Steina and Woody Vasulka: Circuit Riders
By Robert A. Haller

To listen to Steina and Woody Vasulka discussing their video work—and to look at it—is to encounter a form of television utterly unlike what "television" usually means. Using computers and electronic synthesizers, often without cameras, the Vasulkas have extended the range of expression in the medium.

By making the camera/lens combination a secondary tool they have demonstrated that organization can be more important than observation, that the television signal is much more malleable—and controllable—than most of us dreamed. In the new realms of Vasulka video we can see:

- television "snow" randomly raining across the screen, and then suddenly becoming "ordered" so that in the center of the screen a disc of different snow appears—frozen or moving against the direction of the remaining snow.
- the raster lines of the image retreating from the edges of the screen, folding over upon themselves, and forming configurations that are as baffling as they are simply evident.
- a recognizable image moulded into a topographical surface that soon turns into a terrain different from (but born of) the initial image.

The fascination of all such Vasulka imagery resides in our knowledge that the transformations we witness are mathematical, rigorous, our own in that they are made by machines made by men. Yet also not our own, because these electronic images can not be made without machines. Woody Vasulka often speaks of "a dialogue between the tool and the image," a phrase that conspicuously fails to emphasize or even acknowledge the human presence.

Woody and Steina design and construct their equipment with the expectation of learning from it during and after the programming process. Their tools exist to be used and collaborated with. The tools are not that extraordinary, although they are custom built: a Rutt/Etra analog scan processor, a dual colorizer, a programmer, a multikeyer, a variable clock and a switcher (the last four made by technician George Brown in the early 1970s). With these instruments the Vasulkas are
pioneers charting the digital and analog space of the micro-circuit, the time duration of instant information exchanges, the implications of infinite extrapolations.

The capacity of the Vasulkas to enter into the electronic realm of their tools is indispensable to their work and a consequence of their experience. Both have delighted in frequently moving across geographical and cultural boundaries, immersing themselves in each successive environment. Born and raised in Reykjavik, Iceland, Steina studied violin, harmony, and music theory. In 1957 she spent a year in Denmark at a boarding school, and returned to Iceland speaking Danish. "I decided German was the next language I wanted to speak, so [in 1958] I went to Germany." In 1959 she moved again, to Prague where she studied music for four years. Returning to Iceland she joined the Icelandic Symphony Orchestra and married Woody. In 1965 they moved to the United States, where in 1969 they discovered alternative video.

Woody was born in Brno, Czechoslovakia in 1937. In 1945 he discovered an interest in technology—"Europe was a junkyard, where we could find great dumps of war equipment"—that he pursued in the 1950s, obtaining a degree in industrial engineering. Already branching out, he was also a jazz critic, a poet, and a photographer, who turned to film-making in 1960. Several years after he met Steina in Prague he moved to Iceland (where he married Steina) and eventually changed his citizenship and name to Timoteus Petursson.

Video impressed Woody as "an energy system"—a system he and Steina soon set out to explore on an electronic rather than photographic basis. Both were in New York by 1969, fascinated by feedback and the flexibility of half inch tape on the Sony portapak. Initial documentary tapes soon gave way to experimentation that was accelerated by their 1971 creation of the seminal electronic arts exhibition space called the Kitchen. With assistance from their friends, the self-taught Vasulkas learned and made scores of tapes investigating the manipulation of the video signal. By reducing that signal to its component codes, they obtained such a command over it that they could assemble volumetric forms that could be freely interpolated with photographed images.
In 1973 the Vasulkas moved again—to Buffalo; in that same year they made Golden Voyage, a work that illuminates some of their creative interests. The tape is unusual in that it is based upon a work from another medium, Rene Magritte's painting "Golden Legend." The Belgian Surrealist had long fascinated Steina and Woody: "Magritte had stricken us as being premonial to many electronic imaging concepts." The weightless loaves of bread drifting through the space beyond the window frame is much akin to his locomotives emerging from fireplaces, downpours of bowler-hatted gentlemen, and boulders serenely floating above the ocean. Golden Voyage begins as an homage to Magritte's painting, but it rapidly becomes much more. The framing window vanishes, the screen space increases in terms of depth, and the loaves cease to be just bread, becoming very suggestive of sections of the human body. The background and foreground also change, situating the loaves over the ocean, drifting them over rock-strewn plains, and along an electronically colorized coast. At times the screen "pans" and "tracks forward" with a flexibility one recognizes only after the fact. False perspective, contradictory illumination, improbable juxtaposition, and poetic harmonies punctuate Golden Voyage and other Vasulka tapes (just as they do Magritte's paintings).

In Buffalo, where Woody taught at the Center for Media Study, Steina plunged anew into her Machine Vision project, a series of tapes and installations that break ground conceptually and aesthetically. In 1978 she said:

Ordinarily the camera view is associated with a human point of view, paying attention to the human conditions around. In this series the camera conforms to a mechanized decision making of instruments, with the movements, and attention directed towards their own machine to machine observations.

From 1975 to 1977 she produced five tapes whose mechanical aspect lay not in image formation, but in alteration of photographed views (somewhat like a surveillance camera system). In some of these tapes, and then more spectacularly in her installation series Allvision, two or more cameras simultaneously regard each other and the external world. Displayed on side-by-side monitors (in the installation) or rapidly alternating (on the generated tapes) these works provide an
encyclopedic perspective, a kind of omniscience within our grasp but slippery.

The late Marshall McLuhan's maxims about the impact of media on perception are reaffirmed by the experience of watching the Vasulka's video work. One comes away from it with an enhanced recognition of how much we do not see, and how much effort must be expended to gain a wider vision.

In 1978, shortly before they left Buffalo for Santa Fe, where they continue to work, the Vasulkas assembled a remarkable series of programs for broadcast. Initially shown on WNED in Buffalo, the six half hour programs (funded by the NEA and CPB) survey their work over the preceding ten years. Extracts from many of their tapes are included with explanations of how they were made.

Process, as much as product, intrigues the Vasulkas and dominates the programs, but never at the expense of being submerged by jargon. Woody explains some of the most cryptic images with disarming candor: "I always wanted to make an object on the surface of a sphere." Steina, discussing the effect of a switcher, says the signal was "flip-flopped," being clear but never condescending.

What is most striking about the series is the sense of how the Vasulkas have become almost inseparable from their machines, how they see with rather than through their television equipment. And how art and technology are also intertwined, indivisible, one.