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Art Notes
Steina's Visual Artifacts
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Steina Vasulka's December Artist-in-Residency at the Chicago Editing Center was headlined "Digital Video", indicating that the audience would have the pleasure of seeing video images of a new kind. Steina started the workshop presenting fairly unknown, rarely seen work from the early days of video, produced mainly at the end of the '60's at KQED's Experimental TV Center in San Francisco. It was illuminating to see that these artists immediately set out to discover the particularities of the new medium: electronic feedback, camera switching, image keying and multiple recorder loops. All of these techniques have become part of a new visual vocabulary which is standard today.

Showing her own work the next evening, Steina demonstrated how far this young medium has already come. She focused on the aesthetics of the machines she is using, saying, "I'm interested in machine vision, to set up a structure which will generate video images according to certain rules." In her conceptual approach she leaves room for the machines to "behave" and produce the final visual result. This can be quite unexpected in case of an error. But, Steina welcomes "mistakes", because they introduce new information and perfection soon becomes boring.

Currently she experiments with two different types of machinery. One is a mechanical system of mirrors mounted in front of the video camera. Motorized zooms, rotations of the mirrors, as well as rotations of the complete set-up generated very unusual machine views of downtown Minneapolis, capturing the movement of people and cars and moving the solid buildings across the screen. This "automatic camera work" strongly contrasts to the way a human camera operator imposes structure. When Steina operates a camera by hand, she throws it around - again with a parabolic mirror mounted in front - turning her backyard and herself visually upside down.

The second machine environment is digital with an "image articulator" as its core. With the help of the designer, Jeff Schier, Steina and Woody Vasulka pioneered one of the first digital video systems that work in real-time. Real-time digital video converts a video picture to digital numbers that a computer can understand, i.e. "digitizing" it. Once a video picture is digitized, it can be stored in computer memory, the frame-buffer, and then be manipulated in incredible ways. Designing their system, the Vasulkas were faced with a necessary trade-off between speed and user-friendliness. They favored speed, one reason why she admits: "The hardware is so much ahead of us and our tedious machine language programming."

It is impressive to see, though, what effects they have already programmed. Switching frames backward and forward in time. Functions built into the hardware so that the machine can perform continuous zooms or multiply a frame so that the picture becomes magnified to the point where the entire frame is only one picture element (pixtel) big. The content of several frames can be combined with a set of logical computer operations, yielding never seen pictures of common objects such as a simple styrofoam globe. The Vasulkas most recent achievement was the rotation of an entire frame, giving a glimpse of the power still to be developed with their digital video processing system.

The tapes produced with the "image articulator" show digital beauty: self-portraits of the Vasulkas, the trees in front of their window, cars passing by. All comprise intense and complex imagery, often difficult but exciting to watch because it is so new. The visuals are amplified by electronic soundtracks, which often are tapped directly from the video and then are fed into audio speakers.

The audience, half of which were video and computer experimenters themselves, welcomed Steina with open eyes. These eyes were perfect receptors for Steina's extraordinary visual artifacts.

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