

IN TIMES OF CHANGE: AN INSTITUTIONAL PERSPECTIVE ON COLLECTING AND CONSERVING BORN DIGITAL ART

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The social and networked aspects which permeate the process of making and dissemination for many New Media Art works brings to the fore questions not only about how works are made and used but how they should be collected and conserved. Within the museum context it is the care of the collection for future generations and public access that drives the need for expanded research into the collection and conservation of digital art.

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The Victoria and Albert Museum is the UK's national museum of art and design. In its early years as the South Kensington Museum, the V&A attempted to unite the arts and sciences. Its collecting policies, which today include born digital acquisitions, continue to emphasise the importance of technique, process and innovation. The V&A's acquisition of contemporary born digital works builds on the museum's existing comprehensive holdings of historical computational work, providing a route for understanding the contemporary significance of early computer artists' work. The V&A received two major collections of computer-generated art and design, one from the Computer Arts Society, London, and the other from Patric Prince, an American art historian and collector. This combined with more recent acquisitions has solidified the museum's status as the national collection of computer art.

The early history of the museum's computer art acquisitions offer important insights into the impact of preservation strategies, the construction of art history and the potential bearing this has for collecting contemporary digital art. The museum began acquiring computer-generated art and design as early as 1969 with the purchase of a portfolio of prints from the 'Cybernetic Serendipity' exhibition held at the ICA in 1968. However until recent years acquisitions ceased, in part due to the difficulties of preserving fragile computer-generated material compounded by, and contributing to the exclusion for many years of computer art by the mainstream art world. The Museum's 2009/2010 display entitled 'Digital Pioneers' sought to redress this and raise awareness of this lesser known field of art and design. The display ran consecutively with 'Decode: Digital Design Sensations', a major exhibition curated in collaboration with onedotzero and showcased the latest developments in digital and interactive design, from small, screen-based, graphics to large-scale interactive installations and new commissions. It included works by Danny Brown, John Maeda, Rafael Lozano-Hemmer and rAndom International. A later prototype of the latter's work was subsequently acquired by the museum; a decision that was informed by the close working relationship between the V&A Conservation Department and the artists.

In May 2010, the V&A acquired *Study for a Mirror* by artist collective rAndom International. Described by the artists as a contemporary 'light painting' it uses face recognition technology with software to transfer the onlooker's image onto the screen. *Shaping Form 15/5/2007* by Ernest Edmonds, acquired in April 2011, is a generative and interactive artwork using software to create a continuous stream of abstract images that evolves in response to external stimuli. Casey Reas, who together with Ben Fry developed the open source software known as Processing, is the latest digital artist whose work has been acquired by the Museum. *Process 18* by C.E.B. Reas is a visual and kinetic system.

The challenge of preserving these works rests on the question of how born digital art can be understood and used in the future when systems, software, and knowledge continue to change. The vulnerability faced by all software-based artworks is its susceptibility to change. The obsolescence of hardware and format, the bespoke nature of the code and the rapidly changing systems and technical environment all pose risks. To reduce these risks the museum has developed a series of steps, firstly identifying what elements need preservation. Through a series of discussions with the artists the museum ascertains the significant properties assigned to the concept, material components, the experience and perceptual quality of the art and identifies which component parts are interchangeable. Details about the code are recorded such as what software the programme is written on and how it is saved. The production path is documented along with information on how to recognise failure detailing what constitutes acceptable and unacceptable changes.

Migration and emulation are the two strands through which preservation is managed. Migration, the process of transferring data from one platform to another, is undertaken at the earliest opportunity and where possible saved in multiple formats. As part of an ongoing migration programme the V&A is currently investigating the feasibility of saving the code for all three case studies on VADAR, the museum digital repository. Changes to the appearance of the original format is a risk associated with migration, thus emulation offers an alternative method involving imitating the original look and feel of the piece but by different means. Where possible these methods are discussed with the artists at the point of acquisition. The current strategy relies on the museum continuing to record as much metadata as possible including descriptive, technical and artist-dependent; developing procedures for the acquisition of software-based artworks; identifying tools useful for preservation and initiating a program to test recovery strategies, recording results over time.

The acquisition of born digital artworks has highlighted the need to work in different and more open ways, drawing on the strength and knowledge from an array of people across the museum, in addition to expanding and sharing expertise externally. The social ideas encompassed in the participatory works and collaborative approaches of the artists have given rise to intriguing questions and new challenges both in terms of preserving, conserving and documenting the concept, experience and physical components of works. The V&A has learnt invaluable lessons with each new born digital acquisition which in turn has informed how the museum operates.