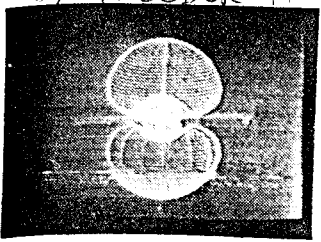


THE CIRCLE GRAPHICS HABITAT



From videotape,
"The Hydrogen Atom
According to
Quantum Mechanics"
by T.J. O'Donnell
& David Parrish.

It is usually hard to combine things: especially complicated technical things. Usually it takes infinite reconsiderations, finagling, modification, intertwingling.

The Circle Graphics Habitat, however, is something else again. It results from two intricate, independent technological developments, each an intricate system carefully crafted by an exceptionally talented person, coming together like two hands clapping. Like ham and eggs, like man and woman, Sandin's Image Processor and DeFanti's GRASS language conjoin directly and interact perfectly as if they had been made for each other, which they were not.

Dan Sandin's Image Processor (see p. 100) is a system of circuit boxes that allow video images to be dynamically colored, matted, dissolved and palpitated; Tom DeFanti's language (see "Coup de GRASS, p. 31) permits the rapid creation, viewing and manipulation of three-dimensional objects on the screen of a particular computer setup.

To combine them, you just point Dan's system at Tom's system.

Let's say that on the screen of Tom's system we are viewing an animated bird, flapping its wings. Since it's being shown on a three-dimensional refreshed line display (see pp. 22-3, 30), it appears only as white lines on a dark screen.

Dan merely points a TV camera at Tom's screen, and runs the TV signal into his Image Processor. Now, in the Image Processor, he gives it the magic of color. Different colors, interplaying with gradations and subtlety.

From the Image Processor, the finished signal goes out to videotape recorders.

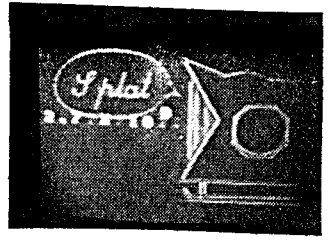
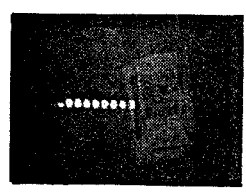
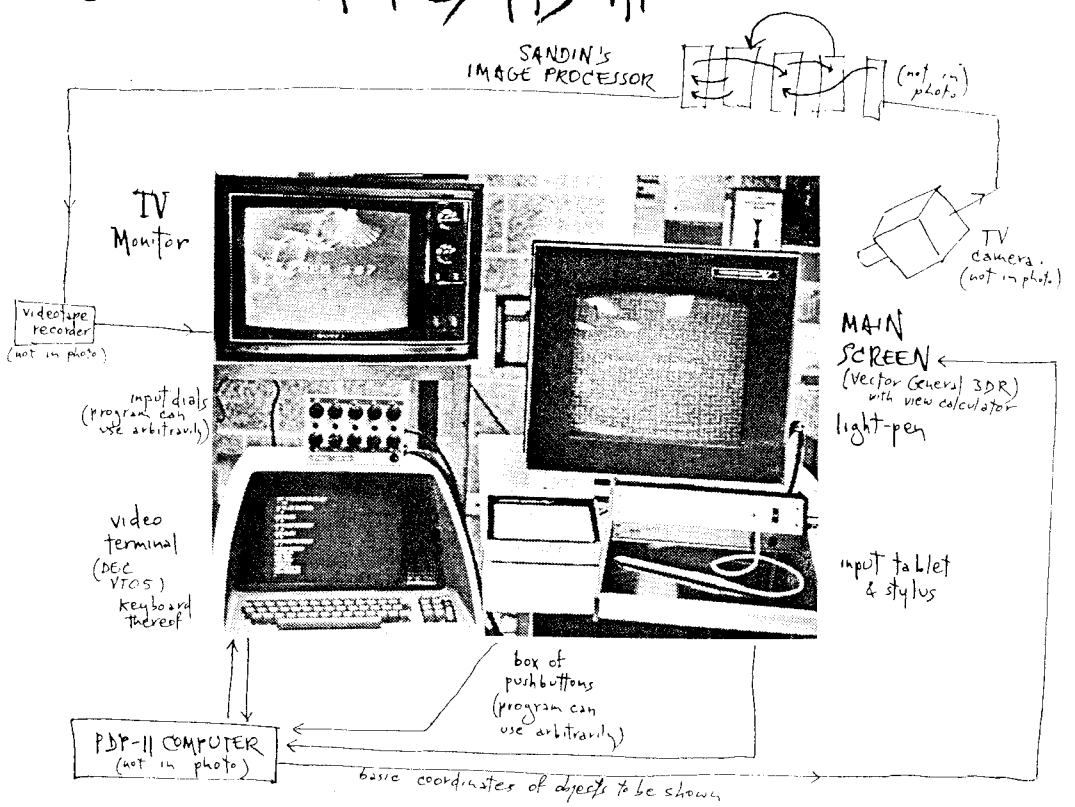
What then have we overall? One of the world's most flexible facilities for the rapid production of educational videotapes.

To explain something, you create a three-dimensional stick-figure "model" of it, using DeFanti's GRASS language. Then you make a videotape of it, showing rotations or other manipulations, using the Image Processor to give it color.

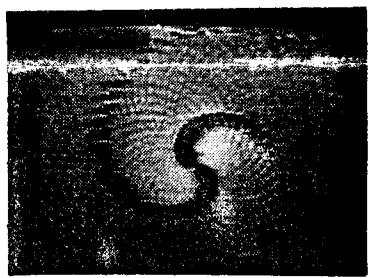
DeFanti and Sandin have spent much of the academic year '73-4 getting the kinks out of this procedure. (Many of the difficulties stem from the unreliability of videotape recorders.) Stills from some of the first work are shown here.

BIBLIOGRAPHY

Thomas A. DeFanti, Daniel J. Sandin and Theodor H. Nelson, "Computer Graphics as a Way of Life." To be presented at U. of Colorado computer graphics conference, July 1974; to appear in proceedings purportedly to be called Computers and Graphics.



From videotape,
"The Number Cruncher,"
by TDF & DJS.



From videotape,
"The Spiral Tape,"
by DJS and TDF.

