foundation Campus Heritage Grant program. She is also collaborating with ten African-American communities along the coast of South Carolina to document their basket making cultural landscapes.

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Polk Farm Clouds by Jonathan Higgins

