Paul Brown
Birkbeck College, University of London
paul@paul-brown.com
www.paul-brown.com

RECOVERING HISTORY:
Critical and Archival Histories of the Computer-Based Arts

During the 1960s, artists first began to get involved with digital computing. By 1968, it was possible for Jasia Reichardt to curate a survey of digital work in the influential Cybernetic Serendipity exhibition held at London's Institute of Contemporary Art (ICA). The show went on to tour the United States and Japan, and many young artists were inspired to get involved with computers after seeing it.

The concept of user-friendly applications was still in the future, and, for most artists, using a computer meant learning how to program, which wasn't easy and only appealed to certain types of minds. The resulting work owed much to the traditions of constructivism and the then-popular systems art. A new generation of artists took the computational and generative systems as their primary working methodology.

However, times were changing. Late modernism was replaced by what has become known as post-modernism, which relatively quickly became the dominant critical and curatorial aesthetic. The computer-based work was problematic. It challenged the understanding of the humanities-trained theorists (who, at that point in time, had no exposure whatsoever to computer systems), and the computational work was wrongly identified with technological absolutism and the modernistic emphasis on intrinsic media qualities.

In consequence, many young artists emerging from the new interdisciplinary programs were not able to participate in the mainstream artworld. Their work wasn't exhibited in the prestigious and influential state and private galleries or discussed in the art media. But their prospect wasn't completely bleak. In 1968, after meetings at IFIP in Edinburgh, the Computer Arts Society (CAS) was formed at Event One at the Royal College of Art. In addition to publishing over 50 issues of their bulletin, *PAGE*, CAS also curated several exhibitions and often presented them in unsold spaces at major computer trade shows and conferences. This tradition was "formalised" over a decade later when in 1981 ACM's Special Interest Group on Graphics (SIGGRAPH) augmented their annual conference with an art show co-curated by Darcy Gerbarg and Ray Lauzzana. The annual SIGGRAPH Art Gallery became a major international venue throughout the 1980s and continues to this day.[13] In 1987, Lauzzana went on to found fineArt forum (fAf) as an online bulletin board dedicated to the electronic arts.[9] Now under the editorship of Australian hypermedia writer Linda Carroli, it still appears monthly as both an email digest and a web 'zine. A complete 15-year archive is available on CD.

Another essential resource was founded back in 1968 by the American artist/ engineer Frank Malina. The journal *Leonardo* remains the principal scholarly publication that addresses the convergence of arts, science, and technology. With a move to MIT Press in the early 1990s, it was able to launch its own book imprint and online publication: Leonardo Electronic Almanac or LEA.[11]

In 1979, the annual Ars Electronica festival began in Linz, Austria,[12] and then in 1988 the Inter-Society for the Electronic Arts (ISEA) was formed in the Netherlands.[10] These and other resources and opportunities enabled the digital arts and their makers to survive and flourish albeit in a marginalised and often maligned form. We became an international "salon des refuses!"

Now postmodernism itself is on the wane, and, sadly, many of the pioneers who were involved in the digital and electronic arts have died. There's a growing awareness that if this period isn't documented and archived soon, it runs the risk of being permanently forgotten. A huge chunk of art history will have been lost forever. A number of international initiatives have sprung up to ensure that this doesn't happen.

I am associated with CACHe (Computer Arts, Contexts, Histories, etc.).[1] Funded by the British Arts and Humanities Board (AHRB), the CACHe project is based in the department of history of art, film, and visual media at Birkbeck College, University of London. It's a three-year program that aims to archive, document, and create both historical and critical contexts for the computer arts in the UK from their origins to around 1980 when the "user-friendly" systems began to appear. The word "arts" is used in its plural sense, and we intend to include the visual and performing arts, literature, etc.

Stephen Jones' project is called: "Synthetics: Towards a History of Computer Art in Australia."[2] It covers development and use of the electronically generated image in Australia from its first appearance in computing to its subsequent use in video, film, and media art. Jones' intention is to uncover the interactions and streams of influence between people working in hardware and software technological developments and artists working in the many areas of image production that were enabled by these technologies.

The Paris-based Leonardo/Olats : Pionniers & Précurseurs (Pioneers & Pathbreakers) project is managed by Annick Bureaud.[3] It aims to establish reliable, selected, online documentation about the artists of the 20th century whose works and thoughts have been seminal for techno-science related art. The project is being carried out through a collaborative working group of art historians, scholars, and researchers. So far, the project has been mainly done in French, although translations into English are under consideration.

Sue Gollifer of the University of Brighton is undertaking a project to create a Digital Archive of ISEA.[14] It's another project being supported by the UK's Arts and Humanities Research Board. The aim of the project is to catalogue and preserve an educational electronic archive of the International Symposium of Electronic Art - Conference and Exhibition 1988 - 2002. These will include the conference proceedings, catalogues, and CD-ROMs, and work from the accompanying exhibitions and performances.

In Germany, the computer-arts pioneer Frieder Nake is creating "compArt - a structured space for computer art."[5] He describes it as a "hypermedium on the history of computer art." The project is currently focusing on the early history, from 1965 to 1980, but it will eventually include later periods. At present, it's in German, but translations are planned.

Also in Germany, the historian and theorist Oliver Grau, author of *VIRTUAL ART - From Illusion to Immersion* has put a critical database on his web site.[6] The Daniel Langlois Foundation for Art, Science and Technology operates a Centre for Research and Documentation (CR+D) that aims to document history, artworks, and practices associated with electronic, digital media arts and make this information available to researchers in an innovative manner.[7]

The Digital Art Museum (DAM) is another project that has received funding from the UK's Arts and Humanities Research Board.[8] As the name implies, it's a virtual museum of pioneers and practitioners. It's also an interesting collaboration between an academic institution, Metropolitan University, and the gallerist Wolfgang Lieser. Lieser comments that all this academic and philanthropic

research will establish a new legitimacy for the computer-based arts. In response, the work will become collectable, demand for it will increase, and sales will improve.

Now that's something most practitioners will be pleased to hear about!

Paul Brown, artist and writer, is a visiting fellow in the Department of History of Art, Film and Visual Media, Birkbeck College, University of London.

ADDITIONAL INFORMATION
1. CACHe - Computer Arts, Contexts, Histories, etc., www.bbk.ac.uk/hafvm/cache/, info@cache.bbk.ac.uk

2. Jones, Stephen. Synthetics: Towards a history of computer art in Australia. Synthetics: The electronically generated Image in Australia. *Leonardo*, 36 (2), April 2003. The evolution of computer art in Australia. *Computer Art Journal*, 1, 2003, Europia Editions, France. sjones@culture.com.au

3. The Leonardo/Olats: Pionniers & Précurseurs (Pioneers & Pathbreakers), www.olats.org/setF4.html, annickb@altern.org

4. ISEA Digital Archive Project, www.isea-web.org/eng/projects.html, s.c.gollifer@bton.ac.uk

5. compArt - a structured space for computer art, www.agis.informatik.uni-bremen.de, nake@informatik.uni-bremen.de

6. Grau, Oliver. *VIRTUAL ART - From illusion to immersion*. The M.I.T. Press, January 2003. www.arthist.hu-berlin.de/arthistd/mitarbli/og/og.htm (go to DATABASE - English version), Oliver.Grau@culture.hu-berlin.de

7. The Daniel Langlois Foundation for Art, Science and Technology, Centre for Research and Documentation (CR+D), www.fondation-langlois.org/e/CRD/index.html, info@fondation-langlois.org

8. The Digital Art Museum - DAM, www.dam.org/, Digitalartmuseum@aol.com

9. fineArt forum - the art and technology netnews, www.fineartforum.org, editor@finartforum.org

10. ISEA - the Inter-Society for the Electronic Arts, www.isea-web.org, info@isea-web.org

11. Leonardo Electronic Almanac, mitpress2.mit.edu/e-journals/LEA/, lea@mitpress.mit.edu

12. Ars Electronica, www.aec.at/, info@aec.at

13. Prince, Patric: A brief history of SIGGRAPH art exhibitions: Brave new worlds. *Leonardo*, Supplemental Issue, Computer Art in Context for ACM SIGGRAPH '89 Art Show, 1989.

HISTORY OF COMPUTER GRAPHICS AND ART: CALL FOR PARTICIPATION

The aim of this call for participation is to assemble a database that documents the evolution of computer graphics, art, and thought about art in relation to the progress of technology. The result will be a collection of images and essays created by artists, scientists, and people who have influenced their work that reflects how technical achievements (hardware, software, languages, etc.) have generated new artistic opportunities. The database will demonstrate how computer art and graphics are related to the history of concurrent technical innovations. It will be augmented by artists' web sites and materials that have accumulated in various collections around the world. Eventually, it will become an invaluable ACM SIGGRAPH resource – the first such resouce, because there is currently no single comprehensive resource that describes the influences and inventions in computer graphics and computer art from a historical perspective. The Birds of a Feather gathering at SIGGRAPH 2002 (organized by Anna Ursyn and Anne Morgan Spalter) generated helpful comment and feedback on this project.

Those who feel their work has contributed to the field of computer graphics, art, and thought about art are requested to describe their areas of activity and accomplishments. Since this approach calls for interaction between people representing various fields in the history of innovation, we request participation from anybody involved in the progress of these fields, from software and hardware developers to scientists and artists. Being a part of this project may be interesting both on a personal level and a community level, because it involves a great potential for new approaches in teaching and provides materials for visual learning. It would be greatly appreciated if you could forward this URL for the Call for Participation and release form to anyone you feel could contribute to this project:

www.siggraph.org/education/cgHistory/history.html