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Dedicated to the Protection, Preservation and Management
of Cultural and Natural Parks and Reserves
Through Research and Education

The George Wright Society

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On the Cover

Frederick Law Olmsted, Sr., *from an 1895 Painting by John Singer Sargent
which hangs at the Biltmore Estate, Asheville, North Carolina.*

Nominations Open for Two GWS Board Seats, 1997-1999

The 1996 Board election, which will take place this October, will be for the seats of two retiring incumbents. Stephanie Toothman, the Society's president, and Steve Veirs, our treasurer, have reached the end of their second terms on the Board and are therefore ineligible to run again. We are accepting nominations for these two seats through June 1, 1996. To be eligible, a nominee must be a GWS member in good standing; be willing to travel to Board meetings, which occur once or twice a year; and be willing to serve on Board committees and do other work associated with the Society. Travel costs and per diem for the Board meetings are paid by the Society; otherwise there is no remuneration. The procedure is: members propose nominees to the Board's Nominating Committee, which makes a selection from them to determine the final ballot. (It is also possible for members to place candidates directly on the ballot by petition. For details, contact the GWS office.) To propose someone for candidacy (and it's perfectly acceptable to nominate one's self), send his or her name, mailing and e-mail addresses, and phone and fax numbers to: Nominating Committee, The George Wright Society, P.O. Box 65, Hancock, MI 49930-0065 USA. All nominees will be contacted by the Nominating Committee to get background information before the ballot is determined. Again, the deadline for nominations is June 1, 1996.

Twenty-Nine Sites Added to World Heritage List

In early December the World Heritage Committee accepted 29 new properties on the World Heritage List—the UNESCO-managed list of cultural and natural sites of universal significance. Among them were the first sites to be inscribed in Chile, Laos, the Republic of Korea, the Netherlands, and Uruguay. Some of the notable sites include: Rapa Nui (also known as Easter Island), famed for its isolation and its monumental stone figures, known as “moai,” created from the 10th to the 16th centuries; Crespi d'Adda, a rare company town in Italy's Lombardy region; Waterton Glacier International Peace Park, Canada/United States, with its outstanding scenery and rich plant and mammal communities; the Aggtelek caves and the Slovak Karst, of Hungary and Slovakia, which display an extremely rare combination of tropical and glacial climatic effects; the Virgin Komi Forests of the Russian Federation, one of the most extensive areas of virgin boreal forest in Europe; Gough Island Wildlife Reserve in the South Atlantic, one of the least disrupted island ecosystems in

cool temperate zones and home to one of the largest colonies of sea birds in the world; Carlsbad Caverns National Park (USA), outstanding in the profusion, diversity, and beauty of mineral formations and for the Lechuguilla cave, an underground laboratory where geological processes can be studied in a virtually intact setting; the Old City of Lunenburg, Canada, the best surviving representative of British colonial town planning in North America, preserving almost in its entirety the model layout of the mid-18th century; and the Historic Centre of Avignon, France, with its Gothic Palais des Papes, the seat of the papacy in the 14th century. The World Heritage List now numbers 469 sites. (This item is condensed from a report by ICOMOS correspondent Peter Stott.)

Protected Areas Virtual Library Now On-Line ...

The World Conservation Monitoring Centre, based in Cambridge, England, has created a "Protected Areas Virtual Library" on the Worldwide Web. This new information service is a set of links to various Internet sources on parks and protected areas. It includes information on protected areas in selected countries around the world, an on-line version of the 1993 UN List of National Parks and Protected Areas, information about international conservation programs and conventions that involve or affect parks (e.g., Ramsar, World Heritage, MAB). It is a valuable starting point for international information. If you have full Internet access, the Virtual Library can be found at:

<http://www.wcmc.org.uk/~dynamic/pavl/>

Users with a non-graphical interface can get there through Telnet by typing:

**telnet rsl.ox.ac.uk, login: lynx, and then
g <http://www.wcmc.org.uk/~dynamic/pavl/>**

For further information, you may contact The Information Officer, World Conservation Monitoring Centre, 219 Huntingdon Road, Cambridge CB3 0DL, United Kingdom; telephone: 44-0-1223-277314; fax: 44-0-1223-277136; e-mail: info@wcmc.org.uk.

... The GWS Soon to Follow

For the past couple of months, we have busily been working to build a GWS Web site. A prototype actually has been on-line for some weeks now, undergoing internal review and testing. Once we get all the information in place and the bugs worked out, we will announce the URL and open the site to the general public. We view the Web site as a way to complement the FORUM and to reach out to a much wider audience than before. The Web site will consist of a home page with basic GWS information; links to pages on the biennial conferences, the FORUM, and membership information; a complete

publications list with on-line ordering form; links to other Web resources of interest to park professionals; and more. We will be using the site to publicize the 1997 Conference (scheduled for March 17-21 in Albuquerque) and will include an on-line forms to submit abstracts and conference registrations. Watch this space for further details.

News from CNPPA–North America

Report on CNPPA Lake Louise Meeting

In the last issue of the FORUM, Dave Harmon reported on the North American regional meeting of CNPPA held at Lake Louise in October 1995. The same issue contained a number of papers from that meeting as well as excerpts from the Regional Action Plan. The full results of the meeting have now been published as the "Proceedings and Regional Action Plan" and this document has been distributed to members of the Commission and other participants at the meeting. Some additional copies are available by contacting: Bruce Amos, Vice Chair (North America), IUCN Commission on National Parks and Protected Areas (CNPPA), 4th Floor, 25 Eddy Street, Hull, Québec K1A 0M5, Canada; Telephone: (819) 997-4908; Fax: (819) 994-5140; E-mail: bruce_amos@pch.gc.ca.

IUCN–The World Conservation Union

The Commission on National Parks and Protected Areas (CNPPA) is a component of IUCN–The World Conservation Union. The overall mission of IUCN is "to influence, encourage and assist societies throughout the world to conserve the integrity and diversity of nature and to ensure that any use of natural resource is equitable and ecologically sustainable."

The World Conservation Union is unusual in that, as an international organization, it brings both governments and NGOs together in a unique global partnership. It has the particular advantage of offering neutral ground for different bodies to share ideas and work together to develop strategies, consider treaties, and undertake global and regional initiatives. Founded nearly 50 years ago, it now numbers within its ranks some 800 organizations from over 130 countries working together in a common interest: Caring for the Earth.

The World Conservation Union carries out a single integrated Program. Approved by the triennial Congress of members, the Program is coordinated by the central Secretariat (both in headquarters and in the Regional and Country Offices) and implemented with assistance from the network of volunteer experts in the six IUCN Commissions (national parks and protected areas,

species survival, environmental law, conservation strategies and planning, environmental education, and ecosystem management).

IUCN World Conservation Congress

Every three years, IUCN members come together in a General Assembly to set the general policies and direction that the Union will follow (via resolutions and recommendations) and to debate and agree the global Program and the budgets, and to elect various officers and members of the IUCN Council, its governing board. So it is a vitally important mechanism for the members to contribute to and shape their organization. And of course, through an associated program of workshops and other events, it is a great opportunity for organizations to interact with and learn from colleagues from around the world.

"Caring for the Earth" will be the theme of the IUCN World Conservation Congress at the Montréal Convention Centre, from October 13 to 23, 1996. Some 2,000 delegates involved in global conservation and sustainable development issues from around the world will be coming to Montréal. This will be the major international conservation event of 1996 in North America. Every effort is being made to make this event significantly different and more valuable than previous assemblies. The Congress will, for the first time, include open sessions (notably workshops and an exhibition) to encourage the broadest possible participation of a range of constituencies.

The workshops will run over four days (October 17, 18, 20, and 21) and will focus on eight main thematic areas: sustainable use, biodiversity, shared resources, strategies, green economics, Rio plus 5, environmental justice, and conservation in Canada. Within the various themes, a number of workshops are being planned related to protected areas, including:

- Protected areas and climate change
- Economic value of protected areas
- Managing private lands for conservation / marine protected areas
- Planning national systems of protected areas/ business planning for protected areas

For more information: IUCN World Conservation Congress, Canadian Heritage/Parks Canada, Guy-Favreau Complex, 200 René-Lévesque Blvd. W., West Tower, 6th Floor, Montréal, Québec H2Z 1X4, Canada; Telephone: (514) 496-5387; Fax: (514) 283-2015; E-Mail: congres_uicn@pch.gc.ca. Or you may contact IUCN's headquarters: IUCN-The World Conservation Union, World Headquarters, Rue Mauverney 28, CH-1196 Gland, Switzerland; Telephone: (4122)-999-00-01; Fax: (4122)-999-00-02; E-mail: mail@hq.iucn.ch.

— *Bruce Amos*

Nature and Culture in Historic Landscapes

Sometimes, when we “manage” nature (or culture) in what I shall generically term cultural landscapes, we do such things as cut second- or third-growth woods in what were once open fields of fire for Civil War artillerists. We may run into trouble doing this: a clean swath along section or fence line breaks the integrity of the woods by exposing its vulnerable inner sectors to domino-effect wind falls.

Or, we might debate the fate of a large, anachronistic, and exotic tree—like the one that once shaded visitors and framed their photos of the mission at Tumacacori. That tree has gone to its reward. And we are pure. And on hot days visitors do not stand in the shade of that tree to contemplate the lovely façade of the old mission. They rush across the simmering compound to the cavernous shade within.

Back to the Civil War. In the search for purity and literal accuracy (as documented by contemporary photos and maps), we may be overzealous. Nearly forty years ago my old friend Frank Barnes (then Regional Historian in the then Northeast Region) often expressed his discomfiture at the clutter of 19th Century monuments and memorials at Gettysburg’s Hallowed Ground. He floated a trial-balloon idea to have them removed. The mere hint ignited instant wrath amongst Civil War aficionados. More important, had the notion flourished it would have desecrated the cultural impulse that commemorated that decisive battle. This deep-felt impulse—resonating with Lincoln’s “mystic chords of memory”—turned a battleground into a field of conciliation as the old veterans from both sides shared their memories and, arm-in-arm, placed the markers that delineated their struggle-at-arms decades before. Moreover, their memories were accurate. And the memorials they commissioned and lovingly placed have proven invaluable interpretive statements. Gettysburg, without its memorials and monuments placed by the soldiers who fought there, would be the cultural equivalent of a vacant house.

All of us with some duration in this business can cite instances like those above. Some later accretion, natural or cultural, that challenges our sense of accuracy or suitability. Or some initiative of our own in the quest for the last datum—several in recent years—that recalls the apocalyptic Vietnam War report: We had to destroy the village to save it. Or, as counterpoint, the shaping to conventional park standards of a place like Fort Bowie, which says it all as an abandoned ruin in an isolated pocket of lonely mountains. Here our role

should be to perpetuate nature's reclamation—our work and presence so subtle and effacing that visitors must discover lingering human echoes on their own. A wild and primitive and provocatively mute place that takes us to the edge of dread. Along this whole spectrum our problem is doing too much.

Let me close this phase of the essay with what may be a sort of philosophical criterion to help us judge these matters. In preserved cultural landscapes (and evermore in living ones) we are dealing with memorial landscapes. Accuracy is indeed a virtue in these landscapes. But it is not the only virtue. And applied too literally it can transmute to violation. After-the-event things do come into the fields of history by natural or cultural means. Some of these complement, become part of the continuum of the times and events commemorated. Some of them, like additions to an old house, may be a bit slaunchwise, but have incorporated themselves into the scene, become beloved elements of it. In these instances, literal accuracy may be the wrong thing entirely. We never achieve literal accuracy anyway. No matter how pedantic we may become, how pure in our no-nonsense factual microscopy, we are never really literally true in our representations at these places. If it were so we would have rotting horses and screaming wounded and piles of amputated arms and legs aswarm with flies at Gettysburg.

Nothing above, as I intend it, supports a sloppy, careless approach. Rather, let us be gentle and subtle in these memorial landscapes. Give the benefit of the doubt, whenever possible, to those later accretions—natural and cultural—that add to the harmonies and atmospherics of memory. That is what commemoration is all about. And by all means, when we must get rid of the incongruous or intrusive or obscuring element, let us do so with care. Especially is this critical in the removal of natural elements, to avoid ugly and costly wounds to the evolved landscape.



In a larger sense, all parks and equivalent reserves are cultural landscapes. Societies make decisions that these places have public value, are worth saving from consumptive types of utilitarian use. These are value-system determinations, abstract artifacts. They are products of culture. As, in their dedicated role, are the material reserves themselves—whether natural or built environments. We easily speak of both natural and cultural reserves as heritage sites—a generic way of stating cultural value. Now we have World Heritage Sites and International Biosphere Reserves, some sites having both designations.

Evermore, super-saturated modern world culture (over populated, urbanized, industrialized, and homogenized by dependence on the same resource, energy, financial, and communication systems) becomes one grand system, and the biosphere its one contiguous support system. In such a world system we may look for radical changes. We have many spot examples: statues and buildings sluff in polluted places; forests die from acid rain.

Now comes another blind-side blow. Recent studies by Duke botanist Dr. Boyd Strain forecast the possibility that "aggressive weeds" fed by excess carbon-dioxide could inherit the Earth. Strain's research (as described in the 12/12/95 *Christian Science Monitor*) gives warning that CO₂ enrichment could "have a profound effect on plant life even if there were no substantial climate change." And if there were, the impacts of global warming could "not be understood without taking account of CO₂'s fertilizing influence." This combination could so change the mix of plant species on unmanaged lands that "the whole system of birds, bees, rodents, fungi, and microbes" could radically change as well. Thus conceivably opening the way for "a feeding frenzy" and takeover by undesirable plants.

This scenario may recall President Carter's "killer rabbit" encounter, but don't dismiss it on that account. Strain and his co-investigator Dr. George Hendrey of Brookhaven National Laboratory make the point that intensively managed agricultural acreage might adapt to such a changing regime. In contrast, lands we want to preserve "in their natural state" might be more vulnerable and need more active management.

Workers in the park and equivalent reserve business may be facing changes that could make most of today's management dilemmas and manipulations fade to insignificance. The mandarin curse comes to mind, "May you live in interesting times."

To end this ramble on a less depressing note (the holidays still ahead as I write) it should be noted that interesting times are times of challenge, times that stretch us to do our best. Which brings to mind a marvelous "Block that Metaphor" quote in a recent New Yorker, ending with the line: "It's a two-sided sword, one hand washes the other." Be of good cheer!

William E. Brown
Gustavus, 12/20/95

Preface

On April 20-23, 1995, in honor of the centennial of the Biltmore estate—Frederick Law Olmsted, Sr.'s last, and perhaps greatest achievement—over two hundred attendees were gathered in Asheville, North Carolina to continue a discussion on balancing nature and culture in historic landscapes.

The sold-out conference, which received base funding from the National Park Service Cultural Resource Training Initiative, was co-sponsored by the National Association for Olmsted Parks (NAOP), the National Park Service (NPS) and the US Forest Service (USFS), was attended by a broad variety of natural and cultural resource specialists that included managers, historians, interpreters, archaeologists, arborists, horticulturists, biologists, geographers, curators, landscape architects, architects, engineers, planners, park rangers, maintenance professionals, community activists, professors and students.

By the end of three days it became clear that a deeper understanding was necessary between those professionals that preserve significant cultural resources and those who conserve natural resources. The conference included six presentations in the form of six plenary keynotes and thematic breakout sessions. The full papers from the breakout sessions will be included in a complete proceedings publication later this year, and address specific topics of landscape management, rural/vernacular landscapes, corridor landscapes, vegetation, forestry and ethnographic landscapes.

These first six plenary papers offered a variety of perspectives on nature and culture, yet they are also representative of a variety of related issues that repeatedly arose throughout the conference. These concerns included a desire to understand the relationship between people and the land, past and present; an integration between design, planning, and management both historically and today; tools for interpretation and intervention; and, shifting anthropological, ecological and cultural values. The plenary papers that follow include: *The Twentieth Century Landscape Park* by Ethan Carr, Landscape Historian, NPS-Park Historic Architecture Division, Washington, D.C.; *Moving Toward the Middle in a World of Extremes* by Robert Z. Melnick, FASLA, Dean, Department of Architecture and Allied Arts, University of Oregon, Eugene, Oregon; *Can "Ecosystem Management" Manage Cultural Landscapes? An Ecological Perspective* by Robert E. Cook, Director, Arnold Arboretum, Ja-

maica Plain, Massachusetts; *The "Balance" Between Nature and Culture* by John Dixon Hunt, Chairman, Department of Landscape Architecture and Regional Planning, Graduate School of Fine Arts, University of Pennsylvania, Philadelphia, Pennsylvania; *Master Plan for Renewing Louisville Kentucky's Olmsted Parks and Boulevards* by Rolf Sauer, ASLA, Landscape Architect, Principal & Master Plan Project Director, Andropogon Associates, Ltd., Philadelphia, Pennsylvania, and, Patricia M. O'Donnell, ASLA, APA, Principal, LANDSCAPES, Westport, Connecticut and Charlotte, Vermont. This publication concludes with a collection of all abstracts.

Finally, we would like to recognize the contributions of several colleagues and organizations, without whose outstanding commitments this publication would not be possible. We are especially grateful to Phyllis Knowles, NAOP administrator; Lucy Lawliss and Brian Morris, NPS historical landscape architects; and, Steve E. Hendricks, USFS landscape architect for their extraordinary support, as well as Lina Confresi who provided editorial support for this publication. We are also grateful to the George Wright Society, who have not only helped us tremendously with the conference outreach, but provided all of the technical support to make this publication possible.

Charles A. Birnbaum, ASLA, NAOP
Coordinator, Historic Landscape Initiative
NPS, Heritage Preservation Services Program

Sandra L. Tallant
Landscape Architect



The Twentieth-Century

Landscape Park

Due to "the universal abuse of the word park," the landscape architect Charles Eliot complained in 1888, "the strict meaning of the word is completely lost."

The strict meaning Eliot had in mind defined a large park, or "country park": landscapes which were, in his words, "intended and appropriated for the recreation of the people by means of their rural, sylvan and natural scenery and character."¹ Eliot was not alone in the late 19th century in his concern over the meaning of the word park. John Charles Olmsted, Eliot's professional colleague, also attempted to differentiate between what he called the "large park," and other forms of public open space, in particular small parks and playgrounds. In his keynote address to the first meeting of American Park and Outdoor Art Association in 1897, Olmsted asserted that the "true purpose of the large public park"—a purpose he felt had been forgotten by many municipal park commissions—was "to provide for the dwellers in cities convenient opportunity to enjoy beautiful natural scenery." "Large parks," he continued, "should contain a complete natural landscape, where the boundaries should not be obtrusive, where one may stroll over hill and dale, across meadows and through woods always amid natural surroundings for hours and hours...where many thousands of visitors may be enjoying the scenery at the same time without crowding each other... [where] the roar of street traffic is less noticeable than the rustle of leaves."²

This definition of the large park echoed the rhetoric of park advocates of the previous generation. As early as 1851, Andrew Jackson Downing had insisted that the proposed municipal park for New York have "space enough to have broad reaches of park and pleasure-grounds, with a real feeling of the breadth and beauty of green fields, the perfume and freshness of nature."³ Frederick Law Olmsted (John Charles's stepfather)

had expounded on the virtues of such park scenery for 40 years, and as a professional consultant he had designed many park systems for municipal park commissions. A park "system" implied that a range of park types (such as squares, playgrounds, and parkways) were featured; but the heart of such park planning remained the "sense of enlarged freedom" which was "the most valuable gratification" provided by a large, central

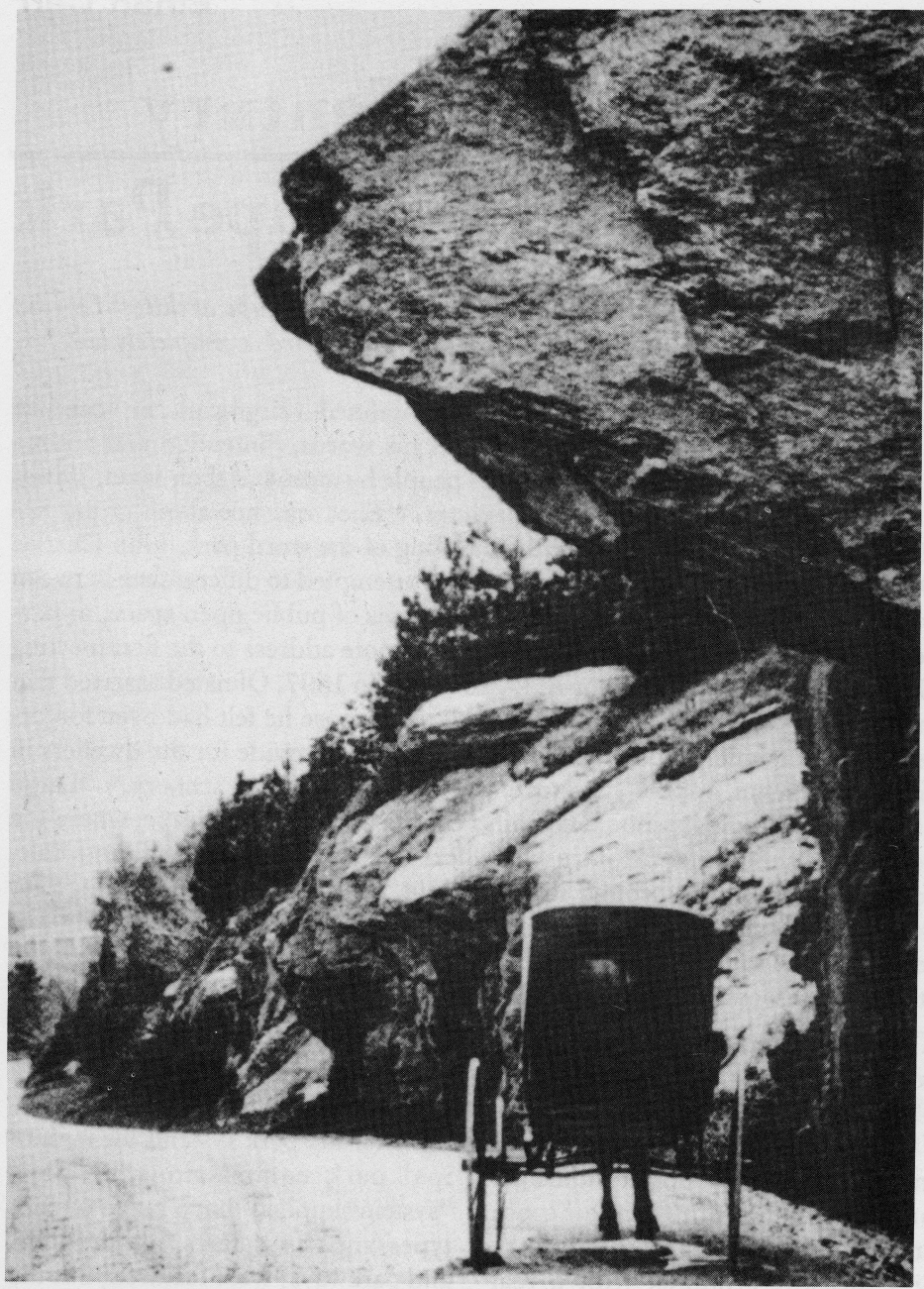


Figure 1. Carriage drive in the north end of Central Park, New York. Through the thoughtful development of drives, paths, and overlooks, existing topography, geology, and vegetation became main attractions of the new park landscape. (Courtesy New-York Historical Society)

park "of a rural character."⁴

But for the next generation of American landscape architects, the "roar of traffic" that J.C. Olmsted felt was inimical to the "true purpose" of a landscape park had grown louder. By the 1890s many municipal park commissions were under great pressure to open their large parks to myriad new uses that went beyond the preservation and management of scenery. Motor enthusiasts, playground advocates, organized sports leagues, and other groups all viewed their activities as legitimate uses of parkland. Open spaces near swelling urban populations became ever rarer, just as the demands on those spaces increased. Landscape parks inevitably hosted a broader range of activities than had been required of them in the 19th century, and they experienced more intensive levels of use. The technological and social changes of the Progressive era challenged 19th-century definitions of "park," and then added new meanings, until (as Eliot feared) the word came to denote public space of virtually any size, appearance, or function.

Certain changes were required for the large, landscape park to remain a viable reform institution in the new century. The belief that large public parks could improve public health, for example, had depended largely on 19th-century miasmatic disease etiology, which held that gasses and odors rising from poorly drained, polluted areas spread disease. But by the end of the century, germ theory

was accepted and advances in public sanitation had made urban epidemics less lethal. Although parks would continue to be associated with environmental health and improvement, they would no longer be considered major factors in the prevention of communicable disease in the 20th century. Also in the late 19th-century, improved transportation had opened up suburban and rural destinations for tourists interested in seeing what Charles Eliot described as the "real country," as opposed to the municipal landscape park. One of Frederick Law Olmsted's most important apprentices, Eliot planned the first "metropolitan system of reservations" around Boston in the early 1890s. Noting that "a crowded population thirsts, occasionally at least, for the sight of something very different from the public garden, square, or ball-field," Eliot remarked that "the railroads and new electric street railways...carry many thousands every pleasant Sunday through the suburbs to the real country...for the sake of the refreshment...the country brings to them." But the areas around Boston possessing "uncommon beauty and more than usual refreshing power" were largely in private hands and "in daily danger of utter destruction." An ancient grove of oaks in Waverley was one such area that had originally elicited his observations; but there were many others to be added to the list, and almost all of them were outside the municipal boundaries of Boston. Working with George C. Mann, the



Figure 2. Lynn Woods Reservation, Lynn, Massachusetts. Electric rail and improved roads made larger scenic reservations farther from city centers both feasible and desirable in the 1890s. (Courtesy Metropolitan District Commission)

president of the Appalachian Mountain Club, and Sylvester Baxter, a journalist from Malden, Eliot organized an effective public relations campaign, and in 1891 the group succeeded in having legislation passed to create the "Trustees of Public Reservations," a group of citizens empowered to hold "real estate such as it may deem worthy of preservation for the enjoyment of the public." A year later, the state legislature authorized a Metropolitan Park Commission, with Eliot as landscape architect and Baxter as secretary, to condemn land and "acquire, maintain, and make available... open

spaces for exercise and recreation" in 37 separate municipalities.⁵

Eliot demonstrated that scenic preservation could be a basis for regional planning in the 20th century, based on the precedent of municipal park and parkway planning in the 19th century. Since improved transportation allowed park visitors to reach suburban woods, waterfalls, and geologic features with close to the same level of convenience that they had once visited municipal parks, the scenic reservation could become an enlarged landscape park in an expanded park and parkway system. The goal of Eliot's scenic reservations

was, as it once had been for municipal landscape parks, to provide what he called in 1893 the "space for air, for light, for exercise, for rest, and for the enjoyment of the peaceful beauty of nature which, because it is the opposite of the noisy ugliness of towns, is so wonderfully refreshing to the tired souls of townspeople."⁶ The ideal had not changed. The geographic setting of the landscape park had moved out, however, to where such park development had always made the most sense: the peripheries of the urban sphere of influence. The ultimate justification for such parks remained the same as well. Eliot emphasized the healthful benefits available to the individual—and to society as a whole—through the free, public opportunity for the aesthetic appreciation of landscape beauty.

Many city, county, and state governments, emulated the metropolitan Boston work and soon created regional historic and scenic reservations. In 1895, Andrew Haswell Green, the former comptroller of Central Park, founded the American Scenic and Historic Preservation Society, a group authorized by the New York State Legislature and dedicated to the "preservation of natural scenery from disfigurement, for the creation of public parks for the health comfort and recreation of the people, and for the beautification of cities and villages."⁷ Green hoped the society would "provide the machinery for performing the same work for New York State that 'The Trustees of Public Reservations' provides for the

Commonwealth of Massachusetts."⁸ The society was active in the campaign to preserve the Palisades, a prominent escarpment of volcanic rock along the Hudson River opposite New York City, and subsequently participated in the creation of a series of scenic parks across New York State, including Watkins Glen (1906), Letchworth Gorge (1907), and the extension of the Palisades Interstate Park up the Hudson to Bear Mountain (1910). In Minnesota, the action of the Minneapolis park commissioners in preserving Minnehaha Falls in 1885 served as a precedent for the preservation of Lake Itasca as a state park (1891), and at the Dalles of the St. Croix River (1895), an area of scenic rapids that had been a tourist destination since the mid-19th century. The Dalles became part of another Interstate Park five years later when Wisconsin created a complementary park on the other side of the river.⁹ In California, the Sempirvirens Club was organized in 1900, and after a concerted public relations campaign succeeded in having the California Legislature pass a 1901 bill authorizing a California Redwood Park Commission. Over the next 10 years, the commission acquired thousands of acres of old growth coast redwoods, including the California Redwood State Park in 1902.¹⁰ Before the end of World War I, state governments in Ohio, Idaho, Illinois, Pennsylvania, Connecticut, Indiana, Iowa, New Jersey, and North Carolina all empowered park commissions to acquire and manage

parks in areas determined to have outstanding historical interest or scenic value.¹¹ County governments became active in creating scenic reservations beginning in 1895, when Essex County in northern New Jersey created a system of parks that included scenic reservations on the hills around Newark, as well as smaller parks and playgrounds in the city.¹² In Chicago, a Special Park Commission was organized in 1899 to suggest an outline for a Cook County park system based on Eliot's metropolitan park system. In 1904, the landscape architect for the commission, Jens Jensen, proposed a system of scenic reservations around Chicago based on the scenic, geological, and ecological characteristics of the area.¹³ In the West, municipal governments were sometimes able to create regional park systems. The Denver Mountain Park system, begun in 1912, extended the Denver municipal park and parkway system with in a series of scenic reservations that were acquired outside municipal boundaries. Such mountain parks, with connecting scenic drives, became characteristic of regional park development undertaken by many Western municipalities in the early 20th century.

In all of these cases, the physical development of regional scenic reservations—whether in the suburbs of a metropolis or in relatively remote scenic areas—followed certain tendencies. The geometric gardens, axial site plans, and architectural embellishments that had become com-

mon in city parks since the 1890s usually found no place in larger scenic reservations of the period. Playgrounds, outdoor gymnasia, and other recreational development (which also proliferated in municipal parks at this time) were absent or at least subordinated in larger reservations. The 20th-century scenic reservation, like the 19th-century municipal landscape park, featured curvilinear drives and paths that conformed to topography and offered constantly shifting views in a considered sequence. In the Boston metropolitan parks and other regional parks, views were carefully considered in the placement of roads, buildings, and other facilities; indigenous landscape character and features helped determined the particulars of site planning. In other words the appreciation of landscape scenery remained the primary purpose of these larger parks, as it had been for many municipal parks in the 19th century. Therefore all construction—whether of a simple guard rail or of a large hotel—was designed to remain a consonant, subdued element in the picturesque compositions of landscape scenes.

Eliot recognized, however, that larger scenic reservations demanded a new balance of landscape development, forest management, and preservation of natural systems. If the 19th-century municipal park had required extensive landscape engineering to produce desired picturesque effects, the 20th-century scenic reservation often eliminated the need for heavy manipulation of topography



Figure 3. South Mountain Reservation, Essex County, New Jersey. Essex County established the first county park system in 1895. Scenic Metropolitan Park Commission parks around Boston. (Essex County Park Commissioners, *Annual Report*, 1905)



Figure 4. Bear Mountain, Palisades Interstate Park, New York. By 1915, the Palisades Interstate Park drew over two million visitors annually. (Courtesy Palisades Interstate Park Commission)

and hydrology, since the land for the reservation (often to a greater degree than the municipal park) could be selected according to its existing scenic qualities. But the formal features and engineering developed earlier in municipal landscape park design were adapted as needed in the more limited development of scenic reservations. In 1897, Eliot described some of the management priorities for the Boston metropolitan reservations in a report to the Metropolitan Park Commissioners. It was "quite unlikely," he wrote, "that there will ever be any need of artificially modifying... [the reservations] to any considerable degree. Such paths or roads as will be needed to make the scenery accessible will be mere slender threads of graded surface winding over and among the huge natural forms of the ground."¹⁴ The element of traditional park design for which Eliot perceived the greatest need was the control of "the vegetation which clothes the surface everywhere." Eliot advocated selected cutting of forests; he believed that "to **preserve** existing beauty, grass-lands must continue to be mowed or pastured annually, trees must be removed from shrubberies, competing trees must be kept away from veteran oaks and chestnuts, and so on.... To prepare for **increasing** the interest and beauty of the scenery, work must be directed to removing screens of foliage, to opening vistas through 'notches,' to substituting low ground-cover for high woods in many places, and to other like operations." He provided watercolor

sketches to illustrate his points.¹⁵

In scenic reservations in other parts of the country the specific remedies may have been different; but landscape architects and park officials managing those parks shared Eliot's concern for the visual experience of regional landscape scenery. If important views were lost or impaired through the growth of vegetation, the public would miss an important aspect of their experience of the place. Keeping vistas open from roads, paths, and overlooks therefore figured in management plans as necessary. Landscape management otherwise was kept as inconspicuous as possible, and physical development exhibited a character considered appropriate to the character of wooded, relatively secluded landscapes. In terms of construction details, this meant that the Boston metropolitan reservations continued the use of native stone masonry and wood construction that had been started in the larger Boston municipal parks, such as Franklin Park.¹⁶ Buildings and facilities considered necessary for day trippers and weekend tourists were not allowed to overwhelm the primary purpose of the scenic reservations: to provide the free and public opportunity for the appreciation of landscape beauty. Other regional parks and regional park systems developed in the years before World War I showed the same inclinations. At Bear Mountain, New York and Lake Itasca, Minnesota, rustic inns were built of peeled logs and boulders, and scenic drives employed and

stone guardwalls and heavy wooden signs.¹⁷ The Bear Mountain Inn was described at the time as "a rugged heap of boulders and huge chestnut logs assembled by the hand of man, and yet following lines of such natural proportions as to resemble the eternal hills themselves."¹⁸ Curvilinear roads and trails, decentralized and minimal services for camping, hiking, and other activities, and minimal alterations to the existing landscape all characterized the development of regional landscape parks in the early 20th century.

Landscape architects such as Charles Eliot provided the formal and conceptual basis for 20th-century landscape park development by adapting their training in 19th-century municipal landscape park work to the scale and context of a regional park. The continuity between municipal and regional park design was particularly evident in the 1890s, when civic improvement, scenic preservation, horticulture, and forestry were among interests shared by landscape architects, civic groups, and other park advocates. The 19th-century park movement also provided legal and administrative precedents for how scenic areas outside of cities could be acquired and administered as public places. The maturing profession of landscape architecture, represented by a second generation of practitioners, provided the technical and aesthetic discipline that suggested how to develop such places for public use—in other words how to make them into parks. If the imposition of

monuments and institutions had altered the carefully composed landscape sequences in Central Park or Golden Gate Park, picturesque aesthetics and Reptonian principles continued to guide development at new state parks like Lake Itasca or California Redwoods. If organized recreation had made inroads on 19th-century urban greenswards and "Keep Off the Grass" signs were taken down, the preservation of natural features, plants, and animals would assume increased urgency in larger reservations farther from the city. If improved transportation technology had made the municipal landscape park obsolete by making what Eliot called "the real country" more accessible to city dwellers, the same technology made scenic reservations viable by bringing day-trippers to the countryside and creating a constituency for regional parks not unlike that which had existed earlier for municipal landscape parks. As the municipal landscape park became, in the words of Richard Morris Hunt, "less of a park and more of a garden,"¹⁹ a new generation of park advocates employed the aesthetic ideals of pastoral calm and picturesque beauty—ideals that had been embodied in scores of municipal parks—to identify and appreciate areas of natural beauty in still rural counties around cities like Boston and Denver, as well as in more remote scenic areas in states like New York, Minnesota, and California.

The American landscape park was born in the city but moved to the

country. As tourism expanded both socially and geographically, the urge to preserve threatened scenery naturally broadened as well. The creation of municipal parks had also helped establish a constituency for scenic preservation; whether appreciating the engineered scenes of landscape parks close to home, or the less contrived beauty of more remote scenic areas, the visual grammar and aesthetic language needed to interpret places as pictures, and land as landscape, remained constant for urban park visitor and vacationing tourist alike. The greatest examples of the 20th-century landscape park would be accomplished, in fact, at the national level, by what was originally formed as the greatest park commission of all time: the National Park Service.

Today, huge numbers of tourists overwhelm many favorite national parks during peak months. In the first years of the 20th century, however, when the Federal Government was only beginning serious efforts to manage the national parks and reservations that had been set aside since 1832, many argued that the parks suffered from a lack of attention rather than a surfeit. Secretary of the Interior Walter L. Fisher called the first National Park Conference in 1911 based on his conviction that "the attendance in the parks [had] not increased as those most familiar with them believe it should have increased...particularly during the past five years."²⁰ Just over 200,000 visitors had visited the 12 existing na-

tional parks in 1911. Appropriations for all national parks between 1906 and 1913 totaled less than one million dollars.²¹ The lack of interest on the part of Congress, it was felt, could be directly attributed to the apparent indifference of the traveling public. Increased appropriations would come only with increased use of the parks; and increased appropriations were needed, ironically, because poorly planned visitor accommodations were already degrading scenery and polluting natural systems in several parks. The numbers of park visitors may have been low by today's standards, but with few facilities and little supervision, those few did great damage. In Yellowstone, poaching of game and vandalism of geologic features were commonplace until 1894, when the Lacey Act finally provided criminal penalties for the infraction of park regulations.²² By that point, visitors had defaced the prominent geyser formations in the park, and hunters had decimated the herds of elk and bison. In Yosemite Valley, sewage from 19th-century hotels and tent camps flowed directly into the Merced River, making that stream unfit for drinking or swimming by the turn of the century. In his tour of national parks in 1916, the geographer Robert B. Marshall, (who was appointed "general superintendent" of national parks in 1915) was "consistently impressed with the total lack of any systematic sanitary arrangements." He observed that "there [was] not an adequate sanitary system in a single park."²³ The Department

of the Interior could offer little assistance to the parks that were its responsibility since it had little money, and no bureau (or even a consistent set of policies) for park management or improvement. Since 1886, the War Department had deployed the U.S. Cavalry to administer Yellowstone, and the troopers eventually ended the most egregious abuses there. After 1890 troops patrolled Yosemite, Sequoia, and General Grant as well. Although these arrangements resulted in dual administrations and overlapping jurisdictions in the parks, they were unavoidable since no other means were available to keep order. "There was no effective national park policy," within the Department of Interior according to historian Donald C. Swain, "only a haphazard, day-to-day administrative arrangement."²⁴

In contrast, the management of the nation's forest reserves epitomized Progressive efficiency in the early 20th century. Gifford Pinchot arrived at the Division of Forestry at the Department of Agriculture in 1898. Connected and ambitious, Pinchot was also professionally trained in the principles of scientific forestry. By redefining the role of the Division of Forestry, he eventually helped redirect government policy regarding the management and use of all natural resources in the public domain. In 1905, Congress transferred jurisdiction over 62 million acres of forest reserves from the Department of the Interior to Pinchot's growing forestry agency. Pinchot's rapid success in the

scientific management of public forests through the issuance of leases and permits demonstrated how the Federal Government could efficiently manage what remained of the public domain in the early 20th century. The complete preservation of an area exclusively for its scenic qualities, however, was ridiculed by Pinchot and his scientific foresters. They felt that improved logging techniques and the regulation of grazing could prevent the degradation of landscape scenery (if necessary) while also allowing for controlled forms of commercial exploitation. Since it prevented planned multiple uses and scientific management, the total preservation of large areas was as outdated and inefficient, in its way, as the opposite extremes of overuse and exploitation of natural resources. By 1905, Pinchot pushed for legislation that would transfer jurisdiction over the national parks to the Department of Agriculture, where they would be managed together with the national forests. Representative John F. Lacey of Iowa prevented the legislation from passing in 1906 and again in 1907.²⁵ Even Roosevelt's Secretary of the Interior, Ethan Allen Hitchcock, supported the transfer of the parks from his department, as did James R. Garfield, who replaced Hitchcock in 1907.

A coalition of park advocates (including Representative Lacey) opposed this position, however, because they opposed logging, grazing, and dam construction in national parks. They contested the transfer of

the parks to Pinchot's Forest Service and recommended instead the organization of a separate national parks bureau within the Department of the Interior. In order to offer a viable alternative for the management of national parks—an alternative that would justify the exclusion of extractive industries and dam construction—park advocates needed to justify other uses for these places. Tourism, they argued, would create economic activity, prevent Americans from spending their money abroad, and inspire patriotic sentiments among an increasingly diverse population.²⁶ Richard B. Watrous, as secretary of the American Civic Association, in 1911 described tourism as the only “dignified exploitation” for national parks.²⁷ Tourism would also mean profits for railroad companies and other concessionaires, who in turn would put their considerable political influence to work on Capitol Hill in favor of maintaining the integrity of the parks. The increasing number of tourists drawn to national parks would be a quantifiable measure of success of this policy, and such public use would justify the exclusion of other forms of exploitation. After 1909, President Taft endorsed the idea of a separate bureau of national parks within the Department of the Interior, perhaps in part as a check on the influence of Roosevelt's chief forester, whose efforts were received with less enthusiasm by the new administration. In 1910, Taft's Secretary of the Interior, Richard A.

Ballinger, also favored the creation of a bureau of parks as a first step towards increasing the number of park visitors.

But politicians such as Ballinger had only vague ideas regarding “comprehensive plans” for how the parks should be “opened up for the convenience and comfort of tourists and campers and for the careful preservation of natural features.”²⁸ There were other park advocates, however, who had been professionally trained in such “park development.” The profession of landscape architecture had grown rapidly in the 19th century in the United States largely due to the enthusiasm shown by hundreds of municipalities for acquiring and developing public parks. In the early 20th century, as tourism—and therefore “park development”—was advocated as the alternative to logging, grazing, and the construction of dams in national parks, landscape architects were called upon to give formal articulation to that development. Mark Daniels, a landscape architect appointed “general superintendent and landscape gardener” of the national parks by secretary of the interior Franklin K. Lane in 1914, acknowledged that “land is not always land, but is sometimes coal, sometimes timber.” He went on to say that, “It is also sometimes scenery, and as such merits the careful study and development that would be extended to other national resources.”²⁹ Daniels began drawing up “comprehensive plan[s] for the road and trail development of all the national

parks." In 1915, Stephen T. Mather, who had just arrived at the Department of the Interior as an assistant secretary charged with the management of the parks, stated as a matter of policy that "all of the improvements in the parks must be carefully harmonized with the landscape, and to this end, engineers trained in landscape architecture or fully appreciative of the necessity for maintaining the parks in their natural state must be employed." In 1918, Mather hired landscape architect Charles P.unchard, Jr. to continue the work Daniels had begun.³⁰

Like a municipal or regional park commission, the National Park Service was authorized in 1916 (in this case by Congress rather than a state legislature), to engage in "park development." In the decades following World War I, Park Service landscape architects and engineers designed scenic roads, campgrounds, administrative "villages," and a myriad of other park facilities in what proved to be the most intensive period of such human alterations in the history of the national parks. It was during this era that the "developed areas" in national parks (and in many state and county parks as well) acquired the consistent appearance, character, and level of convenience that most visitors have since come to associate, almost unconsciously, with their experience of park scenery, wildlife, and wilderness. Mather consulted landscape architects such as Frederick Law Olmsted, Jr., as experts who could provide not only professional design

services, but expert validation as well, analogous (in a more artistic vein) to the scientific expertise provided by Pinchot's foresters. Landscape architects subsequently would plan and design the physical development of national parks from the earliest days of the Park Service.

Many historians have remarked on the "dual" or "contradictory" mandate contained in the 1916 act that authorized the creation of the Park Service within the Department of the Interior. The most often quoted portion of this legislation states the purpose of the new bureau was "to conserve the scenery and the natural and historic objects and the wild life therein and to provide for the enjoyment of the same in such a manner and by such means as will leave them unimpaired for future generations." Frederick Law Olmsted, Jr., drafted this portion of the legislation.³¹ But to a landscape architect such as the younger Olmsted, steeped in the tradition of American park design, there was no inherent contradiction in preserving a place through its thoughtful development as a park. Without such development—without well designed roads, marked trails, sanitary facilities, and permanent campgrounds—the damage caused by tourists compounded brutally, especially in a fragile environment. And Olmsted knew that bringing people into the parks and facilitating their appreciation of the flora, fauna, and scenic beauty to be found there was the surest means of building a public constituency for preserving such

places in a relatively "unimpaired" state. And this understanding of how best to develop scenic places as "parks," related directly back to the definition of that word that J.C. Olmsted and Charles Eliot had elaborated at the turn of the century: a place preserved through careful physical development that facilitated the public appreciation of scenic beauty.

Landscape architecture, or "park development," does not immediately come to mind when considering national parks. National parks are, after all, great wilderness preserves, valued primarily for their primeval qualities. The roads, trails, overlooks, and other works of landscape architecture that convey us through and mediate our experience with those larger landscapes are often taken for granted—quite understandably—in the presence of a Grand Canyon or Mount Rainier. The history of the parks as natural resource and biological reserves similarly has overshadowed the history of their physical de-

velopment. Park development, in fact, has often been represented as a necessary evil in an otherwise edenic setting. This unfortunate characterization obscures what Frederick Law Olmsted, Jr., had learned so well from his father and his older colleagues: it is the cultural value invested in natural places through their physical development as parks that best assures the preservation of those places in a relatively natural state. The designed landscapes in national and state parks, as works of art, directly express the value society invests in preserving and appreciating natural areas. Few other arts, with the exception of landscape painting, more fully explore this leitmotif of American culture. Neither pure wilderness nor mere artifact, the national park may be the purest manifestation of the peculiarly American genius which sought to reconcile a people obsessed with progress, with the unmatched price paid for that advance: the near total despoliation of the North American wilderness.

Endnotes

- 1 Charles W. Eliot, *Charles Eliot, Landscape Architect: A Lover of Nature and of his Kind who Trained Himself for a New Profession, Practised it Happily, and Through it Wrought Much Good* (Boston: Houghton Mifflin, 1902), 305. The comment originally appeared in an article published in *Garden and Forest*.
- 2 [American] Park and Outdoor Art Association, *First Report of the Park and Outdoor Art Association, Louisville, 1897* (Louisville, Kentucky: 1898), 8-9.
- 3 Andrew Jackson Downing, *Rural Essays* (New York: George F. Putnam and Company, 1853), 150.
- 4 Frederick Law Olmsted and Calvert Vaux, "Preliminary Report to for Laying Out a Park in Brooklyn, New York: Being a Consideration of Circumstances of Site and Other Conditions Affecting the Design of Public Pleasure Grounds," [1866] in Albert Fein, ed., *Landscape Into Cityscape: Frederick Law Olmsted's Plans for a Greater New York City* (New York: Van Nostrand Reinhold Company, 1967), 98-102.

- 5 Eliot, *Charles Eliot*, 318-319, 384-415. Eliot's comments on the Waverley Oaks originally appeared in 1888 as a letter to the editor of *Garden and Forest*. See also: Commonwealth of Massachusetts, Metropolitan Park Commission, *A History and Description of Boston Metropolitan Parks* (Boston: Wright & Potter Printing Co., 1900), 26, 31.
- 6 The quotation originally appeared in an 1893 report for the Metropolitan Park Commission. Eliot, *Charles Eliot*, 385.
- 7 American Scenic and Historic Preservation Society, *Fourth Annual Report of the Trustees of Scenic and Historical Places and Objects in the State of New York* (Albany: Wynkoop Hallenbeck Crawford Co., 1899), 6-7.
- 8 American Scenic and Historic Preservation Society, *Fifth Annual Report* (1900), 28-29.
- 9 Roy W. Meyer, *Everybody's Country Estate: A History of Minnesota's State Parks* (St. Paul: Minnesota Historical Society Press, 1991), 5-8, 17-19.
- 10 In 1918, another private group in California, the Save-the-Redwoods League, was organized and successfully lobbied for more coast redwood reservations to the north. One of the Californians most active in the Save-the-Redwoods League was Stephen Tyng Mather, who in 1916 had become the first director of the new National Park Service in Washington. Joseph H. Engbeck, Jr., *State Parks of California from 1864 to the Present* (Portland, Oregon: Graphic Arts Center Publishing Co., 1980), 29-33, 41-43.
- 11 Norman T. Newton, *Design on the Land* (Cambridge: Harvard University Press, 1971), 562. It should be noted that historic preservation played as important a role as scenic preservation in the creation of early state parks. Several states and the Federal Government acquired battlefield sites from the Revolutionary and Civil Wars in the 19th century, although the resulting parcels of land tended to be smaller than scenic parks. See: Raymond H. Torrey, *State Parks and the Recreational Uses of State Forests in the United States* (Washington, DC: The National Conference on State Parks, 1926), 20-
- 12 See: Frederick W. Kelsey, *The First County Park System: A Complete History of the Inception and Development of the Essex County Parks of New Jersey* (New York: J.S. Ogilvie Publishing Company, 1905).
- 13 Robert E. Grese, *Jens Jensen: Maker of Natural Parks and Gardens* (Baltimore: The Johns Hopkins University Press, 1992), 64-67.
- 14 The report was published posthumously. Charles Eliot, *Vegetation and Scenery in the Metropolitan Reservations of Boston* (Boston: Lamson, Wolfe and Company, 1898), 7-8.
- 15 Eliot, *Vegetation and Scenery*, 23. The watercolor sketches Eliot provided (by Arthur A. Shurtleff) featured movable flaps, or slides, to represent the proposed removal of trees, clearing of notches, and other effects. This conscious allusion to Humphry Repton's "redbook" presentations again indicated the degree to which Eliot admired and imitated Reptonian theory and practice. In his call for selective thinning of forests both to improve views and to speed the recovery of cutover stands, Eliot again echoed Olmsted, who advocated "the use of the axe" in such cases. To justify his position, Olmsted cited Brown and Repton, in addition to 19th-century scientific foresters, such as Bernhard E. Fernow and Charles Sprague Sargent. Frederick Law Olmsted, "The Use of the Axe," [1889] *Landscape Architecture* 3, no. 4 (July 1913): 145-152.
- 16 In 1893 Eliot had returned to Fairsted as a partner, and the firm (now known as Olmsted, Olmsted & Eliot) was hired by the Metropolitan Park Commission—so in fact the same landscape architects worked on both municipal and metropolitan park systems.
- 17 At Lake Itasca, the Douglas Lodge opened in 1905. The Bear Mountain Inn, another massive rustic lodge, opened in 1915.

- 18 Palisades Interstate Park Commission, *Palisades Interstate Park, 1900-1960* (Bear Mountain, New York: 1960), 31.
- 19 Quoted in David Schuyler, *The New Urban Landscape: The Redefinition of Urban Form in Nineteenth-Century America* (Baltimore: The Johns Hopkins University Press, 1986), 96.
- 20 In his opening address, Fisher also stated that "the parks have not received the attention they deserve. They have grown up like Topsy, and no one has been particularly concerned with them." Department of the Interior, *Proceedings of the National Park Conference Held at Yellowstone National Park, September 11 and 12, 1911* (Washington, DC: U.S. Department of the Interior), 3.
- 21 Platt National Park and the Hot Springs Reservation accounted for an estimated 145,000 of the total number of visitors. The third and fourth most visited parks were Yellowstone (23,054) and Yosemite (12,530). Congress appropriated \$819,181.67 between 1907 and 1913 for national parks, and an additional \$326,809.48 was raised through automobile and concession fees. Department of the Interior, *Reports of the Department of the Interior for the Fiscal Year Ending June 30, 1913* (Washington, DC: U.S. Department of the Interior, 1914), 114-116.
- 22 Hillory A. Tolson, *Laws Relating to the National Park Service and the National Parks and Monuments* (Washington, DC: U.S. Department of the Interior, National Park Service, 1933), 32-33.
- 23 Department of the Interior, *Report of the Superintendent of National Parks to the Secretary of the Interior for the Fiscal Year Ended June 30, 1916* (Washington, DC: U.S. Department of the Interior, 1917), 15.
- 24 Donald C. Swain, "The Passage of the National Park Service Act of 1916," *Wisconsin Magazine of History* 50, no. 1 (September 1966): 5.
- 25 Samuel P. Hays, *Conservation and the Gospel of Efficiency: The Progressive Conservation Movement, 1890-1920* (New York: Athenaeum, 1979), 196.
- 26 The landscape architect Mark Daniels, among others, fully expressed this set of aspirations for national parks by 1914. Department of the Interior, *1915 Annual Reports*, 843-852.
- 27 Quoted in Alfred Runte, *National Parks: The American Experience*, Second Edition, Revised (Lincoln, University of Nebraska Press, 1987), 92.
- 28 Department of the Interior, *1910 Annual Reports*, 57-58.
- 29 Daniels was paraphrasing an earlier comment by Secretary Lane in the first portion of this observation. Department of the Interior, *1915 Annual Reports*, 843, 849.
- 30 Department of the Interior, National Park Service, *Report of the Director of the National Park Service to the Secretary of the Interior for the Fiscal Year ended June 30, 1918* (Washington, DC: U.S. Department of the Interior, National Park Service, 1918), 10; Department of the Interior, National Park Service, *1919 Annual Report*, 25.
- 31 Horace M. Albright and Robert Cahn, *The Birth of the National Park Service: The Founding Years, 1913-33* (Salt Lake City: Howe Brothers, 1985), 36.



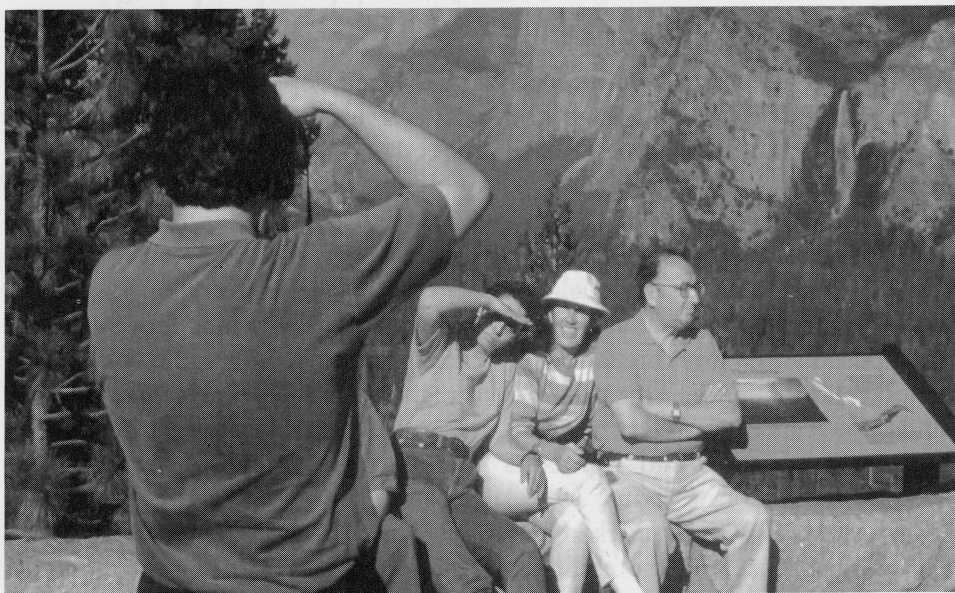
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Moving Towards the Middle in a World of Extremes:

Nature and Culture in Historic Landscapes

Introduction¹

Our understanding of the relationship between people and the landscape is complex and intricate, often blurred, and at times contradictory. There are many ways to view this relationship, from an anthropological perspective stressing human culture, to an ecological analysis of the pre-eminence of natural systems. As this relationship is considered there is the potential to recognize the ways through which our descriptive and analytical language forms one basis for our understanding of the landscape. In historic landscapes, the issues of nature and culture can be especially burdensome, loading any discussion of analysis and management with questions of authenticity, originality, appropriateness and innovation. The discussion, however, may also address understandings of landscape and language.



Visitors at Yosemite, September 1993. (*Robert Z. Melnick photo*)

Any consideration of issues of nature and culture may well take into account a broad range of analytical constructs, from eco-feminism to landscape ecology. In this paper, a narrow range of ideas are addressed, focusing on three linguistic and landscape frames: semantic ecotones, landscape differentials, and landscape as teacher. The reasons for addressing these three ideas are based upon a desire to recognize the commonalties between language and landscape, not only in the ways we describe places, but in the modes of language which we elect to employ in that description. The idea that landscape is a concept as well as a place is not new. (Appleton, 1975; Rolvaag, 1927.) I would like to suggest that there are additional tools from language which we may consider as we address some challenges of landscape protection and management.

Frame

Notions of nature and culture are often situated in our language and thought at ends of a spectrum (Blouet and Lawson, 1975; Appleton, 1975; Sauer, 1925), much like the proverbial characterizations of "black and white." At one end of this dialectic lies wilderness and nature; that which is supposedly free from human intervention and influence. This primeval landscape is often viewed as the embodiment of good and righteous thought and action. (Nevius, 1976.) This position is at times marked by a clarity of purpose and the ability to make right that which has been de-

spoiled by civilization. (Thayer, 1994) In its most simplistic terms, nature is the unattainable goal, the home from which we have been cast, the Eden of fallen humanity. In language, "nature" (as will be discussed later) is a difficult word, with multiple meanings. (Williams, 1985)

At the other end of this spectrum lies the power and creativity of culture, that which is created purposefully and decidedly by people. It may be material or non-material culture, but it represents the numerous and often uncatalogued actions of individual people. Culture is often and commonly identified as "high culture," such as fine art, symphony orchestras, and the wisdom of the poet laureate. It might also be considered simply as that which is created by the human hand or mind. Culture, in this construct, is the result of the deliberate act of the rational human, set apart from and above the naked wilderness. (Wilson, 1991) Culture is much like the valued opposing thumb: without it we would not be human, we would merely be animal.

For the purposes of this discussion, it is instructive to consider a point between these two posited extremes. While we have long familiarity with a dualistic model, we are less comfortable in the middle, with what might be termed the "semantic ecotone." Much like its counterpart in ecological systems, the semantic ecotone represents a most fruitful opportunity for diverse and rich consideration of a variety of landscapes. It provides a model for recognizing that

thought, ideas, and actions, much like landscapes, are complex constructions of overlapping layers. These defining world views of nature and culture are most limited when the vision is too narrowly framed. All too often land managing agencies, and those charged with natural and cultural landscape preservation, are invested in a construct which emphasizes the landscape differentials at the expense of commonalties and potentials, and thereby entrenches and polarizes opinion.

The concept of the "semantic ecotone" is purposefully borrowed from the ecological concept of ecotone: the transition zone between two different plant or ecological communities. An ecotone is also a zone characterized by a vagueness of borders and boundaries, and by the potential for both mutual dependence and competition. The purpose of the semantic ecotone concept is to understand that our "zones of thinking," all too often separated by various barriers, may both thrive and seek their strength through competition within another framework.

Semantic Ecotones and Oceanic Tidepools

A metaphor for examining these ideas might be taken from coastal waters: the oceanic tidepool. The tidepool contains organisms which not only thrive both in and out of water, but rely upon the cyclical regularity of the varying tides for nourishment and sustenance. In language, as well as in thought, we may learn

from this concept, so that our understanding of nature and culture in the landscape might benefit from a set of variable conditions, rather than a fixed position. (Bahre, 1991) We could then think, metaphorically, of a landscape as a "tidepool of the mind," ecologically rich and biologically diverse in a variety of settings, rather than limited to solid ground or robust ocean, but never the edge between them. The interest here is not only on richness and diversity, however, but upon the interplay between nature and culture.

This "ecotone" is regularly modified through human interaction with the landscape. The notion that some cultures address land management with a pure heart, while others only willingly destroy them, is grounded in great part upon an overly romantic view of the past. (Cronon, 1983, Silver, 1990). While we may consider the past, for example, as "a foreign country," and while modes of landscape appreciation, perception and alteration were different in the past than they are today, it is the modalities of those actions which mark the differences between past and present. (Lowenthal, 1985) The excessively narrow landscape view that institutionalizes the separation of nature and culture stems not so much from the realities of the landscape, as from a construct, both common and elite, which seeks to maintain an overly simplistic view of nature and culture. Additionally, the desire to reduce complex history to attractive simplicities (Brown, 1994) is common

throughout many avenues of historic re-vision.

In its extreme, this dichotomized construct fails to recognize legitimate management conflicts (such as open stream flow versus historic bridge preservation) between natural and cultural resources while overemphasizing erroneous conflicts (such as meadow protection for drainage and rare species protection.) Additionally, through the legitimization of polar opposites, the construct encourages a version of "landscape violence," an extension of a striking part of the American tendency towards violence which so much pervades our society. The role of violence in American history and throughout American society has been well documented (Brown, 1994). A key feature of this concept is the legal recognition, developed over many years, that Americans have "no duty to retreat," in the face of a threat or attack. This is a dramatic departure from the English common law which is clear on the requirement to move away or retreat from attack, all the way "to the wall" if necessary, prior to using force. (Brown, 1994)

Our attitude towards the landscape may be seen, in part, as an acceptance of the attitude towards violence in American society, and subsequently in the underlying nature/culture conflict which informs our land categorization and management. The idea that these two constructs are in opposition is essentially a violent concept, for it establishes an adversarial relationship

between those who first consider natural systems and those who first consider cultural systems. Additionally, the ability to "strike out" at the landscape, through ill-considered development and poorly regulated environmental controls, results in an inability to gain either time or perspective on circumstances. In turn, this reduces the potential for considerate thought and rational response to difficult situations.

Violence comes in many forms, and it would be ill-considered to suggest that all violence towards the landscape is intentional or necessarily malicious. Violence can be premeditated or accidental. It can be the accidental result of a different intentional path. While the actions may be harmful, sadistic, willful or merely inexcusable errors, the result to the landscape is often the same.

The American acceptance of violence breeds a lack of consideration for the details of a landscape, and a belief that power equals right. This can be seen most readily in the ways in which we build in locations such as overhanging cliffs, floodplains, and hurricane alleys. The power of technology breeds a hubris of violence towards natural forces and landscape elements. Our myths and stories speak of conquering the landscape, and honor those forbears who overcame great odds to establish cities, towns, farms and villages. This is not a nostalgic view of the past, but a recognition that modern technology have enabled us to overcome the limits which had been historically estab-

lished by the landscape. In this common vision, landscape development is rarely seen as an act of violence, but rather an act of courage and perseverance.

The adversarial relationship between people and place is implicit in the way we talk and think about the land, the manner in which we continue to refuse to retreat in the face of reasonable odds, and the associated glorification of the violent vigilantism displayed by continued disregard for natural systems in the American landscape. There are vigilantes on both sides of this argument, and those that spike trees to inhibit logging at any cost are themselves members of what Edward Abbey refers to as the "monkey wrench gang." (Abbey, 1990) The issue is not whether one side is right or wrong. The issue is the acceptance of violence as a reasonable means of action and as a way to settle disputes.

The ways in which we think and speak about landscape, therefore, and our understanding of landscapes, often reflect the ways in which we have come to revere places as much for what they were as for what they are. These reflections are about what exists today in places of supreme natural splendor and wonder, and about the larger and parallel idea that nature the ideal often overshadows nature, the real.

Landscape Differentials

Landscape, of course, is both a word and an ideal. While some see landscape as the embodiment of

simplified national tendencies (Nevius, 1976), it can conversely be understood as place. There is a complex relationship which we hold with the landscape, including the intricacies of nature and culture as they are played out within that relationship, and the manner in which we describe these places. While the intent here is to generalize some of these ideas, the primary vehicle for this discussion will be a view of Yosemite Valley as a landscape of both nature and culture.

As with the idea of a semantic ecotone, the concept of a landscape differential borrows much from a linguistic model. The research tool of the semantic differential is used to encourage or force research respondents to place their views along a marked continuum from one extreme to another. The most commonly used semantic differential is one which asks that the respondent strongly agrees, agrees somewhat, is neutral, doesn't agree, or strongly doesn't agree with a statement or idea. In landscape terms, the implicit acceptance of a differential model has resulted in an attempt to place any specific landscape at an exact point in a conceptual continuum. This has resulted, I believe, in a forced categorization of increasingly integrated landscapes.

Landscapes such as Yosemite Valley are complex systems (Sauer, 1925) of both natural and cultural resources; there are ways to manage these places which recognize not only our current societal needs and intent,

but also the natural and human history of these places. Furthermore, these landscapes are inadequately served when we consider them only within one classification of landscape and resource type.

The flawed dichotomy of nature/culture and the "landscape violence" which it breeds informs the framework for land management. Unlike the landscape itself, however, the management system today is not a synthesis of efforts, and therefore integrated resources are treated separately. This, in turn, breeds a competition for scarce resources as well as public favor, a sort of non-violent violence and mistrust of the views of others. Unless we reconsider our attitude towards landscape resources, the way we describe those resources, and our professional and intellectual boundaries, we will continue to be limited in land management and protection potentials.

One of the more puzzling idiosyncrasies of land management in the United States has been the forced and often illogical categorization of land and resource types into rigid pigeon holes of natural, historic, wilderness, and recreation. As we have learned more about our environment (physical, social, and psychological) there has been an increased role for the "resource specialist" (the caretaker) as well as the "resource enthusiast" (the consumer). We seem to be mired in a view of isolated resources, not in the sense of ignoring our fundamental ecological understanding of natural systems, but rather in our

substantial inability to extend that paradigm to a larger world view which integrates natural and cultural resources. For example, we rely upon legislation to "establish" wilderness, even if people have lived in an area for generations. We somehow need legislation and code to inform us that a place is, or isn't historic.

This dichotomy of land resource management is evident in the history of Yosemite Valley - a history which is as much about landscape control (i.e., culture) as it is about landscape protection (i.e., nature). This history is as much about landscape abuse and violence as it is about landscape use. Yosemite is also one example of the ways in which we think and speak about nature and culture in our public landscapes. The valley has historically been controlled by planning based upon a landscape differential, but with the potential to be understood within a richly diverse semantic ecotone.

Yosemite Valley was first set aside and "reserved" by the State of California in 1864. There has been a great deal written about the Valley and the Mariposa Big Tree Grove and about the battles over Hetch Hetchy and about what has become of this remarkable American wilderness. Scholars and writers such as Alfred Runte (Runte, 1990), Roderick Nash (Nash, 1989), François Matthes (Matthes, 1950), Carl Russell (Russell, 1959) and others (Clark, 1910; Demars, 1991; Foley, 1912; Hutchings, 1886; Orland,

1985) have taught us to understand what Yosemite means to us as a people and as a group of peoples. The photographs of Carleton Watkins, George Fiske, and Ansel Adams, to name a few, have concretely set the landscape of Yosemite in our collective construct of wilderness, westernness, and nature. Along with that other great icon of the American west, Yellowstone, Yosemite has been both revered and criticized, honored and desecrated, attended to and neglected.

Yosemite Valley is not so much the abandoned wilderness, but a landscape which has been gradually modified over time, till it has reached the point that it no longer coincides with its public image. The reality no longer fits the image, but it is a reality which has been changing slowly, not dramatically, over time. This image is based, as Runte points out, on the "art of promotion," from Albert Bierstadt and *Sunset Magazine* to the railroads and the National Park Service itself.

The landscape, as well, is based on divergence of thinking about what is nature and what is culture. Neil Evernden, in his book *The Social Creation of Nature*, observes that "what is nature is the not-human." (Evernden, 1992) Evernden argues that we have created nature, and the idea of nature, as a "resource for humans," in great need of management and control. Equally important to this discussion is the understanding of "nature" as a dual term, describing

both that which is non-human, i.e., the natural world, and that which is the fundamental characteristics of an entity, i.e., the essence of an object or person. We regularly refer to "human nature," never quite realizing that this is a creative juxtaposition of words.

Furthermore, in this line of thinking, "to ask what is the nature of something is to ask about its character or essence," (Evernden, 1992) implying that nature is somehow above, beyond or more supremely delineated than the human characteristics of that same entity. Nature as a place, however, is different. "[T]he domination of nature is not only a right but an obligation: nature is to be overcome, not preserved." (Evernden, 1992) Nature, however, is also about change, and what happens to place. We understand it to imply the dynamic characteristic of a place, and those qualities which cause the place to evolve and change. Finally, nature is a thing, an object, a trophy to be displayed in a showcase. We think of preserving nature by inhibiting change in a place, clearly a contradiction which it is difficult to overcome.

Nature, then, has many forms: characteristic, process, entity, and object. All of these assist in the understanding of Yosemite and the ways in which, since the early 1860s, non-native peoples have altered and modified that landscape, sometimes in the name of protection, but more often in the name of control, dominance, and exploitation.

Landscape as Teacher

While we have inherently understood, therefore, that nature is to be dominated and placed in our societal trophy rooms, we also inherently understand that nature is the great educator, the great teacher, a source of knowledge about life and its meaning. While filled with contradictions, this notion allows us to revere what we capture, to venerate what we control and to worship that which we subjugate. Given the perverse and often contradictory relationship between people and the American landscape, perhaps there is no other way. In Yi-Fu Tuan's terms, we view nature through the dual lens of "dominance and affection," with a need to both love and control it. (Tuan, 1984)

This idea of nature as educator is not recent, of course. One of the most vivid and common examples comes from the writing of James Fenimore Cooper, the first great American novelist, whose writings were popularly published and circulated. In his famous *Leatherstocking* series, Cooper described his protagonist, Deerslayer, as having the "signs of belonging to those who pass their time between the skirts of civilized society and the boundless forests." While it is clear that Cooper's gender-focused characterization of this society carries other implications, for this discussion it is the heroic descriptions of the man that are of interest. Deerslayer is a man of the woods and of the edge, the ecotone, the frontier between civilization and sav-

agery, who learns from what is around him. As he and a companion approach an especially beautiful and untouched lake (described by Cooper as having "Rembrandt-looking hemlocks"—America's answer to European culture) Deerslayer exclaims: "This is grand!—'tis solemn!—tis an edication of itself, to look upon." (Cooper, 1841)

This is far more than the noble savage, and implicitly better than the "book-learning" of the schoolhouse. The strength of wilderness and nature is clear, not only because it breeds an atavistic nobility, but also because there are lessons that only "nature" can teach. (Deakin, 1967).

Yosemite Valley, as both place and teacher, can be read in the same way. In a concise collection of poems, for example, first published in 1897, Yone Noguchi (Noguchi, 1897) describes the Valley as "the balance of Glory and Decay." Although we may think of Yosemite as an "embattled wilderness," as Runte terms it, it is also a manipulated landscape, molded and shaped as much by human decisions as by natural systems.

Early pamphlets extolling the wonders of Yosemite also reminded potential visitors of the efforts of the federal government in assuring that a visit to this "wilderness" would not be too wild, after all. In 1919, Secretary of the Interior Franklin Lane prefaced a Yosemite guidebook (United States Railroad Administration, 1919) with the following comments:

To the American People:

Uncle Sam asks you to be his guest. He has prepared for you the choice places of this continent - places of grandeur, beauty and of wonder. He has built roads through the deep-cut canyons and beside happy streams, which will carry you into these places in comfort, and has provided lodgings and food in the most distant and inaccessible places that you might enjoy yourself and realize as little as possible the rigors of the pioneer traveler's life. These are for you. They are the playgrounds of the people. To see them is to make more hearty your affection and admiration for America.

While Lane and National Park Service Director Mather were experts at promotion and public relations, our interest here is on the understanding that this was (and is) often a landscape to be altered for short-term human enjoyment, satisfaction and pleasure, without the "rigors of the pioneer traveler's life." While this is not an unknown concept (Demars, 1991) recent studies of Yosemite Valley reveal a landscape of both nature and culture, yet one which is popularly revered for its natural splendor, to the almost constant exclusion of human history. The idea that one must choose between nature and culture is reinforced in interpretive displays, visitor services and staff competition for resources and recognition. The organizational and disciplinary structure encourages and

fosters this differential approach.

Currently at Yosemite, there is a some effort to consider the interrelationship between natural and cultural resources, their interaction in producing this landscape, and to affirm the value of the park's cultural landscape resources while also allowing for improved visitor services, interpretation and enjoyment. (Gramann, 1992; Demars, 1991; Sargent, 1975) The essential goals and intentions of the park will not change, and one might anticipate the conflicts between visitor use, resource protection, and management intentions will continue. While there is some hope that the process will seek the "ecotone," there is great resistance to this from all quarters.

In the past fifteen years a method has been developed for understanding cultural landscapes, especially in the American landscape (Land and Community Associates, 1994). This method is partially based upon the linguistic analogy that to understand and appreciate cultural landscapes, we must learn to "read" them, as well as consider the forces which caused them to develop. This process is much like learning to read a language. We recognize patterns, details, ("words"), parts that go together, and pieces that "sound" strange next to each other. We must learn the "grammar" of the landscape, and allow the landscape to be a teacher. This is, of course, not an easy task. We are accustomed to looking at historic structures and understanding their importance and potential signif-

icance. Cultural landscapes, however, are more subtle than structures, and require a somewhat different approach. As a visibly dynamic entity, the landscape, (natural and cultural) is best understood by an analytical system which responds to the changing details of that landscape.

A View of Yosemite Valley

There are many prominent natural features of Yosemite which serve to explain its cultural prominence as a natural landscape, as well as our natural inclination to downplay its history. (Geological Survey of California, 1869) Formed by alpine glaciers moving through the Merced River canyon, the U-shaped Yosemite Valley, sometimes called the "Incomparable Valley," is one of the world's best known glacier-carved canyons. (Matthes, 1950)

Its broad, flat floor; steep, sheer granite walls and domes; lush, green meadows; and spectacular waterfalls are familiar scenes well-documented in literature, painting, and photography. The Merced and its tributaries wind their way through the valley floor, waterfalls continue to marvel in their power and variety, and wetlands provide wildlife habitat as well as seasonal wildflower displays.

Major geological features [such as El Capitan, (3593 feet), Half Dome, (8842 feet), and Sentinel Rock (7038 feet)] dominate many Valley views and present an imposing facade of natural strength and fortitude. (Hall, 1921) The first non-native peoples to see this valley were awed by its sheer

magnitude, as it was unlike any thing they, or any of their colleagues, had seen before. (Russell, 1959; Matthes, 1950)

Valley vegetation occurs in alternating patterns of open meadowland and dense groves of trees that create a series of landscape spaces. From dark, dense forests to open spaces with long, dramatic views, the character of the Valley is heavily influenced by vegetation. The relationship of forest and meadowland is dynamic, however, and subject to changes wrought by seasonal and annual fluctuations in available moisture, catastrophic weather, pedestrian and vehicular traffic patterns, and National Park Service maintenance programs, such as clearing and planting programs. (Hill, 1916)

The eleven meadows comprise one of the most sensitive ecosystems in the Valley. Over the years, human alteration to the natural channel of the Merced have lowered the water table and changed the composition of the vegetation in the meadows. Intentional introduction of non-native species has had an adverse impact on native plant materials. The landscape of the meadows, far less dramatic than that of El Capitan and Half Dome, was readily sacrificed in the name of flood control which was necessary to protect human features. The "wilderness" landscape was modified, and then modified again to protect the previous investments.

Over the years the National Park

Service has attempted to control the natural lateral movement of the Merced River channel by deepening, widening, or rechannelizing flow. These attempts were motivated by the desire to protect investment in bridges and other structures in developed areas. Current degradation of adjacent vegetation has made it abundantly clear that these programs have been detrimental to the environment, and there is now discussion of allowing the Merced to return to its natural configuration. This, of course, could have profound implications for this landscape—implications which have not yet been adequately addressed.

We cling to the understanding that this is a landscape to be used, and not always protected for its natural values. The valley is not a landscape of seclusion, nor one of gradual and incremental rejuvenation. Through its multiple uses, inspired by the intense needs of so many visitors so far from other vestiges of western civilization, Yosemite valley has become what in any other setting we would term "urbanized." Thus, the valley is a landscape of broad differentials.

Controlled views and vistas are critical to the average visitor experience, and, as with many other aspects of Yosemite, through the years the experience has been set, programmed and controlled. At one time Kodak engaged in tree cutting, clearing and trimming (with the active consent of National Park Service) to ensure that classic photo opportunities would always be available. The

landscape of Bierstadt and Adams can now be personally reproduced and displayed in photo albums, slide shows, and home videos along with images of other great California icons.

The notion of interpretation—actively showing and engaging the visitor with what they are seeing so that they may better appreciate it—is fundamental to the experience of this landscape. Throughout the Valley, views to supreme natural wonders are carefully framed, described and made available to the visitor. (U.S. Department of the Interior, 1931; Stornoway, 1888) While nature is something to behold, especially here, it is also a prize to be captured - and then revealed again and again as a trophy in the profound comfort of one's home. More than anything, the idea that we "take" pictures has a special meaning in this landscape. It reflects the profound need to mark ourselves in this space, so that we may be sure, and so that others may be sure, that we were actually here. The marking of oneself in a special place, not through writing or poetry or memories in our minds, but through the taking of photos, is one of the great sports of our century. It is the fox hunt of civilized America, with a reward which proves to all that we have been "here." Nature becomes culture in this valley. (Orsi, 1993)

The landscape of Yosemite, like so many landscapes of the North American continent, (Malin, 1984; O'Brien, 1984) is neither the wilderness which we seek, nor the city

which we so often fear. For many, it has become the point of quest - the place to meet a personal, societal, and natural history. While the National Parks, both ideal and real, are a major contribution to the democratization of the American landscape, they nonetheless allow us to push aside some broader questions. For example, Yosemite, both ideal and real, absorbs a great many pressures. There are the pressures of the visitor, the pressures of the experts, the pressures of politics, the pressures of our collective consciousness which repeatedly says that this is a place which must be available to anyone who wants to come to it, but must also be protected for all of those who would come here in the future. In many ways, this is a Herculean task which we have set for ourselves. Most importantly, this valley must withstand the pressures of differential extremes that are imposed upon it in the guise of caring.

Yosemite, and all of the National Parks, must respond not only to the immediate pressures and needs of its clients and taskmasters, but also to the larger societal realities of population expansion and the increased popularity of nature as an idea. This concept of nature as an artifact to be viewed and extracted sets in motion the perceived imperative to protect Yosemite as an imagined wilderness, forgetting the true reality of the complex past of the American west. (Limerick, 1987) If, after all, it is just another place to spend time in a swimming pool, why come here? If it

is, after all, just another place to sit at a picnic table, why spend the time and effort to arrive here? If it is, after all, just one more traffic jam, why bother?

One answer perhaps lie in our need and desire to get close to nature, but only so close; to leave behind the comforts of our home, but only so far behind. (Wilson, 1922; Worster, 1993) The on-going dialogue between nature and culture is evident not only in the history of the American landscape, as reflected in Yosemite, but in its present as well; a present which raises great concerns for the future of this landscape. As the national parks of the nineteenth century were seen by some as lessons for our society, perhaps it is still true today. The confusion, over-burden, and intense focus on Yosemite and all of the national parks and our public landscapes raise substantial issues about the collective ways in which we treat the places we revere. As Alfred Runte reminds us: "Yosemite is too important to be just another place." We may think about it, however, as an indicator species, revealing both our past opportunities, our recent foibles, and the future of our mistakes.

Conclusion

How then do we reconcile the unrelenting need to protect natural systems with the impulse to transform them into human systems? Perhaps, we achieve this through an inclusive view that nature and culture are, in fact, not merely "two sides of the

same coin." Rather, we need to engage in non-linear and cyclical modes of thinking about nature, culture, and landscape. This is a complex relationship, one which is best understood through clarification, rather than through simplification.

As with an ecological ecotone, a semantic ecotone enables us to look beyond the limited values of a singular view (or landscape type) towards an understanding of temporal and resource based changes in both the virtual and actual landscape. The intensely felt need to stake our landscape views at different ends of the linguistic and managerial spectrum (or even the view that there is a spectrum) is ultimately harmful to the larger goal of landscape sustainability, whether we are grounded in a natural or a cultural perspective. At some level, of course, the concept of the semantic ecotone must address the reality of different "species" competing for the same geography and resources. Diversity can result in its own degree of competition.

Land managers and design professionals, through need, professional impulse, or codified expectations, have come to rely upon narrowly de-

fined understandings of landscape values. There is the opportunity, however, to recognize that a broader and more complex understanding of these values will, in turn, support a richer and more satisfying process for determining and protecting landscape values. In Yosemite valley this would mean, for example, a policy which allows for the inclusive management of the valley meadows. This policy might recognize that the meadows are landscapes of both natural (hydrologic) and cultural (native American) significance. Rather than the competitive management which now presides, this landscape could be treated as an integrated and dynamic whole.

In any study of the landscape, we can recognize that it has always been the "garden" which has had as its subject the relationship between nature and culture.² If we recognize "landscape," therefore, as the integrating force for nature and culture, we will then present ourselves with the opportunity to move beyond the staked positions at extremes of a landscape differential and towards the inclusive and dynamic ground of the semantic ecotone.

Endnotes

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- 2 Thanks to Kenneth Helphand for this concept.

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Is Landscape Preservation

an Oxymoron?

"Every act of recognition alters survivals from the past. Simply to appreciate or protect a relic...affects its form or our impressions... Interaction with a heritage continually alters its nature and context, whether by choice or by chance."
(Lowenthal, 1985)

I. Introduction

To a plant ecologist, such as myself, the parts of the landscape of most interest resist preservation naturally. Plants, and the wildlife associated with them, grow, move around, reproduce, die, and generally bring to the landscape a very uncooperative tendency to change. A successful effort at preservation would seem to require its own failure. So what, exactly, is the manager of a landscape trying to preserve?

One element of the problem is the very broad range of entities to be preserved. Called "cultural landscapes," they are defined as "a geographic area, including both cultural and natural resources and the wildlife or domestic animals therein, associated with a historical event, activity, or person or exhibiting other cultural or aesthetic values" (Birnbaum, 1994). Are there any landscapes that this excludes?

In addition, the degree of the problem may differ for the several elements found in cultural landscapes. We can classify the resources of the landscape into four categories. There is, first, the natural terrain—the rocks and soil of the substrate that are configured to form topography. Second, we may find a rich and complicated

diversity of human artifacts representing the surviving relics of the landscape's history. The third resource includes the heterogeneous array of living plants and animals, including humans, that fulfill a transitory existence in the landscape, often in complex biological association with each other.

Finally, there is often a less tangible resource present that reflects the deliberate configuration or alteration of the first three elements into what can be called a design, with its very formal characteristics or its less formal, so-called vernacular qualities. There will also be some set of accidental characteristics that, while not a deliberate component of the design, are often an acknowledged indirect, accepted, and appreciated part of the

landscape's life in time. Often the choice of the design's materials and organisms determines the later proportions of these accidental qualities, forming a kind of landscape patina. Since these four types of resource often express different rates of change relative to each other, it may be appropriate to bring different treatment philosophies to these different resource elements.

A third part of the problem with the idea of landscape preservation depends upon the scale of the landscape. As the cultural property under management increases in geographic size, unambiguously cultural resources become intermingled with "natural" resources in spatially complex mosaics. The historic house with a small lawn bordered by a second growth forest presents a very different set of issues than the remnant mining camps scattered throughout a vast wilderness watershed. In an analogous way, all landscapes can be seen at different scales of time in which a particular "period of significance" overlays and is overlaid by cultural landscapes of other periods, and with modern land uses.

Finally, as noted at the start, there is in landscapes the irrepressible biological vitality of living organisms struggling to survive. No amount of pruning can "preserve" the form or material substance of a tree as it existed at one moment in time.

In the face of these difficulties, the preservation community is seeking to create consensus around a single set

of guidelines to support managers of cultural landscapes (NPS, 1995). These efforts have drawn upon similar standards for historic buildings, structures, and objects for the classification, and often the language, of treatments (NPS, 1992). So, for instance, the **preservation** treatment calls "*for retention of the greatest amount of historic fabric*" and **restoration** allows for "*the depiction of a site...by preserving materials from the period of significance and removing materials from other periods*" (NPS, 1995).

It may, however, be of some value to broaden our perspective to other types of resources. In this heuristic sense, cultural landscapes may be seen as residing on a spectrum that stretches from the purely cultural to the purely natural (Figure 1). At one end might lie the operating system of the average personal computer; at the other end sits the genetic material of an organism such as *E. coli*, the common gut bacteria. Given this bug's happy existence in the human intestine, I will leave it to philosophers to determine just how natural *E. coli* is.

In the remainder of this essay, I will explore this spectrum by examining the form and language of preservation activities as they apply to biodiversity, on the one hand, and painting restoration on the other. I will then briefly return to current directions in historic preservation, and suggest what enlightenment might bring to the challenge of cultural landscape preservation.

II. The Conservation of Biological Diversity

On the natural end of the spectrum, there are two broad activities involved in the preservation of biological diversity that may provide some guidance for cultural landscape managers: ecological restoration of lost landscapes and ecosystem management of existing natural resources. At first glance, the new discipline of ecological restoration would appear to provide hope for such lessons, especially those attempts that go beyond a simple reclamation that installs an erosion-controlling mixture of species quite distinct from the community displaced by disturbance. In practice, however, ecological restoration, if taken literally, promises more than it usually delivers. Even with considerable, continuous management efforts, few such projects are able to truly restore the original plant and animal community in all its historical complexity.

So how authentic are successful restorations? The Henry Greene Prairie at the University of Wisconsin-Madison Arboretum is one of the more successful examples to date (Kline, 1992). This 50 acre cornfield

was first planted with prairie seedlings and transplants nearly half a century ago and today supports over 200 native species of herbaceous plants dominated by big and little bluestem and Indian grass, all classic prairie species. However, the island-like nature of the tract subjects it to continuing invasion by weeds and woody species, requiring frequent intense burns, cutting, and application of herbicides. Missing, of course, are a number of characteristic animal species—green snakes, upland sandpipers, Franklin's ground squirrels, elk and bison—whose presence, along with numerous unidentified arthropods and soil organisms, would create the frequent local disturbances that facilitate soil development and support rare, early successional prairie species. Today such small disturbances are likely to be invaded by alien species such as sweet clover and wild parsnip developing from dormant seed in the soil, a heritage from the cultivation of corn. Managing the invasion of exotic plants is the greatest challenge of the cultured and cultural landscape, thus clearly defining ecological restoration as a highly refined form of gardening

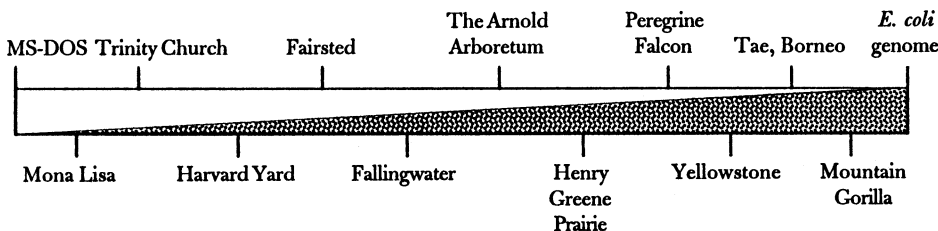


Figure 1. Is Landscape Preservation an Oxymoron?

(Jordan, 1994), albeit one where the intentions of the garden designer (if that is the right word) are greatly constrained by an ideological commitment to a native past.

Beyond questions of authenticity, the art of restoration ecology has become mired in the kind of philosophical and scientific disputes about its practice that remind one of similar rhetoric surrounding the restoration of art (Mendelson et. al., 1992; Packard, 1993; Baldwin et al., 1994). Critics argue about the historical reality of the primeval condition toward which restoration efforts are aimed. They decry the highly intrusive technological assaults (controlled burns, herbicides) mounted by ardent practitioners against aliens, and they mourn the loss of native species judged "foreign" to the presumed original community. They accuse the restoration ecologist of creating an unnatural artifact "analogous to an art forgery" (Elliot, 1982). Restoration ecology is, they say, at best little more than "an expensive self-indulgence for the upper classes, a New Age substitute for psychiatry" (Kirby, 1993) and at worst "*an unrecognized manifestation of the insidious dream of the human domination of nature*" (Katz, 1991).

Perhaps the wisest counsel for the restoration ecologist, and for us, comes from a pair of academic ecologists who call upon restorationists to avoid two intellectual pitfalls (Pickett and Parker, 1994). First, do not assume that there is only a single unique and knowable reference state, the so-

called climax or primeval community, that can guide the process of restoration. Because natural systems exhibit a variety of pathways of change and multiple possible combinations of plant and animal species, an ecological restoration may measure itself against any number of legitimate systems and different results may all be ecologically valid. Second, a restoration is not a single event, but rather an experimentally defined intervention into an ongoing process. Because restoration involves so much trial and error, documentation of this intervention and monitoring its progress are critical to its success.

This emphasis on the ubiquity of change in natural communities, and the variety of pathways it may take, reflects a fundamental shift in our understanding of nature. This shift, in the name of ecosystem management, is beginning to influence the design of natural resource policies on public lands (Loomis, 1993). Called the New Paradigm in ecology (Pickett et al., 1992), the concept is expressed in the metaphor of the "flux of nature," as distinct from the "*balance of nature*" metaphor which has pervaded ecological thinking for most of this century.

Under the older "balance of nature" concept, a plant and animal community undergoes a linear, predictable pattern of change following an external disturbance such as fire. This succession of species ends in a stable, diverse configuration called the climax community that represents the primeval or virgin landscape prior

to human-induced disturbance. The New Paradigm replaces this descriptive "balance of nature" approach with the concept of a continually changing, dynamic configuration of natural elements called an ecosystem. It includes all the plants, animals, and microorganisms that interact with each other, and the inorganic nutrients and energy that create change. The "flux of nature" perspective emphasizes the importance of *processes* within the system that cause the dynamic and unpredictable nature of these changes. Rather than a linear pattern of community development, the New Paradigm sees multiple possible pathways for succession and a number of relatively stable community configurations along the way. The system is open to influence and regulation by outside factors; therefore understanding its dynamics depends on the context in which it is embedded.

The New Paradigm places great importance on the pervasive presence of disturbance as a continuing agent of change within the system. Disturbance can be local (the fall of a tree in the forest) or catastrophic (widespread wildfires), and the evaluation of its effects is therefore very dependent upon the scale of observation. Finally, the "flux of nature" perspective sees human influences as integral to all systems, including the kind of human-induced disturbance, both local and catastrophic, that we sometimes identify as our cultural heritage.

Modern ecology's focus on process and context can also be seen in

the concept of contingency. In this view, the specific dynamics of any one system will be contingent on its history, on the accidents of arrival as species disperse into the site, and on the nature of the system's interactions with the surrounding landscape. The patterns of change in any landscape will be unique, highly variable, and historically contingent.

Because the New Paradigm explicitly includes both natural and human disturbance as important agents of change within systems, it recognizes that cultural influences can often threaten the ecological integrity of ecosystems (Woodley et al., 1993). The evaluation of ecological integrity is not measured in terms of physical materials or organisms, but rather in terms of dynamic processes that maintain the functional interactions among system elements. Integrity is compromised when elements (biodiversity) are lost and functions (energy flow, nutrient cycles) are altered.

The practical application of this paradigm shift can be seen in the struggle to provide Park Service resource managers with a new philosophy of operation (NPS, 1994). On the surface, the draft document *Ecosystem Management in the National Park Service* reflects a need to define properties or landscapes not by political or agency boundaries, but by natural boundaries, called ecosystems. At a deeper level, however, this document encourages a profound shift in the way managers are to think about the resources under their

care. By focusing on the larger system, it encourages managers to move away from a single-resource approach to decision-making. Instead they should adopt an approach that stresses the interconnected nature of all parts of the system, including the past and present effects of humans.

"The bifurcation of the world into human and natural spheres is a false dichotomy under ecosystem management...The National Park Service should reduce the barriers to ecosystem management that result from artificially separating cultural and natural resources and strive to replace them with collaboration planning, research, and resource management efforts that reflect the real-world integration of material, human, and natural features."

In summary, ecosystem management stresses the integrity of system processes, the importance of local context, and the unpredictable and contingent nature of living systems. A systems approach sees natural and cultural resources as integrated aspects of one management system.

III. Painting Restoration and the Preservation of Artifacts

Like ecological restoration, the act of painting restoration is an intervention motivated by a desire to recreate an entity presumed to have existed in the past. An old painting, especially one whose creator is an acknowledged master, represents a highly designed cultural artifact. Because painting restoration has a long history, the discipline has reached some

consensus regarding the philosophical justification and approaches to be taken for its practice.

Prior to the 18th century, works of art (as we judge them today) received little respect as artistic creations; they were often treated as functional artifacts, serving the purposes of decoration, education, or cult objects. Images which became worn, darkened or damaged were renewed by overpainting. If too badly deteriorated, they were destroyed to preserve their sacred dignity. Restoration often involved significant modification of the images to fit the morals or tastes of the age. The profession of restorer flourished in the 18th century when the restoration, including a preference for embellishment, was more important than the original creation.

It was in the 19th century that the work of art was appreciated as an historical document, and only in the last half century have advances in science begun to inform preservation. The word conservation has replaced restoration to reflect an approach that emphasizes protection of the integrity of historic material with minimal intervention. The ethics of modern conservation also stress the importance of documentation for all interventions, and the adoption of technical solutions that are, to the extent possible, reversible.

From the moment a painting is finished, it begins to change, both from the internal effects of age on the chemistry of the materials and from the accumulation of dirt, the accidents of damage, and subsequent at-

tempts at restoration. In addition to the original significance of the painting, an old masterpiece comes to have an acquired significance revealed in its patina that reflects the value we place on age and the importance of survival (Hodkinson, 1990). These dual elements of significance, the original aesthetic value and the acquired historic value, create a natural tension that defines the current integrity of the work and shapes its value for us. Paintings which have been restored to some presumed original condition are frequently greeted with shock at the brilliance of the colors and the loss of a mellowing glow following the removal of grime and yellowed varnishes (Watson, 1992).

Of course, such strong intervention is usually justified in the name of artistic intent. The conservator is merely restoring the work to the condition of its original appearance, as the artist would have wished us to see it. Today, however, such justifications are rather suspect (Carrier, 1992). To quote one famous critic of radical cleaning in the name of artistic intent: "*One should have thought it common ground that Titian is dead and that we cannot ask him what his intention was*" (Gombrich, 1962).

Many ancient works were created not as art, but as functional artifacts serving a particular purpose in a specific setting; once removed from this setting, they become a different object than the painter intended. Similarly a painter may create a work with little thought for its permanence

over time, using fugitive materials, and working under conditions of illumination that instantly change once the work leaves the studio. Even when artistic intentions are thoroughly understood, it is not clear that the conservator has an obligation to honor them above all other considerations of value.

In the end, each act of conservation becomes a statement of interpretation (van de Wetering, 1992). Because a work of art begins to change from the moment of its completion, its acquired historical value may eventually surpass the value of original intentions. Any intervention, even the removal of accumulated grime, will alter these relations and reflect the context and interpretive intentions of the conservator, not the artist. Every era has its own way of seeing the past.

Perhaps there is no better proof of this relativity than the existence today of three equally valid approaches to treating the old varnishes on paintings (Hedley, 1990). One approach ("complete cleaning") removes all varnishes, giving primacy to the value of color and what remains of the original paint. The second approach ("partial cleaning") thins the ancient varnish uniformly to harmonize color and space while retaining the antique character of the surface. The third approach ("selective cleaning") removes varnish in certain locations to achieve a balance by manipulating the relations of colors at their borders, thus restoring the image's pre-

sumed original unity. It is even more striking that the National Gallery in London, the Louvre, and the Metropolitan Museum of Fine Art each employ a different approach.

Because each approach implies a different interpretation by valuing a distinct component of a painting's significance (color, antique harmony, internal relations), each achieves equal validity as a treatment because *"they are parallel ways of constructing a new relationship to the artist's intent and the passage of time,"* thus achieving what Hedley (1990) calls *"new found relativities."* In this sense the process of cleaning fundamentally changes the work as an aesthetic object by re-presenting it to the observer.

"We have lost the old original relations. We did not even want them to stay unchanged, for the passage of time is important. Yet, we need to understand our new found relativities, not as a battleground for right and wrong, but as the varied strands which have come to connect our present view of art with the past."

(Hedley, 1990, p168).

The history of painting conservation, then, seems to yield three observations that may enlighten landscape preservation. First, in contemplating **restoration**, the changes that come with age have added a set of positive, acquired values to a work that must be weighed against its loss of original significance. Second, the intentions of the creator are always seen through the lens of our own times and may therefore be essentially unknowable.

Besides, intent may be largely irrelevant when what was created for one purpose (functional artifact) is made to serve a new purpose (art object). Finally, any treatment is an interpretation that constructs a new relation between the observer and history. Thus there may be multiple, equally valid treatments that give primacy to equally important, but competing, historical values.

IV. A New Paradigm for Historic Preservation

In 1991, the quarter-century anniversary of the National Historic Preservation Act of 1966 brought forth an outpouring of introspection and prognostication in a book of essays called *Past Meets Future* (Lee, 1992). One preservation advocate (Boasberg, 1992) calls for a new paradigm in preservation that would greatly expand its mandate and enlarge the constituencies which it serves. In the future, preservation efforts will need to move beyond saving single objects of historical or aesthetic significance to the broader *context* of urban or rural planning. This will require full immersion in and better management of the political and economic *processes* that shape change in the built environment. To this plant ecologist, this sounds like a systems approach to preservation, a recognition that cultural relics surviving from the past are just one part of a dynamic, living present.

This new paradigm will also need to form new partnerships with constituencies not traditionally involved

in the historic preservation movement. Environmentalists form one logical group for the development of partnerships around common planning goals, and the preservation of cultural landscapes would seem to be an excellent meeting ground for exploring the relevant issues. More importantly, there runs throughout *Past Meets Future* a recognition of the socially narrow origins of preservation in this country and the socially broad impact that preservation has brought, especially to the urban setting. An expanded preservation mandate must embrace and consult minority populations whose cultural interest in the past may be different than traditional architecture.

The thrust of the new paradigm is captured in a quote of Professor Robert E. Stipe that acknowledges the importance of historical integrity but states:

"At the same time, national, state and local preservation programs...will have to display increased sensitivity to changing concepts of significance that have less to do with maintaining the artistic and stylistic integrity of buildings than they do with enhancing the quality of the larger environment for the daily living purposes of people."

This shift in philosophy is also argued for the legal foundation of preservation decisions that are traditionally based on aesthetics (Costonis, 1989). The objects we designate for preservation may be seen as "icons" in our environment that confirm a sense of order and identity in a

world experiencing a frightening rate of change. Aliens, objects that represent the forces propelling innovation and change, threaten icons. While laws to protect icons from aliens may have been erected in the name of aesthetic qualities and "objective" standards, in reality their implementation requires a communal process that weighs and adjudicates the multiple values we bring to our perceptions of the known environment and the new.

"Beauty is off the mark as the force behind aesthetic laws...In its place [should be substituted] our individual and social needs for stability and reassurance in the face of environmental changes that we perceive as threats to these values...legal aesthetics cannot itself make the choice between familiarity and innovation. That is an issue for our culture at large" (Costonis, 1989, p.xv, xviii).

Thus the standards we use to define preservation goals and reach management decisions should also reflect the social values of a broader community, rather than some elusive aesthetic qualities or presumed creative intent.

V. Conclusion

At the end of our journey, what enlightenment can we bring to the challenge of landscape preservation? First, the discipline of cultural landscape preservation, by virtue of its hybrid nature, is presented with an opportunity to mediate two trends: the interest that preservationists have in forming a partnership with envi-

ronmental advocates, and the acknowledgment by natural resource managers that conservation, to be successful, must understand and accommodate the values of a larger society (NTHP, 1994). Perhaps recognizing that ecological restoration is essentially a cultural activity may be a starting point.

We can also want to begin to evaluate cultural landscapes as *systems* more than artifactual properties. This new perspective recognizes that all relics of the past qualify for some level of historic validity. Analysis of integrity and its evolution through the life of the landscape might focus on the cultural function the landscape served and how processes of landscape change due to natural and human factors altered that function in its particular social context. The object of preservation then becomes less the material constituents and more the whole system in its present day operation. Evaluation of preservation options will be very contingent upon location, site history, present social needs, opportunities for creative interpretation, and the scale of the time and land under consideration.

This may also require greater resistance to the comfortable expedient implied by the concepts of "design intent" and "period of significance." Although particular points of time in the past are important, landscapes as systems continually acquire new significance that can inform the present. Especially with highly designed landscapes, the cult of artistic intent ignores the functional significance of

the land through time by idealizing an image of it in the past as entirely the creative expression of a designer.

We may have inherited this preoccupation with original design from the modern movement in architecture which conceived the completion of a building at the end of construction as the moment of maximum expression for the designer. Subsequent changes in the materials—what we call weathering—were a subtraction from this ideal, a loss of design integrity in the face of nature (Mostafavi and Leatherbarrow, 1993). Yet an older architectural tradition envisioned the life of buildings long after construction, and shaped the design to accommodate weathering as an expression of the building's duration through time. The use of rusticated, "unfinished" stone surfaces in Renaissance construction may be seen as an expressive acknowledgment of nature that anticipates weathering.

"The fact of weathering inheres in all construction...and reminds one that the surface of a building is ever-changing. While a potential nuisance, the transformation of a building's surface can also be positive in that it can allow one to recognize the necessity of change, and to resist the desire to overcome fate—an aspiration that dominated much of modernist architectural thought through its resistance to time. The preoccupation with the image or appearance of the building in current practice is symptomatic of this desire" (Mostafavi and Leatherbarrow, 1993, p.116, 119).

Could our impulse to capture a landscape and restore it to a particular moment in the past reflect a similar modernist preoccupation?

Perhaps the best landscape designs, rather than simply creating an abstract idealization of artifacts and organisms, do fully anticipate the life of the land following construction. This would include the inevitable cultural changes that flow from and express the land's functional operation. The "weathering" of the landscape and the accompanying acquisition of socially-mediated significance are not revealed in the documentation that directs construction, or in the photographs that record completion. When landscapes are seen as systems, though, the functional significance that is acquired over time can also be seen as part of the creative intentions of the designer.

Finally, the act of preservation is always an interpretation. In our own day we believe that preservation means material preservation; that is why landscapes, or at least the living elements of landscapes, present such a challenge. Yet material preservation is just one way to conserve a heritage. David Lowenthal, in his book "The Past Is A Foreign Country", notes (1985) that "*the great Ise Shinto temple in Japan is dismantled every twenty years and replaced by a faithful replica built of similar materials*

exactly as before. Physical continuity signifies less to the Japanese than perpetuating the techniques and rituals of re-creation"

If we see preservation as a culturally mediated interpretation of the past, then there may be no unique solution to the challenge presented by our desire to preserve a landscape. Multiple interpretations may be equally valid, each favoring one element of significance over another, and multiple valid solutions may be able to coexist as a mosaic of interpretations. The challenge will be to identify differing modes of interpretation, ranging from radical intervention to benign neglect, that in their application do not try to fix a particular image of the past, but rather permit an understanding of how the landscape's functional, organic nature served a cultural purpose or was transformed through human interaction. In this way a living landscape may both embrace and survive preservation.

"Some preservers believe they save the real past by preventing it from being made over...A fixed past is not what we really need...We require a heritage with which we continually interact, one which fuses past with present...Only by altering and adding to what we save does our heritage remain real, alive, and comprehensible" (Lowenthal, 1985,p.410, 412).

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The Nature of Culture

and the Culture of Nature

My contribution today was written before I received a draft of Bob Cook's paper a couple of days ago. I have been able to alter a few of my remarks to take account of some of his ideas and arguments: in so doing my main concern was to try and suggest parallels between the new ecological paradigms he offers and the processes of the historian of culture and one of its fundamental expressions, landscape architecture. However, it is also perhaps worth prefacing my paper proper with a few general observations, designed to relate our two approaches.

First, my own concerns are inevitably with sites where cultural elements are more dominant than in, say, the Henry Greene Prairie in Wisconsin; my own sites are probably smaller, and their inorganic elements, especially those introduced by human hands, predominate. Second, Gombrich has been quoted on the common sensical opinion that we cannot ask Titian "what his intention was"; I would agree, but only because it seems a naive formulation, ignoring the widely acknowledged fact that great works of art yield legitimate meanings beyond the specific prescriptions of their creators who have gone on record about them; in short, it is beside the question to ask Titian what he meant.¹ As will be clear later I subscribe to a more strenuous role for the historian than TV interviewer

(surely Gombrich's model); I share Bob Cook's view of "historical complexity" and relish the task of grappling with it, with historical contingency. Thirdly, and finally, I should say one thing that I am not going to consider: the often vexed problem of deciding at what point in the temporal continuum of a site to fix its preservation or restoration. On the one hand, I actually welcome celebrating a site's different historical moments or "periods of significance"; on the other to cherish a palimpsest of cultural deposits obviously begs the question of how to treat the natural materials which surround them and which change at a different rate. No general answer seems possible; the contingencies of the specific project will determine the only worthwhile answers.

I

Landscape architecture requires three ingredients: a specific site, organic and inorganic materials (that is to say—the resources of the physical world), and the creative energies and cultural skills of human beings (their art, science, technology, “know-how”). The given or natural materials of a site, along with others introduced on to it for various reasons, are rearranged, revised or re-presented by human skills in such a way that the site is transformed, is made anew for some purpose, whether practical or aesthetic.²

The history of landscape architecture since the mid-eighteenth century has been told largely as a battle between natural resources and cultural skills and inventions for possession of the soul and body of a given site; rephrased, this becomes a battle of styles—usually (if somewhat absurdly) designated as formal and informal.³ Such a narrative also supposes that since historically the informal, irregular, picturesque or “natural” came after the formal, regular, geometrical or artificial it was a development to be applauded in the name of progress, a movement towards perfection and towards modernity, as inevitable as it was therefore “natural”.

For reasons at least explicable if not acceptable, this was a narrative developed by the English, who brought to what Walpole called “the point of perfection” the kind of landscaping that has been named after them.⁴ But what is much more puz-

zling is why the whole of late 18th-century Europe, followed hard by 19th-century America, bought into the idea that the natural or English landscape garden was the superior, prime mode of laying out grounds. True, some intelligent and critical spirits outside England resisted the teleology of such histories and the imperatives of such taste—Hirschfeld in Germany, Laborde in France; in North America, Downing, as Judith Major has admirably demonstrated, not only realized that some sort of adaptation of the English mode of landscape architecture was required for a new territory and a new society, but himself adapted his own adaptations in successive editions of his *Treatise*.⁵

The pervasive notion of a battle of opposing styles that characterizes both landscape architecture itself and the history of this art since the late 18th century disables analysis in two ways: to emphasize a battle—even, sometimes, a fight to the death⁶:—between art and nature obscures the essential fact that in all landscape architecture of whatever style these two rival elements have been collaborative not antagonistic; and, much more importantly, that the art of landscape architecture has always been dedicated to inventing or creating a nature viable for that particular time and place.

II

The arts and sciences of any given society discover and make accessible to that time and place a particular

perspective on the phenomenal world; they "invent" an idea of nature that their society can cherish. In these circumstances "nature" is never a normative, stable entity, but a view of the physical world that a particular culture creates to be able to live with (in the process it often comes to believe that its nature is indeed normative, stable, in short wholly natural). It is among the functions of culture to devise or construct a nature for its contemporaries to live in, believe in, and represent in their arts, which themselves of course participate in that devising (including landscape architecture). Devising is not faking, falsifying, lying; it is abstracting or extrapolating from the vast resources of the natural world a version of that world that is enhancing.

If we return briefly to a moment before the hegemony of the art-nature conflict was established, we can see what such invention or creation of nature entails. Around 1700 there can be found throughout Europe many engraved topographical views which represent a mansion surrounded by a highly artificial landscape; yet as the eye moves outwards from the gardens across orchards, paddocks and agricultural land, the landscape seems to grow less and less controlled, less worked, organized and managed, until usually it ends in some distant mountains, waste land or wilderness that is apparently beyond human control or exploitation. These engravings are usually invoked to demonstrate the human domination of the natural world through

horticultural art and agrarian technology.

But I suggest that we read these images with too modern a regard; their contemporary viewers saw them differently. Here in two similar frontispieces we can perhaps get closer to their significance: again we look across the spaces of a garden, decorated schematically with a fountain at its centre and flowerbeds, towards fields where labourers plough and sow, towards a cragged and steep mountain, out of the bottom of which a spring gushes. Yet a moment's reflection will also show that this scene is jointly presented to us by two figures, who are positioned on rough, unworked ground this side of the garden—the figures of Nature, the fecund, abundant, many-breasted Diana of Ephesus, and the figure of Science or Technology, holding an armillary sphere. And their joint and collaborative responsibility for introducing us to the landscape beyond is made all the clearer when we also register what is taking place on the craggy hillside in the background. It is in fact populated with figures of the nine Muses along with Apollo, traditionally their conductor and manager.

Muses are personifications of those arts that interpret aspects of the world for us in their various ways; they re-present for us in their own terms—as history, poetry, music, whatever—the physical (and indeed the metaphysical) world. So, too, Science here in the foreground with her sphere, understands and inter-

prets for us the myriad universe of nature. The careful population of this scene by the artist begins to explain the rudimentary signs that have also been incorporated into the landscape: the fountain in the centre of the garden is a reworking in artful, gardenist forms, of the natural spring at the base of the hill; the flower beds reorganize the happenstance of natural growth in different parts of the world into coherent, localized format. Almost all the elements of a contemporary garden would have been interpreted in this way, as we know from many contemporary sources, including John Evelyn's unpublished manuscript of garden history and theory: there, for example, he explained that grottoes were the representation of natural caves and dens, mounts were hills, labyrinths, the bewildering unmediated natural world, and so on.⁷

Now there were two essential corollaries of this view of art as reformulating natural events. First, the reformulation was designed to help humans better to understand the natural world, as they learnt to access it in situations where accidents and contingencies had been eliminated; but such perfected images, such abstractions, were by no means meant as a substitute for the "real thing". Second, not everybody needed the same kind of education in natural phenomena that was afforded by a geometrical garden—some people could understand and enjoy the spring gushing from the mountain without seeing its representation as a

garden fountain.

Towards the end of the 17th century such people were thought of as visionaries, enthusiasts, dubious solitaires, even slightly zany or mad; but their perspective on nature was allowed. It was a time of unprejudiced relativism and tolerance among gardenists, a time that historians have totally marginalized in their subscription to the latter-day story of nature triumphing over art. Different styles or modes of landscape architecture were seen as fitting different classes of people, different temperaments of client and/or designer, different uses and functions, different local conditions (topography, ecology, geomorphology). It is, I suggest, no accident that this was also the period in which both a scientific empiricism was dominant and in which a new explanation of the mind's formation that privileged the individual sensibility and mind-set was being elaborated.

Only rarely does such relativism reappear in landscape architecture history—it flashes through the theoretical work of Hirschfeld, Laborde, and Downing, but rarely shapes their concepts or their judgments of actual landscape architecture. And we are today, in my view, urgently in need of a new history of landscape architecture that explores the changing cultural needs of given societies, even the cultural needs of different segments of the same societies, to identify, express and re-present ideas of their natures in garden format. Such a new history would, for instance, be able to con-

front the whole cycle of the 19th and 20th centuries afresh instead of being forced to live with the strange predicament that—since the English, picturesque or “natural” garden was deemed to be the inevitable climax, the long-awaited apotheosis of good landscape architecture, there was in a literal sense nowhere to go after Capability Brown. At best it was a question of opting for styles as if in some shopping catalogue, which the new breed of eager garden journalist willingly provided.

III

In anticipation of such an ambitious new history, let me look at what might be some of its consequences for our concerns on this occasion. The landscape historian's responsibility is to try and understand the cultural interpretations and representations of the physical world at given moments in the past (in my view the past includes yesterday, even today as it slips into being tomorrow's yesterday). Myself, I see this enterprise as our having to learn how a particular society's mind worked, how it looked and thought, how it responded to whatever were its dominant concerns, what varieties of response were subsumed within larger units; we need to know not only what a society or some segment of it deemed necessary to spell out and explain, but what went (as it were) without saying; I want to be in the position to second guess those who intervened upon the ground and created works of landscape architecture in the light of, or

despite, their ideas and habits of mind. The French conveniently call this the study of *mentalité*, mental habit, but it sounds perhaps too rarified, too indeterminate, simply too vague for our purposes, though I have no alternative formulation to offer.

It is a challenging task to try and be such a historian. The past is indeed a foreign country, the languages of which are not easily learned with all their proper vocabulary and idiom. Yet, as A J Downing told the readers of his *Horticulturist* in 1852, “when a man goes into a country without understanding its language, he is likely to comprehend little of the real character of that country”.⁸ Historians are currently much exercised by the extent of their incomprehension: Simon Schama wrote *Dead Certainties* (1991) as a mixture of recoverable fact and imaginative fiction about two historical events in 1759 and 1849; yet his disarming subtitle, (*Unwarranted speculations*), did not wholly conceal his delight in muddling the modes of “fact” and “fiction” as he chronicled the deaths of General Wolfe at the battle of Quebec or Dr. George Parkman in Cambridge, Massachusetts. More to our own purposes is a similar meditation on the impossibilities of historical recovery & explanation in Tom Stoppard's new play in New York at the Lincoln Center, *Arcadia*. Much fun is generated for the audience from the absurd inabilities of modern researchers to penetrate the intricate trivialities of both Regency love affairs and Reptonian landscape archi

ecture.

We do not need the theatre to be reminded of such difficulties. Throughout the 1970s the Dutch government researched and prepared for the restoration of the late 17th-century gardens at the Paleis Het Loo outside Apeldoorn. Armed with a wealth of engraved views, drawings, written descriptions, blessed above all with a site that—although stripped of its statuary, urns and fountain work—had simply been covered with sand and grassed as a so-called English landscape garden and could therefore by the removal of the sand be laid bare in its skeleton form, the learned and experienced team got at least one crucial thing wrong: though they planted it exactly as the engravings, paintings, drawings and verbal descriptions claimed it had been in the 1690s, and though they grew vast quantities of specially prepared species to match exactly the original planting schemes, the modern experts simply forgot to learn how to tend and maintain this old planting style. So that after only a few years much had to be redone, and meanwhile the gardeners were sent back to school with Jan van der Groen, William III's original gardener, to re-learn lost horticultural skills.

But such difficulties should not deflect the historian. Neither Stoppard nor—above all—a professional academic historian like Schama (who has, by the way, just produced a new book entitled *Landscape and Memory*) can escape the compulsion to hope, to posit the idea, that the past is

a foreign country whose language may be learnt to more or less perfection. Some are more adept at cultural bi-lingualism than others; but it is a skill not to be wished away for whatever reason.

There are two methods of wishing it away. One is to insist so much that our own interpretation colours the historical object that we convince ourselves it is unknowable. Another is to argue that nothing important changes, that (as a philosopher has recently written) garden history is governed largely by universal perspectives:

The environmental nature of gardens, coupled with our nature as biological organisms of a particular kind, provides a range of significance, orderings, and values that precedes and transcends cultural differences and makes gardens to a large extent (though not completely) universally intelligible and meaningful. This level of meaning is neither representational nor symbolic, and neither culture-dependent nor culture-specific.⁹

What truth may subsist in that statement seems to concern such a residual part of our subject as to concern us very little. It is, in effect, the old, rather sentimental appeal to unchanging human qualities, an appeal that forgets how much men and women are themselves the product of nature and culture and therefore changing according to the times and places they inhabit. Indeed, there is a striking similarity between landscape

architecture itself and human beings, the only animals to create gardens—namely, that both are intricate dialogues between nature and culture; this perhaps explains our enduring, though changing need for the bi-focal (natural-cultural/cultural-natural) world of landscape architecture.

IV

Two final observations. First, any analysis of our present cultural perspectives on the natural world must also be properly historical: that is to say, that we must try and see how and why our own perspectives upon the natural world are constructed. No less than in previous eras, our ideas and the forms they take upon the ground are conditioned by the specific time and place of their occasion.

Currently, the lawn has something of a bad name, a contemporary battleground every bit as contested as once were terracing, parterres or axial avenues. Those who cherish a lawn can be reviled for their willful imposition of abstract order upon the natural element of turf, for their invocation of an arsenal of chemicals, or for the wasteful use of water in its irrigation. But there are climactic and geographical conditions in which a lawn need not be contentious, and it is well to recall how its predecessors—the “flowery mead” of the late Middle Ages, the parterre à l’anglaise or the *boulingrin*, or the green sward of Capability Brown—were each a version or representation by a specific culture of a certain natural feature—a herbiage sprinkled with flowers, a

zone of grass—none of which is any more “right” or “correct” except as a particular society chooses to determine the rules by which—in that time and place—such judgments are made.

A second observation concerns the restoration and preservation of historical sites. Grant (for my argument¹⁰) that we can count upon bringing to such work a detailed knowledge of the past—a conspectus of archaeological, geomorphological, horticultural and architectural information, the result of which would be the complete recovery of the physical shape of a given site. How do we then mesh the historical habits of mind that informed such a site with our own contemporary ones? This is in part, but only in part, resolvable by programmes of interpretation.

There could be many illustrations of this conundrum, but let me offer you the example of the Elysian Fields at Stowe, Buckinghamshire, responsibility for which has recently been assumed by the National Trust. It is a site that exists virtually as it was created in the 1730s (some statuary is missing from one of the temples, but its location is now known and it could be replaced or duplicated); tree growth and other plant changes have in relatively minor ways altered our experience of the valley—most importantly now hiding the parish church the sight of which was an essential element of the ensemble. And we may with some confidence, I believe, say that we can penetrate the mind-set that created this ensemble of

temples scattered on both sides of a pastoral valley. Immersing ourselves in a whole range of texts and engravings—some offering specific commentary on the site and its landscape architecture, others opening for us contemporary attitudes and ideas on a range of matters not connected with garden art, we can fairly confidently recover a detailed sense of how these Elysian Fields were experienced at the time of their creation.

I can on this occasion only suggest how this landscape architecture organized a juxtaposition of native English scenery, carefully contrived to elicit its pastoral potential and perfection, and augmented with rival representations of those cultural processes by which that very pastorality had been constructed, was understood and was challenged. A Temple of Ancient Virtue, a heap of rubble (supposedly a Temple of Modern Virtue in false classical style), a parish church, a Temple of British Worthies that deliberately excludes the priesthood and challenges its own celebration of eminent British figures with a satire on moral excellence in foxhounds—all these invite the visitor to engage in various dialogues on the relevance of the antique world to the modern; of classical mores, conventions and wisdoms to the political and cultural exigencies of contemporary Whig England.¹¹

Now, if you object that these concerns have nothing to do with land-

scape architecture, I'd reply: that (i) most gardens and parks address issues beyond their own concerns, for their cultural perspectives extend beyond the materials of the physical world from which they are made and (ii) the very location of such issues within an abstracted and perfected landscape, redolent of English rurality, makes the site itself a stage and therefore a subject for debate (Stowe is in the nation's heartland and therefore in this context stood for England herself). An emerging modern England of the early 18th century needed to ask itself what use was the classical past, how it could or should be invoked, why it should be considered of significance. Given the associations of that classical past with landscapes in Italy and Greece (actual landscapes, painted or written about landscapes), a landscape garden was as apt a location as any to dramatize such questions.¹²

But in the final resort I confess to be puzzled how the intricacies of a recovered mentalite, so illuminating of Stowe's historical potency, can be accessed by the modern visitor in a fashion that justifies the historian's endeavours. Perhaps they should not need justification, for they are their own reward. Yet in our ongoing debates, the voice of the historians of culture, including the culture of nature, should be heard distinctly and with all its concern for the complexities of the past.

Endnotes

- 1 However, I am not sure quite where Bob Cook stands on this: he implies the contrary to Gombrich when he uses the phrase, "a different object than the painter intended", yet also avers that "the intentions of the creator are always seen through the lends of our own times and may therefore be essentially unknowable".
- 2 And from that moment the different elements age and alter in different ways and at different speeds.
- 3 The absurdity, of course, is to imply that "informal", whether referring to Capability Brown or the wearing of jeans and t-shirt, doesn't itself employ forms. But that aside!
- 4 See Walpole's *The History of the Modern Taste in Gardening*, with an introduction by John Dixon Hunt (NY., 1995), p.55.
- 5 Judith Major's University of Pennsylvania PhD thesis, soon to be issued in revised form as a book, was "To Live in the New World': Adaptations for America in A.J.Downing's Theory of Landscape Gardening" (1992). For Hirschfeld, see the best English introduction to his theory in Linda Parshall, "C.C.L.Hirschfeld's concept of the garden in the German enlightenment", *Journal of Garden History*, 13 (1993), 125-171; A-L. J. Laborde, *Description des Nouveaux Jardins de la France.....* (Paris, 1808).
- 6 This battle of style reached its apogee in the confrontation of William Robinson and Reginald Blomfield, for which see David Ottewell, *The Edwardian Garden* (New Haven and London, 1989), pp. 5-38.
- 7 It follows then for the restorer that, since the larger context of the specific site often belonged to it, much may be lost by focusing only upon the site itself and not also on the surrounding landscape of fields or wilderness that was an essential element of the garden's representations. I have elaborated this in my report on historic gardens for the French Ministry of the Environment: see Yoshio Nakamura, Dirk Frieling & John Dixon Hunt, *Trois Regards sur le Paysage Francais* (Seyssel, 1993), pp. 233-40.
- 8 *Horticulturist* 7 (June 1852), p.249.
- 9 Mara Miller, *The Garden as an Art* (Albany, NY, 1993), p.124.
- 10 I put to one side the often contentious issues of how we should restore or conserve some site from the past: what new, perhaps better or more environmentally sound materials to substitute for the old, what to do when we do not really know enough about the past, or when our predecessors clearly got it wrong (or passed on information that could not possibly have been true).
- 11 The mid-18th century visitor would have encountered a fine, perfectly round classical temple—in fact, a modern completion here at Stowe of a ruined antique model far away in Tivoli; this was juxtaposed to three other edifices—a gothic parish church, somewhat hidden in the trees, a somewhat shapeless heap of rubble, adorned with a headless statue, that appears to be a modern attempt to build something classical, and (across the limpid stream that flows through this pastoral valley) a rather odd structure, a hemi-cycle of busts in squat niches. Since it is a spot that encourages lingering and relaxation, the visitor would have doubtless compared the four, full-length sculptural representations of exemplary classical figures that were (then) to be discovered within the Temple of Ancient Virtue (for that is its name, as any guidebook would have explained) with the more numerous, but squat figures in the Temple of British Worthies. He or she would have read the inscriptions, maybe even—for sufficient numbers of visitors to Stowe would have been learned enough—realized that in the one Latin inscription on the centre of this latter structure a line of Virgil's that praised priests must have been deliberately omitted, and certainly would have (on the back of the same building) enjoyed a long inscription in English that praised what first seemed set to be an epitaph on a fine Italian gentlemen,

Signor Fido, who could obviously not be admitted into the front of this sanctum of British worth, but who gradually transpires, as the epitaph unrolls, to have been a quite exemplary greyhound.

- 12 These questions probably still need to be posed, given the continuing grip of neo-classicism. The work of poet and landscaper Ian Hamilton Finlay would be a fine example of a designer who continues to provoke such debates in landscape architectural terms.



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Master Plan for Renewing Louisville Kentucky's Olmsted Parks and Parkways

A Guide to Sustainable Landscape Management

Portions of this paper are from the *Master Plan For Renewing Louisville's Olmsted Parks & Parkways: A Guide to Renewal and Management*, © 1994 by the Louisville Olmsted Parks Conservancy, Inc., prepared for the Conservancy in conjunction with the Louisville and Jefferson County Parks Department, Louisville, Kentucky. The master planning team included Andropogon Associates, Ltd., master planners; LANDSCAPES, historic resources; PDR Engineers, Inc., infrastructure and engineering; Eco-Tech, Inc., natural resources, and Dr. Charles Beveridge, The Frederick Law Olmsted Papers, historical research. Portions of this paper are also from a *Landscape Management Guidebook*, © 1994 by Andropogon Associates, Ltd. and currently in preparation, which has been supported by grants from the Design Arts Program of the National Endowment for the Arts and the Graham Foundation for Advanced Studies in the Fine Arts.

Introduction

“**P**LANS MUST BE SUITABLE. That these plans may be suitable to the future wants of the growing population of the city; that they may be nicely adjusted to the varied local conditions which they are intended to fit; that they may be judiciously auxiliary and complimentary to each of the others, the first step to be taken is that of procuring elaborate records of measurements and data of the ground to which they are to be fitted. . . . It would be folly to have them made hurriedly, as it would be folly to go to work except with plans deliberately pondered with fluent imagination and abundant exercise of searching, comprehensive forecast. . . . The cost of maintaining parks is a matter of more importance in determining plans for them than the cost of forming them.”

—Excerpts from *First Annual Report, Louisville Board of Park Commissioners*, July 1891, prepared by F. L. Olmsted & Co., Landscape Architects

One of the greatest frustrations for Frederick Law Olmsted was the fact that there was rarely adequate follow through on the maintenance and

management of the landscapes he and his firm were designing. Deterioration due to misuse, overuse and poor care in Central Park and Prospect

Park was a problem he decried even before the landscape installations were completed. This situation has only worsened over time to the detriment of nature and culture. This paper is about recognizing that landscape management is essential to sustaining natural and cultural values and must be elevated to fully achieve a park's renewal.

Louisville's Olmsted Parks & Parkways, one of the last major works by Frederick Law Olmsted, Sr., and one of only five parks and parkways systems he designed, had fallen into various states of disrepair and misuse by the 1980s. In 1989, Mayor Jerry Abramson established a planning and funding partnership between the city and the private sector—the Louisville Olmsted Parks Conservancy—to undertake a master plan and raise money for its execution. Its mission is “to preserve the legacy of Louisville's Olmsted Parks and Parkways for all generations to come.”

The genius of the Louisville Olmsted Parks System is rooted in the distinctive and diverse landscapes that characterize each park. Olmsted's design sought to bring order and drama to each site by clarifying and heightening its predominant character. It is that special character that still dominates current perceptions of these parks—the wild forest of Iroquois, the rolling pastoral terrain of Cherokee and the expansive river front of Shawnee. But the landscapes of the parks today, both natural and designed, are very changed from those that inspired Olmsted.

The planning team of landscape architects, historical landscape architects, historians, civil engineers and ecologists sought a common ground between natural and cultural resource management. For historic landscape preservation, the primary issue was character definition of the landscape that would preserve and recapture lost spatial organization, views and vistas, vegetation types, circulation systems and built elements.

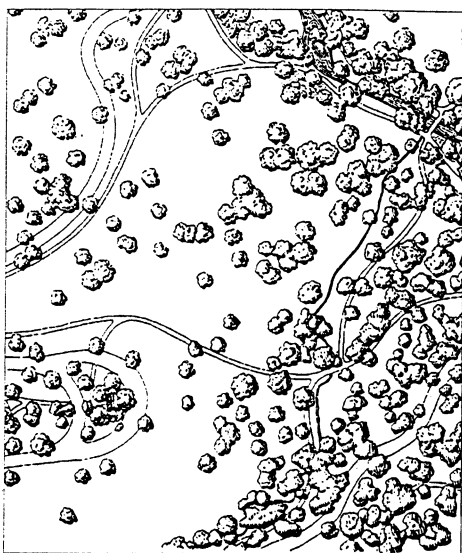
The master plan recognizes that the overall context of these landscapes has changed substantially since Olmsted's era. Simply recreating an Olmsted design in these altered settings will not restore the original vision nor accommodate current uses and conditions. We have to confront the need to restore the larger settings of these designs, including the indigenous natural communities, the historic pastoral scenery, the green parkway links, as well as the spirit of positive community involvement.

For natural resource management, the primary issue for sustainability was the need to reconcile longstanding user conflicts and update management practices. This master plan's process proposes a depth of dialogue between those who use and care for these landscapes that will empower both to be stewards into the 21st century. The transition to sustainable park management depends on developing the expertise of the parks department and related city agencies, as well as the level of participation and education of the public at large. This approach integrates natu-

Vista and Landscape Management Historic Design Intent

Barringer Hill, Cherokee Park, Louisville Olmsted Parks Conservancy & Metro Parks, Louisville, Kentucky.

Historic Design Intent: Original conditions of the site, from an 1891 survey, show a mature beech woods, with black walnut, sycamore and elm, and a largely open understory. Barringer Hill was in pasture, with a few hedgerows of black locust, cherry and ash. Olmsted's proposed park plan of 1897 shows the design intent of a vista through the woods from the overlook to the creek and hillside beyond. Groves of mature trees overlap the edges of the vista, with views under and through the groves as well as over the tops of tree canopies. Many trees had enormous canopies and were underlain with carpets of wildflowers and a rich woodland ground-cover.



Historic Design Intent: Plan of Barringer Hill, as proposed in F. L. and J. C. Olmsted's General Plan of 1897.



Historic Design Intent: Barringer Hill Vista, as proposed in F. L. and J. C. Olmsted's General Plan of 1897.

ral, cultural, and social resources and proposes an implementation process keyed to training, education and community involvement. The purpose of the master plan is to focus attention and energies on the most significant factors that are responsible for the pattern of deterioration and to define a renewal program for the parks and parkways that frames a broader vision, recognizing original intentions, restoring health and function, and creating a new spirit of positive involvement.

Field trials and staff training workshops have been undertaken as parallel efforts to the development of capital projects and serve as ongoing vehicles for assessing and improving the process through to implementation on the ground. An in-house management log that includes ecological, aesthetic, historic and use-related documentation of all management practices has been initiated and will be expanded over time to give a continuous record and evaluation of landscape objectives and conditions. Staff management of volunteer efforts is also anticipated and will lead to development of a highly trained staff and volunteer corps to augment and enrich the public's role in the renewal of these parks.

The vision of the Louisville Olmsted parks that is contained in the master plan represents a level of care and management of landscapes that has never been achieved by any park system. Much of the country is faced with crisis conditions in the com-

munity infrastructure. Maintenance has been undervalued and deferred, based on rote practices, and routine to marginal tasks like trash pick-up and lawn mowing. Neither management nor labor have the expertise and staff necessary to accomplish a comprehensive renewal of these landscapes. Louisville is not alone, as every major city administration is facing similar problems. Moreover there are no well established techniques for sustainable landscape management. This is a field that is in its infancy.

It is important to acknowledge that we cannot know enough at any one point about a site to accurately predict the future or to fully specify what actions are appropriate to take. This entire program is, to some extent, a grand experiment that we have no choice but to embark upon. It is a program that will evolve over time. The crucial steps include training workshops yoked to key demonstration projects that will provide on-the-ground trials and real feedback.

A Perspective on Current Landscape Management Practices

Given that protecting and managing the natural resources of the parks and parkways is a priority goal, it should be pointed out that this is not possible to achieve within the present structuring of the parks department maintenance operations. There is no room for natural resource management without expansion and restructuring. Current landscape management includes the following tasks:

SPRING / SUMMER

60%–70%	mowing lawns
25%–30%	trash collection
15%–20%	special summer events, moving bleachers and picnic tables

FALL / WINTER

60%–70%	leaf litter and snow re- moval from park roads and city streets; equip- ment and facilities re- pair (about half the pic- nic tables are stolen or vandalized yearly)
30%	trash collection

Current Maintenance Problems of Lawns and Meadows

1. Too much turf—a ubiquitous solution that creates ubiquitous problems.
2. Turf is too demanding of energy and labor resources, and can degrade adjacent habitats.
3. Current meadows are managed inadvertently, which yields poor public acceptance.
4. The historic greensward and meadows, with a richness of grasses and forbs, have disappeared.

Olmsted is generally credited with having popularized the extensive use of lawn in the modern landscape. But it is important to remember that the lawn of today is very different from that of Olmsted's day. Ever since turf was distinguished from pasture as a purely aesthetic and recreational landscape type, the trend has been toward an increasingly uniform carpet of cool-season grass. But not until after World War II, with the development of rotary mowers, new hybrid grasses and the increasing re-

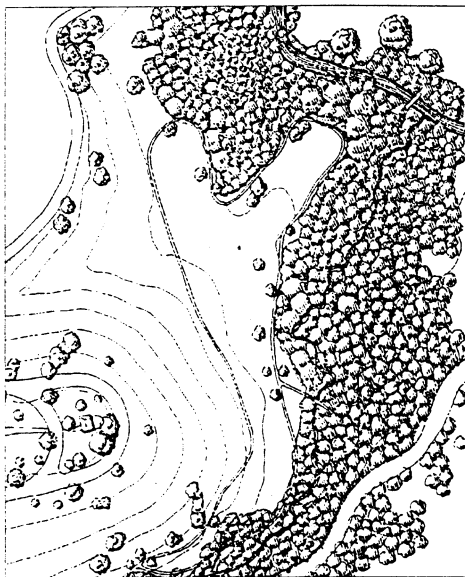
liance on inorganic fertilizers and pesticides, did the very short and often monospecific turf of today appear. The historic photographs consistently show many areas of longer turf as well as tall grass and wildflowers that were not distinguished from turf on the design plans. The proposed "greensward" management is intended to come closer to that of Olmsted's day than current management practices.

The greensward of Olmsted's era was also more "green" with regard to maintenance. The use of organic fertilizers prevailed and pesticides were largely unused, resulting in a more diverse soil flora supporting dense, lush growth. The greensward was relatively diverse and often included numerous broad-leaved herbs, such as veronicas and chickweeds in addition to mixed grasses. And perhaps most importantly, the grass was cut long, that is cut to a length of about four to five inches instead of two to three inches, and often regrew to six to seven inches before being cut again. From a maintenance

Vista and Landscape Management—Current Conditions

Barringer Hill, Cherokee Park, Louisville Olmsted Parks Conservancy & Metro Parks, Louisville, Kentucky.

Current Conditions: The 1974 tornado felled over two thousand trees in Cherokee Park. Barringer Hill in particular was devastated—the tornado cleared a swath on both sides of Beargrass Creek. Many of the mature trees were completely uprooted. The sudden loss of canopy reduced the forest cover substantially and fostered the spread of invasive, non-native species. The twenty years of unmanaged understory growth has resulted in a dense thicket of vegetation that blocks the historic vista from the hill above. The mature trees have been replaced by stands of younger, relatively even-aged trees, with an understory clogged with invasive shrubs and vines.



Current Conditions: Plan of Barringer Hill, 1994.



Current Conditions: 1994 Barringer Hill Vista, with vista blocked by trees, Shrubs and vines.

perspective, this practice reduced drought stress while conserving energy and labor. Environmentally, it increased infiltration of water and produced less rapid runoff than today's turf.

Even when lawn is relinquished, the resulting released landscapes bear little resemblance to the waving grasslands and wildflowers meadows envisioned. Thinking that meadows mean no management is a common fallacy. In a climate that would normally support a forest, meadows are by definition managed landscapes. In a disturbed landscape, meadows can gradually be overtaken by exotic invasives, such as honeysuckle or Japanese knotweed, and can serve as a continuous source of infestation that give meadows a bad name and do not help change public perceptions of the messiness of "natural" landscapes.

The open landscapes of the Olmsted parks are nearly all mown turf, comprised largely of mixed cool-season grasses. With the exception of the golf course and some athletic fields, the turf areas are given only limited maintenance, which is generally adequate to maintain vegetative cover except where there is compaction, erosion or sedimentation due to uncontrolled use or excess stormwater. There are also areas of parkland where large trees, in groves or as specimens, occur in turf, although many are in poor condition, due to soil compaction, mower damage to the trees, or species unsuited to site conditions.

Three major management directions are recommended and will be evaluated over time to ensure there is no compromise in the original character of the design. They are intended to better foster the landscape effects that Olmsted intended.

1. Limited reduction in the extent of turf by expanding the area of more diverse, managed natural habitats, such as meadow, prairie and savannah.
2. Modifications to current turf management to reduce the level and impacts of maintenance by emulating historic management practices—"greensward" management.
3. Reduction of the impact of runoff from mown grass onto adjacent woodlands by maintaining a margin of meadow as a filter strip to reduce runoff velocity, trap sediment and absorb nutrients.

These proposed directions are remarkably consistent with the goal to renew the landscape character of the Olmsted era for these parks. Many of the management recommendations are more like those of the turn of the century than current conventions which rely on newly hybridized grasses, modern mowing machinery and high impact maintenance.

Current Maintenance Problems of Woodlands and Forests

1. Continued proliferation of invasive exotics.
2. Mowing and clearance of understory eliminates native reproduction.
3. Soil disturbance from compaction,

erosion and stormwater runoff and from maintenance activities such as grubbing and clearing.

4. Thinning of the canopy encourages exotic over native plants.

5. Unresolved use and facilities conflicts.

The visitor to the park today probably has no idea of the richness and grandeur of the natural landscapes that so inspired Olmsted. He preserved the natural features and made them integral to the vision of each park. His designs sought to heighten and dramatize the most characteristic patterns of each landscape and he was renowned for his ability to 'edit' and enhance the landscape—adding and removing plants selectively to reveal the general landscape character that he found already in place. But these effects, which contributed so greatly to the original design, did not persist as the environmental quality of these habitats declined over time. Woodlands that initially featured masses of spring ephemeral wildflowers were gradually overwhelmed by exotic invasive vines and shrubs, some of which escaped from planting elsewhere in the parks and in the city. This problem was greatly accelerated by disturbance from understory clearance to maintain views. Although these design effects collapsed with the degradation of the environment, many can with management be restored.

Two primary forest management needs are clear. The first is to restore and sustain the forested areas of the Olmsted parks using largely native

plant communities similar to those that served as the inspiration of each park at its inception. The second is to develop appropriate management practices for achieving selected design effects, especially related to increasing visibility. The success of these efforts will depend on the control of the misuse and overuse of the natural areas due to trampling and off-trail use. Stormwater management is equally important and will require a comprehensive approach and program.

Sustainable Landscape Management—A New Process

Learning to sustain rather than degrade the landscape will require a revolution in conventional landscape maintenance.

"We are on the verge of a new renaissance. After training people to sweep concrete for twenty years, we will now have to train them to become managers of living environments."

—Adrienne Bresnin, former Director of Capital Planning for New York City's Department of Parks & Recreation; currently Director of Historic Preservation for New York City's Department of General Services.

The objective of this plan is to develop an ongoing landscape management program that is rooted in the idea that those who use and care for a landscape should be responsible for sustaining its value over time. Implicit in this concept is the process of ongoing assessment of what is happening on a site and continuous adaptation

of the management program as information about the site is documented and trends are observed. These guidelines are founded on the premise that landscape management and restoration is a heuristic process—that is, one in which the participants learn by doing while being guided by certain principles, including:

1. Recognizing the landscape as a living system that needs to be restored and sustained.

Sustainable landscape management is rooted in and celebrates the diverse patterns and plant communities of the indigenous landscape. The restoration of the landscape is an essential component of sustainable design and should be incorporated into all planning and management activities. New site management presents an opportunity to encourage recovery and to promote the ecological health of the larger environment.

2. Creating a participatory design process.

The degradation of the environments around us is due to a breakdown in the relationship between the community and the landscape. Those who use and care for the land should be responsible for sustaining it over time, but they cannot do this well if they are not involved, informed and empowered. Participatory design is an ongoing process of education and communication. It involves a broad array of users and managers to reconcile conflicts and promote stewardship of the landscape. Decisions

based on real consensus are implemented because they meet multiple goals.

3. Integrating ecological restoration and historic preservation.

Renewing historic landscapes calls for a blend of history, ecology, contemporary use and management and requires that we learn to support many overlapping and interrelated values, rather than favoring one over the other.

4. Making a habit of restoration.

Restoration is accomplished slowly, in many repeated efforts over time, such as removing exotics, rebuilding soil biota, restoring drainage corridors and replanting native plant communities. Ultimately, sustainability of the character and quality of the landscapes will depend on how they are managed, and requires new skills, training, staffing, volunteer coordination, and a stable funding base.

5. Developing a monitored landscape management program.

Developing a monitored landscape management program is crucial to ensure that policy and management fulfill long-term goals and are informed by real science. A key objective is to ensure that the most effective strategies are applied and that chronic problems are not exacerbated by routine maintenance operations. Building a site database becomes an important ongoing activity. This information is incorporated into a management log that is used to

record and revise management decisions.

Proposed Landscape Management Plan

The first step in determining the management program was to delineate each of the major management areas in each park, because sustainable landscape management is primarily centered on whole places, such as Barringer Hill, rather than on isolated tasks, such as mowing. This is an important distinction. The objective is for the participants to understand the whole landscape not just the parts. In the end, most mismanagement is based on misinformation and, in particular, a failure to see long-term trends. This can be corrected by research and monitoring and asking questions based on careful observation of real site conditions.

The management areas for each park are simply those places with the highest degree of local identity. Typically they embrace a major physiographic area, such as a stream valley or a hill. This may be modified by the dominant landscape character, such as the extent of forest or a large maintained field. These places typically have names and are easily identified by park users. The closer the designation of management areas conforms to the community's general experience of the place, the easier it will be for a wide group of people to participate in and contribute to the overall process of becoming good stewards.

A management log will be kept for each management area to record

change over time and the impacts of management and use. A case study of a management log addresses Barringer Hill and the vista restoration project that was initiated in the spring of 1994.

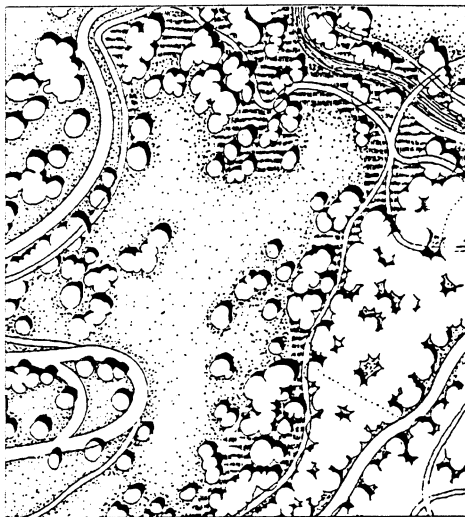
Within each of these management areas, a mosaic of cover types is proposed that describes the management objectives in terms of the structure and type of the vegetation. These cover types reflect both the original Olmsted design intention as well as the environmental conditions that pertain today and are intended to serve as a bridge between the historic character and the ecological functions of natural landscape systems.

The cover types have been grouped in two major kinds: those that are comprised primarily of woody plants, such as trees and shrubs, and those that are comprised primarily of herbaceous plants, such as grasses, wildflowers and ferns. The wooded cover types are characterized by a structure that may be comprised of many layers of plants, from canopy and understory trees to shrubs and a ground layer. The soil is covered by a layer of leaf litter and is very intolerant of trampling. The prime management focus is to ensure that the indigenous plants are continuously replacing themselves to sustain the native communities. In addition to forests and more open woodlands, these landscapes include the special places that are small openings in a forest that are called glades. The herbaceous landscapes, on the other hand, are typically much smaller in

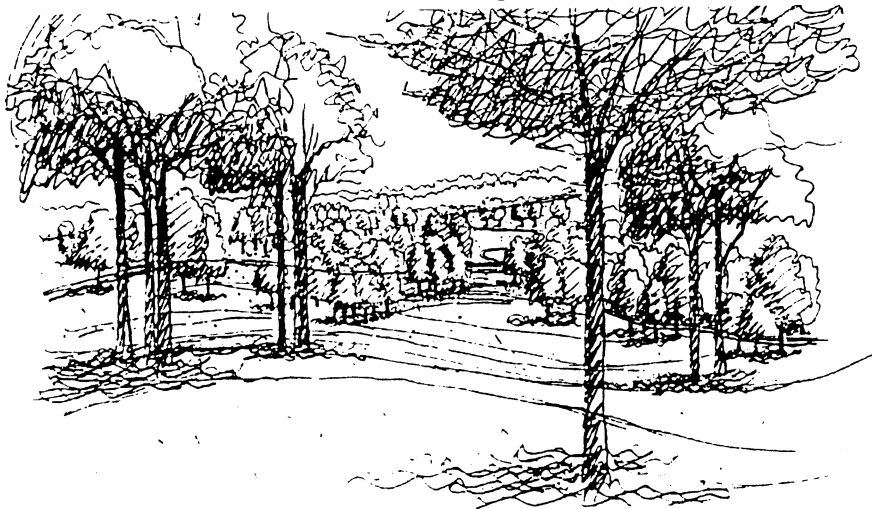
Vista and Landscape Management Proposed Renewal

Barringer Hill, Cherokee Park, Louisville Olmsted Parks Conservancy & Metro Parks, Louisville, Kentucky.

Proposed Renewal: The plan shows the proposed scenario of landscape cover types that is the overall goal of landscape management at Barringer Hill. An open woodland cover type is proposed for the present dense woodland thickets; a savannah of long grasses and tree groves is proposed for the central historic vista; and a greensward of mixed forbs and grasses is proposed for the open hillside. The primary objective is to restore the spatial character of the open woodlands that Olmsted retained as part of the 1897 General Plan. The chief task is the removal of invasive shrubs, vines and trees that presently form a dense green wall between the forest and the meadow. Removals will be done incrementally and by hand, beginning with vines and shrubs and progressing to young trees, with follow-up work to favor wildflower and woodland ground-cover development.



Proposed Renewal: Plan of Barringer Hill, 1993 Master Plan.



Proposed Renewal: The historic vista and woodland renewal for Barringer Hill. 1994 conceptual sketch.

scale, ranging from short turf underfoot to knee-high, or even shoulder-high grasses and wildflowers in wet meadows. The ground is not visible when effectively stabilized. These landscapes generally have to be managed by mowing or other methods to prevent the eventual growth of forest cover, and include turf and green-sward meadow and savannah, as well as open parklands.

Renewing Louisville's Olmsted Parks and Parkways

Renewing the Olmsted parks cannot be accomplished by doing several capital projects and providing no follow through. Without a matching increase in staffing, expertise and commitment, improvements degrade quickly and the investments fail to fulfill their promises. A reality that must be faced for this master plan to succeed is that the parks department has very limited staffing, insufficient equipment and is in need of addi-

tional skills. The current work force is not adequate to meet the challenge of sustaining the Olmsted legacy. Thus, renewing the parks and parkways must go hand in hand with renewing the parks department, with the support of the Conservancy and the public. The renewal projects reflect these interwoven components. The users are involved in educational programming and are pivotal to the realization of the projects by their direct actions. At the same time, the caretakers are keeping monitoring logs and assessing and revising implementation techniques to make them more cost effective over time. The transition to sustainable park management will depend on developing the expertise of the parks department and related city agencies, as well as the level of participation and education of the public at large, who are as much a focus of this plan as capital improvements.



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Integrating Cultural and Natural Landscape Values in Louisville's Olmsted Parks and Parkways

Editor's Note: In 1991 the multi-disciplinary team of Andropogon Associates and LANDSCAPES was hired by the Louisville Olmsted Park Conservancy and others to develop a comprehensive master plan for three large parks and a parkway system designed by the Olmsted firm in the late 19th—early 20th century which would preserve the parks' legacy for future generations.

In order to achieve this goal, the team had to meet the challenge of identifying and integrating the cultural and natural landscape issues and values inherent in a hundred year old park network designed by an influential firm.

The following paper addresses the integrated planning process and steps the team undertook over a several year period to meet the challenge.

Introduction

*The Olmsteds have built our parks and are responsible for all of their marvelous beauty; we neither plan, construct nor destroy without the advice of the Olmsteds... They have the most marvelous ability and wonderful foresight as to future results of constructive work."*¹

What we know as historic designed landscapes are natural environments that have been altered by planned human interactions. The Louisville Parks and Parkways have value both as artistic and cultural landscapes, designed by recognized landscape architecture masters Frederick Law Olmsted, Sr., John Charles Olmsted and members of the Olmsted firm, and as natural landscapes and ecological resources, which provide important green environments for wildlife habitat and recreational activities in a dense urban setting.

The Olmsted work in Louisville began in 1890 and continued consistently through 1916 with some later advice in the 1930s. The comprehensive system developed under the Olmsted firm at Louisville was the final park and parkway vision brought to form under the guidance of Frederick Law Olmsted, Sr.

Olmsted's design were inspired by the unique natural qualities of three areas, each park providing entirely different kinds of public landscape for Louisville's citizens. Shawnee Park is sited along the Ohio River frontage. Iroquois Park contains the scenic promontory, forests and park-like surrounds of Burnt Knob or Jacob's Park; and Cherokee Park is centered on the pastoral, rolling valley sur-

rounding Bear Grass Creek. The firm planned park improvements to enhance access, provide scenic experience and develop diverse recreational opportunities based on the character of each area. Each park was planned as a unified composition, organized for a complete landscape experience as stated in a letter dated May 24 1899: "*Everything that is done, that is visible from the surface at any rate, should be in harmony with a comprehensive, sensible general plan.*"²

Master Planning for Louisville Olmsted Parks and Parkways

These three large parks and the parkway system were the subject of comprehensive planning efforts undertaken in 1991 and completed in 1994. Led by the Louisville Olmsted Parks Conservancy the planning process included broad participation of groups and individuals in Louisville and a multi-disciplinary consultant team. Andropogon Associates, known for their work in the natural resource field, functioned as team leader. As a starting point Andropogon Associates investigated the indigenous, native landscape and pre-design condition of the three parks, the existing natural resources, landscape cover types, areas and nature of disturbances, current uses and existing landscape management. By contrast, LANDSCAPES initial data gathering related closely to our role as historic resources specialist. We developed an understanding of the Olmsted design intent, as-built condition and historic landscape charac-

ter and compared these to the existing conditions, current park landscape character and remaining Olmsted era features. Other team members contributed local ecology expertise, civil engineering skills and landscape history.³ On the client side, the Louisville Olmsted Parks Conservancy (LOPC), the Louisville and Jefferson County Parks Department (Metro Parks), the Louisville Friends of Olmsted Parks, three park stewardship councils, neighborhood representatives, and citizens all brought a plethora of ideas, desires, demands, feelings and hopes to the planning process. In addition, the conditions of the parks and parkways communicated dire needs- failing drainage systems, partially lost circulation systems, degraded natural systems, lost historic character and features and other problems. From these varied positions, a comprehensive planning process moved forward.

This paper is written from the perspective of a cultural landscape architect working toward the preservation of historic resources in rehabilitation planning for Louisville's urban parks and parkways. As the project proceeded, the role of the author was to frame preservation concepts, articulate their detailed applications, hear and understand natural resource concepts and their detailed applications and work together with Andropogon Associates and LOPC to find the balance that would fulfill both cultural and natural resource agendas. The process undertaken was not one where dogma and entrenched

positions would hold sway. Rather, a spirit of mutual respect, interest and willingness to engage in dialogue was required to undertake this planning challenge.

Disciplines and Division of Responsibility

The issues facing the Olmsted Parks and Parkways of Louisville are broad and far-reaching. The team members experience in urban parks, as well as ecological restoration and historic preservation comes together effectively to address the myriad issues facing our public landscapes of the nineteenth century as they complete their first century of use and service to urban populations.

Philosophical guidance was drawn from two disciplines, natural resource restoration and cultural landscape preservation. As we proceeded, it was apparent that conventional application of each discipline often turned on a blind eye to the other seeking results that on the surface were incompatible. Take, for example, the issue of "period of significance." In the field of preservation the important time span is the era of human interventions that created a designed landscape. On the contrary, in the field on ecological restoration the pre-contact period when the landscape was in a state of ecological balance is the important time and the reestablishment of lost structure, function and integrity of the indigenous ecosystem is the goal. These are very different perspectives that are in greatest conflict at the garden scale

since horticulturally and aesthetically driven design and ecologically driven restoration are in direct opposition. The implementation of each would potentially obliterate the other. These perceived incompatibilities necessitated movement to a deeper level, return to principles, revisitation of project objectives and avid pursuit of overlap and compatibility. At the scale of the larger landscape there is room for a rich dialogue about approaches and options.

Once each team member was grounded in their data base, project guiding principles were crafted collaboratively, used as a touchstone in each task and refined over the course of the project. The published guiding principles are included here as a sidebar, Figure 1. These principles address values and balance, integrating the cultural, natural and sustainable. As the project proceeded communication and testing did as well. The debate, heated at times, eventually led to the development of comprehensive vision that achieves a balance of cultural and natural resource values and approaches and is enriched by both.⁴

The first step is to begin sharing knowledge and achieve some understanding of each others specialization. In undertaking a historic preservation treatment a sequence of steps is followed in order to develop sound recommendations for the future of these historic landscapes. The steps in the preservation planning process, followed in the Louisville master planning project are:

- Historic research for the site with historic context provided by comparable properties nationwide;
 - Detailed inventory of the existing conditions;
 - Analysis of the character-defining features of the landscape over time;
 - Exploration of treatment alternatives and selection of a treatment followed by treatment implementation;
 - Landscape management of natural and built elements to address ongoing preservation;
 - Interpretation of landscape to the public.
- Based on all relevant factors--research findings, existing conditions, Conservancy and community goals, etc.--treatments to preserve the character-defining elements of these historic landscapes are indicated. These elements include topography, vegetation, circulation, spatial relationships, structures, site furnishings, ob-

- All actions must be guided by respect for the inherent landscape quality of each park and the parkway system. The historic Olmsted design shaped places for public enjoyment, guided by the unique qualities of each park. Current and future efforts must respect this legacy.
- Natural processes are the foundation of these resources. All decisions must sustain these processes so that natural systems are preserved and enhanced.
- These parks and parkways form a unique component of the city fabric, a contributing factor to the quality of life for all citizens. Future efforts must understand the parks system's larger setting, both in terms of community perception and physical environment.
- People of all ages and abilities should be able to enjoy a variety of recreational opportunities that can be supported by the landscape and facilities.
- Ultimately, the character and quality of these parks and parkways will depend on how they are managed. Skills, training, staffing, volunteer coordination, and a stable funding base are needed to ensure the fulfillment of these principles over time.
- Three key objectives permeate this Master Plan and are perceived as the crux of its program for renewal. If these are met, the mission will be fulfilled.
- Build an ethic of stewardship for the public landscape as a community based partnership.
- Integrate ecological restoration and historic preservations to shape the future vision.
- Upgrade the staffing and expertise of Metro Parks to bring skills and resources to the management of the living and built landscapes.

Figure 1. Guiding Principles from the Louisville Olmsted Parks Master Plan, (Andropogon Associates and LANDSCAPES.)

jects, natural systems and setting. Overall, the primary treatment for the Louisville Parks and Parkways is:

Rehabilitation which brings the historic landscape to a fully useful condition, preserving historic character, while incorporating additions and alterations for contemporary and future use and management.⁵

The use of a different terminology in the natural resource field complicates the issues. A definition of ecological restoration is drawn from the Society for Ecological Restoration newsletter, summer 1993 states:

Ecological restoration is the process of reestablishing to the extent possible the structure, function, and integrity of indigenous ecosystems and the sustaining habitats that they provide.

In this master plan, restoration is used as an umbrella term to describe the interventions undertaken to return a disturbed landscape to a sound ecological balance. Other terms are also used to describe the bringing back lost of ecological functions or reinstating of failed processes. The restoration of indigenous communities and ecosystem function would be as do-able as this description sounds if it were known precisely how natural systems work and all the component pieces were at hand. The concept of a restoration presumes that it is possible to replace missing pieces and or remove added elements.

While removal of invasive exotics is possible, removal of all new elements, such as changes in the atmosphere and alterations to nutrient availability, is not. With complex living systems a range of interventions can be undertaken, some of which seek to restore something, others which rehabilitate some aspect and others which simply safeguard what remains. The cumulative result moves toward a healthier system. It is also assumed that this is a process where all the participants learn by doing. A commitment to sustaining indigenous systems and a hands-on approach, will over time lead to the discovery of new tools and techniques that are unforeseen. The underlying intent is that this generation make as great a contribution the renew and sustain these public places as did the generation that created the Louisville Olmsted Parks and Parkways.

Recommendations for historic preservation and ecological restoration are incorporated in the planning process, alongside the information and issues pertaining to infrastructure, user needs, management objectives and maintenance capabilities as a part of the overall master planning considerations. Rather than focusing on terms which vary in usage and understanding, the reasons for the recommendations are set forth.

With the project basis and understanding of the breadth of issues at hand, Andropogon Associates took the lead in developing guidelines for the living landscape while LAND-

SCAPES took the lead in parallel guidelines for the built landscape. LANDSCAPES' role in the living landscape was to provide our assessment of historic designed landscape cover types, provide documentation of historic landscape character, articulate the role of vegetation in the Olmsted spatial organization role, analyze historic planting lists and correspondence for species mix and intent and comment on the proposed direction set by Andropogon from these perspectives.

Principles were developed for the built elements within the parks and parkways that are applied in each decision. It is necessary to achieve a balanced solution and some aspects may have more importance than others in a given situation but all must be considered. The principles are: *historic precedent and value, respect for natural resources, harmony, function, diverse use, safety, durability and maintainability and universal access*. The first two topics are most relevant to this discussion and are:

1. *Historic precedent is based in the Olmsted design intent, described in detail for each park and the parkways earlier. The historic character of the each element in its setting is considered and remaining historic features are valued. The Olmsted approach to built elements was to provide serviceability and aesthetic quality, simultaneously blending these items into the park and parkway environment.*

2. *Respect for natural resources is primarily an issue of proper siting of built elements within the landscape and care during the construction of new elements or repair of existing ones. The inclusion of built elements or the provision of utilities should not degrade environmental quality and if impacts are unavoidable they should be minimized and mitigated.*

The issues that are generally applicable to the renewal of built elements throughout the parks and along the parkways address the repeating factors of dysfunction, conflict and lack of optimal use. A series of priorities address full function, resolution of conflict and full use of the built landscape, to include infrastructure and circulation drives, paths, and parking, drainage, utilities, facilities and furnishings. As a parallel, Andropogon Associates developed principles of landscape sustainability, which they have expounded in the companion presentation and paper in detail.

Drawing from the parkways and each of the three parks project examples are used to demonstrate the decision-making process. In each case the historic basis for the cultural resource is briefly described, the area and issues identified and finally the results are presented and discussed.

Parkways

The Louisville parkways were developed in the late nineteenth and early twentieth century as a connect-

ing system of wide, tree-lined streets. Figure 2 shows the Olmsted intent for the planting along Southern Parkway with bands alternating trees in three pairs of rows along the six row corridor of main central drive, planted medians, service drives and planted frontages. Predominantly residential in character, the 14.5 mile, three-part system includes the 150 foot wide, Southern Parkway (2.6 miles) accessing Iroquois Park, the 120 foot wide, Eastern Parkway and Cherokee Parkway (4.3 miles) accessing Cherokee Park and the 120 foot wide, Western Parkways (7.6 miles) accessing Shawnee Park, including Algonquin, Southwestern and Northwestern parkway segments. The central linkage between these three corridors was never appropriately carried out, as seen in Figure 2. Olmsted plans and correspondence document the parkway design and intent while 1928 aerial photographs and historic postcards and photographs identify the as-built character and details of the parkways. Early problems with achieving desired widths, getting clear rights-of-way, losing tree plantings and the variations implicit in construction over an extended period of time comprise a complex historic record. In addition upgrading of sewer and utility lines along parkways have caused extensive root damage in some areas.

Changes over time have led to varied existing conditions along the parkways that express their intended historic character, their more recent engineering and the degradation of

parkway trees and built elements. Existing parkway trees, of mixed species with a predominance of Pin Oak, are inconsistent in pattern, with notable gaps and are of varying ages. There are various places along the parkways where loss of trees, degradation of turf, increased pavement width and other changes have altered the character of the parkways. Losses in character need to be reversed. The master plan goal for the parkways is renewal of intended character with multi-use corridors provided consistently along the parkway length. The parkway system requires more complete linkage to develop greater continuity. Both parkways and the proposed city street links should be the green corridors of Louisville. This proposed linkage is seen in Figure 3. The four to five tree rows, large setbacks for adjacent structures and expanses of green lawn all contribute to the character of the parkways. In addition, pedestrians and bicyclists should be afforded continuous routes along the parkways.

Renewal of the spatial organization of the parkway was a critical objective. The formal rows of parkway trees and green medians and frontages are the natural and cultural resource elements that defined the space. As noted previously, although the Olmsted firm recommended mixed species in a formal arrangement of sequence, no evidence of that arrangement was found today and historic correspondence noted changes made in Louisville as plantings were initially placed and as they

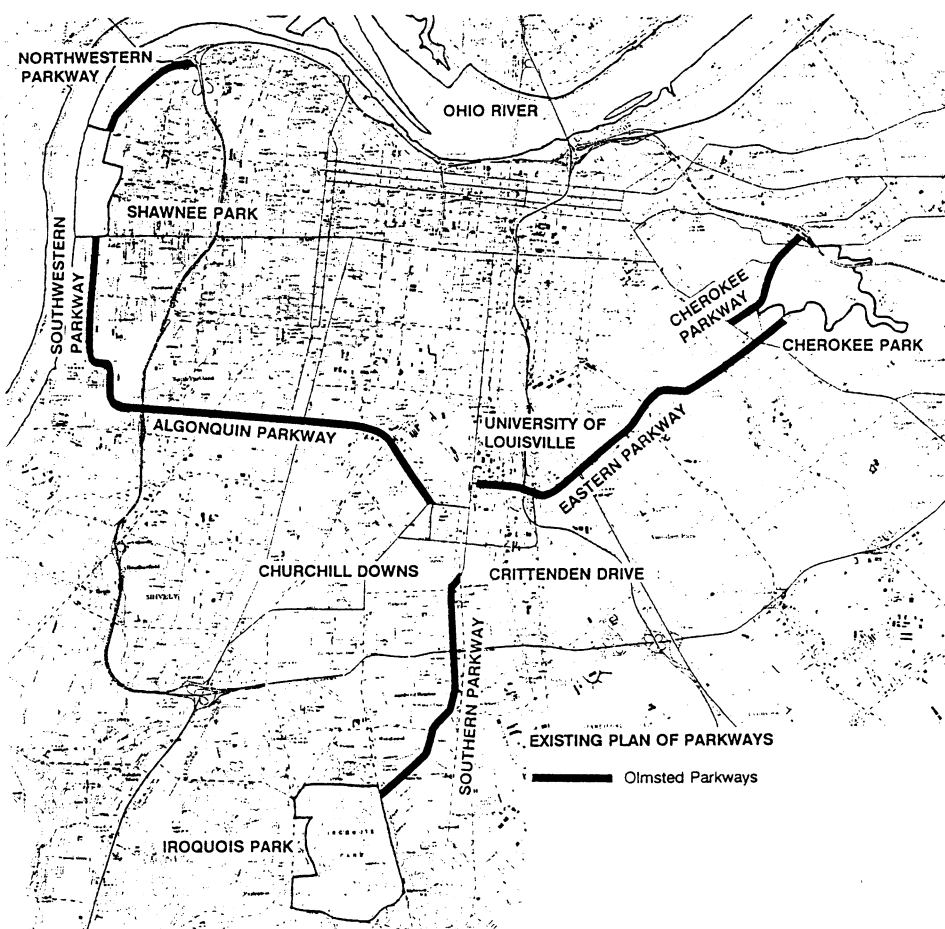


Figure 2. Existing plan of parkways, on a drawn over USGS base. (LANDSCAPES, 1992)

were replaced. Over 5,100 trees grow on the parkways today with Pin oak comprising 23.7%, Sugar maple 20.4%, White ash (10%) Green ash (7.7%) and Red maple 7.2%, three species at about 3% are Sycamore, Dogwood and Yellow Poplar. Self-sown tree-of-heaven and black locust are also found as are recent plantings of Japanese maple and Mountain ash. Over 1500 trees have been removed and not replanted in recent

years and an additional 500+ trees will require removal in the near future. The current predominance of Pin oak has developed into the spread of obscure scale infestations and chlorosis from the generally alkaline soil pH in Louisville.

From a historic perspective the following of the Olmsted design is not defensible because the as-built condition and the existing evidence do

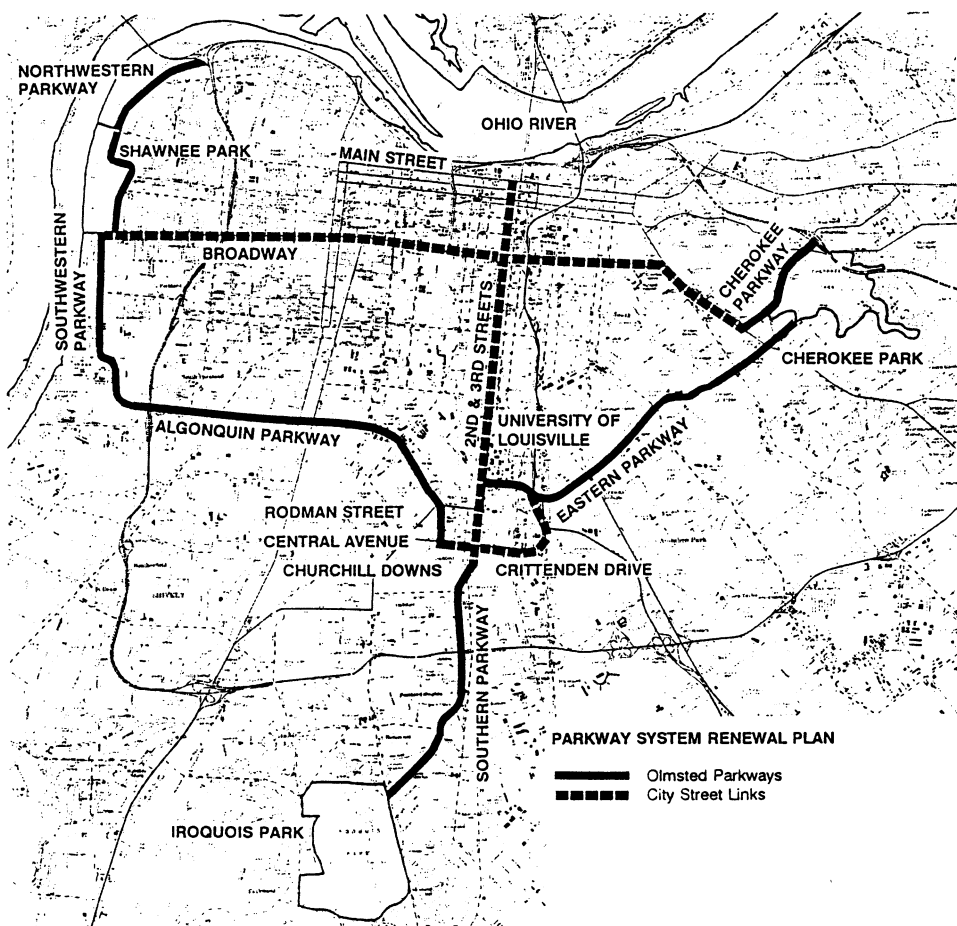


Figure 3. Key projects of the Olmsted Parkways Master Plan, Louisville, Kentucky. (LANDSCAPES, 1993)

not support that approach. About 25% of the remaining trees are the original parkway plantings and a recent inventory project makes replacement in-kind possible as these are removed. Historic views show same aged tree stands along some portions of the early parkways. The length of these parkways (14.5 miles overall), the number of trees and their mixture of ages makes wholesale removal of existing trees to replant in

same aged stands undesirable and not capable of gathering city and public support. The importance of the parkway environment can be simplified to the presence of tall maturing deciduous trees in double and triple rows, along each side of the parkways. The trees are a vertical element that create shade and dappled light, provide an overarching canopy and give a park-like quality to these broad, green corridors. Hence, the devel-

opment of proposed, typical cross-sections that reinstated the continuity of the trees along the park corridors, as shown for Eastern Parkway in Figure 4.

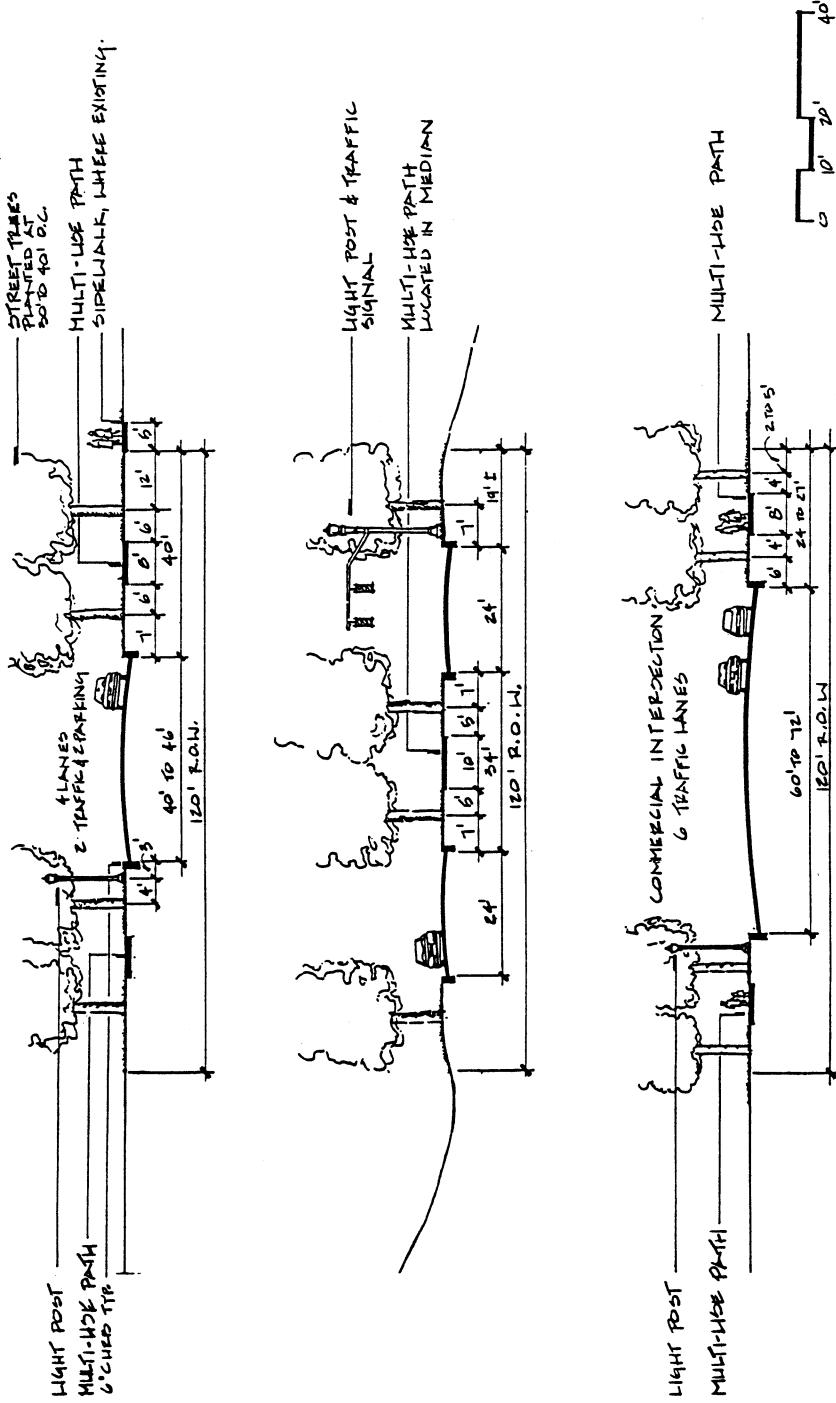
From a natural resource perspective native trees from the region that thrive in limestone based, alkaline soils should be chosen for the parkways, monoculture stands should be discouraged and mixed ages are acceptable. Both disciplines share the desire to preserve and effectively care for existing trees. The resolution of these issues in the master plan recommendations for parkway trees are:

- Trees should line all the parkway corridors in rows reflecting the current pattern on each parkway segment;
- Trees should be replaced where lost to street widenings, in the same rows with compressed spacing and additional widening should be avoided;
- Replacement trees should be of a mixture of native, tall maturing deciduous trees species suited to the soil and urban street edge conditions;
- Existing trees should be cared for effectively to control disease and promote longevity;
- Construction techniques should be developed to avoid significant tree root damage.

Large, high-branching canopy trees are used for their grandeur when mature as a scale element, for their large canopy to provide shade and to be in concert with the original parkway tree recommendations. Recommended Parkway and street trees are shown in Figure 5. A number of these trees are not included on the current City of Louisville recommended street tree list because they have fallen out of favor over time or more popular cultivars are available. Along the Olmsted parkways it is important to replant the range of recommended trees that were originally used and that will be well suited for parkway conditions, in their true species form. These recommendations reflect a blending of natural and cultural resources perspectives, providing a broadly defensible basis for renewing Louisville's parkway trees.

Shawnee Park

The 1893 Olmsted, Olmsted & Eliot Plan for Shawnee Park uses the riverfront setting and topography to develop a series of descending river overlook terraces and an upper, nearly level, great lawn. The overlook promenades were designed to be partially shaded walks above shrub planted slopes with a series of paths leading to the river edge for boating and swimming. Figure 6 shows the historic zones of Shawnee Park, one of three analysis plans developed over the Olmsted General Plan in order to understand the design intent.



EASTERN PARKWAY PROPOSED SECTIONS:

Figure 4. Eastern Parkway proposed sections.

<i>Acer rubrum</i> *	Red maple
<i>Acer saccharum</i> *	Sugar maple
<i>Acer saccharinum</i> *	Silver Maple
<i>Aesculus glabra</i> **	Ohio buckeye
<i>Carya cordiformis</i> **	Bitternut hickory
<i>Carya glabra</i> **	Pignut hickory
<i>Carya lacinosa</i> **	Shellbark hickory
<i>Carya ovata</i> **	Shagbark hickory
<i>Carya tomentosa</i> **	Mockernut hickory
<i>Celtis occidentalis</i>	Hackberry
<i>Fraxinus americana</i>	White ash
<i>Fraxinus pennsylvanicus</i>	Green ash
<i>Gymnocladus dioica</i> **	Kentucky coffee tree
<i>Juglans cinerea</i> **	Butternut
<i>Juglans nigra</i> **	Walnut
<i>Liquidambar styraciflua</i>	Sweetgum
<i>Nyssa sylvatica</i>	Sourgum
<i>Platanus occidentalis</i>	Sycamore
<i>Quercus prinus</i>	Chestnut oak
<i>Quercus velutina</i>	Black oak
<i>Quercus bicolor</i>	Swamp white oak
<i>Quercus alba</i>	White oak
<i>Quercus coccinea</i>	Scarlet oak
<i>Quercus laurifolia</i>	Laurel oak
<i>Quercus lyrata</i>	Overcup oak
<i>Quercus macrocarpa</i>	Bur oak
<i>Quercus michauxii</i>	Swamp chestnut oak
<i>Quercus rubra</i>	Red oak
<i>Quercus palustris</i>	Pin oak
<i>Quercus phellos</i>	Willow oak
<i>Quercus shumardii</i>	Shumard oak
<i>Tilia americana</i>	Basswood
<i>Ulmus americana</i>	American elm

* Salt intolerant

** Nut/Pod bearing

Figure 5. Recommended Parkway and street trees, Louisville Olmsted Parkways and City Street Links.

Shawnee Park today has a varied vegetation cover, with a predominance of open lawn and shade trees in lawn but also contains substantial areas of indigenous river edge vegetation, remnants of early forest associations and invasive vegetation.

The future treatment of the river slopes was a matter of interest. Currently overgrown with invasive species, views of the river are blocked by a mass of vegetation. A recent slope clearing effort in one area that was not monitored and had no follow-up resulted in immediate regrowth with a greater concentration of undesirable species. The Olmsted intent for the park as a scenic river overlook has been significantly altered through the vegetative growth closing river views. While the original plan shows shrub massing along the riverfront, correspondence indicates that shrub plantings failed and early views reveal tall grass on a relatively open slope. The master plan seeks to reopen river views. The replacement of invasive herbaceous and woody plants on these slopes with a savannah responds both to preservation and sustainable landscape objectives.

A mixed woody border planting along park boundaries was recommended in the Olmsted plan. Edged by parkways and residences the park boundaries were designed to be thickly planted. The range of native and exotic plants included herbaceous groundcovers, shrubs, understory trees and canopy trees that were fast growing, aggressive and had a generally open and coarse texture. In

a letter dated May 6, 1896 the firm remarked on border plantings indicating their purpose and intended management:

"As parks are laid out in the main with regard to agreeable interior scenery and as they are in time apt to be surrounded with streets and houses which are out of harmony with the more natural scenes of the park, it is necessary to the enjoyment of park scenery to exclude from sight generally everything outside. For this reason thick plantations of shrubs and trees have been formed about the borders of the park. For economy they have been planted mostly with trees and very thickly. They should be thinned out from time to time to such an extent that the long-lived trees only will be left, and these must be given room to grow with full, dense tops. At the same time shade enduring shrubbery should be maintained in good health. As the outer trees spread, shrubbery and low growing trees should be added, especially where the trees show a tendency to lose their lower branches."

The consultants discussed the intent and quality of these border plantings in detail. Ecologically this narrow strip plantings were deemed to be unsustainable and management intensive. In addition, the boundaries of the park had grown up over time to a mixed stand of mature trees. The design intent, clearly stated in the Olmsted correspondence, was the screening of the surrounding park

ways and residences. The discussion moved to the issue of screening. While partial vegetative screening in contemporary society, dense screen-

ing is not because it blocks surveillance. To address the intent and to some extent the spatial organization of the Olmsted plan, the master plan

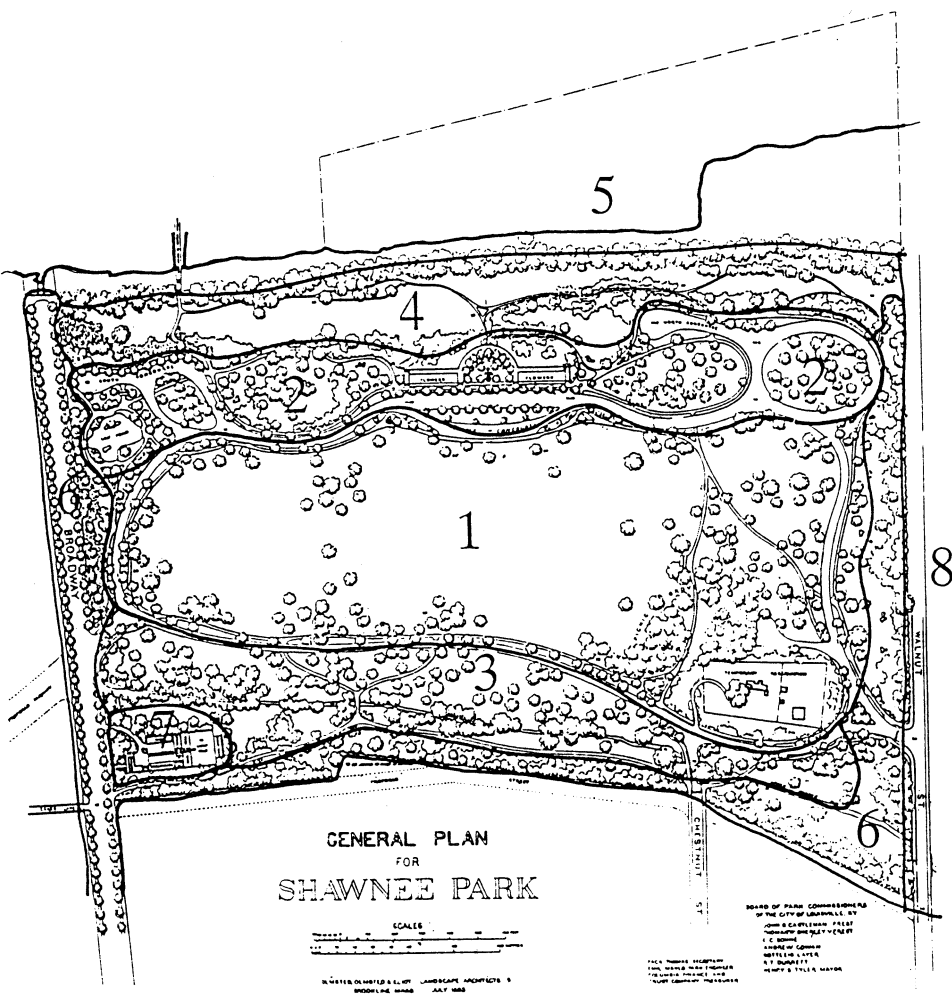


Figure 6. Shawnee Park historic zones, prepared by LANDSCAPES, 1993, shown on General Plan for Shawnee Park. 1=Great Lawn, 2=Middle Concourse, 3=Paddy's Run, 4=Slope & Bench, 5=River Edge, 6=Park Perimeter, 7=Administration, and 8=1911 Addition.

seeks to add canopy trees, some understory trees and herbaceous ground covers in a light woodland community along some of the park boundaries.

Iroquois Park

The 1897 General Plan for Iroquois Park shows a nearly square area of park land with the open center of Summit Field at the top of the domed knob. The sloping forests and open summit, with several scenic vistas over the city, are the essential components of these preserved lands which were developed for public use.

The sloping forests of Iroquois Park, varying in species with sun exposure and soil type are old growth and have never been cleared, with the exception of the areas below the scenic outlooks. The level beech forest to the north is old of high ecological value. Iroquois Parks' forest communities are seen on the plan in Figure 7. Important shale barren communities are also found on some forest slopes. The geology of New Albany shale with a mantle of highly erodible loess soils was disturbed by the original construction of Uppill Road and over time a number of drainage and erosion problems have developed. The large, open knob with undulating topography channels runoff to specific areas. Storm flows from the top of the knob create deep erosion gullies, fast moving water and flooding in areas of the park and surrounding neighborhoods at the base of the slopes.

The drainage challenge is the most compelling problem in Iroquois Park that threatens portions of the forests, Uppill Road and the surrounding community. The solution to these drainage problems begin at the top of the knob. Andropogon put forward a bioengineering approach that would slow runoff by developing a system of detention basins in existing swales shaped naturalistically and planted with wet meadow and intermittent wetland woody plants. The entire knob is currently mown with the exception of a few areas that are covered with goldenrod and little bluestem grass. The first project calls for the shaping and planting of the detention basins, the release and amendment plantings of a substantial area of meadow, substantial tree planting on the knob including the Olmsted recommended White oak grove.

From an historical perspective the spatial quality of openness of the knob grass area is the first consideration. The development of the basins adds a new element that will have a different visual quality that is seen today. No visual evidence of the open knob has been found and we do not know if in the past the swales were mown or unmown. If unmown they may have contained a number of the native species to be planted in the basins. Here the compelling need is to slow the water. The basin approach, driven by natural resource and infrastructure degradation, favors natural resources over cultural ones. However, the basins are kept to the

Legend



Forest Communities

①

Blackjack Oak-Post Oak Forest

②

Chestnut Oak

③

Oak-Hickory Forest

④

Sugar Maple-Beech

⑤

Mixed Forest-Yellow Poplar, Sugar Maple, Beech

⑥

Beech-Yellow Poplar



Park-Like Trees



Mowed



Wetland Remnant

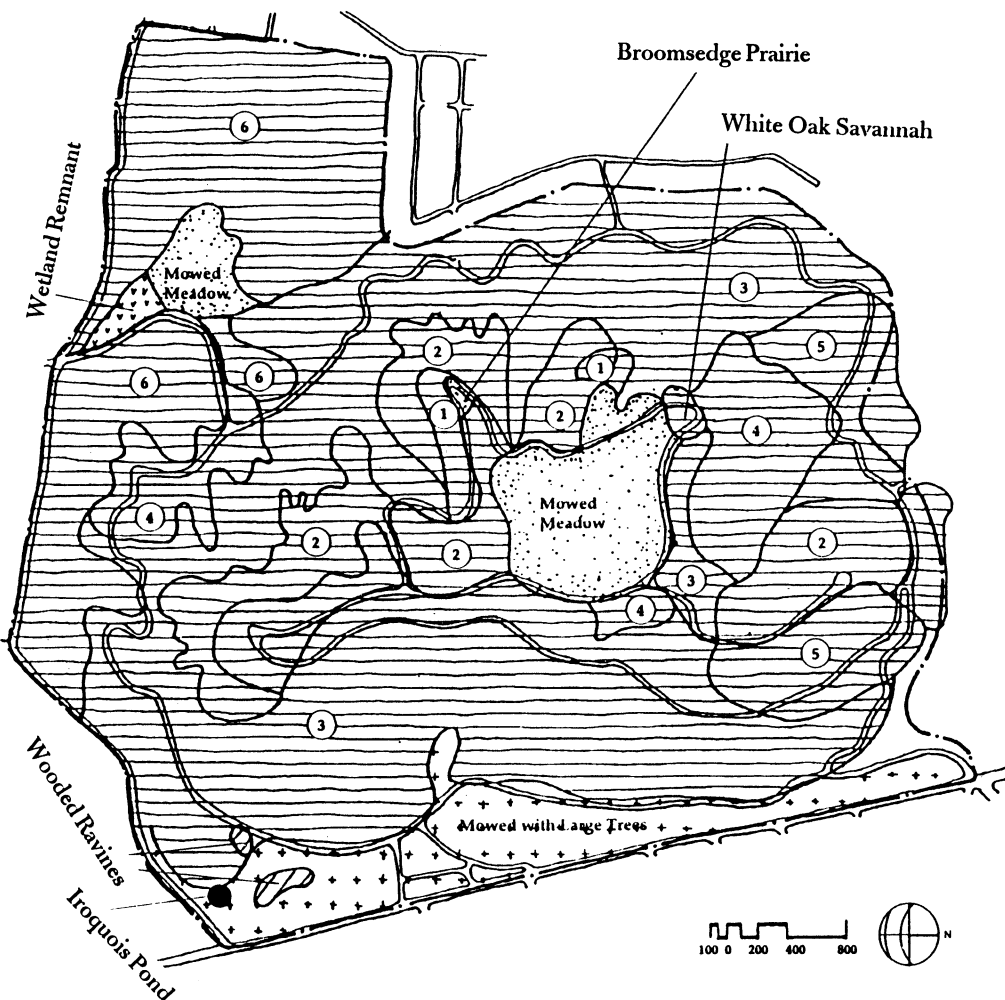


Figure 7. Plant communities of Iroquois Park.

knob margins to the greatest extent possible. The center of the meadow will be mown mixed turf. Basins closest to the center will have herbaceous wet meadow species only while those near the perimeter will contain woody species as well. The tall meadow areas, beyond the turf, will be managed to encourage species that are well below eye level so that the desired openness remains.

Cherokee Park

Cherokee Park is a public landscape that captured the Bear Grass Creek Valley with the rolling topography of blue grass, open pasture lands rising up from the creek bottom. The Olmsted design provided for augmenting park plantings with additional shade trees, areas of shrub and tree planting on steep slopes and varied open and dense planting along Bear Grass Creek. A botanical collection of native Kentucky woody plants was integrated into the park scenery as a unique regional expression and educational aspect of the landscape. The topography and vegetation of the park created a spatial organization that provided visual access throughout most of the landscape from the drives that often followed higher ground. Cherokee Parkway created a formal edge along the east side, while a boundary drive was proposed on the south. The park is still handicapped by the lack of a complete frontage drive that was hoped for but never achieved. The Cherokee Park Spatial Organization Plan, shown in Figure 8, indicates the

breadth of the internal views from drives and paths and the areas of enclosure created by vegetation. Unlike Iroquois and Shawnee Parks, broad vistas of land or water beyond the park do not exist in Cherokee Park. For Cherokee Park views are internalized ones from hilltops to valleys or along valleys. These five broad internal views of rolling topography, were punctuated by large, native trees. For example, the view from Barringer Hill consisted of an open grass foreground with a few shade trees, and a mid-ground of dappled light and shade with views to the creek, and light behind the groves hinting of the greensward beyond. The vegetation of the park was intended to frame spaces with indefinite edges allowing views through--a play of light and shade.

Historically, internal circulation provided varied experiences of the park from drives and paths that included movement through shaded valleys, open greensward and hillside overlooks that is altered today by radically changed vegetation caused by the 1974 tornado. The loss of a large number of park trees in the tornado and the resulting disturbance of plant communities allowed a high level of invasive exotic plants to enter the park landscape. Exponential increases in storm flows over the years have resulted from surrounding development and the Bear Grass Creek banks are eroded. The severe disturbance problems of park plantings and creek directed toward a natural res-



Figure 8. Spatial Organization Plan for Cherokee Park, prepared by *Landscapes*, 1993, overlaid on 1897 General Plan.

toration approach while preservation concepts looked toward recaptured spatial organization and the pursuit of the Olmsted "Woody Plants of Kentucky" concept, seen in the plan in Figure 9.

The arboretum approach, proposed on Olmsted planting plans and documented in plant lists and orders, was organized within the park in plant families. This simplistic nineteenth century idea, used in arboreta worldwide, placed a number of plants in environmental situations that were unsuitable, with lowland and upland species planted together in a low lying area for example. Olmsted's "Woody Plants of Kentucky" were also drawn for throughout the state with plants native to more northern or southern regions and varied soils all to be placed within on inland, pastoral creek valley park. A few exotic plants of European and far eastern origins were also curiously placed on the Olmsted lists.

Extensive discussion has surrounded this issue. From an historic restoration perspective, the Olmsted plan can be replaced in-kind, however, rehabilitation is the preservation treatment and the development of an intensively maintained arboretum is well beyond the means of the parks' stewards. However, the idea of incorporating a number of species into the landscape of all three parks as component of landscape restoration and an educational element is a compelling one. The intent is to compare and contrast the simplistic family

grouping approach of the Olmsted arboreta with our current ecological knowledge and group plant in their appropriate locations and associations using the spatial organization of the Olmsted plan as the design guide but substituting ecologically appropriate plantings. Overall the Olmsted list has been reduced in breadth and native species that prefer alkaline soils will be used. The process will begin with the first project which provides a 5% graded walk, partially following the Olmsted alignment, through the Barringer Hill section of the woodland along Barringer spring. Plantings will mimic the Olmsted organization. While a few trees will replace lost historic ones in-kind, the organization and ecological appropriateness of the plantings of trees, shrubs and herbaceous understory will guide the project. Interpretive signage addressing the "Woody Plants of Kentucky" will be incorporated into a wayside shelter along the spring.

Conclusion

This complex project is the result of a willingness to engage in a collaboration of disciplines to address natural and cultural resources in a manner that values both. The integrated planning process upon which it is built gives it a greater opportunity for lasting success. As the construction documents for phase one projects proceed, clarification of cultural and natural resource issues and the balancing of outcomes continues. The mission of the Louisville Olmsted

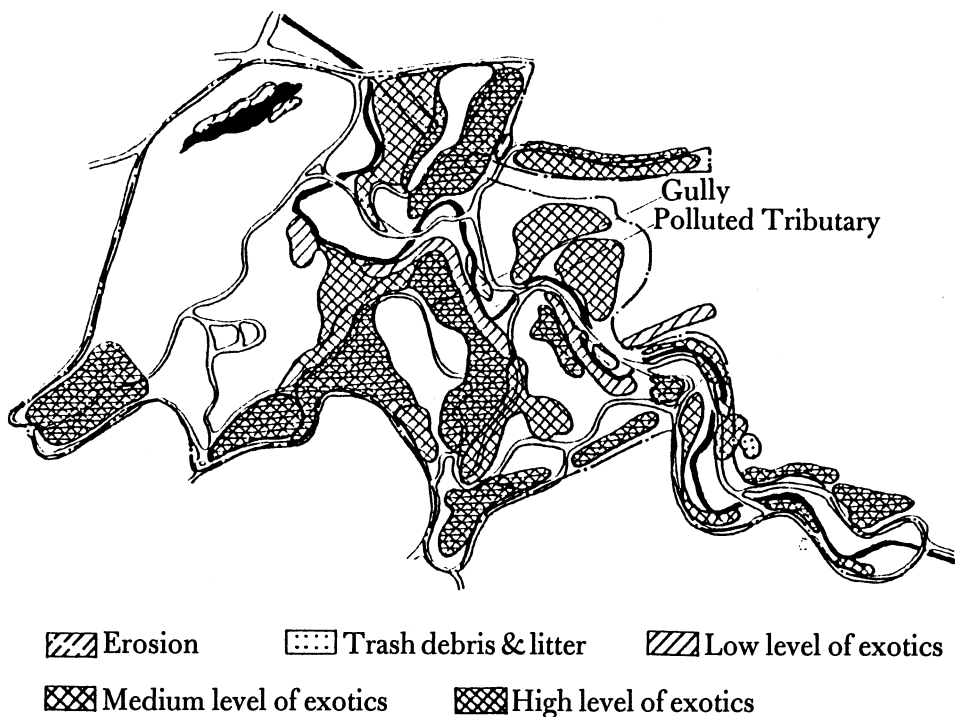


Figure 9. Plan of Cherokee Park, showing disturbance factors.

Parks Conservancy, “*To preserve the legacy of the Louisville Olmsted Parks and Parkways for all generations to come,*” is a work in progress.

Interventions selected to improve the quality and function of the public landscapes of Louisville's Olmsted system are important decisions that must consider the parks and parkways holistically, as cultural and natural resources. Existing conditions, user

needs, maintenance and management capabilities, as well as the role of both the Louisville Olmsted Parks Conservancy and Metro Parks, now and in the future, are addressed. The master plan results from the synthesis of all these bodies of information to provide for the framing of a vision that will bring the Louisville Olmsted Parks and Parkways into their second century of service and enjoyment.

Endnotes

1. Charles Beveridge and Arleyn Levee, compilers. “Olmsted Documentary Resource for Louisville’s Park Legacy: Cherokee, Iroquois and Shawnee Parks and the Parkways,” prepared for the Louisville Olmsted Parks Conservancy, 1992.
2. Charles Beveridge and Arleyn Levee, compilers. “Olmsted Documentary

Resource for Louisville's Park Legacy: Cherokee, Iroquois and Shawnee Parks and the Parkways," prepared for the Louisville Olmsted Parks Conservancy, 1992.

3. The Louisville Olmsted Parks & Parkways Master Plan Team includes: Andropogon Associates, Ltd., Rolf Sauer, team leaders; LANDSCAPES, historic resources; Eco-Tech, Inc. regional ecology; Proctor/Davis/Ray Engineers, civil engineering; Charles Beveridge and Arleyn Levee, Olmsted historians; for the Louisville Olmsted Parks Conservancy and Metro Parks, with the cooperation of many local citizens and groups.
4. The product of the planning effort is the *Louisville Olmsted Parks and Parkways Master Plan: A Guide to Renewal & Management*, a large format, 297-page document that is available through the Louisville Olmsted Parks Conservancy, PO Box 37280, Louisville, KY 40233-7280. A few paragraphs in this paper are edited from the report.
5. Treatment terms for all or part of a park or parkway are defined in the draft *Guidelines for the Treatment of Historic Landscapes*, prepared by the USDO, National Park Service, Preservation Assistance Division and other preservation literature.



Patricia M. O'Donnell, ASLA, APA, *Principal, LANDSCAPES, Landscape Architecture·Planning·Historic Preservation, Westport, Connecticut and Charlotte, Vermont*

A Listing of Sessions and Papers

The Twentieth Century Landscape Park

Ethan Carr, Landscape Historian, NPS-Park Historic Architecture Division, WASO

Moving Toward the Middle in a World of Extremes

Robert Z. Melnick, FASLA, Dean, Department of Architecture and Allied Arts, University of Oregon, Eugene, OR

Concurrent Sessions

A. Management Issues

Moderator - Opening Comments: Nora Mitchell, Director, Olmsted Center for Landscape Preservation, NPS, Brookline, MA

Fields of Prairie To Parade Fields: Landscape Stewardship In The Military

Suzanne Keith Loechl, US Army Corps of Engineers Research Laboratories, Champaign, IL

Tree Huggers and Godless Humanists: Let's Get Real - A Case Study of the Crater Lake Lodge Landscape

Nancy Dunkle and Terri Urbanowsky, NPS, Denver Service Center, Denver, CO

The Minuteman National Historic Park (MMNHP) Management Plan: Balancing Natural and Cultural Issues

Julius G. Fabos, PhD, FASLA - Department of Landscape Architecture and Regional Planning, University of Massachusetts, Amherst, MA

B: Rural/Vernacular Landscapes

Moderator - Opening Remarks: Hugh C. Miller, FAIA, Architect/Planner, Richmond, VA.

What's Good for Nature is (Often) Good for History Too! A Review of Protection Mechanisms for Natural and Cultural Landscapes

Elizabeth Brabec, ASLA, Principal, Land Ethics, Annapolis, MD

Farmer's Attitudes Towards Nature

Richard Westmacott, Professor, School of Environmental Design, University of Georgia, Athens, GA

Gardens in the Wilderness: Documenting, Interpreting, and Managing Agricultural Landscapes in National Parks

Professor Arnold R. Alanen and Susan Haswell, Department of Landscape Architecture, University of Wisconsin, Madison, WI

Session C: Corridors

Moderator - Opening Comments: Elizabeth E. Fischer, ASLA, National Scenic Byways Program, FHA, Washington, D.C.

The Erie Canal: Balancing The Preservation of Historic and Natural Resources On A Working Canal

Kathryn Wolf, ASLA, Trowbridge & Wolf Landscape Architects, Ithaca, N.Y.

Patterns on the Land

Michael Everett, Professor, Road and Land Institute, Rhode Island School of Design, Providence, RI

Frozen in Time: Viewing Natural Resources as Cultural Resources: Public Participation in the Management of Natural and Cultural Resources in Urban Parks

Michael P. Nairn, ASLA, Principal - South Street Design Company, Philadelphia, PA

Session D: Vegetation

Geraldine Weinstein, Director of Landscape Policy, Chicago Park District, Chicago, IL

Integrating Natural and Cultural Resource Management for Historic Orchards

Margaret Coffin, Historical Landscape Architect, Olmsted Center for Landscape Preservation, NPS, Brookline, MA

Highland Park Shrub Collection: A Case Study in the Preservation of Historic Plant Materials In An Arboretum Setting

Kathryn Wolf, ASLA, Trowbridge & Wolf Landscape Architects, Ithaca, NY

Palimpsests, Populations, and Patterns Recognition

Ian Firth, ASLA, Professor, School of Environmental Design, University of Georgia, Athens, GA

Session E: Forestry

Moderator - Opening Comments: Char Miller, Professor, Department of History, Trinity University, San Antonio, TX

Cultural Landscape Planning and Management: An Integration of Natural Systems

Dana E. Supernowicz, Historian, USFS, Placerville, CA

New Perspectives on Cultural Landscapes

Mary McCorvie, Shawnee National Forest, USFS, Murphysboro, IL

Industry as Rural Landscape: The Fenwick Iron Mining Complex, Craig County, Virginia

Michael Barber and Dale Huff, Jefferson National Forest, Roanoke, USFS, VA

Session F: Ethnographic Landscapes

Moderator - Opening Comments: Quentin Bass, Forest Archeologist, USFS, Cleveland, TN

Ephemeral Native American Cultural Landscapes: Recognition and Perpetuation or Loss? Examples from Northern California

Stephen D. Veirs, Jr., Division of Environmental Studies, Unit Leader-CPSU, NBS, University of California at Davis, Davis, CA

In the Shadow of Kilauea: Historic Landscape Management at Hawaii Volcanoes National Park

Cheryl Wagner, Landscape Architect, Lee & Liu Associates, Washington, D.C.

Perspectives on Nature and Culture

The Federal Role in Protecting Communities and Their Heritage

Bonnie R. Cohen, Assistant Secretary for Policy, Management, and Budget, Department of the Interior, Washington, D.C.

Can "Ecosystem Management" Manage Cultural Landscapes? An Ecological Perspective

Robert E. Cook, Director, Arnold Arboretum, Jamaica Plain, MA

The "Balance" Between Nature and Culture

John Dixon Hunt, Chairman, Department of Landscape Architecture and Regional Planning, Graduate School of Fine Arts, University of Pennsylvania, Philadelphia, PA

Master Plan for Renewing Louisville Kentucky's Olmsted Parks and Boulevards

Rolf Sauer, ASLA, Landscape Architect, Principal & Master Plan Project Director, Andropogon Associates, Ltd., Philadelphia, PA and Patricia O'Donnell, ASLA, APA, Principal, LANDSCAPES, Westport, CT and Charlotte, VT







About the GWS . . .

The George Wright Society was founded in 1980 to serve as a professional association for people who work in or on behalf of parks and other kinds of protected areas and public lands. Unlike other organizations, the GWS is not limited to a single discipline or one type of protected area. Our integrative approach cuts across academic fields, agency jurisdictions, and political boundaries.

The GWS organizes and co-sponsors a major U.S. conference on research and management of protected areas, held every two years. We offer the FORUM, a quarterly publication, as a venue for discussion of timely issues related to protected areas, including think-pieces that have a hard time finding a home in subject-oriented, peer-reviewed journals. The GWS also helps sponsor outside symposia and takes part in international initiatives, such as IUCN's Commission on National Parks & Protected Areas.

Who was George Wright?

George Melendez Wright (1904-1936) was one of the first protected area professionals to argue for a holistic approach to solving research and management problems. In 1929 he founded (and funded out of his own pocket) the Wildlife Division of the U.S. National Park Service—the precursor to today's science and resource management programs in the agency. Although just a young man, he quickly became associated with the conservation luminaries of the day and, along with them, influenced planning for public parks and recreation areas nationwide. Even then, Wright realized that protected areas cannot be managed as if they are untouched by events outside their boundaries.

Please Join Us!

Following the spirit of George Wright, members of the GWS come from all kinds of professional backgrounds. Our ranks include terrestrial and marine scientists, historians, archaeologists, sociologists, geographers, natural and cultural resource managers, planners, data analysts, and more. Some work in agencies, some for private groups, some in academia. And some are simply supporters of better research and management in protected areas.

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A Call for Papers will be issued in June 1996, and a Registration Form will be available in late Autumn-early Winter. Both will be available on the GWS internet Homepage—watch for an announcement in the next FORUM concerning the Homepage, now “under construction.”

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