'Doing Unfathomable Things': Computer Art in Britain

ANNA BENTKOWSKA-KAFEL

A Computer in the Art Room. The Origins of British Computer Arts 1950–80

CATHERINE MASON, FOREWORD BY CLIVE RICHARDS

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A historical account of early British computer art has been much needed for quite some time. The popularity of digital media in today's art practice has not been matched by comparable interest in the histories of computer art. Typically, there is no mention of computer art in *The Definitive Guide to Modern British Art* published by the *Daily Telegraph* in 2008. Until recently it was equally difficult to find an account of the origins and early history of computer arts in literature more specialist than the Gordon's-sponsored supplement to this major British broadsheet. Mason's book fills the void, putting computer arts firmly within the historiography of British art.

The author hopes her book will inspire further studies. She describes her work as 'an introduction to a largely unknown subject'. This is an understatement. What she offers is a detailed survey of the leading artists and schools; of major exhibitions and other art projects in the area of cybernetics and other computer genres; their relationship to the Independent Group; and a few glimpses into parallel developments in Europe and America. Nonetheless, the perspective adopted by the author limits her coverage to art produced within British art schools, as reflected in the book's title. This approach leads Mason to elaborate more generally – one can argue, even too broadly – upon British politics of the time, and the particularities of British education in art and design. We learn, for example, about the effect of Harold Wilson's promise of 'redefining and restating socialism' through 'the white heat of scientific revolution' proclaimed at the Labour Party Conference in 1963; and about changes in education resulting from the Coldstream Report of 1960 and Anthony Crosland's White Paper of 1966. The latter proposed the expansion of higher education through a network of polytechnics, some of which became incubators for computer art. Mason steps even further back and discusses the Victorian approach to art and crafts education in an industrial society. Such a setting of the scene for the development of computer arts, from the 1950s onwards, makes for interesting reading, but could have been dealt with through references to earlier research. This would have allowed the author to expand her captivating account of the achievements of those who have pioneered the use of computers in the arts. The vision of these artists and scientists, computer engineers and educationalists was truly extraordinary. One wonders how the contemporary debate about 'two cultures', fuelled by C P Snow's famous arguments, was able to continue in spite of so much collaboration between art and science.

Early computer art is difficult to experience first hand, the single main reason being the obsolescence of the original technology. One must welcome an academic attempt at documenting the early history of computer art, without which today's digital culture would not have been possible. Mason may be the first to admit how difficult it has been to trace the actual works, their records and artists. Her book arises from her doctoral research conducted as part of the CACHe Project, Computer Arts, Contexts, Histories, etc. (see the project's website, www.e-x-p.org/cache/index.htm). Between 2002 and 2005 the project was based at the VASARI Lab in the School of History of Art and Visual Media at Birkbeck, University of London. VASARI (the Visual Arts System for Archiving and Retrieval of Images) ran from 1989–92, the first of many projects hosted by Birkbeck College in the lab that was to become (as the CACHe Project confirms) a hub for studies in arts computing. I worked there in 2003 and 2004 on a different project and was intrigued by the dusty contents of cardboard boxes and files full of brochures, notes, sketches, five-inch floppy disks and other pieces of old computer equipment. This material looked physically and conceptually impenetrable. I remember noticing the Polish name Ichnatowicz misspelt on a label. The name meant nothing to me then. As the CACHe project evolved so the importance of this research and its archive became apparent. Mason's detailed survey of this material, now deposited with the Victoria & Albert Museum in London, and complemented by extensive interviews and additional research, reveals a fascinating story of avant-garde artists engaged with science and technology. The focus of Mason's research is on British art education, because this was where the first computers were accessible to the select few. The extortionately expensive equipment drew the artists and designers in. In the 1960s there was typically one computer per college, which was sometimes the only one in the city. When access to computers was not available, as it was in the case of Roy Ascott's ground-braking course at Ealing College of Art in London, teaching of cybernetics relied on mind maps, analogue calibrators and other machines. Students were asked to tackle questions such as 'what is a human being?' It was an art practice that put emphasis on processes and behaviours rather than the final products, and required from students their unreserved intellectual, creative and social engagement.

Hailed by his contemporaries as 'a new Leonardo', Ichnatowicz strikes one as a major figure of early cybernetic art. A chapter dedicated to his work discusses and illustrates his experiments with robotics, including *Sound Activated Mobile (SAM)* showed at 'Cybernetic Serendipity' at the London Institute of Contemporary Arts in 1968, and the interactive *Senster* commissioned by Phillips and exhibited in 1971 to considerable acclaim at the company's Evoluon centre in Eindhoven, alongside other electronic installations. Instrumental to the latter commission was James Gardner, the designer of the Evoluon display, previously engaged as the principal designer of the Festival of Britain in 1951 and the designer of the decorations for the coronation of Elizabeth II. *Senster* was a lobster-shaped moving robot, approximately five metres long and three metres tall. Its steel frame with five robotic arms moved in slow motion thanks to hydraulics located below the floor. *Senster* used a radar motion detector and microphones to detect and respond 'naturally' to

E Ihnatowicz's Senster installed in the Evoluon, c. 1971. From *A Computer in the Art Room. The Origins of British Computer Arts 1950–80* by Catherine Mason. © Estate of the artist.

the viewer's movement and sound. Ichnatowicz developed the underlying programming in collaboration with engineers from Philips and Mullard Research Lab. In an unpublished letter, Gardner wrote that the *Senster* should not be treated as 'a gimmick'; 'The Senster combines art and science. The art bit should not be forgotten as it cannot be categorised but is far more complex and important than exact science is'. Ichnatowicz's work also involved sculpture, which he studied in the 1940s at the Ruskin School of Drawing in Oxford as well as film. His wide-ranging experience and interest in artificial intelligence and robotics led him to accept a position in the Department of Mechanical Engineering at University College London, where he decided to approach the engineering of artificial limbs 'with the same loving care as with a piece of sculpture'.

Equally insightful coverage is given to other important computer artists – Roy Ascott, John Vince, R John Landsdown, Gustav Metzger, Colin Emmett, Brian Eno, Paul Brown, and Clive Richards, who introduces the book – to name just a few. The supporting role of the Computer Arts Society, founded in 1969 and by 1970 spreading its membership to 17 countries, also emerges very strongly. The abundance of artistic activity in this field and the range of opportunities for 'artists and designers doing unfathomable things in studios' (in Richards' words) leaves the reader with the impression that Britain is an ideal place for practising, showing and debating computer arts. Yet the lack of recognition – and therefore 'a lack of consistent mainstream support' – for British computer arts in this period preoccupies Mason a great deal. A field lacking 'mainstream institutional support', 'largely outside what may be considered the mainstream art world of museums and dealer-gallery networks', 'overlooked by mainstream art history', she declares frequently. At the same time she demonstrates how institutionalised this new art was, being taught and practised in London's Royal College of Art and the Slade and numerous other schools; and exhibited not only at the Institute of Contemporary Arts but also throughout the country and overseas. The examples do not support the author's argument. The pioneers of computer arts in Britain were part of the academic establishment and able to teach the younger generation right from the outset. This seems to be a comfortable position for an experimenting artist. So the reasons why the subject has remained unknown for so long, lie in my view, not in the rejected or elitist status of this art (this normally propels the interest!) but elsewhere: in the continued lack of understanding of its complexity.

Much of the early computer art no longer exists. Its lasting contribution is therefore mainly and importantly conceptual. The book is crying for a critical analysis of the role played by computer artists in the shaping of theories of modern digital culture. As Mason hints, 'computer arts can be seen as a crucial part of the transition from late modernism to postmodernism', but she falls short of offering her own interpretation of this claim. One may hope that she will follow her landmark survey with another study. This may provide an opportunity to include those pioneers who shied away from the art room.

ANNA BENTKOWSKA-KAFEL
Centre for Computing in the Humanities, King's College London