

## INTERVIEW WITH HERB SCHLOSSER From NBC chief to videodisc programmer

### 1979 WHO'S WHO IN CORPORATE TV



## HIGH-TECH VIDEO ART "Light music" by Vibeke Sorensen



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### VIBEKE SORENSEN Demystifying video technology

As a critic I have generally resisted asking artists what they went through in order to produce a work. My main interest lies in what new aesthetic, emotional or intellectual ideas they have to offer us. Technical virtuosity is to be commended, but I am moved more by content than by method.

It seems to me that only a few years ago, when video was being discovered as a tool for self-expression by creative people, there was more of a sharing attitude. Today, with the ever-growing competition for funds, equipment, exposure, and distribution, artists have become more

Victor Ancona covers video art for this magazine.

secretive with one another.

But 25-year-old Danish-born videographer Vibeke Sorensen stands ready to demystify video technology. "My attitude is that if somebody wants to know how my tapes are made. I'll tell them everything," she declares. "That's because I'm not worried about somebody reproducing my work. Artists ought to have self-confidence in their own vision and in themselves. I know that I have a vision no one can appropriate. If they copy me, that would support my work, and by the time they are finished, I'll be off doing something else. I feel it's much better to share one's knowledge, so I don't believe in keeping secrets.'

To put her to the test, I asked Vibeke,

whose enthusiasm for her work is contagious, to share with the readers of this column how she produced "Temple," a segment of "VideOcean," a 45-minute videotape she made in 1976 as an artist-in-residence at the TV Lab at WNET/13 in New York City. The tape, which she screened for me at Electronic Arts Intermix in New York, has been a prize-winner at video festivals and has been cablecast and broadcast widely in the United States, Japan, England and Austria.

For fellow videographers as well as students, Vibeke Sorensen's description of how she produced "Temple" will serve as an example of her work, to be analyzed for its technical as well as its emotional content. She writes: "I was alone in the studio. Having spent considerable time learning how to use synthesizers, I was comfortable enough to know exactly what kinds of images could be made, and how. It is like speaking a foreign language; at first one memorizes the words and struggles with the grammar, and after a while one begins to think and even dream in that language. I felt that I was fluent in Synthesizerese. I felt so incredibly peaceful that I began to imagine that I was in a temple.

"By that time I had made an array of



dots using only sine waveforms that were multiples of the horizontal and vertical frequencies. For ten dots across the frequency is  $10 \times 15,750$  cps—the H frequency, and for ten dots down it is  $10 \times$ 60 cps—the V frequency. When you multiply these two waveforms in the appropriate module, a multiplier, you get an array of 100 dots— $10 \times 10$ . The information was used to control Z axis modulation or brightness.

"The array was the basic image upon which I performed a variety of operations. The Rutt/Etra synthesizer allows one to alter the height, width, depth and horizontal and vertical amplitude of the raster. The resultant image is displayed on a cathode ray tube and rescanned by a black-and-white camera, which then enters a switcher for adding outlines, color, wipes, or other effects.

"To create the illusion of rotation or folding over, I used a low frequency AC sine wave which could pass through zero in its oscillating amplitude and reach extremes on both sides of the center axis. What's really happening is that the raster is slowly being squashed and unsquashed in reverse and then back again. If the squashing waveform is a multiple of either the H or V frequency and phaselocked to it while controlling a cor-



Sine waves shape the image in this still from "Temple."

responding effects module—for example, width for V and H for height—you get a static squash something like an hour glass (width) or a landscape (height).

"Two lumps in the vertical (width) would mean that the modulating waveform is  $2 \times V$  or  $2 \times 60$  cps or 120 Hz. Two lumps in the horizontal (height) would mean that the modulating waveform is  $2 \times H$  or  $2 \times 15,750$  cps or 31,500 Hz. If the form is rounded, the wave shape is a sine; if it is pointed in the middle, it is a triangle; if it rises gradually and stops suddenly and starts over again, it is a ramp or saw tooth; if it is flat and starts and stops suddenly, it is a square wave or pulse.

"In Temple, I used sine waves to shape the width, and a triangle and low frequency sine wave to control the height. I used the same information in the height to control the depth. Thus, when the image folds over, it appears to come forward. By performing upon this patch, or set-up, on the synthesizer, I created the first set of changes. There came a point



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in my meditation when I became aware that I had transcended the technology, that the machine wasn't controlling me as much as I was controlling it. It was a vehicle for my expression, much as a typewriter is a vehicle for a writer or a paint brush for a painter. I was imparting order—choosing from a vast array of possibilities only particular images and changes over time that expressed my mental state—much like a musician composing and performing on a musical instrument.

"I had already created images which to me represented a Chinese pagoda or temple. Next, I wanted to express my self-realization, my understanding of myself in relation to the machine (physical expression). Like a sudden awakening from a trance, I made the image seem to explode and begin a complex metamorphosis. I gave myself several patches to choose from, depending on how I felt they fit into the flow The first set was a slow-moving sine wave controlling both the height and depth, making a butterfly-like shape which undulated and seemed to come right out of the tv screen. This was further modulated using sine waves locked to the V frequency and performed upon by me. Then, at the right moment, I removed that patch and replaced it with a second one which included low frequency square waves in the depth control, making the image split into two levels of arrays passing by. Throughout, a low frequency sine wave controlling the height caused the flipping. Again, at the right time, I removed the second patch and replaced the first one and performed upon it until I felt the piece was finished—until I had succinctly completed my communication, no more, no less.

"I composed the music afterwards. For guite some time I have been interested in the phenomenon of synaesthesia. As a result, my approach to music composition for video art is twofold: to create sounds which to me are the sounds I imagine in my head as I see the images, and to set up an electronic music patch which is technically analogous to the video patch. The illusion of simultaneity is a result of hard work. The eye is synthetic: it is incapable of seeing green as a combination of blue and yellow. The ear, on the other hand, is analytic: it can distinguish instruments and notes in a complex orchestral chord. Therefore, to make a soundtrack seem as complex as the image looks, many voices and timbres had to be created, each one requiring a different patch. Consequently, the soundtrack is multitracked, in contrast to the single pass needed to produce the

image.

"Technically it is possible to produce the music and images at the same time since both are electronically generated. However, most video studios are not equipped with electronic music synthesizers, nor are electronic music studios usually equipped with video synthesizers. Even if they were, I'm not sure that I would choose to use the sound of the image as the soundtrack. I would probably only use the slow-moving waveforms (controlling changes over time), and have them control a sound made by an entirely different patch on the music synthesizer. In general, a nice image sounds bad and a nice sound looks bad. Therefore, separate origins are necessary for my aesthetic. Having a common control voltage source makes the image and sounds change in tandem. If you listen to the soundtrack, you will hear a meditation chant: OMMMM. In general, creativity for me is a meditation."

The next time you watch Sorensen's "Temple" you'll realize the effort, technically and emotionally, that went into its creation. You'll enjoy the electronically produced images and sound, and hopefully meditate along with the artist. Her "VideOcean" and "Monocules" tapes are replete with variations on the



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theme.

Her work's roots lie in many intellectual disciplines. She's interested in music, architectural/three-dimensional spaces, painting and literature, but has settled to an emotional relationship with video-a romantic fascinated with technology.

"I was determined to become adept with the technology-not to be overcome, oppressed or frightened by it," says Sorensen. "I'm not interested in technology per se. It may sound corny, but I want to transcend the context in which I am working. I'm interested in producing content-to create images and sounds that may last a hundred years even though the technology will change." To Vibeke Sorensen, mastering technology is a means toward an end. "I have to summon up the if feelings that come from my experience. I'm interested in impressions and the emotions they invoke in me and in others."

After having lived in the United States since the age of three, Vibeke Sorensen returned to Denmark to get her high school diploma and international baccalaureate. Then she attended the Danish Royal Academy of Art and Architecture. Unlike most students, she liked every subject offered at the Academy. Believing that architecture combines most disciplines, she pursued the subject until she began to realize that she would probably end up working at a drafting table rather than erecting structures. The educational revolution of 1971 in Denmark gave her the opportunity to become involved in alternative educational forms, including film and video. As her thesis project she videotaped deaf children and showed how they communicated in their environment.

Returning to the United States in 1974. Sorensen received a Master of Arts in Humanities from the State University of New York at Buffalo. While there, she met video artist Tom DeWitt, who became friend, mentor and teacher, and with whom she collaborated in producing "Cathode Ray Theatre" and "This is TV America." Sorensen worked with DeWitt while he was an artist-inresidence at the TV Lab at WNET before she had her own fellowships at the Newhouse Postproduction Program of Syracuse University and then at the WNET-TV Lab. She has lectured widely and taught "Television and Video Art" at the College of General Studies at the State University in Albany, N.Y.

Vibeke Sorensen is as much at home in the music world as she is in the visual arts, and she is critical of some visual ar-

tists. "There is not enough discussion, not enough give-and-take among visual artists," she said, "It's a tradition for musicians to communicate with one another-perhaps it's because they have to play together. The visual arts are more insular because artists in this field usually work alone."

Sorensen is interested in how people react to her work. "Audience reaction is very important to me. I feel that I have succeeded when somebody else feels the way I did when I produced the work. I like to show my videotapes to people who don't know anything about video art. I've had quite a bit of feedback from artists who say that what I do is not video art-that what I make is commercial television. And that always shocks me. They think that because my work is technically competent, it's not art. As far as I am concerned, being slick in technique simply means that I am wellcrafted."

I agreed that being technically competent frees her to concentrate on content so that her ideas would flow more easily. The idea that a work of art is not great because too many people like it is absurd. Vibeke Sorensen doesn't even like to say that she is an artist because "it implies so much." I'll call her one, anyway.



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