NEA PROPOSAL

We believe we are dealing with a new medium, a marriage of video and digital computers. The most pleasant and most natural direction this union leads is to digital, realtime, interactive animation - any flight of fancy, not just "cartoons". The key hardware developments making this all possible are the *refresh picture memory* and digital *colormap*. The major contribution of these devices to artists is immediate feedback and a greatly reduced initial concept-to-finished product time.

We have access to a prototype machine for digital animation, through the courtesy of Xerox Palo Alto Research Center, Palo Alto, California. We would like to take advantage of this opportunity to develop video software (and even digital software). The purpose of this proposal is to gain financial support while utilizing this unusual equipment availability for creating such images.

We think dealing with images in this way is important because of the order or two of magnitude increase in the ease of animation. And animation is the key to the future of visual information.

We feel we are a good team for this particular endeavor because of our complementary backgrounds which combine the same sources as the new medium itself. This feeling is supported by the experience we've already gained by working together on the machine. David comes from a background of video art (B.F.A., University of Wisconsin, University of Copenhagen; M.F.A., University of Colorado), analog computer animation (Computer Image Corporation, Denver), and media technology (Ant Farm 2020 Exhibition, San Francisco). He founded Video Grease, an experimental media group, whose tapes have been aired on Aspen Cable Network, New York cable networks, and Video Niroba (Tokyo). He is presently working under an NEA grant at Xerox. Alvy has a background in computer science, electrical engineering, and art. He has a Ph.D. in computer science from Stanford, has taught at New York University and Berkeley, done research on cellular automata theory (under grants from the National Science Foundation). His artwork has apppeared on the covers of several publications (Scientific American, Prentice-Hall textbooks, IEEE conference proceedings). He has most recently been employed by Xerox to help develop the color graphics system which we now propose to use artistically. For example, the program which exercises the colormap (which makes over a billion colors available to the user) was designed by Alvy. We have enclosed videotapes made on the color machine by each of us separately and in collaboration.