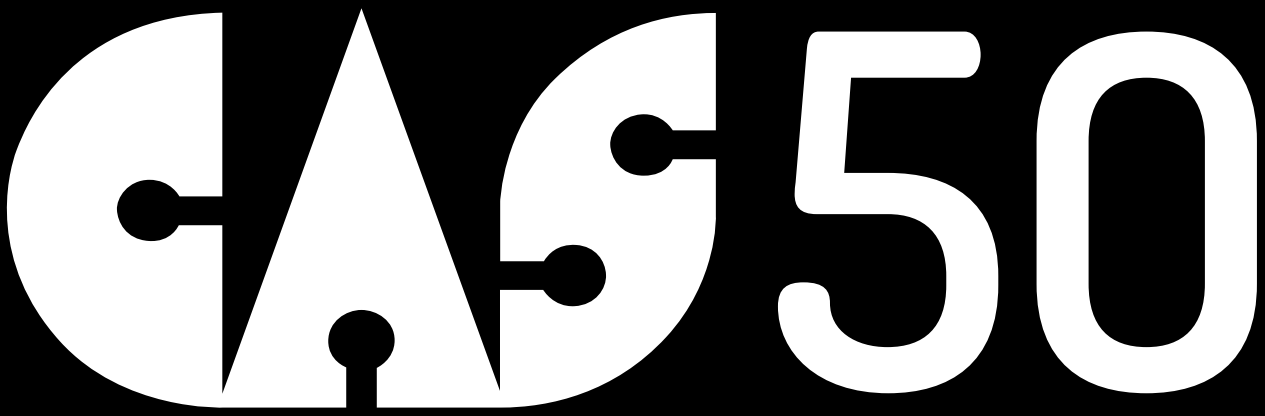

CELEBRATING 50 YEARS OF THE COMPUTER ARTS SOCIETY

COMPUTER ARTS SOCIETY

British Computer Society Specialist Group

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interactdigitalarts.uk/publications

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The Computer Arts Society

The Computer Arts Society was founded in 1968 and in 2018 marks its 50th anniversary. To celebrate this occasion an exhibition of artwork by twelve computer artists associated with the Society over the years was held in Leicester and Brighton. This publication documents this exhibition.

At the time of the Society's formation, the three founder members – Alan Sutcliffe, George Mallen and John Lansdown – had been involved with computing and its related concepts for some time. They knew Jasia Reichardt, the curator of Cybernetic Serendipity and had participated in, or advised on, aspects of the exhibition.

Sutcliffe was involved with the Cybernetic Serendipity exhibition through his collaboration with composer Peter Zinovieff and Electronic Music Studios (EMS). Mallen was working with the English cybernetician Gordon Pask at Systems Research and had assisted on the production of the interactive robotic work Colloquy of Mobiles shown at the exhibition. Although not mentioned in the catalogue credits, Reichardt knew and respected Lansdown who, from 1963, had used computing techniques in architectural design and planning.

The original idea for a society dedicated to the computer arts (which was to become the Computer Arts Society) was instigated by Sutcliffe at the IFIP (International Federation for Information Processing) Congress in August 1968 in Edinburgh. Sutcliffe and Zinovieff had won second prize with ZASP, their piece of computer-composed music. Members of the Congress suggested to Sutcliffe that he might like to convene a meeting of people working in a similar field whilst they were all together at the Congress, as most had not had a chance to meet like-minded persons outside their own team before. Sutcliffe collated the names of interested individuals and the group formed out of this, with the first meetings in London held in a room belonging to University College London, in or near Gower Street in September 1968. Subsequent meetings were often held at the offices of Lansdown's architectural practice (he became the Secretary with Sutcliffe the Chairman and Mallen, Treasurer).

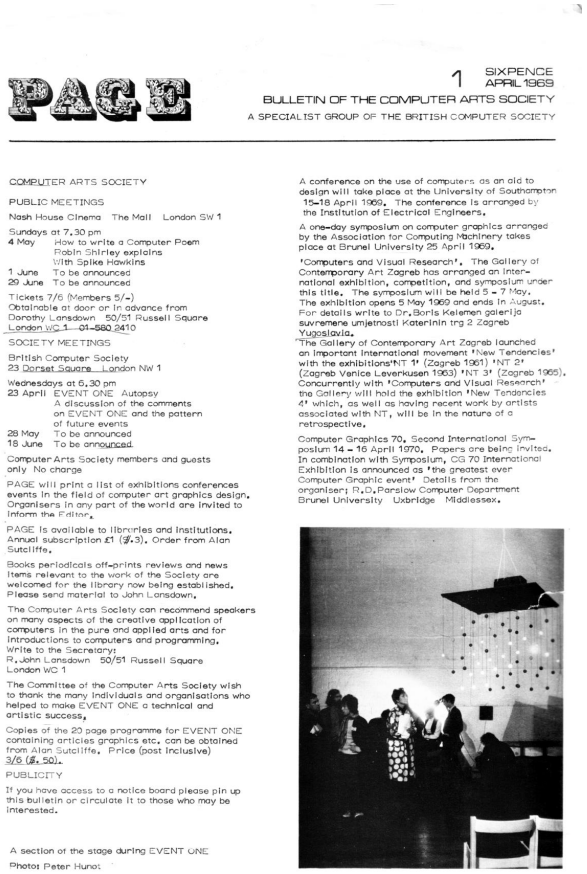
The Computer Arts Society was founded to encourage the creative use of computers and to allow the exchange of information in this area. It was recognised that this was an area where there had been increasing activity, but with little formal publication of methods and results and little communication between artists in different fields (music, visual, performing arts, and so on). The society organised it's first computer art show, Event One, in 1969.

www.computer-arts-society.com

PAGE

PAGE is the bulletin of the Computer Arts Society. It was first published in 1969 and was an important vehicle for communicating the Society's activities, particularly in its early years. The bulletin was first edited by auto-destructive artist Gustaz Metzger and has since been edited by Alan Sutcliffe, Dominic Boreham, Paul Brown and others.

Between 1969 and 1985 there were 52 issues of PAGE - ranging in size from one-page bulletins to full magazines. There was then a hiatus from 1985 until 2004, after which 13 additional issues have since been published. In March 2018 a complete set of scanned copies of PAGE was made available for free download from the Computer Arts Society website.



PAGE

1 SIXPENCE APRIL 1969

BULLETIN OF THE COMPUTER ARTS SOCIETY

A SPECIALIST GROUP OF THE BRITISH COMPUTER SOCIETY

COMPUTER ARTS SOCIETY

PUBLIC MEETINGS

Nash House Cinema The Mall London SW 1

Sundays at 7.30 pm

4 May How to write a Computer Poem
Robin Shirley explains
With Spike Hawkins

1 June To be announced

29 June To be announced

Tickets 7/6 (Members 5/-)
Obtainable at door or in advance from
Dorothy Lansdown 50/51 Russell Square
London WC 1 01-580 2410

SOCIETY MEETINGS

British Computer Society
23 Dorset Square London NW 1

Wednesdays at 6.30 pm

23 April EVENT ONE Autopsy
A discussion of the comments
on EVENT ONE and the pattern
of future events

28 May To be announced

18 June To be announced

Computer Arts Society members and guests only No charge

PAGE will print a list of exhibitions conferences events in the field of computer art graphics design. Organisers in any part of the world are invited to inform the Editor.

PAGE is available to libraries and institutions. Annual subscription £1 ($3). Order from Alan Sutcliffe.

Books periodicals off-prints reviews and news items relevant to the work of the Society are welcomed for the library now being established. Please send material to John Lansdown.

The Computer Arts Society can recommend speakers on many aspects of the creative application of computers in the pure and applied arts and for introductions to computers and programming. Write to the Secretary:
R.John Lansdown 50/51 Russell Square
London WC 1

The Committee of the Computer Arts Society wish to thank the many individuals and organisations who helped to make EVENT ONE a technical and artistic success.

Copies of the 20 page programme for EVENT ONE containing articles graphics etc. can be obtained from Alan Sutcliffe. Price (post inclusive) 3/6 ($.50).

PUBLICITY

If you have access to a notice board please pin up this bulletin or circulate it to those who may be interested.

A section of the stage during EVENT ONE
Photo: Peter Hunot

A conference on the use of computers as an aid to design will take place at the University of Southampton 15-18 April 1969. The conference is arranged by the Institution of Electrical Engineers.

A one-day symposium on computer graphics arranged by the Association for Computing Machinery takes place at Brunel University 25 April 1969.

'Computers and Visual Research'. The Gallery of Contemporary Art Zagreb has arranged an international exhibition, competition, and symposium under this title. The symposium will be held 5 - 7 May. The exhibition opens 5 May 1969 and ends in August. For details write to Dr.Boris Kelemen galerija suvremene umjetnosti Katerinin trg 2 Zagreb Yugoslavia.

The Gallery of Contemporary Art Zagreb launched an important international movement 'New Tendencies' with the exhibitions'NT 1' (Zagreb 1961) NT 2' (Zagreb Venice Leverkusen 1963) 'NT 3' (Zagreb 1965). Concurrently with 'Computers and Visual Research' the Gallery will hold the exhibition 'New Tendencies 4' which, as well as having recent work by artists associated with NT, will be in the nature of a retrospective.

Computer Graphics 70, Second International Symposium 14 - 16 April 1970. Papers are being invited. In combination with Symposium, CG 70 International Exhibition is announced as 'the greatest ever Computer Graphic event' Details from the organisers: D.G.Parsiow Computer Department Brunel University Uxbridge Middlesex.

PLANS FOR THE SOCIETY

Following the success of EVENT ONE, the Society is planning a full programme of activities. The first of these are detailed at the head of this issue.

Meetings

A series of three public lectures in the Nash House Cinema will show some of the ways that computers can be used in the arts. No knowledge of computers will be assumed, and the intention is to impart information rather than general views.

Three meetings at the British Computer Society will allow new members to say how the Society should develop, discuss our attitudes to other technologies in the arts, and the aesthetics of computer art.

Based on these, a full programme of public and Society meetings will be arranged for 1969 - 70, beginning in September.

Workshop

A major aim of the Society is to found a permanent workshop having computing facilities, where co-operative projects can be undertaken and discussions carried on in a working atmosphere. As a test-bed, we are hoping to arrange a week-end workshop at Brunel University sometime during June.

Joint Presentations

We are being invited increasingly to take part in exhibitions and conferences organised by others. This is welcome not only as relieving us of some of the organisational work, but more important as allowing the use of computers in the arts to be seen as part of the ever more overlapping areas of arts, technology and science.

EVENT TWO

Initial thoughts are now being gathered for the Society's second main event, to be held towards the end of 1969.

AIMS AND MEMBERSHIP

The aims of the Society are to encourage the creative use of computers in the arts and allow the exchange of information in this area.

Membership is open to all at £1 ($3) per year (students half-price). Members are entitled to reduced prices for all the Society's public meetings, and to a copy of PAGE.

The Society has the status of a specialist group of the British Computer Society, but membership of the two Societies is independent.

On all matters of information, circulation and membership, write to the Chairman:
Alan Sutcliffe International Computers Limited
Brandon House Bracknell Berkshire

OPINION

The Computer Arts Society's EVENT ONE at the Royal College of Art 29 - 30 March 1969, attracted 700 visitors. The key to the impact and success of EVENT ONE lies in the computer-linked equipment presented. A PDP-7 computer with visual display unit (Imperial College); 2 Teletype terminals plus graph plotter (Time Sharing Limited); 2 Teletype terminals and graph plotter (G.E.I.S. Limited); a telephone link to Peter Zinovieff's PDP-8:the Visual Display Unit by International Computers Limited.

The introduction of this working equipment within a fine art context represents a revolution in the British art world. After years of theoretical work, and isolated contacts with technology, here was the major COLLECTIVE step forward. It is important to remember that the men who with exceptional skill and energy engineered this, are primarily professionals in the field of computing and architecture.

The event was apprehended by the visitor and participant as a continuum of activity and sound. Having passed Brower Hatcher's programmed sculpture that was being erected in the foyer throughout the week-end, and the few exhibits at the entrance to the Gulbenkian Hall, the visitor was immediately caught up with the terminals, and the PDP-7 under the charge of Chris Jones, whose display was often surrounded by up to 15 people watching the light-pen in use.

The central area was used for performances and discussions. Moving beyond this, one entered the screened-off stage. Here more visitors, aided by technicians, were working terminals and plotter, whilst the light structures including Adrian Nutbeem's Object-Text-Light Interval, and The Folder by John Bucklow, were seen (and heard) at their best in the occasionally darkened space. Some of the performances suffered from sounds carried across the hall, but this mobility of sound and people added to the excitement and sense of integration. Films made by computers, or dealing with the subject, were screened in the lecture theatre in three daily sessions.

Gustav Metzger.

Extract from programme for EVENT ONE describing Philip Hodgetts's light/sound structure illustrated overleaf.

"Light bulbs are situated at selected nodes in a three-dimensional cubic lattice. Selective illumination of sets of these lights picks out planes and patterns in this 3-D space. A mechanism for sequencing the illumination of lights has been built and used so that changing patterns and transformations of patterns can be observed. This device embodies a fixed sequence of transformations.

The current experiment involves a tape reading mechanism and a computer terminal. Required sequences can be programmed for the computer and output on to punched tape. The tape is then used to drive the sculpture via the tape reader. This will enable the sculptor to develop and control sequences more easily."

PAGE is a publication of the Computer Arts Society, appearing 8 times a year. All views are those of the individual contributors. On all editorial matters (not circulation) write to the Editor:
Gustav Metzger BM/Box 151 London WC1

Recent Activities

The Computer Arts Society originally ran from 1968 until 1985. In 2002 the CACHe project at the Vasari Lab in the School of History of Art and Visual Media, Birkbeck, University of London began to digitise and catalogue the image holdings of the Society and related archives. This resulted in a re-establishment of the Computer Arts Society in 2004. The core archive was then acquired by the Victoria and Albert Museum and now forms part of their Computer Art Collections.

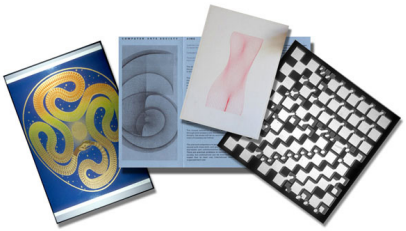
Two books, A Computer in the Art Room: The Origins of British Computer Arts 1950-1980 (2008) by Catherine Mason and White Heat Cold Logic: British Computer Art 1960-1980 (2009) by Paul Brown, Catherine Mason, Charlie Gere and Nicholas Lambert, have been published that detail the early history of computer art, including the early CAS period.

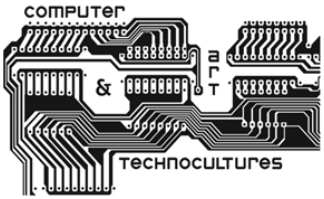
A follow-up project entitled Computer Art and Technocultures, based jointly at Birkbeck and the Victoria & Albert Museum ran from December 2009 until April 2010. This project ran a symposium, Ideas Before Their Time, at the British Computer Society, and a two-day conference, Decoding the Digital, at the V&A on 4th-5th February 2010.

Since re-forming in 2004, the Computer Arts Society has run an extensive speaker programme from its base at the British Computer Society in London, as well as from other London venues, and more recently in Leicester and elsewhere.

The Society also runs the annual Electronic Visualisation & the Arts (EVA) conference in London. Through its status as a Specialist Group of the British Computer Society it is able to support exhibitions and other computer art activities throughout the year.

The Computer Arts Society is currently creating an on-line archive of its activities over the past 50 years. Work in progress can be seen on the CAS website and already includes new materials not presented on-line before.





The CAS50 Collection

As part of its 50-years celebration, the Computer Arts Society agreed to support an exhibition of artwork from artists who have been associated with the Society. It was planned that this exhibition would be first shown in Leicester in Summer 2018 and then tour elsewhere over the following year.

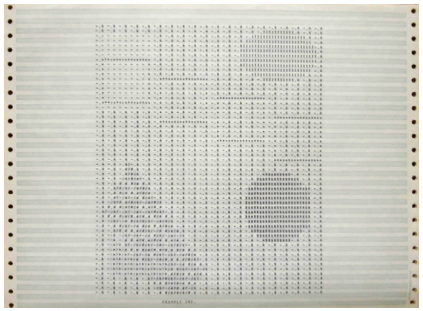
Support for the exhibition from the artists invited has been such that the project is now being expanded to become the CAS50 Collection. This will be a collection of high-quality computer artworks, donated by the artists, that we intend to develop over the coming years and ultimately donate to a suitable museum or gallery.

The collection is currently being curated by Sean Clark of Interact Digital Arts in Leicester, who has donated much of his own collection of artworks to the project. As the collection grows, with more artists and collectors becoming involved, we hope to establish a unique and accessible resource for people interested in digital and computer art.

The first twelve artists in the collection, whose work is included in this publication, are Stephen Bell, Peter Beyls, boredomresearch, Daniel Brown, Paul Brown, Sean Clark, Ernest Edmonds, Sue Gollifer, Desmond Henry, William Latham, Andy Lomas and Stephen Scrivener. Many of the artists featured are in the V&A collection and are Lumen Prize winners.

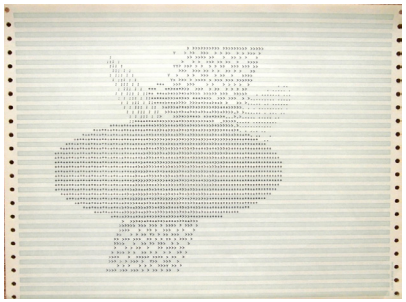
For the Brighton showing of the exhibition work was included from Roger Saunders. Roger was a student in Brighton in the early 1970s and was active in the Computer Arts Society at the time.

In addition to contributing artworks to the CAS50 Collection, Roger has also donated many early computer art documents. These will be made available in archive section of the CAS website in the near future.



↑ **Roger Saunders**
PLAD Example 1 (1973)
Computer Printout

↓ **Roger Saunders**
PLAD Example 2 (1973)
Computer Printout



Stephen Bell

Stephen Bell's interactive computer programs generate shapes inspired by his observations of animal and plant behaviour. Recent works use algorithms derived from the behaviour of bees gathering nectar combined with computer graphic techniques usually considered mistakes to create spatially ambiguous compositions that nevertheless possess an underlying natural logic.

Bell started to use computers in his art at The Slade during the late seventies, including the "ranstak" plotted drawings using brush pens. Attending CAS meetings at the time confirmed that there were people who thought that making art using computing was a worthwhile pursuit at a time when it was not generally accepted.

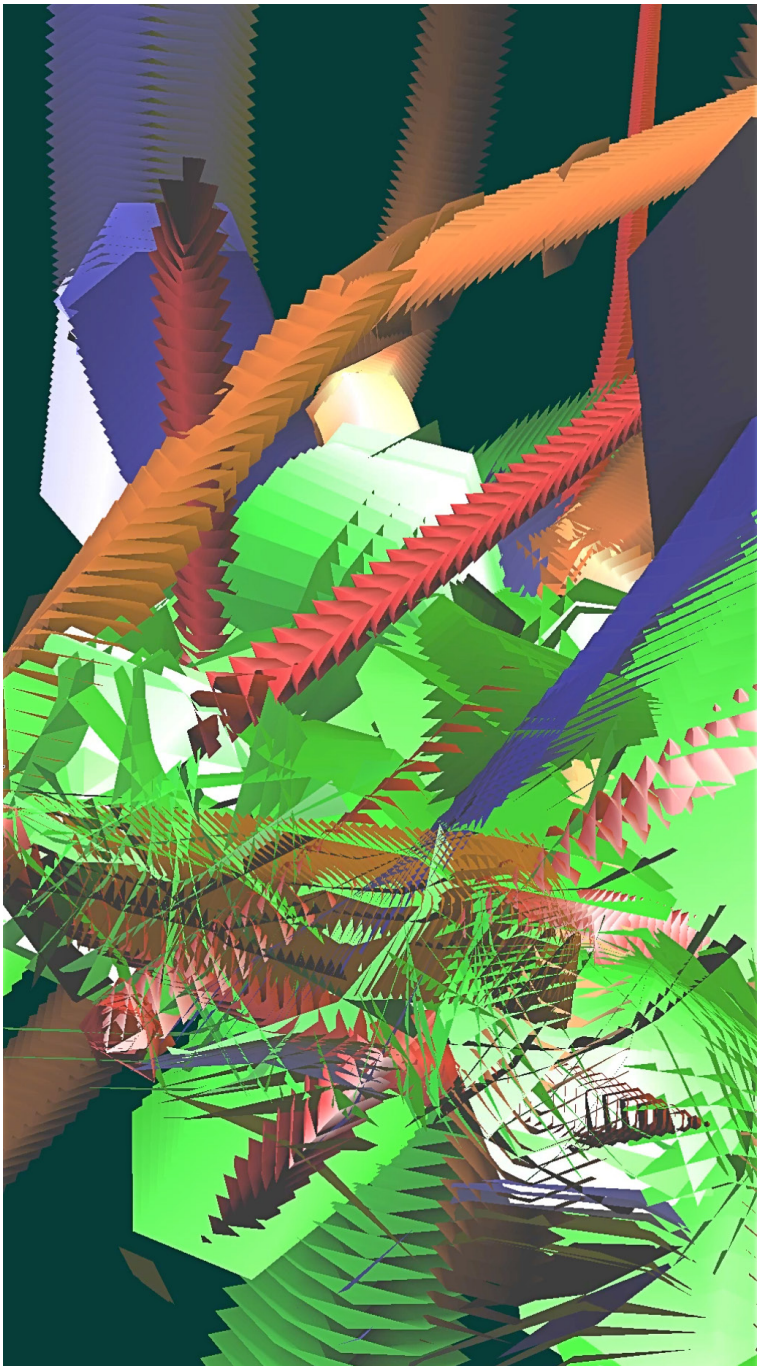
His work first came to public attention in the mid-1980s when he was Artist in Residence in the Computing Laboratory of the University of Kent at Canterbury. There he wrote programs that were based on predator-prey interaction and human conflict, producing abstract images of trails of their movement that looked a bit like frozen firework displays. Bell was able to share his ideas at the time with CAS members when Karen Mahoney interviewed him for PAGE 52 in 1985.

In 1991 Bell was awarded a PhD for his thesis "Participatory Art and Computers" in which he used his own "Smallworld" suite of programs as a case study. The research at Loughborough University was supervised by Ernest Edmonds and Susan Tebby.

He recently retired from having spent nearly thirty years as a lecturer, first at Reading University Fine Art Department then at the National Centre for Computer Animation in Bournemouth, encouraging art and design students to use programming creatively and experimentally. During this time CAS provided a valuable forum and a supporting network of like-minded people, which helped him to continue a trajectory that had started whilst at The Slade.

stephenbell.org.uk

→ **The Gathering** (2018)
54cm x 84cm Digital Print

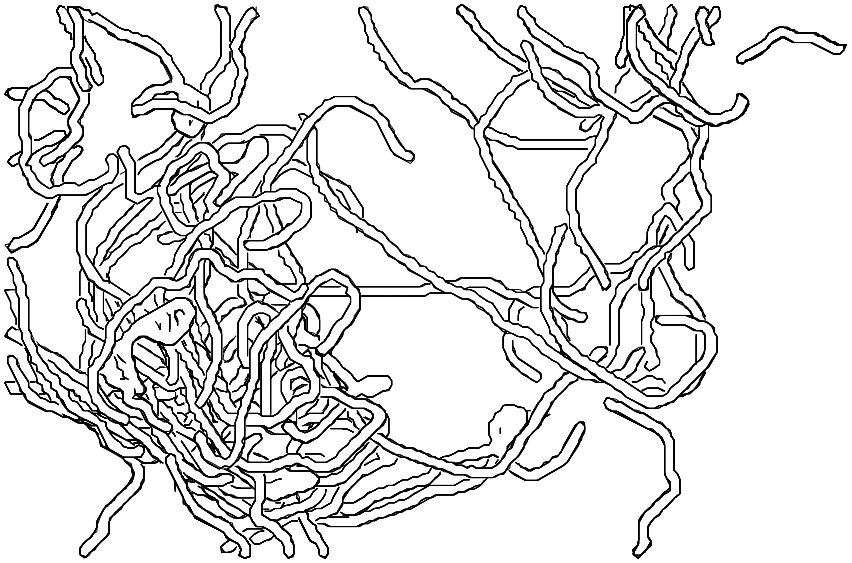


Peter Beyls

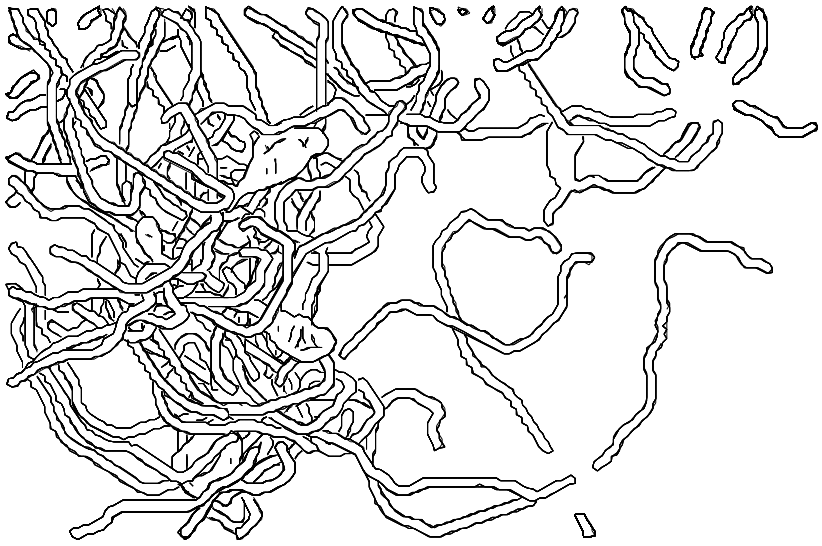
Peter Beyls is an interdisciplinary artist working on the intersection of computer science and the arts. He is active in the global domain of Media Art as a researcher, curator, educator and practicing artist. He published extensively on various aspects of digital art. Beyls studied music at the Royal Music Conservatory Brussels, was a student at the pioneering Electronics Experimental Department, Slade School of Art, University College London and holds a PhD in computer science from the University of Plymouth, UK.

He was a professor of digital culture at LUCA Brussels and visiting professor at The School of Arts, University College Ghent, Belgium and various institutions in the USA, China and Japan. Beyls was a researcher at the VUB Artificial Intelligence Lab, Brussels and CITAR (Centre for Research in Science and Technology for the Arts), UC Porto, Portugal and is currently a researcher at the Bio Lab, University College Ghent. His present research interests include machine learning in interactive music systems, big data analysis, visualization and sonification, generative autonomy in machines, aesthetic and cognitive issues in software art and experimental control structures for live performance.

www.peterbeyls.net



← **Aladdin v2 nr1 (2016)**
42cm x 28cm Digital Drawing



→ **Aladdin v2 nr2 (2016)**
42cm x 28cm Digital Drawing

boredomresearch

boredomresearch is a collaboration between British artists Vicky Isley and Paul Smith, their work benefits from a long lasting fascination in the mechanics of the biological world which they explore using contemporary technology. Their work transcends boundaries between art, science and society, with previous projects exploring topics including: the intricate biological signatures of neural activity, the frontiers of disease modeling and our cultural obsession with speed.

With two decades of artistic practice, exploring an understanding of the natural world through the medium of computational technologies, boredomresearch have become intimately aware of the sensitivity and vulnerability of complex systems, including those which support human life on earth.

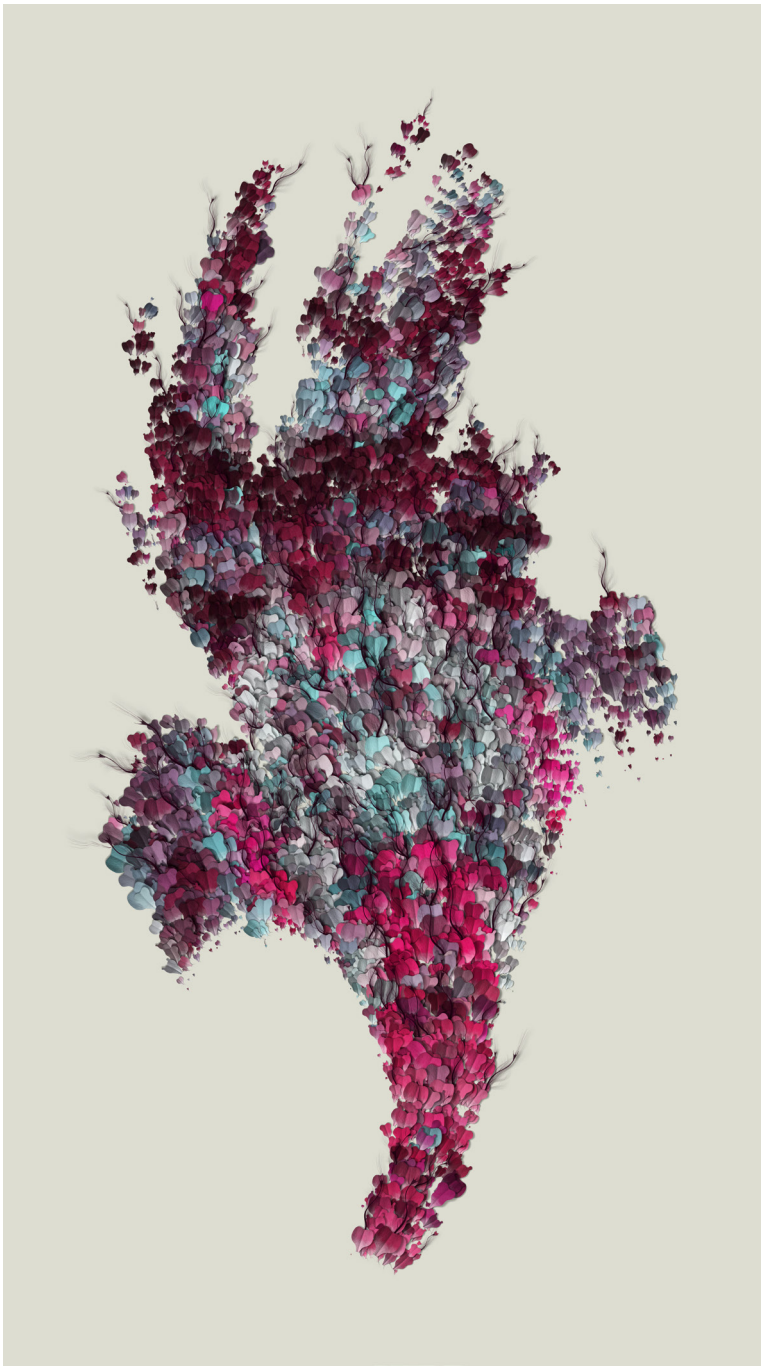
boredomresearch have been working in collaboration with world leading science institutions across Europe creating artworks developed from ground breaking research. Their collaboration with Dr Paddy Brock, a mathematical modeler at the Institute of Biodiversity Animal Health and Comparative Medicine at the University of Glasgow, led towards the creation of AfterGlow. This new representation of malaria infection transmission addressed the limitations of existing models and was awarded, in September 2016, the Lumen Prize moving image award.

Their seminal work Real Snail Mail (the world's first webmail service to use real snails) challenged our cultural obsession with speed, highlighting perverse socio-economic distortions, centered on ideas of productivity, which exploit technological innovation to enslave humankind in a work life imbalance that continues to deteriorate despite the introduction of numerous 'time saving' technologies. Receiving worldwide attention, including: BBC, TIME Magazine, New Scientist and Discovery Channel Canada, this and other works by boredomresearch, open channels for meaningful dialogue and engagement between public and scientific domains.

The artworks of boredomresearch are in collections around the world including the British Council and Borusan Contemporary Art Collection, Istanbul. Recent international exhibitions include: ISEA, Manizales (2017); Future Emerging Art & Technology (FEAT) Exhibition, BOZAR Brussels (2017); Data Aesthetic Exhibition, Amsterdam (2016); Bio-Art, Seoul (2015); TRANSITIO MX_06 Electronic Arts & Video Festival, Mexico City (2015); Soft Control: Art, Science and the Technological Unconscious, Slovenia (2012) and Gateways, House of Electronic Arts, Basel (2012).

boredomresearch.net

→ **Fragments (2013)**
90cm x 140cm Digital Print on Aluminium



Daniel Brown

Daniel Brown is a creative-technologist, working in the fields of generative and interactive design and art - creating apps, websites & installations for luxury brands and public and private artworks.

Inspired since early childhood by his father, the artist Paul Brown, he grew up surrounded by fellow digital artists and curators such as Barbara Nessim, Patric Prince, William Latham and Tony Longson – many of whom were also CAS members – and chose to follow in his father's footsteps.

Since 1999, Daniel has been chosen by Internet Business Magazine as one of the top 10 internet designers; was one of Creative Review's 'Stars of the New Millennium'; and more recently featured in The Barbican's touring Digital Revolutions exhibition (2014) and The New York Cooper Hewitt Design Triennial (2016). His work for Nick Knight can be seen on Apple's 'Thirty Years of Mac' documentary / commercials.

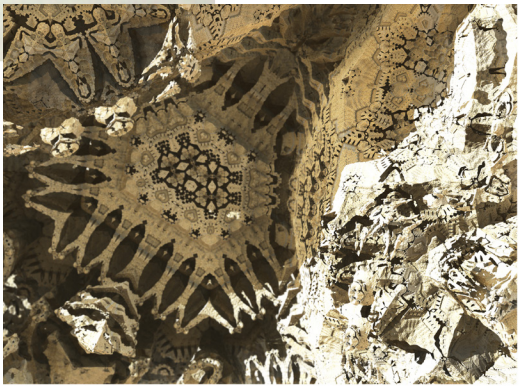
He has been acknowledged as a pioneer in the new media field - his experimental works are now archived in the San Francisco Museum of Modern Art, Denver Art Museum and London's Victoria & Albert Museum. He was chosen as London Design Museum's UK Designer of the Year in 2004 and since then selected for The Observer's '80 people who will define the next 10 years', Design Week's Hottest 50 Designers and invited to Buckingham Palace to honour the contribution of design to the British economy and culture. He is featured in Debrett's People of Today and an honorary member of The International Academy of Digital Arts and Sciences (IADAS).

In a public role Daniel is a regular speaker, including giving a series of lectures at The Royal Society for the Arts on topics including: The use of design skills to empower the disabled; The role of mathematics & programming in design, art & education and Generative design, fashion and branding.

In 2008 Daniel joined with his father Paul – and established Brown & Son to promote their work in the crossover between art, science & technology since 1968. Their first joint show – Brown & Son: Art That Makes Itself – was held at Watermans in London in 2015 and included a one-day symposium sponsored by the Computer Arts Society.

danielbrowns.com
www.brown-and-son.com

↑ **Still from Commission for D'Arcy Thompson Museum (2013)**
70cm x 70cm Digital Print



→ **Untitled, from the series Travelling by Numbers (2015)**
60cm x 47.5cm Digital Print

Paul Brown

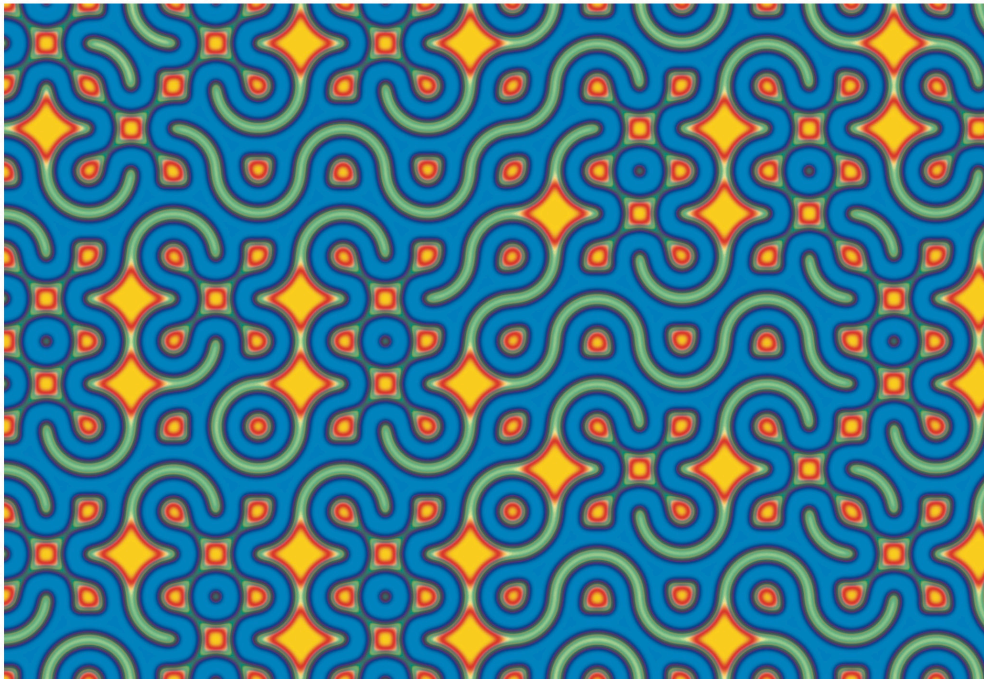
Paul Brown is an artist and writer who has specialised in art, science & technology since the late 1960's and in computational & generative art since the mid 1970's. His early work included creating large-scale lighting works for musicians and performance groups (like Meredith Monk, Music Electronica Viva, Pink Floyd, etc…) and he has an international exhibition record dating to the late 1960's that includes the creation of both permanent and temporary public artworks. He has participated in shows at major international venues like the TATE, Victoria & Albert and ICA in the UK; the Adelaide Festival; ARCO in Spain, the Substation in Singapore and the Venice Biennale. His work is represented in public, corporate and private collections in Australia, Asia, Europe, Russia and the USA.

In 1984 he was the founding head of the United Kingdom's National Centre for Computer Aided Art and Design and in 1994 he returned to Australia after a two-year appointment as Professor of Art and Technology at Mississippi State University to head Griffith University's Multimedia Unit. In 1996 he was the founding Adjunct Professor of Communication Design at Queensland University of Technology.

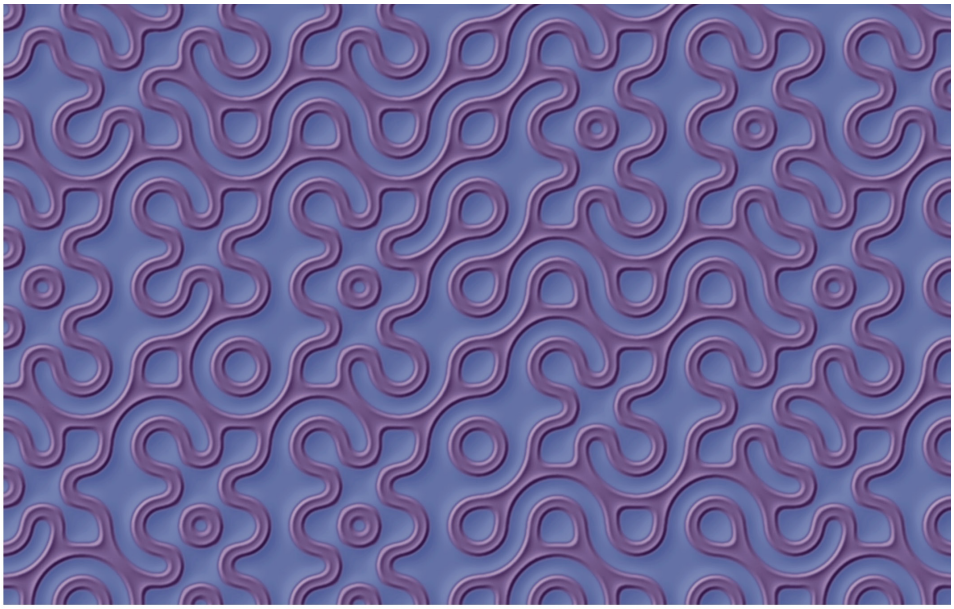
From 1992 to 1999 he edited fineArt forum, one of the Internet's longest established art 'zines and from 1997-99 he was Chair of the Management Board of the Australian Network for Art Technology - ANAT. He has been active in CAS since the mid-1970's and in 2005 he was elected Chair and served in this position again from 2008-10. He is also moderator of the DASH (Digital ArtS Histories) and CAS e-lists. . He is currently editor of PAGE – the bulletin of the CAS as well as Secretary of the society.

In 1996 he won the prestigious Fremantle Print Award and during 2000/2001 he was a New Media Arts Fellow of the Australia Council when he spent 2000 as artist-in-residence at the Centre for Computational Neuroscience and Robotics (CCNR) at the University of Sussex in Brighton, England. From 2002-05 he was a visiting fellow in the School of History of Art, Film and Visual Media at Birkbeck College, University of London, where he worked on the CACHe (Computer Arts, Contexts, Histories, etc...) project and since 2005 he has been a visiting professor and artist-in-residence at the CCNR, Dept. of Informatics at the University of Sussex. From 2010 to 2012 he was Synapse artist-in-residence at the Centre for Intelligent System Research, Deakin University in Geelong, Australia – a position supported by the Australia Council for the Arts and the Australia Research Council.

www.paul-brown.com
www.brown-and-son.com



← **Night Sky (1996)**
85cm x 60cm Digital Print



→ **Swimming Pool (1996)**
85cm x 60cm Digital Print

Sean Clark

Sean Clark is an artist and curator, the Founder and Managing Director of web/mobile developer Cuttlefish, the Director of Leicester arts company Interact Digital Arts, a Visiting Researcher at the Institute of Creative Technologies at De Montfort University in the UK and an International Professor at Guangdong University of Technology in China.

In his commercial work he is interested in mobile multimedia, collaborative computing and the Internet of Things. In his arts work he is inspired by systems theory, the nature of interactivity and creative explorations of flow and connectedness.

Over a period of almost 30 years he has had a varied career that has seen him work in the arts, academia and commerce and he is comfortably able to move his focus between the three.

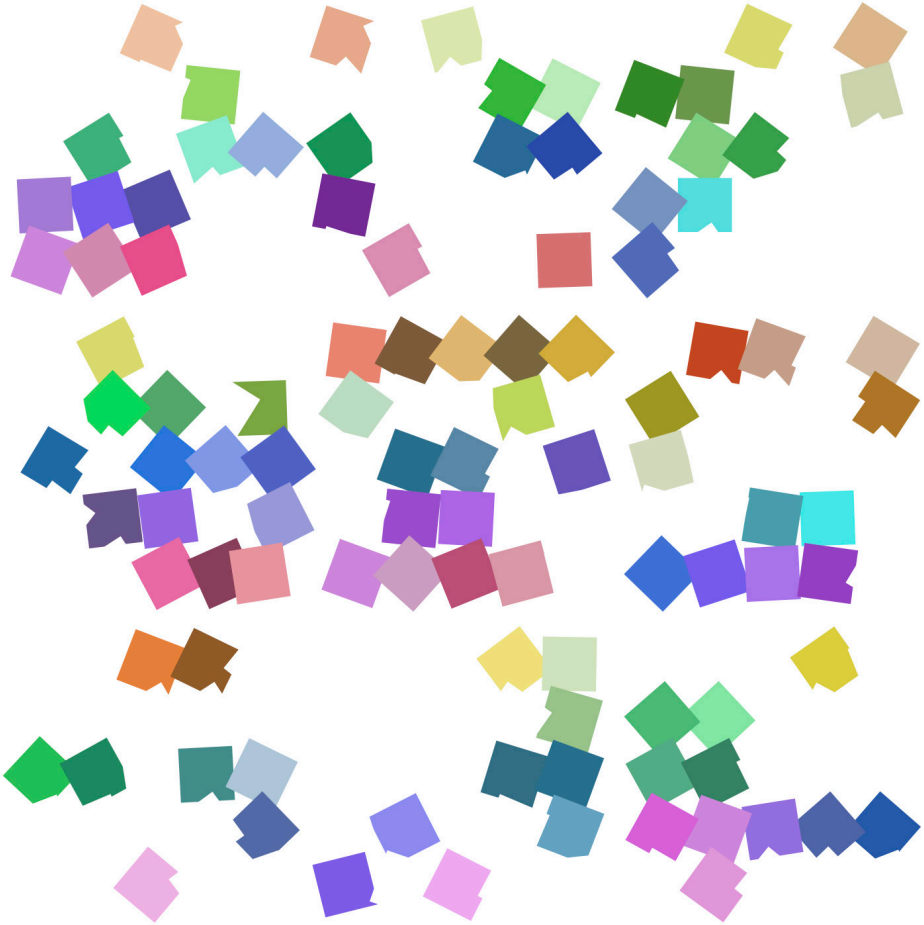
As a researcher he has published over 30 research papers and has spoken at numerous conferences and seminars. He has an Honours Degree in Computer Studies from Loughborough University, a Masters in Digital Arts from Camberwell College of Arts, University of the Arts London, and is currently completing a practice-based PhD in Systems Theory and Digital Arts at De Montfort University.

He is a Fellow of the British Computer Society and active member of the Computer Arts Society. In 2016 he was the co-winner of the inaugural ArtCHI award in San Jose, CA and the Lumen Prize for 3D/Sculpture in London, UK. In 2015 he was shortlisted for a Talk Talk Digital Heroes Award for his education work.

www.seanclark.me.uk
interactdigitalarts.uk

→ **Transformations Variations a (2017)**
24" x 24" Digital Print

Transformations Variations c (2017)
24" x 24" Digital Print
(Inside Back Cover)

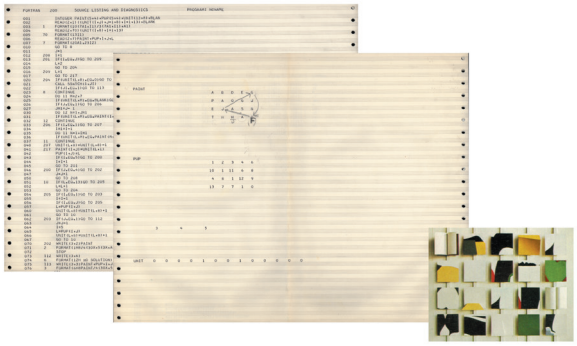


Ernest Edmonds

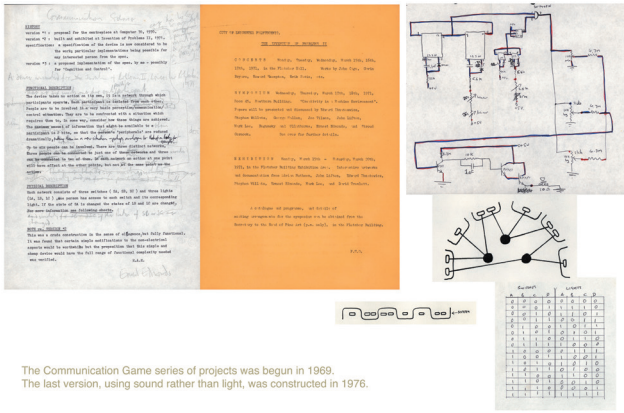
Ernest Edmonds was born in London in 1942. He now lives in the Peak District and in Sydney Australia. He has pioneered the field of computational art and contributed to the broader field of contemporary art from the late 1960s to the present. In 2017 he was awarded the ACM SIGGRAPH Distinguished Artist Award for Lifetime Achievement in Digital Art as well as the ACM SIGCHI 2017 Lifetime Achievement Award for the Practice of Computer Human Interaction. He has been a University Head of Department and a Dean and is currently Professor of Computational Art at De Montfort University, Leicester, UK. He is Chair of the Board of ISEA International.

Ernest Edmonds has exhibited and published widely. Recent solo exhibitions have included a retrospective, "Constructs Colour Code" at The Gallery, De Montfort University, "Open Systems, Open Space" at Microsoft Research Asia, Beijing and "Systems and Software" in Shanghai University. Recent group shows include "Algorithmic Signs" at Fondazione Bevilacqua La Masa, San Marco Venice and "Códigos Primordials" (Primary Codes) at Oi Futuro Flamengo, Rio de Janeiro. Routledge have just published the book by Francesca Franco: "Generative Systems Art: the work of Ernest Edmonds". Edmonds' own latest book is "The Art of Interaction: What HCI Can Learn from Interactive Art", published by Morgan&Claypool. He has been active in the Computer Arts Society since 1969, giving his first CAS talk in 1970. Edmonds has supervised many practice-based PhDs in the computer arts, including those by Stephen Bell, Stephen Scrivener, Dominic Boreham and Sean Clark.

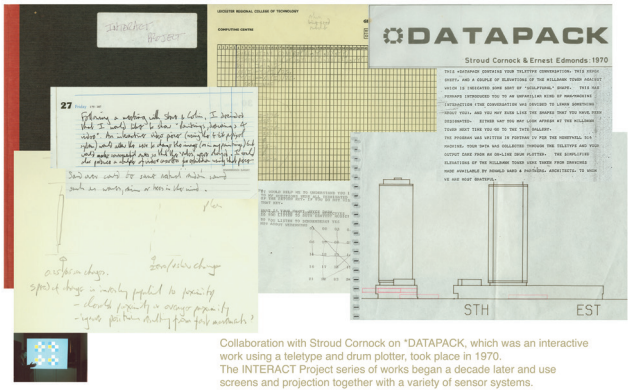
www.ernestedmonds.com



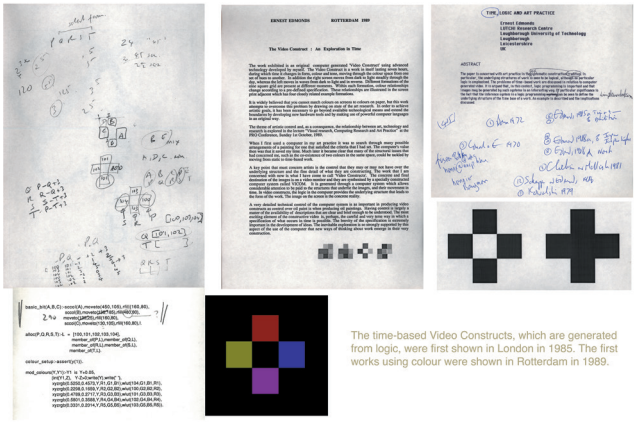
Nineteen (1968/9) was arranged with the help of a computer program



The Communication Game series of projects was begun in 1969.
The last version, using sound rather than light, was constructed in 1976.

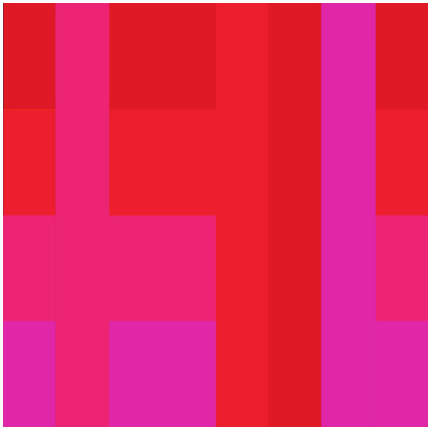


Collaboration with Stroud Cornock on *DATAPACK, which was an interactive work using a teletype and drum plotter, took place in 1970.
The INTERACT Project series of works began a decade later and use screens and projection together with a variety of sensor systems.



The time-based Video Constructs, which are generated from logic, were first shown in London in 1985. The first works using colour were shown in Rotterdam in 1989.

↑ **Four Notes (2000)**
4 x 66cm x 44cm Digital Prints



→ **Shaped Forms, Venice-CAS (2018)**
100cm x 100cm Digital Print on Aluminium

Sue Gollifer

Sue Gollifer works at the intersection of art and technology. As someone who works as an artist, curator, organiser, professor, researcher, chair and board member she embodies this intersection across many venues. A pioneer of early computer art, she has continuously explored the relationship between technology and the arts and has written extensively on this subject.

Although formally trained as a Fine Artist and not as a Computer Scientist and in the early years and had no access to computer facilities, she instead turned her self into a computer. Her work is held in both national and international public and private collections.

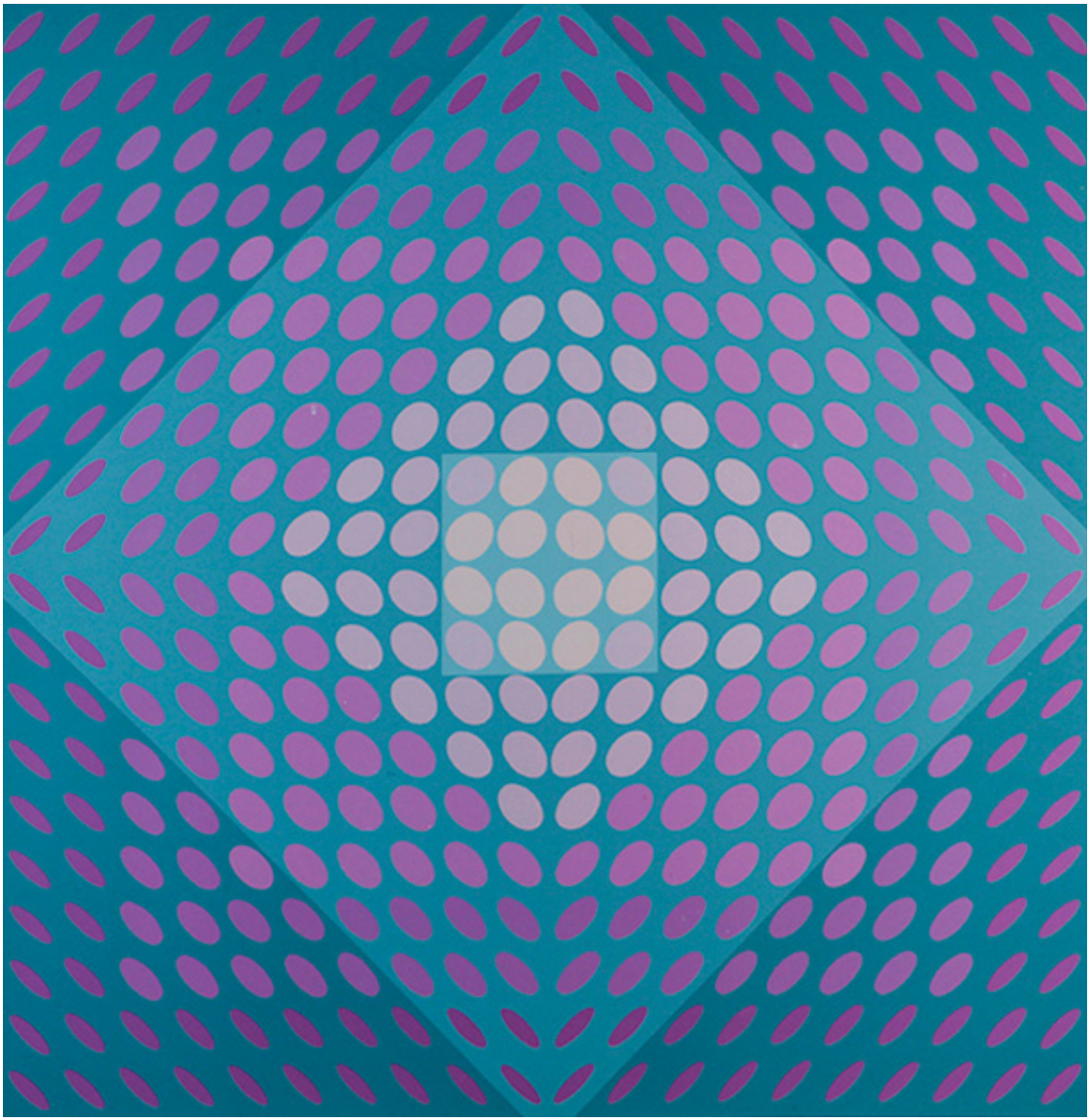
She is the Executive Director of the ISEA International Headquarters, and is on a number of National and International Committees, including the ACM Digital Art Community (DAC), Computer Arts Society (CAS) and Phoenix Brighton. She has been a curator of a number of International Digital Art Exhibitions including, ArCade, the UK Open International Biennale Exhibition, of Digital Fine Art Prints 1995 – 2007 and the SIGGRAPH Art Gallery Exhibition'04: Synaesthesia and the "Intuition and Ingenuity" art exhibition to celebrate the Alan Turing Centenary 2012 and the HOT PLATE Exhibition (2010) & William Latham Exhibition Mutator 1 & 2 (2013) at Phoenix, Brighton.

She is on the Editorial Board of Digital Creativity, a referred journal published by Routledge, and is the art editor and curator of the visual section 'Artist Space', which examines the work of artists and printmakers using digital technology.

In 2006 she was awarded an iDMAa Award, The International Digital Media Arts Award for her 'Exceptional Services to the International New Media Community'.

Sue has been involved with CAS since 2002, when the CACHe project at the Vasari Lab in the School of History of Art and Visual Media, Birkbeck, University of London began to digitise and catalogue the image holdings of the Society and related archives, documenting UK computer arts in the years to 1980. This resulted then re-establishment of the Computer Arts Society in 2004.

→ **Untitled (1969)**
22" x 23" Screenprint



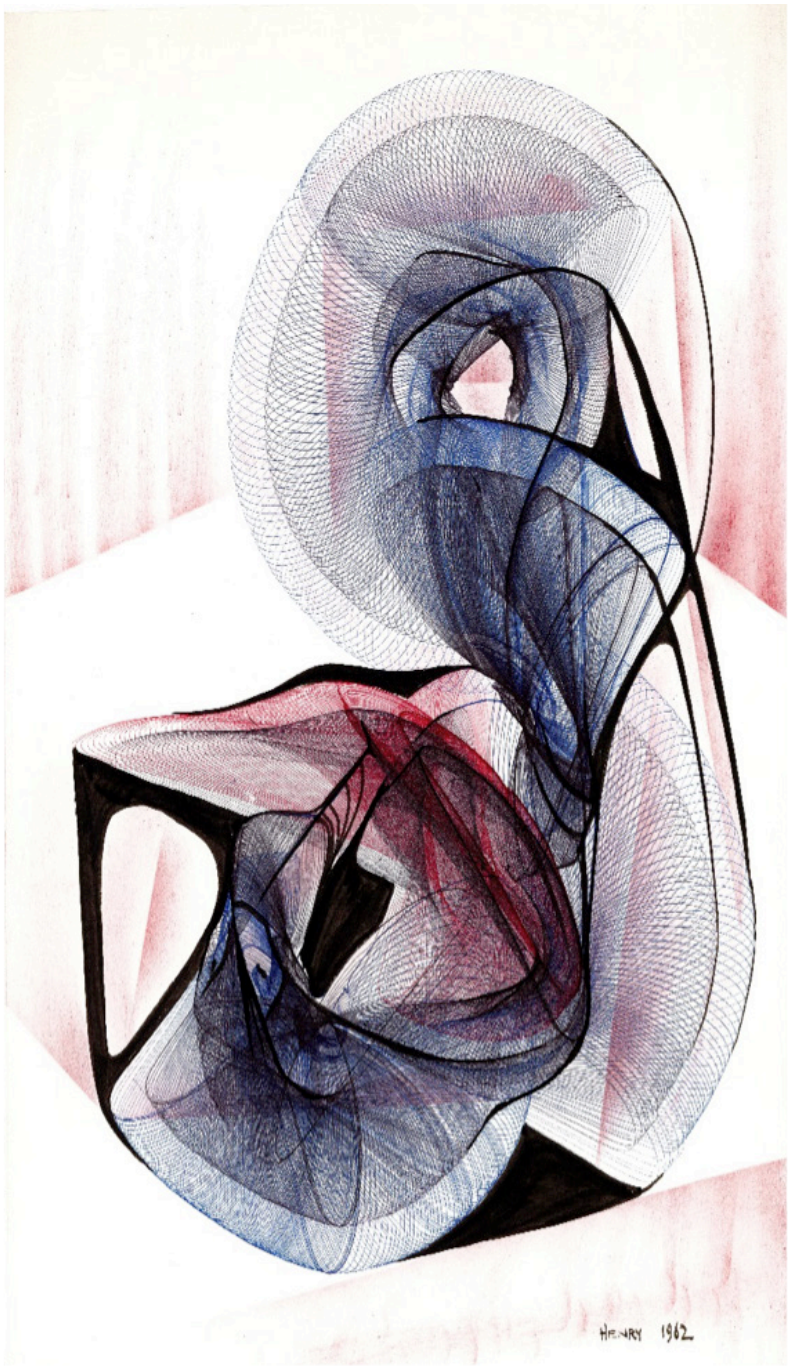
Desmond Henry

Desmond Paul Henry (1921-2004) was both a Lecturer in Philosophy at Manchester University (1949-1982) and a part-time artist. During the 1960s he created a series of three electromechanical drawing machines from analogue Bombsight Computers originally used in WW2 Bombers to calculate the accurate release of bombs onto their targets. His first show of machine-generated art was in 1962 at the Reid Gallery, London. His second drawing machine was included in the ICA's seminal exhibition of 1968, Cybernetic Serendipity. Henry's substantial archive of machine-generated artworks act as precursors to post 1960s Digital Art. As such, he ranks as one of the early British pioneers of Computer Art.

With the support of CAS and its members, Elaine O'Hanrahan, the curator of Henry's artistic archive, has been actively promoting Henry's significant contribution to early Computer Art.

www.desmondhenry.com

→ **Untitled (1962)**
12" x 16" Computer Drawing


HENRY 1962

William Latham

William Latham is well known for his pioneering Organic Art created in the late eighties and early nineties whilst a Research Fellow at IBM in Winchester with mathematicians Stephen Todd and Peter Quarendon. His computer art exhibitions "The Conquest of Form" and "The Empire of Form" toured the UK (starting at the Arnolfini in Bristol), Japan, Germany and Australia from 1989 for 3 years

In 1993 he moved into Rave Music working with The Shamen and other bands creating their album covers, stage visuals and videos then and worked in computer games development for consoles and PC. A field he was active in for ten years as a Creative Director of a seventy person console and games studio developing games published by Vivendi Universal, Microsoft and Warner Bros, hit games produced at that time included Evolva and The Thing (based on The John Carpenter movie) for console and PC.

In 2007 he became a Professor of Computer Art at Goldsmiths (University of London) with new research projects in Protein Docking Games with Imperial College Bioinformatics Group and Oxford Weatherall Centre of Molecular Medicine. He is a principal researcher with York University in the Digital Creativity Labs Project.

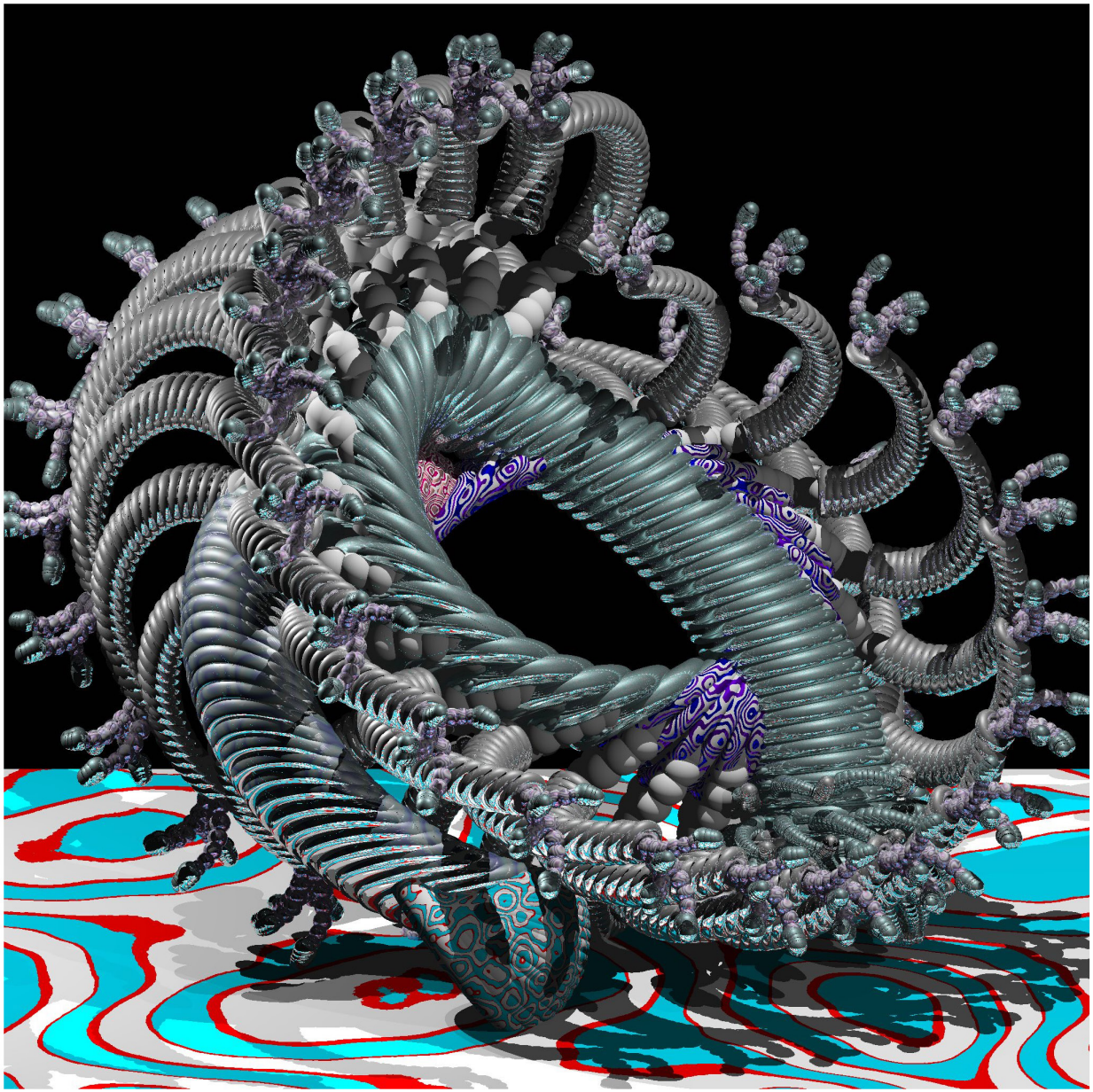
His Mutator VR Art Experience on HTC Vive developed with long term collaborator Stephen Todd with Lance Putnam and Peter Todd between 2016 and 2018 has been exhibited at Ars Electronica in Linz, Hybris (show linked to The Venice Biennial), Cyberfest in St. Petersburgh (show linked to the Hermitage Museum) and East Gallery in Norwich.

In 2014 he co-founded SoftV Ltd which is developing serious games for tablet with UCL Institute of Cognitive Neuroscience and the NHS for stroke patients. He is a co-Director of London Geometry Ltd.

William was a student at The Ruskin School of Drawing (Oxford University) and The Royal College of Art. CAS co-founder John Lansdown was his PhD supervisor at the RCA and was very influential in William's work and also encouraged him to write software and submit papers which lead to his Research Fellowship at IBM. William began to attend CAS meetings in the early 1980s.

latham-mutator.com
mutatorvr.co.uk

→ **ZapQ3 on the Plane of Infinity. Ray Traced (1991)**
75cm x 75cm Digital Print



Andy Lomas

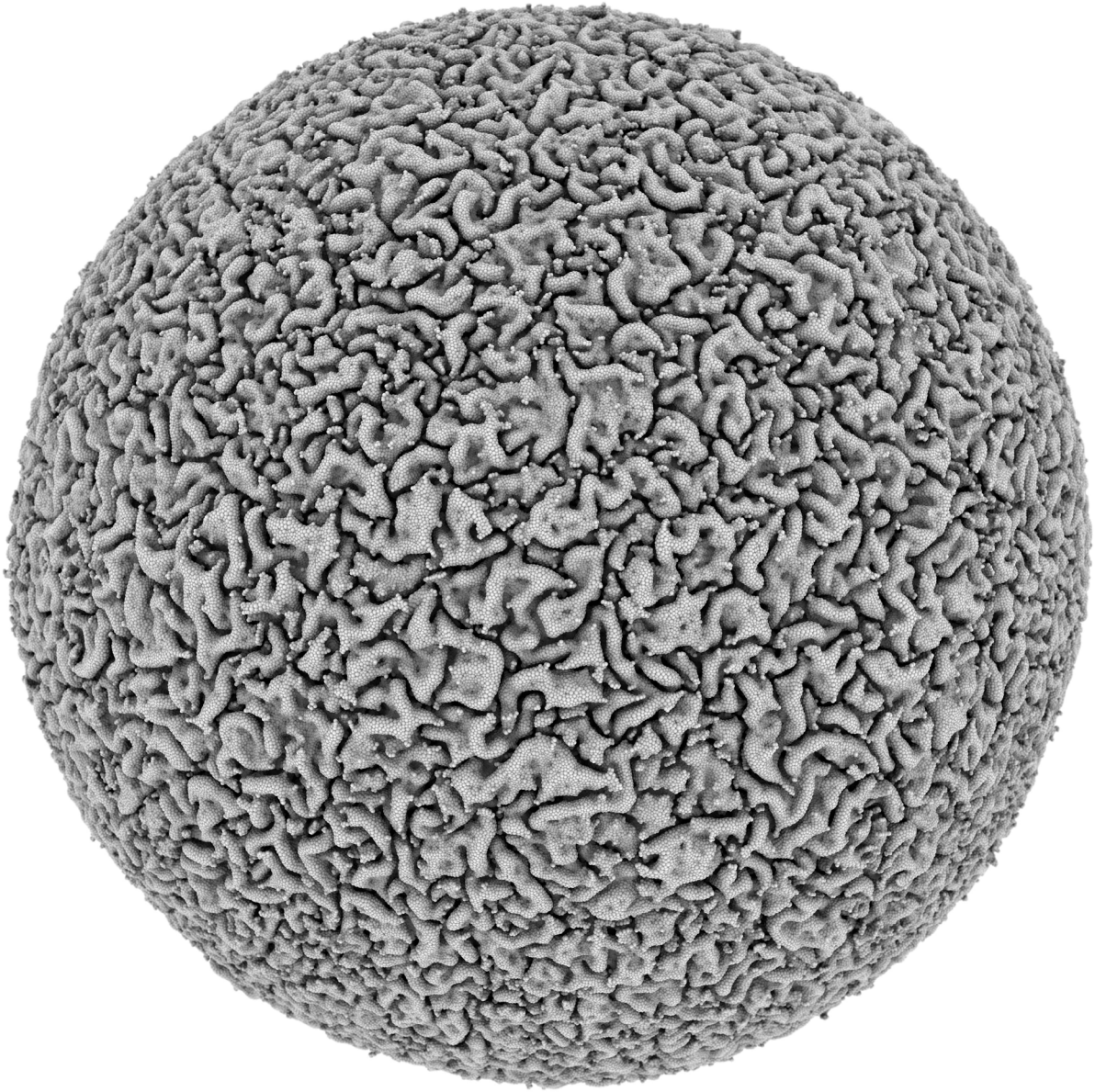
Andy Lomas is a computational artist, mathematician, and Emmy award winning supervisor of computer generated effects. Inspired by the work of Alan Turing, D'Arcy Thompson and Ernst Haeckel, his art work explores how complex sculptural forms can be created emergently by simulation of growth processes.

He has exhibited internationally in numerous joint and solo exhibitions, including at the Pompidou Centre, The Royal Society, SIGGRAPH, Japan Media Arts Festival, Ars Electronica Festival, Kinetica, Los Angeles Municipal Art Gallery, Los Angeles Center for Digital Art, Centro Andaluz de Arte Contemporaneo, Watermans, the Science Museum and the ZKM. His work is in the collections at the V&A and the D'Arcy Thompson Art Fund Collection, and was selected by Saatchi Online to contribute to a special exhibition in the Zoo Art Fair at the Royal Academy of Arts. In 2014 his work Cellular Forms won The Lumen Prize Gold Award.

He is a Visiting Lecturer at UCL, The Bartlett School of Architecture and a Visiting Research Fellow at Goldsmiths University of London. His production credits include Walking With Dinosaurs, Matrix: Revolutions, Matrix: Reloaded, Over the Hedge, The Tale of Despereaux and Avatar. He received Emmys for his work on The Odyssey (1997) and Alice in Wonderland (1999).

www.andylomas.com

→ **Cellular Form 14 0016 0016 (2013)**
100cm x 100cm Digital Print



Stephen Scrivener

Stephen Scrivener studied Fine Art at Leicester Polytechnic (now De Montfort University) from 1969 to 1972. Entering art school as a painter, he became increasingly dissatisfied with subjectively determined art making and inspired by the experimental artists working in the college, such as Jack Rodway and Gavin Bryars, he produced experimental works exploiting the natural properties of light and water. In 1972 he joined the Experimental Department at the Slade School of Fine Art, London, directed by the Systems Artist, Malcolm Hughes, where he soon made the shift to using computational systems to make artworks. During this period he modelled and visualised a variety of homeostatic systems. This included the design of a stand alone electronic device, called The Machine, that viewers could disrupt by interacting with a control panel.

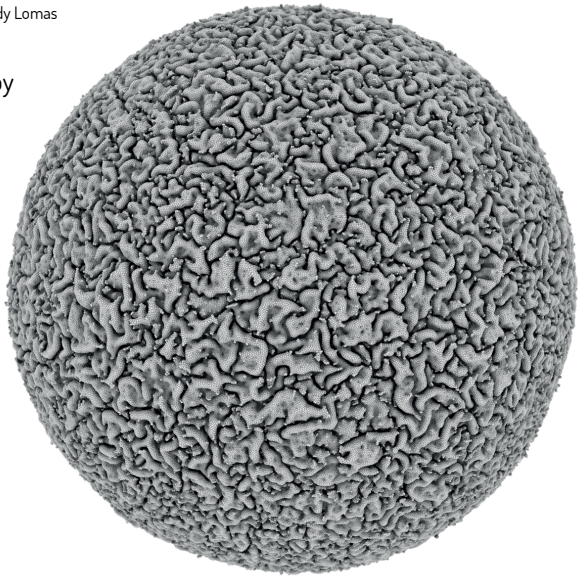
After undertaking a PhD in Computer Science, he taught and conducted research into interactive computer systems design before returning to the art school in the early 1990s, culminating in his appointment as Head of Research at Chelsea College of Art. Since returning to the art school he has written widely on the theory and practice of artistic research. Today he works in a wide variety of media, including installation and recent group exhibitions include Csepel Works, Budapest; Recalculation, London; Automatic Art, London and OnePlaceTen, London. He is currently Emeritus Professor at Chelsea College of Arts and Visiting Professor at Ravensbourne University, London.

→ **Untitled (1983)**
Computer Printout
(Detail)

CAS50 EXHIBITION 21st May - 13th June 2018

CELEBRATING FIFTY YEARS OF THE COMPUTER ARTS SOCIETY

Image: Cellular Form 14 by Andy Lomas



Featuring artwork by

Stephen Bell
Peter Beyls
Desmond Henry
Ernest Edmonds
Sean Clark
Paul Brown
William Latham
boredomresearch
Sue Gollifer
Stephen Scrivener
Daniel Brown
Andy Lomas

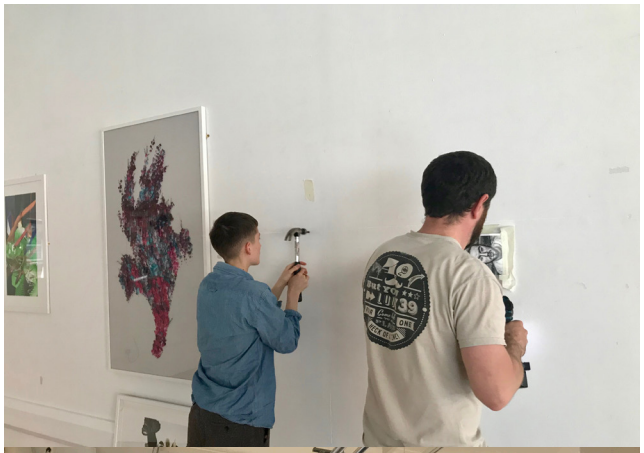
Lightbox Gallery, LCB Depot, 31 Rutland Street, LE1 1RE

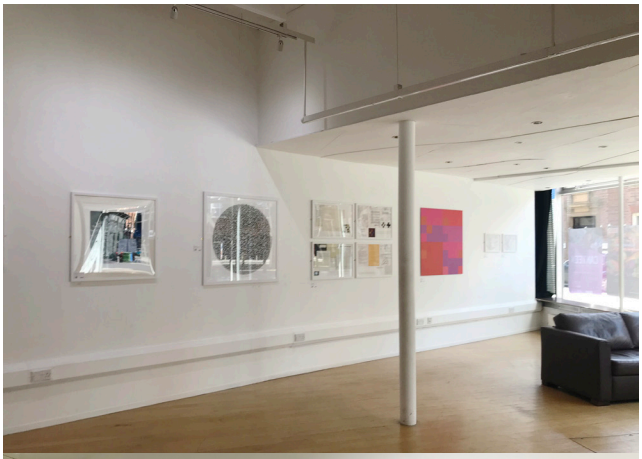
interactdigitalarts.uk/cas50

Opening Event	Weekdays	9am - 5pm
Wednesday 23rd May	Friday 25th May	Until 9pm
7pm - 9pm	Sat 9th June	11am until 4pm

CAS INTERACT bcs The Chartered Institute for IT LCB

An Interact Digital Arts Exhibition





CAS50 EXHIBITION 14th - 23rd September 2018

CELEBRATING FIFTY YEARS OF THE COMPUTER ARTS SOCIETY

Image: Still from Commission for D'Arcy Thompson Museum by Daniel Brown

Featuring artwork by

Stephen Bell
Peter Beyls
Desmond Henry
Ernest Edmonds
Sean Clark
Paul Brown
William Latham
boredomresearch
Sue Gollifer
Stephen Scrivener
Daniel Brown
Andy Lomas
Roger Saunders

Phoenix Brighton, 10-14 Waterloo Place, Brighton BN2 9NB

interactdigitalarts.uk/cas50

Opening Event
Thursday 13rd September
6pm - 9pm

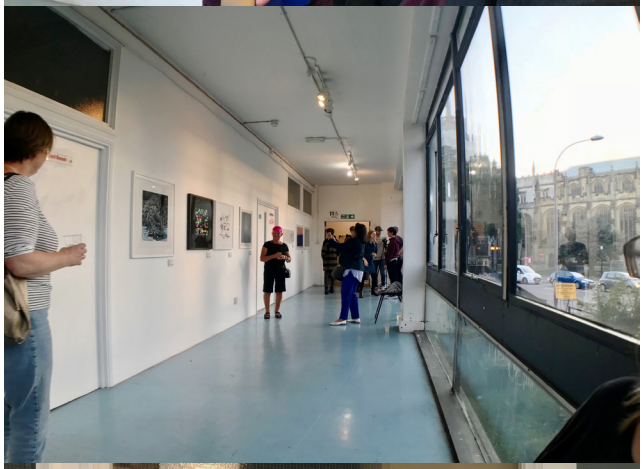
Open Daily 11am - 5pm
FREE Entry

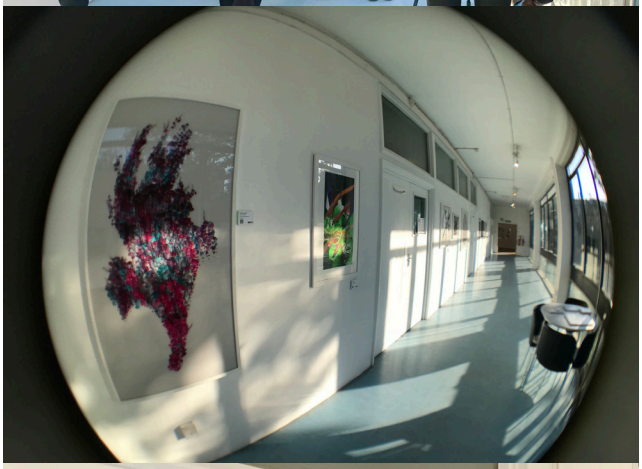
CAS INTERACT BCS The Chartered Institute for IT PHOENIX brighton gallery artists studios education

An Interact Digital Arts Exhibition

CAS 50

CELEBRATING FIFTY YEARS OF
THE COMPOSITORS' SOCIETY





Acknowledgements

The CAS50 exhibition would not have been possible without the support of Interact Digital Arts and the British Computer Society, of which the Computer Arts Society is a specialist group; Nicholas Lambert (CAS Chair), Paul Brown (CAS Treasurer) and Sean Clark (CAS50) and, of course, the participating artists.

Additional information about the CAS50 programme and the CAS50 Collection can be found on the CAS website.

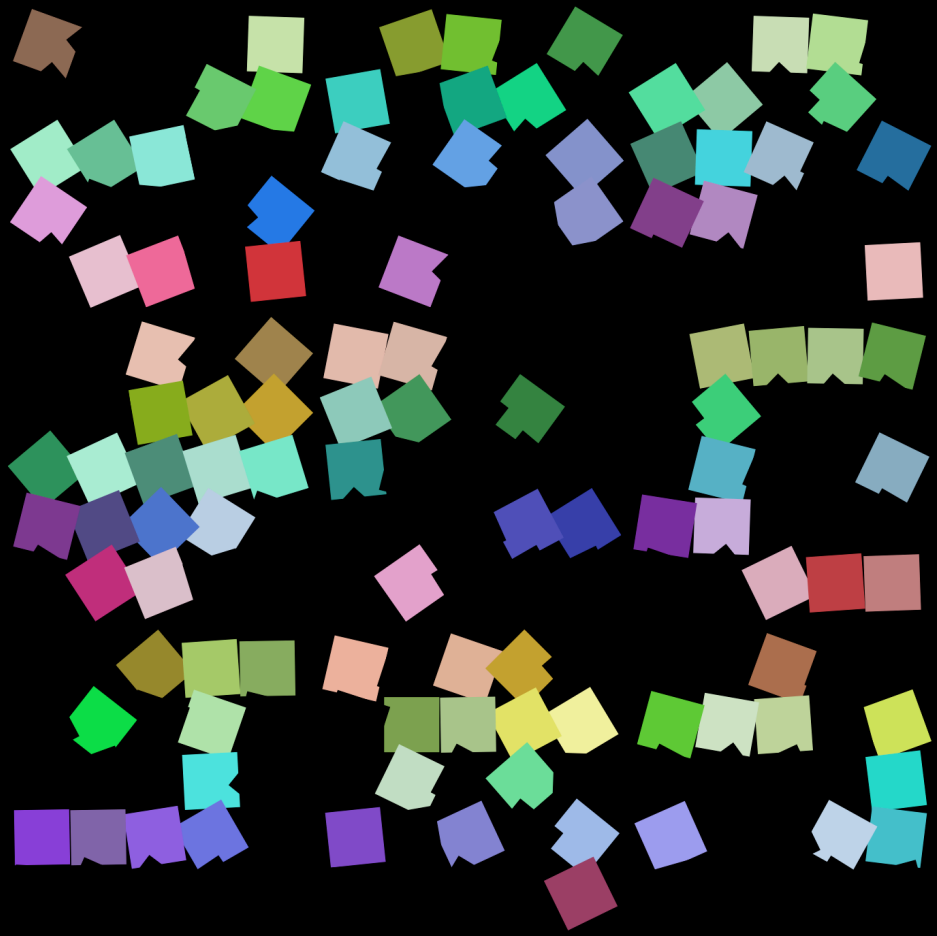
computer-arts-society.com/cas50

The CAS is a Specialist Group of the BCS, The Chartered Institute for IT.

Thanks to the LCB Depot LightBox (lcbdepot.co.uk) for hosting the CAS50 exhibition in Leicester and to Phoenix for hosting the exhibition in Brighton (phoenixbrighton.org). Thanks also to Stephen Lynch and Carise ZM for their help with the Leicester install and Fraser Kent and Sue Gollifer for their help with the Brighton install.

This publication was produced by Interact Digital Arts and designed and edited by Sean Clark. It is available for download as a PDF file from interactdigitalarts.uk/publications.

→ **Sean Clark**
Transformations Variations c (2017)
24" x 24" Digital Print



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www.computer-arts-society.com/cas50

CAS50