# LIFE AT THE INTERFACE OF ART AND TECHNOLOGY

By Tamiko Thiel

When I was in college in the late 1970s, there were very few programs combining art and technology. I was taking classes in both areas but finding satisfaction in neither, until I found the Product Design program at Stanford University. Here one could take art, design and mechanical engineering classes toward a single major, and I felt like I had finally found a home for myself. In those days I was interested primarily in the engineering design of 3D products and especially in questions of the user interface: how the user approached, perceived, understood and then used the product. These questions have stayed with me in my evolution into an artist working with interactive 3D virtual worlds.

My last engineering project was in the early 1980s at Thinking Machines, when Danny Hillis asked me to do the packaging design for his Connection Machine CM-1/CM-2 supercomputer. I consider this machine also to be my first artwork, because in the process of coming up with a design that expressed the revolutionary nature of this massively parallel supercomputer (with over 64,000 1-bit processors working in parallel,) my concept of the user experience expanded from the realm of the practical into the realm of the metaphorical. What sorts of associations and images did we have of our new creation? How could we convey the mystery and magic of this machine to someone who encountered it for the first time? What did "form follows function" really mean to Louis Sullivan, the architect who invented the phrase, and why did it evolve to mean the opposite of what he intended? How do these philosophical and design historical concepts apply to a machine whose function is invisible?
(See http://www.mission-base.com/ tamiko/theory/cm_txts/di-frames.html)

**Connection Machine CM-1/CM-2
Thinking Machines Corporation, 1987.** *Photo:* **Steve Grohe.**
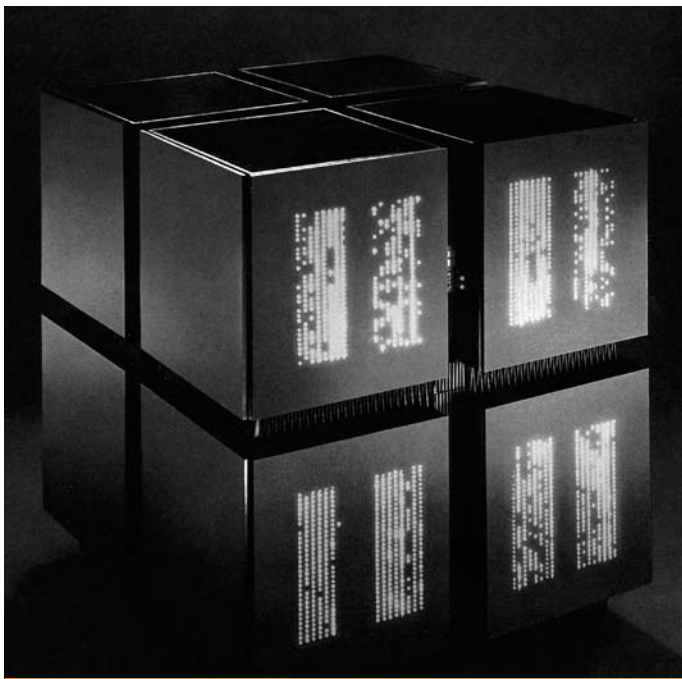
When I saw the wonder, delight and awe in the faces of those who saw the finished machine, I understood for the first time the power of images and objects to touch people deeply. We had tapped into an archetypal image of what an "electronic brain" could be, and created a machine that evoked that image at a time when most computers were as sexy as refrigerators. It was a potent feeling to be on the cutting edge of technology AND to have created an object that moved people so strongly. I was hooked.

The design and prototype phase was exciting but short, and the production phase long and relatively dull. If I became an artist, I reasoned, I could stay in perpetual design and prototype mode. I went to art school, graduating with a video installation (*The Golden Seed*, the first work in my *Totem Project* series.) Video art was the avant-garde media art of the time, but it felt too passive to me. More and more, I wanted to deal with issues of spatial experience.

In 1994 I was asked by the pioneering 3D Internet company Worlds, Inc. to be creative director and producer of the Starbright World project. Working closely with film director Steven Spielberg, then chairman of the Starbright Foundation, we were to develop a PC-based online multi-user virtual reality world – like Second Life is today – that would serve as a virtual playground for seriously ill children Worlds, Inc. had just brought the technology out of the lab and onto the Web, itself in its fledgling days at that time, and this was a chance to be involved directly in the development of a new, cutting edge technology.

Searching for ways to create engaging experiences for the children in this virtual world, I looked to the theory of sequential spatial experience being developed by my father Philip Thiel, Professor of Architecture and Urban Planning at the University of Washington in Seattle. (See his book *People, Paths and Purposes*, UW Press, 1997.) His focus on the experience of a space from the perspective of a person moving freely within that space became the basis for my own theory of dramatic structure in virtual worlds that I apply in all my interactive 3D artworks.

While working at Worlds, Inc. I discussed the artistic potential of this medium constantly with another producer, Zara Houshmand, whose background included theater direction with strong Brechtian influences. In 1995, Zara and I began work on *Beyond Manzanar,* an interactive 3D installation dealing with scapegoating of entire ethnic groups in times of crisis: the Japanese American Internment during World War II, and similar threats to intern Iranian Americans during the Iranian Hostage Crisis in 1979.

We premiered the piece in Tokyo in December 2000, and showed it at the Seattle Cherry Blossom Festival in April 2001, where many former internees of *Manzanar* were able to experience the piece themselves. Five months later it became horribly topical. At 9am EST, on September 11, 2001, I was giving a talk on *Beyond Manzanar* at COSIGN2001, a games conference in Amsterdam. In the break after my talk, we learned that Middle-Eastern Muslim fanatics had just smashed planes into the World Trade Center.

In the shock and horror of that moment I realized how terribly prophetic *Beyond Manzanar* would be. All those perceived to be Middle-Easterners or Muslims would become the current "face

makes the experience of the artwork understandable – try speaking a foreign language with only words and no grammar! I continue to explore how to create that structure; every piece I build is a further test case. Once a piece is finished I try to articulate what I have learned in writing. (See my article http://www.mission-base.com/ manzanar/articles/cosign/cosign.html, dealing with the dramatic structure of *Beyond Manzanar*.) I am grateful to those who pick up and continue the dialogue, for instance Boston University's Matthew Smith, who critiques Beyond Manzanar from a drama history viewpoint in his book, *The Total Work of Art: From Bayreuth to Cyberspace,* calling it a "Brechtian response to the total work of art."

> **"Working closely with Steven Spielberg, we were to develop a PC-based online multi-user virtual reality world – like Second Life is today – that would serve as a virtual playground for seriously ill children."**

of the enemy," and many innocent people would disappear into internment camps. As Bush pushed to invade Iraq, it was scary to present *Beyond Manzanar*, saying "Look: see how our government has lied to us before; perhaps they are lying now," but some people were willing to look and listen. The San Jose Museum of Art even bought the piece in 2002, showing it for several years first as part of their "Highlights of the Permanent Collection" show, then in their traveling show "Visual Politics: The Art of Engagement." I realized that art can give me a voice, and even if it isn't very loud, it enables me to participate in a cultural, political and social dialogue. My interactive 3D installations can enable people to experience a situation, for instance wrongful imprisonment, that they might never go through in real life. I hope my artwork can help them to an understanding and empathy that they may not have had before.

For me, art is communication, a dialogue between myself and someone out there who might be interested in what I am trying to say. Communication cannot take place without a structure that

I see the user's experience in a virtual world as a struggle between their "free will" and the "determinism" of the world I have created. In *Beyond Manzanar* and my new piece on the Berlin Wall, *Virtuelle Mauer/ReConstructing the Wall* (premiere: Berlin, August 2008), this conflict is clear as the user deals with issues of confinement and compulsion. On the face of things, *The Travels of Mariko Horo,* my "reverse Marco Polo fantasy" of a Japanese woman discovering the exotic Occident, may not seem to deal with these issues – but when the user confronts a confusing mixture of Asian and Western, Buddhist and Christian imagery, or makes a wrong move and finds herself in Hell, she might see that even without obvious political constraints, each culture and society creates its own deterministic web which we navigate in our personal struggle between destiny and desire.   ☲

Note: Projects referred to in this article can be found on Tamiko Thiel's online portfolio at http://www.mission-base.com/tamiko/

**Beyond Manzanar: Media Nightmare
Tamiko Thiel and Zara Houshmand, 2000**

**Beyond Manzanar: Internment Camp
Tamiko Thiel and Zara Houshmand, 2000**

THE TRAVELS OF MARIKO HORO

VIRTUAL REALITY INSTALLATION AT 911 MEDIA ARTS CENTER FALL 2007

Sometime between the 12th and the 22nd centuries a woman journeys westward from Japan, traveling through space and time, searching for the "Isles of the Blest," the Buddhist paradise said to float in the Western Seas. She will be called Mariko Horo, Mariko the Wanderer.

She encapsulates her impressions of the places she sees in her travels in a series of "Horo-gramms," 3D virtual worlds. She invites you to visit her worlds and see the West through her eyes.

The Travels of Mariko Horo is an interactive 3D virtual reality installation, a fantasy virtual environment that users explore at their pleasure and peril. Mariko is a fictitious character I have invented to incorporate the viewpoint for this project. Users never actually see Mariko—except perhaps in a mirror. In essence they will be Mariko, seeing the exotic and mysterious Occident through her eyes and her experiences.

For Japan, of course, the entire world lies to the West. For hundreds of years before there was contact with Europe, Japan incorporated artistic and religious influences "from the West"—from the Eurasian continent. For Japanese artists trying to imagine the West, but also for Western artists trying to imagine Japan, the power of fantasy could often take them only as far as a vague and undefined "Asia"—for both Far East and Far West the epitome of "foreign" and "exotic." Thus some Japanese artists depicted Holland with the same buildings as they depicted China, and Western artists as late as Gilbert and Sullivan depicted the Japanese "Mikado" in the style of a Chinese Emperor. This geographic confusion finds echoes in Mariko's Last Judgement scenes, inspired equally by Byzantine Christian frescos and Tibetan tankas.

In 2003 I spent 3 months at the Kyoto Art Center as a Japan Foundation Fellow, researching this period in Japanese history, gathering images and talking with Japanese art historians. In *The Travels of Mariko Horo* I use the viewpoint elucidated in this research to create my own fantasies of the Mysterious and Unknowable Occident. In addition to my research I also draw on my personal experiences: as a 5 year old child I returned from Japan to my native USA, a large, strange and empty land that I could no longer remember, populated with large, light-haired people.

As Italo Calvino's book *Invisible Cities* used Marco Polo as the point of departure for a meditation on the meaning of cities, I use the figure of Mariko Horo as a point of departure for a meditation on the Mythic West. Her journey is of course an inversion of the "Marco Polo Syndrome." The 13th century Venetian traveler has long represented the exoticizing gaze that looks from Europe into the depths of Asia, a symbol of Western Man exploring, categorizing and analyzing the exotic cultures of the East. The exoticizing gaze thinks itself to be a magnifying glass, but in actuality it is a view through a half-silvered mirror: the viewer means to describe new lands, new peoples, new cultures, but in reality he sees images of his own culture superimposed over a vague and exotic background. I wish to reverse this gaze, invert the mirror and view the exotic West through Mariko's fictitious but observant eyes. ⵇ

Travels of Mariko Horo: Last Judgment
Tamiko Thiel, 2006

Travels of Mariko Horo: Limbo of Lost Souls
Tamiko Thiel, 2006