

1974

# Borrowed Images: Work in Color Separation Photo Serigraphy

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*Eastern Illinois University*

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Author

BORROWED IMAGES:

WORK IN COLOR SEPARATION PHOTO SERIGRAPHY  
(TITLE)

BY

Eugene Arnold Staudt

THESIS

SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS  
FOR THE DEGREE OF  
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IN THE GRADUATE SCHOOL, EASTERN ILLINOIS UNIVERSITY  
CHARLESTON, ILLINOIS

1974

YEAR

I HEREBY RECOMMEND THIS THESIS BE ACCEPTED AS FULFILLING  
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## PREFACE

It is this author's desire to first thank those members of my committee; Dr. Bill Heyduck, Mr. Al Moldroski, and Dr. Lynn Trank for both their many suggestions in writing this paper and for allowing me to work with extensive freedom. Without them there would certainly have been less of me in this paper.

It is also hoped that the reader will note that the illustrations can not match the qualities of the serigraphs and words do not always say what we wished they had.

## INTRODUCTION

The purpose of this paper is twofold. It is an educational tool with technical data on this author's work with color separation as well as a verbal companion for the Borrowed Images Suite. It is these two concerns: "background statements, those neutral, how it is done approaches, and the highly subjective verbalization of what is an intuitive process--that of creating art, which are of great interest to the public at large." (7:40)

One may feel more at ease with the prior, background statements, as the information is more exact and as stated, neutral. Making personal statements on one's work is dependent on a countless array of influences both past and present and may often be a nebulous undertaking. Too often discussion of a visual media with words is taken to be an indication of a shortcoming in the work and at times this would seem the case.

It is this author's conviction that although no amount of verbalization will change the image it can give insight to a new approach of viewing it. This is the distinction between liking and appreciating in those instances where the two are not concurrent. An example could be the super real painting of Chuck Close.

After the initial impact of the size and most realistic image, one could be caught saying: "So what, that's art? . . . those are just big photographs and why bother to paint what you can take a picture of?" Maybe the answer can be found in a quote from the artist made in 1970: "My main objective is to translate photographic information into paint information." (8:47) This allows for an approach to appreciation of the work in the context the artist intended. Liking or disliking will still be based primarily on the individual's reaction to the visual information of the work.

In addition to the statement of intent or motive there is the desire of others to learn mechanically how the problem of this translation of information was approached and executed. This knowledge may also give new insight into appreciation. The underlying motives for the choice of some aspects of the creative process are very subjective and perhaps an unsure area even for the creator.

This is an attempt to present answers to possible questions in both of these aspects of art: the how it is done and the why it is done as it is in the author's work. The work centers around one particular method of printmaking; that of serigraphy and more specifically the photo method of serigraphy. The photo method is the most mechanical of a traditionally commercial process.



It was only with its use by the pop artists in the last decade that screen prints have come to be considered fine art.

It is the most recognized of the pop artists, Andy Warhol, who has had the greatest influence of any single famous artist on this author's attitude and work. The following two statements made by Warhol in the 60's explain why he worked as he did during the early pop movement. "The reason I'm painting this way is that I want to be a machine, and I feel that whatever I do and do machine-like is what I want to do." (5:163) When asked about the subject matter and possible implications he said simply: "it is indifference . . . it just caught my eye." (7:45)

For this author, these quotes and the images and style of Warhol sum up, to a degree, the philosophy of the work now engaged in: that being color separation photo serigraphy. The author would agree with the attitude that the technique does not fit within the scope of traditional fine art but is rather a technical process. The artist then is simply the chooser of the image and the converter and manipulator of the final product. By farming the work out the artist becomes the conceiver of the piece and eventually the approver of the final result. However, as the final image is dependent on a number of decisions that must be made during the actual process, it is this author's desire to make

each of these decisions personally.

Possibly the second strongest influence (the strongest being the sum total experiences of one's life) on this present work was the author's schooling in art as an undergraduate. That education focused primarily on applied design and the commercial arts. A feel for design based on purity of imagery, resulted and serigraphy was found a readily adaptable method for that type of image making.

Serigraphy did, however, remove some of the subtilities that occurred in earlier works due to the inherent qualities of the techniques employed. One favorite was the sprayed-ink and tracing paper stencil method. This imitated the airbrush but left a noticeable spattering of pigment as shown in figure 1. In a general approach to design that featured basically hard-edge shapes there was considerable similarity.

There were a number of factors that lead to the use of the photo image. Paramount on this author's list was the speed and ease of designing from a photo as opposed to drawing from life. A style had developed that bore close resemblance to the sign painter's method of creating poster art from original photographs. This is illustrated by comparing figure 3, which shows a detail of a large billboard, and figure 4, a stylized photo image in an early painting by this author.

This had not been a conscientious effort to imitate but rather had evolved spontaneously as the solution to an immediate problem: how to do quick, design oriented but still realistic painted images. Later, using photographic methods of posterization as opposed to the hand method, this style was retained in serigraphic work.

Lost was the inherent feel of the hand drawn posterization and in its place the precision of the photo process as shown in figure 5. This was used in conjunction with hand drawn image areas to put back into the prints some more natural spontaneity since this author did not wish the art to become too machine-like. Figure 6 shows the combination of several techniques in addition to a basic photo image.

It was not the feeling of mastery of a technique that led to new areas of experiment but rather exposure to new stimulation and some boredom with the present methods. Nor was it the feeling that there was an orderly and necessary progression from simpler technique to advanced, although improvement and increased complexity was a natural by-product of increased work and accumulated knowledge. One could spend a life time with a single method of working and never fully develop all the possibilities.

The upcoming text will include information on this author's method of photo serigraphy. It will not be a step by step account but rather cover specifics that

are basic to this author's way of working. Also covered will be a brief explanation of color separation and an account of the initial application of this information. A basic knowledge in the areas of both photography and serigraphy will be helpful in the understanding of the work and certainly necessary to truly appreciate the combined technique. It is only by working with the process that one can come to realize the possibilities and discover the limitations of the materials.

The presentation of the Borrowed Images Suite will take up the final pages of the text. The suite is six prints based on experimentation using the accumulated knowledge and information, both practical and applied, on the theory of color separation for the graphic arts. The images chosen are simply images that for some reason caught my eye: images that possessed an immediate esthetic quality that was felt could be captured and reproduced in a form with its own intrinsic beauty.

By now the motives for selection of this particular form to work in should be rather clear. It is not so much a desire to be with the front-running action of photo realism but instead to work in a technique that suits this author's approach to art: one that is both mechanical and realistic while very design oriented. It is not something new, much as the airbrush is not a new thing, although both are somewhat recent innovations in the fine art area. Anything one does must be considered

a new experience even if it is simply a new application of some known materials and processes.

The foregoing material will hopefully give the reader an insight as to the reason for the work that is to follow. It will give some appreciation for what was involved in the direction that has been taken by the author in his work. The units to follow will state both the technical data and personal motives that are a part of the work produced. The technical data will not be in the detail of a how-to-do-it explanation but rather how it was approached by the author. Also included will be information on the subjective reasons for image choices and decisions that controlled the look of the final prints.

## HISTORICAL INFORMATION AND INITIAL APPLICATION

Color separation theory was developed to allow color reproductions that would be both accurate and economical. Prior to this, black and white work was either hand tinted or large areas of solid color put in by mechanical means. To match the subtle variety of nature's color required extensive work and great cost. Although work done in this way had a beauty all its own, it was certainly not suitable for use in such work as magazine or newspaper color reproduction.

The theory of color separation is based on light and filters. Filters of primary light colors are used to separate the three light secondaries from a full color original. This information is recorded in a subtly varying dot pattern for each separation. Three printers are made from the color separated halftones and printed with transparent inks on white paper. The result of these three overprinted, color separated halftones is a full color reproduction.

The three colors printed are yellow, cyan, and magenta and are close to but not exactly the yellow, blue and red of the pigment primaries. A comparison of figures 13 and 16 will show this difference. An additional black printer may be added to give increased depth and realism to the picture. Figure 13



and 14 will illustrate the difference between a 3-color and a 4-color reproduction.

In very fine reproduction work additional color printers are made to more closely capture the color of the original. A most readily available example of color separation printing are the commemorative issues of postage stamps. They generally include along the plate block edge printing notations in the form of colored numbers, slashes, or solid areas of color. These indicate the colors that were used on the printing plates for that stamp. Quite often these include additional printers to the three basic for color work.

Figures 9 through 14 show the separate printers and the final prints that resulted from this author's initial work with color separation theory. Figure 15 is a color print from the original photograph and is included as a reference. The work took place in a graphic arts lab and as a result the color of the serigraphic print is quite realistic. The procedure followed was for the ROP (run of press) method. This is an unmasked, "quick and dirty" method of color separation. It was employed by this author because the experiments to follow would allow even less control.

For the initial work a color negative was used. This negative becomes the first filter of light and as it is a negative, allows colors complementary to those of the original scene to pass through. An area that

is yellow in the photograph will be blue on the negative. It follows then that a blue filter is used to remove the other light and allow the blue to be transmitted. This light, by striking the pan paper and recording the opposite information will show a minus-blue or a positive yellow area. This continuous tone black and white image is a record of the amount of yellow in the picture.

This filtration process is used to produce all the separation positives. All three filters are used for the black printer with each exposure reduced to a percentage of the time for the single color separations. Each of the prints is checked with the reflective densitometer to determine if the shadow and highlight densities fall within the prescribed limits. This is done as extreme variation will result in a shift in final color balance.

These continuous tone black and white positives are next rephotographed on a sheet of high contrast orthographic film through a properly angled contact screen. The contact or halftone screen is responsible for the dot pattern (figure 2) which simulates the continuous tone look of the original. The screen is angled so the dot patterns will not fall directly on top of each other but rather in clusters of color.

The common screen angles used are 45, 75, and 105 degrees. By allowing the 30 degrees of difference, the problem of moire is minimized. When four colors are



used, the fourth, usually yellow as it is the least noticeable, is placed at the midway point between the 75 and 105 degree screen angles.

The screened halftone negatives that result from the rephotographing of the black and white positives are in some operations what is needed to make the printer for the color they record. For putting the images on a silk screen, as this author did, a screened halftone positive was needed. The 5X7 negatives were trimmed to 4X5 and projected on an 11X14 sheet of orthographic film. This size was used for two reasons. The 11X14 was the maximum size that could be put on the screens used by the author and this enlargement changed the 133 line negative to a 60 line positive that could be accommodated by the mesh of the fabric. Noticeable on the print are a number of stars. These served as registration devices during the enlarging and later during the printing.

At this point the images were ready to put on the screens. The screens were coated with the photo emulsion and when dry placed on the light unit along with an 11X14 positive and exposure made. The area to be printed, in this case a varied dot pattern, is then washed out and the screens made ready to print. The inks used were Advance 4-Color Concentrated Process Inks. These were extended in the recommended proportions.

The cyan was printed first: the only criterion

for this being that since the yellow, after being printed on the paper, can not be clearly seen through the yellow-green screen for registration, could not be used first. Again, references to the illustrations of figures 9 through 12 will clearly show what was printed by each of the four screens used. Additional detail as to this author's method of work will be presented in the following section.

## PERSONAL METHOD OF WORK

As previously stated, a style of purity of design and an attitude for clean, precise work was the result of early schooling. This approach to printmaking is quite evident in figures 5 through 7. Also evident is the progression of increasing color and detail. This was the result of a desire to get more visual stimulation into the prints. The author, although using color to create the desired visual effect, still relies heavily on natural coloration (i.e., blues for the sky, greens for the grass . . .)

In an attempt to get more color a gradual conversion from an opaque pigment system to one featuring transparent color developed. This allowed for additional color by overlapping areas and greatly enhanced the overall color quality. This was due to the fact that color unity was a by-product of creating a third color from two colors which also appeared in the print. Also influencing this conversion was the method of producing the images that were to be put on the screens.

Generally the images were the result of varying exposure times during the preparation of the positives on the ortho film. The areas are then controlled by the amount of darkness or lightness that they possessed in the original photograph. By printing with successive

overlap, going from large light areas to the smaller dark areas and using transparent inks, the nature of the object is enhanced. This is evident in the coloration of the truck in the rear view mirror in the print illustrated in figure 7. In contrast is figure 5 where an opaque pigment system was employed. In this print the separated areas stand out more distinctly although in no way do they destroy the reality of the face.

Most of the ink used was extended at least 25%. The ink was stored in glass jars which allowed ready identification and ease of color comparison. In addition the composition of each color was noted on the jar lid. Most of the over seventy colors were produced by mixing a basic red, blue and yellow. In later prints additional colors were used as obviously it was not possible to mix all the desired colors from just those three. All inks were Advance Poster Inks of the SAM or JRP series.

The photo emulsion used was Advance DM-259 with an ammonium bichromate sensitizer. This combination was used as it could be worked with under a red safe light and if stored air and light tight would retain its exposure characteristics for up to six months. It also made reclaiming of the screens relatively easy. In addition to transparent pigment, this author used a single, thin coat of emulsion on the screen. As editions were limited in number this held up well and resulted in a very thin layer of ink to be deposited during printing.

A single squeegee stroke and off-contact printing also added to the overall transparency of color and a crispness of edge.

It was the general direction that the work was taking that lead to the desire to experiment with color separation. As the early prints were made from black and white negatives all color had to be controlled in one of these ways: by making use of the varied exposure positives (as was done in figure 5), by addition of hand prepared positives to a basic exposure (the case in figure 6), or by the combination of all these (as in figure 7).

This necessitated planning extensively in advance and additional work as only four screens were used. A screen had to be made for each color or it had to be made so as to allow, with blocking out, several different colors to be printed. Both of these methods were extremely time consuming and bothersome to the author as the print lost the immediacy desired in the printing process. A good example of this is the work that went into the print in figure 7.

The basic image used was a photograph of the author in a van traveling along the highway. All additional visual information was added. The clouds, cow and the truck in the rear view mirror came from other negatives. In all there were four positives for the truck, three for the clouds, one for the cow, two negatives for the truck plus a hand cut positive for the

control of the landscape color in addition to one positive for the basic image. All this information was used on a total of seven screens (reclaiming and re-shooting of three took place during the printing) with twenty three inks being used. The actual number of printings was slightly higher than that number as some colors were repeated. Figure 8 will give some indication as to the order and other information of the printing schedule.

It has long been the habit of this author to make a printing chart to help in maintaining the desired printing plan. All prints are initially planned to a degree prior to producing the positives so they may be controlled for the desired qualities. The plans are then modified as the positives may dictate at times. With work in color separation most of the planning had to be done prior to the production of the positives.

It was not only the intention of the author to modify the elaborate printing procedure that had developed but by its nature the material eliminated many of the modifications that could be made to the positives. This new system was to be used without the loss of color or detail and the resulting prints are the concern of the next portion of the text.



## BORROWED IMAGES SUITE

This suite of six prints is the culmination of the author's studies in color separation and experiments based on the knowledge gained from the initial application of the theory. The title of "borrowed images" comes from the fact that with only minor exceptions the initial images for each print was taken from an outside source.

There were several goals or ideas that the author prescribed to in both the initial choice of images as well as production of the prints. One was the freedom to use any subject matter, as stated previously, that caught the eye of this author. To stretch the point there was a desire to photograph Andy Warhol's print of Marilyn Monroe and do a color separation print based on it. This was not done as a previously established limitation had already been met: that being that only a single thirty six exposure roll of color negative film was to be shot for use in the separations. It was also stipulated that only a single exposure be made of any one image.

Partly due to an early stigma felt in working from a photograph and the certainty that one could never use another's work as the basis for your work, it was felt that as a personal statement of disbelief in either of

these conventions the work would be entirely borrowed. This was not the case however as some of the work was borrowed from the author and one was based on a photograph from life with the addition of hand cut imagery. This final print was not included because some guilt was felt in the use of original designs or photography, but rather to prove that by working with the media the author could produce a design of quality which was entirely his own.

As is sometimes the case with innovation, quite often the point must be "more than made" to insure that it is in fact made. It was the author's contention that a print based on the 4-color process could stand as a piece of fine art, and that this highly technical process need not be relegated solely to the commercial arts. It was felt that the subject matter alone was not the only criteria for distinction between fine art and commercial art. It was this reasoning that led to the use of three images from the commercial art field.

Possibly because of the influence of Warhol on this author, some disappointment was felt that time could not be made to include the reproduction of the Warhol print. It should be noted that the idea is not to copy exactly or reproduce the work as is but to use the image as a basis for a print. Alterations would come about as an indirect result of the materials and method limitations along with direct decisions by the author at various stages of the process. It was also Warhol who once said



about one of his movies that it was art because it was made by an artist and that would make it art. Certainly that seems a statement not to be argued.

Following a brief explanation of the darkroom setup that was used, the author will discuss in detail each of the prints in the suite. The darkroom equipment consisted of an enlarger, a timer, a home-made copyboard, a set of home-made contact screens, fifty sheets of pan litho film, chemicals for the film, trays for the chemicals and an assortment of colored filters. The copyboard was a piece of dark matt board to which three tabs of matt board had been attached. Two were aligned along one edge of the matt board base with the other one at one end and perpendicular to the two. This arrangement produced a three point system of contact for registration that the author had found workable for accurate registration in darkness. This also allowed for maximum use of the 11X14 sheets of film as the outside edges would serve as registration guides.

A pan litho film was used as it is sensitive to all wavelengths of light and when using color negatives and filters a pan film is essential if all colors are to be recorded. A litho film was used as a high contrast positive was needed to put the images on the silk screens. The film is notched along an edge as it must be used in total darkness and this allows identification of the emulsion side. An A-B litho developer, indicator stop, and rapid acid hardener fix were used in film processing.

Prior to making an actual set of positives a test sheet was run. This consisted of four test strips on a single sheet of film. From this the filters to be used and the length of the exposures were determined. It should be noted that in all of the exposures with the various filters and the data sheets kept there was no easy way discovered to determine exposures. In fact, usually an additional exposure would be required for one or more of the positives in a set. The reason for this remains a mystery to the author.

Having experience in the graphics lab gave the author a general idea of what to look for in the way of a positive, however the quality of a positive could not be realized until it was placed on a screen and printed. At the point of printing, if it did not perform as desired little could be done in the way of alteration. The various positives were made with some preconceived idea of the desired look of the final print and what would be required of the positive to produce the necessary effect.

The contact screens used were made in the graphics lab prior to this work. They were made by contact printing with a commercially produced 133 line screen onto ortho film which was soft developed. This was trimmed down and projected onto a sheet of 11X14 ortho film which was also soft developed. This procedure was repeated for each of five screens. A screen was made for the angles of 30, 45, 75, 90, and 105 degrees.

These screens were given an identification system. This was a series of stars along the top edge plus a notch to aid in determining the emulsion side of the screens in the dark. The screens also varied as to the density of the dot pattern and this was noted so that printer strength could be partially determined. In this way the screen could actually control strength of a color printer positive.

Actual image production in the darkroom was a very vital part of the procedure, once the image was put on the film there was little that could be done to alter it without the change being an eye sore. The point of this work was to see what could be achieved with a minimum amount of alteration to the positives. The following will be a step by step account of the darkroom procedure employed in the production of the color separated, screened positives that were used in the prints of this suite.

This account will use the specific information that went into the production for the first print, "Bevy of Beach Beauties". First a test sheet was run using the following filters; blue 47, yellow 8, orange 22, and green 58. From this, timings were determined and the following screened positives were shot; yellow filter and medium screen for a medium density blue printer, blue filter and a very light screen for a heavy yellow printer, green filter and light screen for a dark magenta printer, and orange filter with a dark

screen to produce a light positive printer in the blue-green range.

As the work is done in darkness it was truly a thrill, when the light could be turned on, to discover that the contact screens did act as true halftone screens and produced a realistic appearing range of dot configurations and percentages. This was an indication that not only the color but to some degree its saturation in an area was being recorded on the positives.

Working with the idea that this initial experiment should yield a fairly accurate color reproduction, an additional separation was made. This was for the cyan printer and a red 25 filter was used. This was done while everything was still in register as it would be nearly impossible to go back and attempt to produce an additional separation at a later time. As it turned out this was one of the positives that was used in the final printing of this image.

After the positives were completely dry some minor work was done on them. This consisted of filling in with a pen and ink small dot patterns in areas that for some reason were completely blank and the etching away of some areas where the dots seemed to clump together for no apparent reason. This completed, the images were ready to put on the screen.

When shooting the screens a test screen was used to determine an exposure time that would insure the halftone

pattern be locked in and the negative spaces would still wash out. It was found that exposure of under five minutes was too weak whereas ones over eleven did not allow the removal of negative areas. Subsequent exposures varied from seven to nine minutes depending on the density of the positives and how it was felt the screen would best record the information that was on the positive.

For the first print (figure 17) the basic three process inks; yellow, cyan, and magenta, were used in conjunction with the screens based on the blue, red, and green filtered positives respectively. This resulted in a very satisfactory print with its only weakness being in the overall color intensity. This problem was eliminated by using the screen based on the orange filtered positive to overprint an additional pattern of blue in the area of the ocean. This band of color separated the sky and figures and enhanced the color of the print with an increase in contrast.

Compared to the original postcard, a color tint special from the days when a cent was required postage, there is none of the orange tint to the sky and the overall intensity of colors in the print is weaker. The lack of orange in the sky was due to the recorded information on the separation positives. The overall lower intensity is due to two factors: one being the fact that the lower line-per-inch halftone tends to spread out the color thus weakening it and the inks



used were extremely transparent.

This first print was very encouraging because it proved that by using the simplest of devices quite accurate color prints based on color separation positives could be produced. It was this postcard that had been tacked to the studio wall and the resulting print that capped months of preliminary research and work. This is not to say that all was downhill from that point on but it was certainly made easier by this initial success.

The second print in the series (figure 20) in its initial stages came far from the preconceived idea. The original image on the can of plant food is a very subtle one yet full of rich color variation. The idea was first to make the positives without the use of the halftone screens and add color to the flower areas with water color. The separations were made with extended use of the yellow through red range of filters to make strong green and blue printers.

After printing of the first two screens, blue and yellow, it was discovered that some miscalculation had been made and that subtle color was certainly not the mainstay of this print. It should be again noted that it was not the desire to produce images that would bear as close a resemblance as possible to the original (except in the case of the first print) but rather to match the concept of the print in mind.

It was at this point that in order to 'save' the print it was necessary to resort to previously successful methods of work. This meant the production of additional print areas on the screens as well as re-definition of those areas now printing. To remove new areas from the screen an application of Bix paint stripper was used. Care was taken to insure that damage to the screen is avoided as this material works rapidly on the hardened emulsion and will work slowly on the fabric. It is thoroughly rinsed out after a minute and when the area is dry the edges are redefined by using water soluble block out.

The use of water color to put in the flower areas was eliminated as the water color could not compete with the very strong color that was already in the print. An additional area of a green was printed and then work began on the smaller areas of color to be added. The print took on an altogether different characteristic than the original image. The can of plant food, although not referred to in color selection, bears many similarities in hue location to the final print. Of particular interest are the colors in the pots along the ledge. The red, orange, and browns seem to be based on the color of the original: this was not the case as they were based on a feel for what would be 'right' for the design. In order to make this print successful fourteen additional screenings were required.

There was no way that the next print could be made to fit a concept of what was to happen. To start, the disfigured advertisement for Wonder bread caught the eye and brought to mind the past incident involving claims that the product did not in reality build strong bodies twelve ways. As photographs had previously been taken of a torso in a striped top using high contrast film it was decided to use these in conjunction with this image of the loaf of bread.

The torso positives were attached directly to the screens to be used in the separation work. The feeling was that in this way subtle torsos floating in the "build strong bodies" image would result. This failed almost entirely with the exception of the images appearing in the bottom of the print along with the copy. Part of the reason for this 'failure' was the desire to maintain the original color of the loaf of bread. What a price to pay for a loaf of bread even in today's inflated economy!

As an after thought in the darkroom a positive had been made by contacting all three screens used in making the original positives, just in case. If ever there was a case, this was it and this positive was placed on a screen and printed over the 3-color print. The result was a print with a little stronger color and texture (in part due to the pattern of the positive) but without any additional emphasis of the too subtle bodies.



An additional screen was made by putting the nine bodies on a sheet of acetate as they appeared in the original screens. The portion of the torsos that had already come out in the copy block was blocked out and solid colors printed above each in the new body areas. By this time the material had been exhausted as well as the energy for continued work with this print. During the work and frustration it was decided to use a similar approach in part of another print. This was done in the last of the six prints.

Print four (figure 24) was an extension of experimentation with producing separations without the use of a halftone screen that had started with print two. It was much more effective a procedure in this print because the original had a very elaborate pattern of dots as a result of the technique employed in its production. The negative of this design was greatly enlarged to accent the dot pattern so it would be recorded on the pan film.

In comparing the original (figure 23) to the final print it can be seen that although the image in the print is only slightly larger than the original, the pattern of dots has little of the subtlety of the original. It is however rich in color and texture as the print was made with inks used straight from the can and in valued areas the dot pattern is noticeable. The use of nonextended pigment was an experiment to determine

if such printing was feasible. It was found that for certain effects it can be used but for many purposes the inks are so thick and the color so strong as to hide much of the color interplay normal to transparent inks.

Three variations of this print were made but only the one is illustrated in this text. One was based on a monochromatic color scheme of cerise to magenta and was not considered very effective in terms of color. The other was even more American as the only yellow printed was in the flower area below the lip with all other areas either red, blue or the white of the paper. There was not considerable difference between this and the one illustrated so it has been eliminated from the paper.

Figure 27 illustrates a print that is quite a deviation from previous works in both shape and original materials used. The original images are two and include the old illustration border design which was a borrowed one and a marker drawing. The author is in the habit of using marker drawings for design work as they duplicate the transparency of his print technique. It was used to determine if the subtlety of the marker drawing could be duplicated in the screen process.

By comparison to the original design (figure 25) it can readily be seen that in this case most of the subtlety was lost or at least hidden by the strength of the inks used in printing. It is felt that in any

subsequent work from marker drawings the inks used in printing will have to be even further extended to achieve maximum transparency.

The original plan was to print the three screens and let what ever happened be. After color proofs were run it was discovered that the balance in the positives were not vaguely related. As both images had been produced separately and fitted together later this was not at all surprising. The border colors and the picture colors then were to be printed separately. This was taken advantage of, as some inside areas were also printed with the border trim to maximize color variation in the area of the drawing.

The slight border around the figures was the result of a desire to give the figures more snap and set them off from the background and not the result of misaligned screens. Additional over printings were made in the areas of the female eyes, mouth, hair and in the beach. This was done to bring out coloration in the face and to increase contrast in color areas. As the title indicates, it is a print based on a honey moon photograph which in this case happens to include a self portrait. Not only did the images catch my eye but the print was made as an anniversary gift (the first being paper) for my wife.

The last print in this series has special meaning for a number of reasons. Primary on this list is the closeness of the print to the artist's original concept.

It combines the information gained through the success and failings of the preceding work in a single print. The subject matter is near and dear to the heart of this midwest born and reared artist. There is a degree of ambiguity along with the directness of the title. Visually it is a very satisfying final print in the suite.

The cow was one found grazing along a country road fence line and posed very cooperatively for the one photograph that was allowed by preplanned controls. The wedges of pie are reminiscent of the author's love for the pop art image. The combination of the two make an apt statement about this author's approach to art as was stated in the early pages of this text.

Four screens and a good deal of planning went into this print. The color for the wedges of pie was printed along with the three colors that produced the cow. Elimination of the magenta printer in the area of the background yielded a grassy green. The pie crust and black outline was done by staggering the printing areas on a single screen and using blackout.

Areas on the left side of the slices of pie were opaqued in on the positives depending on the color that the pie was to be. Areas on the right side were removed to control the color in that area. The original cow information on the positives in some areas of the pie remained. This is evident particularly along the horn area in the magenta pie slice.

After the cow and pie colors were printed the light areas of the crust were added. These had to be printed three times to build up adequate opacity as the thin coating of emulsion on the screen allowed only a thin film of ink to be deposited each time. The dark crust areas and the black outline were each printed twice. Upon close inspection of the print the under-color is still evident in the pie crust areas.

## CONCLUSION

The information and illustrations should give the reader insight to the reasons and techniques of this author's work. Little remains to be said. Visually the prints will have to rely on the design information they possess.

The author's desire to combine both photographic realism and hard edge design was successfully accomplished, as was the freedom to use any image material with the least bit of guilt. Successful work with simplified color separation was also achieved.

It is the author's hope that the public (in addition to their desire for the technical and subjective information) will find this suite to their liking and the endeavour be made self-supporting. Although the prints were done for a number of more 'noble' reasons there is no need to feel negative about the desire to please the public.





Figure 1. Detail of a sprayed ink design



Figure 2. Detail of halftone serigraph



Figure 3. Commercial posterization



Figure 4. Detail of painting by the author





Figure 5. Serigraphy: Ruth



Figure 6. Serigraphy: Lady on Couch



Figure 7. Serigraphy: Midwest Landscape

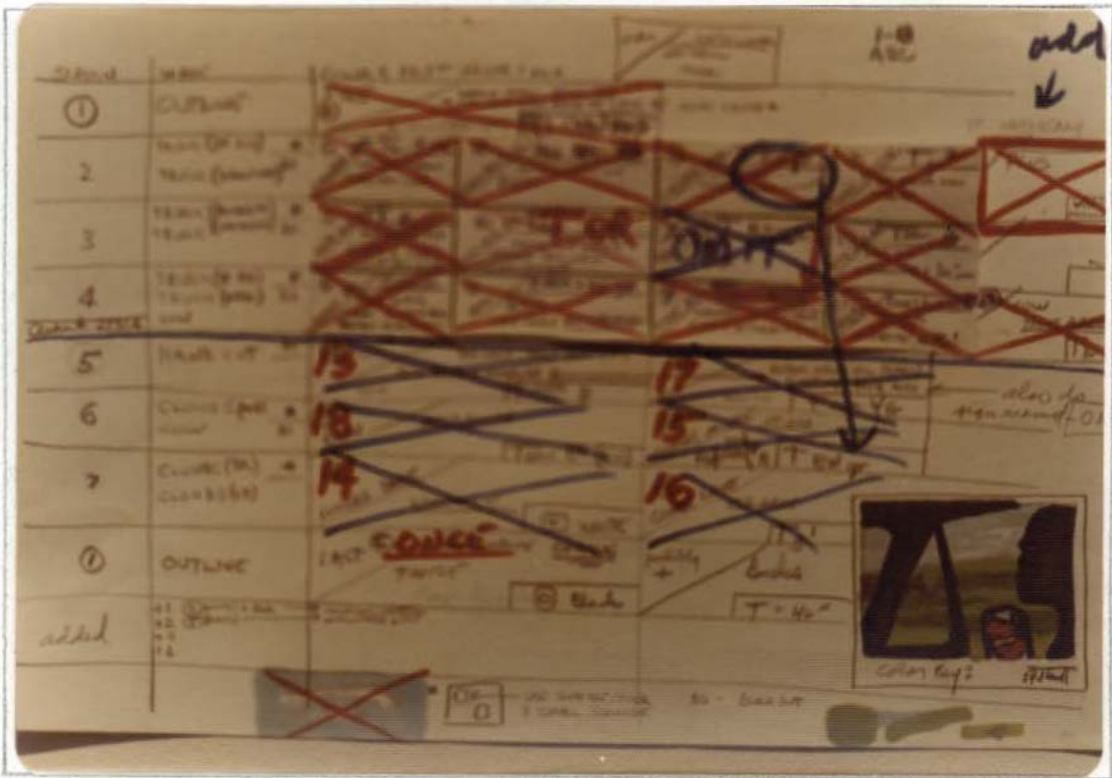


Figure 8. Worksheet for Midwest Landscape



Figure 9. Yellow printer for  
4-color print





Figure 10. Magenta printer for  
4-color print



Figure 11. Cyan printer for  
4-color print



Figure 12. Black printer for  
4-color print





Figure 13. 3-color print



Figure 14. 4-color print



Figure 15. Original color photograph





Figure 16. Print using primary  
red, yellow and blue



Figure 17. Serigraphy: Bevy of Beach Beauties



Figure 18. Original color postcard



Figure 19. Original can design



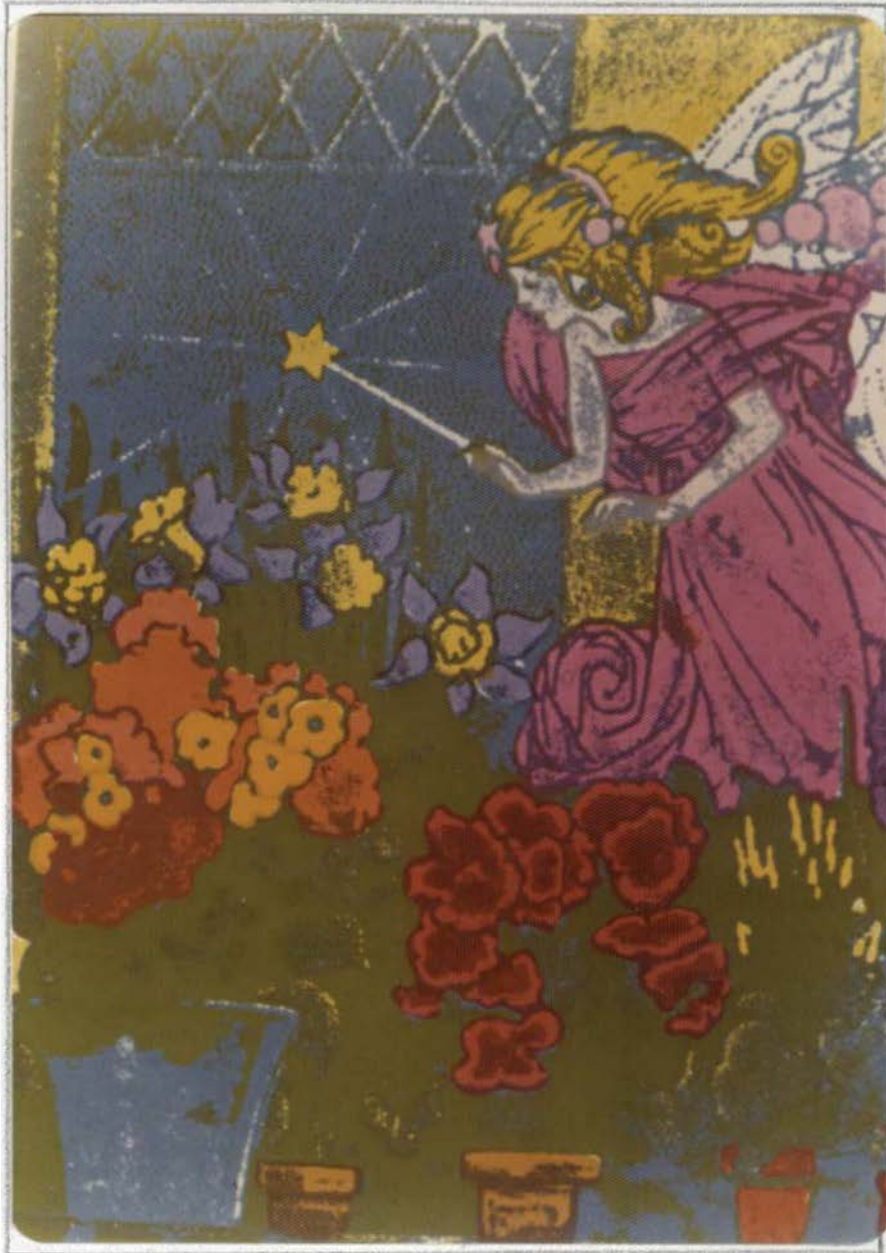


Figure 20. Serigraphy: Good Fairy



Figure 21. Serigraphy: Build Strong Bodies

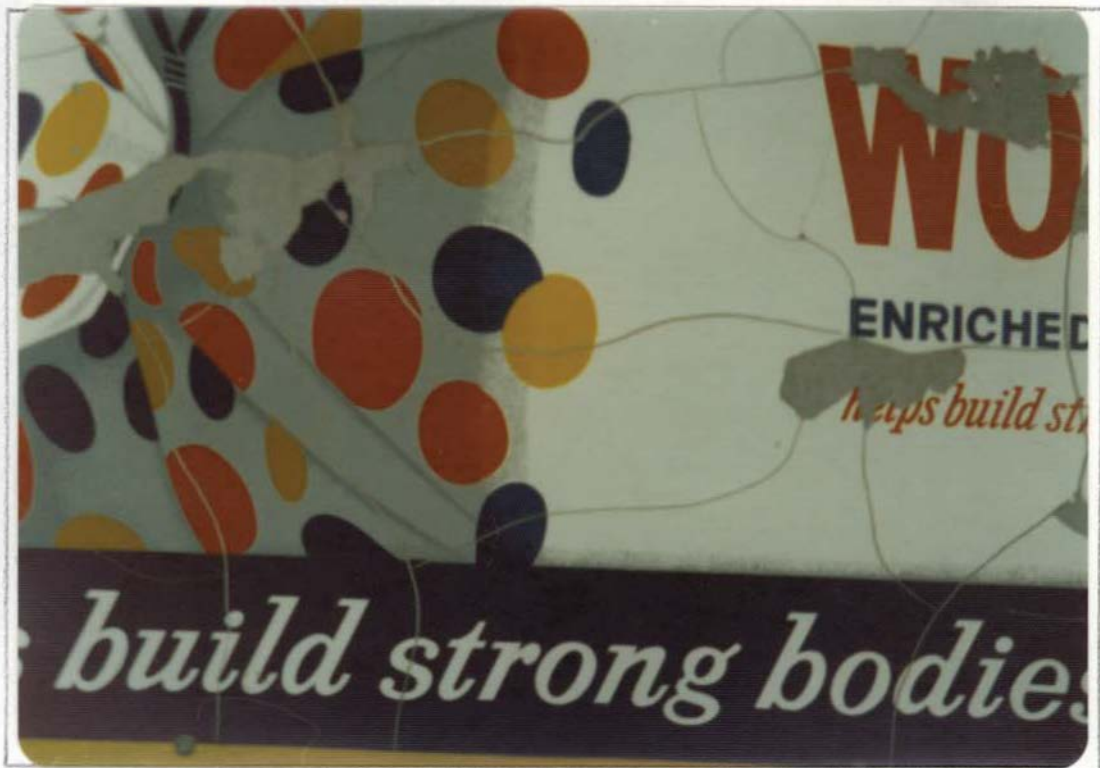


Figure 22. Original bread advertisement





Figure 23. Original sprayed ink design

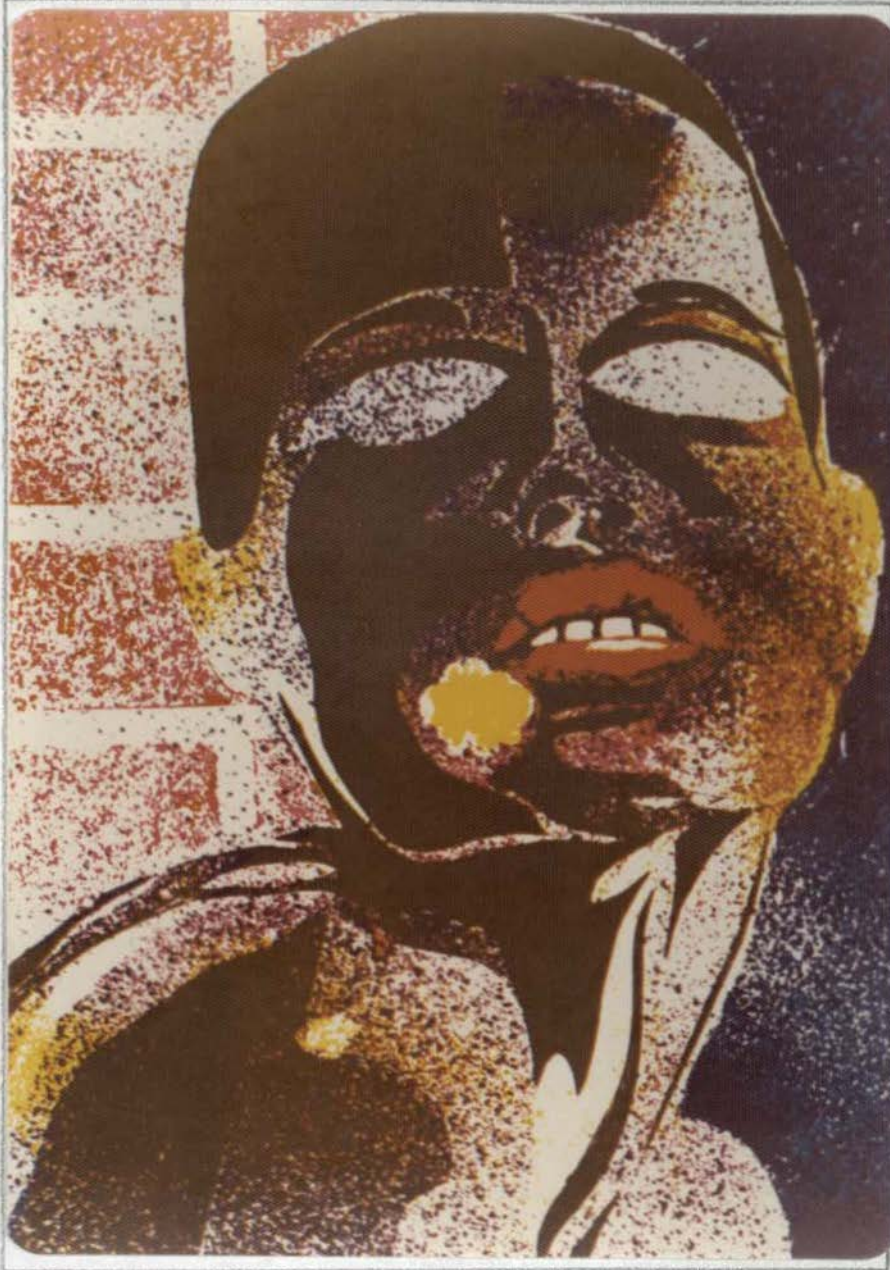


Figure 24. Serigraphy: American face



Figure 25. Original marker drawing



Figure 26. Original border trim



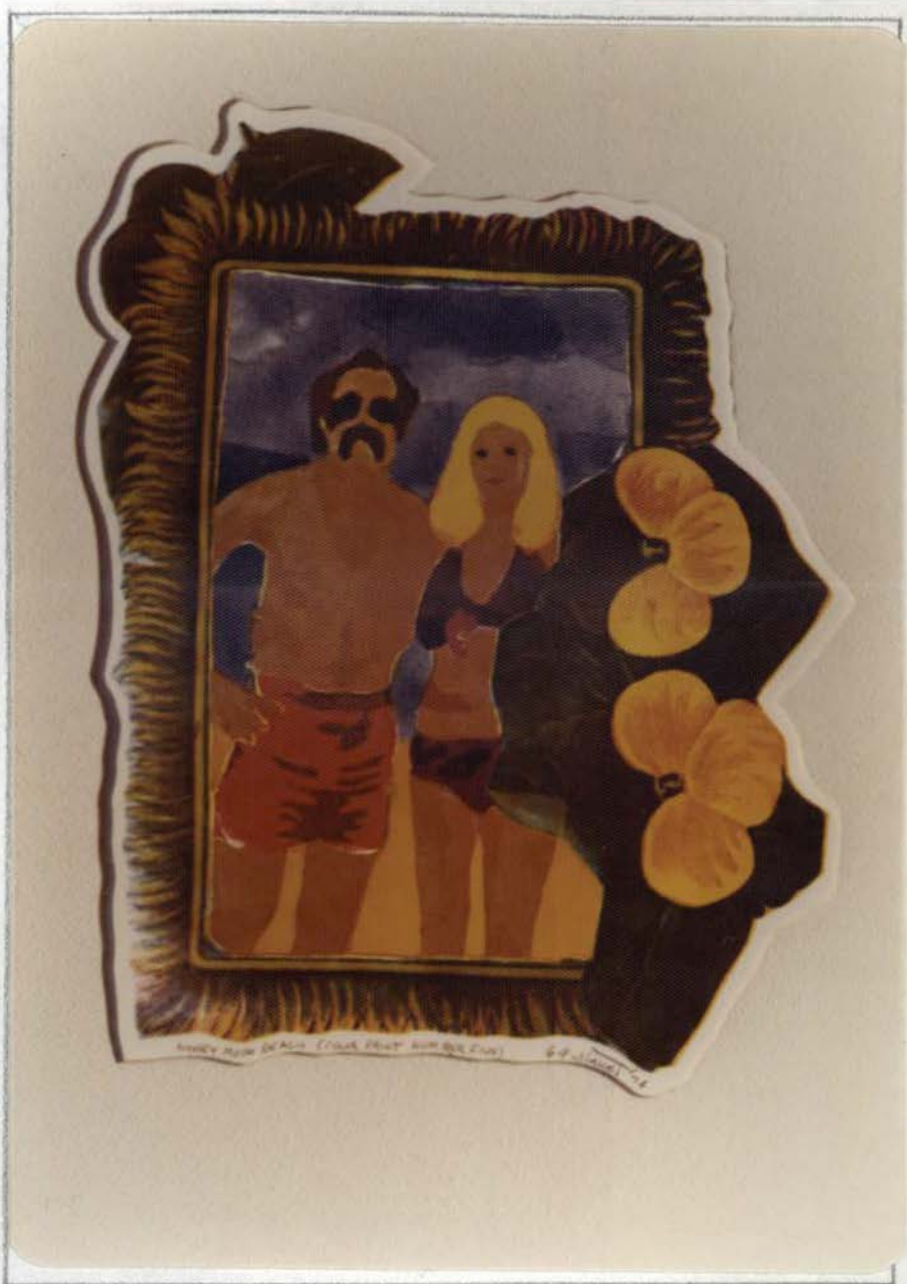


Figure 27. Serigraphy: Honey Moon Beach



Figure 28. Serigraphy: Cowpie



Figure 29. Original photograph of cow

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