Digital Media and Ephemeralness

Art, Artist, and Viewer

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WHILE HIGH-QUALITY MATERIALS ENABLE PRODUCTION OF EXTREMELY durable artworks, contemporary artists have selected materials and processes that bring about a degeneration of the object. Easy reproduction and faster proliferation of the image mean new ideas are communicated rapidly and each work is considered more briefly by the viewer. Artists' concepts are incorporated into other pieces, with recently exhibited work frequently looked upon as passé. Digitalization produces intangible art, planned rather than crafted by the artist. The temporality, intangibility, and transience that mark art's ephemeralness are advanced through cyberspace, where the digital piece is placed on a network, downloaded, manipulated, and placed back on the network by others, sometimes simultaneously. Someday the artist may manipulate a program she or he began long ago without recognizing the creator or the creation. The authors trace these developments, with emphasis on how technology has contributed to the increased ephemeralness of art.

Sound bites, music videos, and fleeting, nearly subliminal television ads spew forth from hundreds of cable and satellite channels, AM and FM radios, videotapes and audio CDs in a torrent that has conditioned viewers to quickly recognize spare or highly compressed auditory and visual messages. To sip from this firehose, viewers have learned to sample by channel surfing, selectively recording, fast forwarding, and retaping to eliminate unwanted material such as commercials.

Video and computer games further enhance our sensory conditioning. By responding instantly in action games, players are rewarded with faster and more visually complex scenarios. In exploratory and role-playing games, players work through labyrinths, virtual rooms, and choices affording a nonlinear context with a variety of outcomes. These interactive game metaphors assume growing importance in educating children, the artists and viewers of the future. When these spectators visit a gallery or museum, they anticipate fuller interaction with the art than previous generations could have had.

Not long ago, visitors to the Museum of Modern Art in New York moved through an exhibit of the works of Bruce Nauman in which installations, low-resolution videos, high-decibel noise, and notes of projects combined to leave the viewers with a sense of discomfort [1]. Were these pieces leftovers, items that in some sense had been edited from our modern society like the commercials and other noise that we eliminate from our videos and audiotapes? One Nauman work consisted of televisions positioned within narrow corridors. People approaching one television were viewed by others on another screen, much as people today catch sight of themselves and others filmed from security cameras in stores [2]. Viewers became participants according to Nauman's plan.

At the 1995 Whitney Biennial in New York, people were kept from touching works by Andrea Zittel. However, visitors to the Andrea Rosen gallery in SoHo could sit on Zittel's furniture with freedom. Her brochures were taken away like so many advertising brochures for high-priced furniture. The viewers provided the final conceptual link for Zittel's show of furniture as art. Those sitting on the furniture were part of a performance for the incoming gallery visitors. The brochures, which tell the prospective buyers that the antiseptic Bauhausian furniture is comfortable, are part of the joke [3].

Zittel's advertising brochures are conceptually linked to the catalogs, prints, and postcards purchased by museum visitors

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today. These documents often misrepresent exhibitions, collections or individual works by changing scale, adjusting contrast, altering color, or eliminating some works in a show. Moreover, catalogs and other forms of reproduction are often used by people who have never seen the original art. To invoke William Ivins's conclusion to *Prints and Visual Communication,* the translated artwork becomes more than an iconic representation of the original, it becomes the original [4].

The transformation of the original continues today through digitalization and retention of the representation in disembodied electronic form. Here many different art forms and styles may be maintained in an homogenized electronic limbo, awaiting neat repackaging. For example, CD-ROM collections of clip art, stock photographs, film, and video clips have become readily available in digital formats. Once digitized, all art is just another form of electronic information stored in well-organized databases for further manipulation. This is clearly evident in the recent releases of CD-ROM products containing samples of museum collections, most notably Microsoft's "Art Gallery," a selection of over 2000 works from the National Gallery in London. In a recent review appearing in *Scientific American,* Ben Davis noted that none of the products gave directions on how the viewer could find his or her way to the museum (the source of the artwork) or encouraged the viewer to experience the original, "which is the point of looking at digital collections—isn't it" [5]. Clearly, CD-ROM producers, either by intent or omission, have fashioned the CD-ROM into the museum.

Many artists use electronic tools to explore form, spatial and temporal relationships, color, and texture as a precursor to final renderings in traditional media. The increasing ease of use and affordability of software for realistic three-dimensional rendering, animation, and construction of virtual realities makes it ever faster and less expensive for artists to move from concept to demonstration. For example, sculptors working with 3D computer-aided design software generate blueprints or templates for execution by craftspeople or even control milling machines to produce physical artifacts [6]. But why create the artifact? With continued evolution of these tools and enhanced reality of the experience they will provide, the software experience should be equivalent to the real experience! Moreover, artists would create works designed specifically to take full advantage of a software tool's unique qualities, just as artists select one medium over another [7].

Finally, each successive generation increasingly uses computers for education, play, research, and communication [8]. The digital world is becoming a standard for measuring the real world, while networks provide a venue for the proliferation of concepts and images.

The following projects exemplify the possibilities for sharing ideas and obscuring the identity of the artist. In one project called RENGA (a name based on word play between two Japanese ideograms meaning "linked images"), two artists collaborated to create computer paintings. One artist sent his work to the other via electronic mail, and the second artist used a paint system to alter the art. The process was repeated and resulted in a series of works created jointly by the two artists [9]. In Pennsylvania, the Children in the TeleCommunity Project run by the Pittsburgh Children's Museum uses email, computer and video conferencing, and other networking tools to share artistic ideas among a pool of users [10]. Images, stories, poetry, and other unjuried material by Dave Sag in Australia can be downloaded from the World Wide Web [11]. Material from a node like this, downloaded, manipulated, and returned to another node by people around the world, will both spread ideas and distance the work from the originator. A new level of ephemeralness is introduced since, while the path to the node may remain the same, the material on the node can be altered continuously. A negative side of this sharing is exemplified by a letter to the editor in the May 1995 issue of *NewMedia* requesting credit for an image created by students and faculty at the Center for Electronic Art in San Francisco that had been downloaded from the center's World Wide Web site for an earlier issue of *NewMedia* [12]. The potential for uncredited use of material is increasing simultaneously with the possibilities for viewers to interact with it [13]. The implications of such an evolution are clear: in the future, computer art will be elevated to the mainstream with other media assuming a craft status. Few artists now work in fresco or prepare their own paints; neither do landscape or architectural photographers use glass negatives, nor photojournalists 4x5 press cameras. Those that do so have become harpsichord makers in an age of synthesizers, creating art that maintains links to the sequence of traditions upon which the future is founded. When will the digital media supplant traditional media as the mainstream method of making art? Max Planck's observation about the acceptance of new scientific innovations and the evolution of physical theories may be pertinent: "An important scientific innovation rarely makes its way by gradually winning over and converting its opponents: it rarely happens that Saul becomes Paul. What does happen is that opponents gradually die out, and that a growing generation is familiarized with the ideas from the beginning" [14].

References and Notes

1. Peter Schjeldahl, "The Trouble with Nauman," *Art in America* 82, No. 4, 82 (April 1994). See also Lane Relyea, "Cast Against Type," *Artforum International* XXXIII, No. 8, 62 (April 1995) and Peter Plagens, "Cousin Brucie," *Artforum International* XXXIII, No. 8, 62 (April 1995).

2. Recently Timothy Binkley raised the issue of privacy as well as gender with *Rest Rooms,* a computer installation based on interactive video conferencing. In this piece, two computers are installed in rest rooms outfitted with video cameras and connected to a network. The screen of each computer can display images from either rest room, as well as shared graffiti from both rest rooms and videos from gender-specific commercials. In addition, the participants in the rest rooms can see and talk to each other. For further details see Lucy Petrovich and Kathy Tanaka, eds., *Visual Proceedings: The Art and Interdisciplinary Programs of SIGGRAPH 1994* (New York: Association for Computing Machinery, 1994).

3. Andrea Zittel, *The A-Z Bed Book,* produced in coordination with *Transcript, a Journal of Visual Culture,* University of Dundee, Scotland, and printed in conjunction with work exhibited at the Andrea Rosen Gallery and the Whitney Museum of Modern Art Biennial, New York, and NUTOPI: Rooseum Contempory Art, Malmo, Sweden, 1995.

4. William M. Ivins, Jr., *Prints and Visual Communication* (New York: Da Capo Press, 1969) p. 180.

5. Ben Davis, "The Gallery in the Machine," *Scientific American* 272, No. 5, 107 (May 1995).

6. For a brief review of early work of this type, see Cynthia Goodman, *Digital Visions: Computers and Art* (New York: Abrams, 1987). Recent work includes Stewart Dickson's aluminum sculpture designed using Wavefront's interactive modeling environment and milled from templates based on these designs. In the early 1990s, Dickson used stereolithography to convert mathematical forms into plastic polymer. See Stewart Dickson, "True 3D Computer Modeling: Sculpture of Numerical Abstractions," in Michele Emmer, ed., *The Visual Mind: Art and Mathematics* (Cambridge, MA: MIT Press, 1993). Similarly, artist and mathematician Helaman Ferguson has used computer-controlled milling machines to interactively carve stone. See Helaman Ferguson, "Computer Interactive Sculpture," in Michele Emmer, ed., *The Visual Mind: Art and Mathematics* (Cambridge, MA: MIT Press, 1993); and Claire Ferguson, *Helaman Ferguson: Mathematics in Stone and Bronze* (Erie, PA: Meridian Creative Group, 1994).

7. Artist Kent Rollins, for example, uses 3D modeling tools to create objects that appear to be real but actually do not exist. See "The Leonardo Gallery," *Leonardo* 28, No. 1, 10 (1995).

8. For an excellent survey of the state-of-art uses of computer graphics in art, science, and education, see Lucy Petrovich and Kathy Tanaka, eds., *Visual Proceedings: The Art and Interdisciplinary Programs of SIGGRAPH 1994* (New York: Association for Computing Machinery, 1994).

9. Toshihiro Anzai, Rieko Nakamura, and Machiko Kusahara, "RENGA (Linked Image)" in Lucy Petrovich and Kathy Tanaka, eds., *Visual Proceedings: The Art and Interdisciplinary Programs of SIGGRAPH 1994* (New York: Association for Computing Machinery, 1994) p. 184.

10. Robert Dunn, "TeleCommunity Project," in Lucy Petrovich and Kathy Tanaka, eds., *Visual Proceedings: The Art and Interdisciplinary Programs of SIGGRAPH 1994* (New York: Association for Computing Machinery, 1994) p. 136.

11. At the World Wide Web address http://www.ozemail.com.au/~davesag/.

12. Howard Hedelman, "Letters to the Editor," *NewMedia* 5, No. 5, 10 (May 1995).

13. Curtis E.A. Karnow, "Data Morphing: Ownership, Copyright and Creation," *Leonardo* 27, No. 2, 117–122 (1994).

14. Gerald Holton, *Thematic Origins of Scientific Thought: Kepler to Einstein,* revised edition (Cambridge, MA: Harvard University Press, 1988) p. 412.

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