

Computer Arts Society Bulletin  
No. 46 Spring 1984

## COMPUTER ANIMATION PORTFOLIO

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CAS Secretary John Lansdown  
Computer Arts Society  
50/51 Russell Square  
London WC1B 4JX  
England

Membership £4 or \$10

The Society aims to encourage the creative use of computers in the Arts and to further exchange of information in this area. The Society is a Special Interest Group of the British Computer Society but membership of the two is independent.

The Society holds regular meetings in London on the first Monday of each month. Members and visitors are welcome. Phone Sharon Nightingale on 01-836 4400 for details of the current venue and times.

# PAGE 46

At last! A new copy of PAGE. Firstly a big vote of thanks to Dominic Boreham who resigned as Editor with our last issue. Dominic did a great job of building PAGE into a regular and exciting forum for new work and ideas.

Astute readers will have noticed that this is issue 46 and our last was No. 50. Well... err... No. 46 was due from our American colleagues in CASUS. There seems to have been some delay and this issue should plug the gap that seems to horrify our library subscribers. Our next issue will (I hope) be 51 and will celebrate our first half century. If any members have any favourite items from previous copies of PAGE, or anecdotes about the society please send them in as soon as possible.

Two items of interest to members will be a new computer arts competition and a new conference.

The COMMODORE INTERNATIONAL COMPUTER ARTS CHALLENGE is planned to be an annual event. Initially all work must be produced on Commodore equipment.

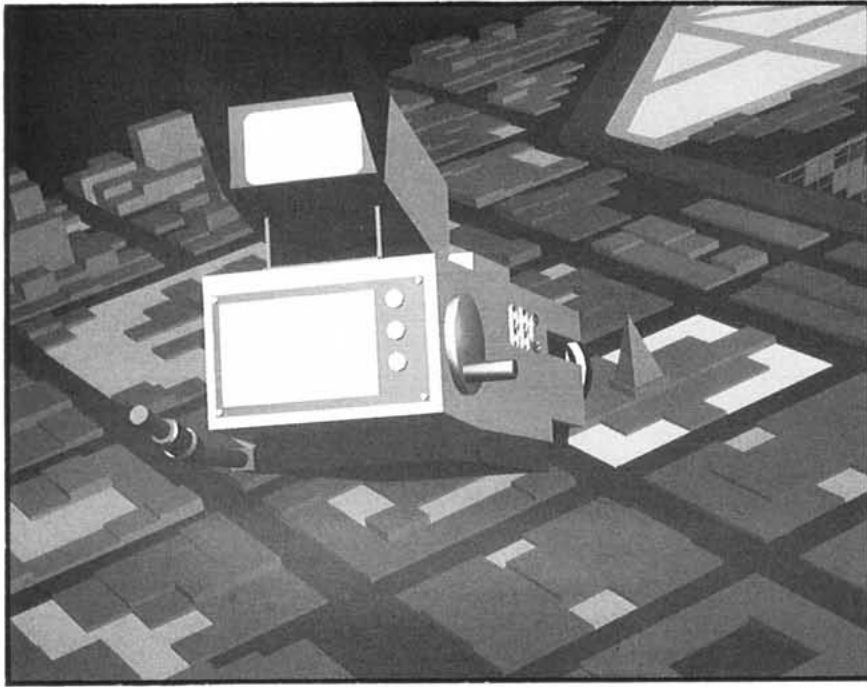
This, the organisers say, is to simplify the administration of this 'pilot' event and that other machines will be included in the future. When I started using computers it was punch-cards in and (if you were lucky) a paper plot out—about a day or so later. I remember discovering teletypes and thinking they were a great leap forward. (They were!) Things have changed. Now even the most basic home-computer has some graphics capability. Let's hope this 'Challenge' will encourage more people to explore the visual potential of both themselves and their personal computers. And that more manufacturers will follow Commodore's lead in promoting work in this area. More details from CICAC, Granard Communications, 4 Babmaes Street, London SW1Y 6HD, or your local Commodore dealer.

COMPUTER FX '84 will be the first conference organised by Online Ltd. to specialise in the growing area of Computers and Digital Effects in Animation and Art and Design. Again the intention is to produce an annual event. This is a break-away from the successful series of Computer Graphics conferences that Online have been running for several years. The Computer Animation Festival, previously part of the CG conferences, will now become a part of FX '84 and the opportunity to view the latest work from around the world should provide a focus for the event. It's also hoped to run a session on computers in art education. A topic that, in the UK at least, needs some serious attention. More details from Online Ltd., Pinner Green House, Ash Hill Drive, Pinner, Middlesex HA5 2AE, UK. 01-868 4466. Please mention CAS/PAGE if you're sending off for details of either of these two events.

This issue of PAGE surveys the new work being done by some of the London Computer Animation Companies. In the last 12 months the UK industry has made a 'quantum jump' from green-line graphics on cell to hi-res raster images. To all of the companies (world-wide) who we have missed this time—send us your pictures and some blurb and we will include your work in future issues.

STOP PRESS Eurographics UK Chapter Conference. University of Kent, 10-11 April '84. Details: Dr. M.A. Oliver, Computing Lab., The University, Canterbury, Kent CT2 7NF.

# ELECTRONIC ARTS

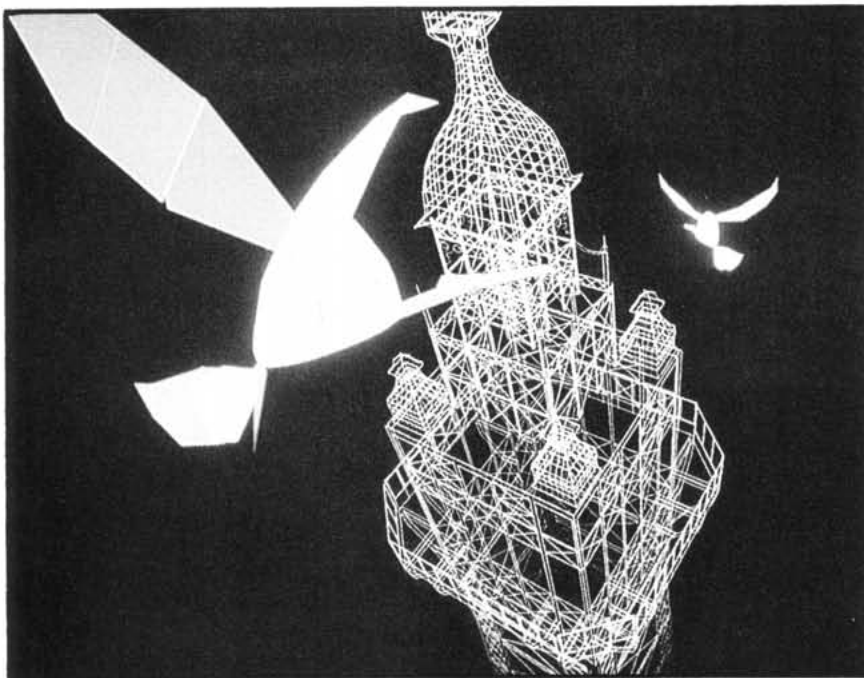
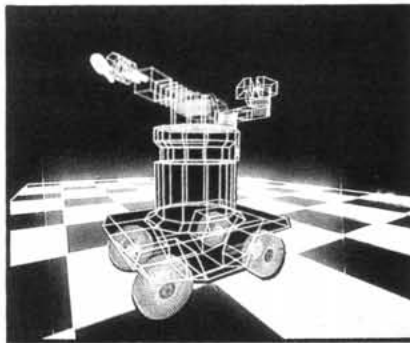
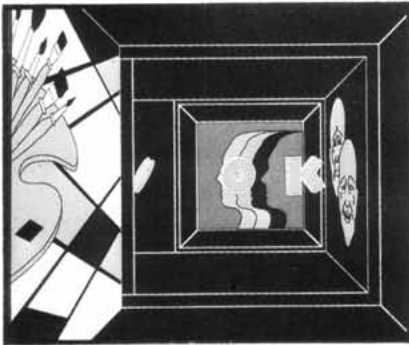


Electronic Arts is one of the UK oldest computer animation studios. Originally a re-search project at Imperial College it became a part of the EMI empire before finding its current identity as an independent facilities company. In the late '70s it was experimenting with low-res raster graphics using a CAD-Centre Bugstore frame-buffer. In 1983 they acquired a Dicommed hi-res film plotter backed by two D.E.C. VAX 750s and a PDP11/60. In parallel with animation they run a business slide facility.

Their software is based around the MOVIE.BYU package which they have refined and are extending. The 'Look Forward' titles for Channel 4 produced at Electronic Arts won an award at the CG'83 Computer Animation Festival.

Credits: 1/ Sportsnight-BBC TV,  
Design Darrell Pockett;  
2/ Look Forward-Channel 4,  
Design Bob English.

Electronic Arts  
Unit 2, 6 Erskine Road  
Primrose Hill  
London NW3  
England  
01-586 7733



Computer FX is a newly established London computer graphics facility specialising in the production of 3-D animation sequence. The system was developed in-house and is completely interactive. It is based on IMI vector-refresh hardware which allows complex animation in real-time. Over 100 objects, each having 9 degrees of freedom can be animated simultaneously.

The system is vector based. Filled areas are obtained by drawing lines close together to form a surface. Using this technique objects of more than 15000 lines can be animated, creating surfaces that have an unearthly, high-tech, quality. Conventional wire-frame animation is also available. Images are output onto 35 mm cine film at more than 2000 line resolution.

Credits: 1/ Blackpool Tower, Design in-house;  
2/ Robot, Design Lodge Cheesman  
Productions.

Computer FX Ltd.  
14-15 D'Arblay Street  
London W1V 3FP  
01-734 3155

# COMPUTER FX

# DIGITAL PICTURES

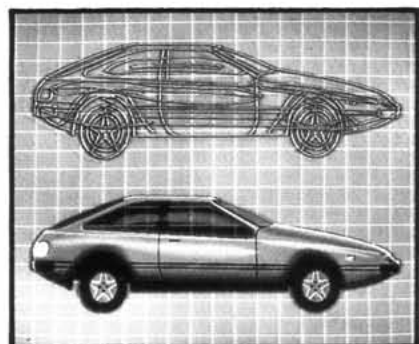
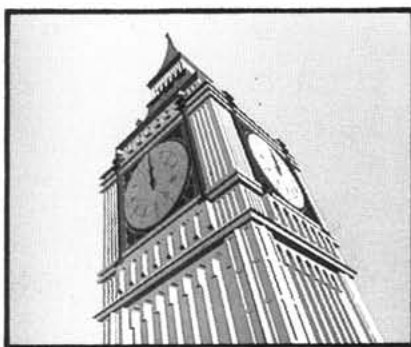
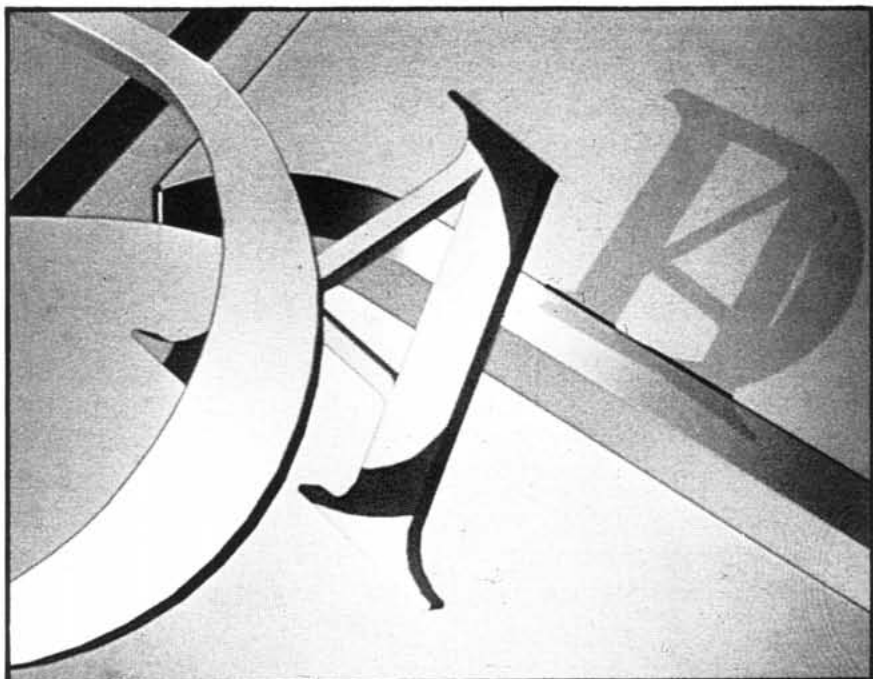
Digital Pictures was formed in 1982 by two artists—Chris Briscoe and Paul Brown. The company grew out of research being done in the Experimental Dept. of the Slade School of Fine Art, University College London. It is one of the few companies in London offering high-resolution raster graphics.

Their software is in Assembler and Fortran and has all been developed in-house. The heart of the system is a Watkins-type hidden surface algorithm which recognises shadow volumes. Current research covers transparency and texture-mapping. The company has two Data General Eclipse C330 mini-computers, one for R @ D, the other a production machine linked to a Matrix QCR-D2000 hi-res film plotter which they have modified to use a Mitchell 35mm pin-registered cine camera.

Designer Steve Lowe and producer Pete Florence joined the company in September 1983 when they moved to new, custom built, premises in London's Covent Garden.

Credits: 1/ Imperial Tobacco Ltd., Design Robinson Lambie Nairn;  
2/ Weekend World—LWT TV, Design Robinson Lambie Nairn.

Digital Pictures Limited  
185 Drury Lane  
London, WC2B 5QD  
England  
01-831 0209

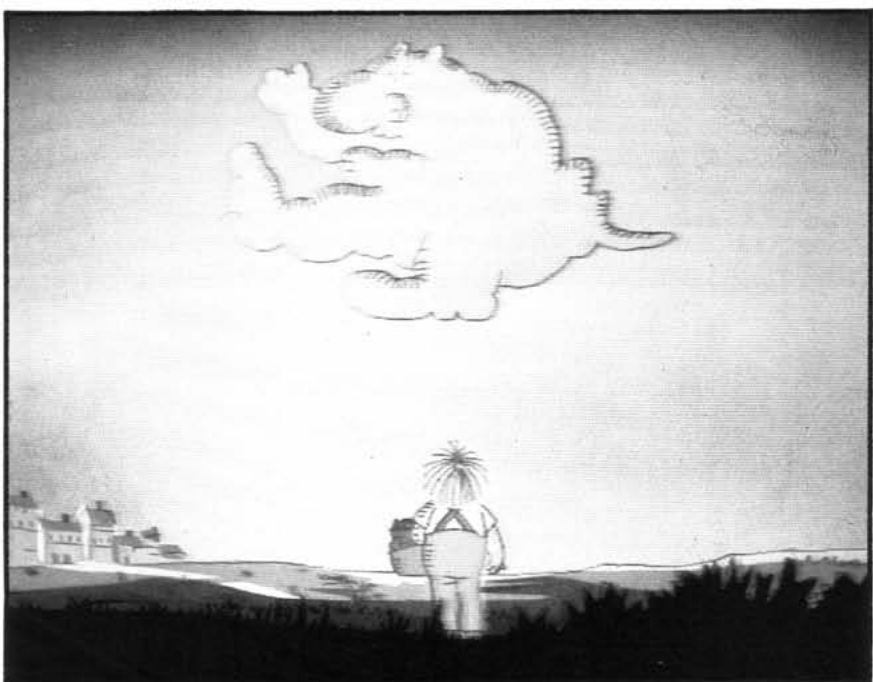


Antics is the brain child of Alan Kitching. Its user-friendly 2½-D cell simulation package that neatly fits into the expectations of traditional animation companies. The code is in Fortran and is currently implemented on D.E.C. VAX and Prime equipment.

The package has its origins in research Alan was doing at the Royal College of Art. This culminated in 1973 with the 'Primordial' version of Antics. This was superseded in 1978 by the 'Paleolithic' revision and then in 1983 the current state-of-the-art 'Stone Age' version was released.

Several Antics machines are now operating worldwide. Four were recently set up in Tokyo, one each in Amsterdam and Brussels and one is currently being installed in New York.

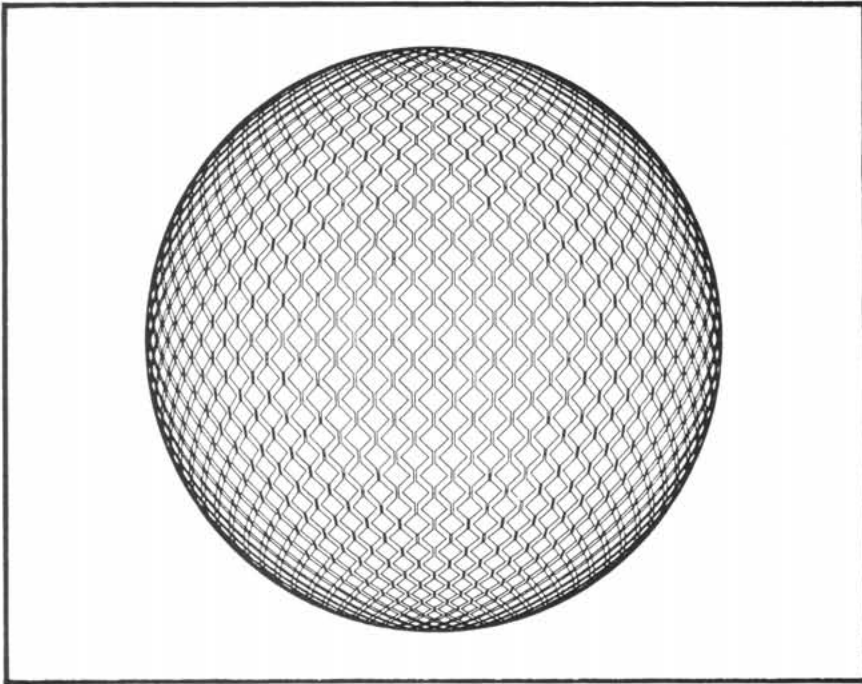
Grove Park Studio Animations Limited  
104 Grove Park  
Camberwell  
London SE5 8LE  
England  
01-274 5395



# ANTICS



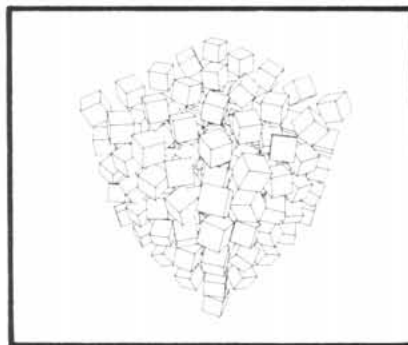
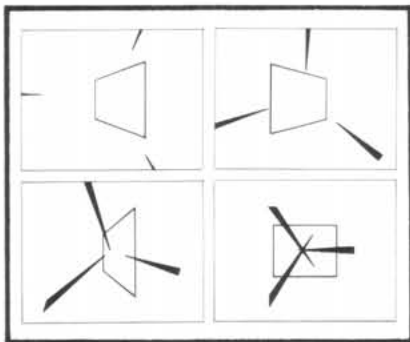
# MEDIA COMPUTER GRAPHICS



Media Computer Graphics is part of AIDCOM International plc and was formed in October 1983 to develop and exploit the computer graphics and animation software of System Simulation Ltd.—the company involved in computer animation for such films as ALIEN and HEAVY METAL, as well as the award-winning Channel 4 logo.

John Lansdown (secretary of CAS and Chairman of System Simulation Ltd.) acts as consultant to the new company and is assisted by Alan Rudge and Trudi Brady. He is able to call on the design, graphics, model-making and audio-visual skills of the sister AIDCOM companies and aims at providing a comprehensive service of design-based graphics varying from the one-off drawing to complete computer animated films and videos.

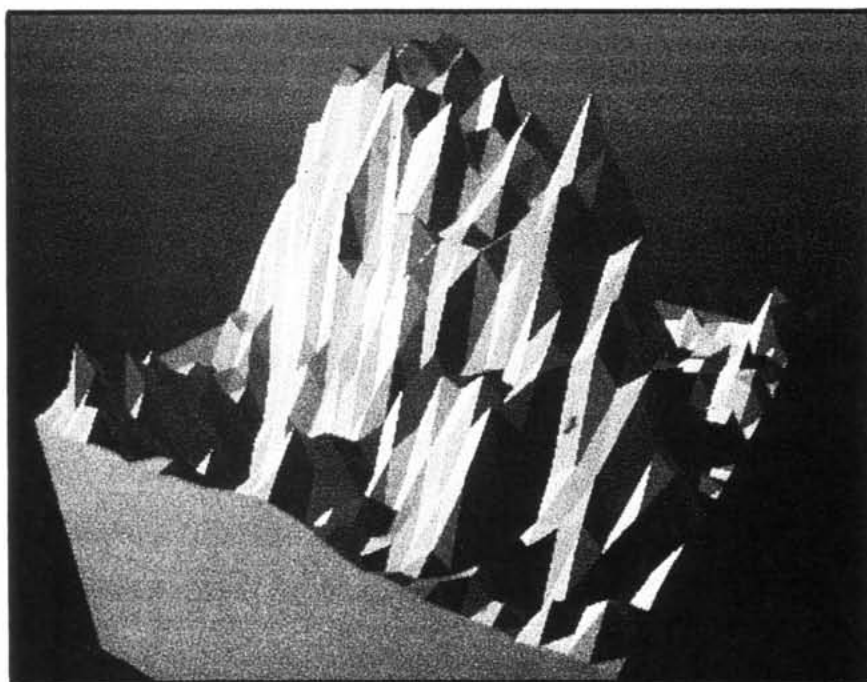
Media Computer Graphics Ltd.  
41 Paradise Walk  
London SW3 4JW  
England  
01-351 1151



The Graphics Unit of the Computing Dept. at Middlesex Poly., via their Consultancy Services Unit, offers both computer animation and courses about computer animation. It is, to the best of my knowledge, the only educational establishment in the UK to offer these services. Thanks are due to John Vince whose commitment to graphics began over 10 years ago with his PhD subject 'PICASO'—a graphics package that's now virtually a standard in educational computing throughout the UK.

Successive staff and students have developed the basic PICASO package. Originally 'wire-frame' it now has a hidden-line removal backend that was written by Paul Hughes. A graphics art student—Paul Ashdown—developed software to allow PICASO data structures to be displayed as solid, shaded raster graphics images. More recently Gareth Edwards, a new member of the Graphics Unit, has been exploring algorithms employed in creating fractal surfaces.

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01-368 1299



# MIDDLESEX POLY