Not quite computing
—almost art

JOHN LANSDOWN

Splashdown!

There are quite a number of painters throughout the world who use computers to help them in the creation of their paintings: Huittic in France, Leavitt in USA, Barbadillo in Spain, Thomson in Israel are some of the names that come to mind in this connection. One of the most imaginative of such workers is Peter Struycken of Holland who, for many years, has co-operated with computer scientists at Utrecht in the investigation of random permutations as a basis for paintings. In Britain, Struycken is mainly known for his carefully painted works in black-and-white acrylic and many of his paintings seem to me to be, as it were, sections of a huge abstract work which he has been revealing piece by piece since 1962. However, in parallel with the systematic methods he developed for black-and-white paintings, he has also been evolving techniques to deal with colour and has just had an exhibition of works based on an ingenious concept embodied in a program called SPLASH.

These works are a series of abstract paintings meant to be viewed in consecutive order and, essentially, are a set of colour transformations from a given initial state to a given final state, the program determining the quality of the changes which can be big or small, sudden or gradual. The program is called SPLASH because of its analogy to the effect when a stone is dropped into a pool and concentric ripples go out from the point of splashdown. The centre of the colour change in the painting is also referred to as the 'splashdown' and the colours arranged concentrically around the splashdown represent the resulting square ripples. The colour change is strongest at the splashdown and gets weaker as it proceeds towards the outermost ripple, the process being programmed so that as a large number of colours as possible change at one step. The program is in Algol 60 and, for those interested in studying the work in detail, a full description and listing is given in the 1972-1974 periodical,  Artinfo Musinfo, published by the Group Art et Informatique of the University of Paris VIII. Like Page, the Computer Arts Society's own Bulletin,  Artinfo Musinfo, has a somewhat erratic publication schedule but it is well worth reading when it comes. It is, of course, written in French and, when I first saw a copy, it was a matter of some surprise to me to realise that French computer programs are written in French and not American. For example, DEB for BEGIN, SI for IF, FIN for END and so on. Do other countries write their programs in their native tongue? From the programming point of view, the Paris Group is of interest also in that, as far as I am aware, they are the only computer art workers who make use of LISP. (It is probably too nasty—perhaps even inaccurate to say—that they seem to be the only people anywhere who have found a use for LISP.)

The latest issue of Artinfo Musinfo contains a copy of Jean-Eric Schoettl's program DRAGON (which produces dragon curves on a plotter). Written for the Telemechanique T1600 in Assembler ASM, the program is quite simple to follow and the article which accompanies it describes the procedure and gives examples of the output (see opposite page and Figures 1 and 2) so that one could readily rewrite the program to suit one's own system. Dragon curves are one class of the many spacefilling curves which have been discovered by mathematicians and are particularly suitable for computer exploration. Try them!

You show me yours and I'll show you mine

As one who has advocated disclosure of research and research-related computer programs for some years, I was pleased to learn that the new recommendations for the copyrighting of programs to be laid before the United Nations will give protection of rights whilst allowing publication. Artists—perhaps because they are used to receiving little or no payment for their work—are very much freer than others in allowing their programs to be published so that there is a great deal of valuable cross-fertilisation of programs and procedures in computer art. I believe that such an approach in the computing industry generally can do nothing but good.

It's colossal, stupendous, gigantic, tremendous...

Delegates to this year's Datapalooza will have an opportunity to see an hour-long show of performance art all of which has been devised with the aid of computers. Goodies promised are dances, live music, poetry and some surprise items; those present will have a unique chance to see some of the ways in which the computer is influencing the performing arts.

John Lansdown is an architect, choreographer and composer who has been Secretary to the Computer Arts Society since its foundation in 1969. He has recently been awarded a Bursary by the Arts Council to investigate how computer techniques he has developed in choreography can be applied to the presentation of dance on television.