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The Post–Earth Day Conundrum:Translating Environmental Values into Landscape Design

Elizabeth K. Meyer

Over the last quarter century, environmentalism has shifted from a fringe issue to a central theme in American cultural consciousness and political discourse.¹ Environmentalism's evolution from a special interest to a broad-based concern among the general population paralleled a re-centering in the practice of landscape architecture. Motivated by environmental values, landscape architects became increasingly knowledgeable about ecological principles and systems. The associated types of design practices were not monolithic, representing a single school of thought, but diverse, ranging from "scientific" restoration ecology to sitespecific "artistic" interventions, from projects that simulated nature to those that revealed the act of human creativity and construction. The practices of several landscape architects bridged the "great divide" between ecology and design and between science and art that characterized the profession in the 1970s. In constructing this bridge, a body of work has emerged that not only applies ecological environmental values to a design language,² but

¹ Andreas Huyssen, "Mapping the Postmodern," in *After the Great Divide: Modernism, Mass Culture, Postmodernism* (Bloomington: Indiana University Press, 1986), 220. See Andreas Huyssen and Marshall Berman, *AllT hat Is Solid Melts into Air: The Experience of Modernity* (New York: Penguin Books, 1982), for their insightful analyses of how nature's cultural position evolved dramatically from the time of modernism to postmodernism. In the early twentieth century, nature was viewed as a resource to be conserved and then consumed for modernization's progress. By the late twentieth century, the postmodern culture recovered nature from its role as "other" to one that was incorporated into culture and progress. Furthermore, environmentalism and especially ecology shed their roles as single-issue critiques of progress and transformed into broad-based social values.

² By the 1960s, environmentalism was no longer focused solely on "conservation [preservation] and measures against pollution." Rather, a new constituency politicized by books, such as *Silent Spring*, and such events as the reclassification of the reports on nuclear bombing and fallout, construed its relationship with nature as ecologically environmental, not simply environmental. Raymond Williams, *Keywords: A Vocabulary of Culture and Society* (New York: Oxford University Press, 1983), 110–11; Derek Wall, ed., *Green History: A Reader in Environmental Literature, Philosophy and Politics* (London: Routledge Press, 1994), 8–9. Wall's introduction includes a chart and passage from Jonathan Porritt's *Seeing Green* (Oxford: Blackwell, 1984), in which the author correlates environmentalism with "the politics of industrialization," suggesting that a modernized society cares about the conservation of nature only as a means to ensure the availability of natural resources for industrial production. To clarify my distinctions of ecology, I embrace the concept of ecological environmentalism that matches what Max Oelschlaeger calls "preservationism," a worldview in which the natural world is construed as dynamic, interrelated ecosystems that include humans, who have the ability to alter those systems. See Max Oelschlaeger, *The Idea of Wilderness* (New Haven: Yale University Press, 1991),

also suggests a strategy for breaking out of the restrictive tenets of modern art that so marginalized the landscape as a medium and subject.

One thread in the tapestry of the postmodern, postenvironmental movement landscape involves the search for significant forms and spaces that might embody, reveal, and express ecological principles while embodying and inculcating environmental values.³ The focus here is directed toward those works of landscape architecture that represent a new type of practice, one that makes the natural world—its ecological and geological processes, its rapid phenomena, and its invisible substructure-more evident, visibly legible, and meaningful to those who live, work, and play in the landscape. One of the trajectories that connects the disparate work of the last two decades in landscape architecture is the desire to make palpable, physical, and aesthetic the intimate interconnections between humans and the natural world, thus constructing experience and engendering a sense of affiliation between humans and nature. This desire has inserted ecological environmentalism into the design process in many places-in programming, site analysis and interpretation, form grammars, and construction techniques. This impulse has also challenged the tenet of modern form as an isolated, bounded form or space experienced by a detached, contemplative observer by focusing on the construction of aesthetic experiences bound to, and enmeshed in, their specific cultural and ecological context.⁴ The projects infused by these desires and impulses are environmental experiences, not bounded landscape objects, and they constitute what the cultural critic Andreas Huyssen regards as a critical postmodern reconsideration of modern art and culture as filtered through a new lens-in this case, the lens of ecological environmentalism.⁵

The merit of exploring this genre of work lies in its contribution as a mediating practice between two disparate discourses, each with its own language and principles—the

^{289.} In the context of ideas assembled in this anthology, Oelschlaeger's concept of preservationism corresponds to Hastings and Nadenicek's description of "integrative anthropocentric environmentalism."

³ Other threads of the postmodern environmental landscape tapestry include urban works that expand the role of landscape from amenity to essential infrastructure, as documented in the writing of Anne Whiston Spirn, Michael Hough, Robert Thayer, and Elissa Rosenberg; brownfield and toxic site reclamation; and landscape ecological theory and practice influenced by Richard Forman and Joan Nassauer. Louise Mozingo summarizes another strand in her recent article "The Aesthetics of Ecological Design: Seeing Science as Culture," *Landscape Journal* 16, no. 1 (spring 1997): 46–59. Mozingo's thesis, while different from mine, is complementary, in that she chastises ecological designers for ignoring aesthetics and thus ignoring the perception and rituals of visitors to their projects—the very perceptions and rituals that might build a new audience and advocacy group for environmental issues.

⁴Michael Van Valkenburgh introduced me to the concept "constructing experience" during one of our many conversations about design pedagogy and practice over the last ten years. George Hargreaves voiced parallel interests when he described his role as "trying to be a participant" rather than a controller of all a site's forms and spaces (interview by author, October 1998).

⁵Huyssen, "Mapping the Postmodern," 195–221, defines postmodernity as a cultural condition that is a critical extension of modernity. This critical capacity seeks out those issues excluded from modernity, such as environmentalism, and repositions them as the field upon which culture operates. This notion of postmodernity has much more resonance for landscape architecture than the limited sense of the postmodern as a return to historical styles and types.

dialectic between science and art and between ecological environmentalism and landscape architectural design.⁶ For a designer, one conundrum presented by the environmental movement was the disconnection between site analysis and design expression or, in other words, between environmental values and form generation. After identifying the most ecologically valuable or fragile places, designating them "no build" zones, and ascertaining the most ecologically fit location to site a building or construct a designed landscape, how was one to shape the forms and spaces of that landscape? Was it possible to create places with forms significantly different from those of earlier designers who were not as ecologically literate? Could one make the ecological planning process visible to those who came to the site? Would they be able to decode it? Was it necessary to create places that were recognizably different from existing landscapes for a contemporary public that was considerably more environmentally aware? Once having decided that the design vocabulary, syntax, and content should inflect the changing values of both designers and design patrons, the landscape architect encountered a second problem in the 1980s. How could one give form to dynamic processes and fluctuating systems but not resort to the modern design codes that privileged static, bounded, ideal objects in art and architecture and often relegated landscape to visual scenery, a stripped-down version of the pastoral?

These were among the questions that confronted designers during the quarter century after the first Earth Day, which occurred in April 1970. When landscape architects such as Susan Child, George Hargreaves, Catherine Howett, Anne Whiston Spirn, and Michael Van Valkenburgh began their academic and design practices, two strong models existed. The first, environmental or ecological design, had emerged out of the writings and teachings of educators such as Ian McHarg. Its primary contribution to the design process was to structure the preconceptual design phase according to a more defensible, scientific method.⁷ The second model, landscape architecture as art, had emerged from the teachings and practice of educators such as Peter Walker who were concerned that the design process had become so beholden to analyses—ecological, social, and behavioral—that the art of making the landscape visible, beautiful, and memorable had been made subservient to the landscape's function.⁸ This model's primary contribution was its application, in the concep-

⁶ For a fuller explanation of the role of design theory as a mediating practice, see Elizabeth Meyer, "Situating Modern Landscape Architecture: Theory as a Bridging, Mediating, and Reconciling Practice," in *Design + Values: Conference Proceedings, CELA 1992*, IV, ed. Elissa Rosenberg (Washington, D.C.: Landscape Architecture Foundation, 1993), 167–78.

⁷ Ian McHarg, *Design with Nature* (Garden City, N.Y.: Natural History Press, 1969). See Spirn's article in this volume for an account of the interdependence of McHarg's academic and private practices. Like those of his antagonist, Peter Walker, McHarg's significant contributions to the discipline resulted from the creative tension between his teaching and practice. Though my article does not cover the intellectual and theoretical critique and extension of McHarg's ideas by Anne W. Spirn, James Corner, and Anu Mathur at the University of Pennsylvania in the 1980s and 1990s, this fascinating and significant story sometimes parallels and overlaps the one I chronicle here.

⁸ See Peter Walker, "A Personal Approach to Design," in *Peter Walker: Landscape as Art*, Process Architecture 85 (Tokyo: Process Architecture, 1989); Linda Jewell, ed., *Peter Walker: Experiments in Gesture, Seriality and Flatness* (New York: Rizzoli, 1990); Leah Levy and Peter Walker, *Peter Walker: Minimalist Gardens* (Washington, D.C.: Spacemaker Press, 1997).

tual and design development phase, of the vocabulary and tactics of contemporary art to the making of landscapes. These two models existed in isolated opposition from one another, cognizant of the other but operating in separate worlds, based on separate value systems and vocabularies.

This isolation troubled, even confounded, those landscape architects drawn to the discipline in the aftermath of the 1970s environmental movement. The divide between science and art that was integral to late-modern design theory and practice, such as McHarg's and Walker's, was called into question by such postmodern concerns as environmentalism, a strong cultural undercurrent felt by young landscape architects. From the perspective of this postmodern postenvironmental movement, two key issues were identified and then problemmatized in the works of the next generation. First, the lack of formal inquiry or invention in much environmental planning and design ensured landscape architecture's continued invisibility, a legacy of modern urbanism. This invisibility was frequently clothed in the pastoral, a romantic conceit preferred by many modern architects and landscape architects who envisioned their projects surrounded by a background of "natural" scenery. This form of pastoral ecological design, so ably chronicled by the geographer Denis Cosgrove, perpetuated the visual ideology of the modern landscape that reduced the land to pretty scenery devoid of ecological and cultural content.9 Ecologically planned or not, these landscapes did not look managed or designed to most people. They allowed the public as well as developers and designers to ignore the actual impact of construction and sprawl. Second, while the alternative model was successful in "making the landscape visible" through artistic devices such as gesture, flatness, and objectification and in overcoming the emptiness of much modern urban open space, Walker's vocabulary did not acknowledge the difference between the land's surface and materiality and that of a canvas or gallery floor.¹⁰ As such, Walker's minimalist landscapes perpetuated modern art values and ideals, objecthood and detachment, at the very time such values were being challenged by environmental and conceptual artists.¹¹

Landscape designers immersed in the postmodern culture encountered artistic and architectural works and theories that questioned the objecthood of sculpture and buildings. These works explored the site-specific characteristics that conditioned their response, reveled in a "systems aesthetics" that intermingled cultural and natural processes, and valued the regional and the place particular over the universal and ideal. Influenced by such theoretical richness, landscape architects found the venues for exploration between the two models to be rich, varied, and productive. Landscape as a subject, a medium, and an inquiry

⁹ See Denis Cosgrove, *Social Formation and Symbolic Landscape* (Totowa, N.J.: Barnes and Noble Books, 1984), for an excellent account of the modern landscape's visual, or scenographic, emphasis.

¹⁰ Melanie Simo, "Making the Landscape Visible," in Jewell, *Peter Walker*, 8–13.

¹¹ See Michael Fried, "Art and Objecthood," *Art Forum* 5, no. 10 (June 1967): 12–23, for a conservative critique of conceptual and performance art; and Jack Burnham, "Systems Esthetics" (1968), reprinted in Richard Kostelanetz, ed., *Esthetics Contemporary*, rev. ed. (New York: Prometheus Books, 1989), 144–53, for a more positive assessment of this work and how it required art critics to change their criteria for evaluation.

was no longer marginal, but central to contemporary cultural debates and concerns.¹² What could and did this mean for the discipline whose medium, subject, and canvas was the landscape?

The inquiry that followed was not direct and singular, but made by many in meandering and opportunistic forays that sought clues and inspiration from various sources. These included recent works of landscape architecture, such as those by Lawrence Halprin, that represented a first step toward creating a design vocabulary predicated on landforms created by natural processes, such as erosion and deposition due to water and wind; recent works by conceptual artists, such as Hans Haacke and Alan Sonfist, who were probing the boundaries of art objecthood in their process pieces and performances; contemporary environmental and site artists, such as Robert Smithson, Michael Heizer, Mary Miss, and Robert Irwin, who were making site-specific works outside the gallery; and contemporary critics and artists who were translating the ideas of phenomenologists about bodily experience, duration, immersion, and place making into design and art theories.¹³

To some it may seem odd that landscape architects looked toward art and design theory and practice when seeking direction about folding ecological principles and environmental values into their creative processes.¹⁴ But this simultaneous look to art as well as science and to theories of site specificity and phenomenology as well as ecology was critical to the successful integration of environmentalism into landscape architectural design. Post– Earth Day environmentalism was more than a movement to solve individual ecological problems. It was an attempt to change the value systems that had created those problems and then to modify the institutions that acted on those values. As such, it is not surprising that some landscape architects saw environmentalism and ecological concerns as cultural as much as scientific concerns. These designers created designed landscapes that operated as focusing lenses for knowing the natural world, that instigated aesthetic experiences that reduced barriers between humans and the natural world, and that functioned as physical catalysts for changing social rituals affecting the natural world.

¹² For various accounts of the ways that different disciplines incorporated landscape concerns in the 1970s and 1980s, see John Beardsley, "Earthworks: The Landscape after Modernism," in *DenaturedVisions: Landscape and Culture in theTwentieth Century*, ed. Stuart Wrede and William H. Adams (New York: Harry B. Abrams, 1991), 110–17; Rosalind Krauss, "Sculpture in the Expanded Field," in *The Originality of the Avant-Garde and Other Modernist Myths* (Cambridge, Mass.: MIT Press, 1985), 276–90; Colin Rowe and Fred Koetter, *Collage City* (Cambridge, Mass.: MIT Press, 1978).

¹³ See Alan Sonfist, ed., *Art in the Land: A Critical Anthology of Environmental Art* (New York: E. P. Dutton, 1983), for brief essays on eighteen artists who were involved in making environmental and site art in the 1960s and 1970s. Phenomenology refers to the philosophical theories and methods that "seek to rise above both idealism and materialism by discovering a philosophical third way, by making intuition the true source of knowledge." *The Oxford English Dictionary* [database online] (Electronic Text Center, University of Virginia Library, Charlottesville, Va.). Designers and artists who employ a phenomenological method frequently speak of a "return to things" that can be known through direct experience and immersion in a place. See Christian Norberg-Schulz, *Genius Loci:Towards a Phenomenology of Architecture* (New York: Rizzoli, 1980), 7.

¹⁴ Steven Krog, "The Language of Modern," *Landscape Architecture* 75, no. 2 (March/April 1985): 56–59, 130. In this article, Krog facetiously refers to Smithson as Saint Robert, acknowledging the reverence young landscape architects have for Smithson's work and writings.

192 Elizabeth K. Meyer

What shape did these practices take? Some sought to emphasize nature's forms, others to make nature's subtle and transitory processes palpable and visible, and still others to reveal a site's entire history of cultural and ecological agents. These varied goals placed the landscape architect in a position of being site perceiver, reader, and interpreter. Straddling the line between conception and reception, controlling and initiating, the landscape architectural design process anticipated the audience's reactions, perceptions, and experiences of place. Therein lay the strength and the potential weakness of this genre of postmodern environmental landscape practice.

Who are these landscape architects, and how do they illuminate the boundaries of this inquiry? Some, like Catherine Howett, Anne Whiston Spirn, and Michael Van Valkenburgh, advocated constructing experiences and implicating natural systems over shaping landscape objects. Such work made the landscape more than visible; it made it tangible and palpable, giving form to an experience that aesthetically engaged humans with their environment. Not content to merely "make the landscape visible,"¹⁵ some, like Susan Child, created works that resurrected the cultural and ecological places that were being leveled and homogenized by contemporary urban development practices. To do so, some designers, like Hargreaves, Van Valkenburgh, and Ken Smith focused on the nonvisual aspects of the landscape that reinforced its placefulness, materiality, tactility, fluctuating systems, character, mood, and phenomena. Some, like Hargreaves and the urban designer William Morrish, looked to the land itself as a generator of form types, enriching an inherited vocabulary of abstract geometry with geomorphological forms and ensembles. Others, like Richard Haag and Laurie Olin, looked for material traces in the land's natural and cultural histories to develop a connection between humans and their constructed places. Their works invited immersion and subjectivity, not detachment and alienation. Landscape architects in this last group found guidance and inspiration in different sources outside the discipline of landscape architecture-in philosophy, art criticism, and cultural geography-that could assist in reenvisioning the relationship between humans and their environment.

Art and Environmental Engagement: Phenomenology and Theories of Experiencing Place

The conflicts and debates within landscape architecture about the interrelationships among ecology, environmentalism, and design did not occur in a cultural vacuum. Events, projects, theories, and issues generated in art, architecture, and philosophy paralleled, overlapped, intersected, and inflected the theory and practice of landscape architecture. *Art and Engagement* (1991), by the art critic Arnold Berleant, provides the most comprehensive account of this infiltration of experiential and environmental works into post-1960s art and design culture. He suggests that this period's art, from "happenings" to landscape architecture, substituted the modern aesthetic criteria of "disinterestedness" for a "continuity of experience" whose goal was empathy.¹⁶ Berleant's "participatory model of aesthetic expe-

¹⁵ Simo, "Making the Landscape Visible," 8–13.

¹⁶ Arnold Berleant, Art and Engagement (Philadelphia: Temple University Press, 1991), 12, 15.

rience," which draws on the aesthetic theory of the American philosopher John Dewey and the phenomenological writings of the French philosopher Maurice Merleau-Ponty, presents art and design works from the perspective of the perceiver—that is, from the experience of the audience as well as the artist.¹⁷ Berleant's account of late-twentieth-century art and design requires a different conception of space (engaged versus abstract), an altered relationship between subject and object (connected versus detached) and a renewed appreciation for experiencing art over time instead of immediately as a singular event. Because concepts of space, the body, and temporal experience are fundamental to the landscape as a medium and subject, Berleant's critical reappraisal of the last quarter century provides a coherent narrative within which works of landscape architecture can be situated. This is a narrative that assumes that the body and perception are key to environmental awareness and engagement, as evidenced in this passage:

Environment, then, is no foreign territory surrounding the self. Understanding environment involves recognizing that human life is lived as an integral part of a physical and cultural medium, under conditions through which people and places join together to achieve shape and identity. Within this environmental medium occur the activating forces of mind, eye, hand, climate, and the other processes of nature, along with the perceptual features and structural conditions that engage these forces and evoke their reactions. To grasp environment, every vestige of dualism must be discarded. There is no inside and outside, human being and external world, even in the final reckoning, no discrete self and separate other.¹⁸

Berleant's writings provide us with a retrospective understanding of the cultural milieu and the key role aesthetic experience of the environment played in postmodern art and design. Theories related to the making of place and the environmental experience dominated the many articles and books by design critics that were popular in professional offices and in the academy. Writings about contextualism, regionalism, critical regionalism, site, place, and the body permeated design journals in the 1970s and 1980s as the pendulum swung away from the abstract, siteless ideals of modernism toward the site- and localespecific values of postmodernism.¹⁹ One of the most widely read essays, Kenneth Frampton's "Towards a Critical Regionalism" (1983), alluded to the particular environmental factors that informed design responses—topography, light, climate, and context—emphasizing their

¹⁷ Ibid., 61–62, 86–87. See also John Dewey, *Art as Experience* (1934; reprint, New York: Putnam, 1980), 37; Richard Rorty, *Contingency, Irony, and Solidarity* (Cambridge: Cambridge University Press, 1989); idem, *Essays on Heidegger and Others* (Cambridge: Cambridge University Press, 1991). My thanks to James Wescoat for questioning me about Dewey's theories of art as they relate to contemporary theories of phenomenology, as well as the importance of aesthetic experience within art production and reception.

¹⁸ Berleant, Art and Engagement, 102.

¹⁹ See, for example, Yi-fu Tuan, *Space and Place: The Perspective of Experience* (Minneapolis: University of Minnesota Press, 1977); Kenneth Frampton, "Towards a Critical Regionalism," in *The Anti-Aesthetic: Essays on Postmodern Culture*, ed. Hal Foster (Seattle, Wash.: Bay Press, 1983), 16–30; Norberg-Schulz, *Genius Loci*.

tactile and phenomenal influence on the moving, sensing body. This inflection would, in Frampton's view, lead to works that were more place specific, more resistant to globalization, universal solutions, and a "cleared site," or *tabula rasa*, mentality.²⁰ Not surprisingly, Frampton built his intellectual argument on the works of Paul Ricoeur and Martin Heidegger, both of whom wrote philosophical works on phenomenology.²¹

Other popular design writings included those by Christian Norberg-Schulz, especially his 1982 book *Genius Loci:Towards a Phenomenology of Architecture*, in which he outlined a vocabulary for reading and interpreting a place through the construction of architecture, landscapes, and cities, and the numerous books by Kevin Lynch, particularly *The Image of the City* (1960) and *What Time IsT his Place*? (1972).²² Norberg-Schulz's vocabulary stemmed from everyday things and phenomena that constituted the character and structure of a place that differentiated a place from a space. Lynch's first book was concerned with the way people construct mental maps from their daily engagement with a city's streets, landmarks, and districts—how perception structures conception or legibility. The latter demonstrated how time is embedded in the physical environment and how individual and collective well-being is intertwined with a sense of place in time. Themes of the body, temporal experience, and dwelling in a specific place permeate Lynch's writings, explaining why Norberg-Schulz acknowledged Lynch's ideas in his book on place, *Genius Loci.*²³ These writings are but a small sampling of the design texts on contextualism, place, phenomenology, site, and the environment that informed the theories over the last quarter century.²⁴

These theoretical trends found mature landscape architectural expression in Catherine Howett's and Anne Whiston Spirn's writings in the late 1980s. Their operative essays not only observed existing trends, but also speculated about future implications for design practice. Howett's "Systems, Signs, Sensibilities" (1987) provided one of the first comprehensive theoretical strate-gies for connecting the aesthetic and the ecological.²⁵ "The domain of aesthetics," wrote Howett,

²⁰ Frampton, "Towards a Critical Regionalism," 26. Frampton wrote about Heidegger for a more select audience in the early 1970s. See the editorial in *Oppositions* 4 (October 1974).

²³Norberg-Schulz, *Genius Loci*, 12, 19, 20, 201.

²⁴ The collection of essays in Kate Nesbitt, ed., *Theoriz ing a New A genda for A rchitecture: An A nthology* of A rchitectural Theory, 1965–1995 (New York: Princeton Architectural Press, 1996), demonstrates this point. Four of the fourteen chapters concern issues of landscape, place, phenomenology, site, and the environment. These were not primary issues in the anthologies of treatises and manifestos written by modernists, and their proliferation is yet another indication of how much interest has shifted from idealized types or models toward designs centering on places and the environment.

²⁵ Catherine Howett, "Systems, Signs, Sensibilities: Sources for a New Landscape Aesthetic," *Landscape Journal* 6, no. 1 (spring 1987): 1–12. Howett mentions that this paper was first presented as a CELA lecture in 1985.

²¹ See, in particular, Martin Heidegger, "Building Dwelling Thinking," in *BasicWritings: From Being* and *Time (1927) toTheTask ofThinking (1964)*, ed. David Krell (San Francisco: Harper and Row, 1977), 320–39.

²² Kevin Lynch, *Image of the City* (Cambridge, Mass.: MIT Press, 1960); Kevin Lynch, *What Time Is This Place?* (Cambridge, Mass.: MIT Press, 1972). Lynch's influence is especially noteworthy, as Michael Van Valkenburgh worked for him before starting his own practice.

195 Post–Earth Day Conundrum: Translating Environmental Values

must come to be seen as coextensive with the ecosphere, rather than narrowed to its traditional applications in art criticism, so that aesthetic values may no longer be isolated from ecological ones. Thus every work of landscape architecture, whatever its scale, ought first of all to be responsive to the whole range of interactive systems—soils and geology, climate and hydrology, vegetation and wildlife, and the human community—that will come into play on a given site and will be affected by its design. In the measure that the forms of the designed landscape artfully express and celebrate that responsiveness, their beauty will be discovered.²⁶

Fundamental to Howett's argument was her assertion that ecology should not be applied without mediation and that principles of ecology must be combined with the two other powerful "critical and theoretical currents" already influencing the practice of landscape architecture-semiotics and environmental psychology.²⁷ The mediating concepts that Howett gleaned from these currents included theories of place making, such as Yi-Fu Tuan's topophilia, "the affective bond between people and place or setting"; Heidegger's theories on building and dwelling, which, she noted, had acquired a cultlike following in schools of architecture and environmental design; and Berleant's "participatory model of aesthetic experience." Each recognized the role experience played in bonding humans to their cultural and ecological environment and acknowledged that those bonds of concern were the prerequisite for transforming feelings into values, then into knowledge, and finally into principles for action. Howett's short essay was of great value in its reflective role of outlining current theoretical dilemmas and suggesting future directions. She intertwined what appeared to be disparate threads and disciplines-environmental art, psychology and philosophy, semiotics and architectural theoryinto a narrative that illuminated specific works of landscape art and architecture, such as those by Sonfist, Haag, Halprin, Van Valkenburgh, and Darrell Morrison.

Spirn's "Poetics of City and Nature: Towards a New Aesthetic for Urban Design" (1988) built on her earlier collaborations with McHarg as a student and colleague and on her book *The Granite Garden* (1986). Spirn's style is as compelling as her content, which reads, at times, like a manifesto or a call to action:

This is an aesthetic that celebrates motion and change, that encompasses dynamic processes, rather than static objects, and that embraces multiple, rather than singular, visions. This is not a timeless aesthetic, but one that recognizes both the flow of passing time and the singularity of the moment in time, that demands both continuity and revolution. This aesthetic engages all the senses, not just sight, but sound, smell, touch and taste, as well. This aesthetic includes both the making of things and places and the sensing, using, and contemplating of them.²⁸

²⁶ Ibid., 7.

²⁷ Ibid., 4–5.

²⁸ Anne Whiston Spirn, "The Poetics of City and Nature: Towards a New Aesthetic for Urban Design," *Landscape Journal* 7, no. 2 (fall 1988): 108. This is another seminal article of the period. Spirn focused on the aesthetic form and experience of landscape architectural design in the city, an argument which she began in *The Granite Garden*, a book that explicitly applied McHarg's vision to the built environment of cities.

Like most manifestos, Spirn's established a genealogy of ideas between her thoughts and the works that preceded her. Like Berleant, she relied on John Dewey's writings and shared his belief in the link between everyday experience and aesthetic experience. Like Howett, she identified currents in contemporary work, such as Halprin's, but she considered work completed to date to be tentative and rudimentary. Her essay was a call to revolutionary action predicated on both a careful study of the processes of everyday life and nature and the thoughtful invention of new forms of drawing, representation, and vocabularies of design. She reminded her readers that invention was mediated through the conventions of one's discipline and that the development of vocabulary and syntax were necessary for the discovery of content and the communication of meaning.

For all the written and verbal debates that characterized the design cultures of the 1970s and 1980s, the most powerful influences on landscape architects attempting to bridge ecological environmentalism and design expression were the artists known as environmental artists, earth artists, or site artists. Obviously, working outdoors with dirt did not pose the same challenges to the internal theories of landscape architecture as it did to the art world of isolated objects, displayed in galleries and traded like commodities in the marketplace. So why did projects like Robert Smithson's Spiral Jetty, Great Salt Lake (1970), Michael Heizer's Double Negative, Overton, Nevada (1969–70), Walter De Maria's Lightning Field, Quemado, New Mexico (1971-77), or Robert Irwin's Nine Spaces, Nine Trees, Seattle (1979-83) (Fig. 1) resonate so powerfully with landscape architects?²⁹ The best of these works were more than significant forms in the landscape. Their creators employed formal presence to focus attention on a place and its particular qualities—its ancient natural histories, its deep time, its recurring natural cycles and processes-that were almost invisible to a culture of distraction and disengagement.³⁰ This formal presence, then, depended on the experience of a dynamic place by an engaged participant over time. Such emphasis explains why the philosopher Gary Shapiro interpreted Smithson's writings and works through a phenom-

²⁹ Landscape architects began to take notice of earth art very early. In October 1969, the year Heizer's *Double Negative* was "unearthed" and a year before the completion of *Spiral Jetty, Landscape Architecture* 60, no. 1, ran an article on "dirt art" and "light art." The theme of *Landscape Architecture* 61, no. 4 (July 1971), was entitled "Landscape Sculpture—the New Leap." Catherine Howett, author of a key article for understanding the influence of ecology, environmental art, environmental psychology, phenomenology, and semiotics on the design of landscapes in the 1980s, recently told me that her master's thesis was on environmental art. George Hargreaves frequently refers to Smithson in his own writing and in interviews. A number of art students who are now landscape architects, like Julie Bargmann, Paula Horrigan, and Mitchell Razor, came to the field through their appreciation for Smithson's unfinished project. Many graduate students of landscape design were introduced to the environmental artists through seminars given by Peter Walker and Melanie Simo. Landscape architecture students at the University of Virginia, for example, learned about environmental art in seminars given by the art historian John Beardsley, author of *Earthworks and Beyond* (New York: Abbeville Press, 1984).

³⁰ "The more compelling artists today are concerned with 'place' or 'site'—Smith, de Maria, Andre, Heizer, Oppenheim, Huebler—to name a few," said Robert Smithson in "A Sedimentation of the Mind" (1968), reprinted in Nancy Holt, ed., *The Writings of Robert Smithson* (New York: New York University Press, 1979), 85.



1. Corner view of Nine Squares, Nine Trees, Seattle, Washington, by Robert Irwin, 1979–83. The chain-link walls evoke associations with the building's intention to secure and protect. The light blue plastic coating of the chain-link enclosure and the light pink blossoms of the flowering plum trees within correspond and complement the colors of the metal and masonry veneer of the adjacent building as well as those across the street.

enological lens and why Robert Irwin predicated his book *Being and Circumstance* (1985) on the philosophical writings of the phenomenologist Merleau-Ponty.³¹

Given the influence that Smithson and Irwin had as artists in the academic and professional studios of landscape architecture, most landscape architects who have heard of phenomenology have probably learned about it through them.³² What specific lessons have designers gleaned from Smithson and Irwin? In their working method, landscape architects found alternatives to the abstraction of ecological analysis, especially the large-scale mapping of individual ecological systems such as hydrology, soils, and vegetation. Instead of mapping large parcels and attempting to gain a comprehensive conceptual understanding

³¹ Robert Irwin, *Being and Circumstance* (Larkspur Landing, Calif.: Lapis Press, 1985). See Gary Shapiro, *Earthwards: Robert Smithson and Art after Babel* (Berkeley: University of California Press, 1995), for a Heideggerian analysis of Smithson's earthworks.

³² I taught my first design studio in 1982 at Cornell as a visiting instructor and have taught full time since 1987, first at Harvard and now at Virginia, so this statement is predicated on first-hand accounts and experiences. I was introduced to Smithson's work by one of my graduate students at Cornell, Paula Horrigan, who was an undergraduate art major. Since then every class has included at least one student who entered the field of landscape architecture because they wanted to make earthworks, or site art. of the whole, artists like Smithson and Irwin concentrated on observing specific phenomena and processes at a particular place. They began with that which was knowable through human experience at the scale of the body. From this standpoint, they sought to reveal, through their interventions, the long-term processes that formed such a place and enabled such an experience.

Through his own reflexive practice, Irwin has alternately written and created. *Being and Circumstance* summarizes his theory of site-responsive art, developing categories such as "site-specific" and "site-generated" work, which became entrenched in the vocabulary of land-scape architects in the 1980s and 1990s. Irwin's second contribution was his desire to destroy the division between subject and object and between art object and art connoisseur that defined modern art theory and appreciation. To do so, Irwin translated phenomenological theory, especially the ideas of Merleau-Ponty, to art practice, while constructing several projects that have become iconic applications of phenomenology to art and design practice.³³ Hoping to create a conceptual transparency between his creative act and the experience of his works by others, he concentrated on the phenomena of a place that would be experienced to all who visited it: "[W]hat holds true for the artist/perceiver must hold true for the observer/ perceiver."³⁴ This experience would be the subject and content of his work:

What would an art of the phenomenal or plastic reality be like? Where and how would it exist, and how would we come to know it? . . . [I]n one sense, the phenomenal can be located in the dynamics of change in the world; and in another sense, it can be located in the dynamics of perceiving that world. We can now venture to put these two senses together and say that the phenomenal, as we know it, exists in the dynamics of our perceiving (experiencing) the nature of the world about us and our being in it.³⁵

These artistic explorations created new models for landscape architects. More important, they demonstrated that the very criteria by which modern art and architecture had been evaluated—and by which the landscape had been cast out of the family of the fine and applied arts—no longer mattered.³⁶ The long-standing consensus about what consti-

 ³³ Maurice Merleau-Ponty, *Phenomenology of Perception* (1962; reprint, New York: Routledge, 1994).
 ³⁴ Irwin, *Being and Circumstance*, 24. This book was an exhibition catalogue for two 1985 exhibits at Pace Gallery, New York City, and the San Francisco Museum of Modern Art. Note the similarity between Irwin's writing and that by Dewey fifty years prior. "For to perceive, a beholder must create his own experience. And his creation must include relations comparable to those which the original producer underwent." Dewey, *Art as Experience*, 54.

³⁵ Irwin, Being and Circumstance, 23.

³⁶Similarly, in the architectural academy and practice of the 1970s and 1980s, the boundaries of the pristine object-building and the surrounding amorphous landscape were called into question. Whether in the site plans of Michael Graves, the urban design plans of Colin Rowe's studios, the geological constructions of Stanley Saitowitz, the phenomenological explorations of Juhani Palasmaa or Steven Holl, the fictive site archaeologies of Peter Eisenman and Laurie Olin, or in the writings of Caroline Constant and Carol Burns, there were many examples of architects reflecting on the biases of their own disciplinary conventions and reenvisioning new relationships with the ground, natural processes, and natural histories.

tuted art, an "aesthetics of separation, isolation, contemplation, and distance,"³⁷ had created philosophical problems for the inclusion of landscape and garden design in modern art.³⁸ By the 1980s, however, those aspects of landscape that were deemed most problematic for modern art critics—its fieldlike properties, systems aesthetic, ecological flows and fluxes—proved central to postmodern practice in many fields, not only landscape architecture. This centrality encouraged designers not only to produce new works, but also to reconsider the works of their predecessors. One landscape architect whose standing rose because of this new conceptual framework was Lawrence Halprin. Berleant, Spirn, and Howett allude to his explorations of a new environmental aesthetic based in the forms created by natural processes and experienced over time by the moving body.

Halprin's Phenomenal Landscape: A Precursor to the New A esthetics of Environmental Engagement

Halprin's work represented a type of critical practice that gave form to ecological environmental values through the construction of experience. His projects were appreciated anew in the 1980s and 1990s by landscape architects who were searching for a middle ground between McHarg's formless environmental designs and Walker's landscape architecture-as-art objects.³⁹ To this generation, Halprin's work embodied many of the attributes advocated by Smithson and Irwin. In fact, Halprin might be considered to have developed a phenomenologically based language of landscape architecture, as he reconceptualized landscape space as bounded flow, a fluid medium experienced in a multisensory way by the moving body. He also developed new drawing tools for depicting landscape space and created an expanded morphology of landscape forms based on the direct observation of surfaces shaped by natural processes, such as erosion and deposition.

Halprin's *Sea Ranch* community, near Gualala, California (1961–67, 1993–), designed in collaboration with architects Charles Moore, Donlyn Lyndon, and Joseph Esherick, was a landscape design predicated on the experience of nature's processes, temporal structure and flows, and experienced by a body in motion, over time. As such, it subverted the design conventions of its time (Fig. 2). *Sea Ranch*'s site was a striated landscape of open meadows framed by monumental hedgerows running perpendicular to the Pacific Coast. Halprin's

³⁷ Berleant, Art and Engagement, 32.

³⁸ Mara Miller, *The Garden as an Art* (Albany: State University of New York Press, 1993), 178. Miller summarizes how designed landscapes challenged the aesthetic criteria of modern art and how, in doing so, landscape architecture found itself allied with various postmodern art practices that were critical revisions of modern art. "Gardens point to the absurdity of a number of distinctions which continue to lie close to the heart of aesthetic theory, long after they have been abandoned by much of the practicing art world. In particular the garden, by providing an environment for experience rather than an object of experience, collapses the very foundation of modern aesthetic theory, aesthetic disinterest/distance, or the subject-object dichotomy. With it go concomitant notions of sharp distinctions between art and craft, fine and applied arts, and the utilitarian and the aesthetic."

³⁹ Two events that mark this renewed interest in Halprin's work include the 1986 San Francisco Museum of Modern Art exhibit, *Changing Places*, and the 1991 Harvard Graduate School of Design symposium, "Urban Ground."



2. Panorama of hedgerow houses, Sea Ranch, California, by Lawrence Halprin Associates, 1962

firm and his consulting scientists studied the site over the course of a year.⁴⁰ Their summary of this intensive environmental analysis included qualitative observations about the experience of the place, an ecoscore graphically depicting the forces of change over an expanse of geological time, and a synthesis of their site interpretations in the form of landscape and architectural design guidelines.⁴¹ The resulting master plan reinforced the shaping processes of the landscape—grazing, the directionality of the wind, and the erosive power of the water—by clustering buildings and streets along the hedgerows and by leaving the mead-ows open.

The phenomenal experience of these varied ecosystems was one of strong contrasts. The residential streets along the hedgerows were shady, quiet, cool, and moist (Fig. 3). The public spaces of the meadows were sunny, loud with wind, warmer, and drier. Strolling along the bluff from hedgerow to hedgerow, a daily ritual of many residents, maximized

⁴⁰ Lawrence Halprin, *The RSVP Cycles: Creative Processes in the Human Environment* (New York: George Braziller, 1969), 118–47.

⁴¹ "Sea Ranch Design Brochure," undated (available at Sea Ranch Lodge); Lawrence Halprin, *The Sea Ranch: Diary of an Idea* (Sea Ranch, Calif.: Comet Studios, 1995).



one's experience of these differences (Fig. 4).⁴² Building design interpreted the site's wind patterns and made them manifest in sloping roofs that accommodated the breezes, while gardens or terraces were located on the sheltered sides of the houses. By working with the site's structure and character, Halprin created a memorable place, characterized by a vivid, staccatolike experience, from wet to dry, shady to sunny, calm to windy, quiet to noisy, that foregrounded the ways cultural and natural processes shaped and sculpted the land. Unlike many residential communities made up of homogeneous landscapes with equally spaced houses, set in a matrix of lawns and separated from one another by roads and cars, *Sea Ranch*'s landscape was a rich mosaic of meadow and hedgerow, with public walks that connected residences and fostered an engagement with the natural community.

Halprin's conceptual quarrying of the site for its experiential qualities, his interest in the shaping of landforms by natural processes over time, and his reading of the landscape as

⁴² Halprin wrote about the role of movement and experience in his design process in several works, including Lawrence Halprin, *Freeways* (New York: Reinhold, 1966); idem, *Cities* (Cambridge, Mass.: MIT Press, 1963, 1972; idem, "Motation" (1965), reprinted in *Lawrence Halprin*, ed. Ching-Yu Chang, Process Architecture 4 (Tokyo: Process Architecture, 1978), 51–62.



3. Hedgerow street, Sea Ranch, California, by Lawrence Halprin Associates, 1962

cultural and natural strata link his important works of the 1960s and early 1970s with the postmodern landscape works of the late 1980s and 1990s. Equally important, Halprin's conception of the landscape as a temporal medium, the body's role in the experience of place, and space as a qualitative, fluid presence contributed to a type of landscape architectural practice that is an art of environmental engagement. His design method, his formal vocabulary, and his multidisciplinary influences—from dance to ecology—foreshadowed the works that would follow two decades later.

Giving Form to Environmental Values: Constructing Experiences

Many projects that emerged since 1980 have attempted to reconcile the values of earlier ecological design, the operations of landscape as art, the systems aesthetics of environmental art. These works include those by Susan Child, Richard Haag, George Hargreaves, David Meyer, Laurie Olin, Martha Schwartz, Ken Smith, and Michael Van Valkenburgh.⁴³

⁴³ This paper is focused on built works, but it should be noted that dozens of young designers are exploring these issues in their work in graduate design studios, speculative projects, and competitions. Julie Bargmann, James Corner, Mark Klopfer, Anu Mathur, Keith McPeters, Kathy Poole, Jane Wolff, and Alexis Woods, among others, have taken these built works and the theories that underlie them as a point of departure for further development of open-ended compositions that readily accept change and flux as a precondition for working with the landscape medium. An exhibit curated by Brenda Brown, entitled *Exo-Revelatory Landscapes*, at the University of Illinois at Champaign-Urbana (fall 1998), addressed this speculative and hypothetical work. The exhibition catalog is a special issue of *Landscape Journal* (1998), with Brenda Brown as guest editor.



4. Meadow swales, Sea Ranch, California, by Lawrence Halprin Associates, 1962. The slow pace of walking reveals subtle changes, such as the textural differences of plants in the shallow swales that run through the meadows. At these modest bridges, a walker understands that these small linear depressions that drain water from the uplands slowly carve the extraordinary faces of the adjacent rock bluffs leading to the beach.

Though these designers depended on the earlier experiments of the 1960s and 1970s, they were critical of various aspects of those works. They eschewed the intrinsic oppositions that differentiated ecological design and landscape as art—the ecological versus the formal, the system versus the object, the environmental versus artistic. Instead, they made the environment legible to a culture distanced from the natural world by employing the materials and processes of nature. Such experiments frequently resulted in the construction of an "aesthetic of experience" rather than an "aesthetic of objects."⁴⁴

What was to be gained by imagining landscape architecture as the construction of aesthetic experiences that focused attention on nature's forces and flows? By creating places of wonder and beauty, landscapes of strong textural or scale juxtaposition, and ecological spaces of ever-changing mood and character, landscape architects provided occasions for humans to revel in the moment and to feel connected to a place. In brief, by setting a site in motion or registering changes over time, landscape architects translated their ecological environmental values into a new design language that was dynamic, fluctuating, and process oriented. The open-ended nature of this work, not completed when construction was

⁴⁴ Miller, The Garden as an Art, 178.

done but constantly modified by the flow of people and natural processes through the site, contrasted with the static, idealized public landscape that accommodated human activity and natural phenomena but was not affected by them. The dynamic qualities of this new work facilitated unexpected experiences and further interpretations that might inculcate a new environmental awareness or perhaps even a new ethic in those who lived, worked, and played in these designed landscapes. Thus, ecological environmental values were not only embodied in the work, but also engendered by it.

Though theories of place making, phenomenology, and site art provided bridges for landscape architects experimenting with ways to make environmentalism manifest in their work, they also posed new challenges. Landscape architects, unlike architects and artists, work with a medium that is also their subject and canvas. This special condition has raised theoretical dilemmas for landscape design since its embryonic stages as a separate discipline from painting or architecture, as evidenced in the nineteenth-century writings of J. C. Loudon and Mariana Van Rensselaer or, more recently, in Mara Miller's The Garden as an Art.⁴⁵ These theorists and critics speculated about how one could design with the materials of nature, in the place of nature, and about the content of nature and not have the result be confused for nature itself. How could it be recognized as art? The late-twentieth-century response to these questions came, on the one hand, from the larger art and design community that was challenging its own biases toward bounded, objectlike works and, on the other, from the explorations of landscape architects into new design codes and strategies that attempted to find formal languages and ideas in natural processes rather than in ideas gleaned from other art forms. Hence, changes in theories from outside and from within the discipline of landscape architecture intersected in the 1980s, creating fertile ground for landscape architects.

Giving Form to Invisible, Phenomenal Natural Process

The last fifteen years have produced a number of landscape projects that have taken their starting point from environmental artworks, such as Robert Smithson's process pieces, like *Glue Pour* and *Asphalt Rundown* or Robert Irwin's explorations of a specific site's ephemeral and dynamic qualities, such as light and color. Of the many landscape architects whose works have tested strategies for making process and phenomena the subject and content of

⁴⁵ "[G]ardens violate a number of implicit preferences upon which most theory of art is premised—preferences for a single final form of a work of art (for uniqueness and perdurance), for artistic (or authorial) control by a (single) (human) agent, for immateriality, and for what is known as 'disinterest' or 'distance' or 'autonomy.'" Miller, *The Garden as an Art*, 72. Miller was summarizing the garden as an art conundrum from a twentieth-century perspective, but these concerns also troubled critics and designers in earlier centuries. Mariana Van Rensselaer, the prominent critic and early advocate for the profession of landscape architecture, noted the following obstacles to the recognition of landscape architecture as an art: it looks too much like nature, its results are unstable, and "our lack of clearly understood terms with which to talk about it." Mariana Van Rensselaer, *Art Out-of-Doors* (New York: Charles Scribner's Sons, 1893), 6–7. Loudon's theoretical response to Quatremere de Quincy's banishment of landscape gardening from the fine arts has been excellently summarized by Melanie Simo, *Loudon and the Landscape: From Country Seat to Metropolis*, 1783–1843 (New Haven: Yale University Press, 1988), 172–73.



5. Perspective, Wetlands, Civic Storm Water and Contingent Spaces, Carr's Hill precint, University of Virginia, by Kathy Poole, 1997. This speculative project for the campus pairs storm-water infrastructure improvements with significant academic and aultural settings, such as classrooms, entry courts, theater lobbies, and boating ponds. By intermingling natural processes and daily social routines, Poole created a model that overcame the limitations of a phenomenological design in which personal experience and revelation predominate. (drawing: courtesy of Kathy Poole)

their work, George Hargreaves and Michael Van Valkenburgh have left the most documentation of their intentions, both in writing and in built landscapes.⁴⁶ Still, they do not have a monopoly on these issues, as evidenced by the extraordinary graduate student work produced over the last ten years. From final semester projects to first-year studio sketch problems that create instruments and experiences for revealing natural process, student interest in the nonvisual aspects of the landscape is pervasive. As former students of designers like Van Valkenburgh, such as Kathy Poole, have developed their own practices, they have increasingly imbued these process explorations with even more cultural content (Fig. 5). Collectively, these speculative and built works map out a territory for exploring the temporal aspects of the landscape and the open-ended nature of the design process. A design proposition might set a site in motion, construct a catalyst for future change, or provide a datum against which to register change through such processes as deposition and erosion.

⁴⁶ George Hargreaves wrote about Smithson in "Postmodernism Looks Beyond Itself," *Landscape Architecture* 73, no. 4 (July/August 1983): 60–65, and "Most Influential Landscapes," *Landscape Journal* 12, no. 2 (fall 1993): 177.



6. Ice Wall series, Cambridge, Massachusetts, by Michael Van Valkenburgh, 1986–88. These explorations of the winter landscape, transformed by the accretion of luminous layers of ice that collected as misting water slowly dripped down thin metal scrims of chain link and welded wire mesh, were landscape versions of R obert Irwin's interior and exterior scrim installations. The layering of opaque and translucent surfaces lit from various sources created fantastic spaces of complexity and illusion. (photo: courtesy of Michael Van Valkenburgh A ssociates)

Van Valkenburgh's *IæWall* series (1988–90), built on campuses and in private gardens in the Boston area and on Martha's Vineyard (Fig. 6), was initiated through speculative work funded by the NEA and explored in *Eudoxia*, Van Valkenburgh's entry in the 1986 exhibition *Transforming the American Garden*.⁴⁷ These projects, like Van Valkenburgh's explorations of plant form explorations in his gardens and public landscapes, belie the idea that landscape space is open or empty. They also make the point quite explicitly that landscape space is temporal, not constant and unchanging. Hence, a particular landscape space, such as the Radcliffe *IæWalls*, could be many places over the course of a day, depending on the angle of sun, the thickness of

⁴⁷ Michael Van Valkenburgh, *Transforming the American Garden:Twelve New Landscape Designs* (Cambridge, Mass.: Harvard University Graduate School of Design, 1986), 20–23. See also Paula Deitz, "Private Visions," in *Design with the Land: Landscape Architecture of Michael Van Valkenburgh*, ed. Brooke Hodge (New York: Princeton Architectural Press, 1994). These projects were the only landscape projects included in a 1995–96 Museum of Modern Art exhibit on recent design projects exploring the luminosity and translucency of walls. See Terence Riley, *LightConstruction* (New York: Museum of Modern Art, 1995).

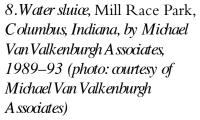


7. Site plan, Mill Race Park, Columbus, Indiana, by Michael Van Valkenburgh Associates, 1989–93 (plan: courtesy of Michael Van Valkenburgh Associates)

the ice, and the position of the viewer. This environmental spectacle foregrounded the processes of nature, making them evident, even magical. This sort of temporary installation thus made the environment visibly temporal, much as Peter Walker and Martha Schwartz's temporary installation, *Necco Garden*, a parterre of pastel candy wafers and automobile tires constructed at MIT's Baker Quadrangle (1980), made the landscape surface visible. This act of recognition might be understood as a first step toward developing an aesthetic awareness and environmental appreciation of hydrological processes such as freezing and thawing, with their attendant accumulation, crystallization, and dripping.

Van Valkenburgh's keen observation of process and phenomena resulted in a number of small projects, such as the *Isaacs Garden*, Cambridge (1986), and the *Krakow Garden*, Martha's Vineyard (1990), which were laboratories for his later public work in parks. At *Mill Race Park* in Columbus, Indiana (1989–93), an eighty-five-acre park built between the western edge of Columbus and the White River (Fig. 7), Van Valkenburgh cut and filled the flood plain to create pools and mounds and then choreographed circuit walks and drives





through the park.⁴⁸ Rather than merely accommodating the river's floods, the park's sequences and events celebrate the water level's rise and fall and concretize the city's relationship to the river. As in Halprin's work, the spatial figures are not clearly bounded by geometry, but by movement from event to event or moment to moment. The first of the major events that one encounters when entering the park from Fifth Street is a crescent-shaped amphitheater. This earthwork is oriented northeast and toward the minor events that cluster around it—a parking field, a playground, a horseshoe pit enclosure, a picnic shelter, and rest rooms. From this recreational precinct, one sees the second event, a pool 450 feet in diameter lined by small trees and surrounded by a covered bridge, a picnic shelter, a rest

⁴⁸ John Beardsley, "In the Works: Public and Corporate Designs," in Hodge, *Design with the Land*, 18–27; idem, "Mill Race Park: Rescuing Death Valley," *Landscape Architecture* 83, no. 9 (September 1993): 38–43.

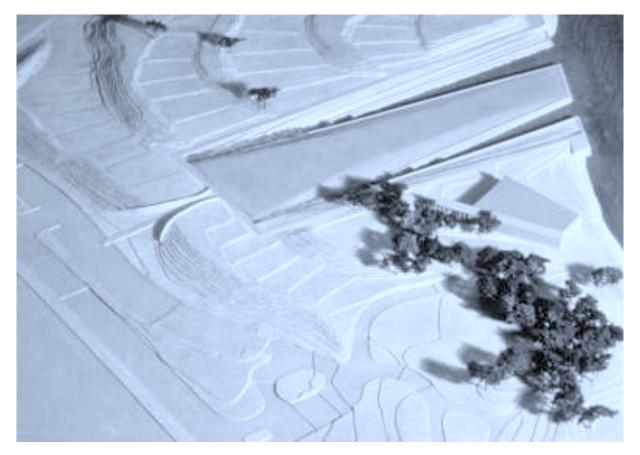


9. Aerial photograph during a flood, Mill Race Park, Columbus, Indiana, by Michael Van Valkenburgh Associates, 1989–93. The elevated plinth of the playground and the high masses of the amphitheater and lookout mound register the fluctuation of the river level and function as memory devices. (photo: courtesy of Michael Van Valkenburgh Associates)

room, and a sluice that controls the pool's water level relative to the level of the river. An adjacent irregularly shaped pond, a remnant of prior industrial processes on the site, structures the third precinct. Its perimeter walks connect and collect the covered bridge, a boat house, a dam, a boat landing, a basketball court with earthwork bleachers, a lookout, and the horseshoe pit enclosure. The fourth event, another earthwork mound, is immediately north of the irregular pond. Created from the excavation required to construct the circular pool, the mound acts as an edge to the park as well as a prospect from which to view the river.

The events, both large and small, register the presence and power of the river in varied ways. Most dramatic, during the flood stage only the elevated structures are visible from the city's edge. During seasonal flooding, the amphitheater, mound, and earthen bleachers are transformed into separate, geometric islands within the swollen river. Even during dry periods, however, there are clues that the park occupies a flood plain. The floors and walls of small structures, such as the rest rooms, hover above the ground on structural columns, so that flood waters can flow under them.⁴⁹ The picnic shelters sit atop slightly elevated floors

⁴⁹ The buildings were designed by architect Stanley Saitowitz.



10. Landform model of Candlestick Point Cultural Park, San Francisco, California, by George Hargreaves, 1985–93 (photo: courtesy of George Hargreaves Associates)

protecting them ever so slightly from wet land below. The most prominent gesture toward the water is at the confluence of the two tributaries that form the White River. Here, four small events, a linear arbor aligned with the western tributary, a rest room, a picnic shelter, and a hairpin-shaped vista walk, gather to celebrate the rivers that give *Mill Race Park* its identity and its boundaries (Fig. 8). All of the major events, as well as this cluster of river activities, are connected by a park drive and river walk so that they can be experienced as a set of related events and spaces as well as separate precints.

For a critic or student accustomed to the geometric clarity and singular gestalt of many modern and classical landscapes, the park's site plan is difficult to decode. Yet a close look at site conditions reveals a careful pairing of each program with its site location (in plan and section) and of each principal park event with its relationship to the river. To use Irwin's term, the structure of the park is site conditioned, meaning it is not dependent on some a priori sense of composition or typology. Its forms and spaces are the result of the designer's reading of the site from the dual perspective of perceiver and conceptualizer. The cyclical processes of river flooding, occurring at longer intervals than those explored in the *IœWall* series, introduce memory into one's experience of the park (Fig. 9). Hence, the structure of the park is dependent as much on the temporal as the spatial, on memory as much as immediate experience. These characteristics bind *Mill Race Park* to postmodern picturesque theory,



11. Site plan, Candlestick Point Cultural Park, San Francisco, by George Hargreaves Associates, 1985–93 (photo: courtesy of George Hargreaves Associates)

as redefined by Yves-Alain Bois and Robert Smithson, as well as to site-specific environmental art.⁵⁰ The bodily experience of moving through this public landscape and participating in the town's annual rituals and celebrations over time—whether a school year, a childhood, or a lifetime—is key to this experience.

Much as *Mill Race Park*'s forms and spaces are shaped by the designer's reading of the site as a place formed and defined by the flow of water, *Candlestick Point Cultural Park*'s sculpted landforms manifest the wind's formidable forces (Fig. 10). Twenty-five years after Halprin and his colleagues designed *Sea Ranch* by responding to the flow of wind and water across a California coastal site, and less than five years after Peter Walker and the SWA Group layered thin planes of stone lines, grass surfaces, and water basins into a Fort Worth plaza parterre called *Burnett Park* (1983), George Hargreaves and his collaborators, environ-

⁵⁰ Yves-Alain Bois, "A Picturesque Stroll around Clara-Clara," *October* 29 (summer 1984): 32–62; Robert Smithson, "Frederick Law Olmstead [*sic*] and the Dialectic Landscape," in Holt, *Writings of Robert Smithson*, 117–28. While a contemporary understanding of the nonvisual aspects of picturesque theory is quite widespread due to the recent historical writings of Anne Bermingham, Stephen Daniels, and John Dixon Hunt, as well as the theoretical recovery of the picturesque by artists and theorists such as Robert Smithson, Sidney Robinson, and Yves-Alain Bois, most landscape architects in the 1950s and 1960s understood the picturesque and the pastoral through modern eyes. For them, it was an appropriately soft, noncompeting, sylvan, visual backdrop or frame for bold, assertive, objectlike buildings.



12.Wind gate, Candlestick Point Cultural Park, San Francisco, by George Hargreaves Associates, 1985–93.This "wind gate" registers the directionality of the late afternoon winds flowing around and over the four-hundred-foot hill and stadium to the west (see Figs. 11 and 13).When the afternoon wind blows from the west, an almost daily phenomenon, a visitor walking toward the water experiences a strong wind from behind and a whistling sound emanating from the gate's walls, which act as environmental whistles.

mental artist Doug Hollis and architect Mark Mack, created *Candlestick Point Cultural Park* (1985–93), an eighteen-acre park on San Francisco Bay, which is indebted to both.⁵¹ The sculptural shaping of the ground into an elongated, tapered terrace bounded by narrow channels and flanked by a repetitive field of crescent-shaped mounds derives its emphatic form and directionality from the pervasiveness of an offshore breeze that characterizes Candlestick Point (Fig. 11). This sensibility that looks to natural processes and phenomena as the genesis of objectified landscape form and aesthetic experience, builds not only on the works of Halprin and Walker however. Smithson and Irwin's interests in process and the extraction of conceptual ideas from a site's existing sense data is also manifest in *Candlestick Point Cultural Park*.⁵²

⁵¹ See Susan Rademacher Frey, "A New Theatre of Collaboration," *Landscape Architecture* 77, no. 3 (May/June 1987): 52–59, for one of the earliest descriptions of the park and the designer's process. I first visited the park in the summer of 1993.

⁵² The writings of the art historian and critic of the contemporary landscape John Beardsley, especially "Entropy and the New Landscapes," in *Hargreaves: Landscape Works*, Process Architecture 128 (Tokyo: Process Architecture, 1996), have made the clearest connections between Smithson's theories and practices and the evolution of Hargreaves's work in the 1980s.



13. Promenade to the bay, Candlestick Point Cultural Park, San Francisco, by George Hargreaves A ssociates, 1985–93. The edge between the lawn and channel is defined by low steps constructed of gabions, wire-mesh boxes filled with stone nubble— a constructed version of the detritus found in the channels.

From the parking lot, the park is entered through a narrow opening between linear earth mounds secured by 130-foot-long concrete walls (Fig. 12). The mowed lawn terrace tapers down toward the water, as if the strong wind had shaved its surface. The wind and gravity compel one toward the water's edge to see around the point and gaze at the distant horizon of water and hills. The terrace's manicured lawn contrasts with the coarse flotsam of rock, wood, and sediment deposited in the channels by the rise and fall of the tidal bay. Paths lining the terrace lead to promenades, which separate the terrace from perimeter mounds (Fig. 13). These wildflower-covered mounds recall dunelike landforms shaped by aeolian processes (Fig. 14).

Hargreaves has described this place as an "environmental park," as opposed to a nature study area.⁵³ Its visitors can experience its specific qualities in the same way its designers as perceivers did during their frequent site visits. No exhibits or interpretative signs intrude on its visitors' experience of this environment. Rather, the park plots a series of interactions, movements, and engagements with the environment—the forces of which can literally move its visitors, just as it can shape the changing boundary between land and water.

⁵³ Frey, "A New Theater," 59.



14. Panorama of aeolian mounds, Candlestick Point Cultural Park, San Francisco, by George Hargreaves A ssociates, 1985–93. The walk to the shore is bounded by dry mounds and wet tidal channels. The landforms' "backslope," concave in plan and section toward the wind, and the "slip face," convex in plan and section on the leeward, create an armature and habitat for varied plant growth—dry and high versus moist and low— and human use— exposure versus protection.

The shaping of the landforms and the primary spatial sequences around them refer to, and rely on, the site's wind processes in varied ways: they channel and deflect the wind's flow to create a rhythmic experience of calm and force, sound and silence, stillness and movement; they allude to other forms shaped by the wind, such as the aeolian dunes; and they create various microclimates that create diverse habitats of volunteer grasses and wildflowers to supplement those planted on the site. In its capacity to function as an arena for the performance of the site's invisible processes, *Candlestick Point Cultural Park* shares an affinity with works by Robert Irwin and, more directly, with the early works by Doug Hollis, such as his *Sound Garden* (1981–83) at the NOAA Headquarters outside Seattle.⁵⁴

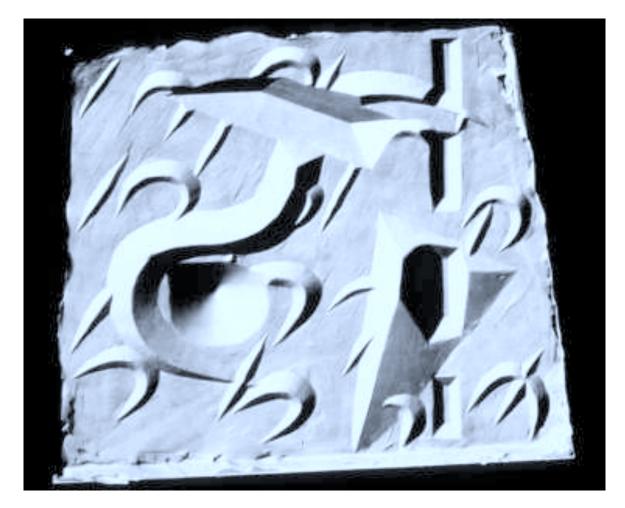
But the park is more than a theater of environmental spectacle. The stark juxtaposition between the cultivated and the natural is about more than interesting visual contrasts. The

⁵⁴ Patricia Fuller, *Five Artists at NOAA: A Casebook on Art in Public Places* (Seattle, Wash.: Real Comet Press, 1985). This catalog describes the site-specific artworks, including Hollis's *Sound Garden*, installed on the grounds of the NOAA headquarters.



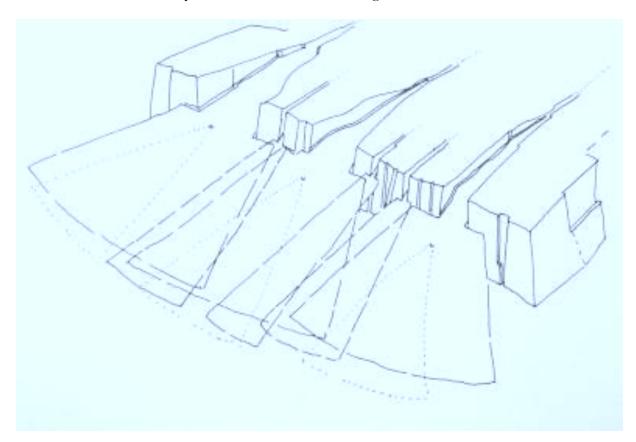
aesthetic experience of walking between these two types of landscape is accompanied by an increased awareness of the environmental implications of their differences. The former, mowed and green, requires not only watering, but also fertilizers and herbicides to maintain its everlasting constantness. The latter, rough and tawny, requires only an annual mowing and the movement of seedpods by wind, water, and birds across the site.⁵⁵ If phenomenal art or the phenomenology of design, in Irwin's and Norberg-Schulz's respective terms, requires an awareness of both the fleeting phenomena and tactile character of a place as well as the nature of its construction, *Candlestick Point Cultural Park* falls well within this genre. Its sensuousness and tactility fosters a recognition that landscapes are human constructions and that the various ways of making and maintaining them carry long-term consequences for the health of the larger ecosystem.

⁵⁵ I first developed this reading of *Candlestick Park* in a short essay, "Theorizing Hargreaves' Work as a Post-modern Practice," in *Hargreaves: Landscape Works*, 138–40.



15. Clay study model of a landform sculpture exercise, 1992, Department of Landscape Architecture, student work, Harvard Graduate School of Design

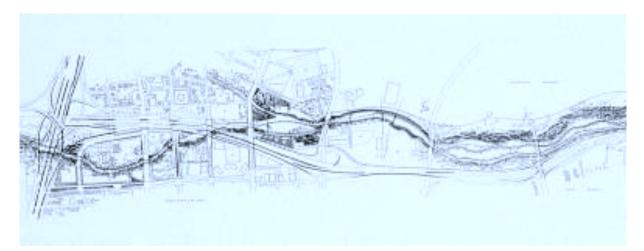
Mill Raæ Park and *Candlestick Point Cultural Park* illustrate the possibilities of a landscape design process open to new forms and arrangements revealed during a close study of a site's natural processes. Both these projects allow us to experience the richness of a postmodern landscape construed more through temporal and spatial sequences rather than through the landscape conventions of the scenic and the visual. For the midwestern urban park, the result is a nonhierarchical, overlapping series of moments experienced around prominent low and high places in the flood plain. Space varies according to the rhythms and forces of the river's flows, as well as the rhythm of an individual's visits. The spaces of the West Coast state park are full of the prevailing wind's force and direction, which shape the land and structure one's experiences. Moreover, these projects establish a parallel experience for the park's designer and visitor. Both are active, engaged perceivers of the place, gaining an appreciation for and understanding of the dynamic land-shaping forces of wind and water. This emphasis on processes notwithstanding, these projects also rely on objectification of landform and landscape space, albeit in nonhierarchical arrangements or non-Euclidean geometric forms.



16. Geomorphic conversation—decomposition of a mountain to a plain (from William Morrish, Civilizing Terrains [Minneapolis: Center for the Design of the American Urban Landscape, 1989], fig. 43)

Giving Form to the Neutral Field: Landform as Mass and Figure

From an environmental perspective, one of the problems with the normative design languages of twentieth-century American landscape architecture was its lack of nuance. Too often, a geometric plan is associated with the realm of man and the constructed, while a curvilinear plan is imagined to be natural, even undesigned. Because of such formal limitations, the relationship between the man-made and the natural translated to a relationship of differences, rather than reciprocities. A parallel set of assumptions on the part of many modern architects was that all buildings are conceived for sites that are metaphorically "natural" (an informal arrangement of plants and outdoor spaces will invoke that metaphor), yet when the site is imagined as natural, or informal, it can only be from a limited formal and nonecological perspective. In such a worldview, Euclidean geometry has a monopoly on form; form and order in nature do not exist. This rigid worldview on the part of modern architects and, by extension, many who develop the land conspired with other forces, such as the economically based system for valuing the land, to marginalize the environment as a medium of design form and order. Without the development of form languages based on such environmental processes as land formation, even the best ecological planning might result in "informal" designs on the most ecologically appropriate parcel of land.



17. Plan, Guadalupe River Park, San Jose, California, by George Hargreaves Associates, 1988– (plan: courtesy of George Hargreaves Associates)



18. Earthwork model, Guadalupe River Park, San Jose, California, by George Hargreaves Associates, 1988– . Recalling the patterns of braided river channels that flow around exposed accumulations of sediment deposited by receding floodwaters, this monumental earthwork is quite different from the singular, figural quality of Candlestick Point Cultural Park's great terrace. Moreover, the earthworks at Guadalupe are intended to perform environmental work over time. This artificial braided earthwork, made of hundreds of triangular acts and fills, parallels the river banks in the northern sector of the park. (photo: courtesy of George Hargreaves Associates)

219 Post–Earth Day Conundrum: Translating Environmental Values

In the writing of the urban designer William Morrish, author of Civilizing Terrains (1989), and in the public parks by George Hargreaves and his partners, Mary Margaret Jones and Glenn Allen, one finds evidence of explorations into new designed landform types derived from geomorphology (Fig. 15) and how those forms might constitute a new "urban ground."⁵⁶ Morrish's beautifully illustrated manifesto (Fig. 16) was written to "illustrate some basic notions of the origins of integrating land and built form together into a comprehensible system."⁵⁷ Hargreaves's landform grammar, perhaps most evident in his study models for Guadalupe River Park in San Jose and in his study drawings for the Parque do Tejo Trancao competition in Lisbon, consists of a sculptural vocabulary that expands the Euclidean repertoire of cones, pyramids, and orthogonal terraces to include the striking and recognizable forms of drumlins, eskers, barchan dunes, and braided linear mounds. Like Morrish's designs, Hargreaves's geomorphologically derived landforms mix freely with geometrical forms, creating sculptural complexity while reconceptualizing the boundaries between the built and the natural. In Morrish's lexicon, this promiscuous mixing results in settlements that emerge from the structure and form of the land. Like the writings of the architectural critics Carol Burns and Kenneth Frampton, Morrish's manifesto calls for a design practice that does not assume some abstract tabula rasa as the preexisting condition of designing.⁵⁸ Instead, by acknowledging the significance of a region's topography—steepness of slope, aspect, and geomorphology-as a generator of form, the landscape architect can begin to overcome the placelessness that a "cleared site" strategy perpetuates.⁵⁹

For Hargreaves, this mixing of forms makes evident the artificiality, or the constructed nature, of his urban landscapes. His efforts to reclaim industrial riverfronts and to manage floodwaters do not mask human creativity and construction under a veneer of pastoral informality. Rather, the interdependence of natural and human processes in such projects is manifest in the interdependence of geomorphological and geometrical forms. At *Guadalupe River Park*, a three-mile-long recreational/storm-water control project (Fig. 17), Hargreaves replaced an engineer's vision for managing the river's floodwaters inside seventeen-foothigh walls with a constructed floodplain of varying widths.⁶⁰ The form and character of the floodplain vary depending on the adjacent urban conditions—proximate cultural institutions, road overpasses, and a recently demolished neighborhood. Near the former neigh-

⁵⁶ This is especially true in *Guadalupe River Park*, San Jose, Calif. (1988–), *Waterfront Park*, Louisville, Ky. (1990–present), and the Parque do Tejo Trancao competition, Lisbon, Portugal (1994–95). Such explorations also figured in the landform and grading exercises done by Harvard's landscape design graduate students under Hargreaves's direction (1992–). These exercises were taught by Gary Hilderbrand, George Hargreaves, and the author.

⁵⁷ William Rees Morrish, *Civilizing Terrains: Mountains, Mounds, and Mesas* (Los Angeles: Design Center for the American Urban Landscape, 1989), iii.

⁵⁸ Carol Burns, "On Site," in *Drawing/ Building/ Text*, ed. Andrea Kahn (New York: Princeton Architectural Press, 1991), 146–67; Frampton, "Towards a Critical Regionalism."

⁵⁹ Burns, "On Site," 149–51.

⁶⁰ Jane Brown Gillette, "River Runs through It," *Landscape A rchitecture* 88, no. 4 (April 1998): 74–80, 92–96, contains the most recent and thorough account of this project at the early stages of its completion.



19. Urban section, Guadalupe River Park, San Jose, California, by George Hargreaves Associates, 1988– . When the river intersects with the city street above, its banks transform into stairs scaled to the human body. One enters the river's realm from sturdy stairways, which "erode" into the banks.

borhood, downstream of the city, the park's surface is made of elongated, streamlined mounds and hollows (Fig. 18). Hargreaves designed this braided earthwork to fill the vacant blocks of the dislocated community and return some of the area back to its floodplain function—that of retaining waters during heavy rains, reducing downstream flooding, and purifying the percolating water. The form these braids adopt when extended into the cleared neighborhood grid is another example of Hargreaves's composite vocabulary. Grid and braid overlap to create a complex, undulating tapestry of future garden plots, bosques, and rivulets. The river encroaches the city, creating a surface of negotiation between wet and dry, cultivation and constant movement.

To the south, V-shaped high walls become elevated overlooks during periods of flooding (Fig. 19). Here, the city encroaches on the river, creating places of awe and wonder where the river's force and volume are most evident. At the confluence of Los Gatos Creek and Guadalupe River, the narrow channels open up to form a space, similar in shape to the sculpted, elongated braids. This bowl is framed by large triangular earthforms of the Euclid-

ean, rather than fluvial, type. These provocative and eclectic earthworks create a territory along the river's banks that bonds the river and the city, sharing properties of each. As such, it serves as a zone of exchange between them—sometimes wet and sometimes dry, sometimes full of water moving down its channel and sometimes full of people strolling along its banks, sometimes a place for water to collect, linger, and then slowly percolate down into the ground, other times, a place for the citizens of San Jose to gather for civic events, linger, and slowly disperse.

It is a paradox of this project that the desire to create an emphatic, sculptural landscape form creates a place with equivocating spaces that accommodate no single use, but rather the flux and flow of riparian and urban cycles. Control is not the operative word here, since the river is permitted to transgress its proper boundaries at times. Another curious characteristic of this sculptural earthwork is its "open-endedness."⁶¹ Hargreaves's firm is working toward a design practice that might be understood as initiating process instead of imposing form. In an interview with Jane Brown Gillette, Hargreaves described the differences between establishing a set of principles that lead to a design thesis and imposing a set of fixed forms.⁶² Given the dynamics of water flow, soil erosion and deposition, and plant succession, the boundaries of mound and depression, meadow and thicket will vary over the course of years and decades. Some changes will be gradual, while others, caused by extreme floods or droughts, will be rapid. In registering the vicissitudes of natural and urban processes, the figured earthwork of Guadalupe's riverbanks will allow San Jose's citizens to witness the interrelationships that bind them to their place and allow them, in Norberg-Schulz's terms, "to dwell."63 Guadalupe River Park represents a group of works that are assembled with alternative form languages that signify the interdependency of human and nonhuman natural systems. Hargreaves's urban landscape relies on neither outdated images of nature, such as smooth riverbanks, clumps of trees, and meandering watercourses that belie the impact of development on the river's volume and quality, nor an image of technological control, such as a high concrete flood-control culvert that hides the river and its waters from the city, masking the impact of the water's release downstream. Instead, his project constructs new forms and spaces that promise to alter public conceptions of the boundaries between nature and the city.

Through their creative explorations of landforms shaped by natural processes, Morrish (at one time a designer with Halprin's office) and Hargreaves are building on a tradition that is some thirty years old. Halprin's fountains in Portland and Seattle were essays on the transformation of forms shaped by natural process into forms of urban place formation

⁶¹ This concept of Hargreaves's, which he calls "open composition," requires a designer to be the initiator of changing, contingent forms instead of the controller of fixed forms. The temporal landscapes that result from dynamic processes define a new genre located between the object landscapes of Peter Walker and the formlessness of earlier ecological design.

⁶² Gillette, "River Runs through It," 74, 92.

⁶³ Norberg-Schulz, *Genius Loci*, 5. Norberg-Schulz defines dwelling as the goal of architecture. By visualizing the genius loci, the spirit of the place, architecture makes a place meaningful and allows humans to dwell there, in the Heideggerian sense of the term.



20. Auditorium Forecourt, Portland, Oregon, by Lawrence Halprin, 1966-67

(Fig. 20). By describing nature as a sculptor of form, Halprin persuasively argued how a designer can be interested in emphatic, legible form and the invisible processes of nature. In "The Shape of Erosion" (1962), he outlined the ways that sculptural forms and landforms are analogous.⁶⁴ This short but insightful article identified two aspects of landform that landscape architects should study—the surface form and the processes that shaped it. By studying not only the former, as he did in his extraordinary sketchbooks, but also the latter, the landscape architect could "begin" to tap the true source of form."⁶⁵ For Halprin and the generations of designers who have read his writings and experienced his urban projects—especially those in the region he knows so well, the West Coast—this insight into the processes and phenomena that shape form has been key to their ability to make places for human life. As he wrote, "We derive our sense of sculpture, our understanding of form, our relationship to group composition, our basic choreography through our relationship to natural phenomena."⁶⁶

⁶⁴ Lawrence Halprin, "The Shape of Erosion," Landscape Architecture 52, no. 2 (January 1962): 87-

88.

caring, making, building, and cultivating.

⁶⁵ Ibid., 88.
 ⁶⁶ Ibid. See Howett, "Systems, Signs, Sensibilities," 11, for an elaboration of this characteristic in Halprin's work and its parallels to Heideggerian notions of dwelling that entail not only living but also

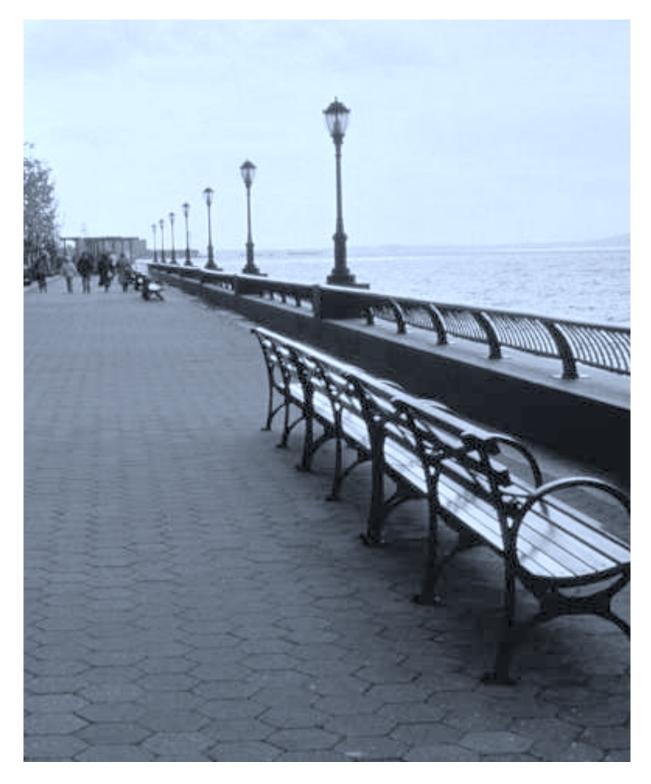
223 Post–Earth Day Conundrum: Translating Environmental Values

Halprin's example and Hargreaves's and Morrish's elaborations on his design thesis demonstrate the environmental role of a design practice that employs nature's forms and processes to reinvigorate human settlement patterns and gathering places.⁶⁷ What differentiates their work from other contemporary works that objectify natural geomorphology for symbolic resonance and sculptural presence, such as Martha Schwartz's Federal Courthouse Plaza, Minneapolis (1998), is their concern for revealing the reciprocity between form and process and between human routines and natural cycles. Moreover, one of the key contributions of Halprin, Morrish, and Hargreaves to the phenomenology of place is their recognition that structure and phenomena as well as perception and conception are vital to the activity of making landscapes. These designers have employed varied means by which to translate this concern for natural processes into a physical, sculptural vocabulary of design forms. These vocabularies do not privilege the forms of culturally constructed geometries over the forms of naturally evolving geomorphologies. Formal and informal concepts have little meaning in how these designers give form to their environmental values. Their forms refuse to fade into the background as "natural." They are not the counterpoint to some ordered urban architecture. They are their own forms-forms of the land and, in the case of Hargreaves's Guadalupe Park, forms that welcome the reshaping and sculpting that the next heavy winter rain or crowded summer festival will inevitably bring. Form and space in this genre of work are neither absolute nor constant, but armatures that transform and deform over time. This type of practice carries out Smithson's goals for reimagining the park, which he outlined in his 1972 article in Art Forum:

Parks are finished landscapes for finished art. A park carries the values of the final, the absolute, and the sacred. Dialectics have nothing to do with such things. I am talking about a dialectic of nature that interacts with the physical contradictions inherent in natural forces as they are—nature as both sunny and stormy. Parks are idealizations of nature, but nature in fact is not a condition of the ideal....Nature is never finished....Parks and gardens are pictorial in their origin—landscapes created with natural materials rather than paint. The scenic ideals that surround even our national parks are carriers of a nostalgia for heavenly bliss and eternal calmness.⁶⁸

⁶⁷ See Spirn, "The Poetics of City and Nature," 108–26. This article is in a special *Landscape Journal* issue edited by Spirn and thematically entitled "Nature, Form, and Meaning." Spirn's article is an important bridge between McHarg's ecological planning theories and the work that I chronicle in this article, as she identifies many of the issues explored by Hargreaves and Van Valkenburgh. She also discusses Halprin's seminal role in the exploration of constructing experiences in the city that engender human interaction within a formal vocabulary that abstracts forms shaped by natural processes.

⁶⁸ Robert Smithson, "Cultural Confinement," Art Forum (October 1972), reprinted in Holt, Writings of Robert Smithson, 133.

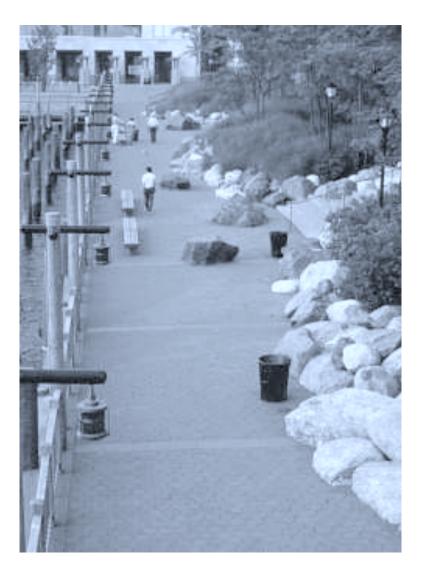


21. Esplanade, view south toward South Cove, Battery Park City, NewYork City, by Hannal Olin and Cooper Eckstut, 1979



22. Site plan, South Cove, by Susan Child, Mary Miss, Stan Eckstut, 1985, Battery Park City, NewYork City (plan: courtesy Susan Child Associates)

23. Esplanade, South Cove, by Susan Child, Mary Miss, Stan Edstut, 1985, Battery Park City, NewYork City. Here, the draracter of the esplanade dranges. The simple wall and rail give way to rows of bundled wooden piers and a wooden railing. A ramp leads down to the water. A bank of Rosa rugosa, multistemmed honey locust trees, and boulders rise above the paved esplanade, as if the original shoreline of Manhattan were erupting through the veneer of this simulated history.



Giving Form to the Neutral Field: Land as Deep Structure— *Accretive, Layered Strata*

Much as Hargreaves made the city's natural history manifest by creating a river park around a temporal and spatial armature, various urban projects and theories have tapped the city's cultural history as a source of a landscape's physical, spatial, and temporal armature. During the early 1970s, the excesses of urban renewal became apparent to many design and planning professionals. Simultaneously, the preparations for the United States Bicentennial refocused Americans' attention toward physical reminders of their own history. Since then, urban designers have advocated contextual design strategies that value, preserve, adapt, and interpret the physical context in both infill and new districts. Cooper Eckstut's and Hanna/ Olin's master plan for Battery Park City, New York City (1979), was such a project. This linear precinct, created from excavated landfill from the World Trade Towers construction, was laid out in an urban grid with a continuous street network and street walls evocative of the fabric of the adjacent city. Similarly, Hanna/Olin's river Esplanade, the first public landscape built within the development, is reminiscent of several revered public spaces in Manhattan (Fig. 21). In short, Battery Park City's designers sought to read the precinct as continuously as possible within its urban context, construed as a visual context focused on the city's surviving cultural and physical history, which could be emulated and reinterpreted.69

For some, this visual contextualism belies the city's actual history, which is much less coherent and more fragmented than the orderly pattern of *Battery Park City*'s blocks, streets, parks, and esplanades. Along the water's edge, the history of the city is both ecological and cultural—a story of filling, regularizing, and hardening the waterfront to control the impact of the fluctuating tides, maximize human use, and increase economic gain. *Battery Park City*'s southern esplanade, South Cove (1985), designed by a collaborative team made up of the landscape architect Susan Child, the artist Mary Miss, and the architect Stan Eckstut, is startlingly different in structure and character from the Hanna/Olin esplanade (Fig. 22). This difference reflects a different set of environmental values surrounding what it means to define the past as well as to frame the scope and content of context.

Walking south on the Hanna/Olin esplanade, defined by hexagonal block pavers familiar to all who stroll through many of New York's older parks, one is elevated above the Hudson and bounded by an elegant metal rail that curves inland, as if coaxing the walker to stop and lean on it. The esplanade closest to the water is a place for strolling, jogging, and skating. Parallel to it runs another path, slightly raised and lined with benches. Ahead, the continuous line of the upper and lower esplanade is broken as the paths turn inward toward the city, shaping the river's edge into a small recess that is called *South Cove* (Fig. 23). At the cove's far end, the esplanade passes a metal overlook and turns back toward the river in the

⁶⁹ For background on *Battery Park City*, see Catherine Howett, "Battery Park City," *Landscape Architecture* 79, no. 5 (May 1989): 51–57; Robin Karson, "Battery Park City Takes Manhattan," *Landscape Architecture* 75, no. 4 (July/Aug 1985): 64–69.



24. Spiral deck, South Cove, by Susan Child, Mary Miss, Stan Eckstut, 1985, Battery Park City, NewYork City

shape of a spiral, becoming ever narrower and less substantial. Viewed from the spiral, the ground seems to dematerialize from a solid, stable mass into a thin membrane stretched over the skeletal concrete frame of the park (Fig. 24). At *South Cove*, the edge between the land and the water is layered in section, thick in horizontal dimension, and composed of diverse materials. Its complexity reflects the contingency of the site—a place where the water was filled in and decked over to expand the city. By unpeeling its layers, Child, Miss, and Eckstut reveal the environmental history of this constructed site along with much of Manhattan's waterfront, where the past is not frozen in time, but often obscured by layers of accretion and change.

The metaphor of *South Cove* as a thin skin over a structural skeleton is recapitulated in the shape and outline of the metal overlook (Fig. 25), which echoes the form of the Statue



25. Overlook, South Cove, by Susan Child, Mary Miss, Stan Eckstut, 1985, Battery Park City, NewYork City



26. Conceptual site plan, University Art Museum Project, California State University, Long Beach, California, by Peter Eisenman and Laurie Olin, 1986 (plan: courtesy of Laurie Olin)

of Liberty in the distance, another structure whose surface belies its skeletal frame. While these sculptural allusions enrich the experience of the visitor who is knowledgeable about the history of sculpture and technology, this knowledge is not necessary for the aesthetic experience. Given *South Cove*'s adjacency to and continuation of the esplanade and its startling juxtaposition of materials, surfaces, and iconography, one cannot help but wonder and muse about the place. In contrast to Olin, Child and her collaborators constructed an experience that provides a different relationship not only to the river and the shore, but also to history and time itself. Here, environmentalism is introduced into the historical arena: it is not simply a present value, but a set of historically situated and enacted values that construct the city and preserve the environment.

This type of project is evident in other landscape works as well, such as the collaborations between Peter Eisenman and Laurie Olin at the University Art Museum, California State University, Long Beach (Fig. 26), or the recent student work by Alexis Woods for an addition to the island cemetery of San Michele off Venice (Fig. 27). Such projects introduce environmental history and the notion of a synchronic reading of history into the theory and practice of urban landscape design.⁷⁰ In doing so, they act as a form of built critique, challenging the environmentalism of much of postmodern contextualism's aesthetic codes, which are predicated on a single, ideal history that is to be replicated and simulated in new construction. In place of the idea of Battery Park City as a cleared site—an unbuilt, flat plane awaiting future development to give it structure and character-South Cove's design forms resurrect the coastal processes and histories that predated the cleared site, the landfill, and the industrial waterfront. The project avoids the nostalgia that such a strategy could readily evoke by employing a design language of fragmentation, juxtaposition, and collage instead of imitation and replication. By placing the cove shoreline above and behind the esplanade, thus displacing the shore, this landscape evokes wonder and surprise, not familiarity. It engages those who encounter it by land or water to question the effortlessness and naturalness of this new/old precinct of the city. As with all these postmodern, postenvironmental landscapes, the designer's act of perceiving the place is registered and manifest in the work's conceptual vocabulary, built forms, and spaces, which create an environment for others to perceive and marvel as they engage the edge between land and water, present and past.

⁷⁰ For an account of Eisenman's work, see Jean-François Bédard, *Cities of Artificial Excavation* (Montreal: Canadian Centre for Architecture and Rizzoli, 1994). This generally excellent review is seriously deficient, however, in its failure to mention Laurie Olin's collaborations with Eisenman and how the start of these collaborations coincided with Eisenman's interest in site issues. For an account of Olin's contributions, see Laurie Olin, "Landscape Design and Nature," in George Thompson and Frederick Steiner, ed., *Eαlogical Design and Planning* (New York: John Wiley and Sons, 1997), 109–39. In addition to the University Art Museum, Eisenman and Olin collaborated on the Wexner Center, Ohio State University, Columbus (1982–87) and the Carnegie Mellon Research Institute, Pittsburgh (1987).

Finding Form in the Formless and Unbounded: The Shape of Change, Dynamics, and Disturbance

The place of engagement between land and water at Battery Park City is the place where the mythic, historical context that undergirded its master planning principles was revealed to be a surficial veneer masking the site's actual history of environmental change. Only by moving along the esplanade across sectors designed and built by others does the experience of South Cove become environmentally meaningful and aesthetically powerful. Similarly, a number of projects designed on damaged or polluted sites gain their power through contrast and juxtaposition with their surroundings. Such projects demonstrate how a landscape architect can acknowledge the history of not only human use, but also abuse of the land. Robert Smithson believed that projects of this genre were among the most challenging. "My own experience," he wrote, "is that the best sites for 'earth art' are sites that have been disrupted by industry, reckless urbanization, or nature's own devastation."⁷¹ In creating their reclamation landscapes, Richard Haag at *Bloedel Reserve* (1979), a harvested second-growth forest, George Hargreaves at Byxbee Park (1988-92), an East Palo Alto sanitary landfill (Fig. 28), and Julie Bargmann at the Vintondale, Pennsylvania, A cid Mining Drainage Project (1996-) (Fig. 29) worked outside the aesthetic paradigm that still dominates land reclamation efforts some twenty-five years after Smithson's death. Instead of returning the site to some image of an idealized nature thought to exist before human dumping, harvesting, destroying, and polluting, Haag, Hargreaves, and Bargmann worked with the site contingencies, highlighting and reinforcing them. In doing so, they called into question the assumption that industrial destruction must be hidden beneath a veneer of pastoralism.

The four gardens that constitute Haag's work at the *Bloedel Reserve* on Bainbridge Island have been well documented, but the forest they were carved out of has not (Fig. 30).⁷² By looking closely at how one experiences the boundaries between the forest and the sequence of the four gardens—the *Garden of Planes*, the *Moss Garden* (or *Anteroom*), the *Reflection Garden*, and the *Bird Marsh*—the garden rooms can be interpreted as lenses for viewing the forest rather than as the project's primary subject. When this reversal of figure and frame occurs, the role of the four gardens in the development of new land-scape design grammars becomes obvious. Additionally, one understands Haag as operating similarly to Halprin as a perceiver of site, not as an analyzer of systems.

The *Bloedel Reserve* forest is entered from a meadow. At this threshold is a large sculpted mound, which marks the edge of construction disturbance along the boundary

⁷¹ Smithson, "Frederick Law Olmstead and the Dialectical Landscape," 124.

⁷² Susan Rademacher Frey, "A Series of Gardens," *Landscape Architecture* 76, no. 5 (September/October 1986): 54–61, 128; Felice Frankel and Jory Johnson, *Modern Landscape Architecture: Redefining the Garden* (New York: Abbeville Press, 1991), 52–69. *Richard Haag, Bloedel Reserve and Gas Works Park*, ed. William Saunders (New York: Princeton Architectural Press, 1998), contains essays by Patrick Condon, Gary Hilderbrand, and Elizabeth Meyer.

27. Site interpretation collage, Addition to San Michele Cemetery, Veniæ, Italy, by Alexis Woods, 1997. This speaulative project acknowledges the dynamic nature of land formation in the Venetian lagoon by proposing a cemetery that is shaped over time by aultural practices, such as burial internment and consolidation of remains into smaller bone boxes and communal graves, as well as the natural processes of erosion and deposition by water and wind. (collage: courtesy of Alexis Woods)





28. Ridgeline of mounds, Byxbee Park, East Palo Alto, California, by George Hargreaves, 1988–92

of the forest and meadow (Fig. 31). The *Garden of Planes* was the most controlled and abstract of the series.⁷³ Bounded by a Japanese teahouse and the earthen mound, it centered on an sculpture of angular positive and negative planes of stone. It was a place frozen in time, unchanging and obdurate. A short walk separates the *Garden of Planes* from the *Moss Garden*. Unlike most gardens, its form is not enclosed by walls, thus its vertical boundaries are vague. This garden was cleared of much of its forest understory so that the large stumps of harvested trees and the fallen trunks are more visible (Fig. 32). Then Haag introduced a carpet of nonnative chartreuse moss. This garden, unlike the *Garden of Planes*, is a place where time does not stop. Decay will slowly destroy this otherworldly place—half memorial to the site's former lumbering operations, half ode to Japanese moss gardens. Smithson's entropy is operative here, as fallen logs return to the soil, yet regeneration is slowly transforming this place, as giant stumps act as hosts to small seedlings. If the first garden is characterized by ideas of unchanging form and abstract space, the *Moss Garden* is a place that, in Mara Miller's words, "articulates space in the interest of articulating time."⁷⁴

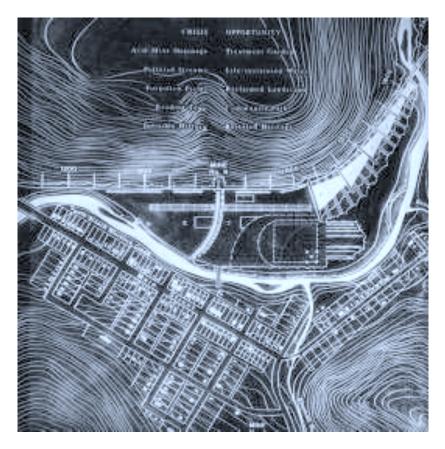
The dramatic contrast between the first and second gardens do not prepare one for the third garden, which adjoins the *Moss Garden*. In the *Reflection Garden*, the forest is reduced to its essentials—ground, water, sky, and perimeter trees (Fig. 33). Its beauty rests in the separation and clarity of each element. Haag employed Euclidean geometry to mark the center of the garden, a cut in the surface filled with rising groundwater, as well as the garden's edge, bounded by a yew hedge and vertical trunks of the surrounding forest. A long walk through the reserve leads to the *Bird Marsh*, a light-filled, watery realm that is a habitat for birds. Here, humans are clearly visitors. Though this garden also has a clear center and edge, neither are marked by obvious geometry. Rather, the extent of an alder grove that grew in the aftermath of a forest fire marks the garden's boundaries (Fig. 34). This disturbed site in an already disturbed setting—a fire-damaged grove in a harvested forest—creates a recognizable place within the larger forest matrix. To create the pond at the center of this grove, Haag expanded an existing irrigation pond. The small islands within this remnant of an early agricultural operation are now home to this "unnatural" retreat for birds.

At *Bloedel*, the disturbance of lumbering and fire were not cleaned up or beautified. Instead, the very location of gardens, as well as the shape and size of their boundaries and centers, were site conditioned. While Haag does not acknowledge the work of siteartists as his inspiration, as his younger colleagues do, his way of working on-site through immersion and observation over long periods of time—imbued this landscape with an astounding specificity to the contingencies of the site. The forest, at first a dark, wet monolithic enclosure, is slowly revealed to those who visit the reserve. As the designer as perceiver, Haag discovered the disturbed forest's mysteries over time. Now, such

 $^{^{73}}$ This room has been considerably altered since Haag's involvement. This essay refers to his original design, not the later alteration.

⁷⁴ Miller, *The Garden as an Art*, 39.

233 Post–Earth Day Conundrum: Translating Environmental Values



29. Conceptual plan, AMD + ART, Testing the Waters, Vintondale, Pennsylvania, Acid Mining Drainage Project, by Julie Bargmann, Stacy Levy, Alan Comp, and Robert Deason, 1996– (plan: courtesy of Julie Bargmann)



30. Forest understory at Bloedel Reserve, Bainbridge Island, Washington



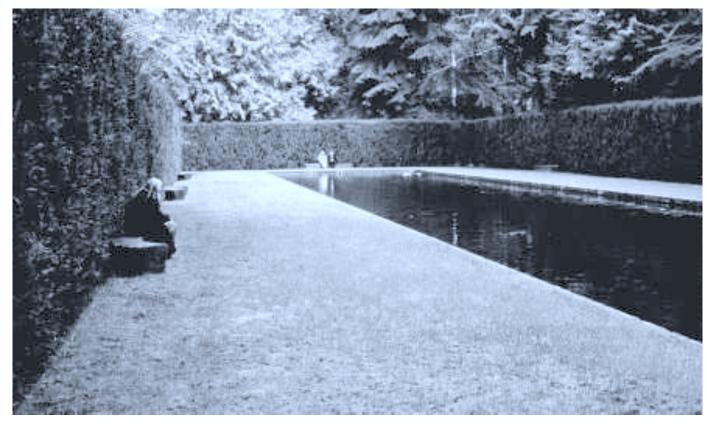
31. Panorama, entrance to the garden sequence from the meadow, Bloedel Reserve, Bainbridge Island, Washington, by Richard Haag, 1979–84



32. Panorama, Moss Garden, Bloedel Reserve, Bainbridge Island, Washington, by Richard Haag, 1979–84



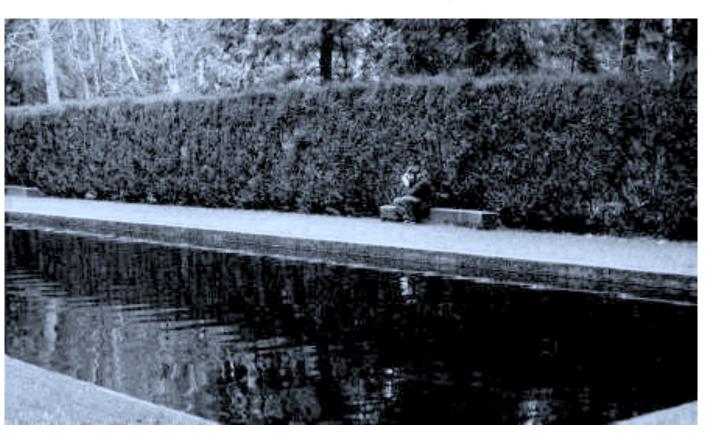




33. Reflection Garden, Bloedel Reserve, Bainbridge Island, Washington, by Richard Haag, 1979–84. A narrow, dipped yew hedge, rectangular in shape, defines the boundary between forest and dearing.



34. Alder grove, Bird Marsh, Bloedel Reserve, Bainbridge Island, by Richard Haag, 1979-84





mysteries are decoded for visitors through the forms and spaces of the reserve's four gardens. Perhaps this project could be criticized for making a disturbed site so hauntingly beautiful, but its significance was not achieved at the expense of glossing over its environmental history of disturbance.

If Robert Cook's exegesis of contemporary ecological theory, as presented in this volume, is germane to the development of landscape architecture theory, projects such as *Bloedel Reserve*, Hargreaves's *Byxbee Park*, and Bargmann's *Vintondale, Pennsylvania, A cid Mining Drainage Project* may be important steps toward developing designed landscapes based on a paradigm of ecological disturbance instead of balance. If so, the discipline of landscape architecture may well have to rely on new mythologies, as well as paradigms, that substitute the disciplinary mythology of healing and balance with one of trauma and disturbance. Through this lens, the formal dichotomies between nature and culture are inadequate constructs for constructing landscape experiences. Likewise, formal criticism that does not expand its frame of reference to document and interpret context—the proximity, for example, of a "sanitary" landfill to an adjacent estuary—cannot adequately decode a project's forms, experiences, impacts, or meanings. As designers in the late twentieth century struggle to give form to the environmental values of their time, the tools of critics and scholars are also called into question.

Finding Form in the Formless: Characterizing the Experience of Ecosystems

If Haag's designed landscapes within the *Bloedel Reserve* are analogous to lenses through which the forest can be perceived more clearly, the *Village of Yorkville Park* (Fig. 35), a new urban park in Toronto, might be seen as a "Victorian collection box" for recalling the experience of distant ecosystems in the city.⁷⁵ In many ways, this project is a hybrid be-tween the formal explorations of Walker and the site-specific and process-oriented explorations of Smithson and Irwin. This is not surprising given that Martha Schwartz, David Meyer, and Ken Smith, the designers of this small, one-acre park, studied or practiced with Walker at one time. With *Village of Yorkville Park*, the search for giving form to environmental values shifted entirely from a concern for process and the shape and forms created by process to an interest in the experiences and phenomena of an ecosystem—its textures, sounds, temperatures, and smells.

Within the repetitive, spatial framework of rowhouses on a city block, the three designers "collected" seventeen ecosystems, one per box, or bay (Fig. 36). This urban park as an ecological curio case reframes the ecology/art divide by making ecology the subject of a landscape as artwork. In doing so, it offers an alternative to the ideas that ecological concerns must result in formlessness or that the relationship between ecology and design is always one of opposition and difference.⁷⁶ Like J. C. Loudon in the nineteenth century and

⁷⁶ Even Louise Mozingo, in "The Aesthetics of Ecological Design," 47, perpetuates this distinction when she focuses on the landscape at the "interface of the built environment and ecological systems."

⁷⁵ "1996 ASLA Awards: Northern Exposure," *Landscape Architecture* 86, no. 11 (November 1996): 70–76; fall 1996 lecture by, and author's conversations with, Ken Smith when he was a visiting studio critic at the University of Virginia.

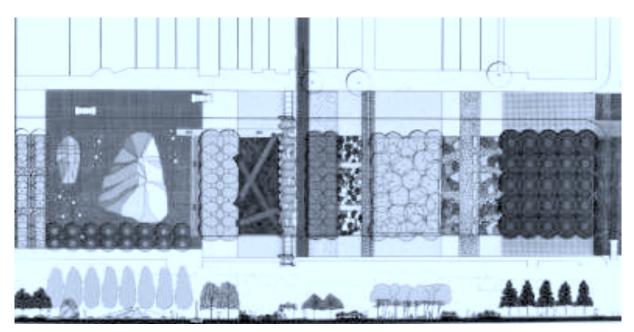
Roberto Burle-Marx in the twentieth century, Schwartz, Smith and Meyer are advocates for the recognition of landscape as art. By bringing native plants into the city and assembling them in clearly artificial groupings, a practice reminiscent of Burle-Marx, Schwartz, Smith, and Meyer were, in essence, urbanizing nature and naturalizing the city.

Schwartz, Smith, and Smith would likely bristle at the moniker "ecological designers," and no one would confuse their work for that of the Philadelphia-based and McHargiantrained Andropogon Associates. Yet their Village of Yorkville Park makes a significant contribution to ecological design by creating a rich, phenomenal experience of nature that does not require one to leave a sidewalk to appreciate its aesthetic qualities. Given the lack of walls in the park, one can pass through seventeen ecosystems within a distance of less than five hundred feet-from upland conifers to lowland marsh. While such an experience is not mistaken for encounters with ecosystems in the actual Canadian wild, much as a zoo exhibit or natural history museum installation is not mistaken for the jungle or rainforest, it may, like an experience at the zoo or museum, create an aesthetic appreciation for its subject that could lead to empathy. If one of the goals of landscape architecture is to construct spaces where humans can experience natural processes in flux, thereby engendering a greater sense of interdependence between humans and nature, perhaps there is a role for a project like this. Here, environmental experiences are anticipated not only through the abstraction and objectification of ecosystems, but also through the choreography of human movement through the ecosystems' sensory and tactile spaces.

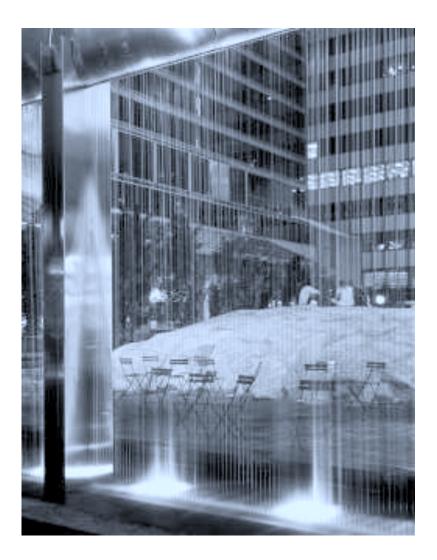
In 1995 Peter Walker and Pamela Palmer created a temporary garden installation entitled *Ground Covers*. Like *Village of Yorkville Park*, it catalogued a series of ecosystems within a garden parterre.⁷⁷ Unlike *Village of Yorkville Park*, this parterre was more conceptual than experiential and phenomenal, since its entire depth was only a few inches (the height of nursery flats). The nursery flats as parterre contained organic materials signifying the substances that cover the earth's surface. Scaled to their actual proportion on earth (for instance, 67 percent saltwater, 8.3 percent forest, 9 percent desert), the materials that created this modest project told a few stories. One, Walker's story, was how small an impact landscape architects have: only .02 percent of the earth's surface is covered with parks and gardens. Walker hoped this story would reduce the friction between environmentalists and landscape artists.

What I was *hoping* to get at—my little political thing—was that gardeners and landscape architects are not really the problem here, because we had this one little tiny representation of *all* parks, *all* designed landscape in the whole world represented by a fly on the elephant. There's just nothing. Of course I think it's sad that we've been held up by our fellows as being somehow culpable, but actually we're a very small part of this whole problem. Urban and land pollution, which is something people should be worried about, is vast compared to what we designers since the beginning of time have been able to effect.⁷⁸

⁷⁷ Jane Brown Gillette, "Under Cover," *Landscape Architecture* 86, no. 7 (July 1996): 26–31.
⁷⁸ Ibid., 29–30.



35. Site plan, Village of Yorkville Park, Toronto, Canada, by Martha Schwartz, David Meyer, Ken Smith, 1991–96 (plan: courtesy of Ken Smith)



36. Icide fountain, Village of Yorkville Park, Toronto, Canada, by Martha Schwartz, David Meyer, Ken Smith, 1991–96. The experiences of each ecosystem are compressed and, given this spatial compression, the characteristic features and phenomena that differentiated them are exaggerated and magnified. Urban infrastructural systems are relied upon to create these environmental simulations, such as "a rain current/ icide fountain" and "slotted stainless steel fog rods" that are related to Van Valkenburgh's ice fountains and Walker's fog fountains, respectively. (photo: courtesy of Ken Smith and photographer Steven Evans)

241 Post–Earth Day Conundrum: Translating Environmental Values

Walker's intended message was only one of the messages conveyed by the *Ground Cover* installation. Another message, relevant to the issues discussed here, is that environmental agendas and experiences transcend single formal languages. Even a "minimalist garden without walls" has the potential to encode stories about impact of human activity on the land. The third story underscores the differences between *Village of Yorkville Park* and *Ground Cover*. While it may be true that landscape architect—designed parks and gardens cover a miniscule portion of the earth's surface, the percentage of the human population that experiences those parks and gardens is undoubtedly larger than .02 percent. How does the experience of those parks and gardens shape the human population's knowledge of, values about, and expectations for nature in the other 99.98 percent of the earth's surface? If the goals of environmentally conscious designers include not only reinforcing the health of a region's ecosystem, but also inculcating a sense of empathy between humans and the natural world, then even .02 percent of the earth's surface can have large environmental repercussions.

Still, Village of Yorkville Park and, to a lesser extent given its short existence and installation status, Ground Cover, represent a type of work that exploits the hardened surface of a minimalist garden not simply to make the landscape visible, but to raise ecological experience to the status of art and aesthetic experience. The emphatic flatness of Village of Yorkville Park's surface makes the constructed outcrop of a seven-hundred-ton rock fragment in the center of the elongated park (Fig. 37) all the more powerful, conceptually and experientially, prompting one to ponder the contrast between uplift and foundation, the ephemeral and the enduring, the instantaneousness and the endlessness of deep time in nature.

Like many other contemporary designers who have been experimenting with ways to give form to their culture's environmental values, Schwartz, Meyer, and Smith looked to the experience of the environment as a bridge between science and art, ecology and design. To give the landscape significant presence, they relied on form, movement in space, and temporal fluctuations to create an environment that engages those who encounter it. Unlike some of their contemporaries intent on formal inventions using forms and spaces created by natural processes, *Yorkville Park*'s designers concentrated on the aspects of nature that would evoke a sense of wonder in humans—its simultaneous ephemerality and grandeur, its infinite variety, and its phenomenal moments when light, air, and matter interact to construct an aesthetic experience. One might argue that this rarefied experience has little to do with ecological design. Would John Dewey think projects like *Village of Yorkville Park* "restore continuity between the refined and intensified forms of experience that are works of art and the everyday events, doings, and sufferings that are universally recognized to constitute experience"?⁷⁹ If so, aesthetic experience as a tool for engendering environmental empathy might be considered more fully by all ecological designers.



37. Rock outcrop, Village of Yorkville Park, Toronto, Canada, by Martha Schwartz, David Meyer, Ken Smith, 1991–96 (photo: courtesy of Ken Smith and photographer Steven Evans)

Reflections and Projections of an Unfinished Project

Post–Earth Day ecological environmentalism profoundly altered American landscape architecture. The profession grew exponentially, dozens of new academic programs began, and new types of commissions became available.⁸⁰ The design process changed, as site analysis became increasingly systematized and emphasized. Tensions developed between ecological planners and artists-designers over the degree to which creativity and environmental responsibility were compatible enterprises. Over the past two decades, numerous approaches to reconciling this divide between ecology and design were crafted. The approach chronicled here expanded ecological design to include the formal, the aesthetic, and the constructed. Inspired by environmental artists and others who challenged the modern tenet that artworks are discrete, static objects separate from a detached observer, a new landscape aesthetic emerged. It was characterized by explorations to reveal and register the experience of place, and it relied on a medium and design vocabulary that referenced the materiality and phenomena of the land. These works were set in motion by the cycles and rhythms of

⁸⁰ Between 1957 and 1966, the number of ASLA members doubled and the number of landscape architecture students tripled. *Landscape Architecture* 48, no. 3 (April 1958): 169; *Landscape Architecture* 57, no. 1 (October 1966): 8. The ASLA currently estimates there are 30,000 practicing landscape architects in the United States, a tenfold increase since the mid-1950s.

human life and natural processes. Bodily experience, movement in space, fluctuating characters, and temporal considerations defined this type of landscape architectural practice.

The designer's heightened role as the perceiver of site established a reliance on personal experience as a filter for editing and interpreting existing conditions to create works of considerable aesthetic power and invention. This role also raises questions about the audience for these works and the accessibility of the designer's interpretation. If the phenomenology of landscape architecture results in built works that only reveal a designer's personal interpretation of a place or his or her private reveries, the significant role for landscape architecture as the art of creating a meaningful, lasting public realm must be called into question.⁸¹ But if, on the other hand, the phenomenology of landscape architecture taps into the concrete experience of a place by its citizens and if those experiences intermingle cyclical natural processes with the rhythms of collective social life, then this type of built work can redefine what it means to be part of the environment. The works described in this essay have done just that. Instead of an environment that is a surroundan "out there" separate from "here"-these works create an awareness that the ecological environment is here, flowing in and through human life and constructions. By constructing aesthetic experiences that foster a sense of being at home in the world, of feeling that nature's rhythms overlap with the daily routines in a community, landscape architects can aspire to achieve what Norberg-Schulz stated was the goal of design-to create places that allow one to dwell in the world.82

This chain of events—from perceiving and revealing a landscape's essential structure and character, to creating an aesthetic experience of that environment, to fostering a sense of belonging and understanding—provides a landscape architect with two important missions as an environmentalist. The more commonly accepted mission is that of reflection. The works of a landscape architect reflect existing environmental values through siting, formal gestures, and their relationship to their ecological and cultural contexts. Another mission, implied in the works reviewed here, is that of projection. Certain works of landscape architecture that give rise to collective aesthetic experiences might engender more mature ecological environmental consciousness. This is not a new idea, specific to latetwentieth-century phenomenological thought or landscape design. Lawrence Buell described a similar notion when he stated that "the dominance of aesthetic considerations does not imply ethical anesthesia. As Aldo Leopold was later to observe in his essay "The Conservation Esthetic," "[T]he cultivation of a noncomplacent bonding to nature at the aesthetic level is one of the paths to developing mature environmental concern."⁸³ By

⁸¹ See Terry Eagleton, *Literary Theory: An Introduction* (Minneapolis: University of Minnesota Press, 1983), 54–90, for a reasoned criticism of phenomenology's intention as well as its weaknesses. In particular, he addresses the antihistoricism of much phenomenological thought, in that it ignores all that is "beyond our immediate experience" or, in other words, all that is part of a larger shared cultural tradition.

⁸² "Architecture means to visualize the 'genius locii,' and the task of the architect is to create meaningful places, whereby he helps man to dwell." Norberg-Schulz, *Genius Loci*, 5.

⁸³Lawrence Buell, *The Environmental Imagination* (Cambridge, Mass.: Harvard University Press, 1995), 121.

244 Elizabeth K. Meyer

extension, giving significant form and meaning to ecological processes through the making of landscape experiences has laudable goals—to foster design practices that engender more mature understandings of humanity's interdependence with nature, that stir ethical as well as aesthetic debates, and that do not sacrifice significant landscape form in the name of environmentalism.