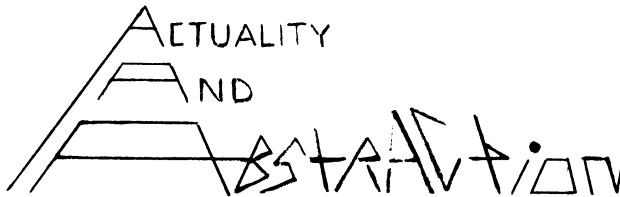


THE CINEMATIC USE OF SCIENTIFIC MACHINES



by Mary Batten

An experimental filmmaker, Mary Ellen Bute, unlike most of her contemporaries, is concerned with the areas of reality made available to the senses by new machines rather than with those areas made available by psychoanalysis.

Born in Texas and the wife of a New York film director-producer, Ted Nemeth, Miss Bute has had a varied career in her filmic exploration of space, matter, and time. Having begun with painting, she developed an interest in light and movement that led to the study of mathematics, physics, and musical composition with Leon Theremin and Joseph Schillinger. Speaking of the mathematical analysis of material that she learned from Theremin and Schillinger, Miss Bute said: "With numbers you could analyse what had been done and then by expanding or contracting or permuting you could get the most fabulous new material. I started with it as an exercise and then did POLKA GRAPH on that system of graph projection."

Miss Bute's electronically-composed films, which synchronize musical beats to patterns drawn by a beam of light, have been shown widely throughout the United States. She has worked with Leopold Stokowski, Henry Cowell, Edwin Gerschefski, and George Gershwin in making these "kinetic" compositions using light and sound. To date, these films have used classical and semi-classical music. Asked whether she planned to do a totally electronic film using electronic sounds, Miss Bute replied, "Definitely. These things should be really intercomposed and all of the elements should be interrelated so that at times the sound, the electronic sound, the noises, would hold forth and you might have nothing visually; then the visual would take over; or you could develop visual and aural harmonies that wouldn't move in too obvious a pattern but would almost be like different instruments for different senses. But they would be intercomposed rather than doing the visual first and the sound to it or vice versa."

Miss Bute has not limited her filmmaking to electronic animations. She describes her attempts to make "visual music" as "just one of the phases" of her film career. She has already made one live-action featurette, THE BOY WHO SAW THROUGH, which

won an award at the 1958 Brussels International Film Festival. She is currently working on a feature-length adaptation of Joyce's "Finnegan's Wake" using a live cast and basing the script on Mary Manning's stage adaptation, "Pastures from Finnegan's Wake."

Common to both Miss Bute's electronic films and to her live-action films is a studious control of material. The oscillograph enabled her to control a point of light in time; she is now interested in the degree to which she can control the dialogue and gestures of live actresses and actors. Her work with mechanical control both limits and in some applications rejects the fortuitous physical reality available to film as to no other medium. Her electronic experimentation has taken her into an area of experience often neglected by contemporary artists except for the purpose of attack—the area of scientific invention, which is the area of controlled matter.

Whatever the significance of her electronic films aesthetically, Miss Bute has suggested through them the sensuous and/or extra-sensuous dimensions of the physical universe, revealed by machines that make the sub-atomic impulses in everyday life available to the senses—i.e., brain waves, heartbeats, the earth's movement, et cetera, are visually measured, recorded on graphs, and given values in sound. Such films are limited by the work-capacity of the measuring devices; the films are, by definition, contrived. However, electronic animations suggest the possibilities of further and more varied cinematic use of scientific machines.

In an article, "Abstronics," published in *Films in Review*, Miss Bute stated her initial film purpose:

For years I have tried to find a method for controlling a source of light to produce images in rhythm. . . . It was particularly while I listened to music that I felt an overwhelming urge to translate my reactions and ideas into a visual form that would have the ordered sequence of music. I worked towards simulating this continuity in my paintings. Painting was not flexible enough and too confined within its frame.

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Miss Bute's emphasis on a maximum of filmmaking control is further revealed in her answers to questions put to her during our interview:

Q. In your discussion of the mathematical basis for one of your films, *RHYTHM IN LIGHT*, you said that you took the relationship between two numbers which you analysed in several different ways until you had a "complete composition of desired length in numbers." I had the feeling that this sort of basis was a nonsensical contrivance. What, in your opinion, is the

validity of using abstract mathematical bases for visual images?

A. When I made RHYTHM IN LIGHT, I had reached a point where I still hadn't been captivated by the film medium; I hadn't really tried it. The color instruments I had worked with had proved to be just color boxes, just patterned around more or less the same movements; you had no real control over it.

But back to the mathematical idea, I feel that's more an analysis of the material which is one of the things we have not done yet in film—and I don't know where one could go to get it—that's really an analysis of filmic material and devices so that a person is as conversant with what you can do with movement, film images, and material as one is with language and the older art forms. I think that once one has a very basic knowledge of the possibilities and limitations they can break them as Joyce fractured the English language. I think that rules are to be broken, but first they have to be established. We haven't quite got the language yet in film.

I don't know of any film that really—and I say this very guardedly—says throughout what it has to say in the way a good story does or a good painting.

Q. What film comes nearest to your idea of a film that holds from beginning to end?

A. I didn't really like LAST YEAR AT MARIENBAD. I didn't get an emotional reaction to it, but I felt that it was extremely controlled, and I felt that it was a good first step in something. So often you see actors and actresses moving their eyes or their bodies where it doesn't mean anything. There are so many little meaningless movements in film. In MARIENBAD, I felt that the actors didn't throw themselves around and show their various virtuositities, that they did the specific thing that the director wanted them to do for that particular film—that particular statement, and I'm interested in using a cast in that way.

Q. Will your production of FINNEGAN'S WAKE require a tight acting job?

A. No more so than in MARIENBAD. I recently saw the Bergman film, THE DEVIL'S EYE; the Don Juan in there could have stepped out of MARIENBAD. You feel that he didn't flicker a hair that Bergman hadn't intended him to. The rest of the cast was more free-wheeling, but Don Juan had something very specific to say from Bergman's point-of-view, and everything revolved around him; he was like a maypole.

Q. It is my impression that more and more you want film to be devoid of the improvisatory element.

A. At this particular moment, I want to make a film that is controlled.

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In an early article, "New Film Music for New Films," (Film Music, Vol. XII, No. IV), Miss Bute referred to one type of controlled film, the "ABSOLUTE" film, in which music is "inter-composed with the visual material." RHYTHM IN LIGHT, which was shown by the Radio City Music Hall, was her first ABSOLUTE film. Although she is not currently working with this type of film, I asked her to describe what she meant by the term.

A. A film that doesn't depend upon literary or any other connotations, that entertains you or stimulates you through movement and color and form, more pure film as you would get pure Bach; it's not programmatic; it's not something that's trying to tell a story in other than its own material. Of course, not that I don't like other films—because I do very much; but I think that the ABSOLUTE is one type of film that is interesting to work on, as a painter might work in pure abstractions.

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Combined with Miss Bute's interest in controlling filmic material, is her enthusiastic espousal of cinema as the medium that can represent more different levels of experience than any other art form. Asked wherein resides the special appeal of film for her, Miss Bute replied:

A. It wasn't until I started playing with the camera and using it that I realized how much you could do with it. Through the wonderful multiple-exposure things you can get very much the effect that you get in thinking—several different levels of activity. In film you can get that as in no other art that I know. I think that the more senses you involve the better. That's one of the great successes of films.

Q. I had the feeling that the electronic animations, rather than providing a whole film experience, were actually isolating the audience from multi-leveled physical reality. How do you, in the electronic films, integrate the visualized abstractions with the experiences of everyday life?

A. The electronic films are natural phenomena, like a sunset. I feel that we must have some art that is completely for itself alone, not at all propagandistic. I think that's one problem it's very easy to fall into—to try to say too much in film either in a social way or in an educational way—to try to put across a point. I guess it was John Dewey many years ago who said, to the degree that you take the spirit of play out of art, to that degree you rob art of its initial purpose.

Q. Would you agree that film has to do with things you can see?

A. I think that we might really get cameras and film that can record and capture things that we can't see with our eye today, because naturally all of our sense organs— eyes, ears, everything—they're evolving, too. As we progress, these sense organs become more and more sensitized.

Q. Do you have any comments on the avant-garde filmmakers in this country who deal with inner personal realities of dream and hallucination as opposed to the reality of the documentary?

A. I think they are quite fascinating. At first I found them a little embarrassing, as if you were reading someone's diary, but I got over that and now enjoy them very much. I think many of them are personal and very intimate, and you have to be in the mood for that like anything else. I think they often do things with pictures that you couldn't do with words; they augment words; it's one of the real uses of the cinema.

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Because Miss Bute's filmic explorations have taken her into the space-time dimensions usually confined to scientific articles and devices, the traditional question for ending a film interview seemed in this instance particularly appropriate.

Q. What do you think lies ahead for the cinema?

A. There are a great many new realities in our life today. A mathematician was trying to explain the fifth dimension to me; I can go along with Einstein's fourth dimension, but the fifth I haven't quite come into yet. I'm sure it's just a matter of growth. There will be all these new and different things in the sub-atomic world, in the world around us that we are so familiar with but not familiar with. I know that we are surrounded by many, many things that we have no conception of at all. We today in filmmaking are in a fabulous position.

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The Documentary Festival at Venice has awarded its Bronze Medal to SUNDAY ON THE RIVER, a film by Vision's editor and Ken Resnick, who presently resides in Baltimore, Maryland. Joseph Blanco, Vision's publisher, worked also on the film, as did George Tipton, Amatsia Chiuni, Joseph Marzano and Robert James. The film was awarded also the first prize, the Silver Gondola, by the CIDALC Association at Venice.

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FOR SALE: 16mm variable density sound-on-film Morton Soundmaster camera complete with 110 volt power supply and recording amplifier, plus microphone. Two 200-foot magazines included. Less lenses. \$550 takes it. Write VISION, 2 East 23rd Street, Suite 704, New York 10, New York.