With the technological development of minicomputers and low-cost scan deflection systems it has become economically feasible for individual exploration into the process of electronic image forming to be carried out. In our own personal contact with such systems we have acquired enough of the basic technological concepts to facilitate an individual understanding and control of the medium in its dynamic state. We therefore represent a new definition to the roles of artist and technician; a new and a new approach to the problem of a creative concept and its execution. The complex means of electronic image generation and manipulation at our disposal warrant a thorough structural investigation and subsequent de-mystification of such processes.

Our extensive experience with institutional hierarchy have reinforced our sense of value in individual experimentation, and the history of our involvement with the electronic arts guarantees a continuation of such work. It is our hope to gain support to administer our own two or three year program modelled for maximum economic, organizational and creative flexibility and growth; and which maintains options for extending our interests in varied directions.

We already have in our possession the basic tools of an image-forming and control system. The initial signal display is a voltage controlled scan deflection system. In order to choreograph or program complex visual permutations in time a data processing module is interfaced with the deflection system through a digital to analogue converter. The display is then
rescanned and the resulting signal can be further treated electronically. Voltage levels and their visual equivalents can now be manipulated by processing circuits which select image priorities to be assembled and colorized. This model permits a required compositional control over the image in order to attempt to notate the modes of generation, processing and display. We will explore the development of hardware suited to the artists purposes, including the incorporation of analog data acquisition devices and other variations of input and output systems. Since the video signal contains an audio component, and is susceptible to audio signal control, we cannot leave the sound spectrum ignored. The tools for working with electronic images are more complex, and as these are developed, they can be interfaced with electronic sound systems.

We can hope to illuminate the interrelationships which exist between these systems in an effort to understand the artistic possibilities these new electronic and computerized media hold in their own right. It can easily be seen that there are many structural themes which can be found in two or three dimensional compositions as they are made to appear on a two dimensional plane. The conceptual evolution which probed these mysteries of form has uncovered various techniques of representing perceptual and spatial illusions as well as having created elaborate cultural sign systems. When adapting these approaches to electronic time, we can establish the medium within a context of all image forming processes, yet we will come to no prestructured conclusions as to the results of our inquiry.