spent sleeping, eating, exercising, and cleaning himself. Every minute Ford spent "in self indulgence" such as gossip, however, would be debited from his compensation.

- 17. Fuller, "Motion Economics and Contact Economies."
- 18. Fuller, "Democracy Is a Principle" (1948), unpublished typescript, Fuller Papers, Stanford University, M1090, series 8, box 8, folder 2.
- 19. Fuller, "Ballistics of Civilization" (1938–39), unpublished typescript, Fuller Papers, Stanford University, M1090, series 8, box 4, folder 1. The Conning Tower design was published in *Shelter* 2, no. 5 (1932): 64–65.
 - 20. Fuller, "Democracy Is a Principle"; Fuller with Kuromiya, Critical Path, 197.
- 21. Fuller to Brigadier General Harold E. Watson, April 19, 1955, Fuller Papers, Stanford University, M1090, series 18, box 38, folder 4. In this letter, as in other documents promoting his ideas, Fuller combined such global and humanitarian appeals with arguments about the strategic value of his invention to American cold warring. See Jonathan Massey, "Buckminster Fuller's Cybernetic Pastoral: The United States Pavilion at Expo 67," *Journal of Architecture* 11, no. 4 (2006): 463–83. Regarding the Geoscopes more generally see Fuller with Kuromiya, *Critical Path*, ch. 5, "The Geoscope"; John McHale, "The Geoscope," *Architectural Design* 34 (December 1964): 632–35; and McHale, ed., *World Design Science Decade*, 1965–1975. *Phase I* (1963) *Document 4: The Ten Year Program* (Carbondale: World Resources Inventory, Southern Illinois University, 1965), appendix A; and Mark Wigley, "Planetary Homeboy," *ANY* 17 (1997): 14–23.
- 22. Fuller et al., World Resources Expo 67 Exhibit Proposal; and Fuller with Kuromiya, Critical Path, 169.
- 23. Fuller in *Domebook* 2 (1971), quoted in Krausse and Lichtenstein, *Your Private Sky*, vol. 1, *R. Buckminster Fuller: The Art of Design Science*, trans. Steven Lindberg and Julia Thorson, 428. *Domebook* was the manual for dome builders edited by Fuller disciple Lloyd Kahn. For analyses of the U.S. Pavilion see Massey, "Buckminster Fuller's Cybernetic Pastoral"; Timothy M. Rohan, "From Microcosm to Macrocosm: The Surface of Fuller and Sadao's US Pavilion at Montreal Expo 67," *Architectural Design* 73, no. 2 (2003): 50–56; and Christine Macy and Sarah Bonnemaison, *Architecture and Nature: Creating the American Landscape* (London: Routledge, 2003), esp. ch. 5, "Closing the Circle: The Geodesic Domes and a New Ecological Consciousness, 1967."
 - 24. Fuller et al., World Resources Expo 67 Exhibit Proposal.
- 25. Regarding "Earthrise" and "Whole Earth," see Neil Maher, "Shooting the Moon," *Environmental History* 9, no. 3 (2004): 526–32. On Fuller's environmental legacy see Macy and Bonnemaison, *Architecture and Nature*, ch. 5.
- 26. Regarding the Swiss Re tower see Kenneth Powell, 30 St Mary Axe: A Tower for London (London: Merrell, 2006).

ΙΟ

"Every Corner Is Alive"

Eliot Porter as an Environmentalist and Artist

Rebecca Solnit

Behind the Eyes

"As I became interested in photography in the realm of nature, I began to appreciate the complexity of the relationships that drew my attention," wrote Eliot Porter in 1987, on the occasion of a major retrospective exhibition of his work organized by the Amon Carter Museum in Fort Worth, Texas. Complexity is a good foundational word for this artist, whose work synthesized many sources and quietly broke many rules, and whose greatest influence has been felt outside the art world. Porter was one of the major environmentalists of the twentieth century, not because of his years on the board of the Sierra Club, but because of his role in raising the public awareness about the environment and shaping it in the popular imagination.

When Porter's first book, "In Wildness Is the Preservation of the World": Selections and Photographs by Eliot Porter, appeared in November 1962, it came as a revelation. Nothing like it had been seen before, and while the subject was ancient, the technology to represent it so dazzlingly was new. Porter was one of the pioneers of color photography, and his editor, Sierra Club executive director David Brower, enlisted new printing technology to attain unprecedented sharpness and color fidelity. Essayist Guy Davenport wrote that the book "cannot be categorized: it is so distinguished among books of photography, among anthologies, among art books, that its transcendence is superlative." A later reviewer recalled, "A kind of revolution was underway, for with the publication of this supremely well-crafted book, conservation ceased to be a boring chapter on agriculture in fifth grade textbooks, or the province of such as bird watchers." Despite its twenty-five-dollar cover price, it became a best seller in the San Francisco Bay Area and did well across the country.

When a less expensive version was published in 1967, it became the best-selling trade paperback of the year. Porter's 1963 book, *The Place No One Knew: Glen Canyon on the Colorado*, a counterpoint to his first, was similarly well received. Precisely because his photographs were so successful, it is impossible now to see what they looked like when they first appeared.²

There are two kinds of artistic success. One makes an artist's work distinctly recognizable to a large public in his or her time and afterward—Picasso might be a case in point. The greater success is paradoxical: this work is so compelling that it eventually becomes *how* we see and imagine, rather than *what* we look at. Invisible most of the time, such art may look obvious or even hackneyed when we catch sight of it. Such success generates imitations not only by other artists but throughout the culture. The ubiquitous Porter imitations in advertisements, calendars, and posters are testimony to his success and fundamental effect on our perception.

Color demanded a new approach to composition and called attention to different aspects of nature than did black-and-white photography. Porter's aesthetic, born out of an individual talent, grew into a genre—"nature photography"—in which thousands of professionals and amateurs now toil. His photographs have come to embody what many people look for and value in the outdoors. That Porter's pictures look "natural" today testifies to their great cultural success. We now live in a world he helped to invent. Because his pictures exist behind our eyes, it is sometimes hard to see the Porters in front of our eyes for what they were and are. Understanding his photographs means understanding the world in which they first appeared and the aesthetic and environmental impact they have had since.

Silence and Wildness

David Brower chose to publish "In Wildness" in the centennial year of Henry David Thoreau's death, a historical move that prompted Porter to pair his photographs with passages from the nineteenth-century writer. But 1962 made plenty of history of its own. In September of that year, Rachel Carson's Silent Spring was published, and this indictment of the pesticide industry quickly became a controversial best seller. In October, President Kennedy announced that the Soviet Union had deployed nuclear missiles in Cuba and that the United States would attack unless they were removed: the world came closer to an all-out nuclear war than at any time before or since. "The very existence of mankind is in the balance," declared the secretary-general

of the United Nations. The revelations of the atomic bomb and the concentration camps at the end of World War II had begun to erode faith in leaders, scientists, and the rhetoric of progress, and that faith continued to crumble as the 1950s wore on. *Silent Spring* and the Cuban Missile Crisis were crescendos of events that had been long building, and "In Wildness Is the Preservation of the World" may have succeeded in part as a response to these circumstances.³

In the late 1950s and early 1960s, fear of a possible nuclear war was coupled with fear of what preparing for one entailed. The 1959 discovery that in many parts of the country milk, both bovine and human, was contaminated by atomic-testing fallout prompted a national outcry. The appearance of man-made carcinogens in what was perceived to be the most natural and nurturing substance in the world meant that nature was no longer invulnerable to science and politics; the government generated biological contamination in the name of national security. Pesticide-spray campaigns in the nation's forests already had provoked uproar by the late 1950s (Porter was among those decrying the abuse of pesticides in letters to his local newspaper), but now even the intimate realm of human biological reproduction was threatened. As Carson wrote of pesticides, "Their presence casts a shadow that is no less ominous because it is formless and obscure, no less frightening because it is simply impossible to predict the effects of lifetime exposure." The world faced a new kind of fear-of nature itself altered, of mutations, extinctions, contaminations without precedent. Porter declared in 1961, "Conservation has rather suddenly become a major issue in the country—that is, more people in higher and more influential places are aware of its importance and willing to do something about it."4

Pesticides and radiation were only part of the strange cocktail that fueled what gets called "the sixties." In November 1961, Women Strike for Peace, the most effective of the early antinuclear groups, launched a nationwide protest that in many ways prefigured the feminist revolution. In 1962 the civil rights movement was at its height, the United Farm Workers was founded, and Students for a Democratic Society held its first national convention. The voiceless were acquiring voices and using them to question the legitimacy of those in power and the worldview they promulgated. Some were speaking up for nature and wilderness with an urgency never heard before. During the late 1950s and early 1960s, the epochal Wilderness Act of 1964 was being debated alongside pesticide and radiation issues; the remotest reaches of the environment were at stake. In this context, the small American conserva-

tion movement became a broad-based environmental movement, with Porter playing a central role.

What "In Wildness" depicts as a beatific vision, Silent Spring tells as a nightmare: our chemical sins will follow us down the decades and the waterways. Carson's book addressed a very specific history, that of the development of new toxins during World War II, their later application to civilian uses, and their effects on birds, roadside foliage, the human body, and the vast ecosystems within which these entities exist. "The world of systemic insecticides is a weird world," she wrote, "where the enchanted forest of the fairy tales has become the poisonous forest in which an insect that chews a leaf or sucks the sap of a plant is doomed."⁵

Porter's book showed the forest still enchanted, outside of historical time and within the cyclical time of the seasons (fig. 41). His photographs, which had appeared earlier in an exhibition titled The Seasons, followed a sequence depicting spring, summer, fall, and winter. Only one image—of a mud swallow's nest built against raw planks—showed traces of human presence, rendered as slight and benign. Whereas politics tends to be about what we fear, environmentalism concerns things worth protecting; "In Wildness" spoke directly of the latter. Nevertheless, despite its lyrical celebration of the non-human world, Porter's first book was widely recognized as a political book.

In a review of the 1967 edition, Sports Illustrated proclaimed: "Hundreds of books and articles have been written urging private citizens to do something ('Write your Congressman, now!') about the destruction of the nation's natural beauties, but the most persuasive volume of all contained not a word of impassioned argument, not a single polemic." In fact, it did contain a few words of impassioned argument. At the end of his introduction to "In Wildness," Joseph Wood Krutch stated: "If those who believe in progress and define it as they do continue to have their way, it will soon be impossible either to test his [Thoreau's] theory that Nature is the only proper context of human life or that in such a context we may ultimately learn the 'higher laws.' One important function of a book like this will have been performed if it persuades those who open it that some remnant of the beauties it calls to our attention is worth preserving."6 Out of these two delicate sentences tumbles an avalanche of assertions: that progress, as conventionally imagined, was devastating the natural world, perhaps irreversibly; that nature is a necessary but imperiled moral authority; that Porter portrays not only nature but its moral authority; that the purpose of Porter's book may be to help rally citizens to



41. Eliot Porter, *Skunk Cabbage, Near Peekskill, New York, April 12,* 1957. 1957. Dye transfer photograph. © 1990 Amon Carter Museum, Fort Worth, Texas, Bequest of the artist.

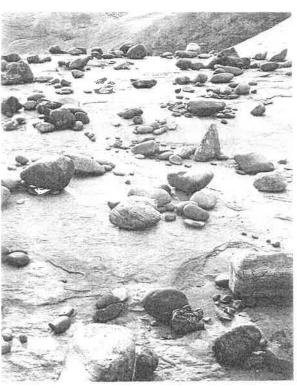
preserve this nature; that photographs of blackberries, birds, and streams can be politically and philosophically persuasive because a love of nature can be inculcated through beauty; and that such love can lead to political action on its behalf. Modernity had placed its faith in science, culture, and progress; the Rousseauian antimodernism that would be central to both the counterculture and the environmental movement put its faith in nature, usually nature as the embodiment of an ideal of the way things were before various interventions—before human contact, before the Industrial Revolution, before the arrival of the Europeans, before chemical contamination. Krutch, who had had a distinguished career as a literary critic before he left the East Coast intelligentsia for Arizona and nature writing, embodies this shift. A

major ally of Porter's, he supplied Americans with a visual definition of the nature worth preserving. Of course, this definition was made possible by a technologically advanced and aesthetically sophisticated art.⁷

In his next book, The Place No One Knew: Glen Canyon on the Colorado, Porter depicted a place that had been at least as pristine as anything shown in "In Wildness" but which, by the time of publication, was irrevocably lost: the labyrinthine canyon lands drowned by Glen Canyon Dam. The book was an argument for preventing further dams in the Colorado River canyons, a struggle that continues today despite the loss of Glen Canyon. Porter portrayed the site as a gallery of stone walls in reds, browns, and grays with gravel-and-mud floors through which water flowed, occasionally interspersed with images of foliage and, much more rarely, the sky (fig. 42). Some found the book claustrophobic and longed for more conventional distant views. Compared to "In Wildness," the new book was challenging in several respects: formally, in its compositions; politically, in the directness of its advocacy; and conceptually, in its depiction of an imminent catastrophe that would have been unimaginable only a century before. Beautiful landscape images traditionally functioned as invitations of a sort, but Porter's photographs surveyed a place no longer available; they were portraits of the condemned before the execution. The beauty of the images was inflected by information from outside the frame; all this was being drowned. As environmental writer and photographer Stephen Trimble wrote, "The message was clear: go out into the land, stand up for it, fight its destruction—you lose forever when you fail to know the land well enough to speak for it."8

Flow and Convergence

Among the factors feeding Porter's vision were a socially conscious family whose influence contributed to his lifelong support of human rights and environmental causes; a boyhood passion for the natural world; an involvement with photography from late childhood onward; a medical and scientific education that gave him the skills to develop color-photography technology; the inherited funds to stand apart from fashions and pressures; and a sense of himself as an artist dating from Alfred Stieglitz's recognition of his work at the end of the 1930s. His training as a doctor and biomedical researcher refined his understanding of biology, chemistry, and laboratory work, which would stand him in good stead as a nature photographer, environmentalist, and innovator of color-photography processes. "I did not consider those years



42. Eliot Porter, Near Balanced Rock Canyon, Glen Canyon, Utah, September 6, 1962. 1962. Dye transfer photograph. © 1990 Amon Carter Museum, Fort Worth, Texas, Bequest of the artist.

wasted," he once said. "Without those experiences it would be impossible to predict what course my life would have taken, least of all that it would be in photography. In retrospect, from my experience it appears highly desirable to order one's life in accord with inner yearnings no matter how impractical."

As a child, "all living things were a source of delight to me," Porter wrote.

I still remember clearly some of the small things—objects of nature—I found outdoors. Tiny potato-like tubers that I dug out of the ground in the woods behind the house where I lived, orange and black spiders sitting on silken ladders in their webs, sticky hickory buds in the spring, and yellow filamentous witch hazel flowers blooming improbably in

November are a few that I recall. I did not think of them as beautiful, I am sure, or as wondrous phenomena of nature, although this second reaction would come closest to the effect they produced on me. As children do, I took it all for granted, but I believe it is not an exaggeration to say, judging from the feeling of satisfaction they gave me when I rediscovered them each year, that I loved them.¹⁰

The items he names in this brief account—insects, buds, branches—are easily imaginable as subjects of his camera, and many of his photographs can be seen as childhood epiphanies of the minutiae of nature.

During his career as a photographer, Porter discovered that "color was essential to my pursuit of beauty in nature. I believe that when photographers reject the significance of color, they are denying one of our most precious biological attributes—color vision—that we share with relatively few other animal species." This statement moves from aesthetics to science as though it were the most natural transition in the world, and for Porter it evidently was, though few others could or would deploy biology in explaining their art. This mix made him something of a maverick and a misfit in photography circles—even the landscapists did not ground their work in science as he did. As a photographer, he engaged with evidence of natural processes, biodiversity, the meeting of multiple systems, with growth, decay and entropy.

In 1924, while hopping freight trains in the West, Porter joined the International Workers of the World, better known as the Wobblies—an expression of solidarity with radicals not common among Harvard students from wealthy families. His tax records portray him as a staunch supporter of human rights and progressive causes. The American Civil Liberties Union was the one organization to which he donated year after year throughout his life. In the 1930s he gave small sums to support the Republican side of the Spanish Civil War as well as the National Committee for the Defense of Political Prisoners. By 1946, the National Association for the Advancement of Colored People was on his list. In 1948 he began giving to the Emergency Conservation Committee—a small, radical environmental organization.

Documents in Porter's archives show he was concerned about pesticides long before *Silent Spring* appeared, along with logging, grazing on public lands, and other subjects that environmental activists have since taken up. He often wrote letters to newspapers and politicians. In 1959, for example, he wrote the *Santa Fe New Mexican*, his local newspaper, to call attention to the centennial of abolitionist John Brown's execution. After quoting Thoreau

on Brown, he wrote, "Not only are the bonds of the slaves he gave his life to free still not struck off, but we have since forged new bonds for ourselves. Is not this a fitting anniversary for us to rededicate ourselves to the cause of freedom, freedom from bigotry, freedom from prejudice, freedom from discrimination and freedom to stand up and be heard?" Later, he would write politicians and newspapers repeatedly about the war in Vietnam and the Watergate crisis, both of which outraged him; he also took an interest in Native American issues long before most of the non-Native public was aware there were any. Though his principles involved him with many issues, his passion and his talent were dedicated to environmental causes, particularly the protection of wildlife and wilderness.

Early in his photographic career, Porter made modernist photographs in the tradition of Paul Strand and Stieglitz, but he also pursued ornithological photography. The latter genre tapped a tradition that went back to the nineteenth-century paintings by John James Audubon, whom Porter cited in two successful applications to the Guggenheim Foundation for funding to support such photography. Though he wanted to document birds for scientific-environmental purposes, he was committed to doing so aesthetically (as were, of course, Audubon and many others in that tradition). With Stieglitz's encouragement, Porter quit his day job as a biomedical researcher to devote himself full-time to photography. In 1939 he showed his bird photographs to Rachel Carson's editor, Paul Brooks, then the editor-in-chief of Houghton Mifflin. Brooks shared Porter's enthusiasm for the environment but not for the bird photographs. He told the artist that they would be far more valuable if they were in color. This prodding led Porter to become a pioneer of color photography. Eleven years later he approached Brooks again, only to be told that his jewel-like bird images would be too expensive to publish in color and would have a limited audience anyway. Fortunately, Porter found supporters elsewhere, including David McAlpin of the Museum of Modern Art, Ansel and Virginia Adams, and Beaumont and Nancy Newhall. Even so, he toiled with little public recognition for more than twenty years.

By the time "In Wildness" appeared in 1962, Porter had met David Brower and had begun to use photography and aesthetics as political tools on behalf of the Sierra Club. The book merged a childlike sense of wonder, modernist artistic sensibility, innovative color photographic technology, scientific acumen, and political awareness—a convergence that would last and evolve through the subsequent books and years. "Photography is a strong tool, a propaganda device," he wrote, "and a weapon for the defense of the environ-

ment . . . and therefore for the fostering of a healthy human race and even very likely for its survival." 13

Dr. Porter and Mr. Brower

In David Brower and the Sierra Club, Porter met a man and an organization that had long put the aesthetic to political use in a way no other environmental group had. In 1938, well before Brower had become the club's executive director, photographer Ansel Adams had published Sierra Nevada: The John Muir Trail and sent it to Secretary of the Interior Harold Ickes to lobbysuccessfully-for the creation of King's Canyon National Park and expansion of Sequoia National Park. A Californian who spent much time in the Sierra Nevada and a board member of the club from 1934 to 1971, Adams was far more deeply tied to the club than the easterner Porter would ever be, and it was another of his books that opened the door for Porter. Brower had published the club's first exhibit-format book, This Is the American Earth, in 1960; its black-and-white photographs were mostly by Adams, and its Whitmanesque text was by Nancy Newhall. More rhapsody than documentary survey, it was a respectable financial success. Edgar Wayburn, who served his first term as the club's president from 1961 to 1964, recalled that This Is the American Earth "changed Dave's whole way of looking at the conservation movement. He saw what a book could do." As an exhibit-format book, it introduced many Americans to their public lands through fine art photography. Whereas a few subsequent books in the series lobbied for the protection of specific threatened places, most—including This Is the American Earth and "In Wildness"—were more general in their political aims. H

Brower himself came out of publishing and publicity, and he naturally gravitated toward books—and later, newspaper ads and films—as a means of educating the public and advocating on issues. A brilliant mountain climber and mercurial personality, he, more than anyone else, changed the club from its postwar role as a small, regional outdoor society that did a little lobbying to the preeminent environmental organization of the 1960s. His book projects sometimes made money for the Sierra Club; more reliably, they brought in members and raised awareness. The club had 7,000 members in 1952, 16,500 in 1961, 24,000 by 1964, and 55,000 by 1967. (In mid-2000, membership stood at 636,302.) By the mid-1960s, however, the publications program had begun to lose money—from 1964 onward, an average of \$60,000 a year, according to historian Stephen Fox. Brower and the club published various

other books by Porter, including the lavishly illustrated *Galápagos: The Flow of Wildness* (1968). The latter's high production costs helped fuel a controversy swirling around Brower in the late 1960s, by which time Porter was a member of the board of directors.¹⁵

Porter had been elected in 1965 and served two terms during the great years of transition in the Sierra Club. In the 1950s the club had been fairly active in organizing outings and expeditions, less so in fighting environmental battles, and little involved in such battles outside California, but by the 1960s the club was beginning to oppose many kinds of pesticide and herbicide use, and by the 1970s, nuclear power and other major technologies were called into question; it had moved from preserving isolated places to protecting pervasive systems. As an outsider in the club, Porter brought with him an independence from its traditional ties and limitations. The club's directors were then mostly Californians, longtime members of the organization, and, more often than not, participants in its outings. Several had been great mountaineers in the days when the Sierra Club was a major force in American mountaineering, and many had ties within more powerful institutions in California—there were engineers, chemists, physicists, and executives involved with enterprises the club would later target. "The idea of playing hardball with big corporations-Standard Oil or PG&E | Pacific Gas and Electric| and what have you—was a jarring thing to them," recalled board member Phil Berry. 16

With Diablo Canyon Nuclear Power Plant, the drama of Dinosaur and Glen Canyon essentially replayed itself. The builder was PG&E, the same company that benefits from hydropower from Hetch-Hetchy Dam inside Yosemite National Park, the early-twentieth-century dam John Muir strove so hard to prevent and that first made the club into a forceful political organization. In 1963, members of the club discovered that PG&E was planning to build a plant at Nipomo Dunes on the central California coast, a site that had often been recommended for park status. After the club's executive committee voted to try to preserve the dunes, board president Will Siri privately negotiated to have the plant moved to Diablo Canyon. Once again, too late, Sierra Club activists discovered that Diablo Canyon was too important to trade off. Many board members, including Ansel Adams, argued that if the club had agreed to support the Diablo site, then they had an obligation to stick by the agreement. Porter thought differently. As Berry puts it, the uncompromising stand advocated by board member Martin Litton "was most eloquently stated, really, by Eliot Porter. Eliot said at that infamous September '68 board meeting that the Sierra Club should never be a party to a convention that lessens wilderness. That's the truth. We shouldn't be. I think we gained strength from the mess of Diablo."¹⁷

At least since the battle over Hetch-Hetchy early in the twentieth century, the Sierra Club had had a lot of internal dissent about tactics and mission, but the battles of the 1960s were far more heated than their predecessors. Like the controversy over Diablo Canyon, the controversy over the publications program threatened to tear the club apart in the late 1960s. Porter was later accused by conservative board member Alex Hildebrand of conflict of interest for voting to support the lavish publications program, a charge Porter vehemently denied. Brower, Porter, and some of the others on the board saw the publications as having far-reaching, if indirect, effects in promoting environmental awareness and raising the club's profile. Others considered the program—particularly the picture books—a drain of time and money and felt that publications should be far more closely tied to specific campaigns and endangered American places. Adams—who had mixed feelings about color photography anyway—was opposed to the lavishness and political indirectness of the publications program and to Brower's direction in those years. Porter's Galápagos book, which he had been thinking about since the early 1960s, joined Diablo as one of the conflicts that came to a head in 1968. "There was a great deal of opposition to the proposal within the board of directors," recalled Porter of the Galápagos project, "on the grounds that the islands were outside the continental United States, which, it was felt, put them outside the legitimate conservation concerns of the club; so the idea was rejected." Newly reelected president Edgar Wayburn argued that "other projects have higher conservation priority; for example a Mount McKinley book could make or break a great national park." Porter shared Brower's sense that the club and the American conservation movement should expand to begin working globally, and he was passionate about the threats to the islands' unique species and ecosystem. 18

Brower was voted off the club's board in 1969. He subsequently founded Friends of the Earth and continued working to protect wilderness, nationally and globally. Porter served out his second term but, to his combined relief and chagrin, was not nominated to a third. He continued to support the club's objectives and served on the New Mexico Nature Conservancy board and on the Chairman's Council of the Natural Resources Defense Council, gave images as donations and for reproduction to environmental organizations (and Planned Parenthood), and continued to donate money to a wide

variety of causes. His books continued to be published, primarily by E. P. Dutton, which, in 1972, finally put out the bird book that had prompted Eliot to take up color photography more than thirty years earlier.¹⁹

Porter himself roamed farther afield, completing books on Antarctica, Iceland, Egypt, Greece, Africa, and China as well as continuing to photograph North American places and phenomena. Many of the images made abroad incorporated evidence of human culture and portrayed human beings, as the American work generally did not. The books on Africa and Antarctica were particularly concerned with environmental issues, though questions of extinction and habitat were present in most. From a modest initial definition of nature as birds and details of the New England landscape, Porter's photography grew into a global picture of natural systems and human participation—often benign—in those systems. His work evolved as the environmental movement did, from protecting particular species and places to rethinking the human place in the world, a world reimagined as an entity of interconnected systems rather than one of discrete objects.²⁰

An Ecological Aesthetic

Perhaps the central question about Porter's work concerns the relationships among science, aesthetics, and environmental politics—about what an environmental aesthetic might be and to what extent Porter succeeded in creating one. His brother Fairfield Porter, a painter and critic, wrote in a 1960 review of the color photographs, "There is no subject and background, every corner is alive," suggesting what an ecological aesthetic might look like. The description prefigures Barry Commoner's 1971 declaration of the first principle of ecology, "Everything is connected to everything else," which ecofeminist Carolyn Merchant revised in 1981 to "All parts of a system have equal value." Porter's most distinctive compositions are the close-ups in which the frame is filled with life and with stuff. Rather than portraits that isolate a single phenomenon, they are samples from the web of interrelated phenomena.²¹

This close-up scale emphasizes the ordinary over the extraordinary, as indicated by a plate in *The Place No One Knew* titled *Near Balanced Rock Canyon* (see fig. 42). Balanced Rock is a landmark, an outstanding and unusual feature of the landscape visible from a distance, but Porter's medium close-up shows large, river-rounded stones on a rock surface—a quotidian scene near the unseen, exceptional one. Of course, Porter meant the picture to be viewed in the context of other, more spectacular images of Glen Canyon. The re-

sulting serial approach affected the expectations for each photograph: not all needed to be prima ballerinas straining for the spectacular, for together they formed a corps de ballet. But *Near Balanced Rock Canyon* also suggests that ordinary rocks are important enough—that we can love a place for its blackberries or its stream ripples, not just for its peaks, waterfalls, or charismatic macrofauna. All parts have equal value. Such images demonstrate why Porter was willing to fight for Diablo Canyon, a beautiful, pristine, but unexceptional landscape.

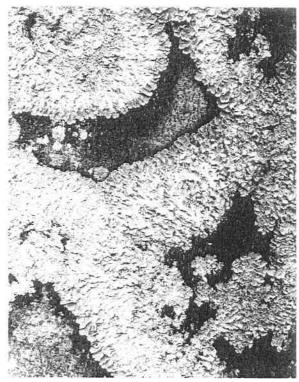
"Every corner is alive" suggests another important aspect of Porter's characteristic close-ups. Landscape photography generally depicts open space, usually defined by a horizon line, with the camera looking forward, much as a standing or striding human being might. It depicts, most often, an anthropomorphic space—anthropomorphic because its central subject is space, space that can be entered, at least in imagination. Moreover, it often shows things at such a distance that the entities themselves—the grass or trees or rocks—cannot be subjects, only compositional elements. The implication of many classic landscape photographs (and the paintings from which they derive) is that such space is essentially empty, waiting to be inhabited. This approach follows the evolution of landscape painting itself out of anthropocentric painting: the human protagonists got smaller, and the landscape behind the drama grew more complex, until eventually the actors left the stage. But the landscape was still composed as scenery, a backdrop, a description of habitable space.

Porter, by contrast, often photographed flat surfaces up close—the surface of the earth, a stone, or a tree trunk—and subtle tonal ranges. He looked directly at his subject rather than across or through it to space. There is very little empty space in his images, and thus little or no room in which to place oneself imaginatively. The scale is not theatrical, or at least not anthropocentrically so. He once remarked, "Don't include the sky in the picture unless the sky has something to say," which seems to propose that the sky constitutes a subject in its own right, not simply a provider of orienting horizon lines and habitable space above the surface of the earth.²² His extensive series of cloud photographs bear out this notion, for the clouds should be seen as autonomous scientific and aesthetic phenomena rather than as part of a land-scape scene. In fact, Porter produced very few "scenes." When not capturing a close-up, his camera tilted down or up to show things on their own terms, rather than as background to habitable space. Whereas landscape photography generally has an empty center, Porter's work fills that center, whether

with leaves, stones, creatures, or clouds. This is not landscape photography, but nature photography—a new genre Porter founded. If it has an ancestor, that ancestor is still-life painting and photography, though before Adams and Porter still-life subject matter was nearly always limited to domestic items indoors that could be set up for the studio easel or camera—fruit, flowers, household objects, instruments, food—not wild stuff in its own place.

When Fairfield Porter wrote that "there is no foreground and background," he was probably less interested in ecological issues than in compositional ones. Fairfield was a painter, as was Eliot Porter's wife, Aline, whose close friend Betty Parsons was an important Manhattan gallery owner and doyenne of the New York school of painting. In the absence of a color photographic tradition, Porter likely drew some inspiration from contemporary abstract expressionist painting, which Parsons championed. Some of Porter's flat-to-the-picture-plane images bring to mind such painting and even may have been influenced by it (fig. 43). Abstract expressionism famously emphasized the formal process of painting itself, or what in Jackson Pollock's work was sometimes called "all-overness." Porter's photographs exhibit a similar compositional approach as well as a passion for process in ecological, rather than purely aesthetic, terms. Porter appreciated lichen a great deal, for example, not only because it had wonderful color range and texture but because it embodied a process of unique symbiosis between fungus and mold, making its home on the seemingly inhospitable faces of rocks. Painter Valerie Cohen has suggested to me that Porter's closest ties are to painters of the early twentieth century: "Porter's close-ups, and especially his flattening of space, follow developments in European and American painting (Milton Avery, Pierre Bonnard, Arthur Dove, Henri Matisse)."23 Elsewhere, Porter's compositions show the strong influence of the great modernist photographers, though he adapted what he learned from them to his own medium, color photography, and transformed their lessons through a very different kind of involvement with his subject. Porter rejected much of high modernism's philosophy in the way he tied his work to science, politics, and literature, but he never quarreled with its strategies or aesthetics.

Though childlike wonder had a role in Porter's work, dispassionate scientific observation was important, too. The clarity and convincing color of many of his images convey a coolly objective view—perhaps not objective in the true sense, but with objectivity as an aesthetic and an ideal. Porter's personality—reserved, attentive, principled—comes across more in this withholding of drama and the personal than in any other aspect of his work



43. Eliot Porter, *Lichens on Beech at Hemlock Hill, Blue Mountain Lake, Adironduck Mountains, New York, May 17, 1964.* 1964. Dye transfer photograph. © 1990 Amon Carter Museum, Fort Worth, Texas, Bequest of the artist.

save, perhaps, his choice of subjects and his deployment of those subjects for political purposes.

Wilderness and Strategy

The golden age of the Sierra Club publication program can be seen to parallel the golden age of American landscape painting in the second half of the nineteenth century, when the American West was celebrated in paintings by Albert Bierstadt, Frederic Church, and Thomas Moran and in photographs by Carleton Watkins, Eadweard Muybridge, William Henry Jackson, and others. In that time it was the West that was terra incognita to the majority;

in the 1960s it was the remaining remote places, east and west. Both were eras in which the American public discovered their terrain through artistic representation, and in both cases American landscape was seen as the stage onto which no actors had yet entered, virgin wilderness before the first taint of civilization. As Thomas Cole had written, "the most distinctive and perhaps the most impressive characteristic of American scenery is its wildness. It is the most distinctive, because in civilized Europe, the primitive features of scenery have long since been destroyed or modified."²⁴

For Cole, the American landscape was a stage on which the principal acts had yet to take place, and this idea of wilderness as a place as yet affected by nothing but natural forces has been powerful ever since. Wilderness, as Wallace Stegner wrote of it in 1960 in the letter that coined the term "the geography of hope," meant a place apart from civilization, a place where humans had not yet and should not arrive onstage.25 Since that era, much has been written to revise this idea, most significantly by acknowledging that Native Americans spent millennia in places Euro-Americans dubbed "virginal" and that the supposed pristine quality of those places had been much affected by the Native presence—and sometimes damaged by their absence. Out of the imagination of wilderness and the ignorance of indigenous presences came a false dichotomy: a wholly nonhuman nature and a wholly unnatural humanity. The latter was seen as a threat, meaning the former had to be protected as a place apart. Historian William Cronon writes, "The critique of modernity that is one of environmentalism's most important contributions to the moral and political discourse of our time more often than not appeals, explicitly or implicitly, to wilderness as the standard against which to measure the failings of our human world. Wilderness is the natural, unfallen antithesis of an unnatural civilization that has lost its soul."26 Now that the critique of modernity is accomplished, we have entered upon the critique of wilderness-not of places themselves, but of the way they are imagined, described, and administered.

One of the ironies of Porter's career is that although he did much to give "the wilderness idea" a face, that face exists not so much in the images he made as in the way people perceive them. "In Wildness" was seen—and successfully deployed—as a defense of wilderness. In their thank-you notes for the book, most of the congressmen and senators to whom Brower had sent it called it "In Wilderness." In fact, most of the phenomena it portrays might readily be seen on the fringes of civilization—by a small-town New England schoolchild taking a detour through the woods on the way home, for ex-

ample, or by Thoreau on the outskirts of long-settled Concord. The creatures are small—caterpillars, moths, songbirds; the bodies of water are brooks, not rivers; the trees are maples, not bristlecones. The photographs could equally have been used to justify development, in that the flora and fauna they show could and do survive on the fringes of developed areas.

There are no human traces in The Place No One Knew, though the region abounds in petroglyphs and ruins and is partially within the huge Navajo reservation. Rainbow Ridge, which the Sierra Club defended as a great natural phenomenon whose setting would be damaged by Glen Canyon, has more recently been fought for as a sacred site by five Native tribes in the area. But the book seems to postulate Glen Canyon (see fig. 42) as an untouched place and the dam as the first, devastating human trace that would be left on it. Now, wilderness can be seen as a useful fiction, a fiction constructed by John Muir and his heirs and deployed to keep places from being destroyed by resource extraction and wholesale development. In more recent years, it has become equally valuable to understand the things that human presences can do other than destroy, the way wild places can be a homeland rather than an exotic other.

The work of Ansel Adams and Eliot Porter generates instructive comparisons on many grounds: the two were nearly the same age, crossed paths both as artists and as activists, and became perhaps the most famous American photographers of the second half of the twentieth century (though Adams's reputation has not faded as Porter's has). The differences are obvious: Adams was a successful, confident artist in an established medium while Porter was still experimenting in relative isolation; Adams was ensconced in both artistic and environmental communities as Porter was not; Adams's work, with its taste for grandeur and spectacle, has ties to the great western landscape photography of the nineteenth century, while Porter was exploring the new medium of dye transfer color photography as both a technical medium and a compositional challenge, echoing new developments in painting. Like Porter, Adams has suffered from becoming famous for a portion of his work now thought of as the whole: as the former is to pristine close-ups, so the latter is to majestic views, though both made many close-up photographs of flora and other natural details.

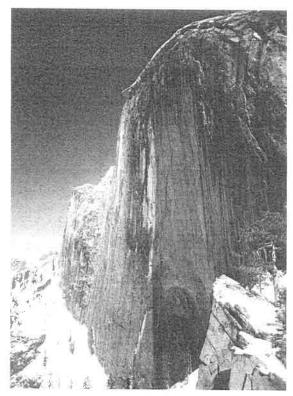
Whereas Adams produced the majority of his pictures in the classic landscape-photographic tradition, emphasizing deep space, strong contrast, dramatic light, and crisp delineation (the near-sculptural qualities that black-and-white was suited to portray), Porter often flattened out a subject and

sought a painterly subtlety of color range. Adams's pictures often depend on the drama of a revelatory light that appears almost divine, while Porter preferred cloudy days to make images that speak of slow, careful attention. Adams usually photographed prominent geological features, such as the balancing rock of Balanced Rock Canyon, but Porter tended to ignore such natural monuments. Adams focused on major landmarks—Half Dome (fig. 44) or the Grand Tetons—but Porter dealt with smaller, representative specimens, such as the sandstone of the Southwest, the warblers of the Midwest, the maple leaves of New England.

Another way to describe the difference between Adams and Porter would be to distinguish conservationist from environmentalist. As a conservationist, Adams prized the most spectacular and unique aspects of a place; as an environmentalist, Porter valued the quotidian aspects of even the most exotic places he went. With Adams's monumental scenes, viewers at least felt they were remote from civilization (though cropping out the people and infrastructure in Yosemite Valley must have been a challenge at times); with Porter they could be a few feet from it—his close-ups might speak of an intact natural order, but not necessarily of an inviolate wilderness space. It could be said that whereas Porter photographed cyclical time, Adams strived for an almost biblical sense of revelatory time-suspension. Porter once argued that photography "almost always unintentionally softens rather than exaggerates the unpleasant aspects of the conditions it attempts to dramatize most forcefully. The same is true when photography is used to show the devastations produced by man's works."27 Such an assertion helps explain Porter's strategy of showing what can be saved and what remains intact rather than what has been ravaged, of photographing nature as existing in cyclical time rather than in history (though looming catastrophe had been the unseen subject of The Place No One Knew).

Legacy

Today's respected landscape photographers are producing very different work, and few of them have the role within environmental organizations or the broad popular success Porter enjoyed. The terrain has changed. Almost two decades after "In Wildness Is the Preservation of the World," landscape photographer Robert Adams wrote: "More people currently know the appearance of Yosemite Valley and the Grand Canyon from having looked at



44. Ansel Adams, Monolith: The Face of Half Dome, Yosemite National Park, California, 1927. Gelatin silver print. © The Ansel Adams Publishing Rights Trust, Collection Center for Creative Photography, University of Arizona, Tucson.

photographic books than from having been to the places themselves; conservation publishing has defined for most of us the outstanding features of the American wilderness. Unfortunately, by perhaps an inevitable extension, the same spectacular pictures have also been widely accepted as a definition of nature, and the implication has been circulated that what is not wild is not natural." He argues here that the same images mean different things at different points in history. By this time, the popular imagination had reached a point where such imagery had achieved what success it could; a new generation of photographers ought instead to "teach us to love even vacant lots out of the same sense of wholeness that has inspired the wilderness photographers of the past twenty-five years." 28

Of course it can be argued that Porter photographed backyards, if not vacant lots, along with people, ruins, and signs of rural life from Maine to Mexico, but Adams has a point. Whatever images Porter made, the ones that proved most memorable and influential were of a pristine nature, a place apart. Though his pictures may have been primarily of the timeless seasonal world of natural phenomena, they were subject to the passage of historical time, and their influence, even their appearance, has changed over the decades. Later in his career, Porter came to believe that his photographs were as likely to send hordes of tourists to an area as to send hordes of letters to Congress in defense of that area, countering Adams's argument that the books could substitute for visits to wilderness. Far more Americans had become familiar with the remote parts of the country, and recreational overuse as well as resource extraction and development threatened to disturb the pristine places. It may be precisely because of Porter's spectacular success in promoting American awareness and appreciation for remote and pristine places that a different message may now be called for.

This invisible success is counterbalanced by a very visible one: thousands of professionals and countless amateurs now produce color nature photography more or less in the genre first delineated by Porter. Their work is not quite like his. For the most part, Porter seemed to value truth more and beauty—at least showy, bright beauty—less. He was concerned more with representing processes, systems, and connections than are many of his followers. He often made photographs of reduced tonal range, and some of his images of bare trees in snow are not immediately recognizable as being in color. "Much is missed if we have eyes only for the bright colors," he wrote.²⁹ The contemporary nature photography seen in calendars and advertisements tends to pump up the colors and portray a nature far more flawless and untouched than anything Porter found decades earlier (though the best defense for such images is that some of them continue to raise money for environmental causes). Their work tends to crop out anything flawed and to isolate a perfect bloom, a perfect bird, a perfect icicle, in compositions usually simpler than Porter's. Looking at these images, one has the sense that the genre Porter founded has become narrower rather than broader. A kind of inflationary process has raised the level of purity, of brightness, of showiness each image must have. Some of this may be about the continued evolution of technologies; with improvements in film and cameras and innovations like Photoshop, a greater degree of technical perfection is possible now than was in Porter's time. And images that were relatively original in his work have now become staples, even clichés.

Notes

- 1. Eliot Porter, Eliot Porter (Boston: New York Graphic Society, 1987), 83.
- 2. Eliot Porter, "In Wildness Is the Preservation of the World": From Henry David Thoreau. Selections and Photographs by Eliot Porter (San Francisco: Sierra Club, 1962); Eliot Porter, The Place No One Knew: Glen Canyon on the Colorado (San Francisco: Sierra Club, 1963); Guy Davenport, National Review, December 18, 1962, Eliot Porter Archives, Amon Carter Museum, Fort Worth, Texas; Stephen Fox, John Muir and His Legacy: The American Conservation Movement (Boston: Little, Brown, 1981), 317, quoting Smithsonian magazine, October 1974.
- 3. Spencer R. Weart, *Nuclear Fear* (Cambridge, Mass.: Harvard University Press, 1988), 258; Rachel Carson, *Silent Spring* (New York: Houghton Mifflin, 1962).
- 4. Carson, Silent Spring, 188; Porter to Aline Porter, April 11, 1961, Porter Archives.
 - 5. Carson, Silent Spring, 32.
- 6. Sports Illustrated, November 22, 1967; Joseph Wood Krutch, introduction to Porter, "In Wildness," 13.
- 7. On Krutch see Paul N. Pavich, *Joseph Wood Krutch* (Boise: Boise State University Press, 1989).
- 8. Stephen Trimble, "Reinventing the West: Private Choices and Consequences in Photography," *Buzzworm*, November/December 1991, 46–54.
 - g. Porter, Eliot Porter, 29.
- 10. Porter, "An Explanation," Harvard Alumni Bulletin, 2-3, n.d., Porter Archives.
 - 11. Porter, Eliot Porter, 83.

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- 12. Porter to the Santa Fe New Mexican, December 2, 1959, Porter Archives.
- t₃. Porter, "Photography and Conservation," manuscript in "Notes on Conservation" file, pp. 5–6, Porter Archives.
- 14. Ansel Adams and William A. Turnage, Sierra Nevada: The John Muir Trail (Berkeley, Calif.: Archetype, 1938); Ansel Adams and Nancy Newhall, This Is the American Earth (San Francisco: Sierra Club, 1960); Edward Steichen, The Family of Man (New York: The Museum of Modern Art, 1955); Wayburn quoted in Michael P. Cohen, The History of the Sierra Club, 1892–1970 (San Francisco: Sierra Club Books, 1988), 293.
- 15. Fox, John Muir and His Legacy, 318–19; Cohen, History of the Sierra Club, 424–26; Eliot Porter and Kenneth Brower, Galúpagos: The Flow of Wildness (San Francisco: Sierra Club, 1968).
- 16. Philip S. Berry, "A Broadened Agenda, a Bold Approach: Oral History Transcript," interview conducted by Ann Lage, 1981, 1984, Regional Oral History Office, Bancroft Library, University of California, Berkeley, 1988, 21. The club was used to cordial relations with the sources of power: "In Wildness" was underwritten by a philanthropic arm of the giant Bechtel Corporation, which built Hoover Dam, countless oil pipelines around the world, and Glen Canyon Dam, and now manages the nuclear bomb testing program at the Nevada Test Site.
 - 17. Berry, interview, 27.
- 18. Alexander Hildebrand, in "Sierra Club Leaders: Oral History Transcript/ 1980–1982," interviews conducted by Ann Lage, 1980–81, Regional Oral History Office, Bancroft Library, University of California, Berkeley, 20–21. For more on debate within the club over publication of Porter's *Galápagos*, see Cohen, *History of the Sierra Club*, 421; Porter, *Eliot Porter*, 56.
- 19. Eliot Porter, *Birds of North America: A Personal Selection* (New York: Dutton, 1972).
- 20. Eliot Porter, Antarctica (New York: Dutton, 1978); The Greek World (New York: Dutton, 1980); Under All Heaven: The Chinese World (New York: Pantheon, 1983); Iceland (Boston: Bulfinch, 1989); Monuments of Egypt (Albuquerque: University of New Mexico Press, 1990). See also Peter Matthiessen and Eliot Porter, The Tree Where Man Was Born: The African Experience (New York: Dutton, 1972).
- 21. Fairfield Porter, *The Nation*, January 1960, 39; Carolyn Merchant, "Appendix B: Feminism and Ecology," in Bill Devall and George Sessions, *Deep Ecology: Living as If Nature Mattered* (Layton, Utah: Gibbs Smith, 1985), 229.
- 22. David Brower quoting Porter in a letter to John Rohrbach, September 16, 1999, Porter Archives.
 - 23. Valerie Cohen, e-mail communication to the author.
 - 24. Thomas Cole, "Essay on American Scenery," in American Art, 1700-1960:

Sources and Documents in the History of Art, ed. John McCoubrey (Englewood Cliffs, N.J.: Prentice-Hall, 1965), 92.

- 25. For "the geography of hope" see David Brower, ed., *Wilderness: America's Living Heritage* (San Francisco: Sierra Club Books, 1961), 102; and Wallace Stegner, *The Sound of Mountain Water* (New York: Dutton, 1980), 245–53.
- 26. William Cronon, "The Trouble with Wilderness," in *Uncommon Ground:* Rethinking the Human Place in Nature, ed. Cronon (New York: Norton, 1995), 69–90. See also Rebecca Solnit, Savage Dreams: A Journey into the Landscape Wars of the American West (San Francisco: Sierra Club Books, 1994); Alston Chase, Playing God in Yellowstone: The Destruction of America's First National Park (Boston: Atlantic Monthly Press, 1986).
- 27. Eliot Porter, "Address to Los Alamos Honor Students," 1971, Porter Archives.
- 28. Robert Adams, "C. A. Hickman," in *Beauty in Photography: Essays in Defense of Traditional Values* (New York: Aperture, 1981), 103.
 - 29. Porter, Eliot Porter, 44.

ΙΙ

Alberta Thomas, Navajo Pictorial Arts, and Ecocrisis in Dinétah

Janet Catherine Berlo

In 1981, Alberta Thomas wove an intricate cosmogram within a ground made of light brown sheep's wool (fig. 45). The cosmogram contains a scene, recognizable to any Navajo, in which the Hero Twins of sacred history stand girded for war against the Monsters that plague the world. Their weapons include flint armor, bolts of lightning, painted shields, and sacred tobacco pouches. The center of the image holds four sacred mountains, above which, at each cardinal direction, the twins Monster Slayer and Child of the Water (in a double set) hover. The sustaining plants of life spring from between the mountains. This world is surrounded by a protective rainbow, with an opening to the east. The moon at the north and the sun at the south guard the opening to the sacred enclosure that is the Navajo homeland, Dinétah, where this dazzling spectacle takes place.¹

Alberta Thomas (1933–93) wove her first rug at the age of ten and sold it at the Shiprock Trading Post for five dollars. Later she proudly recalled buying her first pickup truck with rug money. In her adulthood the patronage of Troy and Edith Kennedy, owners of the Red Rock Trading Post, and an unrelated collector named Edwin Kennedy provided her with a steady income. Her rug money and the income of her husband, Carl, as a miner made the Thomases more prosperous than many other unschooled Navajos of their generation. As I will demonstrate, the narrative of her work and her husband's forms a weave nearly as complex as the one in her textiles, wherein strands of entrepreneurship, creativity, patronage, philosophy, ecology, and corporate greed intertwine.²

Many other interlocutors have played roles in this narrative as well, from anthropologists and traders to philanthropists and art patrons, even executives of global energy companies. Looking through the dual lenses of eco-