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THE WALL STREET JOURNAL.

When You Need a Giant Canvas for Your Work

By ARNIE COOPER

If you're a detail person, the first thing you'll notice about "Ends of the Earth: Land Art to 1974," at the Geffen Contemporary at the Museum of Contemporary Art, is the missing start date in the show's title. Senior curator Philipp Kaiser and co-curator Miwon Kwon insist the omission was intentional. Ms. Kwon, a professor of art history at the University of California, Los Angeles, says that "we chose not to put a beginning date into the title of the show, since Land Art emerges through many different strains of art practices and one could locate multiple moments of its 'beginning.'"

The Noguchi Museum, NY. /Soichi Sunami

Isamu Noguchi's proposed 'Memorial to Man,' aka 'Sculpture to Be Viewed From Mars' (1947). The nose alone was to be a mile long.

You might also wonder why what the accompanying catalog calls the "first large-scale museum exhibition on Land Art" includes work only through 1974. It's not as if the genre, in which the landscape is treated as a giant canvas and the resulting artworks are not only linked to it but express it, dissolved in the mid-1970s; the noted British Land artist Andy Goldsworthy was still in college at that time. But the curators wanted to feature projects created before the Hirshhorn Museum's exhibit "Probing the Earth: Contemporary Land Projects" established the category in 1978. "This show," Ms. Kwon says, "is about early experimentation."

The cutoff date was also an important milestone for the genre. In 1974, New York's Dia Art Foundation was established to support visionary large-scale projects. Consider Robert Smithson's mammoth "Spiral Jetty," constructed in 1970 from basalt rock and earth at the Great Salt Lake's northeastern shore and donated to the Dia by Smithson's estate in 1999. The 1,500-foot-long coil was covered by water soon after its construction but re-emerged after the millennium, allowing visitors to walk between the spirals.

This brings us to the oft-asked question—repeated in an essay written by Mr. Kaiser and Ms. Kwon for the exhibition catalog—"How can you bring monumental artworks that are continuous with the earth in remote locations such as the deserts of Nevada, Utah, or New Mexico into a gallery space?"

The very simple answer: You can't. "We don't even try," Ms. Kwon says, referring to another colossal work, Michael Heizer's 1969-70 "Double Negative," two 250-foot-deep, 30-foot-wide trenches cut into the eastern edge of the Mormon Mesa, northwest of Overton, Nev. Totaling 1,500 feet in length, this immense earthwork is visible by satellite. But you won't see even one image of it at this show. Ms. Kwon says, "We don't want to engage in the common effort made by museums to represent the work with documentary photographs." Her statement is ironic given that "Double Negative" is part of the MOCA collection, a fact that inspired Mr. Kaiser to propose "Ends of the Earth."

However, as Mr. Kaiser is quick to note, every project is different. "For example, 'Double Negative' is out there and we respect the fact that you have to drive to see it," the curator says. "But Robert Smithson took a different approach, establishing the system of the site and the nonsite." Mr. Kaiser is referring to the fact that Smithson conceived of three manifestations of his piece: not only the actual spiral in Utah but a 35-minute film and an essay, both included in the show.

Despite such distinctions, Land Art is frequently equated with larger-than-life endeavors constructed in the American Southwest. But, Ms. Kwon says, "it's not all about monumental, macho guys with bulldozers and dynamite in the desert." The show, which seeks to shatter many misconceptions about the genre, has re-created numerous smaller works: Helen Mayer and Newton Harrison's 5½-by-8-foot "Hog Pasture: Survival Piece #1" (1970-1971) contains live plants—munched on by an actual pig before the opening. And Alice Aycock's "Clay #2" (1971)—another re-creation—contains 16 4-foot squares of cracked clay, inspired by Ms. Aycock's visit to Death Valley in 1969.

Another misconception is that Land Art is antiurban. Robert Morris's "Earthwork" is a 2,000-pound pile of dirt made up of earth, brick, steel and industrial scraps from the New York area. The work originally appeared in 1968 at "Earthworks," the first group exhibition of the genre, which took place at Virginia Dwan's Gallery on 57th Street. The show also presents Swedish pop artist Claes Oldenburg's film "The Hole," depicting his 1967 performance piece "Placid Civil Monument," in protest of the Vietnam War. The 10-minute film shows gravediggers fashioning a 6-foot wide, 3-foot deep hole in Central Park behind the Metropolitan Museum of Art.

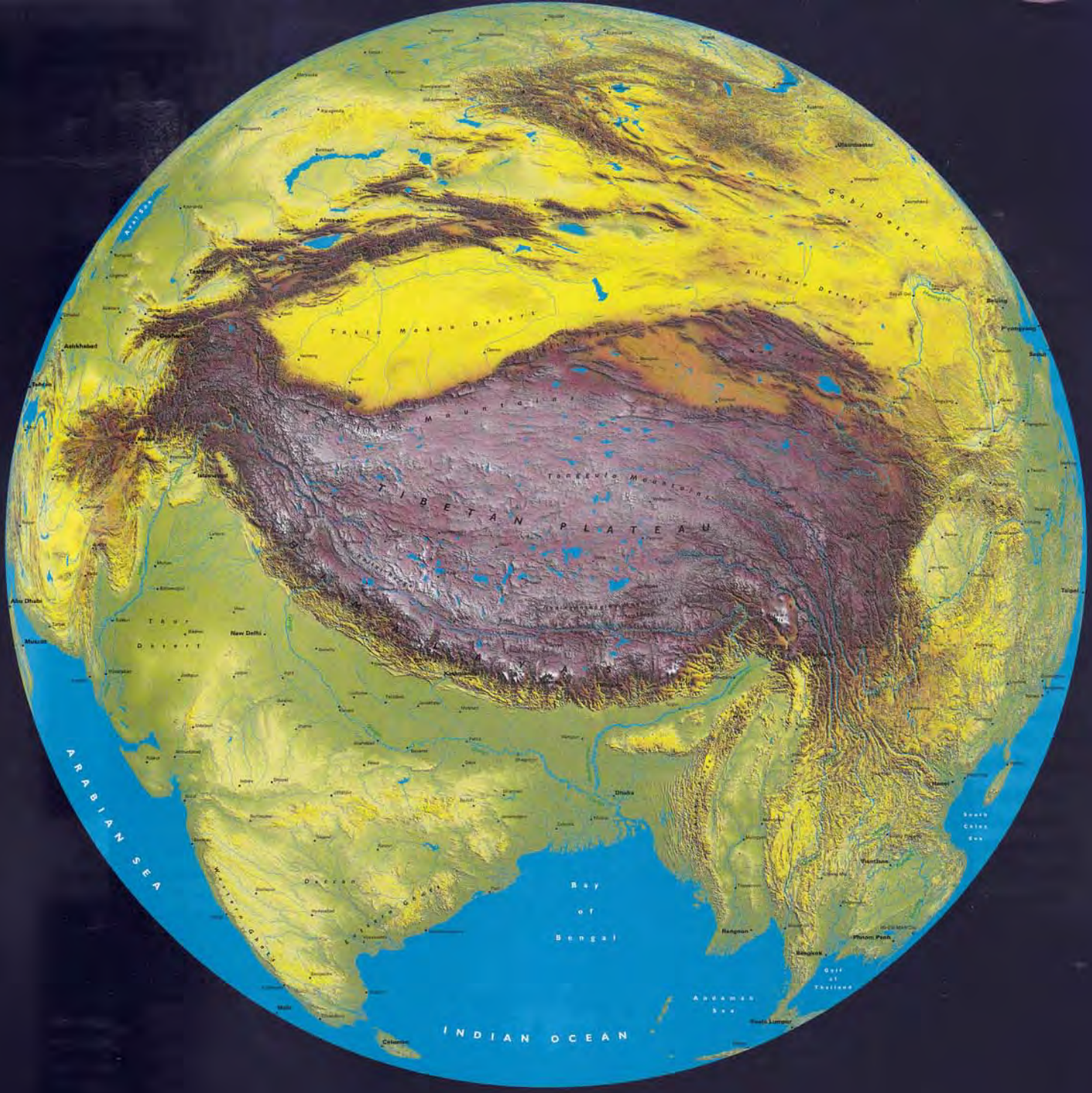
Perhaps more significantly, "Ends of the Earth" aims to shatter the assumption that Land Art is chiefly an American enterprise. The show's 200 works spotlight more than 100 artists from 17 countries in South America, Europe, the Middle East, Asia and Australia as well as the U.S.

Consider the two international works visible immediately upon entering the gallery. Playing directly in front of you is the Swiss kinetic artist Jean Tinguely's 1962 antinuke film, "Study for an End of the World," a 22-minute piece shot in the desert outside of Las Vegas near an atomic-bomb site. The now grainy film, which appeared on the weekly television news program "David Brinkley's Journal," depicts choreographed explosions of junk found in scrap yards around Las Vegas.

To its left is French artist Yves Klein's "Región de Grenoble (RP10)," a 2-by-3-foot work simulating a relief map of the Earth utilizing his patented "International Klein Blue." It was "the artist's vision," Ms. Kwon says, "to claim a color that exceeds territorial boundaries and divisions." Back in 1957, Klein theorized that the entire planet was blue—an idea confirmed by the first human in space, Russian cosmonaut Yuri Gagarin, who declared, "The Earth is blue. How wonderful. It is amazing." No surprise then that Mr. Kaiser says Klein had declared the entire planet a work of art.

Not that all of these projects could actually be realized. The exhibit includes Jean-Michel Sanejouand's proposal for a cultural park development on top of Mount Vesuvius, as well as the Italian architectural collective Superstudio's plan for a gridded superstructure to wrap around the globe. Mr. Klein wasn't kidding about the planet as artwork, a perspective that is evident in one of the show's most provocative pieces, Isamu Noguchi's 1947 proposal "Memorial to Man." The 15-by-34-foot photograph, which appears to be of a massive earthwork sculpture in the sand, contains a face whose nose was to be one mile long. Mr. Noguchi wanted the image to be visible from space "informing others that an intelligent life form once had existed on our planet."

Ms. Kwon says: "Although we do not assert an origin point for Land Art, Noguchi's works are the earliest in the show. 'Memorial to Man,' also known as 'Sculpture to Be Viewed from Mars,' presages many aspects of Land Art as it will develop in the 1960s—the scale of his vision; using land as material and means to articulate commentary on man's relation to earth and cosmos; the importance of the extra-human viewpoint; the coming together of the primitivistic and the futuristic. Utopic and dystopic at once."



Tibet is the High Ground: Part IV, 2010. An Ecologically Based Proposal for the Tibetan Plateau (or Qingzang Plateau).
Helen Mayer Harrison/Newton Harrison, The Harrison Studio

The research of Chinese glaciologists
And glaciologist from India
Appears to be right
80% of glaciers in Tibet
And surrounding areas
Can disappear in the next 35 years

Research further indicates
These glaciers will shrink so much
That their melting borders will dry up
Profoundly affecting
The Salween, MeKong, Huang-Ho
Brahmaputra, Yangtze, Ganges
And Indus River systems
That traverse inner Mongolia,
China, Tibet, Autonomous-Zone, India,
Burma, Laos, Cambodia, South Vietnam,
Bangladesh, Kashmir and Pakistan

A Force Majeure has come into being
In the form of global warming
That will work to the disadvantage
Of 1/6th of the earth's population
Or about 1.2 billion people
Who live in the 7 drain Basins
That comprise
2,404,820 square miles

It is not clear that
The countries of China,
Burma, Laos, Cambodia,
South Vietnam, India,
Bangladesh, Kashmir
And Pakistan can put aside
Differences of culture
Race and religion
Habits of conflict

And governance
Differences in
Border disputes
And legal systems
In order
To create a
Counterforce at
Virtually continental scale

Thus, we make
An unlikely proposal
that culture can offer
a mediating role
in this highly stressed
probable future
by generating
first the research
Which will enable bioregional

And paleo ecological research
To locate forest
And Savannah ecosystems
Which existed in millennia past
When temperatures were
Similar to those
Which are in the process
Of happening in the now
And thereafter
to search to locate local similar
ecosystems that
Exist in our now
And to begin designing and in part
Creating through Assisting the
Migration of a palette of species
Able to replace or restate
Those now coming under
Extreme stress

Thereby
Generating new forest
And grassland
which will in good part replace
The slow water releasing
Properties of glaciers
and snowmelt
by creating
a 2 million square kilometer sponge
To normalize rivers
and secure the lands
from flood and drought

Thus an adaptation
comes into being
At sufficient scale
To sequester 6 gigatons of carbon
Every decade

Selz, Peter. "The Harrisons: Talking and Remembering." *Leonardo: Journal of the International Society of the Arts, Sciences and Technology,* 45, no. 1, 2012. pp. 9 - 16.

The Harrisons: Talking and Remembering

Helen Mayer Harrison and Newton Harrison interviewed by Peter Selz

ABSTRACT

Peter Selz engages Helen and Newton Harrison in discussion about their expansive career in ecological art. The artists reflect upon the influences of Renaissance artists and the Bauhaus on the development of their approach, and they chronicle their concern with survival at progressively larger scales. In their recent *Force Majeure* series, working at the ecosystemic level, they present poetic meditations on prospects for the security of all living things as land, food, fresh water and other species diminish.

INTRODUCTION BY PETER SELZ

We are recording this conversation at Kala Art Institute, in Berkeley, California, on 31 January 2010, where there is a major exhibition of recent work by the Harrisons on view.

I go back with the Harrisons some time. I wrote about the Harrisons in 1979, when they exhibited their 1977 work *Meditations on the Sacramento River, the Delta, and the Bays of San Francisco* in a citywide exhibition held in San Francisco, with a focus at the San Francisco Museum of Art and the Floating Museum. All over the city there were events going on, including billboards, the use of personals in the newspapers as subject matter and a graffiti campaign of chalk on the sidewalks.

The Harrisons were among the chief pioneers in Eco Art and an early generation of earth artists, many of whom, such as Robert Smithson, Michael Heizer and others, made their heavy mark on the land. But the Harrisons, beginning in the very early 1970s, and later Michael Singer, Agnes Denes, Mel Chin and others, expressly did not impinge upon the earth.

In their recent series of works, *The Force Majeure,* the Harrisons look at Peninsula Europe as part of a watershed ensemble, encompassing watersheds from the Pyrenees to the Carpathian Mountains, the Tibetan Plateau and the Sierra Nevada Mountains; they propose ecological approaches to the ecological and human problems caused by glacial melt at great scale.

Unlike most artists, the Harrisons engage in finding ecological solutions, often systemic in nature, to large, complex problems with political implications. Several of their works have actually been adopted in part by government agencies. Their work, as far as I remember, goes back to the corporeal portable *Fish Farm* in London, 1971. There a great fury arose when they actually ate the fish after electrocuting them—electrocution was required by the American SPCA [Society for the Prevention of Cruelty to Animals], since catfish were hard to kill and could live out of water for some time.

A short list of their most important works would include a major work, *The Law of the Sea Conference: Where the Appetite Is Discovered to be Endless,* in the 1976 Venice Biennale; *Two Lines of Sight and an Unexpected Connection Comprise a Promenade for Baltimore* (1981); works in Pasadena, *Arroyo Seco Release: A Serpentine for Pasadena* on the lower arroyo and *Devil's Gate Transformation: A Refuge for Pasadena* at Devil's Gate Dam; work at Documenta 8 (*Kasselwerks: A Work for Documenta* [1987]); and *Atempause für den Sava Flüss, or, Breathing Space for the Sava River* in former-Yugoslavia in 1989, which was interrupted by the civil war there but continued afterwards. The European Union and the German government funded a large traveling exhibition entitled *Peninsula Europe* (2001–2003) (Fig. 1). It is the beginning of the *Force Majeure* series. Typical of their more recent work is a piece called *Tibet Is the High Ground* (Article Frontispiece) (1993, 2005–2010), directed toward the well-being of China and other Asian countries.

I know I'm remembering these out of order—spontaneously—but I recall seeing their work *Serpentine Lattice* on the north coast of California in 1993. In Bonn I saw their work *Endangered Meadows of Europe* (1996). Then they went to work on *A Vision for the Green Heart of Holland* (Fig. 2), which they worked on from 1994–2001. And finally *Greenhouse Britain* (Fig. 3), which is on view here at Kala (2008).

The Harrisons, whose work is fundamentally subject-matter driven, work in many media. A locus in their work bears relationship to color field painting. However, their color fields are large maps, done with a great deal of research with geologists and geographers, etc., and their color fields do a lot more than just refer to themselves. The Harrisons are conceptual artists working with ideas and analyzing systems—except that they go beyond ideas; they act. They are performing artists engaging their own creative modality, which infuses their use of poetic metaphor in their creative use of language, often expanding the permissions and boundaries of the field itself. At this point, I would like to more or less turn it over to Helen Mayer Harrison and Newton Harrison, and we'll follow their dialogue, but we may come in with a few questions in between [1].

[Newton] Helen and I should really talk about how we were driven to deal with something like *The Force Majeure*—what it means and why we feel it necessary to compose with "new" ecosystems, which we call plant palettes, and why we have be-

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See <www.mitpressjournals.org/toc/leon/45/1> for supplemental files related to this article.

Article Frontispiece. ***Tibet Is the High Ground Part IV: The Force Majeure*, 2010. (© Helen and Newton Harrison. Photo courtesy Ronald Feldman Fine Arts.)**

gun thinking about 2 million square kilometers as a field to work in. We've also begun thinking about carbon sequestration at that scale, and how our very early experience, as both field painters and collagists and our history of composing, helps us see the Tibetan Plateau as a field. To deal with that, we'd have to be talking about what we call the field of play. For a painter, the canvas is the field of play; the field of play is where a whole world takes place.

[Helen] I think that we should go back much further, to talk for a moment or two about the real influences on our lives and the way we think. We lived in Florence, Italy, from 1957 to 1960, before it became the tourist trap it is today. Not only was it a great experience to see all the great art and to learn from it, and to know that everywhere you went there was visually something interesting happening, possibly beautiful. It was about the way people had dealt with space and encountering each other. The influence of Florence as a city was as important to our future as was the influence of the art we saw there.

[Newton] The whole idea of our use of the concept field of play has its source in the Florentine experience, which was a field of play for us. But *field of play* as a concept or viable working form for us only emerged 30 years later. What we finally come to when we use the term *field of play* is a search for, and discovery of, a geophysical field that can be apprehended or known. The reason we seek a geophysical field is that it has boundary conditions. If it has boundary conditions, you can actually look at it in a framed or contained way. Thus you can look at Peninsula Europe (see Fig. 1) and suddenly understand that the 3.3-million-square-kilometer peninsula is bounded by water in all cases, with one exception. This is a 30-km region in the Carpathians that marks the distance between the beginning of the Dniester River and the Vistula River. So the peninsula is only connected to the Russian plain and beyond it to the Urals by 30 kilometers. From this bit of seeing, suddenly we understood that the Russian plain is one field, distinct from the peninsula of Europe, although they are interconnected. Therefore, were you to take up the Russian plain, an entirely different work would emerge than that which came about when we took up the European field.

[Helen] And within the field of play that is Peninsula Europe, the mountain ranges from the Carpathians all the way across the Central Massif to the Pyrenees became an undulating multifaceted figure rising from the overall ground plain, with water as a boundary. We began to look at the mountains and what they told us. We saw great differences between the individual mountains, and likewise there was the individuality found in the multiplicity of watersheds.

[Newton] Once we understood the mountains as a form, the form itself became understandable as a vast interconnected body of watersheds. And the biodiversity emerged differently in different watersheds all the way from Portugal to the Carpathians bordering the Russian plain.

[Helen] And the great difference in ecosystems sets up the great differences in cultures, as well as differences in language. As it turned out, we ran into a rough-and-ready equation, where geophysical diversity generated biodiversity, which in turn generated cultural diversity (in rough measure), and Peninsula Europe became a sort of exemplar. I don't know another place in the world that has that many diverse languages embedded in it and that many dialects of the many languages in it.

[Peter] I think this is absolutely true—but the geology of Poland is not that different really than the geology of Germany. So we have different languages, different cultures, but basically the geography is very much the same.

[Newton] Only partially similar, because there are differences in the amounts of water, there are ecological differences, and there are differences in fertility and differences in the land. Small differences, biologically, may afford sometimes large differences in culture. At least that is our belief. I think you can debate that. You can take issue with it.

[Peter] Yes I see that: all these different cultures and different languages and different dialects. I traveled a lot in Europe, and once you get south of the Alps, into the big plain of Europe—going from Holland to Russia—the land seems really similar.

[Newton] However, it does matter that the Peninsula is connected to the Russian plain by only about 30 km. This makes clear that they—the Russian plain and the Peninsula of Europe—are two dramatically different fields of play. The original insight that we had stated earlier is so important. It simply suggests that geophysi-

Fig. 1. ***Peninsula Europe: Part I*****, installation, Ronald Feldman Fine Arts, 2003. Part of the** ***Force Majeure*** **series. (© Helen and Newton Harrison. Photo courtesy Ronald Feldman Fine Arts.) A floor map of the Peninsula of Europe with a drawing of the high ground of the mountain ranges of the peninsula at the 300–350-m level. The high grounds are understood as where the rivers begin. The left wall has a drawing of the high grounds intended to behave iconically. The two images on the right wall have the first comprehensive watershed drawing of the peninsula, which, fragmented, poses the question: Who will look to the continuity of the whole? The overall work poses the question: Can the peninsula of Europe begin to consider itself an entity that, from a biological perspective, knows what's good for itself and does it and knows what's bad for itself and refrains? The narrative is an extended word/image poem. The answer was: Not likely in the near future.**

cal diversity generates biodiversity, which in turn underpins or generates cultural diversity. A little something is happening; that something is called global warming, and the glaciers are melting. As a consequence of the ice melting in the glaciers, many of the rivers are going to experience flood and drought. And as a consequence of that, if the figures are right, drought will cross the continent from Portugal perhaps to the middle of Germany (Fig. 4). Therefore, of 2.4 million square kilometers of factory farm, perhaps half will become unproductive. Well, then, extreme food shortage and some starvation become likely. So, in our field of play, population will increase, food production decrease, ocean waters will rise, and some millions of people will have to move toward higher ground. So: less land, more people, less food. Let's talk about that!

[Peter] In that context, I agree. The cultural differences are not as important.

[Newton] Then there is the larger question that apparently no one has yet asked. That is, Can we think of anything that will replace glacial melt? If we can, a lot of problems could be solved.

[Helen] It's not whether you can replace glacial melt—it's, Can you replace glaciers?

[Laughter]

[Peter] Well, from everything I read, to replace glacial melt—it is too late already.

[Helen] It's too late to get the glaciers back, but it may not be too late to get back what the glaciers do.

[Newton] Now, what do the glaciers do? They slowly release water, and that's what slowly fills the rivers. Well something else slowly releases water, and that something is what we are dealing with: the appropriate generation of forest, shrub and grasslands where the glaciers had been. Forests and grasslands have roots, and the roots interweave and the waters go down along the roots; every ecologist knows that this is called the sponge phenomenon. If you replace the glaciers as much as possible with an appropriate species pallet, then you have created an earth sponge, which will slowly release the waters. We assume the drought will kill most of the tree growth that's there. These are farmed trees, not native and not habituated to the extreme conditions global warming will bring about. On top of that, insects and disease will likely kill the rest. . . .

[Helen] When you have a drought, the trees will be subject to and vulnerable to insect plagues and to other kinds of plague because they are in such weak-

Fig. 2. ***A Vision for the Green Heart of Holland*****, 1994—2001, installation first shown at the Jerusalem Gallery, Gouda, Holland, 1994. Commissioned by the Cultural Council of South Holland. (© Helen and Newton Harrison. Photo courtesy Ronald Feldman Fine Arts.) The objective of this piece was to discover a way to spare the Green Heart region of Holland from a proposed 600,000-house, $220-billion development that would have negatively impacted 35 villages, the farming, the ecology and the perimeter cities of Amsterdam, Rotterdam and Den Hague. The work succeeded: The Harrison Studio line was drawn around the Green Heart, and development was not permitted beyond that line except for modest infill, often required by extended families. Some years later, the core design was chosen by an EU study to be one of the seven most important open spaces to be preserved in northwest Europe. This work was awarded the Groenevald Prize in 2001 for doing the most for the landscape of Holland that year.**

Fig. 3. ***Greenhouse Britain*****, installation, Ronald Feldman Fine Arts, 2009. (© Helen and Newton Harrison. Photo courtesy Ronald Feldman Fine Arts.) Constructed in 2007, funded by the U.K. Department for Energy, Food and Rural Affairs. The image in the foreground is a model of the island with six projectors above it that project the rising of waters at 2-meter intervals with storm surges, thus creating a visual narrative wherein global warming information was democratized and all could see where they lived in relationship to the probable rising of waters and make decisions accordingly.** ***Greenhouse Britain*** **was given the U.K. Chartered Institute for Water and Environmental Management (CIWEM) Arts and Environment Award in 2010.**

Fig. 4. ***Peninsula Europe: Part IV,*** **2007–2008 (an extension of the earlier [2003] Peninsula Europe exhibition), commissioned by the Deutsche Bundesstiftung Umwelt of Osnabruck and the European Commission Directorate of the European Union. (© Helen and Newton Harrison. Photo courtesy Ronald Feldman Fine Arts.) Assuming research is correct, drought will render at least 1 million of an existing 2.3 million square kilometers of farmland in Europe unproductive. With a 5-meter water rise, 23 million people will need to move upward and 95,000 square kilometers of land will disappear under water. Flood will also intensify, and the mostly monocultural high-ground forest will succumb to drought and disease. Why are people not thinking about this event-structure systemically?** ***Peninsula Europe: Part IV*** **makes an ecologically designed attempt to do just this.**

ened conditions, and then typically fires come.

[Newton] So the question is what to do. And our responsibility seems to be generating transformation at a scale appropriate to the problem. The point is, we can lay the concept on the table to get the ball rolling. How does one start the ball rolling? Well, we have written to some of our ecologist friends and they have promised to work with us if funds come. No funds have come. Everyone likes microbiology, gene structures and all kinds of stuff. They don't like composing with messy and unpredictable ensembles like a species pallet.

[Helen] Let's start with the story underlying the work *Peninsula Europe.* We got a telephone call from the head of the Schweisfurth Stiftung, Franz-Theo Gottwald, requesting that we write a book.

[Newton] The subject matter was the Hanover World's Fair, 2000. The whole thing was complex and kind of humorous, since it appeared that 10 authors, ourselves among them, were being asked to write 10 books semi-protesting the presentations at the World's Fair.

[Helen] The Hanover World's Fair was supposedly about the future of Europe from a green perspective, and the producers at first of course were thinking green—ecology and the environment and all those good ideas. And then what happened was that they gave the food section to McDonalds.

[Laughter]

[Newton] What had happened was that a banker took over. Suddenly, the people in charge wanted to charge exhibitors at the Fair $100 per square foot for exhibition space. The whole issue was to make money. This caused a ruckus.

[Helen] As a result, what happened was that one day we received the phone call from Franz-Theo. He said, "You have done so many works on the European environment, can you do something else? Can you write a book on the future of the European environment?" We said, "No. We don't write books, we make exhibitions." And he said, "Well, You're going to want to do this." Again we said, "No."

[Newton] However, he then told us what this book was for—the group wanted to commission 10 books by 10 different authors to show what the Hanover World's Fair exhibition should have been, and our book would be about the landscape.

[Helen] Actually, he called us up three or four times, each time pressuring us to write a book, and each time we would say no.

[Newton] Then, in order to get out of this scary task, I asked him to double what he was offering us and he did!

[Helen] So we said, "Yes, we'll do it."

[Laughter]

[Newton] We said, "We'll do a book, provided we can find out what the European peninsula is, what its boundaries are." That's how we got to Peninsula Europe as a geophysical field. And that's how we came to do a book called *Grüne Landschaften. Vision: Die Welt als Garten* [2]. We wrote it in English (as *Green Landscape: The World Is a Garden),* but it was translated and published in German with all the other books.

[Helen] Finally Franz-Theo said, "Of all the books, yours is the only one which proposed action. Everyone else observed, criticized, or said simply what needed to be done."

[Peter] Yes. That is the difference—between you and other artists. Very few of them ever propose action. That book you are talking about—you wrote it in English. Will it be published in the U.S. too?

[Helen] No. If we could find a publisher we would—although we'd have to rewrite it and significantly revise it, as so much new research has been put on the table.

[Newton] Anyway, to go back to Helen. She was saying that Franz-Theo commented, "You were the only ones that made a proposal," and afterward he said, "What do you want to do with this proposal?"

[Helen] So we said, "Let's do what all artists do, and transform the proposal into an exhibition," which is often how we bring our ideas to pass.

[Newton] Then there is something else that happened here. We said to him, "We will only do this exhibition if you will bring together six or seven major figures from Europe: economists, ecologists and so on," to see if this diversity of people finds our concepts credible.

[Helen] Most obdurate of this bunch was the Acting Inspector General for Environment and Atomic Energy from the EU. He said that he would only support it if he knew where funding could come from, since we were actually making what looked like a 100-billion-Euro proposal. And thereafter Newton said that the ecological regeneration of the high grounds would protect and enhance an endangered trans-European water system and, over a 50-year period, we were looking at a gain of considerably more than 100 billion Euros.

[Newton] And with that answer, they all came together. In addition we were finally, briefly able to speak to the cultural section of the European Union parliament.

[Peter] How was that received?

[Newton] Poorly.

[Laughter]

[Peter] Meaning what?

[Helen] Meaning . . . they did not believe us.

[Newton] The problem was we were dealing with politicians. They are very much in the now. It was 2000 when we addressed them. They just didn't want to think about the scale we were talking about.

[Helen] So you can see the complexity with which we work. Go back and think about great paintings. At least from our perspective, they were in fact complex, multi-leveled fields of play.

[Peter] Yes.

[Newton] For instance, does everybody know how Rembrandt was able to make so many of his figures look like they were casting their own light? It's about light constancy. You see—look at the light here on our faces. We are all used to seeing this amount of brightness on our faces. Now, if I made your face much brighter, it would look fake and corny, because in fact you would have a spiritualized Peter, so to speak, or a madly melodramatic Helen. But if I made your face a little bit brighter, then you will appear as glowing. What Rembrandt understood was light constancy, and he broke that constancy into the smallest possible amounts. That is how he was able to make the light appear to emerge from people's faces. That is one of the things we learned and that applies to this work. We break constancies—but never arbitrarily.

[Helen] But all the great artists have done this in one form or another. In a similar vein, but still more complex, we saw something in Donatello's Magdalene in the [Florence] Baptistery.

[Newton] Yes, Mary Magdalene was often seen as a highly sexualized figure, an excuse for a kind of semi-soft-core porn, expressed amidst all the rest of the serious material, Jesus on the cross etc. But Donatello breaks this constant, by conferring on the Magdalene a Christ-like status.

[Helen] And it's a transformation that is absolutely marvelous—where Donatello in his depiction makes something apparently ugly become, upon second and third look, rich, beautiful, even astonishing.

Fig. 5. ***Sierra Nevada*****, installation view, Ronald Feldman Fine Arts, 2011. (© Helen and Newton Harrison. Photo courtesy Ronald Feldman Fine Arts.) The 44-ft floor image was constructed to represent the 28,000-square-mile footprint of the Sierra Nevada in answer to the question; How big is here? Physically, its intention was, metaphorically speaking, to walk the mountain range. The images of the watersheds on the wall and a number of other pieces not in this installation are the basis for a work entitled** ***Sierra Nevada: An Adaptation.*** **Embedded in the work is a question: Are there ecologically available responses that will, in good part, replace the value provided by the disappearing glaciers to the river systems and to the human cultures they support? The proposed concept will be tested in the 9,000-acre Sagehen Creek nature reserve. The initiator of this work, the Nevada Museum of Art, has committed to a 50-year project and exhibited this work through November 2011.**

[Newton] There is a level of formal daring in it that is shocking. The Magdalene is carved out of wood, and her hair shirt also has bark-like, tree-like properties, so he's telling you it's made out of wood. But then, if you look at the figure from another perspective, it twists in a slow spiral that prefigures the more highly articulated Renaissance spiral, which refers to ever-enlarging aspiration. Conversely, when you look at the hands and triangular shapes embedded in so much of the form, even the bags under her eyes (but the hands particularly)—these refer to the attenuated triangular shape of the medieval spire.

[Peter] Yes.

[Newton] He manages to locate the pivot point between the medieval and the Renaissance—reflecting the one and prefiguring the other in a single figure while debating church doctrine on the historic Mary Magdalene and, we believe, women in general. Donatello taught us to be totally unafraid of complexity.

[Helen] He was the only artist in that whole period who respected women. Indeed we argue that the Magdalene was the first feminist statement in the history of modern art. I also think his *Judith with the Head of Holofernes* had some of these properties.

[Peter] So your own work is rooted or grounded in—or has beginning points from looking at, thinking about and experiencing—the great art of the past. I see you analyzing it and putting it to use.

[Newton] And taking ownership. We don't copy form—we take permission from the intention. So we thought it would be useful to digress here, so that you can see why we too debate norms, why we would want to break constancy, and how one gets to take on complexity. And finally to acknowledge our debt to the Bauhaus, because they introduced utilitarianism into the art-making process, while at the same time attempting to make everyday life a bit better by finding the artist in everyday people.

[Peter] Well, I have to disagree with you about that, because the Bauhaus was primarily a school—it was about education. It was about educating the whole person in the intellectual years rather creatively. It was a school—you can't forget that.

[Helen] Well Peter, as a scholar and growing up in art in that era, you certainly know more about it than we do. However, in 1970, when we took up the issue of survival and introduced utilitarianism by generating mini-farming systems to feed ourselves and others, we may well have taken only a portion of an education system. However, we took what we needed, and we didn't need their whole system.

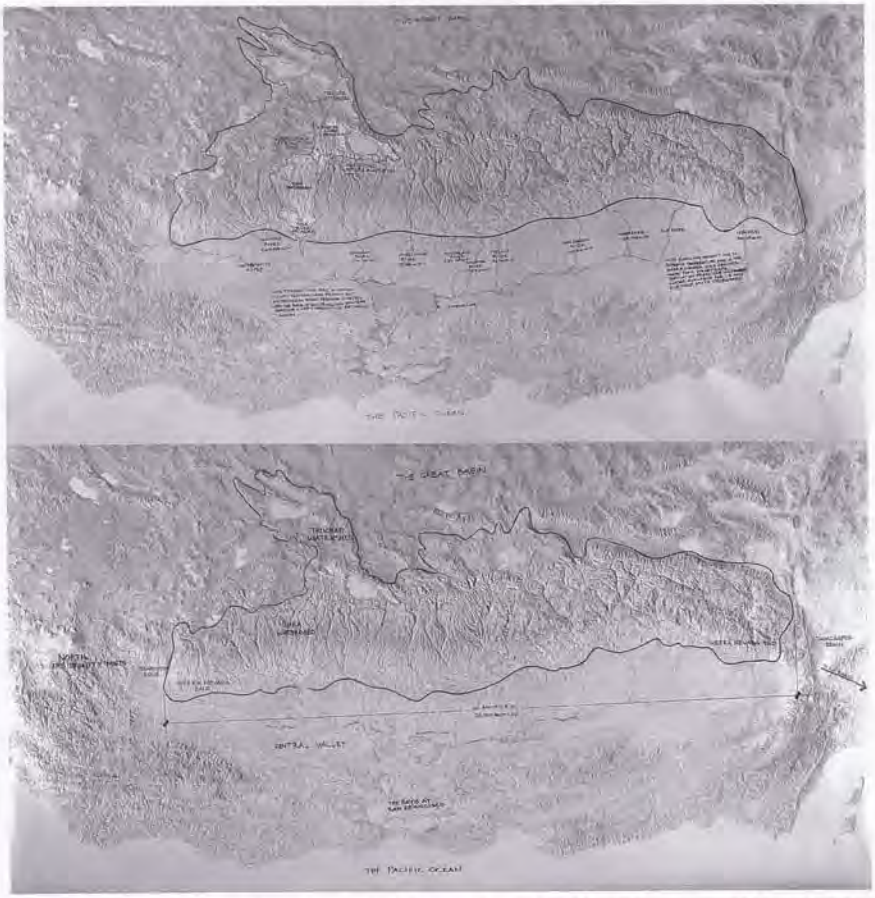

Fig. 6. *Sierra Nevada: An Adaptation* **(exhibition), A Sort of Table of Contents, 2011. (© Helen and Newton Harrison. Photo courtesy Ronald Feldman Fine Arts.) This piece contextualizes the mountain range, suggesting its importance to the Central Valley of California and how the Central Valley itself might respond to an ocean rise of approximately 10 feet.**

[Newton] I'm remembering when we took a decision to do no work that did not, in some way, benefit the ecosystem.

[Helen] And it took about 3 years for us to get some grasp of how complex the ecosystem was, and how niches formed.

[Newton] To move into systems language a bit, we needed to grasp how systems nested within each other, always moving backward to the bacteria or moving forward in complexity to, say, the thermoclime of the North Pacific Gyre or for that matter a human being.

[Peter] Why don't you say something about survival art?

[Susannah] I was going to turn the conversation towards the message of the life source within humans impelling them possibly to understand the bigger picture. Your work is always moving, starting with the cave drawings, which you've said were letters left to us somehow.

[Newton] Many years ago we had a conversation with David Antin about the cave paintings in Lascaux. I was saying that I looked at them as ritualized expressions that had embedded in them survival instructions, possibly hunting instructions. They suggest, in a rather magical way in part, how to live in the real world—and they are rather magical. David said, no, you have to imagine there is a fire in there.

[Peter shakes head]

[Helen] David said, If you imagine there were fires in the cave, the flickering light and flickering shadows with people moving about, one could imagine one was experiencing a primitive movie.

[Newton] So I told David: Well, David, how 'bout it is a primitive movie about survival instructions? [Everyone laughs.] It never went further than that.

[Peter] Well, I'm not sure there were fires in the caves. But I think that the first article I wrote about you was entitled "Art as a Matter of Instructions." I think it was about 30 years ago and I think it is even truer now—as your work is more serious now.

[Newton] If you look at our work, you will find that we successively define survival at larger and larger scales. If you look at the *Fish Farm*—the question in

that work was, "How are we going to feed ourselves?" Then, 7 years later, we did the *Sacramento Meditations*, which takes issue with the so-called Green Revolution in farming—which encouraged a vast system of water abuse.

[Helen] In fact, the whole system at work in the [California] Central Valley has self-canceling qualities in the long term. So then, the question transformed itself in our minds into, "How ARE we going to survive?" The WE being all and everything.

[Peter] How did you get onto the *Fish Farm* idea—is that one of the first things you did? In London of all places?

[Newton] In April 1971, Maurice Tuchman took me outside to the courtyard of the LA County Museum and showed me two large decorative ponds where they used algaecides to kill algae and maintain the purity of the water. He asked me to do an outdoor piece between the waters.

[Helen] Neither of us liked the idea of algaecide. So Newton proposed making something that lives in water, as a sort of visual and material argument about what was happening in these two ponds on either side of the courtyard.

[Newton] I went to the algological group at the Scripps Institute of Oceanography, which was part of UC San Diego, where I was teaching. And I asked if they knew any species of algae that did things like change or generate color. It was a real old-fashioned formalist question. So Mike Mullen and Richard Eppley, the algologists there, told me to fly over the San Francisco salt works and to come back to have a conversation.

[Helen] Over San Francisco Bay.

[Newton] So I take the flight, look down and see red ponds, ponds the color of adobe, clear ponds and some with several shades of green. Eppley and Mullen explained that there is an alga called Dunaliella, and the saltier the water gets, the redder the algae gets, because this particular algae generates carotene to help it survive. And when the water becomes mostly clear, it often means there is a tiny crustacean, *Artemia* or brine shrimp, that has eaten much of the algae—and that brine shrimp/algae transaction is perhaps one of the simplest ecosystems in the world.

[Helen] So Maurice, after rejecting a number of other artists, asked Newton what he would do with the space.

[Newton] And I said to Maurice, How about we do a little something called *Notations on the Eco System of the Western Salt Waters with the Inclusion of Brine Shrimp?* And a number of ironies emerged from doing this work. One was that it generated more and more algae—while the museum was trying to kill all the algae in their own ponds. The next thing that happened was that the piece became stronger and stronger, while many of the works inside the exhibition, electronically driven, got weaker and weaker, because electronic systems break down over time. Ours relied on the sun as its engine, which is not likely to break down for quite some time.

[Helen] You've left out another irony, which is that we did this work for $700, when everything else in the museum cost $50,000 and up. Actually many saw this work as a critique of the rest of the exhibition, including Newton's *Artificial Aurora*, which was inside the museum.

[Peter] I remember it was very beautiful.

[Newton] Then Maurice did a show in London at the Haywood Gallery called 11 LA Artists; he asked me to do something there, and I said, Let's do a portable fish farm. So I started to experiment with fish farms in tanks almost as big as this room.

[Helen] And remember, this was at the very beginning of our collaboration, with Newton doing most of the installations and I doing much of the research and performance. At any rate, we began to look for creatures that could survive museum conditions.

[Newton] The real issue for us was a question of backyard farming.

[Helen] During that period, 1970–1972, in a body of work titled *The Survival Pieces*, we did portable fish farms, portable orchards, a hog pasture, worm farm, portable flat pastures and upright pastures. They all ended up in museums. They were all about how urban dwellers might feed themselves, and all about lost information and retrieving survival skills. Actually these works were reproduced in their totality in the Radical Nature show at the Barbican in London last year [2009]. And over the past 40 years our work has moved from personal survival to the survival of whole systems.

[Newton] And that's what you see in the *Force Majeure* works: *Peninsula Europe: Part IV, Tibet Is the High Ground, Sierra Nevada* (Figs 5–7). In fact, early in *The Lagoon Cycle* we talk about mathematician René Thom's use of the term "change of state" which, to our mind now, seems like a phase shift—although the term *phase shift* comes from physics. And that's how we see the difference between our work prior to *The Force Majeure* and afterwards.

[Helen] Yes, phase shift. How does all this feel to you, Peter?

[Peter] Very good, I think we got back to where we started at the beginning—at the end we pick up the beginning.

[Susannah] OK. We didn't mention

Fig. 7. The Independence Lake watershed site, where the first concept of adaptation at scale was designed as part of *Sierra Nevada: An Adaptation*. (© Helen and Newton Harrison. Photo courtesy Ronald Feldman Fine Arts.) The concepts embedded in this work are being transferred to the next watershed over, University of California's Sagehen Creek Field Station nature reserve, to be enacted on the ground. A 4-minute animation was made for this work. See <www.youtube.com/watch?v=S8bfyVmRwjw>.

Leonardo. We did Michelangelo and Donatello.

[Newton] Enough has been said about Picasso, right?! [Laughter]

[Helen] I would like to end with some thoughts on one of the last images in *The Seventh Lagoon*—one of the last images we did for *The Lagoon Cycle*, written in 1978.

[Newton] In this last work of *The Lagoon Cycle* we refer to Leonardo's last drawings, often called "Storm Drawings."

[Helen] They are about turbulent waters, and waters as far as the eye can see. We understand this to be Leonardo's prophecy. And we take permission then to make that kind of prophecy ourselves. Except Leonardo's was metaphysical and ours is both literal and very physical.

Brief Excerpts from *The Seventh Lagoon*

And the waters will rise slowly
at the boundary
at the edge
redrawing that boundary
continually
moment by moment
all over
altogether
all at once

It is a graceful drawing and redrawing
this response to the millennia of the
making of fire

—

And in this new beginning
this continuously rebeginning
will you feed me when my lands can
no longer produce?
and will I house you
when your lands are covered with
water?
and together
we will withdraw
as the waters rise

Afterword

In August 2011, the Harrison Studio received approval to establish The Center for Force Majeure Studies on the campus of the University of California at Santa Cruz. The mission of the Center is to generate long-term research projects that address the emerging stresses of the Earth's largest ecosystems by conjoining the processes of art-making and the sciences within the perspective of the Harrisons' work. The Center will both reach out to cultural and educational institutions and execute on-the-ground projects. Here the legal term *force majeure* designates the co-evolving set of circumstances set in motion by human overuse and pollution of planetary resources and resultant climate change, imperiling the survival of both human cultures and ecosystems as we now know them.

Complexity theory suggests that multidimensional problems do not yield, or find resolution with, simple cause-and-effect solutions, such as putting iron filings in the ocean, using the ocean floor as a carbon sink through algae uptake systems, burying CO_2 underground, substituting atomic energy for coal, and the like. We have come to believe that problems such as the reformatting of the global weather systems from the predictable Holocene to the unpredictable Anthropocene must be met by a whole-systems approach. We believe that human well-being in our shared and uncertain future will require adaptation on a vast scale, both ecologically and culturally. The formation of the Center will manifest this belief in physical terms.

The Center will engage in studies of "adaptation at scale," a core aspect of the *Force Majeure* project. This large-scale perspective will be maintained in examining the likely outcomes of glacial melt in the Sierra Nevada, the Tibetan Plateau and the trans-European mountain ranges and confronts the following question, which implicates large-scale regional planning and ecostructural design that must be supported at policy levels:

Are there ecologically available responses that will, in good part, replace the value provided by the disappearing glaciers to the river systems and to the human cultures they support?

1. Toward answering this question in several geographies, the Center will evaluate sites of glacial melt for management of plant species adaptable to new climate conditions and capable of generating enhanced topsoil and water retention. Paleo-botanical research will identify species extant in the affected regions when climates were equivalent to those projected. Newly revealed glacial earths will be examined and a viable first succession conceived. More careful exploration of the hydrology of carbon sponge dynamics is to add value to the system. Possibilities for carbon sequestration will be estimated at grand scales, e.g. were the Tibetan Plateau to be significantly regenerated using the evolving principles of the Harrison Studio.

2. In further search of an answer to the above question, the Harrison Studio, the Nevada Museum of Art and the 9,000-acre Sagehen Creek Field Station of the University of California are engaged in a 50-year research project that is at once a work of art, a work of science and bioregional planning and a call for policy change. It also has an educational function, both at university levels and for the public, and is designed so as to deepen public engagement and inform public policy.

The project's 50-year research program will require several generations of artists/scientists/thinkers to bring to a useful conclusion. We envision the Center as a legacy process and expect to begin a transfer of leadership within the next four or five years.

Acknowledgment

In conjunction with the Harrisons' *Greenhouse Britain* and *Force Majeure* exhibition, held 10 December 2009 through 27 February 2010 at Kala Art Institute in Berkeley, California, artist and educator Susannah Hays facilitated and contributed to the above interview on 31 January 2010 and moderated the associated 20 February 2010 symposium "Transformative Processes in Environmental Art" with panelists John Roloff, Robert Dawson, Greg Niemeyer, Chris Chafe and Sam Bower.

References and Notes

Unedited references as provided by the authors.

1. Artist Susannah Hays also contributed to this interview.

2. Helen Mayer Harrison and Newton Harrison, *Grüne Landschaften. Vision: Die Welt als Garten* (Frankfurt/New York: Campus Verlag, 1999).

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Mckee, Yates. "Helen Meyer Harrison and Newton Harrison: Ronald Feldman Fine Arts." *Artforum* XLIX, no. 8 (March 2011): 216-217.

Helen Mayer Harrison and Newton Harrison

RONALD FELDMAN FINE ARTS

For figures from John Muir to Ansel Adams and beyond, the Sierra Nevada has long been a locus classicus of the American wilderness sublime. Traditionally represented as a sacred zone of untouched nature standing outside of human history, the transcendentalist landscape imaginary of the Sierra in fact developed in tandem with a range of biopolitical technologies concerning the government of populations, territories, and resources. Ranging from the imperial survey photography of Timothy O'Sullivan to Adams's own work for the Department of the Interior, this ambivalent history shadows "Sierra Nevada: An Adaptation," the recent exhibition by Helen Mayer Harrison and Newton Harrison at Ronald Feldman Fine Arts.

View of "Helen Mayer Harrison and Newton Harrison," 2011.

Since the early 1970s, the work of the Harrisons has involved a similar antinomy between a quasi-Romantic poetics of the earth, on one hand, and the notion of the artist as ecosystems manager advanced by their early interlocutor Jack Burnham in *Beyond Modern Sculpture* (1968), on the other. Though their practice has always approached landscapes in terms of expanded systems rather than bounded sites, in their recent work they take on a radically new sense of time and scale, dealing with the planetwide crisis of "anthropogenic," or "man-made," climate change. Suggesting both an evolutionary adjustment and an artistic translation, their current project imagines an "adaptation" of the Sierra to the climate-related crises that are likely to affect it in the coming decades (glacial melting, topsoil erosion, drought, fire, and downriver flooding). The project was announced as a "50-year collaboration" with the Center for Art + Environment at the Nevada Museum of Art, a conceptually significant expansion of the time horizon for an artwork, attuning its audience to the long-term, intergenerational ramifications of global warming.

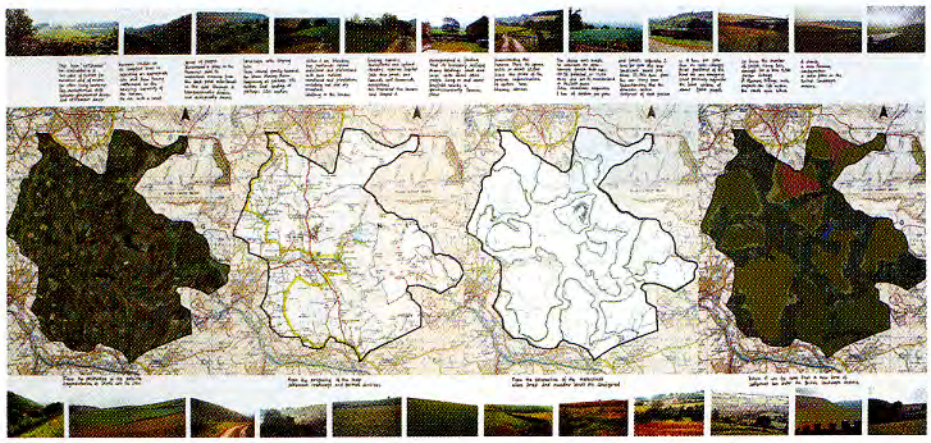
The centerpiece of the exhibition was an enormous satellite photograph of the Sierra laid out across the length of the gallery floor in such a way that the viewer was bound to physically tread across it in looking at other works in the show. Issuing an invitation to WALK THE SIERRA (shades of Muir's famous trek), the installation involved a perspectival, scalar, and locational disorientation, substituting the monolithic sublimity of Adams's canonical photograph *Half-Dome* with a digitized expanse of topographic patterns and traces that confounded any distinction between natural and man-made landscape. Indeed, the Sierra constitutes a kind of transitional geography, marked not only by two centuries of logging, grazing, and tourism, but also by the unintentional carbon footprint of global capitalist development in which we as viewers and consumers are implicated.

The rest of the exhibition was devoted to imagining a large-scale "adaptive response" to ramifications of climate crisis in the Sierra. This involved two silent animations imagining a massive pilot project for recovering topsoil at a designated "adaptation site," which would be part of a proposed "Sierra Nevada drain basin authority to look after the well-being of the whole." The animations were flat-footed aesthetically, but the experience of watching them was marked by the unrelenting clacking of a metronome installed on a separate wall; the latter created a surprisingly unnerving ambience at once sonic and temporal, calling to mind an alarm clock or a time bomb.

Despite the urgent tone and expansive vision of the project, certain critical questions need to be posed. For instance, we learn little from the exhibition about the actual policies and actors currently involved in the region for which the artists' speculative-visionary proposal is designed. Further, while concerned with *adapting* to climate change, the show does not address how this capitalist-driven eco-emergency and its uneven human fallout might be *combated* in political terms. Echoing Buckminster Fuller and Joseph Beuys, the Harrisons appeal to the ecological fate of a generic humanity, thus neutralizing questions of environmental inequality, conflict, and justice. While they call for the collaborative participation of a range of "stakeholders," they describe their proposal as a "symphony of effort" that "creates a consensus to proceed"—what Miwon Kwon has called an "operative community" rather than a dissensual public sphere. This is a critical difference between the Harrisons and their younger colleagues who are involved with the politico-ecological turn at work in contemporary art such as Allora/Calzadilla, Amy Balkin, Matthew Friday, and the Yes Men. That said, the Harrisons' "Sierra Nevada" nevertheless stands as a remarkable remediation of an art-historical locus classicus that is quite literally losing ground as we speak.

—*Yates McKee*

Lebowitz, Cathy. "Newton Harrison and Helen Mayer Harrison." *Art in America* 97, no. 5 (May 2009): 152, 154.



Newton Harrison and Helen Mayer Harrison: *Greenhouse Britain: Pennine Variation II*, 2008, ink, oil and colored pencil on vinyl, 36¼ by 78⅜ inches; at Ronald Feldman.

NEWTON HARRISON AND HELEN MAYER HARRISON

RONALD FELDMAN

Ahead of the curve, Newton and Helen Mayer Harrison started addressing global warming in 1974. Over the years, working with scientists, architects, artists and city planners, among others, they have completed scores of collaborative designs that offer possible geopolitical solutions to ecological problems. Taking on a river system or an entire continent, their practice entails intense research into the specific circumstances of a place. As stated on their website (theharrisonstudio.net), their work begins when they "perceive an anomaly in the environment that is the result of opposing beliefs or contradictory metaphors." For exhibitions, the visual display consists largely of maps, audiovisual illustrations and written statements. The Harrisons' bold plans—the execution of which largely depends on regional governing bodies (for example, watershed and zoning authorities)—have led in some instances to practical implementation and legislative policy change.

A recent show at Ronald Feldman presented the five exhibits constituting "Greenhouse Britain" (2006-09). At the invitation of environmental artist and activist David Haley (senior research fellow at Manchester Metropolitan University), the Harrisons studied the effects of rising sea levels on Britain and explored the feasibility of moving populations to higher ground in determined, sustainable ways. Funding for the project came from local governmental and private sources and totaled approximately $380,000. A 13½-foot-long white platform in the shape of the title island was illuminated by ceiling projectors that beam down landmasses in green and water bodies in blue. Over several minutes, the waters surge and the coastline is greatly reduced. An audiotrack describes the causes and results of the predicted phenomenon. The second component, *On the Upward Movement of People: A New Pennine Village*, elaborates a plan through photos and text for a 9,000-person, 42-square-mile village located on Britain's Pennine Mountain range. Different types of maps (aerial, road, watershed) indicate the irregular borders of the proposed village; the Harrisons arrived at the area and shape by calculating the amount of forest and meadow necessary to neutralize the carbon output of the inhabitants.

In a 3-minute video animation, the city of Bristol is saved from forecasted flooding instigated by increased ocean levels. The duo proposes the construction of a dam along the Avon River, which would both keep Bristol dry and allow the excess water from storms to be stored for efficient usage. Turning their attention to London in *The Lea Valley: On the Upward Movement of Planning*, the Harrisons use maps and texts to analyze the current built environment within this watershed and suggest high-rise living spaces for one million, to be outfitted with solar power and hanging gardens. A 7½-foot-high architectural model created by ATOPIA architects expands the Harrisons' vision of vertical habitation, articulating the details of an open-air multipurpose structure and how people could move through it comfortably.

Seven other works were shown in the back gallery. The earliest was *From the 7th Lagoon, The Ring of Fire, The Ring of Water* (1978) and the most recent a 7-foot-high map of the Tibetan plateau (2009), which highlights the changes its seven rivers will undergo from melting glaciers. This one-room survey, even with only a trace of each project, communicated a sense of the Harrisons' more than 30-year commitment to creative thinking on a grand scale.

—Cathy Lebowitz

Hughes, Jon. "What if life imitated art?"
Ecologist (December/January 2008): 32-37.

An artist's mind is not bound by the same conventions and limitations as that of a scientist. **Jon Hughes** meets the Harrisons, activist artists with a radical vision for lifting the world out of environmental disaster

What if life imitated art?

Percy Bysshe and Mary, Rodin and Camille, Sidney and Beatrice, Sartre and De Beauvoir, John and Yoko. Couples all; original thinkers all. Add to that pub-quiz pantheon of connubial collaboration Newton and Helen Mayer, the Harrisons. They are not well known in today's celebrity circus but are world-renowned. As? Conceptual artists. Not your typical White Cube gallery conceptual artists, though: activist conceptual artists.

'Too self-referential, not enough activism,' is their opinion of the current 'modern' art scene in Britain. Chimes with me. 'Maybe you need an activist arts council,' they suggest. You sense they are disappointed with Sir Nicholas Serota, the UK king of conceptualism as the head of Tate Britain and the Turner Prize.

One of the young Mr Serota's first jobs in the art world was working as an assistant to the Harrisons back in the early 1970s, when they were among the first artists invited to exhibit at the then-cutting edge Hayward Gallery.

Fish Feast caused a furore. In the most simplistic terms it involved a series of interconnected fish tanks stocked with catfish, which the Harrisons intermittently electrocuted and fed to the masses. It was a comment on sustainability and man's ability to feed himself, with obvious religious inferences. The late Spike Milligan was moved to throw a brick at the gallery in protest at the perceived cruelty. The fledgling tabloids had a field day. Lord Goodman, who had recently resolved the crisis in Rhodesia, was asked to judge whether it was offensive and would disturb children.

'He arrived at the gallery and said "We have a problem that needs to be ironed out",' recalls Newton. 'So I said, "You think we're the problem and you're the iron?"'

The show went on with all the ubiquitous warnings we are so used to today. With the world shaken by the barbarism of the Vietnam War and living in the shadow of the Cold War, the irony of the situation was not lost on the Harrisons.

An elegant retreat

I met the Harrisons at an event hosted by CIWEM (the Chartered Institute of Water and Environment Management) called 'Art in the Environment'. I had little appetite for proceedings having left the office with the news wires buzzing with warnings from scientists such as Tim Flannery and the IPCC that climate change was accelerating faster than any of the climate models had previously envisaged. As though artists could change the world in time. Fiddling. Rome. Burns. Whatever.

Yet earlier in the day the Harrisons had addressed the conference about their conceptual triptych, *Greenhouse Britain: Losing Ground, Gaining Wisdom*. It was the talk of the great and good that night at the Millbank Suite of the City Inn Hotel, Westminster.

The work details an elegant retreat. What a striking image those three words conjure up in these exhausted and threatening times: a retreat from unsustainable global economic model; a retreat in the face of climate change; a retreat into a new world.

The Harrisons' is an inspirational response to the fatalism that paralyses a great many of us, prevents us confronting the truth about the point at which we have arrived, and they have articulated the problem with the timeless precision of poets. The notion resonates with the possibilities that naturally occur at pivotal moments in history, when battle's done – in this case our battle to control the environment lost and our battle to save the planet joined. What a perfect distillation of where we're at. And theirs is a perfect response.

'It's [climate change] happening. Better we prepare for an elegant retreat than wait for a panic,' observes Newton. 'We suggest that existing plans for greenhouse

emissions control will be insufficient to keep the temperature rise at 2°C or less. In fact, we believe the tipping point is past. In this context, the rising ocean becomes a form determinant.

'By that we mean the rising ocean will determine many of the new forms that culture, industry and many other elements of civilisation will have to take. There is another piece of this picture that we wish to give voice to; that is, up until this present rising of the world's oceans, the creators of Western civilisation have held and enacted the belief that all limitations in the physical world, particularly in the ecological world, are there to be used and overcome.

'We think that the rising ocean is an opportunity for transformation, but it is exactly the reverse of a new frontier to overcome from civilisation's perspective; now, from the ocean's perspective, its boundary is perhaps a continuing, evolving, transforming new frontier. Therefore, assuming a rapid rise of waters, even for a modest 5m in 100 years, there are apparently no models of precedence, no information, design nor planning on the table, with the exception of ocean defences and typical development models, albeit more energy-efficient ones. It is the intention of *Greenhouse Britain* to begin generating the thinking, the design, perhaps the new belief structure, perhaps even indicating new economic structures that may be required for the democratic dispersal of support for an upward-moving population within the context of a gradually shrinking landmass.'

Above: A square tank, the 'Second Lagoon' in *The Lagoon Cycle*, was used to home mangrove crabs and chart their progress. The artists consider it a metaphor for alienation, for violation, for breaking the integrity of an ecological system

A graceful philosophy

Newton and Helen are in their seventies and have been collaborating since the late 1960s, when they both arrived at the University of California, San Diego, Newton as Professor of Art and Helen as Director of Educational Programmes. Newton is a sculptor, apprenticed in New York at the age of 14 to Michael Lantz – 'he was a fascist sculptor, all muscular horses and strong men'. By 16, Newton was an accomplished artist; he had already mastered hands, which are a perennial stumbling block for many. Helen comes from an 'intellectual family', a Chaucer scholar who studied philosophy of education, sociology and anthropology.

The catalyst for their decision to become eco artists was the publication of Rachel Carson's *Silent Spring*. Carson's seminal work detailed the environmental destruction that was occurring as a result of the industrialisation of agriculture – the green revolution – and consumerism, and which posed a lethal threat to mankind.

'Carson's book haunted me constantly,' recalls Helen.

'It was then, around 1970-1971, that we decided not to work if it didn't benefit the life-web,' adds Newton.

And so they became, uniquely at that time, eco artists – activist eco artists. Even in those radical times it was a decision that was considered revolutionary. The issue of the day across the Western world at that time was 'class struggle'. The Harrisons were accused of selling out by their then-colleague Herbert Marcuse, a revered theoretician of the left. The exchange between Marcuse and Newton is

Above: The grandeur and destruction of the US's last great temperate rain forest, its conifer giants clear cut to destruction, is shown in the couple's *The Serpentine Lattice* (1993)

recorded in a pamphlet describing the Harrisons' work, entitled *From There To Here*.

'Marcuse said
with some force and at much greater length,
"Your work on ecosystems is a form of repressive de-sublimation
which takes energy away from the real issue
which is the class struggle."

'I said,
Improvising quickly,
"The whole ecosystem can be seen as an unacknowledged
endlessly exploited
underclass."'

Such stylised conversational language is a hallmark of the Harrisons' pieces, following in the tradition of 'reportage' that runs from Plato to Pinter, via Chaucer's *Canterbury Tales* of course.

The works the Harrisons did in their formative years as collaborators they refer to as the Survival Series, and include the infamous Hayward *Fish Feast* and others such as *Portable Orchard*, where they grew citrus fruit as an ironic response to the destruction of local orchards by massive development in Orange County, a plush satellite of Los Angeles. While some of the Harrisons' trees still survive intact in their original form outside the gallery, the vast acres of orchard that gave Orange County its name are now only a memory.

'We made portable fish farms, worm farms, orchards — we made soil for one installation,' explains Helen. 'They were done in part to teach ourselves, as urban people from New York, how to grow things, principally our own food. However, the process involved in doing so quickly revealed ethical issues and ecological contradictions; the interconnectedness of things and causal relationships.'

This gave rise to a new 'deeper conversation' between the two artists and resulted in the vast, semi-autobiographical work *The Lagoon Cycle*; a 300ft-long mural, 8ft high, in more than 60 parts, commanding 5,000 sq ft across seven rooms. This epic work, now in the Centre Pompidou collection, was to take 10 years to complete, between 1974 and 1984, and was the couple's first wholesale cultural assault on systems management and the hubris of man in thinking he could do nature better. Even then the couple were talking about a 'graceful' recognition of our errors, as the noted art historian and critic Carter Ratcliff observed in his introductory essay to the book recording the piece:

'Everything is in flux, as few have failed to notice since the time of Heraclitus. The question is how to envision change; then what to do with one's vision. Modernity begins with belief, first articulated by 18th-century philosophers and revolutionaries, that cyclical

change can be converted into progress, a straight-ahead advance to the perfection of humanity and the world. The Harrisons' Cycle responds to the failures of all our visions of perfectability.'

You can't square the circle of nature.

From there to here

While developing *The Lagoon Cycle*, the Harrisons produced another work that was to prove integral to their developing philosophy and is evident in their approach taken in *Greenhouse Britain*. *The Sacramento Meditations* was the Harrisons' response to the condition of the land in their own back yard, and centred around the San Francisco delta. It was, however, the first work they did that had no central image, unless, as they observe in *From There To Here*, 'one could consider the repeated use of images of the state and of the central valley within it as a central image. Our presentation took the form of nine hand-worked maps from various resources agencies and several regular maps of the state of California with the central valley coloured in. These variously represented the state of the farming, the soil conditions, the systems of land division and the water use in the central valley.' In that sense it was very Warholian and equally as iconic as that artist's Marilyn series.

Deriving an iconic image from whatever landscape they are in has subsequently become central to the Harrisons' pieces – as has the desire, as they put it, 'to create works of art to leap out of the gallery and into reality', something that was also evident in *The Sacramento Meditations*.

In 1976-1977, at the height of the punk explosion in the UK, they were overt in going far beyond the gallery walls of the San Francisco Museum of Modern Art.

'There were TV and radio presentations of the dialogue and a city-wide poster campaign asking questions such as "For instance, if..." and ending with "What if all the irrigated farming isn't necessary?" And a graffiti campaign was mounted with various comments such as "Somebody's crazy – they're draining the swamps and growing rice in the desert" and "He who builds on a flood plain must be prepared to be visited by water."'

In the process of making these works, the Harrisons developed their concept and quickly came to realise that the installations alone simply were not adequate to carry all the information required to present whole systems.

So they began to use text, photographs, drawn or painted images and latterly maps, satellite images and climate models to drive the pieces. The narrative comes from the conversations between Newton and Helen, the engineer and the poet, the lagoon-maker and the witness, modern-day Homers on their own green odyssey, looking at what is possible and what is sustainable, using the land and its natural resources as a guide. *The Lagoon Cycle* is variously described as being a Hollywood storyboard or book, with its seven chapters, powerful dialogue and philosophical commentary.

The acclaim they received for these two works launched the Harrisons on to the international stage, and they were subsequently invited to address ecologically troubled areas around the world – 'too many' – including, among their prolific output, *Breathing Space for the Sava* in Croatia, *The Mulde Watershed* in Germany, *Peninsula Europe*, *The Serpentine Lattice* in the US, *Vision for the Green Heart of Holland* and now *Greenhouse Britain: Losing Ground, Gaining Wisdom*.

A new settlement

'We only go where we're invited,' says Newton.

'And we only go where we are welcomed by the community leaders of wherever we may be,' he continues. 'The authorities.'

Defra, that sprawling, incoherent, overwhelmed department of government responsible for environment, food and rural affairs, has funded *Greenhouse Britain*.

'We are sadly never short of invitations, but initially we agree only to go and think,' says Helen.

'And there has to be an urgency,' says Newton. 'Without urgency the vision stays on the gallery walls.'

Which is not the case in Holland, where, with minor modifications, their *Vision for A Green Heart* has all but been adopted, while *The Serpentine Lattice* has been in and out of the Oval Office. Ultimately, however, 'forests don't have a vote or campaign funds and vested interests do'.

The Defra project was an invitation to the Harrisons to create a work that increased awareness of the global warming issue.

The Harrisons' response is the monumental triptych *Greenhouse Britain*. In this they propose three solutions: the upward movement of peoples, retreat and defence, and defence, and they have modelled their iconic installation on three areas: the Pennines, the Thames Gateway and Bristol – vast, illuminating portraits of where we are, what we as people have become as a result of our urbanisation, and the societies

> 'Modern-day Homers on their own green odyssey, the Harrisons are looking at what is possible and sustainable, using the land and its natural resources as a guide'

Above: Bounded by Roman roads and estuaries, a mythic creature is mapped out in Transpennine soil, forestry, pasture and population statistics. *Casting A Green Net: Can It Be We Are Seeing A Dragon?* (1998)

we can and need to create. These three areas were selected as representative of the UK demographic: rural, urban and under particular threat.

The Harrisons are dismissive of the current development plans being pursued across the Pennines and Thames Gateway. In the north of the country, Defra proposes the creation of a super-city, a vast homogenised 15-mile-wide sprawl running from the Humber to the Mersey along the M62. In the south, it envisages simply dumping 200,000 homes along the Thames flood plain. The bulldozers have already moved in, albeit in piecemeal fashion.

'They seem dumb proposals to us,' says Newton. 'We tend to ignore what's happening on the ground – it changes everyday. If you take heed you just end up accommodating it, whereas a vision has to offer a choice. Very often when we argue about "A" or "B", the answer is to look at "C".

'Water rises gracefully,' he continues. 'The question for us is, can we withdraw with equal grace? What would we withdraw into? What would this place look like? How would we behave? Could we invent a new environment, a village-type life that sequesters more carbon than it uses?'

'We use the word "settlement" rather than development – that is important,' says Helen. 'A settlement is where someone puts down roots; people put down roots, animals, plants, trees, insects put their roots down. The different lengths of roots are important to any sustainable ecosystem.'

So the Pennine element of the triptych envisions its resettlement as a series of new villages that respect those that are already there, adhering to their history rather than subsuming them in a concrete corridor. In this instance they have been guided by patterns created by lost dry-stone walls and past settlements, which naturally were created in areas where there was a water supply and fertile soil. These new villages will be built in a way to harness the power of the water courses in the area and stimulate the return of open-canopy forests, which in turn act as a buffer against climate change by sequestering 45 per cent of the carbon emitted by the 8,000 settlers envisaged.

'We only need to sequester half,' explains Newton. 'Any individual or household [through efficiency or conservation] can cut their carbon use by half.'

Integral to the piece is a respect for soil and water, the heart and lungs of the biosphere. Increasingly, both have a recognised economic value, as does carbon, which is why the Harrisons' visions are gaining currency around the world.

The couple number-crunch too, in this instance working with experts such as Professor Robert Nicholls at the Tyndall Centre for Climate Change and Paul Selman, head of landscape architecture at Sheffield University. They calculate that the Pennines can accommodate 70 settlements of 8,000 people. Each would command approximately 40 sq miles, of which 40 per cent would be forest and the remainder diverse meadowland, enough to allow for local sustainable agriculture to deliver on about one-quarter of the community's protein needs, while sequestering carbon.

'The Harrisons' work raises huge metaphysical questions. Evident since *The Lagoon Cycle*, on the most direct level theirs is an environmental audit without compare'

Below: 330ft-long, 8ft high and in more than 60 parts, *The Lagoon Cycle* mural was the Harrisons' first assault on humanity's hubris to think we could improve on nature. It took a decade to complete and resides in the Centre Pompidou collection

The vision doubles the population of the area, accommodating 560,000 people – substantially more than is envisaged by the M62 plan and at no greater expense. We are going to have to build homes in this number to accommodate current and projected shortages, let alone a mass exodus.

'With a sea-level rise of 5m [which some, such as Jim Hansen at NASA, are now predicting by the end of the century] two million people in the UK will have to move upwards.'

In the Thames Gateway the core principles remain the same. Rather than the suburban flood-prone sprawl currently being pursued, the Harrisons see the creation of an open canopy and wetland park between the river and a notional 5m-high flood mark, surrounding 'green statues' and high-rise carbon-neutral buildings (they are well above the 5m mark and unlikely to be flooded) sequestering their own carbon. Basically, they are high-rise towns.

Further, they propose foresting the Lea Valley watershed in order to enhance London's water supply. Like the Pennine proposal, this plan is more financially robust than that which is proposed, and which also benefits the biosphere.

In Bristol they have arrived at a third solution. To save Bristol old town from disappearing below the waves they have reviewed the area's historic water courses and devised a system of damming to hold back rising ocean waters, while redirecting the River Avon itself to above the city, draining off the flood waters and releasing them back into the River Severn above Bristol. The economic imperative is obvious.

The culture of planning

The sheer brilliance of the Harrisons' vision and its presentation is astonishing. The methodology they have devised over the years is inherently democratic and can be applied universally.

The Harrisons' work raises huge metaphysical questions, but, as has been evident since *The Lagoon Cycle*, on the most direct level theirs is an environmental audit without compare, but with many imitators wearing emperor's clothes. Think of the mystifying way corporate social responsibility reports and environmental impact assessment reports are presented.

Investigators are told to follow the money. The Harrisons follow the water and the earth. Through their conceptual art, the couple give the biosphere voting rights and harness its power, rather than fighting against it.

The Harrisons' process exposes a fundamental flaw in how we have grown and threaten to grow as a society. Planning is seen as a bureaucratic issue, when it is inherently a cultural issue, as anyone knows who has seen a superstore open on the edge of their town or a block of flats infilling a local green space. Such events change landscapes and have a cultural impact on where we live and how we conduct our daily lives.

Conversely, the settlements of which the Harrisons speak inherently promote the support network and self-regulation of community that all governments profess to desire. What they do seems simple, as all brilliant things appear to be. They have made available to everyone the ability to see the trees, to become part of a process that is currently impatient, short-term in outlook and clouded in jargon.

It is often the case that original thinkers are only recognised after they have shuffled off this mortal coil. We would be well advised to listen to the Harrisons before we're dead in the water.

***Greenhouse Britain* is currently touring the UK. For exhibition dates, visit www.greenhousebritain.net**

Jon Hughes is Deputy Editor of the *Ecologist*.

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How Big is Here

A Conversation with

Helen Mayer Harrison and Newton Harrison

BY JANE INGRAM ALLEN

Helen Mayer Harrison and Newton Harrison were invited to Taiwan earlier this year by the Council for Cultural Affairs. They gave lectures, toured sites, and held discussions with artists, environmentalists, scientists, government officials, and students and participated in a group exhibition at Taipei Artists Village. A collaborative husband and wife team, the Harrisons have been making art dedicated to improving the environment since the late '60s. Their works are in the collections of such institutions as the Museum of Modern Art, New York; the Centre Pompidou, Paris; the Tel Aviv Museum; the Los Angeles County Museum of Art; the Museum of Contemporary Art, Chicago; and the Palais des Beaux-Arts, Brussels. Their installation-based works usually feature components such as maps, charts, and explanatory texts, but they can also include sculptural elements such as the roof gardens of *Endangered Meadows of Europe*. Helen was trained as an educator and psychologist, and Newton as a painter and sculptor, and both were professors in the visual arts department at the University of California, San Diego for many years. Most of their projects, which span continents and genres, have been in Europe and the U.S., but they have also worked in Israel, Australia, and Asia. Their work is included in "Weather Report: Art & Climate Change" at the Boulder Museum of Contemporary Art through December 21.

COURTESY THE ARTISTS

***Endangered Meadows of Europe*, 1996. Top: Original site of the 2-acre roof garden. Bottom: The meadow re-created as a permanent installation in the Rhine River Park, Bonn, Germany.**

Jane Ingram Allen: *What you are doing in Taiwan?*

Newton Harrison: We were invited here to think about the global warming problem in relationship to Taiwan. People here asked us what our focus was and what our bottom line was. We don't focus quickly—we scan first and tend to focus much later in the process, and basically, there is no bottom line in our work. The very concept of bottom line is one of the less fortunate delusions operating in Western culture. Another is "time is money." Between these two, the human race may not last.

Helen Mayer Harrison: Water appears in all of our work in some form. As you know, water is most vital and has astonishing properties. For our projects, we work with people from the community we are in, various officials, and scientists from needed disciplines.

NH: We are also working in collaboration with another artist, David Haley of England, on a project called *Greenhouse Britain*. David is also working here in Taiwan, and we are talking about another possible project, *Greenhouse Taiwan*. However, there are often several years between speaking an idea and finding the energy, the will, and sometimes the love to enact it.

JIA: *When did your interest in global warming begin?*

NH: Our first global warming piece was in 1974. It was intended as an amusing work, since the belief at that time was that we were in an interglacial period, which meant that it could get colder as well as warmer. That is to say, the waters could withdraw or advance. This work, *San Diego is the Center of the World*, proposed long-range planning for either case. It argued, in our first "if this, then that" linguistic format, to begin long- and short-range planning to prepare for either possibility. When Lawrence Alloway reviewed the proposal in our first New York exhibition at Ronald Feldman Gallery in 1974, he observed that we were probably learned, witty nuts from California.

HMH: By 1978, we came to believe that the preponderance of evidence was that global warming, or the greenhouse effect, was indeed inevitable and everything would begin to change. We expressed this idea as the ending of *Lagoon Cycle*. We began by drawing a map of the world as if the waters had risen. The map was about 7 by 13 feet, and the science at the time said that the waters would rise about 300 feet. So we drew the 300-foot level on a world map as best we could and the outcome was quite amazing. We have done a number of other global warming pieces, often working with knowledgeable scientists. Some deal with the rising waters, some with agricultural lands and urban spaces, and others with effects on the mountains.

NH: Now that global warming has become generally acknowledged and the debate has shifted to address what to do about it, our work picks up on ideas from *Lagoon Cycle* so many years ago. Textual passages in that work asked, "How can we help each other? How can we withdraw?" But also implicit is the question, "How do we defend if the rise is not severe?" We use the term, "graceful withdrawal." It will be our greatest challenge as human beings to face this. Gore's movie seems to suggest that through carbon control we can minimize the effects of this phenomenon. I think we're past the tipping point.

HMH: While we may be able to minimize some of the more extreme outcomes, there are

***Endangered Meadows of Europe*, 1996. Below: Meadow structure and story. Bottom: Meadows transplanted and growing as a roof garden.**

COURTESY THE ARTISTS

California Wash, 1996. Three views of project in Santa Monica, CA. Clockwise from above: Overview of the site, 50 x 200 ft. Outfall cover intersection with Santa Monica Promenade, including Surface Mappings and Striations. Wave Fence in plastic-coated steel, 40 x 600 in.

several profound questions that center around how we go about the business of adjusting to change. By we, I'm including all the other life that will be impacted by global warming—plants, animals, birds, and insects whose survival is vital as well. While this phenomenon of climate change has happened many, many times in our past, I don't think it's happened under the conditions of consumption and exploitation of resources and systemic shock that are operating in our "now."

JIA: *Have you worked in Asia? Is Asia different in its approach to environmental problems?*

NH: There are many Asias, some moving toward wealth, some deeply depressed, some environmentally healthy, some environmentally distressed.

HMH: We have been in several Asian countries for short periods. For instance, Sri Lanka in the late '70s was an environmental cornucopia where one might find an afternoon snack by walking down the street in Colombo and picking fruit off of branches. Then I found out that much of the Sri Lankan ecosystem was gone, replaced by exotic species. In large part, this was due to colonialism. When our Sava River piece was shown in Japan and took second prize at the Nagoya Biennale, we spent time with people there who were attempting to stop a nearby river from being dammed. It was the last undammed river on the island. We failed, of course. They argued that by stopping the building of another dam, we were trying to "break the rice bowl." Also, Newton spent a fair amount of time in Kyoto, doing an artificial Aurora Borealis for the American Pavilion in Expo '70.

NH: It appears to me that the environmental issue only emerged in general Taiwanese awareness during the cleanup of the Xindian and the Tamsui rivers. And this only happened when the polluting businesses moved to China for cheaper labor. We've met a few Taiwanese artists who have deep environmental concerns and are enacting them, and there are some very angry ecologists tracing how global warming is affecting the upward movement of species, but as yet nobody will listen to them, let alone act on what they're discovering.

HMH: We think that Europe has taken the environmental lead globally, and England, Germany, and the Netherlands have taken the lead in research and action.

JIA: *How does this project in Taiwan relate to your past work and present focus?*

NH: Basically, it is all the same work, just enacted differently in different places. However, you're speaking as if we are doing a work here. We have been invited to speak, which we have done. We have not been directly invited to do a work, and in the absence of a clear invitation, with

***The Santa Fe Drain Basin: Lessons from the Genius of Place*, 2005. Installation view of project in Santa Fe, NM.**

resources, networking, and a community of interest, a work here will not happen.

HMH: If we were to do a work here, it would, like all of our works, emerge from our whole life experience, which is with rivers and watersheds, social systems, and global warming. Furthermore, it would have core questions embedded in it: What's farming doing to the topsoil? What's overforesting doing to the rivers and the watersheds? What is the overproduction of sameness doing to the psyche? All of these problems are related to seeing the world as a whole interacting system, which is where we begin.

NH: *The Santa Fe Drain Basin: Lessons from the Genius of Place* is an example of this type of work. We are showing it at the Taipei Artists Village exhibition room in Taipei.

JIA: *What was your most successful project? How do you define a successful project?*

NH: "Is" is the operative verb, not "was." Our collaboration is our most successful project. As to how we define a successful project—you are seeing it and experiencing it right now.

HMH: We're most interested in bringing forth a new state of mind, first in ourselves, then hopefully in others—that is what our work is about. But this is difficult to measure: sometimes it happens slowly and takes a long time. It is not that immediate, and results only happen when our work gets physical and lands on the ground. In Terre Haute, in the early '90s, for example, we did a work dealing with the Wabash River, the area where the prairies stopped and the mountains began. We were studying how to preserve and improve the Wabash River, and we made a proposal. Nothing much happened because the head of the art department left and the next director was not interested. However, 15 years later, last month in fact, we got a call from Terre Haute, from people who had been working with us, and we accepted an invitation to put together a group and begin thinking about the eco-political potential for well-being in the watershed as a whole, to continue where we left off.

NH: Basically, we never think about success and failure. The reason for this is not abstract. That is to say, we can never really tell when and how we may have succeeded. In fact, we may not even know what success is. For example, in 1989, we created an exhibition that proposed the purification and regeneration of the Sava River in former Yugoslavia. It was much loved and accepted by the Croatian Water Department. Then the war started, and Milosevic began to attack upward from Serbia toward Croatia. We had to leave, and we thought the work was lost. The ecologist who was working with us stayed, fought for our basic concept, and then, put his own concept in place to save the Drava, the sister river to the Sava. Ultimately, both ideas worked. Now the Sava and the Drava together give the lower Danube about half of its clean water. These two acts, ours and the ecologist's, had a salutary effect on flushing the very polluted Danube estuary as it flows into the Black Sea. We have named this phenomenon of ideas generating ideas "conversational drift." So, we find it best not to worry about success, but to work for the best thing possible in the place and the moment we are in.

HMH: Fundamentally, we have a non-possessive attitude about our work—we make what has been called "art in the public interest," as best as we can define what that interest is in the moment we are in. When our work is presented, it is obvious that its place is in the public domain. People may ask if we have helped Taiwan. If we have, we don't know and won't know for some time, if ever. We know only that we have introduced new ideas about the work of the artist. The results are, as yet, indeterminate.

JIA: *Your work is project oriented, and many times it has no visual product. What do you exhibit?*

COURTESY THE ARTISTS

NH: Our work is about production, not product, and all of our work envisions. With the Sava River work, we produced an exhibition that was part proposal, part narrative, and part vision of a future. That is to say, could we imagine a new history for the Sava? So, we tend to avoid the term "product." However, *The Endangered Meadows of Europe* is a good example of how a particular work might be called an art object. This was a roof garden, very physical. It operated on about five levels. One of them was about contemplation; another was about a complex story of interdependence; another was about the endangered meadows of Europe, as exemplified by four meadows condensed into one on a roof. Scholars studied the meadow, and it was picked up off the roof and moved to a park in Bonn, then to other parks. The seeds were spread. The project brought the original meadow ecosystem of the area back to Bonn. There were 15 fence-like sculptures with texts and photo images of about 15 meadows, from the south of Italy to Norway, made in ceramic tile. We work with a level of complexity that is sometimes considered difficult. We have no interest in doing a work that gives up its information instantly, or in a couple of sound bytes. Our Santa Monica work does this on a street corner.

JIA: *How does your work relate to sculpture and installation art, or conceptual art?*

NH: All of our work has a certain sculptural quality about it. We consider our work noncategorical. When a sculptural element is needed, it is there; when a painterly element is needed, it is there. We also use photography, maybe of a dead river or a live meadow. Our work is installation based and shapes the gallery space. The real question is whether the installation has sufficient power embedded in it for the ideas to jump off the gallery walls and land in the real world. Santa Fe would be a good example of one that did, also the Sava River piece.

HMH: As has been endlessly discussed, all good art resonates in the mind—maybe not everyone's mind, but that is an effect we aim for. If you're looking at conceptual art, it might be Eleanor Antin's *Boots on a Postcard*. If you want to be enthralled by an astonishing kind of "seeing" that is about seeing, then you might look at Cézanne's "Mont Ste. Victoire" series.

JIA: *How and why do you collaborate?*

***Greenheart Vision*, 1997. Installation view of project in the Jerusalem Chapel, Gouda, Holland.**

COURTESY THE ARTISTS

NH: It is an intellectual choice. When I took on the ecosystem, I did not think I was good enough to do it alone. I asked Helen to join me. A male and a female artist working together gives two different approaches. In the book *The Third Hand: Collaboration in Art from Conceptualism to Post-Modernism*, Charles Green goes into this rather deeply and discusses the issues of collaboration.

JIA: *Is it difficult? How does the collaboration work?*

HMH: It is like a dialogue between two people, an intersecting of stories without naming and claiming. The artist exists in the space between us.

JIA: *What is your next project?*

NH: We never know. The telephone rings, and we are invited to go somewhere and think. We may make a rather elaborate proposal of two or three intense pages as a beginning.

HMH: It's better if it's only one page. Maybe it will be electric and attract the right interest, and, always, we let it happen, or not, as the case may be.

NH: In any given three-month period, there are many invitations, and we follow them, giving lectures, participating in conferences and symposia, creating dialogues. In 1992, the gallery at Reed College asked us to give a talk. We agreed, and from the airplane, we could see clear-cutting vividly. So we did a work about that; it was the same with Holland. Our work is based in a response to urgencies as they bubble up in any particular now.

HMH: Each piece emerges from a few questions: for instance, how big is here? One of our proposals led us to take up the Peninsula of Europe at the request of the European Union, the German agency of the environment, and the Schweisfurth Stiftung. So you can see, "here" can be a street corner, as in our Santa Monica work, or a sub-continent, or an island like *Greenhouse Britain*, which we are doing on a grant from the British government.

Jane Ingram Allen is an artist, curator, and art writer living in Taiwan. She writes frequently for Sculpture *and other art magazines. Her Web site is <www.janeingramallen.com>*

Heartney, Eleanor. "Mapping a Better World."
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Mapping a Better World

Newton and Helen Mayer Harrison's first solo show in New York in 10 years, at Ronald Feldman Fine Arts, opened with a circular map of the earth, installed on a wall facing the entrance. Measuring 86 inches in diameter, the Harrisons' global map was centered on a point that appeared to be somewhere in the vicinity of Prague. With Europe taking center stage, distortions resulting from the flat depiction of a curving earth turned Africa into a disproportionately large land mass, while Asia sprawled to the east and North America almost disappeared as it slipped out of sight. In the context of recent events, from the war in Iraq to the debate over America's imperialist intentions and the rift between Europe and the U.S., this opener served as a reminder that maps are not simply neutral topographical charts or location finders. They also function as political tools, shaping our perceptions of center and periphery, foreground and background.

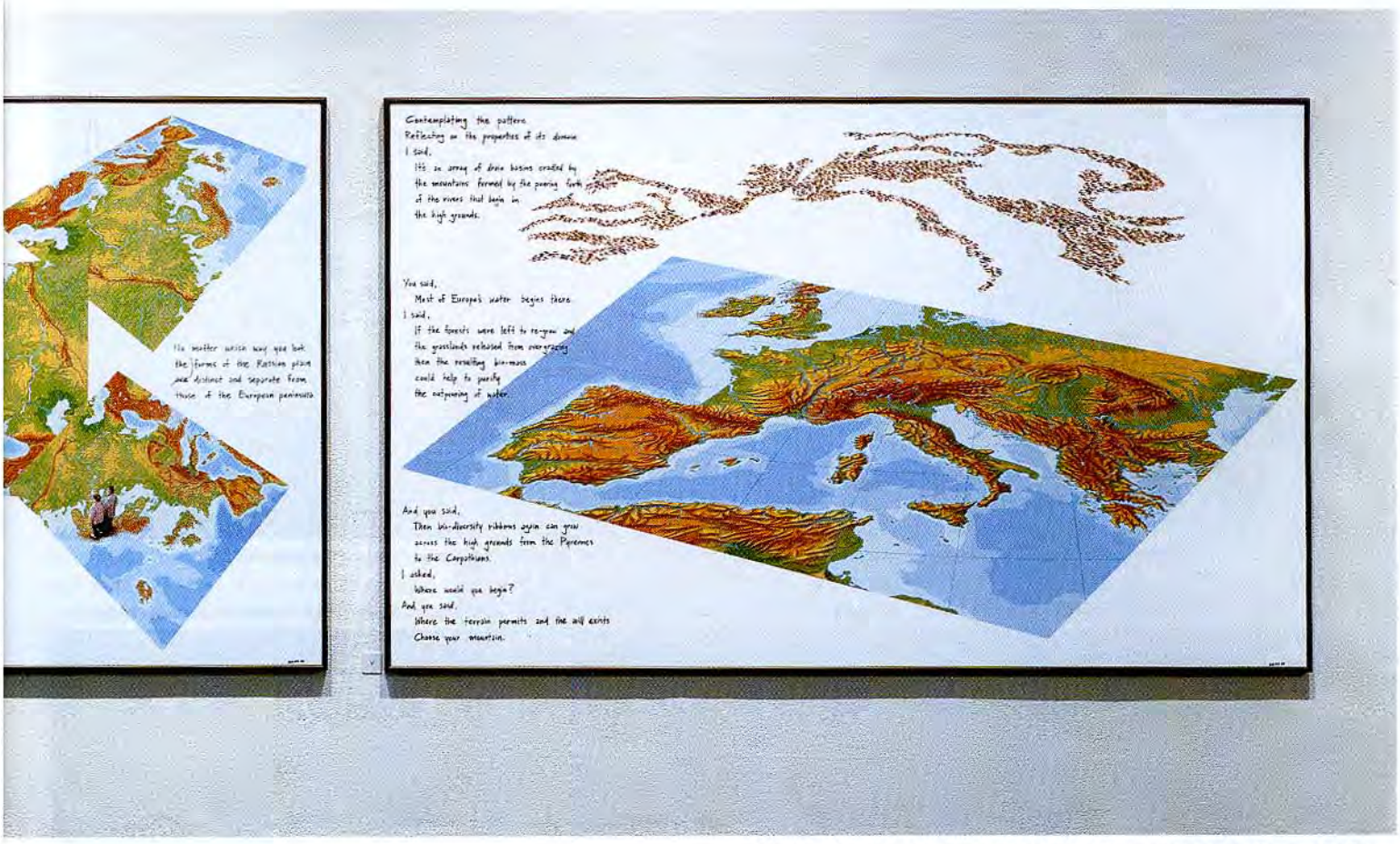
During the three-and-a-half-decade career of this husband-and-wife team, maps have loomed large. Often beginning with preexisting maps, the artists extensively rework them, redrawing, digitally altering, painting over and reorienting the original images so that familiar landmarks such as cities, borders and roads tend to disappear while little-noticed topographical and land-use patterns come to the fore. Pioneers of "Eco" art, the Harrisons use maps to emphasize one of their ongoing themes—namely, the arbitrary nature of national boundaries and the way they often hinder ecologically responsible thinking.

Since the 1970s, the San Diego-based Harrisons have traveled to coal mines in the former East Germany, the banks of the Sava River in ex-Yugoslavia and the farms of middle England. They have parsed environmental reports, toured watersheds and endangered waterways, conferred with specialists, presented their ideas about environmental renewal in town meetings. Their work involves extended, frequently multi-year discussions with government officials, engineers, ecologists and residents of far flung ecosystems. The visual-art component of their activities consists of maps, charts and explanatory texts that set out ideas as products of a meandering conversation between the artists and other interlocutors. Because the Harrisons see themselves primarily as instigators and problem solvers, they measure their success not by the full realization of their ambitious proposals, but by the insertion of their ideas into larger political and social debates. They are satisfied if only certain elements of a project are taken up in a process of incremental change which they term "conversational drift," and they do not mind if others take credit for their ideas.

As a larger phenomenon—one hesitates to call it a movement—Eco art is at once idealistic and practical, involving a scattered group of artists who draw on environmental science in the interest of land restoration or reclamation. Alan Sonfist, Mierle Ukeles, Mel Chin, Patricia Johanson, Jackie Brookner and Agnes Denes are among its notable figures. An outgrowth of and reaction to the short-lived Land art movement of the late 1960s, Eco art also draws on that era's fascination

More than 30 years ago, Helen and Newton Harrison decided to devote themselves to environmentally beneficial art. Their latest project, "Peninsula Europe," envisions nothing less than the greening of most of an entire continent.

BY ELEANOR HEARTNEY



Above, left to right, Newton & Helen Mayer Harrison: **Seeing, From a Bird's Eye View,** ***and*** **Thinking,** ***all 2003, digital photographs and ink, each 36 inches high, from the "Peninsula Europe" project, 2000-ongoing. All photos Dennis Cowley. Courtesy Ronald Feldman Fine Arts, New York.***

with what Lucy Lippard called the "dematerialization of art." Another influence was Rosalind Krauss's contemporaneous notion of the "expanded field," which dramatically enlarged the definition of "sculpture" to encompass engagement with landscape and architecture. Artist Robert Smithson was a significant precursor: his theories of entropy and engagement with sites of industrial devastation offered models for thinking about the relation of nature and culture. Equally important in shaping the direction of Eco art has been its "evil twin"—the monumental approach of artists like Michael Heizer and James Turrell, whose bulldozers were viewed by early practitioners of Eco art as evidence of Western culture's arrogant and instrumental attitude toward nature. By contrast, Eco art, with an occasional flirtation with New Age rhetoric, has always sought to heal the earth from the wounds inflicted by civilization.

The Harrisons' embrace of ecology followed an early engagement with Conceptualism. In 1969, as they note in the catalogue for this show, they decided to focus exclusively on art that contributed to "ecosystemic well-being." They retained the apparatus of Conceptualism, including its focus on the analysis of systems, its questioning of received beliefs and a mode of presentation which relied on documentation, photographs, charts. The impact of Conceptualism is particularly evident in the way that the Harrisons' work is infused with a respect for language and metaphor. In presenting their ideas, they tend to talk about perspectival shifts in which background and foreground are reversed, and they frame complex sets of recommendations in simple visual or poetic images. Explanatory texts frequently take the form of dialogues between the artists, with

Above, several map-based elements of "Peninsula Europe," including (on floor) modified GIS map on canvas-backed paper under Plexiglas, 2001, 13 by 12½ feet.

Below, The Return of the Bear and the Wolf and Even the Lynx, *2001, digitally altered drawing printed on canvas-backed paper, 5¾ by 10½ feet, from "Peninsula Europe."*

statements and questions preceded by "I said" and "you said." For the Feldman show, this quality was enhanced by recordings of the two reciting their texts in conversational tones.

The exhibition offered a survey of recent projects with an emphasis on one named "Peninsula Europe," which looks at Europe as an ecological whole rather than a collection of distinct and often embattled countries. Map, photo and sound installations relating to this project dominated the front gallery, while the back gallery provided an overview of another major scheme, "A Vision for the Green Heart of Holland" (1995-96). Other related projects in which the Harrisons' ideas were embodied at a smaller scale appeared throughout the two rooms.

By isolating Europe's mountain ranges against a blank ground, the Harrisons created a motif that resembles the skeletal remains of an ancient mammal.

"Peninsula Europe" was initiated at the request of a German foundation, the Schweisfurth-Stiftung, for presentation at the 2000 World's Fair in Hannover. It focuses on the rivers and mountain ranges that preceded Europe's national boundaries and will long outlast them. Essentially, the project is a 50-year plan to link the drain basins and forests of Europe from the Pyrenees to the Carpathians, transforming them into a series of "biodiversity ribbons." Highland areas would be reforested to create a filter through which rain and groundwater could be purified for use in the more populated valleys and lowlands. Land would be further revitalized by restoring wetlands and bringing back ecologically responsible land uses.

The plan contains many of the Harrisons' familiar themes. Here, as in other proposals, they advocate allowing nature to repair itself through the reintroduction of diverse species of flora and fauna to areas devastated by overpopulation or industrial pollution. They support "green" farming, and promise new revenues and jobs from ecotourism and the sale of organic produce and purified water. They also argue that the apparently prohibitive costs of such undertakings are in fact far less than the eventual costs of simply doing nothing.

On walls, elements from the project "Casting a Green Net: Can It Be We Are Seeing a Dragon?," 1998, including, on right, topographical map with hand coloring mounted on canvas, 10½ by 15 feet.

At Feldman, the Harrisons made the case for "Peninsula Europe" with a series of map-based installations. The recurring motif in each was a shape created by isolating the mountain ranges of the region against a blank ground. Familiar national outlines disappear as a linear design emerges that suggests the skeletal remains of some ancient mammal. (The head is formed by the mountain ranges of Spain, a foreleg runs the length of Italy and the hindquarters encircle Eastern Europe and the Balkans.) This "icon," as the Harrisons refer to it, symbolizes and encompasses a border-free Europe.

On one wall, the Harrisons paired a conventional map of Europe with one in which the icon has been isolated. Another map titled *The Return of the Bear and the Wolf and Even the Lynx* (2001), installed on a low-lying, wedge-shaped platform, presented the icon with pictures of wild animals painted over it to reflect the return of indigenous species to the highlands. Another map showed the icon as negative space and emphasized the lowlands instead, thereby making Europe resemble a kind of jigsaw puzzle. Yet another included a large map set under plastic on the floor which viewers could walk over to seek out towns and rivers of the area under consideration. A "listening pad" at the edge of this map was placed directly under a pair of speakers, which transmitted a recording of the Harrisons explaining the work.

The back gallery's "A Vision for the Green Heart of Holland" is a project for which the pair won the Groeneveld Prize, an honor associated with the Dutch Department of Agriculture, in 2002. This work, developed at the request of the Cultural Council of South Holland, was designed to address the problem of urban sprawl anticipated in the wake of the expected addition of 600,000 houses to the central lowlands over the next 20 years. Having initially been accepted in its entirety by the Dutch Ministry of the Environment, the Harrisons' plan was abandoned after a change of government. More recently, it's been put back on the table.

The large corner installation provided two competing visions of the future. On the wall to the left was a large map showing, according to the Harrisons' predictions, what Holland would look like were the new homes to be built without deference to ecological considerations. Titled "Bad Government," this map was printed in reverse to suggest the backward nature of such unbridled development.

To the right was the Harrisons' plan, designated "Good Government,"

The Harrisons have long grappled with the challenge of dramatizing complex ecological proposals—this was one of their most lucid presentations to date.

in which the existing "green heart" has been left essentially undeveloped, preserving the zone's traditional mix of open parks and farmland. In this map, the verdant center is surrounded by a green biodiversity ring like the one featured in "Peninsula Europe." Ribbonlike green strips emanate from the ringlike rays radiating from the sun. These are green areas which would separate more congested urban zones from each other. The Harrisons argue that these strips of green would contribute to natural purification of air and water, while warding off a future in which central Holland is transformed, largely thanks to suburbanization, into a megalopolis. The green strips also provide some of the funding for the plan by providing fresh water for residents and industry.

A large section of floor in front of the maps was covered with a walk-on, laminated aerial photograph of the area as it was in 1994, when the "Green Heart" project was originally made public. Transparent overlays of green designated the bands that the Harrisons propose to return to nature. When the work was first presented in Holland, residents could locate their homes and see whether they fell within the restored area. (According to the plan, extant homes within this restored area could remain.) An accompanying video offered views of the central "Green Heart" as it is today, while another listening pad permitted viewers to hear the Harrisons describe the history of the project.

Rounding out the exhibition were installations offering more abbreviated accounts of other recent proposals. In the front room, two other river plans were presented. The Mulde River in Germany, designated here as "The Worst of Places," is the site of a former coal mine which has poisoned both earth and water. The situation there is so dire that, as the wall text noted, the milk of cows grazing nearby had to be taken to the toxic waste dump. Here the Harrisons offered only very modest hopes for restoration, proposing to begin with the small area that still yields clean water.

By contrast, "The Best of Places" was a map-and-text installation devoted to the Sava River, which runs through the former Yugoslavia. The Harrisons propose to restore the river, which has been injured but not destroyed by industrial farming, by enlarging an extant nature corridor and setting up a series of ponds to create a reed-bed purification system. Photographs taken along the edges of the Sava River map revealed the amazing diversity of its existing ecosystems.

Also on view, in the back gallery, was documentation of "Casting a Green Net: Can it Be We are Seeing a Dragon?" (1998), a proposed project in Britain which would connect Liverpool and Leeds. As with "Green Heart," this work deals with alternatives to unplanned urban development. Following the old Roman roads still discernible in this region, and marking the estuaries, the Harrisons discovered a shape on the map that took on the outlines of a dragon, with a small lake for an eye and a pair of extended wings. The dragon metaphor appealed to the artists because it recalled ancient myths of the dragon as the spirit of nature banished from the land by the rise of civilization. Here, they proposed that the existing meadows and woodlands within the dragon's outlines be allowed to spread and intermingle with farms and pastures, which would be worked organically. This, they argue, would eventually restore eroded topsoil, increasing the productivity of the land.

The Harrisons' work raises a number of interesting questions. One that they repeatedly encounter has to do with the definition of their activity: why should what they do be considered art and not science, environmentalism or land development? In response, the Harrisons point out that, generally, their projects are initiated at the invitation of arts groups hoping to play a role in larger planning issues. They maintain that their position as artists allows them to cut through red tape, ignore professional territorialism and present ideas in a form that general audiences can understand.

This last point leads to the second set of questions, having to do with presentation. How does one dramatize complex ecological proposals? How can such ideas be presented without bogging down in incomprehensible details? The Harrisons have struggled for years with this issue, and here they came up with one of the most lucid presentations of their proposals to date. Texts were pared down from far more voluminous explanations available in accompanying catalogues, and the maps were allowed to tell a great deal of the story. Listening pads and walk-on floor elements acted as lures to literally bring viewers into the works.

But if the presentation was simple and direct, the underlying problems of bringing these projects to fruition are monumentally complex, leading to another set of questions. How feasible are the changes advocated by the Harrisons? Is it reasonable to expect governments to pur-

Digitally modified aerial photographs with hand coloring, 41¼ by 44¼ inches overall, from the "Krimpenerwaard" project, 2002.

Installation view of "A Vision for the Green Heart of Holland," 1995-96, showing (on floor) aerial photograph on Delft ceramic tiles with green overlays, 21½ feet square.

chase land to create nature reserves, to plant forests to hold water, to replace stopgap flood control methods currently in place in heavily urbanized areas with natural methods which will require displacement of citizens, to abandon ecologically damaging job opportunities for more beneficent ones? Isn't it utopian to expect bureaucrats to put aside political and territorial boundaries? In a world in which jobs, especially political jobs, seem increasingly short-term, is long-term thinking a practical possibility?

Certainly in the context of present-day America, such ideas seem hopelessly visionary, which may explain why most of the Harrisons' projects have originated in Europe (They are, however, at work on a small project in Santa Fe.) But where there is a receptive government or populace, the pair can point to some real-world accomplishments. The "Green Heart" project, for instance, was immediately embraced by Holland's Green Party, and has gone through various ups and downs with a succession of governments. Today, elements of this proposal, among them the preservation of the country's center, the physical separation of cities and the redirection of new development, have become part of the government's plan for this area.

The Sava project was interrupted by war in the Balkans, but the ideas outlined by the Harrisons are being implemented on the Drava River, a tributary of the Danube that flows through Slovenia and Croatia. Meanwhile, "Peninsula Europe," which is only a year old, has already led a number of smaller local projects throughout the European Union.

Thus, if the Harrisons are utopian, they have one foot in the real world. Change is possible, they argue, and they offer numerous practical suggestions. At a time when so many prognostications about the future condition of the planet seem unrelievedly gloomy, Newton and Helen Mayer Harrison remind us that we are still masters of our fate. □

"Peninsula Europe" was on view at Ronald Feldman Fine Arts, New York [Apr. 12-May 10]. The project will be the subject of forthcoming exhibitions in Toulouse, Athens and Munich. Other projects by the Harrisons will be presented at the Santa Fe Art Institute [2004], St.-Pieters Abbey, Ghent, Belgium [2005], and the Museum of Contemporary Art, Antwerp, Belgium [2005]. They are also included in a group exhibition opening Oct. 4 at the Hudson River Museum, Yonkers.

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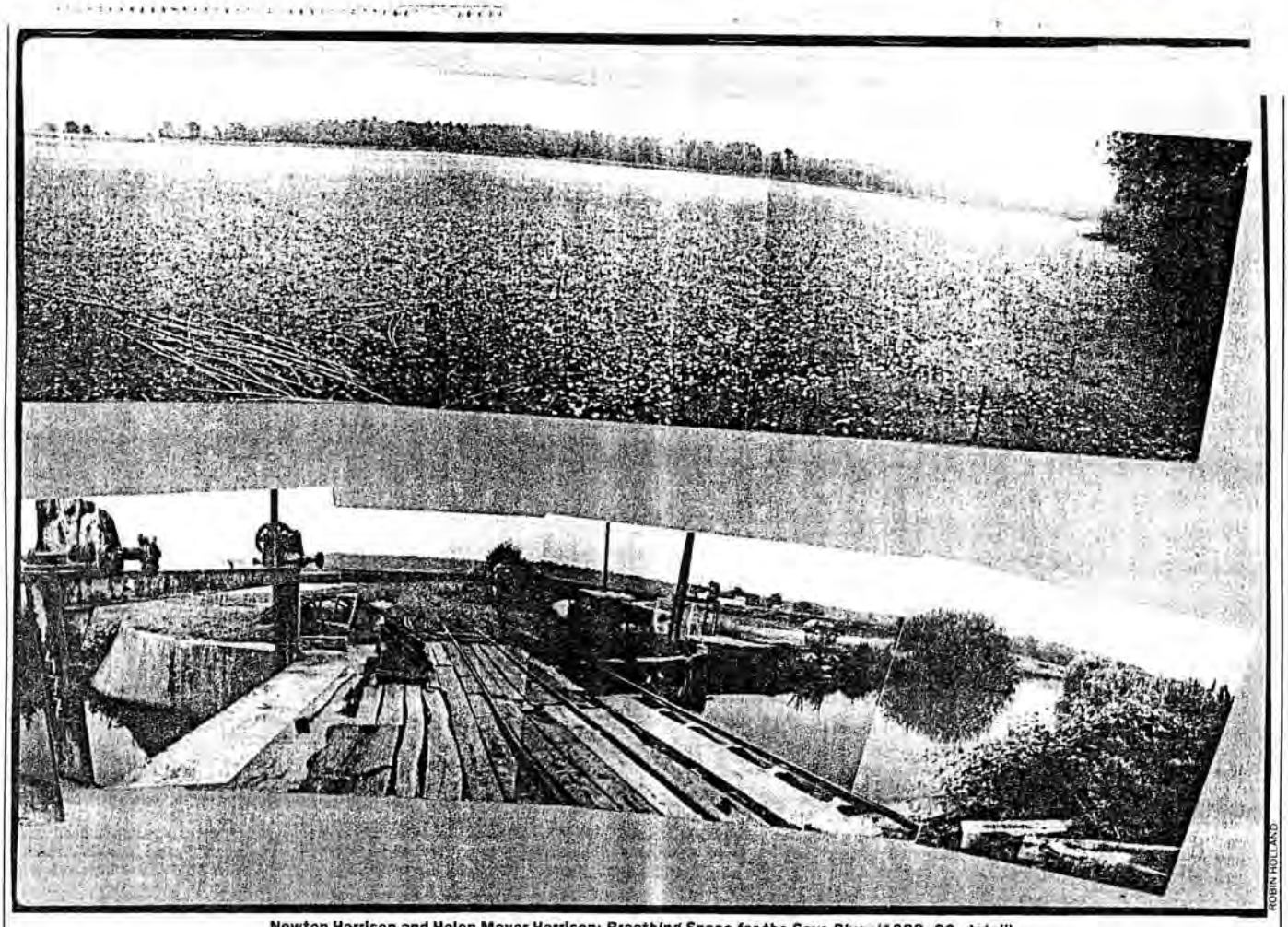

ROBIN HOLLAND

Newton Harrison and Helen Mayer Harrison: *Breathing Space for the Sava River* (1988–90, detail)

Main Stream

By Arlene Raven

Newton Harrison/
Helen Mayer Harrison
"Changing the Conversation"
Ronald Feldman Fine Arts
31 Mercer Street
Through April 6

In Sir Thomas More's 1516 *Utopia*, dwellers on a mythical island attain perfect attunement to their symbolic sod and to one another. The organic character of their connections with nature and society could be assumed. The crisis since brought about by arrogant and misguided use of their environment was unknown. But such a superlative solitary oasis was fictional even then.

Consider its surrounding waters. Water virtually everywhere, without a drop to drink. Prevailing biblically before both land and light, water signifies the very beginning of earthly life. But the primary matter of which living beings are composed as well as the most fundamental substance required for their subsistence is now irreversibly contaminated throughout the world.

Newton Harrison and Helen Mayer Harrison concern themselves with water and its stories. In their engagements with rivers, lagoons, ponds, or human-made tanks over the past two decades, the Harrisons contain the contemporary ecological contradiction of water—as an endangered metaphor for endangered natural resources—in their art.

Old Man River, they have witnessed, does not just keep rolling along. Visiting Yugoslavia recently, they observed that for the Sava River, the "new story" of current usage would become its future history. "A paper mill is the new history/A coal mine and black water is the new history," they wrote. Because they feared for the well-being of the river and were disturbed by the discourse surrounding the state of its waters, they declared that they would literally re-form it and thereby change its saga. "The reshaping of the river is the new history."

The Harrisons proposed a nature reserve. They expanded their plan by adding a corridor to run the length of the Sava from the Austrian border to the Danube River at Beograd. A nature reserve without a corridor today, they pointed out, would be prone to the dangers of "island isolation": territorial encroachment by neighbors as well as chemical and sewage pollution from bordering farms and towns.

The Harrisons had confronted the dangers of "island isolation" in the mainstream art world in 1970, when Newton made a sculpture using water for the Los Angeles County Museum of Art's "Art and Technology" exhibition. Helen, also an independent working artist, was not invited to participate in the all-male show. Although not yet as a coauthor, Helen engaged Newton in a dialogue about the water piece for the first time. Their collaboration had begun. This original exchange prefigured their abiding habit of beginning each day with a ritual discussion, and their discourse became the central metaphor in all of their metaphorical work.

The concrete, ecosensical approach of the artists to solving on-site environmental problems is reflected to some extent in the unassuming photographs, maps, and drawings that document their most recent proposals at Ronald Feldman Fine Arts. But reading their texts—which are conversations between two voices—reveals more fully the poetic resonance of their dialogue and the metaphysical nature of their vision.

A 'Breathing Space" for the Sava. A memorial (not a monument) for Holocaust and other Nazi victims on the actual site of the former Gestapo headquarters in Berlin. "A String of Emeralds" from Devil's Gate to the Lower Arroyo of Pasadena. A "Wetlands Walk" for Boulder Creek, Colorado. Lyrical titles accurately evoke the impassioned and expressive formulations that they suggest. The beauty and economy of the Harrisons' conceptualizations, mapped out as schemas, are not self-referential and nonutilitarian but meant, rather, to repair and restore the particular places that have become the literal ground(s) of their art.

Early in their collaboration, they created an artificial environment for fish in the Colorado desert. They realized then that they no longer wanted to imitate nature by making synthetic support systems, but instead wished to enhance natural processes. Their activity since, although their projects can be seen as interventions in their sites, has been guided by an ethic of nonaggression. With the black waters of the Persian Gulf etched in my own mind's eye, the Harrisons' peaceful, loving purpose, and creative commitment, can be seen more clearly than ever before. In a text for their Sava project, they liken the river to nature itself.

But their studies are generally shown in galleries and museums rather than in the scientific and technological enclaves and communities working on similar environmental problems. The ongoing exchange of ideas that could nourish these preliminary visualizations and perhaps bring more works closer to realization cannot take place in an art context only. The Harrisons' plans are still largely untried. Those that have been put into practice, however, have proved highly practicable.

When in Baltimore, they noticed that pedestrian access had been interrupted by urban development and multilane highways in the downtown area. They began to grapple with this state of affairs by drawing a line on a map of the city. In the sparest and simplest of ways, they connected the enclosed harbor to the surrounding city center. Through a circuitous interaction with city government, this line would become the path of two promenades. By restoring rites of passage, the social disruption as well as the physical impasse of that place, the Harrisons believed, could be simultaneously healed.

It is the vision that fuels their projects rather than the Harrisons' ideas or plans that is, well, visionary. The ecological disaster predicted in the mid-'60s, the apocalyptic picture of the earth as an uninhabitable desert of rocks, is now acknowledged in some quarters to be inevitable. Neither the Harrisons' work nor anyone else's may ultimately be able to regenerate the physical ground. But because theirs is an ultimate vision, it must necessarily become a split sight.

Pursuing the impossible by accomplishing the improbable demands double vision. In one horizontal panel of *Breathing Space for the Sava River, Yugoslavia*, three joined color photographs are cut and pieced to preserve the continuity of the river image. But, because of the jumps and gaps of color, tone, and form between one frame and the next, this representation also disrupts the river's flow. The river is portrayed as continuous and discontinuous at the same time.

The spliced photographs are fragmented by the nature of their assembly and configuration, yet they are also by nature panoramic, offering the broadest and most complete view—one suggesting that the continuity of the river may supersede its dislocations. In these representations, the sinuous flow of the river parallels the curved surface of the earth as it seen from the most panoramic perspective of all. ■