

some notes on movies and form

by MICHAEL NAIMARK

Edmund Carpenter, the anthropologist, once jotted down the number of a centrally located pay phone in Grand Central Station. He then spent the next few weeks calling this number. The pay phone was invariably answered quickly, and Carpenter would ask "why did you pick up the phone?" The replies were always the same ... "because it rang."

How often do we see images that are not flat and rectangular? (How many images of yourself have you seen that were not flat and rectangular?)

True to its theatrical roots, the first decade of moviemaking had no camera movement. When pans and tracks were first introduced, it was a big deal and was compared to a movable stage.

Stan Brakhage: "...still photography and motion picture photography are polar opposite techniques, all the more confusing in as much as they share certain equipment and must be practiced as opposites from the beginning."

In addition to its random access capability, the optical videodisc has another unique feature: the frame per second rate is variable (read programmable) from 0 (still frame) to 30 (normal video "play" speed). An intelligent camera for video disc production would use this feature as another parameter of freedom. Such a camera presently does not exist.

While the "official" frame per second rate of video is 30, each half-frame field contains its own motion information, giving video an effective fps rate of 60. Some believe that the upper threshold of our persistence of vision is around 60 fps (the lower threshold is well known to be around 15). The more than double fps difference between film (24 fps) and video is a factor for the visual difference between the two media on television.

Doug Trumbull, known for his special effects in *2001* and *Close Encounters*, developed a new movie system called "Showscan." It uses 70mm film and runs at 60 frames per second instead of the standard 24 fps. (The film is both shot and played back at 60 fps, so the images are "real time." (I've seen it.) Two things stand out:

- 1) it looks more *real* than conventional movies,
- 2) it looks like video.

When conventional television is blown up very large, it usually looks lousy -- you can see the lines. When TV advances to a higher resolution, more lines, it will look like Trumbull's Showscan.

Legend has it that a gentleman once approached Picasso on the street and criticized his paintings as "distorting" reality. Seeming to change the subject, the artist asked the gentleman if he had a girlfriend. He did, and produced a small picture of her from his wallet. "She's beautiful," replied Picasso, "but she's so tiny."

Around the turn of the century, the Lumiere brothers began showing their movies in the salons of Paris. They would set their camera boxes up opposite a white sheet, put the film back through it, a flame behind and crank. It is said that when a scene of an oncoming train was shown, the audience would duck. It was *real* to them, or at least they weren't willing to take any chances.



This is a still image of a movie projection of a scene projected back on itself. All the objects are present, but painted white to become relief screens. From Movie Room, an installation by the author, Center for Advanced Visual Studies, M.I.T., 1980. [photo by Michael Moser]

Just as epic scale movies do not work on television, TV commercials don't work on a large screen. Those nasty little programs are made to get your attention. Always shouting. On a large screen, their ranting is almost unbearable. Feels like being hungover.

With few exceptions, the general rule has been if you need it big, use film. If you need it live or interactive, use video.

Traditionally, film productions are shot with one camera while video productions are shot with multiple cameras. With film, different camera angles are shot during different "takes." The finished version, produced in the editing room, consists of matching cuts, often unsuccessfully, but with precisely composed timing. Video productions, on the other hand, are usually shot with multiple cameras. Editing is performed "on the fly" through live video switching, and often suffers less-than-precise timing. No match cuts are necessary since different camera angles are shot simultaneously.

Siting has never been an issue with conventional television or movies. The playback environments are out of control of the moviemaker.

If *real time* means a temporal correspondence between record and playback environments, then *real space* means a spatial correspondence between record and playback environments.

Why do movie cameras move and movie projectors do not?

The eye is apparently harder to fool than the ear. We've all had the experience of mistaking a voice from the radio for being someone present. Yet when we enter a theater, there is *never* any question whether what we see is a movie or live.

A funny thing happened on the second Aspen "Moviemap" shoot. It was winter, and when we landed in Denver, flights to Aspen had been cancelled due to snow. We rented cars and drove in. There were five of us in our car. Two of the five had never been to Aspen before, but had spent the past couple of months working intensively with the video disc produced from our first shoot of the town the previous summer. As we pulled into town and drove down Main Street, they both had the same two reactions. They knew where everything was -- the park coming up on the right, the Hotel Jerome beyond that on the left. But they were both amazed that it didn't look anything like what they had expected.

(A moviemap is an exhaustively filmed place: every street in every direction, every corner in every direction, in every season. The computer uses two optical videodiscs to splice the correct filmic sequences of streets and turns as rapidly as possible, giving the sensation of driving down the street. The Aspen Moviemap project was produced by the Architecture Machine Group at M.I.T.)

With television, the sense of "being" is at best sporadic and ambiguous and at worst completely lost. Millions of us may have felt like we were on the moon, but we certainly didn't feel like we were in Vietnam.

I once compared exposure readings of an outdoor scene in a movie with a real outdoor scene and found that the real scene was over 1,000 times brighter than its movie equivalent.

The ultimate media room will be indistinguishable from "reality." Any reality: the kind one sees with eyes closed as well as with eyes open. All senses will be effected; all effectors will be sensed. One will be able to touch, smell, walk around, and move objects as well as see and hear. (You may be in one right now.) Like the screen of a television, everything changes when one changes the channel; everything disappears when one pulls the plug.

Edmund Carpenter: "To depict a whole object on a flat surface, literate man employs three-dimensional perspective -- he shows only the surface visible from a single position at a single moment. In short, he fails."

There is no word in the English language that is the spatial equivalent to "simultaneous."

Limits to how we communicate limits what we communicate. The converse is not true.

Gregory Bateson defined information as "any difference that makes a difference." As our eyes look around a movie theater or TV environment, the area of greatest visual difference lies in the place to which we've most acclimated. It lies neither in the screen nor in the room itself: it lies at the window's edge.