

# The Museum of Modern Art

11 West 53 Street, New York, N.Y. 10019 Tel. 245-3200 Cable: Modernart

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## AN EVENING OF COMPUTER FILMS AT THE MUSEUM OF MODERN ART

An evening of computer produced films will be shown Monday, December 2, 8:30 PM in the auditorium of The Museum of Modern Art in conjunction with the current Machine Show. The film program was arranged by Kenneth C. Knowlton of the Bell Telephone Laboratories who will also address the audience.

The films will include "Hummingbird", designed by Charles Csuri, two films by John Whitney, "Permutations" and "Catalog", among others: "Studies with Random Texture", a silent four minute film with sequences generated for experiments in visual perception, composed with pseudo-random "noise" and patters arranged according to symmetries; also a one minute sound film in color, a visual play on the words "Man and his World" in several languages; "An Interim Report", twenty minutes of excerpts from computer animated films, with a narration.

Mr. Knowlton, who will lecture on the subject of computer-made films, has for the last six years experimented with computer programming languages and techniques. One such language was designed specifically for making animated movies by computer and has been used by Stan Vanderbeek for "Man and his World" and "Poemfield No. 1" will be part of the program. Mr. Knowlton has also originated a method for processing and transforming still pictures by computer; three of his works produced in collaboration with Leon D. Harmon are in the Museum's current The Machine as Seen at the End of the Mechanical Age

(more)

Having written extensively on the subject of computer graphics and animation, Mr. Knowlton, who is a member of the National Committee for Electrical Engineering Films, referred recently to the increasing role computer produced movies are playing in technical education and research, particularly in mathematics and other areas requiring logical treatment and visual results.

"An electronic microfilm recorder can plot points and draw lines a million times faster than a human draftsman," he said. "This machine and the electric computer that controls it makes feasible movies that would have been heretofore prohibitively intricate, time consuming and expensive to draw and film." A machine can compose complicated pictures or a series of pictures from a large number of basic elements, Mr. Knowlton indicated, pointing out it can draw 10,000 to 1,000,000 points, lines or characters per second.

From the pedagogical point of view its smooth animation and its precision make an elegant and esthetically beautiful lesson in physics, he says. Its total effect cannot be matched by any amount of handwaving at the blackboard.

Mathematical displays, he believes, can also be used as stimuli in perception or as an exploration into artistic and aesthetic possibilities. The latter results are particularly interesting for artists who can "say something" in a medium that of itself "will not arouse curiosity, acclaim or disdain so as to distract from the artistic content of the work."

The program of computer films, with the participation of Kenneth Knowlton, is one of a series of special events organized by Anne Hanson, Director of the Museum's International Study Center.

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Additional information available from Elizabeth Shaw, Director, or Lillian Gerard, Film Coordinator, Department of Public Information, The Museum of Modern Art, 11 West 53 Street, New York, N.Y. 10019. 245-3200