MEDIUM OPTO-MYSTIC

by Tom DeWitt

"Feedback" is a term used to describe the process of returning a signal to its source. In television and video the rate of the feedback process is much more rapid than it is in film. Video is an electronic medium, and it can process information at a rate which approaches the speed of light. If a comparison of video and film was to be made, feedback characteristics would be a chief distinction. The efficiency with which broadcasters could poll television and radio audiences contrasts markedly with the processes used to determine audience response to a film. In a sense, effective feedback makes it possible to see your cake and feed it too, for it returns to the sender a reflection of his transmission. Electronic media are instantaneous, and the loop from sender to receiver back to sender makes two way communication possible. Place a microphone up to a loudspeaker and you will hear the power of electronic feedback. Feedback through electronic media could potentially be used as a window on a society operating with the time base of twentieth century technology.

To the artist, the instantaneous or "real time" nature of the video medium has a separate set of applications. The creative process is greatly stimulated by the immediate perception of the consequences of each decision and action made by the artist. A feedback loop exists between the artist and the object he is creating. In film the consequences of each decision remain quite literally *in the dark* until the film is processed. For this reason, most film actors require the presence of a director or a live audience to guide their performance. The filmmaker must make educated guesses and take blind risks while at work and then wait for the results to catch up with him. Not every visual artist can work with this handicap. Improvisation and spontaneity suffer or are wiped out.

Point a video camera at a monitor displaying the camera's image, and you will see a graphic demonstration of the instantaneous nature of the medium. This technique produces a seemingly infinite series of reflections like a hall of mirrors. Insert a separate image in the signal path, and it will be reflected endlessly, cycling from monitor to camera to monitor. The graphic patterns created by this technique can be startling and hypnotic. This is the medium looking at itself, and it all but cries out, "I have something to say!"

For artists in dance, drama, graphics and music, video is a magic mirror that gives them instantaneous point reference to their every move. The increased efficiency of the medium over film, lubricates the creative process. Performances can be quickly sharpened; experimentation in new uses of the media becomes greatly speeded up. Errors can be immediately perceived, and the tape medium even makes it possible to erase mistakes and reuse the same recording material. Video is a playground for pioneers of eye and ear art. We are in a period of exploration . . . discovering a new visual vocabulary which like musical harmony is an abstraction tied directly through our emotions. The opto-mystic prediction is that we will real eyes a new art form.

Feedback is a crucial part of developing a new art. Development of new forms occurs in a void. A large part of what is proposed must be rejected, for the core of the art rests on a few fundamental rules of light that appear and disappear in the shimmering video mirror. The eye admits 80 percent of our sensory information; the catalogue of its effects ranges far beyond the ear. The print media can convey emotion, but not especially through graphic pattern. A suggestion was made by the post-photography schools of painting. These artists sought to evoke emotion through the movement of their brushes and the color of their paints. Given the tight loop from pallette to canvas to eye, they could fly through a painting a day, accelerating the feedback rate to a frequency approaching film. Here we go again with a new school of artists exploring pure space and time.

Once the basic vocabulary of visual and aural forms has been derived from real time experimentation in video, the artist can call up effects by pre-design, much as a composer now scores for an orchestra. The computer promises to be a basic tool for graphic artists and new music composers. A written program for light would probably be an impossibility without a machine to handle the enormous amount of information contained in each frame. With a photocell as his brush, the artist will truly be able to paint with light. Give technicians direction and