

Institution: Birkbeck, University of London

Unit of Assessment: 34 Art and Design: History, Practice and Theory

Title of case study: Computer Arts – establishing technoculture collections

1. Summary of the impact

As a result of research conducted at Birkbeck's VASARI Centre, two significant new art collections of digital art provided the basis for establishing the first National Collection of Computer Art at the Victoria and Albert Museum launched with a major free exhibition in late 2009. The two AHRC funded research projects, 'Computer Arts, Histories, Context etc' (2002-5) and 'Computer Art and Technocultures' (2007-10) also played a significant role in highlighting the importance of computer art and computer applications in art history. A further consequence of the research was the re-establishment of Computer Arts Society, and several innovative initiatives in digital arts.

2. Underpinning research

Birkbeck has a longstanding research specialism in computer art and computer applications in art history, established by Prof Will Vaughan in the 1980s, based in the Vasari Research Centre which plays an increasingly pivotal international role in integrating digital research and maintaining and digitizing important analogue material in the computer arts. In 2002, digital culture researcher Dr Charlie Gere was approached to be PI on the AHRC project 'Computer Arts, Histories, Context etc' (CACHE).

CACHE developed out of a collection of early computer art held by the Computer Arts Society (founded 1969). The researchers (Gere: 1998-2005; Brown 2002-2005; Mason – at BBK 2002-2006; Lambert, 2002-present) contacted the artists represented in this collection in order to recover their personal collections, interview them and establish a chronology of the era that would show how they contributed both individually and as a group to the evolution of digital art as a strand of fine art in the UK (Refs 1, 2). As the project developed, a wider international dimension became evident, especially with contributions from Germany (such as the archive of Herbert Franke, held at the University of Bremen). The collection eventually included 35 artists and their respective personal collections, and was written up in the edited volume *White Heat, Cold Logic* (Ref 2).

After acquiring the core artworks from the Computer Arts Society, the V&A then became Birkbeck's partner on the Resource Enhancement project 'Computer Art and Technocultures' (CAT). PI Dr Nick Lambert, digital artist and formerly Research Fellow for CACHE, worked with the V&A on the archive of the American art historian Patric Prince, donated to the V&A 2006. Prince had collated a significant amount of unique material relating to computer art from 1975-2000 that was accessioned and digitised during this project.

Computer art was one of the earliest manifestations of digital imagery and many pioneers were instrumental in developing modern computer graphics. As argued by artist, Brian Reffin Smith, who pioneered computer-based conceptual art in the 1960s, in Gere's publication, *White Heat, Cold Logic*, 'There is a mine, a treasure trove, a hoard – I cannot emphasize this too strongly – of art ideas that emerged in the early decades of computer that still have not remotely been explored. We know how this happens. The next big thing comes along and the Zeitgeist has its demands: things get left behind...' (Ref 2). The repertoire of computer art output has steadily increased from plotter drawings to screen-based imagery, to large-scale projections and most recently to 3D printing, computer-controlled audio-visual installations and robots (Ref 3). The space represented within the computer screen exists at one remove from physical reality but subsists within its own environment. The computer image is the dynamic result of a process, held in stasis at times but

Impact case study (REF3b)

with the potential to be wholly altered without leaving any material record (Refs 4-6).

3. References to the research

1. Mason, C, *A Computer in the Art Room: The Origins of British Computer Arts 1950-1980* (Quiller Press, 2008)
2. Gere, C; Brown, P; Lambert, N; Mason, C, *White Heat, Cold Logic: British Computer Art 1960-1980* (MIT Press/Leonardo 2009)
3. Dodds, D and Beddard, H, *Digital Pioneers* (V&A Publishing, 2009)
4. Lambert, Nick (2011) [From imaginal to digital: mental imagery and the computer image space](#). *Leonardo* 44 (5), pp. 439-443. ISSN 0024-094X
5. Lambert, Nick and Latham, W. and Leymarie, F.F. (2013) [The emergence and growth of evolutionary art - 1980–1993](#). *Leonardo* 46 (4), pp. 367-375. ISSN 0024-094X
6. [“Ideas Before Their Time”](#), conference proceedings from symposium set up by AHRC CAT Project (British Computer Society, 2010)

Total grants/sponsorship:

1 Oct 2002 – 30 Sep 2005 AHRB HARC5 £213,793 Digital & Computer-based arts in the UK from their origins to 1980 Renamed as Computer Arts, Histories, Context etc' (CACHE). PI: Dr C Gere until Dec04; then Dr M Allen

1 Sep 07 2007-31 Aug 2010: AHRC Resource Enhancement Award to 'Computer Art and Technocultures'. Joint project with V&A Total grant £410,229, Birkbeck share £190,074. PI: Dr N Lambert.

4. Details of the impact

The following developments in digital arts occurred as a consequence of the research developed through the CACHE and CAT projects:

1) A new computer arts collection and ground breaking exhibitions at the V&A.

As a direct consequence of the CACHE projects, the V&A acquired two significant collections: the Computer Arts Society Collection and the Patric Prince archive. The head of Central Systems at the Department of Word & Image at the V&A became interested in the collection and acquired it for the V&A, as the nucleus of the National Centre for Computer Art at the V&A (Source 4). Dr Lambert's role in developing this collection is ongoing.

To celebrate and publicise the acquisitions the V&A mounted a free exhibition “Digital Pioneers”, running concurrently with ‘Decode’, an exhibition of contemporary digital art (01/12/2009 to 23/03/2010) supported by a V&A scholarly publication (Ref 3). The exhibitions were supported by two public symposia: “Ideas Before Their Time” at the British Computer Society, in partnership with the Computer Arts Society (03/02/10), attended by 90 practitioners, historians, theorists and technologists in digital arts (Ref 4; Source 5); and V&A conference “Decoding The Digital” which featured artists from both Decode and Digital Pioneers. The exhibitions and supporting events were well-reviewed in publications such as *Wired*, *Huffington Post*, *Art Review*, *GeekDad* (Source 6).

The international importance of this work was marked when artist Jeremy Gardiner and Nick Lambert were invited to represent the project in New York, including a successful art show “Imaginalis”, at the Chelsea Art Museum (owned by the arts charity, the Miotte Foundation, March / April 2009) (Source 7) and a symposium at the School of Visual Art, New York (Source 8).

2) Enhanced professional development

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CACHe and CAT have been instrumental in the professional development of the digital arts sector, creating opportunities for networking and cross-sector ideas sharing. The event to mark the end of the CACHe project in March 2006, “Bits in Motion: Early British Computer-Generated Art Films” was supported by the London Centre for Arts and Cultural Enterprise (LCACE) and the Computer Arts Society, and took place under auspices of Node.London, a network of digital artists.

Re-established in 2004 by CACHe research staff, the Computer Arts Society (CAS), a Specialist Group within the Chartered Institute for IT, has played a significant role in developing digital arts in the UK and internationally. Supported by a £10,000 annual grant from the British Computer Society, CAS sponsors ongoing lectures, workshops and exhibitions at Birkbeck’s VASARI Centre on historical and contemporary digital art. (Source 1: testimonial)

The integration into CAS of the international Electronic Visualisation and the Arts (EVA) Conference has increased connectivity between researchers, professionals and practitioners in the creative industries, heritage and arts sectors. Its annual conference attracts average attendance of 110 participants making it one of the most important events on the digital arts sector calendar. (Source 2: testimonial)

3) Increased interest in the digital arts evidenced by the following projects:

The exhibition **Intuition and Ingenuity**, a celebration of the life of Alan Turing with contributions from contemporary digital artists and supported by the Arts Council England (ACE) and CAS, toured the UK in 2012 (Source 3: testimonial). The exhibition was seen by over 40,000 people and received extensive media coverage, touring to Kinetica Art Fair, London (9-12 February), The Lighthouse in Brighton, (17-26 February); the Lovebytes digital festival in Sheffield (22-24 March); the AISB/IACAP World Congress in Birmingham (2-6 July); the V&A for the Digital Design Weekend (22-23 September) where the Digital Studio was attended by nearly 2000 people; and Phoenix Square in Leicester (7 October–10 November) (Source 9).

The UK Fulldome Festival in 2011 (Birmingham Thinktank Planetarium) and 2012 (the Leicester Space Centre): sponsored by the Computer Arts Society and attracting over 200 and 450 participants, respectively, from the UK, USA, Germany, Australia and East Asia, the festivals were established by a partnership between Birkbeck’s VASARI Centre, the University of Plymouth, the Fulldome UK (a not-for-profit association supporting artists and researchers working within Fulldome immersive environments), and the digital projections specialists Gaianova. They brought together practitioners and researchers in the emerging area of Fulldome (360 degree) digital projection, screening dome films to public audiences (Source 10).

The Null Object art project, developed through a partnership between VASARI and central London’s Work Gallery, November 2012 to February 2013: inspired by the work of veteran artist Gustav Metzger, who was one of the early members of the Computer Arts Society and interviewed by Dr Lambert for CAT. Supported by CAS and ACE, Null Object was a collaborative work by London Fieldworks (digital artists Bruce Gilchrist and Jo Joelson), MIT medical roboticist and haptics researcher, Yaroslav Tenzer, and software designer, Jonny Bradley. Brain mapping software, using electroencephalogram (EEG) recordings of artist Gustav Metzger as he attempted to think about nothing, connected with industrial manufacturing technology to produce a sculptural form (Source 11). The project is described in the publication *Null Object: Gustav Metzger Thinks About Nothing* (Gilchrist and Joelson, Eds, Black Dog, London, 2012).

5. Sources to corroborate the impact

1. Computer Arts Society Treasurer / Director of Cuttlefish (testimonial: factual statement)
2. Head of Publicity and Public Relations, Electronic Visualisation and the Arts ([EVA](#)) (testimonial: factual statement)

Impact case study (REF3b)

3. Organiser of Alan Turing centenary events and digital artist (testimonial: factual statement)
4. [Paper](#) by Douglas Dodds, Senior Curator, Word & Image Department at V&A
5. The programme of the final CAT symposium, 'Ideas Before Their Time', can be found [here](#) and [here](#), showing Computer Arts Society and V&A involvement
6. The V&A exhibitions and events, *Digital Pioneers* and *Decode*, are detailed on the [V&A website](#). The V&A have supplied a list of 28 online reviews of the Design Weekend which can be supplied on request. These include reviews in Wired, Huffington Post, Art Review, GeekDad. The conference programme, *Decoding the Digital* is outlined [here](#), showing a range of academic and non-academic participants. [This review](#) from the New York Times shows the interest in the project in New York.
7. Imaginalis at the [Chelsea Art Museum](#), New York, 2009. Also see: "[Technocultures: The History of Digital Art – A Conversation](#)" at the School of Visual Art, New York, on March 6 2009. The panel traced the history of digital art through vignettes and personal anecdotes of four pioneers: Kenneth Knowlton, Margot Lovejoy, Kenneth Snelson and Lillian Schwartz.
8. Turing centenary exhibition [Intuition and Ingenuity](#): the website provides details of the centenary events. In addition it was promoted and reviewed on the following websites and blogs: [Kinetic Art Fair](#); [New Scientist](#); [Lighthouse](#), Brighton; [Wired Magazine](#); [The Daily Telegraph](#); [We make money not art blog](#)
9. [Full Dome](#)
10. Null Object artwork is described in [London Fieldworks](#); and [Work Gallery](#)