Perhaps what is most intriguing about the history of photography, in light of the new imaging technologies pursuing it, is how many of its earliest practitioners got over the novelty and got on with making resonant images. Newer technologies often seem to have stalled their users in the wonder-of-technology phase, playing the tricks of the media over and over, using them as devices for pure sensory thrill—more like, say, roller coasters rather than novels (to which one might add, no one yet has adequately investigated the meanings of the roller coaster). Steina and Woody Vasulka’s major retrospective at the San Francisco Museum of Modern Art, organized by curator of media arts Robert Riley, traces the development of their mastery of video technology from largely formal experiments with multiscreen installations in the early days of the medium to lushly complex recent pieces in which the tools have become familiar, powerful, and versatile, and the expansion of formal possibilities linked to aesthetic meanings. European émigrés who came to New York in 1965 and moved onward to Santa Fe in 1980, the Vasulkas have made work that suggests a progression in which nothing is left behind but much is accumulated.

Matrix, which the Vasulkas made together in 1970-72, looks like nothing more than a trade-show demonstration piece of multiscreen possibilities in which images and numbers drift across a bank of screens. Steina’s nearby Alvision, which she began in 1975, is more engaging: With a pair of close-circuit cameras mounted on a revolving base and pivoting around a mirror ball (of the kind familiar from English gardens) and feeding into two pairs of monitors, the work mingles the sensibilities of contemplation and surveillance. Installed here atop the museum’s central staircase, it inevitably recalls a panopticon, except in this swollen fish-eye view people occupy only the edges of the image. The center is a vision of pure architecture, as though the pleasures of looking had overwhelmed what could be seen. Steina has remarked that she is not interested in replicating human vision but in using machines to see what people cannot see—in machine vision—and her later installations realize this ambition.

In the two-channel monitor-wall The West (1983), the same panoptical orb-and-cameras device surveys western landscapes. Watching the mechanically recorded image become solarized and overlaid—turned brilliant turquoise and greens as an image of a Pueblo or Anasazi ruin is filled in with textures drawn from a thicket—is like watching a photograph turn into a painting. The representational burden lightens while the degrees of interpretation grows; western landscape tradition itself loosens its grip on this relatively new medium. But everything else pales in comparison to Steina’s Borealis (1993), a two-track installation of four translucent screens on which images of moving water from the artist’s native Iceland are literally denatured. It may be a formal exercise to underscore how much image is displaced from the phenomenon it represents, but in Steina’s vertical screens absent of all depth in an otherwise dark room, the foaming, churning water—slowed down, run backwards, tinted, and represented in video’s grainy texture—is sublimely fearsome. Watching this most basic element of earthly life made to deteriorate and decay entropically through technological manipulation can be eerily unsettling and absorbing.

After an early period of collaboration, the Vasulkas have diverged into distinct paths, each emphasizing different technologies as well as subjects in their respective work. It could be said that if Steina emphasizes the sometimes unsettling distances between the organic world and its video representation, then Woody plays with the disturbing affinities between video and military technologies. He is represented in
this exhibition primarily by two huge installations: *Theater of Hybrid Automata* (1990) and *The Brotherhood, Tables I and III* (1994–96). Built from surplus military and scientific equipment from government facilities in the Santa Fe/Los Alamos area, they're reminiscent of Survival Research Lab's theatrical extravaganzas of mechanical mayhem. While SRL seemed to be making machinery that just happened to fail, Woody's works clearly iterate the pointless and the ominous. His machinery suggest many purposes but serve none, unless it is to embody an aesthetic of ominous utility. The viewer-operated controls provide only modest interference; a computer scrolls text by faster than one can read; three panels shutle past each other with video images (some of passersby in the vicinity); a bombing calibration table lights up and seems to control much of the rest of the room's devices. War and landscape are two of the primary sites of moral self-examination for contemporary artists; the Vasulkas use them to examine the nature of their medium, thereby defining some of its characteristics, specifically, the video's distanced but lyrical relationship to nature and its affinities for surveillance and control.

Across the street from the museum at the Center for the Arts at Yerba Buena Gardens is Michael Naimark's gigantic virtual-reality chamber. An artist's statement at its entrance quite cogently laments the way VR technologies physically and socially isolate the viewer. Alas, the installation itself—a revolving platform on which viewers stand wearing 3-D glasses while looking at video projections of three world heritage sites and the Yerba Buena gardens—is little more than a communal Viewmaster. The shortcoming of the medium seems to be not its social isolationism (which computers share with books, after all) but the inability of artists to invest it with metaphor, to create a relationship between means and themes. Computer art is still a literalist's medium.

I had thought it would be Naimark's work that resonated with the Vasulkas', but instead the black-and-white photographs by Ira Nowinski downstairs at the Center took up the themes of spooky space, war, and landscape. Nowinski started photographing the Yerba Buena area when redevelopment began chewing it up in 1970, and he portrays the people who lived in the cheap residential hotels that have been replaced by convention, tourist, and cultural centers, the hotels themselves, and something of the long and partially successful struggle against ruthless redevelopment. The images give back to the shiny new spaces of this part of San Francisco, and it is fascinating to see such a traditional use of an old medium become as terrifying as the Vasulkas' work and as political as anything Hans Haacke ever did, simply by proximity. Thanks to the state terror of South America, the term disappeared has become a noun; to see the disappeared of the place in which one is standing and looking accomplishes all that public and site-specific art can hope to achieve. One grid of hotel details—medicine cabinets, hallway signs, a stack of worn linen on a sad mattress—is so haunting an evocation of what is gone that it should be permanently installed here. The work recalls Steina Vasulka's remark that she is interested in using machines to see what people cannot. What we see in Nowinski's art is the immediate past via the machine that, early on in its history, was dubbed "a mirror with a memory." Perhaps the capstone for this tour through imaging technologies is Nowinski's photograph of a residential hotel across from what is now Yerba Buena: It has been supplanted by a Sony office.

Rebecca Solnit's next appearance in hardcover will be an extended essay for *Crimes and Splendors: The Desert Cantos of Richard Misrach*. She is a contributing editor to *Art Issues*.