

Cybernetic Social Space

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Empathy has been a topic in my recent practice, starting with the interactive video installation *UCBM (you could be me)* in 1999, and continuing into the photographic works of *The Empathy Sessions* in 2000. In *UCBM*, viewers experience a “test” of their adaptation to artificial empathy or intimacy. A speaking female, shown as a video projection, is an intensely self-absorbed and ironically controlling scientist persona. She is my surrogate in the setup and the visible face of a computer-driven exchange. In a set of questions directed to them by this persona, viewers consider their reaction to her, as well as to a sequence of small LCD images that mimic a web cam located in someone’s private space.

UCBM uses a genetic algorithm (GA) as its method for assessing the viewer’s “empathy factor.” The GA takes a viewer’s empathy score derived from their speed of approach to the video projection and from their answers to three questions via touch input, and calculates it as a set of “genes” that mutate and cross over to form “offspring.” Viewers with adaptive offspring pass their genes into the gene pool that subsequent viewers interact with. In this way the recombinant computation of the GA links together a population of nine viewers before resetting. Each viewer is given feedback on how they did through voice, a light display, and a fitness chart.

The working definition for empathy that underlies both *UCBM* and *The Empathy Sessions* is something like this: It is a process of knowing through imagining the state of mind of the other. Both affect and physical signs are

involved in this process, and they are in balance with intellectual identification. The physical aspect can be characterized as an experiential resonance with the other, based on reading body language or other material signals from that person (or animal, or thing, for that matter). The physical aspects of interacting with *UCBM* include setting off motion sensors that are positioned in the

PHOTO: NELL TENHAAF



**Still and installation view from "UCBM (you could be me),"
interactive video installation, 1999.**

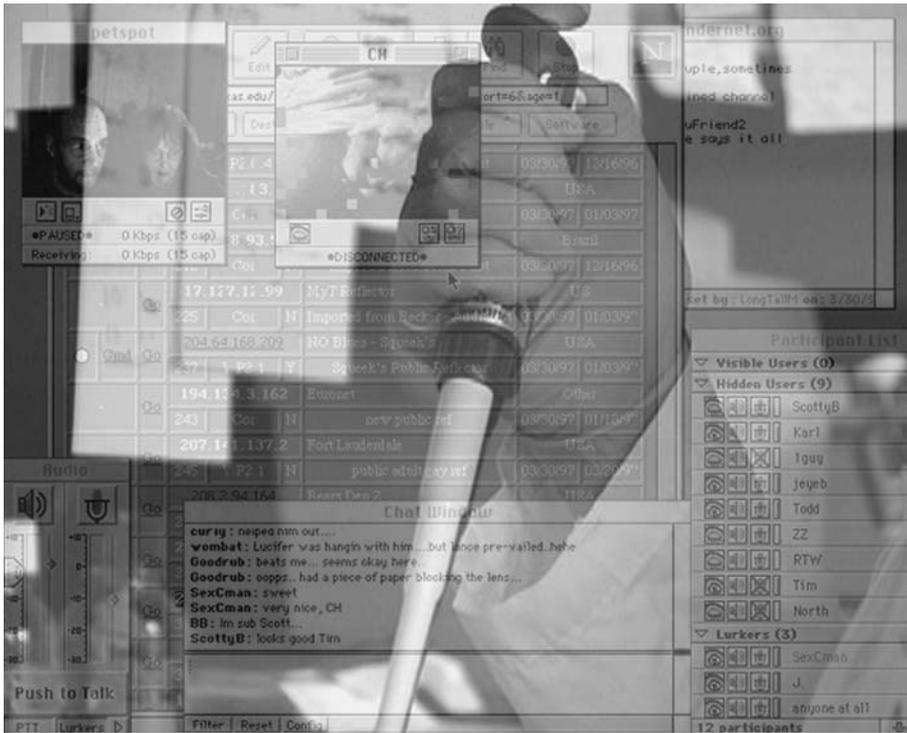
space, as well as touch response to the questions that are asked. Emotional involvement is suggested in the tone of the questions. In *The Empathy Sessions* affect is alluded to in the language of the titles: Fellow-feeling, Recognition, Care, Esteem, Camaraderie, and Courtesy.

The notion of empathy in my work encompasses both human-human and human-machine exchanges. I began to think about empathy as "cybernetic" in human-machine exchanges, because of the important role the computer plays in facilitating the interactive loops I set up. But this developed into a more metaphorically resonant idea: That empathy is cybernetic even in strictly human-human exchange because it emphasizes a two-way flow of relational qualities with a lot of feedback signals built into the process. This perception absorbs much that has been written about cybernetics in the past three or four decades, especially its extension into social systems theory.¹ But it is surprisingly not at odds with the original definition. In Norbert Wiener's pioneering work of the 1940s, the theory of cybernetics is based on three key insights: a) the idea of self-regulating systems that use feedback loops to

maintain their internal state; b) the idea of a kind of learning machine, or as Wiener put it, “an apparatus [that] assumes a specific structure or function on the basis of past experience;”² and c) the importance of information and communication as mechanisms of organization, both within a single entity and in the social realm.

The popular conception of cybernetics certainly leans away from the emotional realm and towards the structural and cognitive aspects of information flow, because of its origins in systems control and its intimate links with the development of computing. But it is interesting to probe further into why this is so, and what impact it has had. One could argue that most readings of Wiener’s theory have carried the same language conventions and interpretive biases as are often applied in scientific thinking, conventions, and biases that are difficult to overturn. Evelyn Fox Keller has given us some cogent feminist analysis of this phenomenon in relation to the history of science. She has critiqued, for example, the idea that natural selection can be equated with competition by calling attention to a succession of erroneous assumptions that result from “reading cultural norms into natural law.”³ She outlines how the conventional idea of natural selection arose and became entrenched through language, such that competition came to cover “all possible circumstances of relative viability and reproductivity,” even where the juxtaposition of organisms or species is not occurring in nature at all but “only in the biologist’s own mind.”⁴

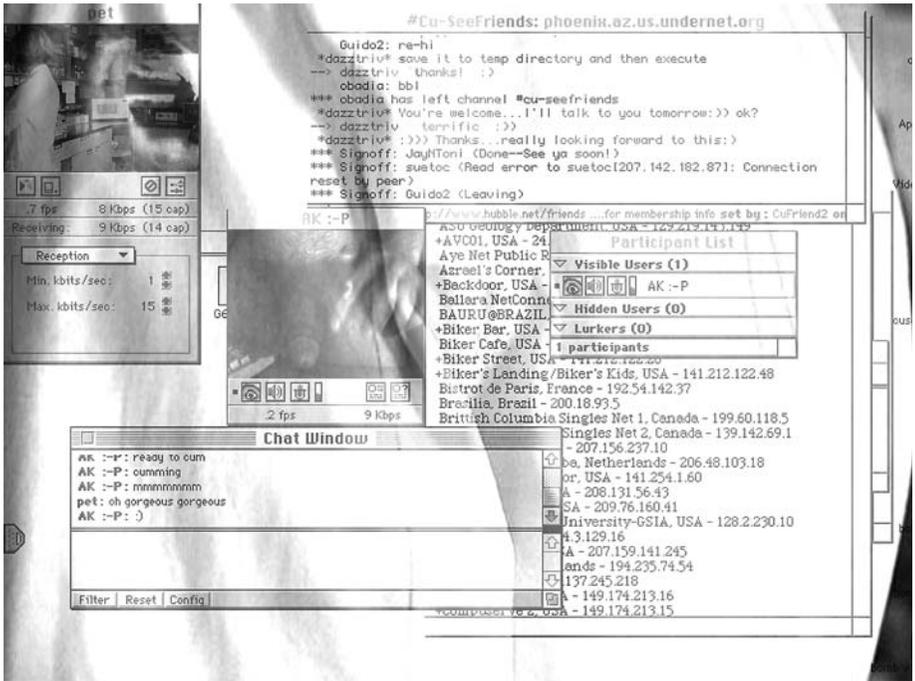
The domain of cybernetics, and its broadly popularized extrapolation, cyberspace, have not been immune to interpretive bias. This is evident in the general sense of robotic or otherwise dehumanized interactions that tend to be associated with cyber-anything, as if the machine will invariably overpower the human, who is made frail precisely by h/er affective dimension. In a sense, the cybernetic modeling of social relations that is suggested in *UCBM* parallels the exposure of conventions embedded within scientific thought that has been key to feminist theories of science. *UCBM* establishes a relational exchange in which information is both objectively “out there” and, at the same time, subjectively activated in the viewer’s imagination, where it sways her or his



"Session #1–3, Fellow-feeling, 31/03/97" from "The Empathy Sessions," 2000, light box (aluminum, LightJet transparency), 14 x 17 x 3½ in.

emotional register. The scientist figure represents a provisional point of view, that is, she both embodies an objective data gatherer and stands in for the viewing subject who identifies with the work by choosing a path through it. Both the scientist and the viewer move back and forth between places of enunciation, acting conditionally as participant and as external observer. These features of interacting with *UCBM* contradict the traditional subject/object split of scientific enquiry, and also create a space for the affective aspects of an exchange that are usually written out of a scientific context.

In *The Empathy Sessions*, I extend the theme of empathy by taking stills from the image flow of *UCBM* in the form of close-ups of the lab coat that the scientist character wears. These become the setting for screen captures from *CUSeeMe* sessions that I participated in between March and December of 1997. (*CUSeeMe* is software that allows several people with cameras connected to their computers to see low resolution video of each other, accompanied by a chat window for verbal exchanges.) The lab coat detail carries the doubled



"Session #2-2, Care, 30/11/97" from "The Empathy Sessions," 2000,
C-print, 17³/₄ x 23⁵/₈ in.

signification that I associate with all clinical accoutrements because it suggests both coldness and care, or picking up on the description above, the ambivalence of the researcher who is both removed and involved. The CUSeeMe screen captures are mostly graphic portraits of masturbating men, which admittedly conveys a biased portrait of the sexualized content one finds on the Internet. It does predominate in the amateur porn to be found there, though. It is the content I was looking for in the CUSeeMe sites I chose to enter and snap pictures of because I wanted to directly address people's commonly-held and often contradictory beliefs about sex on the Net, for example, that it is deviant, distasteful, and dehumanizing in entirely new ways, but at the same time is nothing new.

There are, in fact, things that are new about the raw and most often solitary sexuality that is shown in *The Empathy Sessions*, and they are meant to suggest deviance from the norm. But this isn't located in the obvious voyeurism, in the coldness of the computer context, or in the "unwholesome" onanistic connotations that solo sex has for some people, eliciting everything from prurience to

pity. How I deviate from the norm is that my on-line sex encounters have left me with a surprisingly strong sense of empathy toward the participants in this kind of vicarious sexual expression, and related to this, an unexpected impression that my intellectual response enriches the overall experience. The discovery of subtle subject/object reversals in these encounters, and the recognition of moving between participant and observer roles, strike me as potentially creative features of what Sean Cubitt calls “post-privacy culture.”⁵ Because there are real people interacting here, caught up in the ambiguity of distance and intimacy characteristic of on-line display exchanges, this is a zone that can help us appreciate how the integration of computer technology into so many facets of our communications is changing social relations. If contemporary culture is indeed becoming increasingly characterized by post-privacy, artificiality, and cybernetic human-machine interaction, it seems important to understand and nurture relational qualities like empathy that can apply to both familiar and new forms of exchange. ★

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- 1 See R. Felix Geyer and Johannes van der Zouwen, eds. *Sociocybernetics: An Actor-oriented Social Systems Approach* (Leiden/Boston/London: Martinus Nijhoff Social Sciences Division, 1978), Vol. 1 and 2.
 - 2 Norbert Wiener, *Cybernetics: or Control and Communication in the Animal and the Machine* (Cambridge: The MIT Press, 1999 [1948]), p. xii. At the same time, Wiener cautioned against looking for any direct “social efficacy” in the application of his theories because they retain much of the isolation of phenomenon from observer that is characteristic of scientific practices, p. 162.
 - 3 Evelyn Fox Keller, *Secrets of Life, Secrets of Death: Essays on Language, Gender and Science* (New York: Routledge, 1992), p. 113.
 - 4 *Ibid.*, p. 125.
 - 5 From a talk by Sean Cubitt in conjunction with the Images Festival of Independent Film and Video, Toronto, Spring 2000, in which he linked webcam and other computer-dependent video transmission with creative subversions of surveillance cameras and other forms of pervasive public data-gathering.