

PLYMOUTH
ARTS
CENTRE

SPACE
X
GALLERY

Lesley Kerman
1988



E.A.T. at SpaceX

The Initials E.A.T. stand for "Experiments in Art and Technology".

The Five artists whose work makes up this exhibition are: **Doug Hedges** who is absorbed in the problems of animating a mechanomorph...making a friend.

Mike Lawson Smith who sets out to 'tell a good story' an intention that leads him to build constructions involving machines, film, performers and phenomena.

Mike Phillips who works with computers, oscillators, lie detectors, light...tracing patterns and codes, a constellation in the shuttle explosion.

Tim Jordan builds large scale machines which are inspired by the history of science and technology.

David Sandbach makes things that he finds interesting or amusing on the basis that if they are interesting to him they may be of interest to someone else. He works with mixed media regarding some materials as a challenge waiting to be mixed. He has recently involved the collaboration of bees.

They earn a living through the application of various technical skills developed through Fine Art education... T.V. Advert stylist (putting the steam on frozen peas) Lecturer in computers in Art and Design, Scientific exhibition constructor, Foundry worker, Automata Designer/maker. Thus they are free to make art as interesting or as amusing as they wish.

Their work is divergent, yet they share certain attitudes and intentions which make their collaboration in this exhibition indicative of a new direction. They were once contemporaries on the Fine Art Course at Exeter and since then have continued a close working relationship.

They are happy to swap and share ideas and can often help each other out with information. They agree that they each begin a piece of work with an "idea" or a "feeling about something" and it is this idea that dictates the form that the work will take. Each piece demands its own particular materials, system of construction and technology. As a result they work in mixed media employing 'a system of

inclusion' as Rauschenberg called it, a system which allows them to set out to find the medium, the phenomena and the mechanism that each piece of work requires and which enables them to respond with immediacy to realisations and events without being hampered by preconceptions about what art should look like or what it is supposed to be concerned with. David says that while you are making something as soon as you think of it as 'art' you've had it.

Billy Kluver a research engineer with the Bell laboratories, set up the original E.A.T. in America in 1967, with the intention of introducing individual artists to particular engineers and technologists who could help them to realise their ideas. Kluver began working with artists by helping Tinguely to construct "Hommage to New York" the great white painted mechanism of the 100 pram and bicycle wheels and the many electric motors, which destroyed itself with the help of the New York fire brigade on the night of the 17th March 1960 in front of the Museum of Modern Art in New York. He went on to arrange collaborations between artists and engineers, most successfully his own with Rauschenberg on their "Oracle" at the "9 Evenings Theatre and Engineering" in the Armoury Building. Kluver predicted that E.A.T. would continue to be developed by interested parties throughout the world in ways which could not be foreseen. "the use of the engineer by the artist will stimulate new ways of looking at technology and of dealing with life."

This E.A.T. group has not had to face the schism between art and technology that the original pairing of artist and scientist was designed to overcome. This is a result of the amazing proliferation of technology in the last twenty five years. We live in a culture controlled, repaired, pampered and diverted by technology. Science is enmeshed in all our lives and transforms our thinking.

As Francis Bacon said,

"In the youth of a state, arms do flourish; in the middle age of a state, learning; and then both of them together for a time; in the declining age of a state, mechanical arts and merchandise."

Where once the impetus of war generated the pace of innovation, now the consumer culture through market forces, races to put new technology on the breakfast table, in the work place, even inside the body. Paradoxically the more complex science and technology have become, the more accessible is that complexity. These five artists find it inevitable to be working with technology as part of the fabric of their culture. They read trade magazines and catalogues. If they need advice, they have found individual scientists particularly helpful. Mike Phillips has had help from the computer scientists at U.C.L and M.I.T. They mentioned the Daily Telegraph information service as an invaluable source of facts and contacts. David Sandbach explains that if you use quite easily accessible scientific information, he recommends the Ladybird books, you can soon gain a reputation for being amazingly clever in art circles, and indeed I have heard him referred to as "the man with a brain the size of a planet."

They are not daunted by their lack of a scientific education, believing that, because they begin from an intuitive starting point they are not constrained by disciplines whose boundaries are after all continually being redefined. They feel free to operate across the gaps between disciplines and find some scientist friends like H.G. Wells moon people, specialised bits of whom were grown to vast proportions in glass jars for performing specialised functions, leaving the rest of them withered and stunted.

They are intrigued by the esoteric nature of some research projects that they have come across. One of them described how someone had fed the blood of schizoid patients to spiders, whereupon the spiders spun a web of a different pattern. They are bemused as to why such an investigation should be regarded as legitimate and funded accordingly whereas their own work is not so valued and applauded. The post-Kantian conception of science as not simply the pursuit of a set of objective truths, but as "an

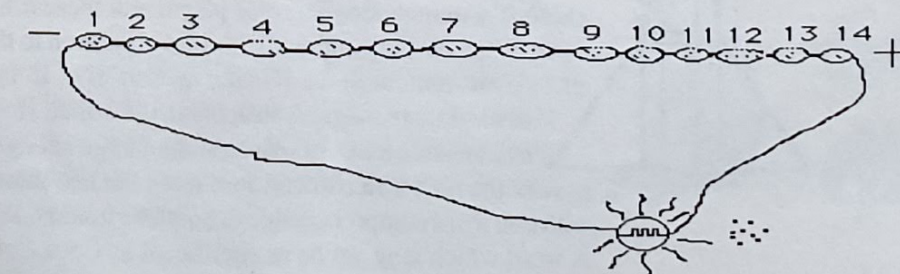
interaction between what we contribute and what we discover" is a definition that could include their work. As Hilary Putnam confirms "science is now simply a term for the successful pursuit of knowledge" art is presumably a term for an unsuccessful pursuit of the same.

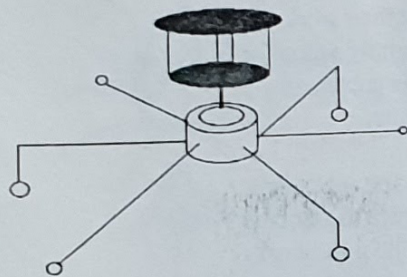
They are all anxious that their work should be accessible. They are attentive to the context within which the work is placed and for this reason they are keen to site some works around the town believing that coming across a piece of work in a shop window, or under a bridge provides an invitation to see the work without the interference of the idea of what 'art' should be like which is immediately present in a gallery.

The accessibility is present in several ways. The invitation to turn the handle and propel the giant machine into action is irresistible in Tim Jordan's work. Tim describes the movement in kinetic art as its decorative quality, the lure that entices the audience towards the work and puts it at its ease. David Sandbach makes sure that there is an explanation alongside the work if anything is confusing "When zinc and copper are immersed in an acid a voltage is generated.

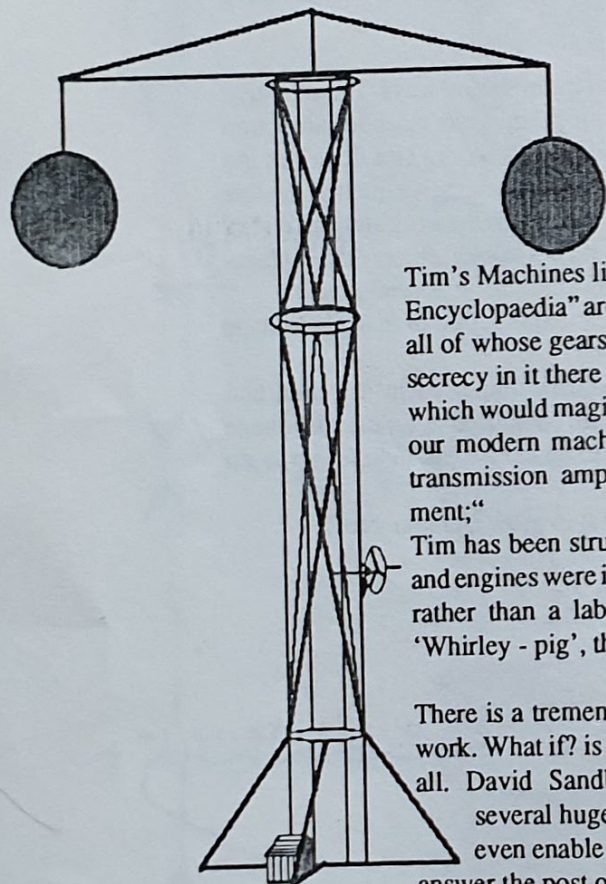
When zinc and copper are immersed in a lemon, and fourteen such lemons are connected in series, the voltage produced can be used to power a weak light for up to ten minutes.

This is insufficient light to grow a lemon tree."





Mike Phillips reckons that everything should be exposed, there should be no mystery as to how something was put together and how it operates. They all endorse this view. They are anxious to demystify technology, but the transparency of the mechanism cannot reveal all. There is ultimately a mystery about a replicated device launched from four continents which moves through the water recording wind and waves as do Mike's 'Water Gauges'. Douglas points out that everything in the science museum has a purpose. The purpose of these works is far more difficult to define.



Tim's Machines like the machines in Roland Barthes' "Encyclopaedia" are "like big toys" a "technological organ all of whose gears and wheels are exposed... absence of secrecy in it there is no hidden place (spring or housing) which would magically conceal energy as is the case with our modern machines. The energy here is essentially, transmission amplification of a simple human movement;"

Tim has been struck by the way that these mechanisms and engines were invented and first built in an agricultural rather than a laboratory environment. At the base of 'Whirley - pig', there is a pigsty.

There is a tremendous sense of play about these artists' work. What if? is a continually thrilling question to them all. David Sandbach can make a fish fly. It takes several huge magnets to achieve the effect. He can even enable a bee to write a slogan large enough to answer the post office tower. In a week the bee came up with one word comprehensible to humans. It said "Tub". A word which may yet be as significant as Coca Cola.

The fascination of automata provide Doug Hedges with a cloak of accessibility. Since Vaucanson's world famous duck of 1738 which could both quack and excrete, machines that can imitate nature have been a popular delight. Douglas describes an argument at work between two grown men about the best way to animate the spines on a hedgehog. It is Douglas who points out that the question "How is it done?" must never cross the mind. The idea must be paramount and the technology be made to follow.

Mike Lawson Smith is surprised at how often an idea is quickly followed by a recognition of a phenomenon or mechanism that may enable its materialisation. David Sandbach reckons that each piece of work is gradually being assembled in the subconscious.

When they talk about inviting audience participation and interaction they really mean a great deal more than grasping the lie detector or turning a handle. They construct work that aims to engage the participation of the imagination. David Sandbach may use sensors and circuitry but he will also catch you out with the golden section. Mike Lawson Smith is working on a device which actually invades the retina. In his piece "The Inhabitant of the Minds Eye." he constructs for his audience through a device the same physical sensations the film records.

Mike Phillips' Bio feedback system uses a lie detector to measure the changes in a subjects emotional state and to respond to those changes through a computer with sound and images constructing a dialogue within the subject's own imagination.

All five artists are attracted by the way in which technology can amplify or articulate unrecognised aspects of the senses

"The poet", says Rilke, "is compelled to use the sense sectors to their full extent, as it must also be his aim to extend each of them as far as possible, so that his lively delight, gift for the attempt, may be able to pass through the five gardens in one leap."

Lesley Kerman
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