The Digital Art: Computer art as a way of life–Jane Veeder
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Jane Veeder stands with Ed Emshwiller and Larry Cuba as one of the most gifted computer artists working in America today. Relatively unknown until recently, she is beginning to get the recognition she deserves. Her 1982 animation MONTANA is the only work of computer graphics in the Museum of Modern Art's video collection, and her interactive paint program/arcade game WARPITOUT was the sensation of the SIGGRAPH '82 Art Show in Boston.

Veeder works in ZGRASS, a language written by Tom De Fanti exclusively for real-time interactive motion graphics. Incorporating the best features of Pascal, Smalltalk, Lisp and BASIC, ZGRASS is by all accounts the best graphics language around. Among other things, it is self-teaching and user-extensible–the users can create their own commands and integrate these commands into the language, expanding and evolving it to fit their personal style of making images.

ZGRASS runs only on the Datamax UV-1 Graphics Computer which contains three custom chips designed for Bally Arcade games like Wizards of War and Gorf–one chip for processing instructions, one for controlling the display, and one for sound synthesis. This makes ZGRASS faster than anything around at its price (about $ l0,000), and speed is essential for real-time animation. There's also a 16-screen memory that allows you to create and store sixteen different full-screen images and then call them up in a real time animation cycle. Output is standard NTSC video. Veeder works with a single Sony 5850 videotape recorder and builds her editing commands into her graphics programs. "Every tape can be first-generation", she explained. "It's just as easy to run the computer and make a first-generation tape as it is to do a dub of the master. And with the 16-screen memory I can work up the individual screens and then program them sequentially and the animation just happens."

The UV-1 offers less resolution and fewer colors than larger, more expensive systems–only 320∞202∞2 bits per pixel (256 colors with four colors per area). This represents a tradeoff in favor of real-time operation while keeping the cost down: but if you're moving images you don't need that much resolution anyway: moreover, although Hi-Res has been elevated to a quasi-religion in the commercial graphics world, the fact is that for many artists real-time interaction is far more important. "Photographic realism is not my goal." Veeder explained. "I can see its utility but I don't think it would be a triumph, you know. I have no desire to use a super-high resolution system because I don't draw in super-high resolution. I just go so far and beyond that it's the integration and manipulation that I enjoy–movements and gestures."

In fact, animation per se is not the primary motivation for Veeder's involvement with ZGRASS. "I'm just interested in real-time graphic interaction that results in a dynamic visual event", she explained. "What I want is to integrate my eye, hand and brain with the computer's ability to perform complex relationships very rapidly. The fact is I'm addicted to the high-speed personal evolution and perceptual education you get from continuous contact with a real-time interactive machine intelligence." Nevertheless, Montana and Veeder's most recent computer animation, Floater, ranks with the best works of experimental hand-drawn animation. The quirky, totemic, dreamlike, cyclical image-events of Montana are reminiscent of Harry Smith's Early Abstractions, whereas Floater inspires comparison with Robert Breer, Paul Glabicki, and the optical-printing films of Pat O'Neill. Both works are essentially autobiographical.

MONTANA

For five years, Veeder and Phil Morton spent their summers camping out and making videos in the mountains of the Western Badlands in Montana, Wyoming, Utah. The trips were part of a unique lifestyle approach to video, a desire to live with and through the medium conversationally, incorporating computer graphics into semi-didactic "simulations" of imagined and desired video realities. They "processed their life" in the electronic domain, producing video "communiqués" of the realities they created by living and processing them. The visual signature of these tapes is absolutely unique, with Jane's poignant, ideosyncratic computer graphic complementing Phil's sublime image processing–all of this superimposed over, and integrated into elegant black-and-white tapes of animal life and geological splendors of the American wilderness. The tapes have a joyous, chatty, conversational, grass-roots flavor that resonates against the otherworldly strangers-in-a-strange-land consciousness that pervades them. They are pioneering works by two genuine pioneers of the Electronic Life.

Gradually Jane evolved away from video and deeper into computer graphics. She and Morton no longer work together, but her love of the wilderness, and much of the graphic material she evolved for the videotapes, continue to inform her work in computer animation. This imagery–soaring hawks, mountain peaks, stampeding buffalo, erosion patterns in the terrain–are combined in Montana with icons of the technological world: video cameras, the Sears Tower in Chicago, the Space Shuttle. Veeder organized the material into 16-screen sequences programmed as a loop that increases in speed over eight cycles, with each of the elements moving at different speeds. The effect is a constellation of totem-like icons dancing on a dreamworld stage hence the similarity to Harry Smith. Equally remarkable is the stereo soundtrack, which consists of an audiotape of birdcalls from the Audobon Society combined with sound synthesis performed on the Sandin Image Processor. The effect of the narrator numbering and naming the birdcalls in a cascade of electronic echoes perfectly complements the imagery and gives the tape a poignant, haunting, otherworldly flavor.