This is an extract from:

Nature and Ideology

Natural Garden Design in the Twentieth Century

edited by Joachim Wolschke-Bulmahn

published by

Dumbarton Oaks Research Library and Collection

Washington, D.C.

as volume 18 in the series

Dumbarton Oaks Colloquium on the History of Landscape Architecture

© 1997 Dumbarton Oaks

Trustees for Harvard University

Washington, D.C.

Printed in the United States of America

www.doaks.org/etexts.html

The Authority of Nature: Conflict and Confusion in Landscape Architecture

ANNE WHISTON SPIRN

Gardens are shaped by rain and sun, plants and animals, and human hands and minds. Whether wild or clipped, composed of curved lines or straight, living plants or plastic, every garden is a product of natural phenomena and human artifice. It is impossible to make a garden without expressing, however unconsciously, ideas about nature. For thousands of years, nature has been both mirror and model for gardens, has been looked to for inspiration and guidance.

Designers who refer to their work as "natural" or "ecological" make ideas of nature central and explicit, citing nature as authority to justify decisions to select some materials or plants and exclude others, to arrange them in particular patterns, and tend the result in certain ways. Appealing to nature as the authority for landscape design has pitfalls which are often overlooked by advocates of "natural" gardens. To describe one sort of garden as natural implies that there are unnatural gardens which are somehow different (and presumably wrong). Yet, over time and place, quite different sorts of gardens have been claimed as natural, much the same way opposing nations claim to have God on their side. In fact, some designers invoke nature to call upon divine authority. To Frank Lloyd Wright, for example, nature was the manifestation of God: "Nature should be spelled with a capital 'N,' not because Nature is God but because all that we can learn of God we will learn from the body of God, which we call Nature."[1]

This essay is an extension of "Constructing Nature: The Legacy of Frederick Law Olmsted," in *Uncommon Ground: Reinventing Nature,* ed. William Cronon, New York, 1995. That book is the collective project of a group of scholars who worked together at the University of California Humanities Research Center in Irvine (UC-HRI) from January to June 1994. For insights which inform this essay, I am indebted to my colleagues in the Irvine seminar: Michael Barbour, Ann Bermingham, Bill Cronon, Susan Davis, Giovanna Di Chiro, Jeff Ellis, Donna Haraway, Robert Harrison, Katherine Hayles, Carolyn Merchant, Ken Olwig, Jim Proctor, Jenny Price, Candace Slater, and Richard White, and to Mark Rose, director of the institute. I would like to acknowledge fellowship support from the UC-HRI and the Nathan Cummings Foundation whose grant prompted the project. I am also grateful to Sylvia Palms, who assisted in assembling bibliographic and illustrative material, and to Paul Spirn, Carl Steinitz, Joachim Wolschke-Bulmahn, Kenneth Helphand, and an anonymous reader for their comments on an earlier version of this essay.

[1] Quoted by Brendan Gill in *Many Masks,* New York, 1987, 22. Another version, almost word for word, is transcribed from a tape of 4 August 1957 in Bruce Brooks Pfeiffer, *Frank Lloyd Wright: His Living Voice,* Fresno, 1987, 88. This is pure Emerson, who had written similar words more than 150 years earlier: "the noblest ministry of nature is to

Now too the authority of science is cited to augment the authority of nature and God. Today most landscape architects regard ecological science as an important source of principles for landscape design. Indeed, the adoption of ideas from ecology contributed to a renewal of the discipline in the 1960s. Some, however, have embraced ecology as the *primary* authority for determining the "natural" (and therefore correct) way to design landscapes. To its most extreme practitioners, ecological design is deterministic, its "laws" couched in terms that recall religious dogma. Debates over what constitutes a "truly ecological landscape architecture" have escalated in recent years, with various groups accusing each other of "non-ecological" behavior.[2] There have been bitter quarrels over the proper materials, styles, and methods of "ecological" landscape design. Some advocate the exclusive use of native, as opposed to naturalized, plants. Some urge the eradication of "exotic invaders" and condemn others for planting naturalized, non-native, plants. Some conceal the artifice of their works; others celebrate the human ability to transform the landscape. Some privilege the role of reason in design and promote science as the sole source of truth about nature, while others prefer personal revelation and reject science as a way of knowing.[3]

Such conflicts and the confusion they engender are about competing sources of authority and conflicting ideas of nature: whether humans are outside or inside nature, whether human impact is inevitably destructive or potentially beneficial, whether one can know an objective

---

stand as the apparition of God"; R. W. Emerson, *Nature,* Boston, 1836, 77. Wright spoke with Mike Wallace in 1957 on the television program "The Mike Wallace Interview." "I've always considered myself deeply religious," said Wright. "Do you go to any specific church?" asked Wallace. Wright replied, "My church [pause], I put a capital 'N' on Nature and go there." Wright is a good example of a designer who appeals to divine authority through nature because he has written so extensively on the topic. Most designers who link the natural and the divine do so less explicitly. For a discussion of how ideas of nature are expressed in the work of Frank Lloyd Wright, see my essay, "Frank Lloyd Wright: Architect of Landscape," in *Frank Lloyd Wright: Shaping an American Landscape, 1922–1932,* ed. David DeLong, New York, 1996, 135–69.

[2] See George Thompson and Frederick Steiner, eds., *Ecological Design and Planning,* New York, 1997. I am grateful to Frederick Steiner for providing the manuscript of this book prior to publication. The phrase "non-ecological" is used in this volume by several authors with divergent views on the nature of ecological design. See, for example, chapters by Ian McHarg ("Ecology and Design") and his critic James Corner ("Ecology and Landscape as Agents of Creativity"). This collection of essays reveals some of the conflict and confusion in the field, as well as some pitfalls of appealing to "ecology" or "nature" for authority in landscape design. Those familiar with the field will recognize that most of the figures quoted in this essay are my colleagues at the University of Pennsylvania. I have great respect for each of them; all have made important contributions to the field through writing, teaching, or practice. The University of Pennsylvania has been a center for the development and continuing evolution of this approach to landscape design. This essay should in no way be interpreted as a rejection of the approach launched there in the early 1960s and dubbed "ecological" design, but rather should be seen as an attempt to construct firmer ground for future discussions. What I *am* attacking is dogma, and what I am urging is a more reasoned, inclusive approach, well cognizant of the problems inherent in appeals to authority, in general, and to nature in particular.

[3] The focus of this book, and thus this essay, is on nature, ideology, and landscape design. The essay does not discuss the full scope of the current controversy in landscape architecture over the conflicting authority of "nature" versus "culture," ecology versus art. I am just as critical of appeals to historical precedent or personal expression as sole authority for landscape design as I am of appeals to nature. Such a discussion is outside the scope of this essay, and I have treated the subject elsewhere. See, for example, "Seeing/Making the Landscape Whole," *Progressive Architecture* (August 1991), 92–94; "Architecture and Landscape: Toward a Unified Vision," *Landscape Architecture* (August 1990), 36–42; "The Poetics of City and Nature," *Landscape Journal* (Fall 1988), 108–26.

nature apart from human values. Some believe authority comes from traditional precedent: from the way things have "always" been done, or were done previously in some idealized period or exemplary models. Others derive authority from a rational system of rules or laws which can be proved or explained. Some are persuaded by the statements of a charismatic leader.[4] Differences in basic assumptions are so fundamental that they may make it impossible to resolve the conflicts, but it *is* possible to clarify differences and dispel confusion. Much confusion comes from launching the debate without defining its terms. Anyone who invokes the *authority* of nature, implies that they are privileged to speak for nature. But who confers that privilege and why, and what is *nature* anyway?

The Nature of Nature

Nature is an abstraction, a set of ideas for which many cultures have no one name, "a singular name for the real multiplicity of things and living processes."[5] The singular quality of the word masks this multiplicity and implies that there is a single definition, an impression which is grossly misleading. A. O. Lovejoy identified sixty-six different senses of the words *nature* and *natural* as used in literature and philosophy from the ancient Greeks to the eighteenth century.[6] The abstract quality of the word strips nonhuman features and phenomena of agency, of exerting an active force upon the world, on the one hand, yet invites personification ("Nature's revenge"), on the other.

Nature is both given and constructed. There is always a tension between the autonomy of nonhuman features and phenomena and the meanings we ascribe to them. *Nature* is the word Raymond Williams called "perhaps the most complex word in the language."[7] It comes from the Latin *natura*, which comes in turn from *nasci*, to be born. Thus *nature* is linked to other words from the same root, such as nascent, innate, native, and nation. In English, as in French and Latin, the word *nature* originally described a quality—the essential or given character of something—then later became an independent noun. Williams identified two additional areas of meaning: "the inherent force which directs either the world or human beings or both" and "the material world itself, taken as including or not including human beings."[8]

Nature is a mirror of and for culture. Ideas of nature reveal as much or more about human

[4] See Max Weber's analysis of three forms of authority—traditional, legal-rational, and charismatic—in *Economy and Society,* ed. Guenther Roth and Claus Wittich, Berkeley, 1978. For an introduction to ideas of authority, see Raymond Boudon and François Bourricaud, *A Critical Dictionary of Sociology,* Chicago, 1989.

[5] Raymond Williams, "Ideas of Nature," in *Problems in Materialism and Culture,* London, 1980, 67–85.

[6] A. O. Lovejoy, "Some Meanings of 'Nature,'" in A. O. Lovejoy et al., *A Documentary History of Primitivism and Related Ideas,* Baltimore, 1935, 447–56.

[7] Raymond Williams, *Keywords: A Vocabulary of Culture and Society,* rev. ed., New York, 1983, 219. Many essays and entire books have been written on the origins, history, use, and significance of the word *nature.* See, for example: Williams, "Ideas of Nature"; C. S. Lewis, "Nature," in *Studies in Words,* Cambridge, 1967; Lovejoy, "Some Meanings of 'Nature'"; Arthur O. Lovejoy, "Nature as Aesthetic Norm," in *Essays in the History of Ideas,* Baltimore, 1948, 69–77; R. G. Collingwood, *The Idea of Nature,* London, 1945; Clarence Glacken, *Traces on the Rhodian Shore: Nature and Culture in Western Thought to the End of the Eighteenth Century,* Berkeley, 1967; William Leiss, *The Domination of Nature,* Boston, 1974; Neil Evernden, *The Social Creation of Nature,* Baltimore, 1992.

[8] This description of the origins of the word *nature* draws from Williams, *Keywords,* 219.

society as they do about nonhuman processes and features. Even as human cultures describe themselves as reflections of nature, their ideas of nature also mirror their culture. Lovejoy's review of the words *nature* and *natural* reveals how integral ideas of nature have been to religion, politics, and beliefs about what constitutes normal or abnormal, right or wrong behavior. Nor has science been immune to normative notions of nature. When ecologists describe the "harmony" of nature and the succession of plant "communities" from pioneers to stable climax forest, they are also describing a model for human society.[9] The idea of the Fall—of humanity expelled from Paradise, a former state of grace within nature—has exerted a powerful influence on the imagination in Western cultures. Ecology, anthropology, and garden design are laced with Edenic narratives, stories of an initial state of harmony, perfection, and innocence in which humans lived as one with other living creatures followed by the forced separation of humans from nature, often accompanied by nostalgia for the perfect past and a view of "native" peoples as living in a more worthy, morally superior relation to nature.[10]

As products of culture, ideas of nature vary from people to people, place to place, period to period. Even in a particular time and place, what constitutes the "natural" way of doing things has been disputed. Frank Lloyd Wright and Jens Jensen, fellow residents of Chicago and Wisconsin, friends throughout most of their lives, agreed that nature was *the* authority for design and sought to express the moral messages or "sermons" they read in hills and valleys, rivers and trees.[11] Despite this apparent common ground, the two men "argued incessantly about the nature of nature," about what form a "natural" garden should take.[12]

Wright's understanding of nature was grounded in his family's Emersonian philosophy.[13] He had contempt for "some sentimental feeling about animals and grass and trees and out-of-doors generally," as opposed to reverence for nature as an internal ideal, the very "'nature' of God."[14] To Wright, landscape was often an imperfect manifestation of nature; the task of the architect was to bring its outer form in closer conformity with an inner ideal, its *nature,* or essential characteristics. Wright derived his principles for design from the underlying *structure* of flowers, trees, and terrain, and his landscape designs were often abstract versions of regional landscapes of prairie or desert.

[9] See Donald Worster, *Nature's Economy: The Roots of Ecology,* New York, 1979; Daniel Botkin, *Discordant Harmonies: A New Ecology for the Twenty-First Century,* New York, 1990; Gregg Mitman, *The State of Nature: Ecology, Community, and American Social Thought, 1900–1950,* Chicago, 1992; and Frank Golley, *A History of the Ecosystem Concept in Ecology,* New Haven, 1994.

[10] Candace Slater, "Amazonia as Edenic Narrative," in *Uncommon Ground: Reinventing Nature,* 114–59. Slater traces edenic narratives as they relate to the biblical story of Genesis, but points out that such notions are not unique to the Judeo-Christian tradition. For a discussion of other religious traditions, see Poul Pedersen, "Nature, Religion, and Cultural Identity: The Religious Environmentalist Paradigm," in *Asian Perceptions of Nature: A Critical Perspective,* ed. Arne Kalland and Ole Bruun, London, 1995.

[11] " . . . a sermon which awakens the best in the human soul"; Jens Jensen, *Siftings: The Major Portion of "The Clearing," and Collected Writings,* Chicago, 1956, 63.

[12] Edgar Tafel, *Apprentice to Genius,* New York, 1985, 152; personal communication, Cornelia Brierly of the Taliesin Fellowship. Brierly was assigned to assist Jensen when he visited Taliesin.

[13] See William Cronon, "Inconstant Unity," in *Frank Lloyd Wright: Architect,* ed. Terrance Riley, New York, 1994, for an excellent discussion of the roots of Wright's philosophy.

[14] "An Autobiography," in *Frank Lloyd Wright: Collected Writings,* vol. 2, ed. Bruce Brooks Pfeiffer, New York, 1992, 163.

If Wright's obsession was to extract and express an ideal inner nature, Jensen's was to protect and promote the "native" features of regional landscapes. Jensen believed there was a correspondence between a region's climate, physiography, and flora and its human inhabitants; landscape fostered, then symbolized, a relationship between people and place. Unlike Wright, Jensen gave no impression in his published works that he believed humans could improve upon the "native" landscape: "Nature talks more finely and more deeply when left alone."[15] He revered what he called the "primitive" and found his "main source of inspiration . . . in the unadulterated, untouched work of the great Master."[16] These ideas led Jensen to imitate the outward appearance of the local landscape, its meadows, woodlands, and riverbanks: "Through generations of evolution our native landscape becomes a part of us, and out of this we may form fitting compositions for our people."[17]

Many of Jensen's ideas, such as the relation he saw between nature and nation and his advocacy of native plants, were common ideas in Europe and North America.[18] Contemporary ecological theories drew parallels between plant and animal "communities" and human communities and, in some cases, extended this analogy to justify certain human activities as "natural."[19] Ideas of the relationship between native plants and "folk," however, were carried to ideological extremes by German landscape architects under National Socialism.[20] The use of "native" plants and "natural" gardens to represent the Nazi political agenda should dispel forever the illusion of innocence surrounding the words *nature, natural,* and *native* and their application to garden design. Nature is one of the most powerfully loaded, ideological words in the English—and German—languages.

Nature and *natural* are among the words landscape architects use most frequently to justify

[15] Jensen, *Siftings,* 94.

[16] Ibid., 23.

[17] Ibid., 21.

[18] Jensen was born of a Danish-speaking family in the Slesvig region, a border zone of northern Germany and southern Denmark. This region was politically and culturally contested ground for more than a century. Despite two good books on Jensen's life and work (Eaton and Grese), his complex relationship to Danish and German ideas of nature and nation has not been fully explored, and it is beyond the scope of this essay to do so. See Leonard Eaton, *Landscape Artist in America: The Life and Work of Jens Jensen,* Chicago, 1964; Robert E. Grese, *Jens Jensen: Maker of Natural Parks and Gardens,* Baltimore, 1992; and Joachim Wolschke-Bulmahn's review of Grese in *Journal of Garden History* 15 (1995), 54–55. For perspectives on contemporary Danish and German ideas of nature and natural gardens, see Kenneth Olwig, "Historical Geography and Society/Nature Problematic: The Perspective of J. F. Schouw, George Perkins Marsh, and E. Reclus," *Journal of Historical Geography* 6, 1 (1980), idem, *Nature's Ideological Landscape,* London, 1984, and Joachim Wolschke-Bulmahn, "'The Peculiar Garden': The Advent and the Destruction of Modernism in German Garden Design," in *Masters of American Garden Design, III: The Modern Garden in Europe and the United States,* Proceedings of the Garden Conservancy Symposium, ed. Robin Karson, New York, 1994. See also Frank Waugh, *The Natural Style of Landscaping,* Boston, 1917, for a North American perspective, and Allan Ruff, *Holland and the Ecological Landscape,* Stockport, 1979, for an introduction to the work of Jacobus Thijsse, J. Landwehr, and the Dutch "Heem" (home) parks.

[19] See Mitman, *The State of Nature,* for a history of the Chicago school of ecology and the interplay between science and a social philosophy that stressed the value of cooperation over conflict.

[20] See Gert Gröning and Joachim Wolschke-Bulmahn, "Some Notes on the Mania for Native Plants in Germany," *Landscape Journal* 11, 2 (1992), 116–12, for a discussion of ecological theory in Germany during the nineteenth and early twentieth centuries and parallels between the eradication of non-native plants in Nazi Germany and the extermination of non-Aryan human populations. There is some evidence that Jensen was sympathetic to at least some of these ideas; see Wolschke-Bulmahn, "'The Peculiar Garden.'"

their designs or to evoke a sense of "goodness," but they rarely examine or express precisely what the words mean to them, and they are generally ignorant of the ideological minefields they tread. Invoking nature, they imagine they are talking about a single phenomenon with universal meaning, when in fact their ideas may be entirely different from one another, even antithetical. At first the abstraction of the word *nature* conceals differences. Then when arguments inevitably ensue, it befuddles and confounds.

The Nature of Landscape Architecture

Landscape architects hold strong ideas about nature; whatever it means to them, they tend to *care* about it, for the beliefs and values those ideas represent are usually at the heart of why they entered the profession. For the past seven years, I have asked my graduate students: What is nature? Their responses have included the following: nature was given as a trust to humans by God; nature is trees and rocks, everything except humans and the things humans make; nature is a place where one cannot see the hand of humans, a place to be alone; nature consists of creative and life-sustaining processes which connect everything in the physical and biological worlds, including humans; nature is a cultural construct with no meaning or existence outside human society; nature is something that cannot be known; Nature is God. While this is a broad range of definitions, it does not represent the full spectrum of possible answers; the experiential and spiritual aspects of nature are cited frequently, for example, and nature as material resource is rarely mentioned.[21]

Tensions and contradictions in landscape architecture also stem from inherent, unresolved conflicts among the disciplines from which it draws. The roots of landscape architecture lie in several constellations of disciplines: agriculture (gardening, horticulture, forestry); engineering; architecture and fine arts; science (ecology). These constellations are based upon disparate ideas about the relationships of humans to nonhuman features and phenomena. Agriculture, engineering, and architecture are founded on the idea that nature can be improved upon, whereas ecologists tend to be observers of, rather than actors upon, nature. To gardeners (and by extension to horticulturalists and foresters), humans are stewards who manage plants, animals, and their habitats for human ends, for sustenance and pleasure; nature is both material and process, something to be reckoned with. To most engineers, nature consists of forces to be controlled or overcome. To artists and architects, nature is generally not an active agent, though it is a source of inspiration, of symbolic forms to be drawn upon, a scene to be represented, a site to be occupied and

[21] On the first day of class, I ask students to define nature. Sometimes, at the end of the course I ask them to write a short paper defining nature once again. Their answers are more articulate and reflective, but rarely change in substance from the first brief statement. I have concluded that ideas of nature are deeply held beliefs, closely tied to religious values, even for those people who do not consider themselves "religious." By the age of twenty-five, most students' ideas of nature seem set or at least not modified greatly by a single course on the subject (they ranged in age from twenty-two to fifty; most were in their mid to late twenties). While largely North American, approximately one-third of these students have been from other parts of the world, including Europe, the Middle East, Africa, Asia, South America, and Australia. Of the North Americans, most grew up in suburbs or in rural areas; a higher proportion of foreign students are from cities.

transformed, something perceived. On the other hand, to many ecologists, humans are interlopers in nature, disturbers who deflect nature from its ideal, self-regulating state.[22]

These differences among disciplines are emphasized further by the fact that they recognize the validity of different types of authority to defend their understanding of the world and justify their actions. While most derive authority to some degree from tradition, systems of rules, and charismatic leadership, they give more or less weight to each of these types. Modern science, for example, is based on the idea of rational, systematic studies whose results can be replicated. Historians of science have demonstrated that scientific practice is also tradition-bound (until the next paradigm shift), its course swayed by the ideas of powerful personalities; nevertheless, rational proofs are recognized as the only legitimate authority. Architecture, on the other hand, has long acknowledged the authority traditionally vested in certain styles (e.g., classicism, the vernacular) and exemplary buildings (the Pantheon, the Villa Savoye). Most architects seek legitimacy for their buildings through reference to a stylistic tradition or original model. Artists have more license to flout authority than do architects or scientists; society does not hold artists as accountable for their works. Particularly in this century, artists have gained authority through originality, the production of works unlike anything seen before.

Landscape architects have drawn broadly from other disciplines without examining and reconciling the beliefs and traditions on which they are based.[23] There is also a tendency to accord higher status to ideas generated in other disciplines, to cite authors from outside the field, but to ignore pertinent works in landscape architecture, and to draw freely from precedent without acknowledgment.[24] The habit of borrowing theory and methods from other fields and applying them directly to landscape architecture not only works against their integration, it often places these disparate ways of knowing and working in hostile juxtaposition. In graduate schools, it is not unusual to find students with backgrounds in horticulture, art, architecture, engineering, and ecology in the same class, and the faculty often includes members of several of these disci-

[22] There are exceptions, of course. Engineers such as Ken Wright of Denver have devised drainage and floodways which deflect or adjust to flowing water. Architects such as the Australians Glenn Murcutt and Richard Le Plastrier regard landscape processes as active agents and design their buildings to respond to wind, water, light, and heat. Artists such as Robert Smithson, James Turrell, Alan Sonfist, Newton and Helen Harrison, and Doug Hollis have engaged processes of erosion, water flow, light, wind, sound, and plant growth in their works.

[23] Robert Riley and Brenda Brown have addressed this topic in a recent editorial, "Analogy and Authority: Beyond Chaos and Kudzu," *Landscape Journal* 14, 1 (1995), 87–92.

[24] Landscape architects fail repeatedly to build upon prior efforts and often reiterate ideas without advancing them significantly. The desire to be seen as original is typical of the field, and advocates of ecological design and planning are no exception. Ian McHarg ignored precedent when he asserted, as he has many times, "I invented ecological planning during the 1960s" ("Ecology and Design," 321). McHarg has made an enormous contribution to the theory and practice of landscape architecture, especially in the incorportion of ideas from ecology. The importance of his contributions is not diminished when seen in the context of work by others such as Phil Lewis, Angus Hills, and Arthur Glickson, who pursued similar ideas from the 1950s and early 1960s, not to mention many prior figures, such as Patrick Geddes and Warren Manning. This tradition was not acknowledged in the Department of Landscape Architecture and Regional Planning at the University of Pennsylvania when I was a student there in the early 1970s, nor did we draw from it in our work at Wallace McHarg Roberts and Todd during that period. Though both department and firm made numerous innovations, there were also many reinventions.

plines. At best, mating these fields in a single faculty is a rich marriage of ideas. At worst, it is a shotgun wedding where individuals cannot find common ground. Few have combined these roots successfully and inventively. The unresolved differences in academic departments over meanings of nature and ways of knowing have been played out in practice, producing a major muddle and too few built landscapes which fuse the contributions of art and science, gardening and engineering.

In 1957 Sylvia Crowe called landscape architecture a bridge between science and art, a profession whose greatest task was to "heal" the "breach between science and humanism, and between aesthetics and technology."[25] Landscape architecture and its relation to allied disciplines was the subject of International Federation of Landscape Architects meetings during this period.[26] Forty years later, landscape architecture is still caught in the breach, struggling to construct a core that integrates its diverse roots rather than privileging one over the others.

In 1969 Ian McHarg's *Design with Nature* led to fundamental changes in the teaching and practice of landscape architecture. McHarg advocated the systematic application of a set of "rules" derived from ecological science and demonstrated the value of this approach in professional projects. His charismatic personality and polemical language captured the attention of the profession and public, attracted a large following, and were instrumental in the acceptance of ideas which had also been explored by others. Nearly thirty years later, many innovations once seen as radical are now common practice. The claim that science is the *only* defensible authority for landscape design, however, proved particularly damaging to discourse and practice in landscape architecture. When McHarg, for example, continues to use the words *nature* and *ecology* interchangeably, as an "imperative" or "command" for design, he brooks no dissent: "I conceive of non-ecological design as either capricious, arbitrary, or idiosyncratic, and it is certainly irrelevant. Non-ecological design and planning disdains reason and emphasizes intuition. It is anti-scientific by assertion."[27] Such aggressive overstatements no longer advance the field, and have provoked equally dogmatic reactions from those who seek to promote landscape architecture as an art form.[28]

Ecology as a science (a way of describing the world), ecology as a cause (a mandate for moral action), and ecology as an aesthetic (a norm for beauty) are often confused and conflated.

[25] Sylvia Crowe, "Presidential Address," *Journal of the Institute of Landscape Architects* (November 1957), 4.

[26] Geoffrey Jellicoe portrayed the situation as "A Table for Eight," where the landscape architect shares concerns for shaping the environment with seven others: the philosopher, the town and country planner, the horticulturalist, the engineer, the architect, the sculptor, and the painter. *Space for Living,* ed. Sylvia Crowe, Amsterdam, 1961, 13–21. Another essay by Francisco C. Cabral, "The Education of the Landscape Architect," outlines a curriculum where he stressed the importance of science (ecology, geology, climate) and agriculture (horticulture, forestry), as well as architecture and fine arts (ibid., 41–45).

[27] McHarg, "Ecology and Design," 321.

[28] Provoked by such statements, many proponents of a new artistic thrust in landscape architecture chose to set this movement in opposition to "the ecological movement and its detrimental consequences for design." One article included gratuitous, unfounded attacks, some from critics who chose to remain anonymous, such as "The so-called Penn School led by McHarg produced a generation of landscape graduates who did not build." Daralice Boles, "The New American Landscape," *Progressive Architecture* (July 1989), 53. Statements such as these were retracted by the editors in a subsequent issue of the journal in response to letters to the editor.

McHarg does so when he calls ecology "not only an explanation, but also a command."[29] As does his critic, James Corner, when he offers an alternative "*truly* ecological practice of landscape architecture" and refers to "the processes of which ecology and creativity speak" as leading to "freedom."[30] It is important to distinguish the insights ecology yields as a description of the world, on the one hand, from how these insights have served as a source of prescriptive principles and aesthetic values, on the other. The perception of the world as a complex network of relations has been a major contribution of ecology, permitting us to see humans, ourselves, as but one part of that web. There has been a tendency, however, to move directly from these insights to prescription and proscription, citing "ecology" as an authority in much the same way that "nature" was employed in the past to derive "laws" for landscape design and to define a single aesthetic norm, in this case "the ecological aesthetic." Laurie Olin has criticized this approach as "a new deterministic and doctrinaire view of what is 'natural' and 'beautiful'" embodying a "chilling, close-minded stance of moral certitude."[31]

Constructing Nature

Landscape architects construct nature both literally and figuratively, but the history of twentieth-century landscape architecture has been told largely as a history of forms rather than a history of ideas and rhetorical expression. This has been especially true of the history of "natural" or "ecological" design. Gardens of different periods built to imitate "nature" may appear similar, yet express different, even divergent, values and ideas. The Fens and Riverway in Boston and Columbus Park in Chicago, for example, were built to resemble "natural" scenery of their region, but the motivations that underlay them were quite different in several important respects. These projects are cited often as precedents and models for an ecological approach to landscape design without critically examining the values and motives that underlay them, thereby further confounding the current confusion around issues of nature and authority.[32]

Boston's Fens and Riverway, designed by Frederick Law Olmsted, were built over nearly two decades (1880s–1890s), the first attempt anywhere, so far as I know, to *construct* a wetland.[33] The function and the form of the Fens and Riverway were revolutionary; the "wild" appearance was in contrast to the prevailing formal or pastoral styles.[34] These projects, built on the site of tidal flats and floodplains fouled by sewage and industrial effluent, were designed to purify water and protect adjacent land from flooding. They also incorporated an interceptor sewer, a parkway, and Boston's first streetcar line. Together they formed a landscape *system* designed to accommo-

29 Ibid.

30 Corner, "Ecology and Landscape as Agents of Creativity," 81, 102 (italics added).

31 Laurie Olin, "Form, Meaning, and Expression in Landscape Architecture," *Landscape Journal* 7, 2 (1988), 150 (special issue on "Nature, Form, and Meaning," ed. by Anne Whiston Spirn).

32 Robert Grese (*Jens Jensen*) presents a useful comparison of the work of Olmsted and Jensen in this and other respects, but emphasizes similarities and does not probe their ideological differences.

33 My essay "Constructing Nature," treats material presented here in more detail.

34 The Ramble at Central Park was planted to appear "wild," but it was only a small part of the park. William Robinson, an English acquaintance of Olmsted, published his book *The Wild Garden* in 1870. Olmsted was undoubtedly also aware of Martin Johnson Heade's contemporary paintings depicting marshes along Boston's North Shore.

date the flow of water, removal of wastes, and movement of people; Olmsted conceived them as a new type of urban open space which he took care to distinguish from a park. This skeleton of woods and wetland, road, sewer, and public transit structured the growing city and its suburbs. The Fens and Riverway were a fusion of art, agriculture, engineering, and science. Olmsted's contemporaries knew that these parks were constructed, for they had seen and smelled the stinking, muddy mess the Fens replaced; the recognition of the transformation was part of their social meaning and aesthetic power.

Jens Jensen designed Columbus Park (1916) in Chicago thirty years later to "symbolize" a prairie landscape.[35] He made a large meadow, excavated a meandering lagoon, and planted groves of trees as a representation of the Illinois landscape: prairie, prairie river, and forest edge. All the plants used in the park were native to Illinois; they "belonged," as Jensen put it.[36] In outward appearance, the "prairie river" looked much like the Fens, as testified by photographs taken of each within about a decade of construction. Both Olmsted and Jensen intended their projects to expose townspeople to what they saw as the beneficial influence of rural scenery, particularly those people who were unable to travel to far-off places and were barred from "neighboring fields, woods, pond-sides, river-banks, valleys, or hills."[37] Despite these similarities, the aims of the two men and the goals of their projects were very different in important ways.

Jensen's agenda at Columbus Park and elsewhere was to bring people, especially "the growing minds" of youth, into contact with their "home environment," for he believed that "We are molded into a people by the thing we live with day after day."[38] Every region should display the beauty of its local landscape: "This encourages each race, each country, each state, and each county to bring out the best within its borders."[39] Jensen elaborated on these ideas of "environmental influences" in *Siftings,* where he attributed certain characteristics among populations of European countries and American regions to the influence of their landscapes. While he stressed that each regional landscape has its own beauty, he repeatedly revealed his prejudice for the superiority of northern regions and peoples with such statements as: "Environmental influences of the hot south have almost destroyed the strong and hardy characteristics of . . . northern people."[40] Jensen drew parallels between people and plants and advocated the sole use of species native to a place: "To me no plant is more refined than that which belongs. There is no comparison between native plants and those imported from foreign shores which are, and shall always remain so, novelties."[41]

Like many of his contemporaries, Olmsted thought that environment influenced human behavior, but his views and focus were different from Jensen's. He believed that contemplation of

[35] Jensen, *Siftings,* 76.

[36] Ibid., 77.

[37] Frederick Law Olmsted, "Parks, Parkways and Pleasure Grounds," *Engineering Magazine* 9, 2 (May 1895), 253–54.

[38] Jensen, *Siftings,* 83.

[39] Ibid., 46.

[40] Ibid., 35.

[41] Ibid., 45.

"natural scenery" had beneficial physical, mental, and moral effects, and that the lack of such opportunity could lead to depression and mental illness.[42] In constructing "natural" scenery, Olmsted advocated the use of hardy, exotic plants along with native species and argued with Charles Sprague Sargent who opposed using non-native plants in the Riverway.[43] The "primary" purpose of the Riverway was "to abate existing nuisances, avoid threatened dangers and provide for the permanent, wholesome and seemly disposition of the drainage of Muddy River Valley."[44] The Fens and Riverway are an application of ideas proposed by George Perkins Marsh in *Man and Nature* (1864): "In reclaiming and reoccupying lands laid waste by human improvidence or malice . . . the task is to become a co-worker with nature in the reconstruction of the damaged fabric."[45] The attempt to manage landscape processes to restore land and water polluted by human wastes and to promote human health, safety, and welfare was what made these projects so significant. Such goals were largely absent from Jensen's work.

The natural garden movement in the early part of the twentieth century, of which Jensen was a proponent, and the ecological design movement of the latter part seem to have much in common. Both have stressed native plants and plant communities as material and model for garden design. Beyond these and other similarities, however, there are deep differences in the ideas of nature underlying the two movements. In the United States, natural garden design in the early twentieth century was part of the larger context of regionalism expressed in art, literature, and politics. American regionalism was a populist movement that promoted the local roots of place and folk over the increasing power of the federal government, the growth of national corporations, and the influence of foreign styles.[46] Jensen used regional landscapes and native plants to shape human society; he never discussed the value of plants, animals, or biological and physical processes apart from their significance for human purpose. This anthropocentric context is a contrast to late twentieth-century environmentalism where animals, plants, and ecosystems may be accorded value, and even legal rights, not just for the present or future value they may have for humans, but also for *themselves*.[47]

[42] Such views were common at the time, and Olmsted discussed them frequently in relation to his work. See, for example, "The Yosemite Valley and the Mariposa Big Trees: A Preliminary Report (1865), *Landscape Architecture* 43 (1952), 12–25, and *General Plan for the Improvement of the Niagara Reservation,* New York, 1887.

[43] Olmsted preferred to follow William Robinson's practice of mixing native and hardy exotic plants, described in *The Wild Garden*. See Cynthia Zaitzevsky, *Frederick Law Olmsted and the Boston Park System,* Cambridge, 1982, 196, for quotations concerning Olmsted's and Sargent's disagreement on this subject. The upshot was that only native species were planted on the Brookline side of the Riverway (where Sargent had the authority of approval), while a mixture of native and non-native species were planted on the Boston side!

[44] "General Plan for the Sanitary Improvement of Muddy River and for Completing a Continuous Promenade between Boston Common and Jamaica Pond," Boston, 1881.

[45] George Perkins Marsh, *Man and Nature,* Cambridge, 1864. Olmsted must have been familiar with this well-known book which was reprinted several times in the nineteenth century.

[46] Robert Dorman, *Revolt of the Provinces: The Regionalist Movement in America,* Chapel Hill, N.C., 1993.

[47] See Donald Scherer and Thomas Attig, eds., *Ethics and the Environment,* Englewood Cliffs, N.J., 1983. At its most *extreme,* contemporary environmentalism can even sound anti-human. Ian McHarg still refers to humans as a "planetary disease," the phrase he published in *Design with Nature,* Garden City, N.Y., 1969. Despite misanthropic rhetoric, McHarg has close links to the earlier regionalist movement through his mentor, Lewis Mumford.

Reconstructing Nature, Renewing Landscape Architecture

The features and phenomena we refer to as "nature" are both given and constructed; authors from Cicero to Marx have distinguished between a "first" and "second" nature where the first represents a nature unaltered by human labor. Cicero defined second nature thus: "We sow corn, we plant trees, we fertilize the soil by irrigation, we confine the rivers and straighten or divert their courses. In short, by means of our hands we try to create as it were a second nature within the natural world."[48] John Dixon Hunt has reminded us that gardens have been called a "third nature," a self-conscious re-presentation of first and second natures, an artful interpretation "of a specific place . . . for specific people."[49]

Today many people are struggling to redefine nature, and the landscape reflects this struggle. There is no consensus. Is nature a sacred entity where humans are one with all living creatures, or a wilderness refuge requiring protection from man? Or is nature just a bunch of resources for human use? Is nature a web of processes that link garden, city, and globe? These different "natures" and others all coexist in contemporary society. They underlie whether and how people value and shape landscapes and gardens. Despite this range of ideas about the nature of nature, there is widespread international concern about the future environment and a growing sense that we need to reconstruct our conceptions of nature, to find ways of perceiving and relating to nonhuman features and phenomena which assert the dynamic autonomy of the nonhuman while they also affirm the importance of human needs and dreams.

Landscape architects have a potential contribution to this exploration, and gardens are one form of our discourse, ideas in the archaic sense of the word as "a visible representation of a conception."[50] Gardens have been a medium for working out fresh ideas and forms of human habitation, and they are particularly fertile ground for exploring relationships between the human and nonhuman. In the garden there is a recognition of constructedness and an attitude of beneficial management, as well as an acknowledgment that certain nonhuman phenomena are beyond human control. Gardens are never entirely predictable; one cultivates a garden with an acknowledgment of unforeseen circumstances. Nature may be constructed, but it is not only a construct.

If landscape architects are to find garden forms that embody ways of knowing "nature as varied and variable nature, as the changing conditions of a human world," we need to dispel the confusion that currently prevails in the profession.[51] Given the many meanings and contested definitions of what is natural, appeal to nature as authority for human actions is problematic. Any approach to landscape design based on the notion that nature is singular or its meaning universal or eternal is sure to founder. The emphasis should be on a spirit of inquiry and exploration rather

[48] From Cicero, *De natura deorum,* quoted and translated by John Dixon Hunt, "The Idea of the Garden, and the Three Natures," in *Zum Naturbegriff der Gegenwart,* Stuttgart, 1993, 312.

[49] Hunt, "The Idea of the Garden," 325.

[50] From Greek *idein,* "to see." *Webster's New International Dictionary,* 2nd ed., unabridged, Springfield, Mass., 1955.

[51] Williams, "Ideas of Nature."

than close-minded certainty. Emotional rhetoric and doctrinaire positions will not advance this agenda, but rather a more reasoned, self-critical, inclusive approach which acknowledges the plurality of human values and motives embedded in ideas of nature and authority.