



Cybernetic Serendipity *an Exhibition at the ICA London*  
 Computer Music and Arts Festival *part of the ACM National  
 Conference in Las Vegas*  
 Computer Composed Music Contest *in conjunction with IFIP in  
 Edinburgh*

Those are some of the events in 1968 that led a small group meeting in London to plan a Computer Arts Society

**The aims are to promote the creative use of computers in the arts, and to encourage the interchange of information in this area.**

The term **CREATIVE** will be applied with some strictness; the use of computers in the analysis of works of art, important though this is, will not usually be included, except where it leads to some synthesis of new works. The term **COMPUTER** will be applied broadly, to include machines and techniques with computer-like functions providing scope for programming, which explore new creative possibilities.

**All arts, pure and applied, are included. Many of the ideas and methods for the creative applications of computers and programming apply to more than one art form.**

**The current information processing needs of artists and the development of new forms of expression will be considered. The underlying purpose will be to foster methods and systems that suit people and to resist the tendency to make people fit systems.**

**The mutual education of artists and computer people through joint projects and discussions is most important. Initially, the stress will be on activities; formal establishment of a society can follow.**

**The arts and computers are equally global: a society concerned with them both, and with fostering new forms of expression and communication, should be world-wide. There are practical problems in running an international society, but publications can be international, and it is hoped that at least one international event can be organised each year.**

**The aims of the society are closely related to two current views of "the computer". On the one hand the computer can be regarded as a unique mechanism enabling the precise control of existing processes and the discovery of new ones. The society aims to explore the mechanistic potential of computers in fields of art and design.**

**On the other hand, "the computer" can be viewed as an innovation which will fundamentally affect man's views of himself and his social structures. The implications of this organic view are of extreme importance. One of the aims of the society is to provide a forum in which artists and scientists can jointly work out these implications.**

## BACKGROUND

The three events listed on the preceding page are just the latest manifestation of an interest that has been growing for over 10 years in the application of computers in the arts. The formation of a society to bring together those who share this interest seems natural.

The response to the limited publicity that the suggestion has so far received indicates that there will be ample support in Europe and North America.

It has been suggested that the society would best be part of one of the computer societies, the British Computer Society or Association for Computing Machinery for example. The arguments against this are that these societies are increasingly professional bodies, concerning themselves with qualifications and more important, they are computer societies, which would give an unwelcome bias. It is essential, and perhaps more difficult, to attract writers, artists and musicians.

An association with a body such as the Institute of Contemporary Arts would be better from this point of view, but any such society has its own aims and current commitments, and is unlikely to want to take on a large new field.

The group has been granted the status of a special interest group of the British Computer Society to aid it in its early organisation. This will not prevent association with other societies later, or the formation of an independent society.



## NEEDS

The current information processing needs of artists can be illustrated by the situation in electronic music. Computer control of an electronic music studio causes a dramatic alteration in the composer's attitude towards his medium and material. The many laborious hours of splicing tape are eliminated. This is a solution of practical problems that is bound to be adopted more widely. The composer can use his system much more freely, like a sketch pad, in a more interactive way. In just this way computers can lead to more freedom for artists, not less. This area is clearly related to the computer aided design which is increasingly finding a place in industrial design.

The development of new forms of expression is not something that is bound to happen, but is a matter of the choice and preference of artists. What is possible is the programmed creation of works. The artist is then creating a process, not individual works. In the pure arts this may seem anathema, but art thrives on contradictions, and it can be yet another way of asking what is art? — how should we look at a drawing designed by a program? — how should we look at a drawing designed by a man? — how should we look at the world?

In the applied arts there are important social implications. For here is a way of reconciling the economic need for large scale production with the human need for the individually different.

We cannot return to the days of hand made goods. But we can now, with computers, reverse the tendency for mechanisation to mean standardisation, greyness, uniformity and de-humanisation. It will be an important function of the society to see that this happens. In architecture, for example, it should no longer be necessary to design estates of identical houses or blocks of identical flats: unlimited variety even within standard shells and with standard modules is possible. It needs more work than the easy way, but computers can do that work.

In addition to the mechanistic role of the computer as a new tool for the artist, it is important to examine the probable effects on life and social structure of the computer. This can be for good or ill. Science and art must attempt to agree on what is "good" otherwise one group or the other will take on the responsibility of decision to the detriment of the other group and to the detriment of society.

We are all aware of the gap which exists between the artist and the scientist. This gap is the result of different and diverging styles of thought. It is widened by the academic approach to scientific research on the one hand and by the personalised introverted approach to art on the other. It is important for the health of a technology-based social structure that this gap be bridged, not by temporary technological gimmickry, but by well founded mutual understanding of needs and aims. The computer arts society will provide a forum where this mutual understanding will be fostered.

## EDUCATION

The first major task of the society will be mutual education of artists and computer scientists. This will start with the artists becoming aware of what is possible now with computers and what is feasible with future systems. With this knowledge, artists can begin to tell computer scientists the sorts of systems they want. There is no need for an artist to learn to program, but he must learn the areas of feasibility.

This approach is common to any area of computer application, but the added and central difficulty in the arts is the individually varying attitudes of creative people. Two composers may have such radically different attitudes that no system could suit them both, in a way that could not be true for two engineers. This applies particularly to the development of new forms of expression, and less to the satisfaction of current data processing needs.

One of the results of the education process will be the discovery of where the common ground between creative people lies. In this situation of individually differing needs, it is right to think of developing simple languages rather than ready made systems. But the first task is to find out more about what people want to do.

## WORKSHOP

It is hoped that this mutual education can go on in the practical atmosphere of workshop sessions.

The amount of education and development is such that irregular and infrequent meetings are not likely to lead to any concrete progress. Only regular and frequent sessions will show any general benefit.

Obviously there are practical difficulties in providing space and basic computing facility for such sessions. A university or college would be the best place.

Even the development of systems to illustrate current possibilities will take time and effort, which may best be fostered in a cooperative workshop atmosphere.

## EVENT ONE

**To launch the society, a first event is being organised that will serve to bring together more of those interested, show something of present systems and future possibilities, and act as further publicity.**

**This will be a one day event at the Royal College of Art on March 29th. The emphasis will be on demonstrations and discussions. By demonstrations is meant simple systems that people can use to generate poetry, drawings and other patterns: they will not be merely churning out pre-programmed material. The atmosphere will be of a workshop rather than an exhibition. There will be exhibits of existing computer art and music, but it is intended to exclude work in which the computer is simply used as a means for the mechanical reproduction of identical items.**

## THE GROUP

This folder and the plans described in it are the work of a small group meeting in London:

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