TECHNIQUE AND AESTHETICS.

The LIMITATIONS of the computer are the key to understanding computer art. Just as there are styles and periods in art, so there are styles and periods in computer art. These are determined by human factors (the amount of time, the knowledge and imagination or talent which have gone into creating the art. The end result is also dependent on the computers, their software, and additional techniques employed. It is easier to start measuring the capacity and limitations of the latter than the human factors. Particular attention must be given to the mechanisms employed, which are of course subject to change. This kind of analysis takes up considerable amount of time, which is probably not available just now. (Far more writing on say, Renaissance art was produced in the present century than in that period).

With computer techniques there occur opportunities for a large number of people to rapidly maximise their contribution in a particular field - one which may not even be in existence at present, but which it is important to go into. If five-hundred artists were now to enter computer art they would find it difficult to exhaust the technical and aesthetic possibilities of the existing mechanisms.

THE ART WORLD.

It is impossible for the museum and commercial gallery structure to accomodate the volume of art that will be produced in technological art in the next few decades. It is therefore vital to begin developing new structures that will enable these works to be produced and exhibited. Work in the present art structure is based on fierce competition to get into the limited space of the galleries, museums, art journals, and other communication media. This forces artists into an isolation where they can not help other artists in any genuine manner. Dealers and museums see to it that there is the minimum of technical advance, since they cannot afford the expense of advanced technologies, they are faced by new and complex problems of installing advanced works, they do not have the space required, their floors may not be strong enough, etc. Dealers have no use for an artist who is so involved with research that his mediums change with a rapidity that give no time to publicise each development, or to reap the economic and publicity rewards that result from the steady exploitation of one type of product. The result is a collusion of the artist with dealers and museums, with the art critic or journalist playing the role of middle-man in the operation.

But this collusion is certainly on the point of being exploded by the sheer volume and accessability of materials and techniques, plus the pressure exerted by rising generations of artists, who will simply not stand for limitations on

their exploitation of the possibilities of technological art. And technology is still in a phase of expansion, where vast numbers of possibilities will be added to those already present. Once these facts are accepted, then the competitive, jealous, and negative spirit that infects the art world can be under-cut.

ART-SCIENCE-TECHNOLOGY COLLABORATION.

It is self-evident that genuine collaboration demands the exactly opposite approach to the mean, conservative one of the art world; it requires a willingness to seize on anything that may lead somewhere, a preparedness to share, by publication, pooling information on materials and techniques, and by numerous other ways, breaking down the barriers that at present dominate the relations of artists. It is in such an open situation that artists may contribute (however indirectly) towards the development of new techniques in life.

In the meantime there is the inevitable conflict between those artists integrated with the existing art world (or who hope, eventually, to join it), and those working in the new approach. These conflicts will be present in any organisation that connects artists with science and technology. How is one to prevent the internal collapse of such organisations without the unjustified exclusion of the artist committed to the present art structure? One answer is to see to it that the core of these organisations is composed of people least dependent on the present art world.

ECONOMICS AND PRESTIGE.

Money must be found to enable artists and their dependents to live whilst pursuing work which in many cases will not be at all marketable in the old sense. This can be arranged in the form of grants for those working in a university or research situation. Industry can supply free materials and workshop facilities within plants, warehouses, etc. A large pool of money can be arranged where industries, businesses etc., give a portion of tax-deductible money which will be shared out to artists. The government can add to this pool. Some of the economic benefits derived from the research of artists can also be syphoned into this. As for prestige, instead of the gossip columns, the T.V. appearance, and articles in the glossy magazines (inevitably limited to a tiny percentage of practicing artists) a far greater number can get the prestige that goes with good work done, or that follows difficult research.

ECONOMICS AND POLITICS.

For the artists or their organisations to approach science and technology as if they were entirely desirable and constructive forms of activity is extremely

unrealistic and dangerous. There is now a clearly established and growing trend among scientists and technicians to create a situation within their disciplines
dividing those who are integrated with present structures, and those wanting to expose and correct the disastrous alliance of science and technology with exploitative and destructive social systems. In the course of the present year there has occurred the formation of the British Society for Social Responsibility in Science. The Union of Concerned Scientists called a one day 'research stoppage' in a number of leading American universities including M.I.T. on March 4. (See New Scientist, March 20, p.616). These two are but the latest developments in a campaign that has gained in strength since the end of the last war.

The same U.S. publication 'Computers and Automation' which has sponsored computer art, has consistently opened its pages to a serious dicussion of the dangers that computers signify for the future of mankind. One of its articles quoted this revealing advert from 'Fortune' The computer industry is a union of science and business that makes the auto and appliance industries in their great old days seem like a bunch of kids playing mumbling peg.'(Computers and Automation, March, 1964, Editorial). The computer industry runs at an annual growth rate of 30%. Computers are retained in production, or are rendered obsolete, in accord with programmes that are essentially based on profitability factors. If the Computer Art Society will not face these facts then it is heading for serious trouble. It would be tragic if the Society did not make some statement about the dangers of computers in war and the control of individual freedom in its policy declarations.

What are the tasks of the artist who is committed to the use of computers and advanced technology? He needs to align himself with those who are working on the sophistication of computers, oppose the stasis in computer development caused by considerations of profit, and align himself with the scientists who are fighting the system from within. A situation where the C.A.S has access to computers, with no strings attached, and no possibility of commercial, prestige, exploitation, is infinitely more desirable than access to the most lavish installation where a company might manipulate the direction of the Society.

A document presented by Gustav Metzger for the Computer Arts Society's 'post-mortem on 'EVENT ONE' to be held at the British Computer Society, London, April, 3, 1969.