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Interview with Michael Naimark: AT THE BAY AREA MULTIMEDIA ARTS & LECTURE SERIES: "VIRTUAL WORLDS: BEYOND THE SCREEN" October 2, San Francisco Museum of Modern Art

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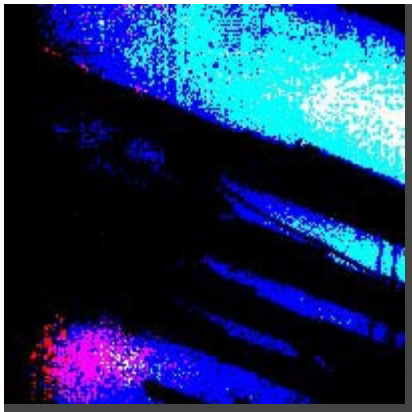

Interview with Michael Naimark

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Monica Vasilescu on Jan 1 1998 **issue 08**

A pioneer in the development of interactive multimedia and virtual reality, Michael Naimark presented his work at the Lecture Series organized by the Berkeley Multimedia Research Center. Michael Naimark's work traces the evolution of multimedia.

> *"It is my observation and belief that technology, particularly computer and media technology, is having an increasingly profound effect on everyone on the planet. And that if artists don't jump in and pro-actively help shape these powerful new tools, it will be left by default to advertisers, the military, organized religion, and sex peddlers. Some of us believe the stakes are high."*
> *Michael Naimark*

A pioneer in the development of interactive multimedia and virtual reality, Michael Naimark presented his work at the Lecture Series organized by the Berkeley Multimedia Research Center, the interdisciplinary research group at the University of California at Berkeley.

Michael Naimark's work traces the evolution of multimedia. From his seminal laserdisc tour through Aspen, Colorado ("Aspen Moviemap," 1978-1980), widely considered to be one of the first examples of interactive multimedia, to his latest project, "Be Now Here" (Welcome to the Neighborhood 1995-6)," a room-sized immersive virtual environment, Naimark has broken new ground in the development of virtual reality.

A graduate student at MIT in the late 1970s, Naimark worked on environmental art at the Center for Advanced Visual Studies and on interactive media at the Architecture Machine Group with Nicholas Negroponte. In the early 1980s, Naimark was recruited by the Atari Research Center during its heyday to help chart the future of interactivity. He left Atari a few years later to join the Apple Multimedia Lab to collaborate on what is often considered the first important interactive media for the personal computer, the "Visual Almanac." In 1992, Naimark went to work at Interval Research, Microsoft co-founder Paul Allen's prestigious and futuristic Silicon Valley-based think tank.

In his presentation at the San Francisco Museum of Modern Art Michael Naimark talked about the dualism of art and technology: "Art and Technology, like art-and-anything, addresses a dual agenda. To describe oneself as a conceptual artist, a reunionist artist, or a video artist is to acknowledge a dualism between one's genre, politics, or medium and one's art. And like all dualisms, sometimes there is symbiosis and sometimes there is strife. I believe in the existence of "Pure art" art without any other agenda but the art itself."

Michael Naimark declares his belief that artists should have an active role in shaping the new tools offered by computer and media technology: "That has been my attitude for the past twenty years, and I've had the good fortune during that time of working

inside a variety of institutions with similar beliefs (or which at least tolerated mine). These places supported my own work and for this I am grateful. In fact, my projects could not have been realized without their help. But it wasn't always a cakewalk. Sometimes it felt like the art and the technology forces were in opposition."

Michael Naimark illustrated his presentation with a representative selection of his most important works. He first talked about his experience as a graduate student and then as a Fellow at the Center for Advanced Visual Studies (CAVS) at the MIT in the late 70's.

The Years at MIT (1976-1980): "Is the Demo the Beginning or the End?"

"MIT was a lively place for art and technology during the late 1970s...CAVS focused on environmental art under the direction of Otto Piene and its founder Gyorgy Kepes. The Film/Video Department, run by Ricky Leacock, was participating in all sorts of video experiments. Meanwhile, Nicholas Negroponte headed the Architecture Machine Group, which was well-funded and increasingly getting involved in media. In 1977 I had this crazy idea to move a movie projector to mimic the original camera movement. I asked Nicholas for funding. He agreed, and I made a simple study by filming with a super-8 film camera on a slowly rotating turntable, then replacing the camera with a small loop projector. The result, which we called "moving movies," retained the film's original directionality and appeared as natural as viewing a dark space with a flashlight. After showing this to Nicholas I said "great, now I'm ready to begin" and he said "great, now you're done." I was interested in exploring imagery and he was interested in the technical process.

To confuse matters further, at that moment, we were just beginning a new project using one of the very first prototype laserdisc players. The idea was to film along predetermined routes with stop-frame cameras and make an interactive system which allowed end-users some control over speed and direction. The project, called the Aspen Moviemap, wasn't intended to be an art project but dealt with some classic issues of visual representation. We all knew we were breaking new ground. I continued working on this project for the next two years, and since then made several other moviemaps.

But I also kept working on "moving movies." I built various camera and projector contraptions to move the image with better control, but then felt like I had to decide: was I interested in building a new projector or in making an art statement? I opted for the latter, and over the next four years produced a series of installations reverting back to a simple turntable, but where I could concentrate more on the imagery itself.

The Architecture Machine grew into the Media Lab and prospered, while CAVS increasingly struggled through the 1980s. I believe this split between the well-funded technologists and the struggling artists was microcosmic of what was happening in the United States during this period. The lesson at the time was that demonstrating a novel idea was different than using it toward artistic ends."

The Years at Atari Research (1982-1984): "Everyone Is not Like Us."

"In 1982 the Atari Corporation, which was making an incredible amount of money on video games, decided to start a long-term research lab to look ten years ahead into the future of computing. They hired Alan Kay as Atari's Chief Scientist who immediately went about rounding up a hundred mostly young people he thought would be "visionaries" for this task. Many of these young people were from the emerging MIT media scene, as well as a diverse group of others. Having already moved to San Francisco in 1980, I was brought in as well.

One problem I noticed is when you put a bunch of very bright people together to speculate about the future, they do just that: speculate. This can be dangerous, because it's easy to cut off the rest of the world and assume everyone is just like you."

The Years at Apple Multimedia Lab (1988-1990): "Educators and Artists Are Different."

"Atari crashed in a big and ugly way in 1984. Many of the people resurfaced several years later at Apple and Lucasfilm. By 1987, a conspiracy of sorts was made between some of these people to convince both companies to start a multi-media laboratory. Neither company was willing at that time to commit to multimedia, but together they approved of the formation of the Apple Multimedia Lab, located in San Francisco, mid-way between Apple in Silicon Valley and Lucasfilm in Marin County. These were close colleagues of mine, and I was invited to help.

Our flagship project was called the "Visual Almanac," Apple's first interactive laserdisc made primarily for schools. I directed production of the laserdisc, which consisted of thousands of short sequences of still images, video clips, and weird stuff.

I remember sitting in a meeting with several consulting teachers and listening to how they all tried to communicate so clearly. I became depressed: they were trying to communicate their ideas by saying everything in such an obvious and explicit way. This is not the way artists I knew operate; we seem to be more concerned with creating a feeling, an impression, or a metaphor.

This distinction came to a head on a little piece I was making for the disc, of a main street in Silicon Valley filmed by the State of California Transportation Department very much like a moviemap. They filmed one frame every 52.8 feet, or one hundred frames per mile, from a camera car throughout the state. And they'd been doing it since the early 1970s. I selected an interesting hundred frames and made a split-screen version of their earliest film and their latest film, a "then and now" comparison of how things have changed over this one-mile strip in Silicon Valley. Several colleagues on the project wanted to add educational information about each of the buildings, but I refused, wishing instead for the visual impact of the material to stand on its own. Then they said "you can add it, and since it's interactive the user doesn't have to see it" and I still said NO. I felt this was a trap of sorts.

At any rate, I was left with the impression that educators and artists have different intentions. Maybe "intentions" is too strong a word here, since both educators and artists might say their intention is enlightenment. But even so, educators tend to spell things out in a more literal way while artists have less of a problem with ambiguity.

I may have been particularly sensitive to this distinction since I was also teaching at the San Francisco Art Institute, a landmark institution for contemporary art, a cutting edge place. I was teaching a class called "Virtual Environments." The students produced an ambitious virtual environment of a restaurant we named "EAT," involving students performing as waiters and images of food (among other things) projected onto the diner's plate from a video projector hidden under the table. EAT was exhibited at various art venues, and it also showed at SIGGRAPH 91. The next year, my students produced a videotape parody of virtual reality called "Virtuality, Inc." It received a "Futures Scenarios" award at SIGCHL the major computer-human-interaction conference.

I realized that I was pushing these projects in the direction of the research community more than the art community, like making little "art bombs" and lobbing them over the fence into foreign territory. I must say I was proud of that. It was also great fun. I very much wanted the art to have some impact on the research community. But the fact was, almost no one at the Art Institute had any knowledge of these venues and saw little relevance. It was outside the art world.

Things have changed a bit since then. As the Internet, multimedia, virtual reality, and the Web have become trendy to the mainstream culture, they have become fashionable in the arts community as well. Nevertheless, making art for communities outside the art community felt like an uphill climb."

The Years at Interval Research (1992-PRESENT): "Can Enterprising Technologists Deal with Independent Artists?"

"Funding for the arts, like most social spending in the United States, had been very heavily cut back by twelve years of Reagan and Bush conservatism. By 1992, the US art community was underfunded, heavily politicized, and to some extent, angry. During this same twelve year period (and for some of the same reasons) much of the high-tech community prospered. The cultural gap between high-tech entrepreneurs and independent artists had grown large.

In 1992 I was offered a research appointment at Interval Research Corporation, a new independent research lab wholly owned by Microsoft co-founder and billionaire Paul Allen. Its charter was to look five to ten years ahead into the future of computing and media, in a most general way. Unlike other tech labs I had seen, this one seemed to really believe in having artists and other diverse elements as members of the research staff.

Interval's head David Liddle assured me that art will be an integral component in this new lab. I could continue to work as I was and make something exhibitable. The result was called "See Banff.'," a stereoscopic moviemap (the first ever) about landscape, tourism, and growth in the Canadian Rocky Mountains. It was filmed with twin 16mm cameras and displayed as a single-user experience housed in a cabinet resembling a century-old kinetoscope, with a crank on the side for "moving through" the material.

One particularly fruitful collaboration that came out of the Interval community was with the computer vision researchers. I learned that they were also interested in basic elements of visual perception, perspective, and presence, and together we nurtured a symbiosis. The footage I produced for See Banff was also made with them in mind.

They were amused, I think, to have an artist-type supplying them with material which they felt was unique and valuable. The fact that it was not simply "views of the parking lot" was gravy.

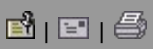
Over a two year period, we all did pretty well. Working with my Interval colleagues, we designed an experimental camera system. I had several weeks of filming as I like best, open-ended and with participation by local community people, and made an installation. My computer vision colleagues got some unique footage and made some striking new imagery. It turns out we also got a patent out of it, something totally unanticipated when we began.

So beginning the next year, in 1994, I proposed we try it again, this time working with representing "looking around" the way the Banff project represented "moving around." We put together another experimental camera rig, this time using two 35mm motion picture cameras for stereoscopic 3D, running at sixty frames per second for unrivaled fidelity. Like my earliest work, the cameras would rotate on a motorized tripod to capture the entire panorama. And I would work with local community people, but this time in collaboration with the UNESCO World Heritage Centre based in Paris. With their endorsement, I would take the camera system around the world to film in endangered places. Finally, the footage would be shown with the viewers standing on a slowly rotating floor, which rotates in sync with the imagery. The effect is illusionistic, like the feeling when the train next to yours pulls out of the station and you think your train is moving. The final installation is called "Be Now Here" and was produced for the Center for the Arts Yerba Buena Gardens in San Francisco.

Again, I had managed to produce an art installation. And again, my colleagues got unique footage for their research. And it turns out again, we also got another unintended patent application out of it. It also turns out that we had inadvertently helped another cause. One of the endangered places was Dubrovnik, the medieval Croatian town near the Bosnian border. It had been heavily bombed and was still in a state of war. Dubrovnik had just opened a Web site, created by Enver Sehovic, a professor and former President of the University of Zagreb, as an example to show his government. Professor Sehovic helped me get in and out of Croatia during the fighting with my five hundred pounds of film gear. Shortly after the installation opened in San Francisco, Sehovic e-mailed me that he was coming to see it, to help convince the Croatian government that he's not just a "dreaming professor."

So what is the problem now? History. After more than a decade of technology entrepreneurs profiting while the arts community has been almost strangled, new bridges need to be built. And perhaps the timing can't be better. The tech world is realizing that consumers don't buy technology for its own sake but for the experiences they afford. The word "content" has only come in vogue recently (and indeed, has entered the vernacular of the Media Lab and its sponsors). The toaster-makers are finally realizing that people don't want toasters, they want toast.

So. can enterprising technologists deal with independent artists? I don't know for sure. There are potential problems, including issues of tolerance and compromise, of intellectual property and secrecy, and of artists being true to heart about their motivations. I may be critical but I'm hopeful."



::CrossReference

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