Digital Art Histories:
Databases and Curatorial Practices in the Preservation of Early Computer Art

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Categories:
Web Services for Humanist Scholarship
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In January 2008 the Block Museum presented *Imaging by Numbers: A Historical View of the Computer Print*. The show was a culmination of eight years of research by Debora Wood, Senior Curator at the Block Museum, and artist and independent curator Paul Hertz, formerly Co-Director of the Center for Art and Technology at Northwestern University, and currently a software developer for the Collaboratory Project at Northwestern University. The show aimed to place computer art within the context of contemporary art history and to develop a scholarly collection of computer prints. The exhibition was organized chronologically with works from the early 1950s to the present and thematically around algorithmic processes. The curators considered the use of algorithmic processes to be a fundamental contribution of computer art to the wider discourse of contemporary art. Nearly all the works in the exhibition were created by custom software, often designed by the artist.

The exhibition was complemented by a smaller exhibition of time-based works and an evening of computer-generated cinema. A two-day scholarly symposium, *Patterns, Pixels, and Process: Discussing the History of the Computer Print*, brought together artists and scholars to discuss the history of algorithmic processes in the medium of the computer print, with particular attention to their impact on contemporary art and society.

By using traditional art historical framing devices such as chronological and thematic windows, *Imaging by Numbers* suggested that computer art, which had often been ignored in the standard histories of 20th century art, could be treated as standard art historical material. It offered the possibility of connoisseurship in computer art through the preservation of physical objects. It skirted the fraught issue of canonical art histories by noting its own limited scope and by offering evidence that the pioneering ideas of computer art were still active and unfinished in the present.

Imaging by Numbers is one of several recent efforts to preserve the history of computer art. These efforts have included exhibitions, museum collections, and online databases, as the historical record of computer art has been viewed as increasingly important but physically fragile and elusive. The preservation of computer art and its historical documentation is part of a broader effort to preserve the history and documents of media art and media culture. Databases have become an integral part of this effort, but their deployment has raised many issues.

The value of massive databases in the sciences is well established. Projects such as the Sloan Digital Sky Survey, the International Virtual Observatory Alliance, the Human Genome Project, or the Millennium Ecosystem Assessment have succeeded in establishing standards for data exchange, database schema, metadata, and web services. IVOA, in particular, unites hundreds of different databases through its standards. There are few if any correspondingly large efforts in the humanities, though there are many databases.

Media art, information art, and computer art would seem to be particularly apt material for database projects, and current efforts to document them may illustrate some of the problems confronting humanities databases in general. There are a number of database projects, such as the Media Art Histories Archive, Media Art Net, the compArt Project at the University of Bremen, and the Ars Electronica database, that provide extensive online research facilities—each with a different orientation and set of standards. Archives with online resources, such as the Daniel Langlois Foundation (Canada) and the CACHe archive (Great Britain), provide additional points of research. Specialized projects, such as the recreation of the Zagreb New Tendencies exhibitions of the 1960 at the Zentrum für Kunst und Medientechnologie Karlsruhe (ZKM), the collections of the Victoria and Albert Museum and the Kunsthalle Bremen, and even small scale efforts such as Imaging by Numbers provide opportunities to research physical objects, though their presence in online data may not yet extend much beyond accession and exhibition lists.

This poster session offers an overview of issues in curating, documenting, and developing databases of media art. Many of these issues were raised at the Second Bremen Symposium on Early Digital Art, Machinic Art, Art History, and Data Base, which brought together curators (including the author), art historians, and database experts at the Kunsthalle Bremen. Media art databases may offer new "cuts" through historical data, offering non-traditional organizational plans that run counter the usual chronological/historical or thematic modes—or they may impose their organization on the researcher, establish unwarranted canons, and confuse the unwary with their apparent authority. The language, organization, data and metadata standards, and possibility of data exchange of media art databases will impact scholarship every bit as much as the physical preservation of media art.