

KEN GOLDBERG 1995

## тelegarden

Custom planter, industrial robot arm (Adept 1), irrigation, video cameras, World Wide Web interface Keywords: installation, telepresence, participation http://queue.ieor.berkeley.edu/~goldberg/garden/telegarden

How do we trust what we see online and know it is authentic? *Telegarden*, which first went online in 1995, raises questions related to what the artist calls "telepistemology", or the study of the nature of knowledge gained through remote, mediated sources such as the Internet. This work promises gardeners from around the world a chance to tend living plants by watering and feeding them via the Web, using an industrial robotic arm, similar to those used in auto factories.

Ken Goldberg, an artist and an engineering professor at the University of California, Berkeley, provokes us to consider whether the garden really exists. We wonder whether we can truly trust that users' actions have actually contributed to the growth of the blossoming and verdant plants represented on the *Telegarden* Web site, or whether the entire art work is staged. Although the robot and the garden are both real and are in fact controlled by users via the Internet, Goldberg asserts that "media technology generally facilitates the suspension of disbelief. I'm trying to facilitate the resumption of disbelief."



Demonstrate, 2004

The physical elements of *Telegarden* were installed at the Ars Electronica Center in Linz, Austria, bridging the gap between the virtual space of Net art and the physical space of the gallery. much as Nam June Paik, Bruce Nauman and Gary Hill extended video art from the realm of the screen into the three-dimensions of sculpture. Goldberg's installation features a robotic arm centred on a white, table-like plinth, surrounded by a small, neat garden that circles the mechanical device. The garden includes a variety of colourful flowers planted in soil, an organic contrast to the hightech design of the robot. Online users register as community members, log onto the Telegarden Web site and take care of the plants from afar. In its first year online, 9,000 members signed up to participate in this exercise in collective online gardening. As media theorist Peter Lunenfeld writes: "In linking their garden to the World Wide Web and creating an intuitive interface for the control of the arm and camera, the artists transformed what most would consider a fit of over-engineering into a subtle rumination on the nature of the Commons."

In *Demonstrate* (2004), Goldberg continues to explore how the Internet and Webcams influence the ways we observe and interact with the world around us. This piece consists of a state-of-the-art telerobotic surveillance camera situated above Sproul Plaza at U.C. Berkeley, a site of student anti-war demonstrations and a launching pad of the Free Speech Movement of the 1960s. Using an easy-to-navigate interface, visitors to the *Demonstrate* Web site can focus on and zoom in on unwitting students, faculty members and other passersby, as well as post text related to the Webcam images. Created in honour of the 40th anniversary of the Free Speech Movement, *Demonstrate* raises questions about freedom and privacy in public spaces in an age of pervasive surveillance, when governments and corporations routinely utilize technologies to capture our images without consent.

