

Anyone Up for Being a Techno de Medici?

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To begin my exploration of artful media, I thought I'd refer back to this column from the previous issue and try to get an answer to the author's question: "Just What Is Multimedia, Anyway?"¹ I looked up the word *multimedia* in my Webster's dictionary, only to find myself sent off on a branching exercise, a book-flipping experience as analog precursor to the digital labyrinth navigated on today's World Wide Web.

First, Webster's simply defines multimedia by a cross-reference: "n. same as MIXED MEDIA." So I moved on to the entry for *mixed media*, defined as follows: "1. the simultaneous presentation of a series of effects in more than two media, as by combining acting, flashing colored lights, tape recordings, and so on."² My dictionary is obviously a bit dated, as this definition sounds more than a little retro, like a sound and light show from the 60s. We've certainly come a long way from that dictionary definition of 15 years ago. Besides, no monolithic definition of multimedia really exists as it relates to art or technology, but rather a plethora, a *multi* of many things. And the definitions keep morphing anyway.

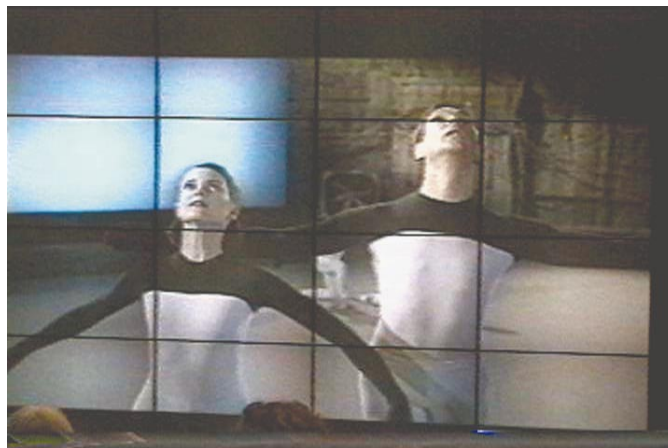
Hungry for interactivity

Artists, along with technologists, have historically stood at the forefront of multimedia—blurring boundaries and crossing borders, penetrating the looking glass, pushing the envelope with the R&D of their creative explorations using new technologies. In the process, they redefine the very notions of both art and artist. These artists work in multiple disciplines, across platforms, creating new forms from hybrid combinations, defying the labels of definition, and inventing new languages. In our current postmodern Oz, a cyber-Toto as avatar yanks the curtain and reveals the wizard at the screen, confronting viewers with questions of authorship, physicality, identity, and space. In most cases, the art experience—no longer passive—requires some sort of interactive participation.

For two years, I've been involved with artists working with multimedia and new technologies as the Director of Thundergulch, the Lower Manhattan Cultural Council's new media arts and technology initiative in New York City's Silicon Alley. We aim to provide new forms of interaction among artists, audiences, and new technologies.

To introduce artists working in some of the newer media forms, Thundergulch has been presenting a series "@ The Wall" showcasing artists' multimedia work on a 14-foot video wall (Figure 1) located in the lobby of the New York Information Technology Center. One of New York's "totally wired" buildings, it has T-1 connectivity and video teleconferencing capabilities, and serves as headquarters to many technological businesses ranging from Sun Microsystems to IBM to N2K to start-up Web companies.

Artists and/or curators/presenters



Courtesy of Thundergulch

Figure 1. Video still from Elliot Caplan's film of Merce Cunningham's "Beach Birds for Camera" featured at Thundergulch's presentation "@The Wall" in connection with works presented by The Brooklyn Academy of Music.

Figure 2. Participants gaze at the gallery window touch pads to direct the gaze of "Alice," ParkBench's wireless telerobotic video camera, which explores the gallery interior and sends images to the window and to the Web.



give informal salon-type presentations, navigating through their Web sites or CD-ROMs, and answer questions from the audience ranging from technological to aesthetic to conceptual. With all the hype of interactivity and the ubiquity of cyberspace, there seems to be a hunger for human interactivity in real time and real space, for physical linkages. The presentations just introduce the work, urging viewers to more directly interact with the work later at a performance, an exhibition, or the computer. Since March 1997, Thundergulch has showcased the work of more than 100 artists in these presentations and with multimedia exhibits.

Bridging art and technology

Several of these artists have partnered or collaborated with technologists. Thundergulch's premise stems from the belief that the arts and technology industries can benefit greatly from closer ties. Historically, companies have sponsored the arts as part of their public relations program. However, industry could benefit from having artists beta test new hardware or software, or explore new forms of transmission. Industry might also acquire new works through sponsorships or by commissions, or increase contacts with the creative community.

Artists can obviously benefit from access, from

the opportunity to explore media and tools that may otherwise remain out of their reach. Many proven examples exist where artists and technologists have worked together to foster research and push the envelope of creative expression. The challenge lies in finding companies willing to experiment creatively, take risks, and invest in the creative community.

More than 30 years ago at Bell Labs, Billy Klüver helped established Experiments in Art and Technology (EAT), designed to help artists with engineering problems. EAT recognized that collaborations between artists and technologists could result in a unique synthesis, creating something completely different than what would evolve from either monoculture. More recent models include Xerox PARC (Palo Palo Research Center) and Interval Research, both located in Silicon Valley, and the Massachusetts Institute of Technology's Media Lab. But with the current explosion of the technological revolution, it seems that there could be many more such "think tank" opportunities where technology companies could support artists' residencies or access programs.

Studying the synergies

To help foster collaborations between the arts and technology industries, or at least to discover where the "synergies" might lie, Thundergulch has currently undertaken a market feasibility study. Conducted by Northstar Interactive (with support from the National Endowment for the Arts), it will assess the potential for industry and academia to benefit from services of new media artists and vice versa (see <http://www.nsir.com/newmediaart>). I hope the study will help link artists to businesses, uncover potential earned income projects, and locate prospective partners to expand Thundergulch's programs. Perhaps a few concrete examples of such "symbiotic" relationships will serve as testimonials to the potential for such collaborations.

ParkBench

Nina Sobell and Emily Hartzell were previously artists-in-residence at New York University's Center for Advanced Technology. Their project, ParkBench, which began there in 1994, was one of five Web sites nominated this year for a Webby Award in Arts. The work evolved out of Sobell's interactive video installations of the early 1970s. Only now the medium has shifted. ParkBench experiments with the Web to discover its potential for creative, collaborative expression, and to explore and sculpt the boundaries between physical space and cyber-

space. By having support and access from NYU's CAT, Sobell and Hartzell have experimented with emerging technologies otherwise beyond their reach. On the other hand, their work has also inspired the development of new technologies, including the first NYC-guide kiosk interface, the first Web-based barter network, and a wireless tele-robotic video camera for streaming video to the Web from a remote location (see Figure 2).

Gertrude Stein Repertory Theatre

The Gertrude Stein Repertory Theatre is pioneering the use of the Internet and other digital technologies by integrating traditional stage techniques with the limitless space of the World Wide Web. Working with major technology developers such as Lucent/Bell Labs, IBM, and Nippon Telegraph and Telephone (NTT), GSRT develops innovative approaches to live, virtual, and multisite performances. These creative explorations have resulted in more practical applications. For example, GSRT's for-profit spin-off, Learning Worlds, creates and markets networked training, communications, and learning environments using new technologies.

Char Davies

Canadian artist Char Davies is internationally recognized for her virtual reality installations ("Osmose" and "Ephémère"), which explore the unique potential of immersive virtual space to change our habitual ways of perceiving the world. (For more information on "Osmose," see Dave Sims' article "Osmose: Is VR Supposed to Be This Relaxing?" in *IEEE Computer Graphics and Applications*, Vol. 16, No. 6, Nov. 1996, pp. 4-5.) Davies actually helped develop the company SoftImage in Montreal to facilitate her work. The software was subsequently sold to Microsoft, and she has gone on to new endeavors in her own artistic work.

"Gesture as Value"

Jeralyn Hanrahan was living in Europe when she went to NCR (National Cash Register) to ask for support to reconstruct one of their automatic teller machines (ATM) for an interactive art work. For "Gesture as Value," NCR assisted the artist in designing a unique user interface for the ATM that probes the worth of a simple exchange (see Figure 3). Redefining the social value of exchange, this reconstructed machine dispenses original "gestures" instead of cash. Hanrahan worked with NCR software designers and programmers to get the machine to do what she conceptually wanted



Courtesy of Jeralyn Hanrahan

it to do. Although she was skeptical at first that they would agree, evidently someone in the company recognized that her artistic investigations might have commercial applications.

Thundergulch assisted in siting "Gesture as Value" last year in the New York Information Technology Center. Other prior locations included Bern, Switzerland and Toronto, Canada. The piece has sparked substantial interest and received coverage on National Public Radio and the British Broadcasting Corporation (BBC), among other media.

A plea for US support

Unfortunately, the notion of enlightened corporate support by technology companies in the United States lags behind other countries, where many new media/art/technology facilities have support from industry. Last spring, the New York State Council on the Arts and the New York Foundation for the Arts held a statewide conference titled "Circuits: The Governor's Conference on Arts and Technology." In her opening plenary remarks, Joan Shigekawa, Associate Director of Arts and Humanities programs at the Rockefeller Foundation, cautioned participants about the impending danger of a brain drain in the US if we don't begin providing some of the resources and support for the R&D of creative investigations in art and technology. Without such support, many multimedia artists will continue to be itinerant, traveling to places that truly support the creation and distribution of new media art—places like Ars Electronica in Linz, Austria; ZKM (Zentrum für Kunst und Medientechnologie) in Karlsruhe, Germany; the Intercommunications Center (ICC) in Tokyo; and Canada's Banff Centre for the Arts.

Figure 3. "Gesture as Value" uses an ATM with a unique user interface that dispenses original "gestures" instead of cash, probing the worth of a simple exchange between two people.

For example, Ars Electronica Center has support from major industry players, including Silicon Graphics, Microsoft, Ericsson, Hewlett Packard, and more. Sun Microsystems has recently started supporting the new media center at the Institute of Contemporary Art (ICA) in London.

Where is the stateside equivalent? The US doesn't need more museums or galleries to support new multimedia work. We need new multimedia spaces—flexible and adaptable, open to risk and experimentation—created in partnership with companies developing new technologies, celebrating the mix of art and technology. Anyone up for being one of the first techno de Medicis?

Taking steps to grow

Although the idea of converging art and technology isn't new, it does seem that we're in the infancy of some new art forms taking their first baby steps. Of course, things can be a bit wobbly in the beginning. There's a need for trial and error, of falling down and getting up again, of patience and faith. Much of the new multimedia work seems to be in this early "baby steps" phase. It reminds me of the early days of video art, where artists experimented as they created new art forms and languages with new tools, which underwent a constant, exponential rate of change. To date,

the language and the tools aren't yet fully developed. But artists, in collaboration with technologists, remain an important part of that development, sometimes able to push technologies beyond the vision of the engineers and architects who built them. For with all the hype and seduction generated by the dazzle of all the latest bells and whistles, artists remind us that a tool is after all just a tool. It's how we use the tools—the form and content we create—that generates the artistic experience. MM

References

1. R. Packer, "Just What Is Multimedia, Anyway?", *IEEE MultiMedia*, Vol. 6, No. 1, January-March 1999, pp. 11-13.
2. *Webster's New World Dictionary of the American Language*, Second College Edition, Simon and Schuster, New York, 1984.

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"Great leaps in technology usually require the springboard of great dreams; breaking free of entrenched ways demands a vision that transcends the tradition of re-doing what's been done before."
—Jules Marshall

All scientists and technologists at the top of their field know the above statement to be true. Their success was not achieved through doggedly pursuing one path, but by "thinking out of the box," in a fluid, flexible manner that approaches problem-solving from any number of different angles. These are the types of scientists/technologists that would make a good match for collaborating on projects with artists. Showing examples of stellar art-science collaborative projects and providing both a virtual and real vehicle for match-making are the goals of this year's ArtSci Symposium, produced by ASCI (Art & Science Collaborations, Inc.), a NYC-based nonprofit organization. The symposium has become a fascinating annual event.

<http://www.asci.org>