Through the Looking Glass

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THROUGH THE LOOKING GLASS

by

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Submitted in partial fulfillment of the requirement for the degree
MASTER OF FINE ARTS

MFA PHOTOGRAPHY PROGRAM
COLLEGE OF GRAPHIC ARTS AND PHOTOGRAPHY
SCHOOL OF PHOTOGRAPHIC ARTS AND SCIENCES
ROCHESTER INSTITUTE OF TECHNOLOGY
ROCHESTER, NEW YORK

January 1982

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Dedication

for Lisbeth, always
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My initial involvement with the machine image began in 1974 when, in an attempt to make some quick 'work copies' of a black and white series of photographs; I made some ten cent copies of them on a Xerox 3200 office copier. Although inconsistent in their quality, there was a 'feeling' to the copies that enhanced the intent of the images far more than my conventional silver prints were able to.

I had been engaged in searching for a key ingredient in my work that would allow me to achieve a balance between the photographic presence within the emulsion of a print and the texture and surfaces of something other than silver based paper. Subsequent non-silver processes presented this marriage, but not to my complete satisfaction. The copy images did set up this dialogue between process and material, between photographic aspects and the hand-crafted elements. I found this to be essential to my 'being' in photography.

Since the copy machine afforded me no direct control, I went back to the darkroom to gain that control by printing for the machine. From the original set of copy images I could make out a certain degree of quality and consistency in some. I found these images to be of a related photographic print quality and therefore re-printed the entire series accordingly. What followed was an early learning process concerning the copy machine. Unlike the usual dependence of a developer, copy machines are highly sensitive and unpredictable commodities. Among other variables, the machine was sensitive to atmospheric conditions and would produce varied results from one day to the next, even from one hour to the next, according to the prevailing weather. Thus my darkroom controlled photo-
graphs still produced too many variations in the quality of the copies. My alternative was to reprint the originals once more, this time making five prints of each negative; a good quality print, two prints of successive lighter steps, and, using the original print as a base, two prints of successive darker steps.

With this abundance of 'master' images I was able to gain the control over the machine that I felt was so vital. By altering the originals in the darkroom I produced a series of black and white xerographic images that were consistent in quality and that, in my mind, de-emphasized technique while emphasizing the form and content I had hoped for.

It was a few months later that I became aware of the existence of a copy machine that was capable of producing images in full color. I read of this wonder in a magazine advertisement for a New York copy center and, for a period of time, I 'worked' with this machine through the mails. It was a slow and sometimes frustrating experience, complicated by the fact that I had no control over what the results would be. Yet, with each batch of color xerographs I received in the mail came a greater realization that the ultimate result of this process could enable me to take my visuals beyond the here and now of conventional prints and open the way for exploring new futures for my imagery with a process that, from start to finish, seemed very much to fit and please my psyche.

With the valuable assistance of Professor Charles Arnold of RIT, I was introduced to Mr. Robert Gundlach of Xerox Corporation who in turn
introduced me to John Klock of the Xerox Graphic Arts Department. At that time, the Graphics Department had one of the only color copiers in the Rochester area and I was fortunate enough to be given permission to work with it. John Klock's expertise and experimental nature proved invaluable during the following year. Not only did he answer my endless stream of questions, he allowed me as much creative and exploratory freedom with the machine as could be expected.

I look upon this time as a positive experience. It was not uncommon to spend hours at a time at the machine, coming away with hundreds of copies, each one a learning process in itself. I experimented with black and white images of varying densities, color images, collages, three dimensional objects and a multitude of combinations therein. I emptied the contents of my pockets and wallet, laid my face on the platen, stared into it....everything but actually sitting on the machine. I twisted and turned the color control keys, adding and subtracting any number of color combinations. I put bond paper, glossy stock, vellum, rice, transparency stock and transfer stock through the roller mechanisms. I made images with the heat of the machine on and with it off. I ran images and re-submitted them to the machine for print overs. I shifted the original during the exposure passes and I caused at least four fires in the machine as a result of exotic paper stock either jamming the mechanisms and igniting or simply by being too flimsy and delicate for the heat of the process.

Through all of this experimentation, I compiled a series of written and visual notes on what I felt was the most effective type of original to
use, the method of copying, the type of stock, etc. My interest was to utilize the machine's characteristics in a way that would retain an element of photographic quality that would be enhanced or transformed by this process of selection. I wished to achieve a sensitivity for the copier medium and was engaged in a commitment to extending the range of the machine's possibilities much like the educational and growing commitment of the instructor to student relationship; teaching it what it could do and being taught by it what I could do.
A move to Colorado began a lengthy period of no access to a color machine. At the very best I was eventually able to use a machine in Denver but the involvement was short lived for I was not allowed to exercise any control over the outcome of the visuals. It was strictly a 'drop-it-off-pick-it-up' situation with the coup de grace of having to pay full price for each and every rejected image.

During this period I thought considerably about my involvement with this method of image making. The physical distance and the passage of time permitted me to reflect upon the messages of the past. I came to the realization that my desire to manipulate was not a rejection of what I saw but rather a positive effort to discover new and more personal realities. I continued a long time habit of collecting visual stimuli that interested me. The walls of my workspace soon became cluttered with this collection as did the overflowing boxes that occupied most of my desk and floor space. It was chaotic organization. Chaotic in that the material was everywhere; organized in that I knew what was there. Any higher degree of organization would have been detrimental to the function of the collection - to inspire. I began to re-work some of my past images in a manner which I felt brought them closer to me and my intent.

In late 1979 I made contact with a machine operator who was sympathetic to my wishes and allowed me a workable degree of creative control. The long hiatus away from the process and the resulting soul searching had been a blessing in disguise. Through it, I had doubts and questions.
There is always some degree of doubt and question, but I recognized that this state of questioning could be healthy for one's own growth. I found that I had faith in the process and my reasoning behind its utilization which in turn raised more intense and precise questions. I did not have a complete understanding of what was happening, only that it was happening, yet my belief in what I was doing (or wanted to do) was strong enough to keep looking into myself in a critical manner that involved the mind as well as the eye. Inspiration is so very unpredictable. It seems to rise up from the depths of the subconscious at odd moments and most certainly is something that cannot be forced. This period of re-assessing and re-thinking my ideals and desires manifested itself in a re-kindling of a basic artistic belief that all artists, regardless of medium, have an aesthetic right to explore and utilize any facet of image making within their means to visualize their subjective world of perception through the objective world of technique. For me this meant a return to the freedom of earlier days when image making was an adventure filled with frustrations, difficulties and emotions, but always satisfying and enjoyable.

In retrospect, I came to recognize that this freedom had not totally left my work but was inhibited, for some time, by a number of factors. Formal education can, I believe, have that type of an effect on one particularly while living that experience as a struggling student. This is in no way a condemnation of education (without it where would many of us be), but I am of the mind that most education is best after
the fact, when subtle realizations take hold, which is directly related to the maturing process and a breaking away from student academics. Yet another factor can be found in the time and energies one must expend to 'make it' after the educational process. In my case it was a lengthy involvement of teaching myself how to teach and to then 'master' that technique so that it could be applied in a manner that would be beneficial and rewarding to my students as well as myself. At that point in time when these factors are no longer a consideration, a degree of self-worth and assurance emerges and with it, the potential of going about your work and your life in a manner best suited for yourself. This, I suppose, is the underlying point of my work. It is created at an intuitive level from subjective, spiritual and emotional values.

Although most of my original workings with the xerographic process of image making was limited to manipulated and controlled copies of photographic prints, I became more interested and involved in how the copy image lent itself to the creation of the collage image, a form of imagery I have long enjoyed. Early attempts at collage imagery through the xerographic process did not fully live up to the potential I had envisioned. This uncertainty and frustration led me to explore further until, through some modifications, I arrived at a then acceptable format. One of my earlier series, "Eclipse," was reworked. Originally these images were created and copied onto a bond stock that lent them a sense of unity and texture, but a limited degree of transparency, which was to be the missing quality, and not
collage was the direction to take. It was the means of creating the
type of visuals I had envisioned; large in finalization and from a
collection of pre-existant elements, some self-generated, others found.
My desire was to unite these elements, making links between them to
end up with gradually perceptible conversions of the commonplace re-
alities into occasions for enjoyment and/or contemplation. Although
the reasoning process had made the solution available, the remaining
problem was how to accomplish it. Experimentation with transfer
images did not prove to be the solution. Many of the transfer images
cracked upon transfer and those that did transfer well to the Arches
paper displayed an unsatisfactory muting of the color as well as a
loss of the xerox texture, a quality I particularly enjoy. I dealt
with the idea of cut-out elements as I dealt with the idea of reduc-
ing the size of the pieces for some time. Conventional restrictions
were stifling and a decision had to be made. Of the two considerations,
size was for me the most important in this image-making process and I
do consider myself an image-maker above all; an image-maker who utilizes
primarily the photographically derived visual as a means of attaining
his imagery.

This most current thought process and a collaboration with a printmaker
to learn aspects of silk screening and embossing which were to become
integral and perimeter elements of the works led to the current 'solution'
and the completion, at this point, of the pieces.
CONCLUSION
The machine copier is used, I believe, as a tool for both the spectator and the artist. It, in itself, does not produce art but is used to manipulate thought and idea. Its use extends the capabilities of the image maker by forcing him to think in new ways as these pieces have affected me. It forces an analysis of the concept so the limitations of the machine can be overcome and, in doing so, the artist is undertaking a more rigorous process of thought than he is perhaps accustomed to.

The finished pieces, multiple representations, are ordered and connected by being alike yet each contains certain modifications in important component elements. Each individual image frees the eye to stress a portion of the whole study. When viewed together, they present a more detailed summary and require more involved looking. The images are made in an undeniably subjective way. By the conscious choice of format, elements, color, etc., (all tools of emotion), and the intent of the work in which these elements are used, I am blending the variables of interpretation into an emotional whole. The viewer is meant to go beyond the subject and involve himself in these components and their qualities that, as a whole, express a personal reaction. To this end, we are all alike, so we can understand each other; and we are all different, so we have things to tell each other. The sameness makes communication possible and the differences makes it worthwhile.
What is presented then is a number of related series of works that have gone through a progression of transformations, visually and idealistically, to overcome, to varying degrees of success, inherent or intellectual problems. They are, as art itself is, the latest in a continuous and connected series, a progression of a concept. As some of these images have been with me for some time and have undergone the changes described herein, I would not care to state emphatically that they are an end unto themselves. The risks and uncertainties of image making in bringing to fruition the conceptualized thought in an organized perception is what art is all about. It is a continuous searching, evaluating, assessing, modifying and re-working process that, in the end, given the fact that we do go on, may very well be an art in itself.
INDEX OF ILLUSTRATIVE MATERIAL

Appendix  "A GUIDE FOR APPLYING COLOR TO BUSINESS COMMUNICATION"
    a Xerox Corporation publication

Appendix  Supplementary Images I
    six color variations from same original

Appendix  Supplementary Images II
    six color images on varieties of stock

Appendix  Thesis Proposal Images
    Four color images used as visual support for thesis proposal
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APPENDIX
Xeros, in Greek, translates to 'dry,' and Graphein is translated as 'to write.' The xerox process, or electrophotography, employs photoconductive substances that decrease in electrical resistance when light falls upon them. The process utilizes the phenomenon of electrostatic force - the same force that causes a spark to jump from your fingers to an object that you touch after walking across a carpet.

Photoconductive materials which conduct electricity upon exposure to light but behave as insulators in the dark, are applied in layers to a conducting plate or drum. That surface is electrostatically charged, in the dark, and light pattern is projected unto it. In the illuminated areas of the design, the electric charge is dissipated, whereas the unilluminated areas retain a residual charge. That charge is then made visible by dusting the plate with a powder which is transferred to it by an electrical charge passing from the back. This charge causes the powder to adhere while heat or vapor is applied to melt the thermoplastic powder particles, and makes the powder image permanently adhere to the paper.

The Xerox 6500 color copier employs three process colors - cyan, magenta and yellow - which are applied to a continuous drum of aluminum. As the image is exposed, the appropriate filter determines the amount of each color in each area. These quantities are then transferred to the surface of the paper from the aluminum drum.
The Xerox 6500 color copier was introduced by Xerox Corporation as a business machine. Its prime appeal was that the resulting copy would contain color which, according to Xerox, "has a function and value beyond aesthetic considerations." Their campaign push stressed the value of business color as having a positive effect on "human performance and productivity." Color would get more attention. Color helps the reader find the more important information faster. Color can highlight the important information in business communications that stand together like rows of dominoes.

Following is Xerox's guide for applying color to business communications.
A Guide for Applying Color to Business Communications
Introduction

This Guide has been designed to help you apply color functionally to text, tables and graphics ... and to help ensure that your important communications will be read, understood and acted upon.

Properly used color can be very effective to:

- Gain immediate attention
- Highlight important data
- Clarify complex information
- Emphasize critical facts
- Speed information retrieval
- Reduce possibility of errors and misinterpretation

This Guide presents some basic ideas about color—what it has to say and how you can use it.

This material is based on recent independent studies and actual customer experiences with the Xerox color copier.

Many of the applications shown in a given section can also be applied to other sections.

The functional uses of color xerography are limited only by your imagination and creativity.

Section | Page
--- | ---
Basic Principles for the Use of Color | 1
For Best Color Copying Results | 2
Applying Color to Text | 3
Applying Color to Tables | 5
Applying Color to Graphics | 7
Using Color Transparencies | 10
Taking Full Advantage of the Versatility of your Xerox Color Copier | 13
Improving Reproduction of Photographs | 15
Tips on Improving Graphic Design | 16
- Use color for a specific purpose—not for color's sake.
- Be sparing with the number of colors used—each color must improve the communications value of the document.
- Intensity of color conveys meaning: Solid areas are more important than patterned areas; Continuous lines are more important than broken lines;

Heavy lettering and numbers are more important than light.
- The same colors should have consistent meaning—whether used as solid or patterned areas, continuous or broken lines or with any size of lettering and numbers.
- Colors should provide sufficient contrast to clearly define comparisons and relationships (see below:)

---

**Basic Principles for the Use of Color**

- For rapid response, priority information can be quickly and informally written, circled, boxed, underlined or overlaid with color.

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**SELECTING RELATING COLORS TO DISTINGUISH RELATIONSHIPS**

**Non-Relating Colors**

[Images of non-relating color combinations]

**Relating Colors**

[Images of relating color combinations]
Prepare originals using materials supplied in the Xerox Color Creation Kit:

- Color Graphic Films
- Color Tapes
- Color Typing Films
- Color Fine Line Pens
- Pattern Film Strip Sheets
- Color Creation Paper
- Continuous Tone Pictorial Screen
  (For use with photographs)
- Heading Correction Paper
- Adhesive-backed Dot Screen Film
- Dry Transfer Lettering

- Graphic Art Tools, eg. Templates, Grids, Ruler and Cutting Device

Additional items are available to supplement the Xerox Color Creation Kit:

- Xerox 6500 Color Transparencies
- Projection Frames
- Color Highlighter Pens (Wide Nib Markers)
- Bar Chart Makers
- Pie Chart Makers
- Pressure Sensitive Address Labels

These items may be ordered through your Xerox Color Applications Analyst or other Xerox Representative.

To insure the best results, each Kit and supplemental item has been carefully selected and tested for optimum color reproduction on your Xerox color copier.

For your convenience, a variety of Color Creation materials which may be used are indicated with many of the applications shown in this Guide.
HIGHLIGHT
PRIORITY INFORMATION
WITH COLOR

- Color Graphic Film
- Color Fine Line Pen
- Color Highlighter Pen
- Color Typing Film
- Color Tape

VISUALLY IDENTIFY
TEXT DRAFTS
WITH COLOR

Note: Seven different colors can be produced from a black-and-white original document on the Xerox Color Copier. (See Page 13, "Copying A Black-and-White Original.")
INDICATE CHANGES WITH COLOR TO CONSERVE REVIEW TIME

- Color Typing Film (for 2nd and 3rd draft illustrations)

USE INFORMAL COLOR FOR QUICK RESPONSE OR LAST-MINUTE CHANGES

- Color Highlighter Pen
- Color Fine Line Pen
ACCENTUATE CRITICAL VARIANCES IN EXCEPTION REPORTS WITH COLOR

- Color Fine Line Pen
- Color Graphic Film
- Color Highlighter Pen

ACHIEVE SELECTIVE HIGHLIGHTING WITH COLOR

- Color Graphic Film

Previous Method

Xerox Method

Xerox Color Copies For Distribution

Black-and-White Original

Original With Color Highlighting Added

Xerox Color Copy (Magenta & Cyan Buttons)

Xerox Color Copy (Cyan & Yellow Buttons)
SPEED RETRIEVAL OF RELATED INFORMATION IN SUPPORTING TEXT WITH COLOR

- Color Fine Line Pen
- Color Graphic Film
- Color Highlighter Pen

Original With Color Highlighting

Related Original With Same Color Highlighting

ACHIEVE SELECTIVE DELETION AND PRESERVE CONFIDENTIALITY WITH COLOR

- Color Graphic Film

Black-and-White Original

Original With Color Highlighting Added

Xerox Color Copy (Magenta Button)

Xerox Color Copy (Cyan Button)

OR
Uncover Facts Not Apparent in Text or Tables
Emphasize and Clarify Facts and Relationships
Compare Two or More Groups of Data
Add Variety to Make Information More Interesting to Look at and Easier to Understand

Applying Color To Graphics

Note: You should be familiar with the principal types of graphics so that you can choose the one best suited to your needs. Following are illustrations of basic graphic forms.

COLOR CAN BE INTRODUCED INTO GRAPHICS AS:

AREAS
- Color Graphic Film
- Adhesive-backed Dot Screen Film
- Dry Transfer Lettering

LINES
- Color Tape
- Pattern Film Strip Sheet
- Color Fine Line Pen
- Color Highlighter Pen
- Dry Transfer Lettering

OR IN ANY COMBINATION WITH TEXT AND TABLES.

EMPHASIZE CRITICAL VARIANCES GRAPHICALLY WITH COLOR
- Color Fine Line Pen
- Color Tape
- Color Highlighter Pen
- Color Typing Film

Original With Color Highlighting
COLOR-KEY REPORT
COVERS FOR QUICK IDENTIFICATION
- Color Graphic Film
- Color Highlighter Pen

EXTEND COMMUNICATIONS THROUGH USE OF PATTERNS AND SHADINGS IN COLOR
UPDATE PERIODIC REPORTS QUICKLY & ECONOMICALLY USING SAME ORIGINAL IN COLOR

- Color Tape
- Color Fine Line Pen
- Color Highlighter Pen

INTERPRETATION OF COMPUTER-GENERATED REPORTS CAN BE RAPID, INFORMAL AND EFFECTIVE WITH COLOR

- Color Fine Line Pen
- Color Highlighter Pen
Using Color Transparencies

- Add impact and dimension to presentations using overhead projections.
- Improve retention of information by distributing color copies at the end of the presentation.
- Provide flexibility to creative design.
- Enhance professionalism to presentations.
- Insure maximum audience attention during presentations.

ADD IMPACT TO PRESENTATIONS WITH TRANSPARENCIES IN COLOR

- Color Graphic Film
- Projection Frame

Note: Xerox color copies can also be produced for distribution from the same mechanical art or originals used to prepare 35mm slides.

Original

Xerox Color Transparency

Xerox Color Copies of Original to Distribute at The End of The Meeting

ADD DIMENSION OR SHOW CHANGE WITH TWO TRANSPARENCIES IN COLOR

- Color Graphic Film
- Projection Frame

Note: More than one Xerox color transparency can be overlaid at the same time to illustrate color-coded segments of complex diagrams, schematics, maps and other graphics.

Underlay (Xerox Color Transparency)

Overlay (Xerox Color Transparency)

Final Projection
ATTRACT ATTENTION OR CREATE URGENCY WITH COLOR

- Xerox 6500 Transparency
- Dry Transfer Lettering (outline styles)

Note: A variety of styles and sizes of Dry Transfer Lettering are commercially available.

ADD VARIABLE INFORMATION TO REPORTS WITH COLOR TRANSPARENCIES

Note: More than one Xerox color transparency can be overlaid at the same time to illustrate color-coded segments of complex diagrams, schematics, maps and other graphics.
GUIDE TO USING XEROX COLOR TRANSPARENCIES FOR OVERHEAD PRESENTATIONS

Preparation
☐ Convey one idea per page
☐ Use variety in subject matter
☐ Know your charts beforehand
☐ Put notes on transparency frames
☐ Practice using charts
☐ Set up the room so that nobody is behind charts
☐ Be sure there is sufficient projection light

Note: Cyan and yellow are not recommended for use on a white or clear background as they are too "soft" to project well. However, these colors can be effectively used with a border in a contrasting color (see page 1).

Presentation
☐ Keep charts covered
☐ Show one at a time
☐ Vary introduction to each chart
☐ Don't read from charts
☐ Make sure charts can be seen and read
☐ Explain what each chart shows and why
☐ Have audience participate
☐ Use pointer to identify details
☐ Summarize your presentation
☐ Distribute Xerox Color copies at end of presentation to enhance professionalism and improve retention of information
Taking Full Advantage of the Versatility of your Xerox Color Copier

USES FULL COLOR SELECTION WHEN:
- Copying a full color original
- Black is one of the colors on the original
- Copying more than two basic colors
- Copying more than one mixed color
- Cancelling another color selection

COLORS REPRODUCED BEST BY THE XEROX COLOR COPIER

Basic Colors
- Magenta
- Cyan
- Yellow

Mixed Colors
- Red
- Green
- Blue
- Black

COPYING A BLACK-AND-WHITE ORIGINAL

In a Basic Color, Press a Single Color Button
- Magenta
- Cyan
- Yellow

In a Mixed Color, Press Two Color Buttons

Original Xerox Color Copy

PRODUCING ANIMATION OR SPECIAL EFFECTS

Reposition the original between each of the three cycles in the full color mode.

Use FULL COLOR BUTTON for maximum effect.

Original Xerox Color Copy
COPYING COLORED ORIGINALS WHICH CONTAIN BLACK

Copy out time is faster by pressing two basic color buttons (black on the original will copy as the mixed color)

Xerox Color Copy (Full Color Button)

Xerox Color Copy (Cyan & Yellow Buttons)

Colors on the Original

Press Two Buttons

For all other color combinations use Full Color Button

CREATING SELECTIVE HIGHLIGHTING OF A PORTION OF A BLACK-AND-WHITE ORIGINAL

Mask or block out the area to be highlighted. Press Full Color Button.

Remove masking sheet immediately after first cycle and before second cycle, to obtain green highlighting.

Remove masking sheet immediately after second cycle and before third (and final) cycle to obtain cyan highlighting.

Note: To insure perfect color-copy registration, tape original lightly to platen surface. This prevents movement of the original as mask is removed.

Black-and-White Original

Original With White Sheet of Paper

Masking Sheet Removed After First Cycle

Masking Sheet Removed After Second Cycle
Improving Reproduction Of Photographs

To increase the color copy quality of originals containing photographs and pictorial subjects, overlay the Continuous Tone Pictorial Screen over the original before copying.

For optimum results, use the screen in conjunction with the Color Adjustment Controls on the console of your Xerox 6500 color copier.

See your Xerox color consultant for instructions.

Photograph copied without continuous tone pictorial screen.
(Xerox 6500 copy)

Same photograph reproduced with continuous tone pictorial screen.
(Xerox 6500 copy)
Tips on Improving Graphic Design

Figures on graph elements are easier to understand than grids.

Labels identifying graph elements are easier to read than keys.

Grouped data from a common base are better than segmented data.

Bar charts are easier to understand than curve charts (or line graphs).

Visibility of graphics using yellow is improved when bordered or framed in a contrasting color.
For more information about how color xerography can improve your business communications, contact your nearest Xerox Sales Office.

Highly-trained color consultants are available to assist your Xerox Sales Representative in identifying specific color applications opportunities.
In response to an article on the color Xerox machine that appeared in the March, 1976 edition of POPULAR PHOTOGRAPHY, I wrote and submitted the following text.
Norman Rothschild's recent article, "Would you believe - 20 cent color copies in 20 seconds?" (Popular Photography, March 1976) spoke in depth on the slide copying capabilities of the Xerox 6500 Color Copier. While it is a fascinating process and does, as he points out, offer many exciting possibilities, I wish to direct your attention to the creative uses of the 6500 when used to copy direct material upon the platen without the use of a line screen.

Although designed to make its best color reproductions from originals of solid color, when a continuous tone color or black and white original is used, the Xerox 6500 produces what the company's technical brochures term 'a representative color copy.' With some control over such variables as color balance, type of copy paper, elimination of the line screen (for added contrast) and a thought out choice of original material, the results of this 'representative color' can be equally fascinating.

The machine generates a seven color range from a magenta, cyan and yellow mode, or any combination therein, including a full color mode for maximum effect. The color balance and density of the reproduced colors can be altered by means of a dial control color balance ( one for each of the three basic colors ) that functions as a subtractive system and is located within the machine.
Since the process reproduces permanent images on ordinary, unsensitized paper, the copy paper can be changed from the normal Xerox stock to a number of other materials. The machine accepts papers of 20 to 24 lb. substance, in sizes from 8x10 to 81/2x14. Even normal copy paper is used the heat fused toners build up to produce a contrasty image that, when viewed, has a curious relief effect. Substituting bond paper tends to absorb the toners deeper into the stock, decreasing the relief effect and creating a slightly less contrasty and more subtle print. The reproduction of images on transparency material (which calls for the heat of the machine to be off) presents another method of imagery as an end in itself or when viewed by projection. I have tried vellum, glossy stock, tracing paper and rice paper and have found varying results from each. For example, the tones fuse deeply into the absorbent fibers of rice paper, producing a subtle image through which the textural qualities of the paper becomes an integrated visual element. It is important to note here that the substitution of the more fragile stocks requires the heat of the machine to be off as in transparency reproductions.

Another point mentioned was the use of a thought out original to work with. Repeated use has led me to conclude that an effective use of the machine in color copying continuous tone black and white originals can be achieved by using an image of large size (within the machines limitations), fairly grainy in its structure and containing little or no areas of solid black. This type original, when copied in full color, will
reproduce a blue-green image with an obvious differentiation between the two tones dependent on the tonality of the original. The darker the tonality of the original, the bluer the copy. As the original's tonality becomes lighter, the copy image shifts from the blue toward the green. Using a more photographically zone-printed black and white original will yield a darker, more dominantly blue image, with less color shift and subtlety. The copying of delicate hand colored images is difficult as the areas of subtle color tend to wash out, but a more saturated, bright hand colored original will reproduce exceptionally well. I have found that bold colored magic markers on my black and white originals has produced the best and most interesting effects.

When working with color photographs, the break up of large areas of tone and color and a degeneration of the original lend a 'painterly' effect to the image while retaining a definite photographic sense. Unless a particular visual effect is desired, stay away from trying to get good reproductions of skin tones. Without a line screen, skin tones reproduce as mottled and dirty.

The visual possibilities of the Xerox 6500 Color Copier are endless; moving the original between scans, placing three-dimensional objects on the platen in conjunction with photographic images or on their own, combining color and black and white images, photo-montage, direct hand-coloring on the Xerox print, etc. You are limited only by your imagination.
The following image variations were produced from the same black and white original. They visualize the variety of color combinations that are possible by careful selection of the color mode keys.
TITLE: Through the looking glass

PURPOSE: To transform the "real world" into a personal pictorial kind of fantasy utilizing the Xerographic image and its particular characteristics as a symbolic equivalent.

SCOPE: Photography was probably the last art form to consider fantasy to be a perfectly acceptable form of expression. (Because they looked so convincingly real photographs have long been regarded as factual, straightforward and faithful to reality.) In recent years photography has been allowed to grow and stretch; it has become a viable open-ended process. (To many, conventional photography has become only a starting point in the creative process and not the entire process.) I ascribe deeply to this and, in doing so, manipulation of the photographic image is to me a positive effort to disclose new and more personal realities. As stated by W.Eugene Smith:

"Up to and including the time of exposure the photographer is working in an undeniably subjective way. By his choice of technical approach (a tool of emotion) and the combined choice of subject matter to be utilized, he is blending the variables of interpretation into an emotional whole."

My personal involement in the Xerographic image has been one of growth and stretching and, as most growth and stretching, it has involved pain. More significant though is the joy that I have experienced - a joy as it relates to making visual discoveries. I have found the qualities of the Xerox image, when utilized effectively as an entity and, in turn, in conjunction with proper imagery (both technically and aesthetically) to be pleasing and interesting. (In dealing with this process, a strong emphasis must be placed on consideration of idea or subject as related to or restricted by the machine.) My concern then is to bring into unison these mental and physical elements in such a manner as to take full advantage of them in conveying impressions rather than reflections of the visible world. (These impressions are intended to achieve a vividness and effectiveness by evoking subjective and sensory involement. The viewer is meant to go beyond the original subject and involve himself in textures, shapes and participation that express a personal reaction on individual terms.

PROCEDURE: The responsibility to continue to search, to continue to look for any type of avenue, any type of leverage for extracting some sensitivity is a major concern. Therefore, the work will be unrestricted as to original material employed, though the final images will be Xerographic, from the Xerox 6500 Color Copier.
Any form of final presentation that enhances the intent and character of the work is valid as an element of the creative process.

Exhibition of the work may be scheduled in the MFA Gallery in the Spring of 1975. Since an artist, creating in any medium, produces at an intuitive level, the physical sizes of the images and their total number cannot be pre-determined. It will be a substantial body of work.

A gathering of information pertinent to the Thesis Report is already underway and will be kept up during the work in order to record changes, discoveries and problems encountered. A final Thesis Report will be submitted in accordance with MFA Committee requirements.

THESIS BOARD:

CHIEF ADVISOR: Charles A. Arnold, Jr.
ASSOCIATE ADVISORS: Tom Muir Wilson
                      Johannes W. Zaandvoort
                      John Klock
SUPPLEMENTARY IMAGES

The following images represent the machines ability to copy on paper stocks other than bond and the visual effects of each.
Purpose: To transform the "real world" (a cosmos of experience) into a personal pictorial kind of fantasy utilizing the xerographic image as a symbolic equivalent.

Through the Looking Glass Scope: Photography is one of the recent art forms to consider. Because they look so convincingly real, photographs have long been regarded as factual. More recently, through growth and stretching, photography has become such a viable open-ended process. To many, the creative process and not the only starting point...
13' x 10' x 26'

Quilt - 20" x 26"

Larger - 14" figure on stand table

Rounded
PROCEDURE:
The body of work will be unrestricted as to original material used, though the final images will be Xerographic, from such machines as the Xerox 6500 color copier and the Xerox 3600 black and white copier. Any form of final presentation that enhances my original intent of transforming the "real world" into a personal pictorial kind of fantasy and the character of the image is valid as an element of the creative process.

Exhibition is scheduled in the MFA Gallery

Since an artist, creating in any medium, produces at an intuitive-rate level, the physical sizes of the images and their total number cannot be pre-determined. It will be a substantial body of work.

Exhibition of the work is scheduled in the MFA Gallery. A gathering of information pertinent to the Thesis Report is already underway and will be kept up during the work in order to record changes, discoveries and problems encountered. A final Thesis Report will be submitted in accordance with MFA committee requirements.
Photography is one of the more recent art forms to consider fantasy to be a perfectly acceptable form of expression. Because they look so convincingly real, photographs have long been regarded as factual, straightforward and faithful to reality. More recently, through growth and stretching, photography has become a viable open-ended process. To many, conventional photography has become only a starting point in the creative process and not the entire process.

The responsibility to continue to search, to continue to look for any type of avenue, any type of leverage for extracting sensitivity is a major concern. I ascribe deeply to this and, in doing so, manipulation of the photographic image is to me a positive effort to disclose new and more personal realities.

My involvement with the Xerographic image has been one of growth and stretching and, as most growth and stretching, it has involved pain. More significantly though is the joy that I have experienced - a joy as it relates to making visual discoveries. The high-speed color-copying machine process has opened up possibilities for visual exploration that far transcend its basic purpose as a business machine. I could exercise direct, conscious control or play with random, accidental combinations. Density, contrast and color balance could be controlled. Colors and textures became quite different from any conventional silver image. I found the "imperfections" of the process (high contrast, color shift, break-up of large areas of tone, ghosting) could be taken advantage of and utilized effectively as attributes. Consequently, in dealing with this process, a strong emphasis must be placed on consideration of idea or subject as related to or restricted by the machine. It's qualities then, when utilized effectively as an entity and, in turn, in conjunction with related imagery of aesthetic as well as technical compatibility, are a source of concern, fascination and pleasure to me.

My goal then is to bring into unison these cognitive and material elements in such a manner as to take advantage of them in conveying impressions rather than reflections of the "real world." These impressions are intended to achieve an effectiveness by evoking subjective and sensory involvement. The viewer is meant to go beyond the original subject and involve himself in visual phenomena that express a personal reaction on individual terms.
PROCEDURE:
The body of the work will be unrestricted as to original material used, though the final images will be Xerographic, from such machines as the Xerox 6500 color copier and the 3600 black and white copier. Any form of final presentation that enhances my original intent of transforming the "real world" into a pictorial kind of fantasy, and the character of the image, is valid as an element of the creative process. Since an artist, creating in any medium, produces at an intuitive level, the physical sizes of the images and their total number cannot be predetermined. It will be a substantial body of work.

Exhibition of the work will be in the MFA Gallery. A gathering of information pertinent to the Thesis Report is already underway and will be kept up during the work to record any changes, discoveries and problems encountered. A final Thesis Report will be submitted in accordance with MFA committee requirements.

Photography has been one of a very personal, at times, private nature. I respond highly to emotion, whether that emotion stems from a visual appearance, a dream, a thought — anything closely related to this is my response to person and place close to me. I find that once the initial sympathy takes place to the "process" start, fantasy takes hold. I change everyday things into visual fantasy as I relate
to them. A spoken word or None

... have evolved into

... intuitively lead me to

... making lines to try and hold that

... I have interpreted these fantasies

... and me again in my work.

... and that reality goes...

With the resulting images - fictionalizing my thoughts and what happened, taking me further into a world of fantasy so personal that I myself cannot verbalize a term
d for it. Enjoy fantasy and perhaps

... feel all that is around me is nothing but a fantasy. In any case,

... the image I have found

... additional realities about my life -

... my being, my emotions, my life is I

... live in the "real world."
"My photography has been one of a very personal, at times, private nature. I respond highly to emotion and imagination, whether they stem from a visual experience, a dream, a thought—anything. Closely related to this is my response to persons and places close to me. I find that once the initial impetus takes place, and the "processes" start, fantasy takes hold. I change everyday images into visual fantasies as I relate to them. A spoken word or minor occurrence can, and has, evolved into a wildly fantastasmagorical vision that ultimately leads me to making images to try and hold that fantasy. I have interpreted these fantasies over and over again in my work with the resulting images visually portraying my thoughts or, as has happened, taking me further into a world of fantasy so personal that I myself cannot verbalize on them. I enjoy fantasy and perhaps subconsciously feel all that is around me is nothing but a fantasy. In any case, through these images I have found additional realities about my being, my emotions, my life as I live it in the "real world."
Photography is one of the more recent art forms to consider fantasy to be a perfectly acceptable form of expression. Because they look so convincingly real, photographs have long been regarded as factual, straightforward and faithful to reality. More recently, through growth and stretching, photography has become a viable open-ended process. Many, conventional photography has become only a starting point in the creative process and not the entire process. A responsibility to continue to search, to continue to look for any type of avenue, any type of leverage for extracting sensitivity is a major concern. I ascribe deeply to this and, in doing so, manipulation of the photographic image is to me a positive effort to disclose new and more personal realities.

My involvement with the Xerographic image has been one of growth and stretching and, as most growth and stretching, it has involved pain. More significantly though is the joy that I have experienced - a joy as it relates to making visual discoveries. The high-speed color-copying machine-process has opened up possibilities for visual exploration that far transcend its basic purpose as a business machine. I could exercise direct, conscious control or play with random, accidental combinations. Density, contrast and color balance could be controlled. Colors and textures became quite different from any conventional silver image. I found the "imperfections" of the process (high contrast, color shift, break-up of large areas of tone, ghosting) could be taken advantage of and utilized effectively as attributes. Consequently, in dealing with this process, a strong emphasis must be placed on consideration of idea or subject as related to or restricted by the machine. It's qualities then, when utilized effectively as an entity and, in turn, in conjunction with related imagery of aesthetic as well as technical compatibility, are a source of concern, fascination and pleasure to me, and closely related to my personal vision (imagery).

My goal then is to bring into unison these cognitive and material elements in such a manner as to take advantage of them in conveying impressions rather than reflections of the "real world." These impressions are intended to achieve an effectiveness by evoking subjective and sensory involvement. The viewer is meant to go beyond the original subject and involve himself in visual phenomena that express a personal reaction on individual terms.
PROCEDURE: The body of the work will be unrestricted as to original material used, though the final images will be Xerographic, from such machines as the Xerox 6500 color copier and the 3600 black and white copier.

Any form of final presentation that enhances my original intent of transforming the "real world" into a pictorial kind of fantasy, and the character of the image, is valid as an element of the creative process. Since an artist, creating in any medium, produces at an intuitive level, the physical sizes of the images and their total number cannot be predetermined. It will be a substantial body of work.

Exhibition of the work will be in the MFA Gallery. A gathering of information pertinent to the Thesis Report is already underway and will be kept up during the work to record any changes, discoveries and problems encountered. A final Thesis Report will be submitted in accordance with MFA committee requirements.

I believe that art, in any medium, is created intuitively and therefore, the physical sizes of the images and their total number cannot be predetermined. Additionally, any form of final presentation that enhances the intent of the thesis is valid as an element of the creative whole. It will be a substantial body of work.
Because they look so convincingly real, photographs have long been regarded as factual, straightforward and faithful to reality. More recently, photography has become a viable open-ended process and to many, a conventional approach has become only a starting point in the creative process and not the entire process. A responsibility to continue to search for any type of leverage for extracting sensitivity is a concern of mine and as such, manipulation of the photographic image is a positive effort to disclose new and more personal realities. My involvement with the Xerographic image has been one of growth and stretching and has involved pain. More significantly though is the joy that I have experienced - a joy as it relates to making visual discoveries - I could exercise direct, conscious control or play with random, accidental combinations, with the resulting colors and textures being quite different from any conventional silver image. The "imperfections" of the process (high contrast, color shift, break-up of large areas of tone, ghosting) could be taken advantage of and utilized as attributes. Consequently, an emphasis had to be placed on consideration of subject as related to or restricted by the machine. Dealing with these factors, and exploiting the kinship of these qualities with my vision has been a source ofr fascination and pleasure - My imagery has been one of a very private nature. I respond to emotion and imagination constantly and my everyday life is a journey "through the looking glass" and into worlds of fantasy. Therefore, my photography has been involved with attempts to visualize them. I interpret everyday images into personal fantasies that take me further into a world of imagination. Through them I have found additional realities about my being, my emotions, my life, as I live it in this 'real world.'

My goal then is to bring into unison my imagery and philosophy with this process to convey impressions rather than reflections of the 'real world.' These impressions are intended to achieve an effectiveness by evoking subjective and sensory involvement. Through them, I intend to take the viewer beyond the original subject and into an involvement, on individual terms, with visual phenomena that reflect my personal being.

I respond to stirrings of emotion and imagination that stem from visual experiences, sounds & thoughts. A spoken word can easily transform itself into a mental fantasy that in turn evokes a desire to hold and express that feeling visually! This cycle of response — visualization has manifested itself in my photographs work through my attempts at interpreting realities into personal fantasies! I change and manipulate common experiences usually much the same as my psyche changes and manipulates them originally - ex: altering natural colors, placing them in different contexts and/or combining them with other elements. I envision fantasy and perhaps subconsciously respond to all that is around me on this level.....
FINAL THESIS PROPOSAL

Following is the proposal as it was submitted to the MFA committee. It includes the support imagery that was also submitted at that time.
THESIS PROPOSAL
for
THE MASTER OF FINE ARTS DEGREE

College of Graphic Arts and Photography
School of Photographic Arts and Sciences

ROCHESTER INSTITUTE OF TECHNOLOGY

*****   *****

TITLE: THROUGH THE LOOKING GLASS

PURPOSE: To transform the "real world" (a cosmos of experience) into a personal pictorial kind of fantasy utilizing the Xerographic image as a symbolic equivalent.

SUBMITTED BY: R. Skip Kohloff
April 10, 1975

R. Skip Kohloff

THESIS BOARD:

CHIEF ADVISOR: Charles A. Arnold, Jr.
Professor
School of Photographic Arts and Sciences

ASSOCIATE ADVISORS: Tom Muir Wilson
Associate Professor
School of Photographic Arts and Sciences

Hans W. Zandvoort
Assistant Professor
College of General Studies

John Klock
Xerox, Inc.
"'O Looking-Glass creatures,' quoth Alice,
draw near!
'Tis an honour to see me, a favour to hear;
'Tis a privilege high to have dinner and tea
Along with the Red Queen, the White Queen,
and me!' "

Lewis Carroll
SCOPE AND BACKGROUND:

Because they look so convincingly real, photographs have long been regarded as factual, straightforward and faithful to reality. More recently, photography has become a viable open-ended process and to many, a conventional approach has become only a starting point in the creative process. I feel a responsibility to continue to search for any type of leverage for extracting sensitivity. Manipulation of the photographic image then, to me, is a positive effort in this direction.

My involvement with the Xerographic image has been one of growth and stretching and, as most growth and stretching, it has involved pain. More significant though is the joy that I have experienced - a joy as it relates to making visual discoveries. The high speed copying machine has opened up possibilities for visual exploration. I can exercise direct, conscious control or play upon random, accidental combinations, with the resulting colors and textures being quite different from any conventional silver image. Qualities and uses of the process, such as high contrast, color shift, break-up of large areas of tone, ghosting and degeneration of the image, can be taken advantage of and utilized as attributes. Consequently, an emphasis must be placed on consideration of subject as it relates to or is restricted by the machine. Dealing with these factors and exploiting their kinship with my imagery has been a serious concern of mine and a source of fascination and pleasure.

My vision is of a very private nature and relates mostly to persons and places close to me. I respond to stirrings of emotion and imagination that stem from visual experiences, sounds and thoughts. A spoken word can easily transform itself into a mental fantasy that in turn evokes a desire to hold and express visually. This cycle of impetus-response-visualization has manifested itself in my work through a concern with interpreting realities into personal fantasies. I change and manipulate common experiences visually much the same as my psyche changes and manipulates them initially; for example - altering natural colors, placing things in different contexts and/or combining them with other elements. I enjoy this approach as I enjoy fantasy. They are personal responses to all that is around me and through them I have found additional realities about my being as I exist in this 'real world.'

My intent then is to bring into unison my imagery and philosophy with this process to convey impressions rather than reflections of the 'real world.' These impressions are intended to achieve an added effectiveness by evoking subjective and sensory involvement. Through them, I intend to take the viewer beyond the original subject and into a participation, on individual terms, with visual phenomena that reflect my being.
PROCEDURE:

I believe that art, in any medium, is created intuitively. I believe also that elements such as size and form of presentation are valid parts of the whole creative process and must be treated accordingly. Therefore, they cannot be pre-determined. They should enhance the intent of the work and can only take shape as the work grows. It will be a substantial body of work, unrestricted as to original material used. The final images will be Xerographic from such machines as the 6500 color copier and the 3600 black and white copier.

Exhibition of the work will be in the M.F.A. Gallery. A gathering of information pertinent to the Thesis Report is already underway and will be kept up during the work to record any changes, discoveries and problems encountered. A final Thesis Report will be submitted in accordance with M.F.A. committee requirements.