

Art Imaging with Color Copiers

A Survey of Artworks from North America and Europe

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BACKGROUND

The history of copier technology may begin with the earliest human efforts to create mechanical records of images in their environment. Numerous devices were employed over centuries of experimentation. The camera lucida was refined by the 16th century, with photography and photomechanical printing processes introduced during the 19th century. Related tools emerged when A.B. Dick marketed Edison's mimeograph in 1887, and 3-M marketed its Thermo-Fax in 1950. Of principal note is the production of the first electrophotograph by Chester Carlson in 1938. Carlson's original patent (1939) described the 'electrophotographic copying apparatus' which would evolve into the first commercially successful photocopier. Carlson spent years trying to sell his idea to numerous companies. The Haloid Corporation accepted and developed Carlson's process. Haloid Xerox released the Xerox Model D in 1950, the famous Xerox 914 in 1959, and became the Xerox Corporation in 1961.

Artists experimented with photocopiers as soon as commercial plain paper copiers became available, and responded with increased interest when full color copiers appeared. The 3-M Color-in-Color System I was introduced in 1968. By 1970, Sonia Landy Sheridan established a program in 'Generative Systems' at the Art Institute of Chicago which incorporated this new color copier. Sheridan worked directly with an inventor of the Color-in-Color System, Douglas Dybvig. She described the program as one "which brought artists and scientists together, ... an effort at turning the artist's passive role into an active one by promoting the investigation of contemporary scientific-technological systems and their relationship to art and life."¹ Sheridan advocated concepts,

dimensions, and applications beyond a limited vision of 'copy art'. As the seventies proceeded, artists were working with the 3-M Color-in-Color System I and II, and with the Color Xerox 6500. Xerox and 3-M both employed three-color systems and light-lens technology, which offered potentials as well as limits. The Xerox 6500 dominated the market during the seventies and eighties. These first color copiers offered capabilities for creative imaging, considerable manipulation of colors & images, and the transfer of images to a variety of other surfaces.

Color copiers became new tools for artists, photographers and designers. They provided opportunity for direct, spontaneous image making with potential for new transformations. The landmark exhibition 'Electroworks' was presented by the International Museum of Photography at George Eastman House, Rochester, New York, in 1979. The exhibit included a varied collection of two hundred and forty-five works ranging from experimental photomontages to limited edition books and clothing. In the catalogue, guest curator Marilyn McCray referred to copy art as having "generated activity all over the world. These highly stylized and individualized works of art are collected by major museums and sold by art dealers and galleries for prices that amaze the inventors of the processes and the pioneers of photo-copier marketing."² The exhibition clearly demonstrated the potential of new technologies as tools for the visual arts.

In 1982, the Centre Copie-Art was established in Montréal (Québec), Canada. The Centre has had significant impact on many levels, including international genre. Their replete blend of exhibitions, workshops, research, and catalogues, promoted the meeting of art and technology. Jacques Charbonneau, founder and managing director, described the Centre's research consequences: "Many artists arrived to a new perception of a great creative power which was unsuspected prior to the works made thanks to the Centre."³ The Centre's main goal is to integrate copy-art into the field of visual arts.⁴ The Centre Copie-Art closely cooperates with the Museum für Fotokopie in Mülheim, Germany and the Museo Internacional de Electrografia in Cuenca, Spain, as well as other copy-art centers worldwide.

Philippe Boissonnet described the Centre's ongoing 'Artist in Residence Program' as dealing with the expressive and plastic potentialities of the equipment, the unexperimented and free exploration.⁵ He cites intent to "create works which would be one-of-a-kind, which would be *original* as contrasted to *a copy*. The idea: try to outpace the limits which are intrinsic to the "copigraphic tool". The idea: to feature some of the plastic characteristics inherent to the medium."⁶

Monique Brunet-Weinmann noted the stages through which copy art has progressed, and observed that it has already reached the third stage of 'institutionalization'.⁷ Recognition of copy art has forged the "stage of developing a textual corpus of manifestos, vocabularies and historical summaries which are all discursive strategies to gain some leadership regarding copy art, copygraphy or electrography. This critical and theoretical production was entirely absent in the early eighties. It turns out that it is necessary to throw some light on a medium-tool that is spreading and networking at a fast pace in technological interartiality with other fields".⁸

In 1982, Louise Odes Neaderland founded the International Society of Copier Artists in New York City. Neaderland reports that the impetus for founding ISCA was the lack of opportunity to share and show copier art. The Society promotes and recognizes the use of the copier as a fine art tool. Neaderland continues to direct ISCA and publish the *ISCA Quarterly*, of which one issue a year is dedicated to bookworks. This annual 'box of books' is a favorite of both artists and collectors.

Artist members include printmakers, painters, photographers, graphic designers, book artists and computer graphists. More than twenty-five museum and institutional members worldwide subscribe to the *Quarterly*, a limited edition journal composed entirely of original art. ISCA also mounts traveling 'Iscagraphics' exhibitions, and maintains an extensive slide archive in New York.

NEW DIRECTIONS

In 1988 the Canon Corporation began marketing its Color Laser Copier, the CLC 1. This full color digital laser copier revolutionized the color copier market with digital scanning, a four color system, high resolution, and a wide range of manipulative capabilities. The Canon CLC was the first of many full color copiers to be introduced into this expanding market in the late eighties and early nineties. Sharp, Kodak, Panasonic, Ricoh and Savin, among others, quickly entered the market. Canon regularly introduced additional models offering increased capabilities. In 1991 Xerox introduced its digital color copier, the Xerox 5775. The related proliferation of full color digital printers, plotters, ink jets and similar devices also increased the hard copy alternatives available to visual artists.

The current generation of digital color copiers allows increased opportunity for new directions in imaging. The switch from light-lens to digital laser scanning vastly expanded copier capabilities. Digital technology offers greater user control, versatility in creative editing, and resolution. Laser scanners 'read' the image, capture the image digit-by-digit, and process the information by computer. As input, the copiers accept color negative or positive transparencies (photographed or hand-made), prints, or actual objects on the glass. In addition, some of the new color copiers have peripheral units which allow the copier to accept input from a variety of sources, including computer files in several file formats, video signals, and CD-ROM imagery. As output, the new machines print on a variety of surfaces, and in dimensions from standard writing paper to billboard size.

The distinction between digital (discrete) and analog (continuous) representation is significant. Digitally encoded and computer processable images are clearly distinguished from that of their photographic predecessor. Critical factors are differing amounts of information and differing characteristics of replication and manipulation in each format. Digital information is easy to manipulate, recombine, and transform.

William J. Mitchell discussed the quandary of an era when artists celebrate the potential of

digital image manipulation, and the press calls for a code of ethics to regulate manipulation. Mitchell noted that we may “...see the emergence of digital imaging as a welcome opportunity to expose the aporias in photography’s construction of the visual world, to deconstruct the very idea of photographic objectivity and closure, and to resist what has become an increasingly sclerotic pictorial tradition.”⁹ He also observed that “After more than a century and a half of photographic production, we also have to contend with the powerful ‘reality effect’ that the photographic image has by now constructed for itself.”¹⁰ Digital imaging has jolted this reference with its new conventions, new forms, new understandings.

The fidelity of the new copiers further diminishes the traditional differentiation in the arts between original and copy. Appropriation is quick, effortless, and can be seen as a potential concern or opportunity. Margot Lovejoy says that “In a sense copier technology represents the act of appropriation itself and stands out as a site for the Postmodern because it addresses directly questions having to do with the copy and the original, authorship and originality.”¹¹ She further notes that “The use of the copy ... is one of the new strategies of postmodern artists who are appropriating images and styles of the past to critique the conventions of art history itself -- to deconstruct or unmask the modernist notion that the “original” and “originality” rightfully dominate in assigning value to art.”¹²

Questions arise concerning the legitimacy of art done by machine. Some ask if the mark of the human hand isn’t necessary to art. Aren’t mechanical tools the preserve of the unskilled? Can a mechanical system produce works of art that are unique, personal, of aesthetic value? Is the copying process at odds with standards of creativity? Do copiers encourage illicit appropriation? One answer is to recognize the significance of the artist’s concept above the tool, material or process. The originality of the visual statement does not depend on the rarity of the image, the laboriousness or complexity of tool and process.

Repercussions to machine-aided art are certainly not new. With the proliferation of

photography in the mid-nineteenth century, the painter Paul Delaroche is traditionally acknowledged as pronouncing 'From this day painting is dead'. Baudelaire is also said to have offered his observation that 'Industry, by invading the territories of art, has become art's most mortal enemy'.

Photography and industry were not fatal to painting and art, but the visual arts were immutably affected. Artists embraced the new technologies and enlarged their selection of tools and media. Just as photography proved to be a means of expression, creation, innovation, and communication; electrostatic media, computers, and electronic imaging now offer new modes of visualization. Some artists naturally turn to the new tools and media available to them. New technologies applied to art forms offer potential for new constructs, both visual and conceptual. The **slide survey** constitutes the nucleus of this FISEA presentation, and exemplifies some of these new visual paradigms. These images, with statements by the artists, speak eloquently for themselves.

THE SURVEY

The slides present a visual survey of selected contemporary artists in North America and Europe who utilize color copiers in their work. This sampling provides a rich repertory by twenty-five diverse artists exhibiting new visual paradigms. Artists approach color copiers with diversity, spontaneity, a sense of discovery, exploitation of the technology, and elements of play. The opportunity for artist/machine interaction affords the potential for new combines of art and technology, and a fresh repertory of forms, methods, communications, and interpretations. Many artists attempt to demolish the confines which are intrinsic to the photocopier. Every tool offers particular potentials as well as limits to be considered.

Artists utilize color copiers with vast divergence. Some use the machine as a large camera, bringing a variety of objects, images, and materials to the copyboard glass. One artist may use a color copier to create a visual diary or self portrait, another may use it as one would employ a small

press. The artist may bring to the copier a prepared 'master' image, often a collage or synthesized work, and then utilize the copier to print the desired number in the edition. Lovejoy notes that "David Hockney calls the collection of office copiers in his studio *magic new presses*".¹³ Some artists print a specific edition, signing and numbering the edition in the tradition of the printmaker. Others tap the 'press' as needed, often varying the prints and producing unique works rather than editions. A considerable number of artists use color copiers as a production tool for limited edition art books.

Other artists use color copier prints as intermediary images. One example is using the copier as a device to produce elements for the construction of a final collage or composition. The artists then fabricate one-of-a-kind works with color copy elements. An interesting paradox exists in this use of a machine engineered for duplication, employed to create unique works. Diverse manipulations during printing, or of the print afterwards, also result in unique images.

Another example of the color copier as intermediary tool are works which are transformed by heat or solvent transfers to other surfaces. This often produces a softening and/or transformation of the image which enhances the unique quality of these works.

This presenter's experience with color copiers began with the 3M Color-in-Color System I, later the Xerox 6500, and was reactivated by the Canon CLC 1. My work explores perceptual relationships, especially figure and ground interplays. With a photography background, I am challenged by both the meanings my images communicate, and the perceptual aspects of those images. Digital tools allow me to release my photoimages from their conventional frameworks and spatial cues, often challenging traditional concepts of shape and space. Multiple layers of images are combined both physically (via collage) and electronically. Figure/ground interplays allow new interconnections and relationships, creating various interpretations and readings of the imagery. They play among visual and perceptual codes, assist the perceptual plays and ploys, and attempt to expand ways of both objective and subjective knowing.

Many of the artists in the slide survey have had considerable influence in the use of color

copiers as a tool/medium in the visual arts. There continues to develop a syntax of copier imaging. The images surveyed in this presentation present a look at current contexts and aesthetic organizations, and a notion of future directions.

References:

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- 5 Philippe Boissonnet, *Copies Non Conformes*, op cit, pp.19-20
- 6 Ibid, p.20
- 7 Monique Brunet-Weinmann, *Copies Non Conformes*, op cit, p.26
- 8 Ibid, p.27
- 9 William J. Mitchell, *The Reconfigured Eye: Visual Truth in the Post-Photographic Era*, The MIT Press, Cambridge, MA, 1992, p. 8
- 10 Ibid, p.27
- 11 Margot Lovejoy, *Postmodern Currents: Art and Artists in the Age of Electronic Media*, Prentice-Hall, Englewood Cliffs, NJ, 1992, p.110
- 12 Ibid, p. 111
- 13 Ibid, p. 115