



SYSTEMS

A Conversation with Nancy Holt



BY JOAN MARTER

Nancy Holt, whose work spans more than four decades, is acclaimed as a filmmaker, photographer, writer, and sculptor. Her public art commissions include *Dark Star Park* in Rosslyn, Virginia; *Catch Basin* in St. James Park in Toronto, and the iconic *Sun Tunnels* in Great Desert Basin, Utah. Holt's "systems" access the great infrastructure of the earth and act as environmental projects that join viewers to the wonders of the solar system. Her work with systems has produced major sculptural innovations, including installations that extend from interior galleries to exterior spaces. Time-based elements stimulate participation, whether viewers turn down the heat in an art gallery, feel a gust of air, experience the summer solstice, or trace light from the constellations overhead.

Born in Worcester, Massachusetts, in 1938, Holt grew up in New Jersey and graduated from Tufts University, where she majored in biology. In the early '70s, she started a series of ambitious sculpture projects in remote locations. *Sun Tunnels*, constructed in the desert, brings the stars down from the sky to register within large tunnels and frames the sun on the horizon during the seasonal solstices.

Many of Holt's early outdoor projects survive. They are joined by more recent installations such as *Solar Rotary* in Tampa, Florida, a fascinating ensemble that incorporates a meteorite into complex shadow patterns responding to the summer solstice and other specific dates. *Nancy Holt: Sightlines*, published in conjunction with her recent traveling retrospective, gathers her diverse body of work together for the first time.

Opposite: *Catch Basin*, 1982. Steel, terra cotta, and concrete, 15 x 90 x 80 ft. overall. View of work at St. James Park, Toronto. Above: *Star-Crossed*, 1979–80. Earth, concrete, steel, water, and grass, 14 x 40 x 53 ft. overall. View of work at Miami University Art Museum, Oxford, OH.





Joan Marter: Your site-specific, system pieces are very important, and you've written eloquently about some of them. You've said: "[My] sculptures are exposed fragments of vast hidden networks. They are part of open-ended systems, part of the world." Could you comment on this idea in terms of your body of work as a whole?

Nancy Holt: What I often call my "system sculptures" are not things in themselves that begin and end in a gallery or outdoor site; they're a part of a huge network of interconnected conduit systems often deep within the ground or in the walls of buildings. Natural elements flow through these systems, and I build a work that continues the flow and makes it visible and more conscious. In the case of *Waterwork*, the water that flows through the system goes out into a drainage system and eventually into the ocean. Initially, there's an evaporation process, with water from the ocean transforming into rain that falls into a reservoir and then flows into a vast underground network of pipes—I tap into that network. The water is channeled through my system of pipes and back down into the drainage.

With electricity, the energy is being produced at a generating plant by plutonium, coal, or oil. The title of my first one, *Electrical System (for Thomas Edison)* (1982), alludes to the name of the New York City generating station, Con Edison. The title turns one's mind to basic electricity, both in its discovery and in its generation. From deep within the earth, from the transformation of natural substances, energy is being produced, and this energy in the form of electricity travels through buried pipes and conduits into the walls of buildings. In the case of *Electrical System (for Thomas Edison)*, you could see the electrical box on the wall where the conduit came out, and you were surrounded by electricity. The sculpture also lit the gallery. Like all of these pieces, it was functional—there was no other light except that produced by the work. The same was true of *Hot Water Heat* at John Weber



Waterwork, 1983–84 (dismantled 1995). Galvanized steel pipe, terra-cotta channel pipe, concrete, steel, and water, $20 \times 130 \times 70$ ft. overall.

Gallery (1984), which functioned as the heating system for the gallery.

JM: You've also spoken about how you want people to become aware of the fact that we are using limited resources.

NH: We use water and electricity so indiscriminately; we're just not thinking. You turn on a light switch, and the light is there, but it's only been there for a little over a century. The history of technology is also part of what I did in the early '80s with systems. I was able to use basic systems as art, as elements of art, because they had been there for a long period and had not essentially changed. Plumbing and electrical technologies were worked out in the early 20th century; as an artist, I could bring greater consciousness to them. For instance, in Catch Basin, in Toronto, I used inverted terra-cotta channel pipes, which were first used in France hundreds of years ago. Channeling water is very ancient—there are, for instance, the aqueducts of Greece and Rome, and crop irrigation has been a crucial factor in the development of civilization. And though with electricity, we're talking about 100 instead of thousands of years, the point is that all of these technologies have already reached their apex and are now in common use. Technic in Greek means art or artifice. Technology and art don't exclude each other—it's like using an art form to make another art form.

JM: You've also talked about the fact that some of your works, particularly Pipeline, have a very strong political message. Pipeline, which was both an indoor and outdoor work, snaked up 30 feet and traversed walls. NH: Inside, Pipeline dripped oil into a puddle on the floor, which referred to leaks in the Alaska pipeline. I was invited to Alaska to get inspired by the landscape, and the thing that most overwhelmed me was seeing the pipeline going in and out of the land, traversing the mountains, and spanning lakes, while knowing that they hadn't perfected the system. It was rusting and subject

Hot Water Heat, 1984. Galvanized steel pipe, valves, gauges, radiators, and water, 11 x 30 x 22 ft.

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Pipeline, 1986. Steel duct and oil, exterior and interior views of work at the Visual Arts Center of Alaska, Anchorage.

to freezing, so there were a lot of spills into the pristine environment. In response, I built my own pipeline at the Anchorage Art Museum. Parts of it were outdoors, and one segment arched over a railroad track and then plunged into the ground, coming back up again to form an archway that you walked under when you entered the museum. Then it twisted around the corner and appeared to pierce the building; inside, at the exact same place, a pipe turned a few times and slowly made its way down from the very high ceiling. Eventually, like the Alaska pipeline, it was held by braces, and, just at that point, the oil dripped. It was on a timer, and so many drops per hour fell into the pool. The gallery was partially funded by the oil companies, so the curators and the director were very courageous to support a work like this.

JM: In the case of Waterwork (1983–84), a participatory fountain of sorts at Gallaudet University in Washington, DC, there was quite a response from a particular audience.

NH: Waterwork was located near the university's elementary school for deaf children. Though it was meant for all ages, the children were especially curious about where the water came from. The main pipe plunged down and split into two pipes surrounding two geometrical areas of sand, where the children could turn the water on and use it to make sand forms. This way, they could get a sense of the water's feel and how things mixed with it; they could think about how it comes to us. Waterwork encouraged them to wonder. We turn the water on many times every day. How often do we have that sense of wonder?

JM: Waterwork, which was dismantled in 1995, raises the fact that not all of these pieces are still installed. Catch Basin remains in operation, though, and still functions.

NH: It does, and not only does it function as art and as a visible way of seeing land drainage, but it also has a purposeful aspect. St. James Park had just been expanded, regraded, and planted with grass. After a few rains, a sunken area developed, where water collected. Standing water breeds insects, algae, and microbes. I told them that I'd build a sculpture that would fix the problem. *Catch Basin* drains the water in that area of the park. It's art that's also functional.

JM: Functionality has played a consistent role in your work. You mentioned the electrical piece at John Weber Gallery, where you also created Hot Water Heat. Visitors could rotate a wheel in order to turn off the flow of hot water.

NH: For the time that it was up, *Hot Water Heat* was the heating system for the gallery, and the main valve could be turned on and off. Gallery staff were there and could check on it. *Waterwork* had a timer—the water could only be turned on and off at certain times of the day. You couldn't leave it on constantly. I like the idea of potential participatory involvement; I think it increases the sensation of the elements flowing through the work.

JM: You've referred to being "physically and visually connected by a single pipe to water coming in from the vast urban infrastructure." Basically, these works provide situations in which people become concretely aware of that connection.

NH: Yes, and it never ceases to amaze me that you can affect the flow of water or air, that

with electrical systems, all you have to do is flip the switch. There is lurking participatory potential.

JM: I'm also interested in the two ventilation pieces that you did, one at Guild Hall in East Hampton and the other at the Tampere Art Museum in Finland. The one in Finland actually circulated air, from the outside in and the inside out.

NH: The Guild Hall piece strongly evoked the inside/outside connection, but it didn't penetrate the wall. In Finland, there was an interchange of indoor and outdoor air. I did a total of four ventilation pieces, the first one in 1985 at the Temple Gallery in Philadelphia.

JM: In speaking about these works, you've mentioned a playful quality that I think characterizes a number of your system pieces. We could even use the word "absurd," taken from Eva Hesse's notion of the absurd in art. NH: Yes, that's definitely part of this work, and I felt a connection at the time to Hesse's work. There's a sense of absurdity and of taking things to extremes, like bending pipes in unusual ways and twisting them around on themselves. Gauges within the system show you the water flowing through, so that it isn't just about seeing pipes—you're actually seeing the water flow every time you see a wheel turn within the system. Hot Water Heat had a mechanism on the wall where I inserted circular graph paper. During the day, a red pen and a blue pen drew the temperature and the humidity.





Ventilation III: Finn Air, 1992. Steel duct, fans, turbine ventilators, and shanty caps, indoor section: 9 x 24 x 17 ft.; outdoor section: 15 x 34 x 27 ft. Work at the Tampere Art Museum, Finland.

So, the sculpture produced its own drawings, which I thought was an interesting idea. There were gauges that you could watch to see the pressure rise and fall, water wheels spinning with the flow, and strangelooking, old-fashioned radiators that emanated heat, so there was a playfulness.

JM: But on a human scale: all of these system projects are done so that they relate to the human.

NH: Yes, absolutely. I'm interested in bringing the universe to the human being. There is a strong connection between Sun Tunnels and these system pieces because Sun Tunnels is part of a system as well, the solar system. The work is just an element within a much vaster system in which the sun rises and sets on the solstices, and one senses the earth's rotation. During the day, the sun shines through the holes in some of the tunnels and creates ever-changing spots of light. You can walk through the tunnels, and these spots of light are like the stars; the sun being a star, it's casting its starlight at your feet. So, the tunnels are indicators of much vaster systems, just like the system pieces are part of a whole, part of a huge, manmade system through which we channel elements.

JM: You talk about the system works as site-specific to a gallery. Could they be recreated in a museum space?

NH: They could, and I had that in mind when I did them. It's easier now for museums to re-create rooms, but it's hard for

people to believe that these works can be made again—though I just did it for "The Light Show" at the Hayward Gallery in London. It was thrilling to see *Holes of Light* again just as it was in 1973, when it was created for the LoGiudice Gallery in New York; they re-created the original room dimensions. Remaking this installation proves that museums can own these works; but in the past, they thought of it as being difficult to do or couldn't imagine it.

JM: Electrical System, from John Weber Gallery, could be re-created in a museum space of the right scale. It would work very well, in fact.

NH: It wouldn't be that hard to do. It's standard electric conduit, and there are special tools that bend it. In the early '80s, artists would often learn a skill, like electrical work or plumbing, to get by financially. I often worked with these artists. They understood that I was trying to make a work of art. It was all done to code—exactly the way you would do any functioning electrical or plumbing system.

JM: A recent Whitney program on women and technology made the point that collaboration is necessary for these types of projects. You have always collaborated, with astrophysicists and engineers, among other experts. I am especially thinking of the collaboration behind Dark Star Park.

NH: Many different people from various areas of expertise worked on *Dark Star Park*. Sometimes I coordinate more than 100 people on my large-scale projects. Advances in technology have allowed me to do a lot of things. For instance, the slopes could be steeper because we used soil fabric, which was quite new at the time. As we put the earth on the mound, the fabric held it in place. There was also the process of making gunite spheres with revolving templates. **JM:** I was always impressed with the fact that you were brought on to this project before the architect of the building; you sat on the selection committee that approved the design.

NH: The first scheme tried to use the park as a front yard. The integrity of the park/artwork was at stake. And the architect was being insensitive to where most people were going to enter the building, which was from the side. My concerns prevailed, and the committee rejected the design. The second design was accepted.

JM: I must say, having visited Dark Star Park when you were just completing it and having returned recently, it's very verdant these days.

NH: It's very verdant. I selected the plantings and trees. The entire park, with its mounds, stairway, paths, retaining walls, stone masonry, spheres, poles, pools, tunnels, and plants, is an artwork. Before and after pictures show how the trees have grown and matured.

JM: It's a very beautiful spot, even though it's just a little pocket of land. In less than an acre, you've created a wonderful oasis.

NH: You know what amazes me? When the work was finished, people named the day when the shadows of the spheres and poles align with the permanent patterns on the ground; they called it Dark Star Day. It happens at approximately 9:32 a.m. on August 1, and every year, if it's sunny, people go and watch the shadows align. In 2009, when we celebrated the

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Sun Tunnels, 1973–76. Concrete, steel, earth, and sunlight, 4 elements, 18 \times 9.2 ft. diameter each. Work at Great Desert Basin, UT.

park's 25th anniversary, Arlington County made Dark Star Day official. It's very interesting that once the works exist, people go to them on a yearly basis. This is totally independent of me. People go to see the solstice at *Sun Tunnels, Annual Ring*, or *Solar Rotary*—I have quite a few works with a solstice aspect, casting shadows, aligning, or directing light through a circle overhead. Sometimes I check my works on the Internet, and I'll find a local newspaper article covering the fact that people had gathered, once with a picture of everyone holding hands in the middle of the sculpture. It's a phenomenon. It's awesome to me that the works are a nexus for people.

JM: Dark Star Park also commemorates a specific date in the history of Rosslyn, when the land was bought to build the town. To translate that into marks on the ground that line up on that day

Dark Star Park, 1979–84. Gunite, stone masonry, asphalt, steel, water, earth, gravel, grass, plants, and willow oak, 2/3-acre site. View of work in Rosslyn, VA.

in terms of the placement of the sun is a significant, and unique, feat. People engage the work repeatedly over time because of the temporal elements, whether the seasonal cycles of nature or dates in human history.

NH: Solar Rotary, at the University of South Florida in Tampa, has six elements that line up. There is the summer solstice, and then there are the five plaques commemorating dates in Florida's history over the centuries. One of them marks Ponce de Leon's siting of Florida in 1513; another marks the British governor receiving the first coastal map of Florida in 1772. There are also the dates for the founding of Tampa and the university and the Apollo 11 moon shot, which launched from Florida. Then, in the center of the sculpture, there is a 4.5-billion-year-old meteorite, which fell to earth in Florida—it's the oldest thing you'll ever touch. People are drawn to it. Can you imagine touching something that old, something that dropped out of the sky and ended up in the middle of my sculpture? To me, it's still amazing.

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