

# Not only computing—also art

JOHN LANSDOWN



Figure 1

BCS 79 has now come and gone and the organising committee can, I think, congratulate itself on its success. Indeed as far as the fun fair was concerned, any greater success in terms of numbers attending would have resulted in failure due to inability to cope. There is now a staggering amount of public interest in the use of computers—or to be more exact—microprocessors, and there is a general awareness that we are at the start of a revolution the outcome of which could either be disaster or widespread well being. The message that computers are not just tools like steam engines or printing presses (or, for that matter, even like sliderules or calculators) seems to be getting through to everyone—especially those in high places—but we need continuous public debate on the implications of this. I am fortunate enough to have been invited by the Swedish Committee for Future Oriented Research to participate in their Stockholm symposium 'Is the computer a tool?' in June 1979 and will report their conclusions on this topic in future.

## One in the eye for art

Many of those attending the Computer Arts Society section of the fun fair (I'm not sure I like that name) commented favourably on what they saw. Three items seemed particularly successful—the tile modules of Paul Brown, which helped to illustrate the way in which his computer drawings were built up from permutations of fairly complex modules; the computer produced poetry to music performance by the Group *Sunflowers*; and the computer composed custard pie fights.

It says much for the quality of the poetry and the way it was presented by Robin Shirley, Alwyn Marriage, Gus Garside and Ranald Macdonald that they were able to give two consecutive 40-minute performances to enthralled audiences of all ages. The poem for three voices, *May Carol* was especially well received and I look forward to hearing the *Wheel of Seasons* cycle in full on some occasion when I'm not trying to run a computer art show at the same time. The custard pie routines, performed with great gusto by Simon Squire and Tony Loftus (Figure 1)—whilst pleasing to the general public—disturb some members of the CAS. They feel that such displays are inappropriate to the tone of the rest of the Society's work. I disagree with this outlook. I think they illustrate in a very graphic way both the manner in which the computer can produce scripts for actors to perform and how it is possible to conceive an art work as a game.

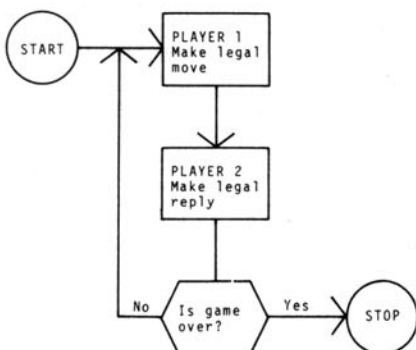


Figure 2

## Art as a Game

If we follow through the flowchart in Figure 2, we can see that this represents—albeit in a very generalised form—the basic concept behind a very large number of games from noughts and crosses to chess and from dominoes to tennis. We can, however, interpret the words 'move' and 'reply' in a variety of ways: for example, a 'move' could be to draw a line in a particular direction and a 'reply' to draw a line at right angles to it. If we write a simple program to implement this idea and the move is chosen at random, we produce a drawing like Figure 3. This, of course, has little intrinsic interest—just as you would expect from a game where one player chooses his moves at random and the other has his replies forced. We can improve the interest by choosing the

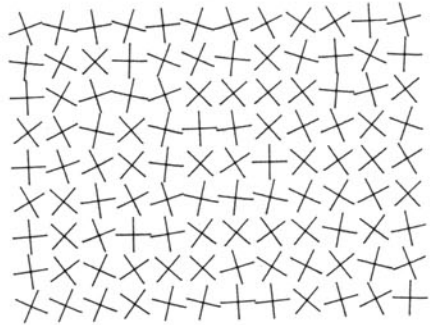


Figure 3

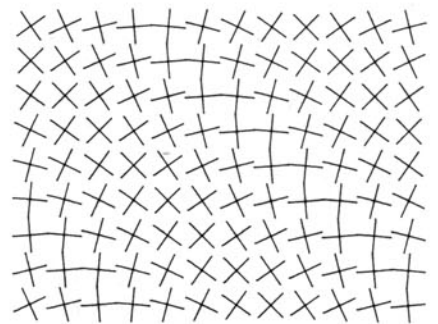


Figure 4

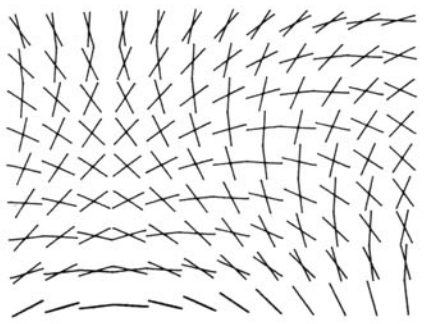


Figure 5

move according to some strategy and, as an example, we get a drawing like Figure 4. If finally, we make both players work to a strategy, we arrive at a drawing such as Figure 5—still not a masterpiece but exhibiting qualities that at least make you want to look at it and, perhaps, to carry the idea further. It was this type of exploration that led to the production of the custard pie routine program and I have used similar methods to produce programs for writing conversations and theatrical swordfights.

#### Vote of thanks

I have commented before on the generous assistance given by members of the computer industry to the activities of the CAS. Such assistance is truly altruistic in that suppliers and manufacturers know that the market for their products among artists is limited to a degree. Our activities at BCS 79 were enhanced by the loan from Techex Ltd of two colour stand alone terminals—an Intecolor 8051 with lightpen and a Chromatics 1398—on which we were able to show some impressive graphics and games which kept visitors busy for hours. Through the good offices of the CAS treasurer, George Mallen, the Design Research Department of the Royal College of Art let us borrow their Altair microcomputer and Tektronix 4014 on which one of the favourite programs was a version of Eliza, the psychiatrist simulation. My special thanks to both these organisations and to the BCS Specialist Group Committee, who financed the hire of exhibition stands, performances, projector hire and so on.

#### PArc 79

The amount of time we spend choosing suitable acronyms for our programs, systems and so on suggests to me the need for computer assistance—perhaps a nice, intelligent program into which you type the characteristics of the thing you wish to name and out come ten witty, internationally meaningful, catchy and succinct words from which to make your choice. Of course, we could give up the use of acronyms altogether and stick to real words or special abstract names—but where's the fun in that? The task of choosing an acronym readily understandable in English, French and German taxed those of us on the organising committee for an international conference on the use of computers in architecture and urban planning for some time. We finally chose PArc 79, with the subtitle 'Building for the 80s'. PArc is an acronym of Planning, Architecture and Computers, and, to us at least suggests the benign environment we wish architects and planners to create.

The conference is the first international symposium to be held on the subject since that in York as far back as 1972—and a lot has happened over those seven years as is evidenced by the papers being presented. Taking place in Berlin during May 1979, it will be one of the first to use the vast new conference centre that is scheduled for completion in April. Figure 6 shows a perspective of the building produced by the BIBLE program of the ABACUS unit of Strathclyde University, one of the leading centres of computer aided architectural design.

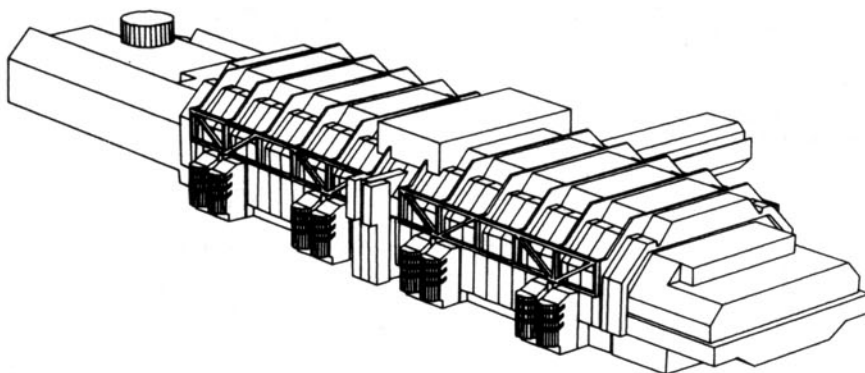


Figure 6

#### EXTRACT FROM USER REQUIREMENTS FOR DATA PROCESSING

##### Committee recommendations

As a consequence of this study, the Project Committee on the future requirements of data processing recommends that:

The British Computer Society:

- 1 Takes note of the likely major increase in the number of organisations, businesses, *etc* that will be using computers, for a very wide range of activities in the future, and uses its influence to promote training and educational activities that will ensure that the criticisms and apprehensions expressed in the report can no longer be justified, at least through the absence or inefficiency of a suitable skills development structure.
- 2 Brings to the notice of the Commission of the EEC and UK Ministers and Government Departments, professional bodies, suppliers, associations, the media and the members of the Society, the requirements of users as contained in this report, with the object of encouraging action to be taken to ensure that current and future computing and communication equipment and facilities can be used to the greatest advantage for the economic and social well being of the community and the individual.
- 3 Takes note of the need to involve users, even if they are not currently associated with the Society, in any planning it might undertake to support its members in the acquisition of the knowledge, skills and competence that is, and will be, required in the future.
- 4 Continues to support and encourage professional and other organisations and its individual members to study their future requirements and to monitor current situations in order that any specific need is brought to notice in a controlled, timely and responsible form.
- 5 Takes steps, as a matter of urgency, to publicise the relevant contents of this report to ensure that existing and future users are aware of its findings and so encourage them to implement the recommendations which are relevant to their particular circumstances.
- 6 Considers the setting up of a control mechanism to determine what, if any, action it proposes to take on the evidence of this report, and if appropriate, to monitor and report progress against an agreed plan.

##### BOOKGUIDE *continued*

This paper has been produced with two expressed purposes in mind

- a) to communicate the GPI Bookguide to interested parties; and
- b) to ask for feedback: Is the guide useful? What is lacking? Would more information of this type be helpful?

Please let the author have your views!

As a post-script I would like to thank the book publishers who provided texts for personal examination. I would add that if a particular title that is thought should be in the guide is missing, it could be that the publisher was asked but did not produce a copy. Thanks go to Dr Alan Knowles of the University of Manchester (each paper has two Examiners) for his constructive comments.