

lutionary shifts from one paradigm to another do not get scientists closer to the truth about nature, that all past paradigms have been rejected as utterly untrue. Newtonian mechanics, for instance, is not simply false, in the way that, say, Aristotle's theory of motion is, Weinberg points out. "Kuhn himself in his earlier book on the Copernican revolution told how parts of scientific theories survive in the more successful theories that supplant them, and seemed to have no trouble with the idea."

In *Structure*, however, Kuhn argued that Newtonian mechanics is not the same today as it was before the advent of relativity and quantum mechanics, because it was not understood then to be an approximation. This, Weinberg comments, "is like saying

that the steak you eat is not the one that you bought, because now you know it is stringy and before you didn't."

Finally, Weinberg says, Kuhn exaggerated the extent to which scientists are in thrall to the paradigm of the moment. Physicists today, for example, know that their theory of elementary particles is only an approximation to some yet unknown basic theory, and they are working hard to find new data that conflict with the current theory. Why do scientists even bother, he asks, if Kuhn's view of scientific progress is correct? "What drives us onward in the work of science," Weinberg writes, "is precisely the sense that there are truths out there to be discovered, truths that once discovered will form a permanent part of human knowledge."

ARTS & LETTERS

The New Gardens of Art

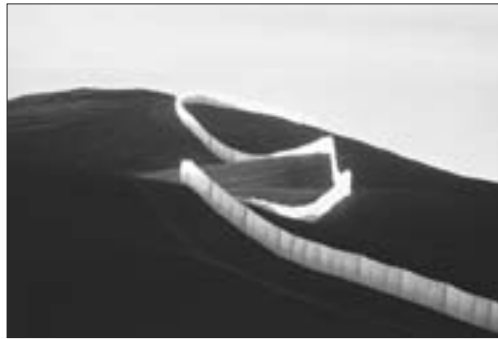
"Gardens and the Death of Art" by Stephanie Ross, in *Landscape Architecture* (July 1998), 636 Eye St. N.W., Washington, D.C. 20001-3736.

Today it is little more than a hobby—albeit an immensely popular one—but in the 18th century, gardening was a fine art. English author Horace Walpole even grouped it with poetry and painting—"Three Sisters, or the Three New Graces who dress and adorn Nature." Yet if gardening no longer is kin to poetry and painting, high art has not completely abandoned the landscape, asserts Ross, author of *What Gardens Mean* (1998). Many recent works of "environmental art," she argues, "fulfill the same functions" the gardens of Walpole's day did. "By inhabiting, addressing, and altering a site, they call into question our relations to landscape, nature, and art."

The contemporary artists whose works "most clearly recall those earlier gardens," Ross writes, include Alan Sonfist and Meg Webster. Sonfist's various *Time Landscapes* are tracts reproducing an urban area's vanished native flora. When his *Time Landscape* in New York

City's La Guardia Place is finished (the first stage was dedicated in 1978), it will exhibit three stages of a forest as it would have been in the colonial era. Webster's work *Pass*, installed in Saint Louis's Laumeier Sculpture Park between 1990 and 1992, reproduces a variety of different habitats and plant varieties found throughout Missouri, including a fruit orchard, a woodland stream, a pond, sun and shade gardens, herbs, berry bushes, and various prairie grasses and flowers.

But even less obviously gardenlike works of environmental art—such as Michael Heizer's desert sculpture *Double Negative* (1969), in which 240,000 tons of earth were carved out of two facing cliffs—"force us to rethink our place in the landscape, our roles as perceivers, enjoyers, consumers, destroyers," Ross observes. "They raise profound metaphysical questions about permanence and change, about human will and agency."



Running Fence, Sonoma and Marin Counties, California, 1972-76, by Christo and Jeanne-Claude