

*Artists need to create on the same scale that
society has the capacity to destroy.*

—Lauren Bon, 2005

Helen and Newton Harrison

Tipping the Scales: The Harrisons and the Force Majeure

Helen Mayer Harrison and Newton Harrison (The Harrisons, Harrison Studio) have become legends in their own time. They are well-known pioneers of ecological art and environmental art. Ecological art or eco-art as it is often called, is a distinctive area of contemporary art practice, a sub-category of environmental art that focuses on the biological interdependencies in ecosystems. In order to understand ecosystems, to work with them as an artistic medium, and to create successful ecological and environmental interventions, the Harrisons have had to master environmental science. They also have had to conduct a great deal of their own original research at the intersections of art and science, generating outcomes that contribute to both fields.



In this respect, they are not only pioneers of ecological art but they also have played leading roles in defining art as an authentic research field and in establishing the emerging interdisciplinary field of art-science. To further their research, in 2013 the Harrisons, together with their son Joshua Harrison, founded the Center for the Study of the Force Majeure at the University of California, Santa Cruz. The term, “force majeure” is typically used in legal contracts to limit liability for damages caused by circumstances beyond human control: earthquakes, floods, lightning, and so on. The Harrisons conceive of the force majeure as the environmental damages caused by humans that have set in motion the pending catastrophe of climate change. The Center strives to create on the same scale that society has the capacity to destroy.

The Harrison’s first eco-art project, *Making Earth* (begun 1970) was, according to the artists, a “metaphor for the idea of regenerating the earth worldwide.” *Making Earth* demanded that the Harrisons research soil, its constituent elements,

and the biological processes that generate and regenerate it in order to create it themselves. As artist Elizabeth Stephens has written, “they systematically learned how to... grow things literally from the ground up.” In this sense, *Making Earth*, like much of the Harrison’s work, operates not only metaphorically but concretely: in addition to referencing earth symbolically it created actual earth—the thing in itself. They have referred to this work as “eco-political,” for it responded to the worldwide endangerment of topsoil, which has become a “disastrous environmental problem throughout the world,” far worse than when they began working with soil as a medium nearly half a century ago.

The scale of the *Making Earth* project ranges from *Making Earth Again* (1990), a signed edition of 6 5/8" x 1 3/8" glass test-tubes filled with earth and sealed with cork, to *Working with a Spoils Pile* (1978–80, ongoing), a twenty-one acre reclamation of a debris-filled spoils pile at the Earl W. Brydges Artpark State Park in western New York. In the latter work, collaborators (park

services, municipalities, local power companies, and apple orchards, along with community groups like the boy scouts) contributed some 3000 truckloads of earth and organic debris. In what the Harrisons refer to as a “performance,” earth-moving machinery spread and intermixed those donations with native seeds, transforming the surface into a “viable meadow with trees, berry patches and vines interspersed.” Part of the project’s success lay in its economic efficiency: it cost the collaborators less to haul their waste to the Artpark spoils pile than to the more distant dump, plus they were offered a tax deduction for their contributions. This pragmatism and ability to work at diverse scales characterizes the Harrison’s work, which offers economically viable solutions to “wicked problems,” problems that are difficult or impossible to solve because of incomplete, contradictory, and changing requirements that are often difficult to recognize. Scale, for the Harrisons, was not a formal matter or an expression of bravado but was determined by the nature of a particular problem, which necessitated

a response on a certain scale. Of *Making Earth*, the Harrison Studio more recently asked, “‘Would it be enough, if all the topsoil was regenerated worldwide?’ Clearly it wouldn’t be enough. Regenerating topsoil might simply be an invitation for further exploitation.”

Indeed, that invitation led to more recent, ambitious, and ongoing projects such as *Sage Hen: A Proving Ground*, *Peninsula Europe*, *Tibet Is the High Ground*, and *Saving the West*, which operate at the scale of regions, continents, or watersheds that exceed geo-political boundaries and impact the lives of literally billions of humans and countless other species. For the Harrisons, their ultimate “boss” is not the organization or governing body that commissions their work, it is the environment, the life web. In *The Web of Life*, physicist Fritjof Capra claims that the shift from linear thinking to systems thinking that began in the mid-20th century, is generating an awareness of the world as an integrated whole, rather than as a collection of parts. This holistic perspective has important implications for ecology and ethics.

“Deep ecological awareness recognizes the fundamental interdependence of all phenomena and the fact that, as individuals and societies, we are all embedded in (and ultimately dependent on) the cyclical processes of nature.” The life web operates locally and globally. There are local life webs, like the meadow at ArtPark that the Harrisons brought to life from a toxic spoils pile. There is the global life web, spanning the Earth. And there are life webs at all scales in between.

Atmospheric scientist James Lovelock proposed the “Gaia Hypothesis,” that the Earth itself is a large organism comprised of billions of other organisms that are all interconnected in ways that collectively affect the state of the whole, or Gaia. Although Lovelock’s metaphor has been contested, many scientists accept the idea of the Earth as “one continuous enormous ecosystem composed of many component ecosystems.” In the mid-1990s, when the extent of climate change was less apparent than it is today, evolutionary biologist Lynn Margulis wrote, “Gaia is a tough bitch—a system that has worked for over three

billion years without people. This planet’s surface and its atmosphere and environment will continue to evolve long after people and prejudice are gone.”

The Harrisons recognize that on the deep time scale of evolution, humans are a relatively recent phenomenon and that our species’ reign on Earth inevitably has an expiration date, just like all other species that have come and gone before us. What is different about humans is that, for the last two hundred years, we have been contributing to our own demise—and to the demise of many other species—on a scale that is unprecedented in the fossil record and in a time-frame that is accelerating. The Harrisons accept, albeit with great dismay, that billions of people and millions of species may die as a result of global climate change precipitated by anthropogenic (human) influences.

Driven by an ethical commitment to the life web, the Harrison’s ask a vital question: At what scale of the global ecosystem must we intervene in order to act most effectively, given best estimates

of change over time? In other words, what can we do now in order to mitigate the loss of life and biodiversity that will result from the force majeure—to the catastrophic human impact on Earth. The Harrisons believe that “unless artists, scientists, industry and government create working environmental projects together... habitable environments that can sustain future generations of life may not exist.” Fortunately, the subtitle of their monumental 2016 book suggests, “after 45 years, counterforce is on the Horizon.” That counterforce is the Harrison Studio and the Center for the Study of the Force Majeure.

Dr. Edward Shanken

Associate Professor, Arts Division
UC Santa Cruz



Brine Shrimp: Notations of the Ecosystems of the Western Saltworks, 1971

Photo: The Harrison Studio



Brine Shrimp: Notations of the Ecosystems of the Western Saltworks, 1971
Photo: Musée des Abattoirs toulouse



Watering earth



Hoeing earth



Turning earth



Shoveling and shoveling

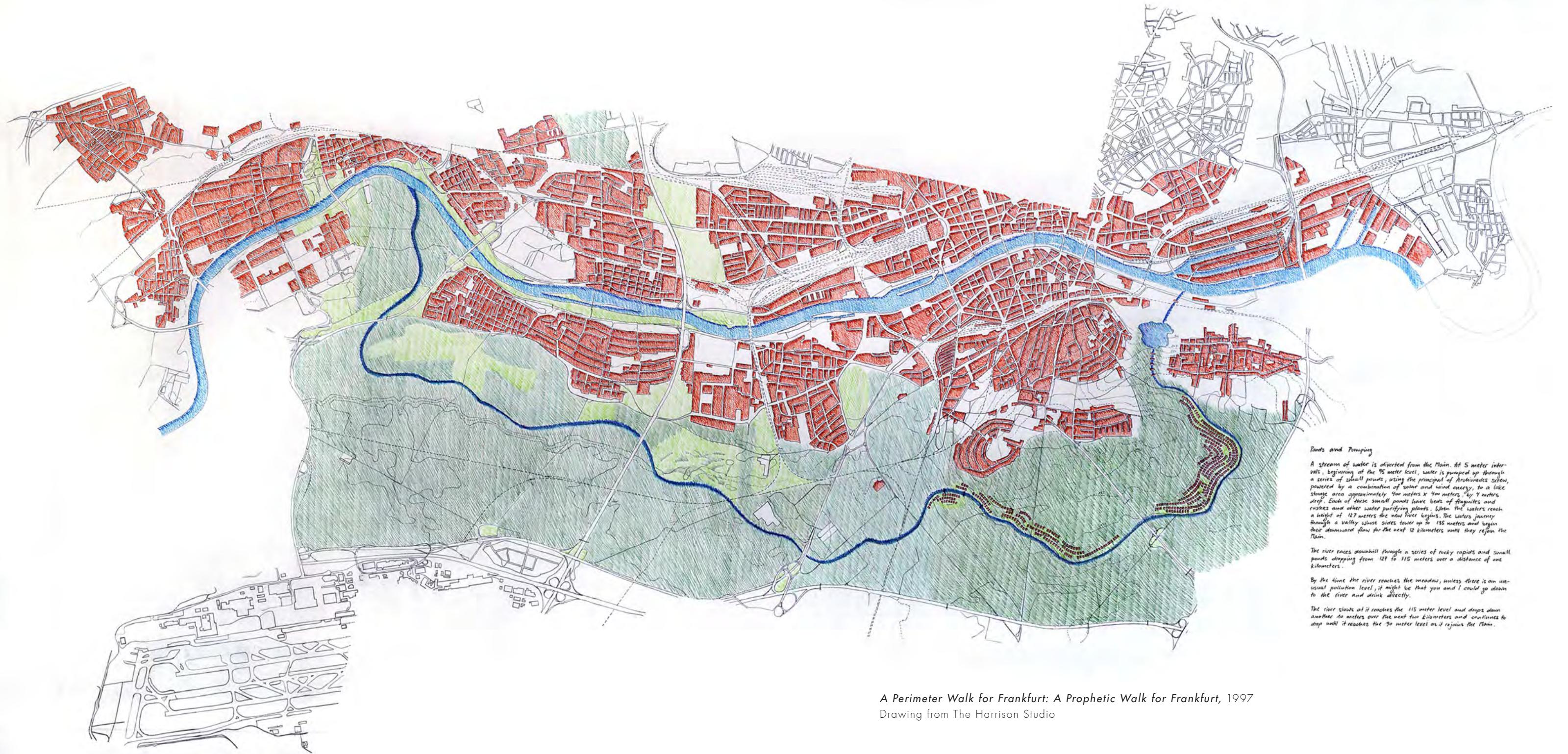


Feeling and crumbling



Smelling and tasting

Making Earth in Pepper Canyon, 1970
Photo: Lennart Bourin



Ponds and Pumping

A stream of water is diverted from the Main. At 5 meter intervals, beginning at the 75 meter level, water is pumped up through a series of small ponds, using the principle of Archimedes screw, powered by a combination of solar and wind energy, to a lake storage area approximately 400 meters x 400 meters, 4 meters deep. Each of these small ponds have beds of fragmites and rushes and other water purifying plants. When the waters reach a height of 127 meters the new river begins. The waters journey through a valley whose sides tower up to 135 meters and begin their downward flow for the next 12 kilometers until they rejoin the Main.

The river races downhill through a series of rocky rapids and small ponds dropping from 127 to 115 meters over a distance of one kilometer.

By the time the river reaches the meadow, unless there is an unusual pollution level, it might be that you and I could go down to the river and drink directly.

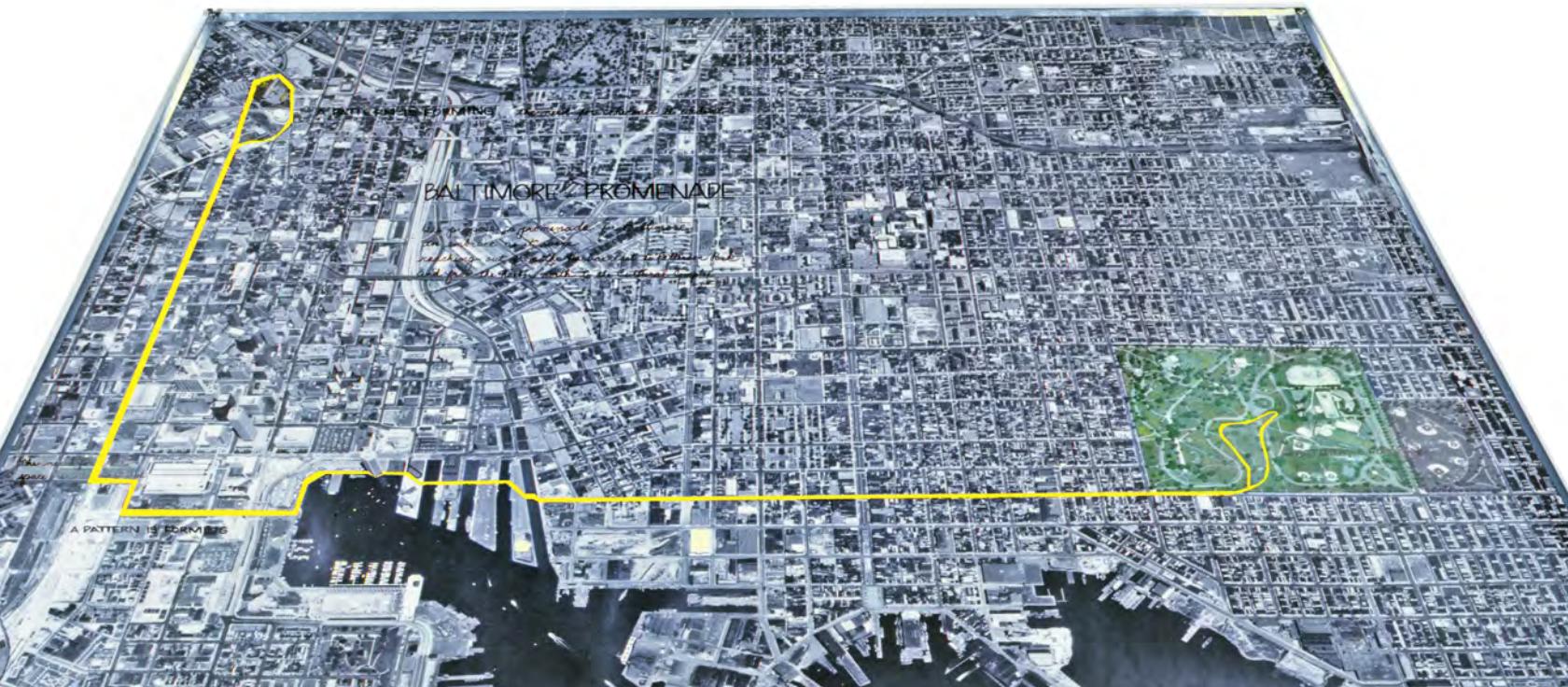
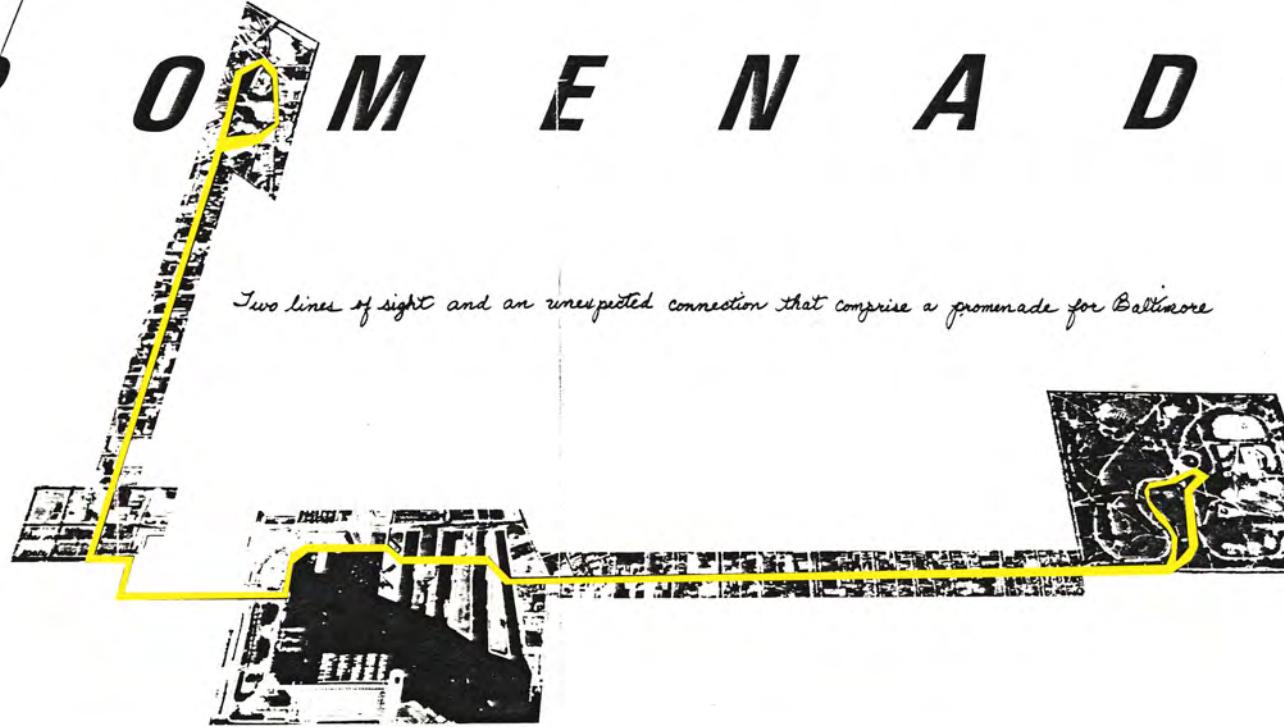
The river slows as it reaches the 115 meter level and drops down another 10 meters over the next two kilometers and continues to drop until it reaches the 70 meter level as it rejoins the Main.

A Perimeter Walk for Frankfurt: A Prophetic Walk for Frankfurt, 1997
 Drawing from The Harrison Studio

BALTIMORE

P R O M E N A D E

Two lines of sight and an unexpected connection that comprise a promenade for Baltimore



Baltimore Promenade, 1997

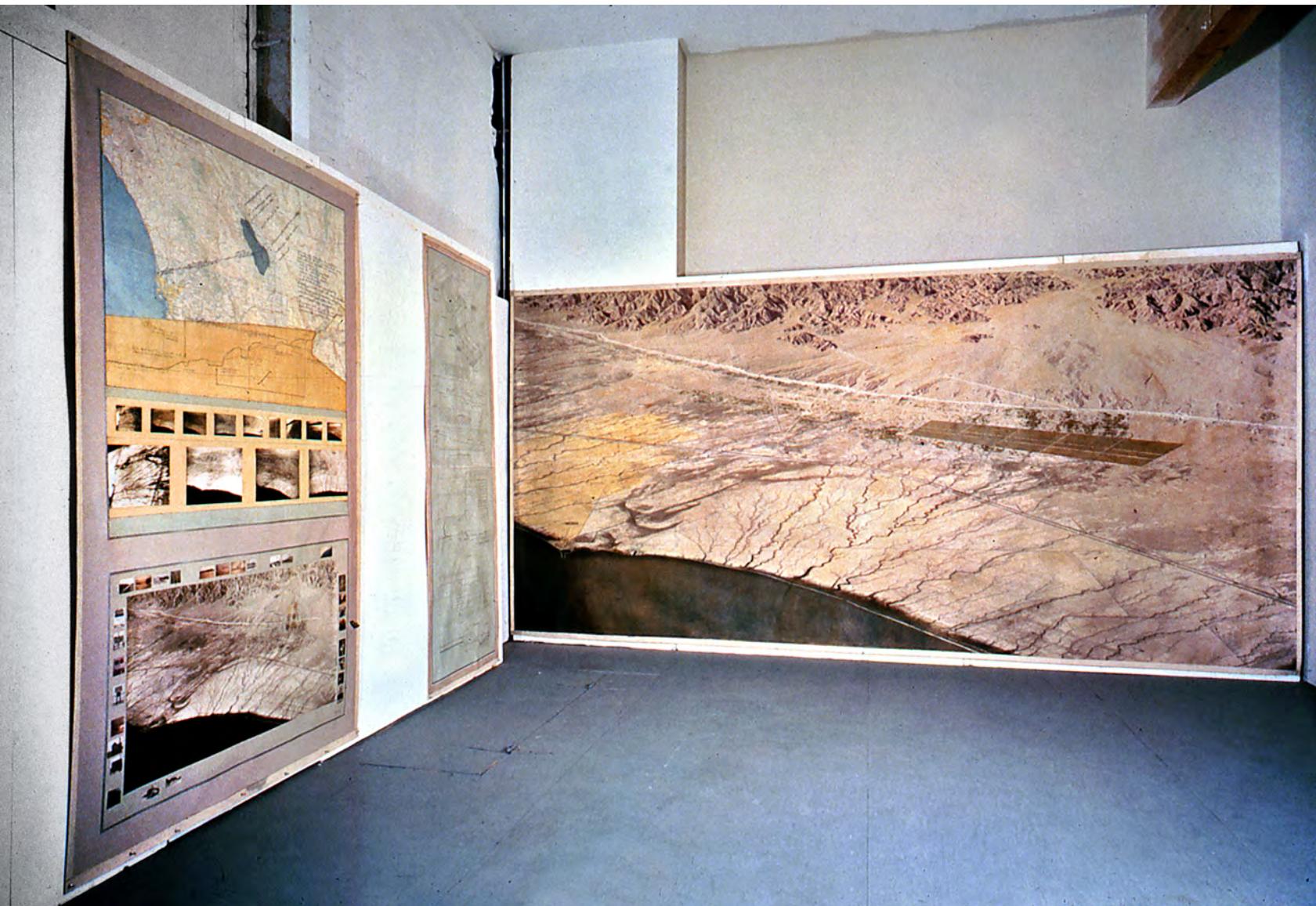
Left: Two Lines of Sight and an Unexpected Connection that Comprise a Promenade for Baltimore

Above: Installation view

Photo: Aerial Photography commissioned by The Harrison Studio



4th Lagoon Cycle Installation, 1974
Photo: The Harrison Studio



7th Lagoon Cycle Installation, 1979-1981
Photo: The Harrison Studio



Above:
7th Lagoon Cycle Installation, 1974
Photo: The Harrison Studio



Opposite:
Green Heart Vision Installation, 1994–ongoing
Photo: Kunst und Ausstellungshalle der
Bundesrepublik Deutschland, Bonn, Germany



Green Heart Vision Installation, 1994–ongoing
Photo: Kunst und Ausstellungshalle der Bundesrepublik Deutschland, Bonn, Germany

Endangered Meadows of Europe, 1975–1977
Photo: Kunst und Ausstellungshalle der Bundesrepublik Deutschland, Bonn, Germany