From Xerox PARC to the Kitchen Table: Playing the Artistic Stakes in Cyberspace

The other night I was in a meeting with an information systems manager. Culture was on the table, literally: novels and poems and films and videos retrieved from the internet, downsize into digestible microchip bits of information, and served up in a glass bowl. With a simmering grain of conviction in his eye, misting the silicon edges of the glass bowl, the information systems manager leaned over the table towards me. Carefully stating the obvious in a measured tone of someone talking to an uncomprehending child, he urged me to consider the importance of bringing new dynamic vocabulary to communications. "Beginning to sound like a patent repletion of Wired magazine articles I had been reading, he told me that a revolution is taking place between the consumer as the receiver of information and the corporation as retailer of information. "In the post," he suggested without a hint of nostalgia in his steady voice, "technology serves to enhance the effectiveness of the individual mind. In the future, the focus will be on the expansion of the organizational mind."

As I looked around the room, I realized that we were in a meeting at the Canada Council. A video camera was recording our conversation. On computer screens behind us, I saw ourselves dissected and reconfigured as minute body parts. Looking at those images, I noticed that his voice was dry, that my eyes twisted nervously. On other monitors, I could see meetings taking place in other rooms. Here the image data bank was no longer a window on the world, or peering into surveillance footage, but an interactive office pool. Suddenly, the features of the information systems manager began to change, transforming into a combination of a bit-chip character out of a Bruce Sterling cyberpunk novel and Ontario Conservative Party leader, Mike Harris. (Odd, I thought to myself, that Harris should appear in my dream, since his proposed solution to a fiscal culture crisis has less to do with new technologies than a nineteenth-century idea of cultural charity. Only days ago, at a forum on the arts, a spokesperson for the Conservative Party announced that the arts funding infrastructure in Ontario could nearly be replaced by a system of volunteer patrons paid a dollar a year to administer and disperse cultural funding.)

Taking a notepad and a pencil from the table, the information systems manager began to draw a graph that simultaneously appeared on one of the computer screens. With his tools of corporate wizardry in hand, he launched into a stream lecture on the foibles of the public purse. "I understand," he said, "that there has been some hostility in the arts community against the decision to dismantle the Art Bank. But it's a simple issue of economics. As you can see from this graph, we have invested the potential worth of art works against the predicted loss of government and corporate office space through restructuring and cost efficiency measures. Future projections point to a radical reduction in the need for objects to fill a radically reduced work space. With everyone working at home on computers and attached to computer screens surfing the Net, there will be no demand for traditional objects of contemplation. Besides, I don't see why artists don't sell their work online. There has just been an agreement reached that will allow direct credit card purchases through the Internet. It makes much more sense to have artists explore home shopping networks and direct consumer access than to continue with a cumbersome and inefficient system of individual grants. The information highway, my friend, leads to direct democracy in the arts."
A dream is just a dream... or is it?

Last February, I visited Xerox PARC (Palo Alto Research Center), which recently initiated an internship-program to involve local San Francisco Bay artists with staff researchers to provide what Xerox describes as "intersections with a sustained community." "Funded by Xerox Corporation to explore and study technological innovations in the workplace, PARC falls itself on its visionary investments in the development of ubiquitous computing. Its teams of scientists, anthropologists, and engineers have already realized prototypes models of cybernetic interchange. Most recently, the head of Computer Science Laboratory, thoát a future in which computers are incorporated into the walls and surfaces of the work environment. Writing in Scientific America about Xerox PARC's research philosophy, Weiner proposes that "the most profound technologies are those that disappear. They weave themselves into the fabric of everyday life until they are indistinguishable from it." ("The Computer for the 21st Century," 265:3 (Sept '91).)

When I arrived at the entrance of PARC for my tour, security was tight. I filled in an identification form that would have made the Pentagon proud. Once inside, cameras recorded my movement and conversation. Yet despite the Orwellian implications of this environment, the atmosphere was relaxed. Colleagues were prevailed. Everyone was eager to demonstrate his or her wares, opening computer screen windows from one office to another, calling up files.


pointing out the virtual blackboards in conference rooms, activating the computerized tabs that track the movement of the employees through the complex. Enveloped within an heiratically sealed technological wonderland, I was struck at how bizarre the whole project seemed, gently revealed in the rolling green hills of Palo Alto and populated by scientifically attired minds.

Far removed from the encrusted sanctuaries of Xerox PARC, however, I have the uncanny feeling that the myriad strands of technology infiltrating my consciousness are not so benign. As I look around my own office at paper descending from the fax machine, e-mail piling up into a metaphorical mountain in a virtual mailbox, the voice-mail button blinking on my telephone, day-time talk shows blaring a cacophony of television noise, I realize that the sensation that technology has invaded everyday life. Producing a constant delusion of interference, technology wraps its tentacles around the thin line between the programable and the absurd. Blurring the boundaries between reality and the imagination, it usurps my sense of being in the world in ways that are as fantastical as the hallucinatory interconnectedness of my dreams, and as ideologically opaque as thelessness of ubiquitous computing.

It is this sensation, a sensation of technology as private, invasive, a "dreaming machine" permeating visions, dreams, politics, passions, that has come to stalk me. It follows me into bank machines, corner stores, apartment lobbies, government offices. It trails me like a secret agent who is discreet in his distance, but nevertheless persistent in his task of shadowing and every activity. Its discerning enunciation ranges from the coarse of Newsweek announcing "Techno-Mad: The Future Isn't What You Think" (Feb. 27 '85) and Uwe Rosler's essay on Germany's "Cybercult" of Citizen's computer association "Cyberpunk vs. Neighborhood" (no. 85: May/April '91) to The Globe and Man's incessant chatter about the fascinating implications of the Internet and the looming transformation of an information-based economy that will be akin to the Industrial Revolution in its consequences. On television, it has found a permanent home as a visual projection: computer screens within television screens becoming indispensable aids for an endless parade of commentators explaining life and religion and science on the new cable channels.


With the recent flurry in the Toronto art world to champion the semantic complexity of art and technology, it means that the sensation of technology as the terrifying machine of late capitalism is also startling artists. In contrast to the art world of the 1980s that bemoaned strategies of appropriation, media construction, gender analysis, and identity politics, the art world of the 1990s has become a launching pad for an emerence of technology-geek technology as the object of investigation. From Public Access's high profile lecture series in February 1995, Robotech: Art, Gender, Technology, to the more modest and ongoing investigations sponsored by InterAccess, an art/tech center, and from the Science Center's interactive new media Technologies show in the fall of 1994 to The Power Plant's splashy Press/Poster exhibition in April 1995, artists and writers who can "talk the talk" about technology are in demand.

Different from the previous obsession with contemporary in less than a decade, the technologically focused art comes garnished in a discourse of utopian futurism that is as expansionary and visionary in its conviction of consciousness as the corporate sector's conviction of a global information economy. What is at stake here, according to the genres of new technologies such as Sandy Stone and Janine Antoni, is the transformation of identity, sexuality, education, and the self in short, the end of humanity as it has been historically comprehended in time and space. For Starkie, an Australian-based performance artist who has built himself a computerized Third Arm and lights cybernetic robotsfadstetyle, the body is an outdated container of physical impulses and genetically programmed obedience. In a bid to replace biology with artificial intelligence and to reformulate the body not as an object of desire but as an object for design ("Phantasm/Moon/Full Sail: Images as Posthuman Entities," unpublished paper, ed.) Starkie imagines his physical presence as no more and no less than an interface between machine and image. "Images are immaterial, bodies are ephemeral" proclaims Starkie, and promises that the presence of both male and female/male haunting human existence will be swept away by the emergence of "hybrid image-machine systems."
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When I arrived at this eminence of PARC for my tour, security was tight. I filed in an identification form that would have made the Pentagon proud. Once inside, cameras recorded my every movement and conversation. Yet despite the Orwellian implications of this environment, the atmosphere was relaxed. Colleagues prevailed. Everyone was eager to demonstrate his or her wares, opening computer screen windows from one office into another, calling up files, pointing out the virtual blackboards in conference rooms, activating the computerized tabs that track the movement of the employees through the complex, enclosed within an hemispherically walled technological wonderland. I was struck at how boring the whole project seemed, gently revealed in the swaying green hills of Palo Alto and populated by scientifically attired minds.

Far removed from the encased sanctity of Xerox PARC, however, I have the uncanny feeling that the myriad strands of technology infatuating my consciousness are not so boring. As I look around my own office at papers cascading from the fax machine, e-mail piling up into a metaphysical mountain in a virtual mailbox, the voice-mail button blinking on my telephone, day-talk shows blaring to a capacity of television networks, I have the sensation that technology has invaded everyday life. Producing a constant debris of interference, technology wraps its tendrils around the thin line between the plausible and the absurd. Blurring the boundaries between reality and the imagination, it usurps my sense of being in the world in ways that are as fantastical as the hallucinations of cyberspace. As a dream and, as ideologically opaque as the seamlessness of ubiquitous computing.

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With the recent flurry in the Toronto art world to champion the semantic cohort of art and technology, it seems that the simulation of technology as the desirable machine of late capitalism is also at work in artists. In contrast to the art world of the 1980s that celebrated strategies of appropriation, media construction, gender analysis, and identity politics, the art world of the 1990s has become a launching pad for an embrace of technology-cyber technology as the object of investigation. From Public Access's high-profile lecture series in February 1995, Robotis, Art, Gender, Technology, to the more modest and ongoing investigations sponsored by InterAccess, an art/science center, and from the Science Centre's interactive new media Techno-Show in the fall of 1994 to The Power Plant's splashy Press/Tourer exhibition in April 1995, artists and writers who can "talk the talk" about technology are in demand.

Catherine from white obscurity to commonplace in less than a decade, the technologically focused art comes gifted with a discourse of utopian futurism that is as expansive and visionary in its conquest of consciousness as the corporate sector's conquest of a global information economy. What is at stake here, according to the gurus of new technologies such as Sandy Storoz and Janus Lurie, is the transformation of identity, sexuality, rebellion, and the soft, in short, the end of humanity, as it has been historically comprehended in time and space. For Storoz, an Australian-based performance artist who has built himself a computerized Third Arm and lights cybernetic robots gladiatorial-style, the body is an outlawed container of physical impalpable and genetically programmed obsolescence. In a bid to replace biology with artificial intelligence and to reformulate the body "not as an object of desire but as an object for design" ("Phantom Body/Fluid Self: Images as PostHuman Entities," unpublished paper, n.d.), Storoz imagines his physical presence as no more and no less than an interface between machine and image. "Images are immortal, bodies are ephemeral" proclaims Storoz, and promises that the bioremediation of both male and female/male haunted human existence will be swept away by the emergence of "hybrid image-machine systems."
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Given the resources and publicity directed to Press/Enter, I had hoped for a glimpse of a cyberspace future in which critically and democratically critical elements of a technological present were rediscovered. I was one of the few who have been able to ask to present this position, that is, the Gulf War, coverage of battles was simulated and "collaborative battles" replaced "exclusive battles." The Gulf War was a true case against the use of technology that was being debated by the public, and the repercussions of this debate were felt in the public opinion.

Gibson's vision of a utopian future also served as a goal for the academic study and criticism of the cyberpunk movement. In the early 1980s, the movement in the United States was called "artificial intelligence" and its influence in the cyberpunk movement was seen as a "new technology" that promised an era of digitalized and cyberpunk society. In the "new media" of the post-U.S. War era, a vision of a cyberpunk future is more likely to be formed by a symbiosis between art and technology, and corporate partnership than by calls for technological autonomy and antiproprietary platforms of self-determination. For Art, the collective perspective of Press/Enter, clearly outlines in its catalogue introduction to the exhibition, the "symbiotic intelligentsia of Press/Enter" which sold its services to the public to support the creative process in the R&D laboratory and to the innovation in the marketplace. In AT&T's claim that "its association with the arts is rooted in our belief that the arts are an important form of communication — and, of course, [communication is at the core of our business]," a number of questions concerning the relationship of art, technology, and ideology are raised. In a freewheeling equation of art and technology, who is complicit in setting the acceptable limits of dissent? The artist? The curator? The corporation? Will the helping hand of corporate funding and institutional support be as easily extended from the artists in Press/Enter to artists whose alliances lie with the film experiences of post-colonial oppression rather than in the future projections of "hybrid" imaging systems where the artistic expression is compromised by the ideological underpinnings of an industrial "serving machine" disrupts the official face of culture, aided by the ascendency of the private sector interests over state-branded funding of the arts?

While the answers to these questions lie in the yet undefined future of the arts and technology, the logical wondering is whether the potential for change in the arts space at the present time does not necessarily entail striking a Faustian bargain with technology that leaves artists as the initiates of a new magic craft, scientists as wizards and computer scientists as sorcerers, and the artist as the arbiter of technology's grip on the cultural imagination. In the heart of Silicon Valley, a number of artists working on areas of art and technology have established laboratories and research centers, and the role of the arbiter of technology's grip on the cultural imagination. In the heart of Silicon Valley, a number of artists working on areas of art and technology have established laboratories and research centers, and the role of the arbiter of technology's grip on the cultural imagination. In the heart of Silicon Valley, a number of artists working on areas of art and technology have established laboratories and research centers, and the role of the arbiter of technology's grip on the cultural imagination.

Within the diverse realm of cyberspace, positions should be argued with rhetorical grace and nuanced criticism, sustained by the mundane satisfactions of eating, shopping, sleeping, social interactions, sexual anxiety, losing one's employment to restructuring plants, etc. What seems to be at stake in cyberspace, then, is how the transformation of identity, identity, sexuality, and self within a technological reality is an investment in the entanglement of consciousness within a technological imaginary. Connected through machines rather than through the body, discourse for a future that will
The great appeal of cyberpace lies in its historical constraints.

When the standard of artistic criteria are set in an environment that affirms the omnipotence of technology gives rise to an even older dream of mastery, masked as a dream of immersion. When the wearer is elevated to the status of the new cowboys of a virtual Wild West, and artists from the new cyber eighties, Robert Longo, found new careers in cinematically adapting images from the future rather than photographically preserving the present.

Gibson's vision of a cybernetic future also served as a grab-bag rubric for academic stud-

The "flow" of these images points to the imaginative when compared to the public opinion net cast by Rupert Murdoch, whose monopoly grip on a mass media has never seen more than a billion people daily. Virtual reality art projects are but the shadows on Plato's cave when compared to the virtual world of the American military offensive. Virtual reality, or "cybernetic" technology, is an extension of military industrial technology. The net work is the first stop in the Pentagon's creation of a "synthetic theatre of war."
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