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An individual analysis of the photography-painting relationship

Lawrence White

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An Individual Analysis of the Photography-Painting Relationship

Lawrence L. White

Candidate for the Master of Fine Arts
in the College of Fine and Applied Arts
of the Rochester Institute of Technology

Date of Submission: August 26, 1970  Advisor: Prof. Fred Meyer
I wish to dedicate this book

......To Donna, Chris, and Sander.

......To All those with whom I have come in contact, who love or hate me, my works, or my ideas, but are not indifferent.

......To Those individuals who teach from their heart, rather than give lip service.
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A self-taught philosopher, Mr. Ferguson, once told Samuel Johnson "of a new invented machine which went without horses: a man sat in it and turned a handle, which worked a spring that drove it forward. 'Thus, Sir' said Johnson, 'what is gained is, the man has his choice whether he will move himself alone, or himself and the machine too.' "1 Perhaps in like manner, the artist today should feel that he has a choice whether or not to use the technological sources available to him, to better express the age in which he lives. Working from photographs has too long implied some kind of artistic foul play. This has been recently dispelled by the advent of the Pop Art Movement. The artist, while not only working from photographs, in many instances, is actually using the photograph in the art work. Perhaps more important than whether one uses a photograph in the actual art work or whether the artist

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refers to the photographic image or in some way utilizes it, is that the artistic problems concerning the art work itself becomes the subject of art. In trying to solve artistic problems which each individual artist sets up for himself, he is still very much a part of the age in which he lives, and this is not only true today but has been true throughout art history. One can reflect back upon history and the introduction of the daguerreotype in 1839, which was associated with magic, giving a mirror image to things. In the middle of the nineteenth century, realism was considered the major aim in art. Painters began using the photographic image as a short cut and to preserve data. In addition, they could accurately record events and objects, which they could later select from to obtain the degree of realism which they so desired. The point is that the artist was still selective; he could omit, ramify, or make more clear his own expressions, even though he was referring to an image taken by a mechanical device.

As the camera was improved, many artists feared
the camera as a competitor. They felt the camera was competing with their ideals of trying to capture both in portraiture and in landscape painting, the degree of accuracy they were trying to achieve in their painting. When the shutter speed of the camera was refined, the artists became more aware of the fact that the camera could give them an image which stopped the action of moving objects, such as a person jumping, a horse running, a bird in flight, etc. They could refer to this for ideas of motion for some of their art works. With the camera constantly progressing to higher stages of development, the painters began to believe that their style was becoming affected. Some artists began to believe as well that it was subverting their individuality. Of course, this would have been the case had not the artists been very selective. As the 1860's and 1870's approached, color photography seemed imminent. The artists were reinforced with the idea that the camera was offering a competitive spirit, photography versus painterly images. They were considered insensitive
or mediocre artists if they referred to the photographic image to the extent of losing their individuality. There was a stigma attached to those who relied on the photograph. Thus the artists started to destroy these photographs after they had referred to them. Because of this competitive spirit between the photographic image and painting, the artists felt a departure from realism was necessary. They became more involved in those aspects of art which showed the greatest degree of individuality, specifically those qualities in painting which only painting can express in a very personal manner. The movement of line and the quality of color became the priorities of the painter.

Artists today are concerned with the photographic image. They are actually utilizing it on their canvases. Many artists are using photographs obtained by photographers. Photographers are referring to painterly images for their photographs. No longer is it necessary to categorize art, nor is it important that one be regarded
solely as a sculptor, painter, or photographer. For
the works I do, I must be the photographer, rather than
taking the photographic image of another photographer
and applying it to my canvases. Many times, however,
I will refer to photographs I have not taken. Many
artists do not approach it in that manner. Because of
the stigma attached to the photographic image and how
much the artists uses the photograph, it is important
that he knows how to use the photograph and why.
It is important that the artist refers to a variety of
visual references to achieve a work which he feels
he can honestly without rationalizing, say, "Yes,
this depicts a certain aspect of whatever it was I had
in mind." It need not be of a storytelling category,
yet the photograph carries with it on the canvas a
high degree of expectation. We accept the photograph
right away as a matter of being, a real thing and when
we use it on the canvas and employ the use of a
painterly image, it becomes more difficult to make
the paint itself read with such assurance. The reason
is that the painterly aspects in painting do not read the same way as those of a photograph. This is especially true when an artist uses a light-sensitive continuous-tone emulsion, because of the various tonal qualities the photographic image possesses. The problem also becomes one of color adjustment. I find in many artists' works who are using the photographic image, an uncertainty and lack of sensitivity as to the black and white image already in position on the canvas. When a negative is used and projected on the canvas, the borders of the negative become another problem. Perhaps to get a painterly quality, it is more commonplace than not for artists using photographic emulsion to employ a brush stroke effect.

The purpose of the thesis is to determine how earlier and contemporary artists have used photography in conjunction with painting and from the visual results of selected artists, to develop and describe a procedure creating a unified image which is both photo-
graphic and painterly, and becomes a single visual presentation. This merging, however, becomes a matter of degree. The demarkation of what is real will always be in conflict. Ronald Grow states:

The line between illusion and reality is nonexistent; rather, there exists a zone of indetermination. Within the shifting merging boundaries of this zone the emotions and intellect of an individual may be stimulated and directed unceasingly from one extreme to the other. Through this constant traversing process one comes ultimately to a state of greater comprehension of true reality. I think of each piece that I do as being emblematic of one traverse; one step toward an ultimate clarification.  

FORMER ARTISTS

Francois Argo, a distinguished scientist in the early 1800's, on January 7, 1839, at a meeting of the Académie des Sciences made an announcement describing in general terms the new process of visualizing or reproducing images:

the image is reproduced to the most minute details with unbelievable exactitude and finesse...in M. Daguerre's copies...as in a pencil drawing, an engraving, or, to make a more correct comparison, in an aquatint-engraving...there are only white, black and grey tones representing light, shade, and half-tones.... Light itself reproduces the forms and proportions of external objects with almost mathematical precision.3

He also pointed out advantages of the daguerreotype for those who draw important architectural structures:

the ease and accuracy of the new process, far from damaging the interests of the draughtsman, will procure for him an increase in work. He will certainly work less in the open air, and more in the studio.4

4Ibid., p. 7.
This proved to be the case as more and more artists would use the studio itself rather than going in the open air to paint due to the new visual phenomenon and mechanical device. Many artists realized the advantages of this photographic image for their work, and at the same time, they found the situation a bit perplexing.

Huet, in turn, wrote later that year to the painter, A.-M. Decaisne:

I am all in a daze over Daguerre's discovery, what will they say about it then in Paris, the big city! Progress, emancipation, etc., etc., have you seen the marvel? To tell the truth I am a bit prejudiced despite my astonishment and admiration. 5

I feel that this prejudice and the astonishment and yet admiration became an internal conflict with the artists of the time. They were convinced that the likeness or the verisimilitude of things in their works was first and foremost and they began to look upon the photograph as a definite threat to how they were

painting. However, many painters did refer to the photographic image for a variety of reasons. As a defense for how they were painting, artists began to regard the photographic image purely as a work of art unto its own. In 1844, in a book, The Pencil of Nature, by Talbot -- the first publication using actual photographic prints with a text -- the author states:

Contenting himself with a general effect, the artist would probably deem it beneath his genius to copy every accident of light and shade; nor could he do so indeed, without a disproportionate expenditure of time and trouble, which might be otherwise much better employed. Nevertheless, it is well to have the means at our disposal of introducing these minutiae without any additional trouble, for they will sometimes be found to give an air of variety beyond expectation to the scene represented.  

Amazingly enough, not only were artists referring to the photographs after photographs became adaptable for reproduction on papers with a fair degree of accuracy in their color content, but as early as the 1860's, artists were using methods which had been developed for pro-

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jecting a camera image and developing it on canvas, this serving as a guide upon which one could paint, thereby saving the artist a certain amount of time. This especially became popular in portrait painting. (Illus. 1-2) Naturally, by this time, the artists were all subject to the skeptical challenge of "how true a painter are you?" The relevance of painting likeness became less and less important because photography, especially in portrait painting, was forcing the artist to not paint, but become a photographer. Such a case is Arsene Houssaye, who realized at the time that as a portrait painter he could no longer make a living but that he could, as a photographer, expedite the time to execute a painting by using photographic means. The public was, it seemed, also in favor of photography at the time because of its high degree of accuracy. Also it was less expensive than commissioning a portrait done in paint. In this same way, a painter named James Smetham, was said to have been victimized by photography:
Early in his career (we are told), he had depended chiefly on portraits for the certain part of his income, which was pretty well assured and satisfactory. But this source was cut off to him, as to many others, by the invention of photography.  

It should be fairly obvious at this point, that the painter had to find a new way of expressing himself or a way by utilizing the photograph rather than becoming a subject of it. In this sense, we find in art history that there was an increase in the subjectivity of the use of color and that it first came about, perhaps, in the first signs of Impressionism, where personal impressions rather than the mere calculated representation that was popular at the time became the priority. Of course it must be kept in mind that not only the portrait painters were having a difficult time contending with this new way of visualizing the world, but the landscape painters as well. The basic reason being that a photograph defined objects with a great deal of exactness, perspective, and higher degree of precision than that which the painter's eye could record. A good example of combining the figure as

well as a partial landscape from a photographic study and turning it into a painterly imagery, is in the painting from a photographic study by Theodore Robinson for *The Layette*, (Illus. 3–4), as well as is *Two in a Boat*. (Illus. 5–6)

One of the first painters who seems to find his way out of this dilemma -- while yet much of his work resembles a calotype and its natural effects which are that of a blurred imagery -- was Camille Corot. Perhaps he was in his painterly way, finding his way out of the edged reality of photography by yet referring to it. John Ruskin and others also became aware of the natural blurred imagery in landscape photography; they criticized it, however, from the standpoint of its distortion and light refraction.

That there were now critics of the photographic image indicated that photography was now losing initial shock impact, and was becoming scrutinized by the aesthetician, or critics, for its merits and its downfalls.

Eugene Delacroix, an artist in the nineteenth century, who saw the beneficial contributions to art
that photography was making, admittedly thought that
the artist should study the true character of light and
shade and also realize its subtle nuances and tonal
movements. Delacroix believed the photograph was
a perfect vehicle for this kind of training. There is
a good example of how Delacroix used photography
to its full advantage in the painting Odalisque.
(Illus. 7-8)

Between the years 1850 and 1859, it was evi-
dent that Ruskin and the French painters had adopted
a more positive attitude toward the use of photography
and that they were beginning to criticize Courbet's
paintings and those of other realists. The idea of
what one knew about life and that which was their
environment as opposed to what one saw from a dis-
engaging viewpoint became a predominant way of
interpreting what a painter should strive for in his works.
Using photographs to record certain events, the works
of Degas (the actual paintings) have a type of animation.
I would refer to Degas as a snapshot painter, not nec-


essarily meaning it in a derogatory way, but in that
his ballet scenes and in his horse race scenes there
exists an exciting quality of momentary movement.

Some of the post-impressionists' reactions to photo-
graphy are summed up best, perhaps, by Edvard Munch
and Gauguin. Aurier wrote in 1891 that Gauguin was
one of the first to:

understand the futility of the
petty little pursuits of realism and
of photographic impersonality which
is misleading contemporary painters,
and to attempt to re-establish in our
society, so badly prepared for that
revolution, true art, the art of the
rebirth of ideas, of living symbols. 9

Edvard Munch influenced no doubt by Gaugin and
the ideas of the Symbolists and, like them, aware of
creating something entirely beyond the powers of the
camera, made this declaration:

I have no fear of photography as long
as it cannot be used in heaven and in
hell. Sooner or later there must be an
end to this painting of knitting women
and reading men. I am going to paint
people who breathe, feel, love and suffer.
People will come to comprehend the holi-
ness of it and take their hats off as in
church.10

10 Ibid., pp. 195-196.
This is how Vincent Van Gogh described the new departure to Theo, (probably in the summer of 1888):

you must boldly exaggerate the effects of either harmony or discord which colours produce. It is the same in drawing — accurate drawing, accurate colour, is perhaps not the essential thing to aim at, because the reflection of reality in a mirror, if it could be caught, colour and all, would not be a picture at all, no more than a photograph.11

Perhaps for the first time since the advent of the camera, we could say that the informational quality of the camera has given way to abbreviated and freely drawn representation, unburdened by the link between the painting and the photograph.

CHAPTER II

CONTEMPORARY ARTISTS

Contemporary artists though they used photography as reference and source, are a continuing part of the revolution, so to speak, that was mentioned earlier.

Paul Cezanne is, in my mind, the most significant of the group of artists who made the departure from realistic painting. Mr. Meyer Schapiro says of Cezanne:

It is the art of a man who dwells with his perceptions, stepping himself serenely in this world of the eye, though he is often stirred. Because this art demands of us a long concentrated vision, it is like music as a mode of experience—not as an art of time, however, but as an art of grave attention, an attitude called out only by certain works of the great composers.

Cezanne's art, now so familiar, was a strange novelty in his time. It lies between the old kind of picture, faithful to a striking or beautiful object, and the modern "abstract" kind of painting, a moving harmony of colored touches representing nothing. Photographs of the sites he painted show how firmly he was attached to his subject; whatever liberties he took with details, the broad aspect of any of his landscapes is clearly an image of the place he painted and preserves its undefinable spirit. But the visible world is not simply represented on Cezanne's canvas. It is recreated through strokes of color...  

Cezanne, however, was not the first of the series of artists of this time and later, who made this departure and also used the photograph as a reference. There are records of Henry Matisse, and Rouault, having used the same photograph of Baudelaire in their paintings and having referred to the same photograph. There are even indications that Picasso referred to a photograph of Paul Picasso on a donkey, for his painting entitled Paul on a Donkey. Picasso also employed distortions created by the camera lens, as a means of heightening the expressive possibilities of moving figures. 13 (Illus. 9-10) It would not be inaccurate for me to assume at this time that Picasso, especially in his blue period, might have been influenced by the monochromatic prints photographers were doing at this time. I will also assume that this early camera influence upon Picasso might have led him to the use of light projections against cut out shapes. These would cast a shadow on the canvas and Picasso would draw from these shadows, as an initial step for

him to begin a work.

High speed photography has also had its impact on the world of art. It is revealed to us that Duchamp's painting of a *Nude Descending a Staircase* -- and Duchamp has stated this candidly -- was derived "principally from Marey's photographs and others of that kind." 14 (Illus. 11-15) "And elsewhere Duchamp not only reiterated this but generously suggested that the Futurists were not so much influenced by his work as they were by that of Muybridge and Marey whose photographs 'they all knew'." 15

In the Dada Movement, the artists were not concerned with idealizing reality, but giving reality an unreal appearance of something real. They began doing montages, which led to the collage eventually. By allowing montage to influence some of the painting and ideas by way of cutting photographs out and placing them at random, their works would become a reality. It was a type of instant art.

The painters of this time were not the only ones, however, to use this photographic image for surrealisti...
or imaginative art form. Like Moholy-Nagy, Man Ray was involved with surrealism, but as a photographer. In some cases he combined negatives and superimposed for a photomontage effect to obtain the surrealistic imagery he desired. (Illus. 16-17) The Surrealist movement contained the first group of artists to openly express themselves with the photograph, rather than conceal or modify or to elaborate further from their source. They actually employed the photographic techniques, prints, and in many instances drew from the photographs with a great deal of exactness. Such a case would be that of a photograph by Yan -- a photograph of Les Jacobins de Toulouse -- which Salvador Dali obviously used as a source in his painting Santiago El Grande. (Illus. 18-19) Interesting to note is the fact that some artists with whom I am acquainted regard some surrealists with a great deal of skepticism; they refer to them not as painters but more as craftsmen. I am led to believe that we still have this feeling about the photograph and its merits as competing with art by the
very fact that some artists do deny that the surrealists are actually painters and not just craftsmen. Some others, however, believe a photograph when used outspokenly, as does Dali, is honest, and does not detract from the merits of being a painter.

Art history has a tendency to repeat itself. (Illus. 20-26) With the advent of the de Koonings and the Pollacks, artists who had accepted abstract expressionism were given the freedom to divorce themselves, to a degree, from reality. The whole abstract expressionistic movement eventually brought about a need to bring back to art, in another manner, a reality and craftsmanship which seemed lacking in the works of the expressionists. I view this desire on the part of many artists for a return to a more tangible reality as having been inaugurated by pop art. Some pop artists left advertising to become fine artists. These artists brought with them a variety of technical skills. Views concerning such things as cropping, and knowledge of photography. Many of the critics at the outset were
highly critical of this whole movement, because they saw it as being a short-lived thing, a fad. I wholeheartedly disagree with this, however, because I believe that the artist is saying something important about the time in which we live. This is said by the use of canvases with hard edge, with shaped canvases, and all the techniques that are appearing. Perhaps, as styles flick by, the painters are ridiculing our whole society for going so fast. I feel many of them sense that commercialism, our present system, could obliterate us.

As Nietzsche said, "The will to a system is a lack of integrity." \(^{16}\) Many artists at present uphold this view and are refusing to define the demarkations of whether one is this or that type of artist or what should be or should not be art. It is not even right for the artist to think that he is an artist, or to strive to be an artist, but just rather happen to produce art. Maybe we should lose the word 'art' somewhere. The concept of not willing a system in art is not original,

for I believe even the abstract expressionist school of art would agree that willing a system is a lack of integrity. Perhaps the pop artists became accepted by daring to avoid such subjects and objects as were considered worthy of being art. One such artist being Robert Rauschenberg.

Rauschenberg uses the photographic image on canvas not because the canvas is flat and has to be so, and this has played an important part in breaking with the conventional modern idea that the canvas is flat. (Illus. 27) I think that it might be interesting if one were to approach photography and painting from the standpoint that, "yes, the canvas is flat and yes the photograph by its very nature retains a high degree of reanimation as opposed to the paint on the canvas" and bring both to the idea of the canvas itself. One very good example of Robert Rauschenberg's concern with this three-dimensional aspect of the photograph and the anti-flat surface quality of the canvas would be one of his earlier works, *Crocus*. (Illus. 28) The photographs
are in black and white and the painting itself is black and white and also illustrates his belief that the canvas is not just flat. Using the photograph on the canvas in this way gives it dimension. It is interesting that Rauschenberg started this work by staying with black and white, thereby avoiding the addition of color until perhaps he was sure of himself. (Illus. 29) He later moved into the realm of employing color in conjunction with the photographic image. Whether or not he is successful would be, naturally, my own opinion. But in most of the canvases I have seen of his work, he employs the use of tints and transparent colors so that the photograph itself or the screening of the photograph comes through the paint and this is how he also incorporates the paint itself with the brush stroke. (Illus. 30)

Roy Lichtenstein uses popular imagery in another respect. Many of his works are satirical to the extent that they employ cartoons and things of that nature. However, he is mainly concerned with using photo-
graphic imagery to obtain a flat, poster-like quality. He does not usually use the actual photographs, but rather refers to them in a very 'commercial' personal way. (Illus. 31-33)

James Rosenquist, though also not employing the actual photographic image on his works, refers to them obliquely. Objects that are very much a part of our lives take on the appearance of a photograph. His paintings contain a certain amount of sleekness, absence of brush stroke, and hard edge qualities. He paints objects that are stripped down to their essentials, while exaggerating the qualities that they possess, such as being metallic, their softness or flowing character. (Illus. 34-37)

Robert Indiana, from his ambition of becoming a writer, became involved in depth with the idea of numbers on canvas, and of stencilling and assembling them so that they became modular units. Each of his paintings are saying something verbally by the use of a number or a symbol. (Illus. 38)
I CAN SEE THE WHOLE ROOM!
AND THERE'S NOBODY IN IT!
Jasper Johns became interested in synthetic objects, such as the Ballantine Ale cans that he did both as a lithograph and in a sculptural form. (Illus. 39) Also the American Flag, which up close does not, in some of his drawings, look like a flag at all, but rather a series of sophisticated doodles which progress from one unit to another unit, or from frame to frame, to make up the entire flag. Upon going away from the work and losing the modular units, one becomes aware of the thing as a whole. (Illus. 40) The idea of using these units possibly originated from film-making. (Illus. 41)

All of these artists refer to definite things in our lives, though they all do not use the photographic image and project it onto their works. So we have those who refer to the photograph and to the world around them, and those who actually apply the photograph itself. Rauschenberg is one of many who use the actual photograph. Andy Warhol is another member of this popular art movement, who employs the use of photography by means of a silk screen on canvas. Besides being known as an artist, he is also known for his movies and perhaps,
once again, this modular or segmented approach to the canvas has had its inspiration in film. (Illus. 42-43) In *Jackie* (1964) or in some of the other similar things he has done, the units seem to simulate frames in a filmstrip. (Illus. 44) Robert Indiana has employed repetitive items as did Rosenquist and Rauschenberg. Another artist who is popular with young up-and-coming artists is Kitaj. However, to me, he becomes so involved with himself that his art becomes a private preoccupation rather than what most critics would say his work represents: namely the world outside of the canvas. I think his paintings come off as being rather academic. (Illus. 45-47) To me it's the difference between Kitaj and Hans Hofmann, Kitaj the teacher and Hofmann the artist, the teacher being of less consequence in the final analysis. It also has something to do with that which is calculated, then well-constructed, as opposed to something which is accidental but then becomes a meaningful aspect of the work in that it is eventually perfectly utilized and no longer becomes the accident it was. (Illus. 48)
Painters are not alone in their concern with the relationship of photography, painting, or sculpture. For instance, at a recent show at the Museum of Modern Art, *Photography into Sculpture*, there were many attempts to use photographs in conjunction with the sculptural form. Many of these, however, took on the appearance of traditional aspects of the photograph itself, in that many artists used the photograph much as a flat or surface thing, projecting it over a cube, or seemingly preconceived form in such a manner that the photographs that were developed on the form said little about the form and more about the photograph. The exhibit, to me, showed a strong lack of understanding of the three-dimensional form on the part of the photographers.

I think that the painters who are using photography in their works are much more successful at this combination. Yet even more successful than either of these groups are the printmakers. The printmakers who are using the photographic form, however, seem to have an advantage in that they are working with a visual expression, in a media that is more readily unified with the
photograph itself. This because they often use the photographic image in the print by way of a half-tone process, which helps to break down the tonal qualities in a photograph and has a tendency to flatten the image out. The final result being that the surface quality of the work has a unity, in that it says something about the surface of the paper or whatever backing is used. This is opposite to that which Rauschenberg is doing in his paintings, when he eliminates the surface quality in his canvas and says something about the third dimension. Yet, the contradiction works in Rauschenberg's painting. In the show at the Museum of Modern Art, *Photography into Sculpture*, I arrived at the conclusion, on the other hand, that the photographers were disregarding the third dimension, even though here it was actually present. Here was a definite visual contradiction which does not exist either in many of the printmakers' works or as regards the works of Rauschenberg. However, some of these notions of disassociation could suggest a kinship to art work which is surreaistic.
It is very difficult to say exactly why I started to use photography in conjunction with painting. I believe, however, that the main influences stemmed from painters who were exploring the idea of repetition and also of a image which was realistic either by the use of the camera or otherwise. I was drawn by the idea of the snapshot which freezes extremely fast movement, and microphotography, which reveals many unusual facts. The first actual recollection of being exposed to a painting in the area which I am now exploring was by the painter, Krimmer Brans, who did a work entitled The Prompter. A photograph of this appeared in a section of the Chicago Daily News on May 11, 1963. (Illus. 49) At that time, I did not think that much of the painting; however, looking back I find that this painting -- like many paintings which seem to arouse an initial dissatisfaction -- was indeed a work of art.
In 1963 I was still working with oil and watercolors. During the summer months of 1966, I became very dissatisfied with my art work, more so than I had ever been in the past. I was groping with the idea of getting back into the design element of painting and I did not quite know how to approach this. It was suggested to me that I try acrylics as a media for expressing myself. As soon as I started using acrylics, it became natural for me to move some of the areas of my work off the canvas so that they were not isolated by a natural frame, and, also the brush strokes started to disappear. (Illus. 50) The result was that I became more and more design conscious and conscious of the fact of the two-dimensional surface of the canvas. Also, even my color sense was changing due to the intensity of the acrylic colors. I was also becoming aware of the line which is formed as two color edges contact one another, rather than thinking of line as a special addition. I became more and more aware of color and shape forming a line. What I refer to as 'color volume' or 'pressure' rather than lines.
Much as I would push one color area against the other, forming as it were, a line. The line is taped to the side of color, so to speak, much as a child's puzzle, or the appearance of a color being pasted on another color, this giving a sharp, clear, cut out effect. (Illus. 51)

I started moving away from the representational form, but only to a degree. I started using beach umbrellas as an inspiration for attaining the sense of design and color relationship that I was searching for. (Illus. 52-53)

Soon, however, I found this not to be enough. The more I eliminated or rather reduced the painting to bare essentials, reducing the emotional aspects trying to make the effect more intense, the more I wanted to do this. So, I started using completely flat color and flat spatial concepts. I worked figuratively. (Illus. 54-55)

During this time, the artists who had most influenced my work were Marcia Marcus and Allan D'arcangelo. A few months later, I became very aware of an artist named Georgia O'Keeffe. It was at this time my art work became less concerned with the figurative and became delineated to
the extent that the viewers would see the work perhaps
as color and shape rather than figurative form. (Illus. 56-58)

Thinking back, at a time when I apprenticed as
an artist under Alphonso Iannelli and while I was working
as an Interior Illustrator and attending The Chicago Art
Institute, I was becoming dissatisfied with the delineation
of various "decorative" aspects that were lacking in my
paintings and started to become more and more involved
with representation and those aspects of representational
form which are "decorative" and at this point I began to
turn toward photography. At this same time, I saw a
painting entitled My Brother with Janice by a young artist,
Noel Mahaffey. (Illus. 59) The painting, done in oil
on canvas, contains visual forms which connote a time
lapse. The canvas is two-dimensional in some areas
of the painting; those parts of the painting which are
more realistic depict a certain degree of the third-dimensional
quality. It was this painting that made me more aware
of what was happening with some artists in having been
exposed to the photographic image and especially film-
making.
During the winter months of that year, I became involved with making movies by drawing on 16-millimeter film and not only hand drawing on the film itself, but adhering to the film such things as Zip-a-Tone, Ben Day patterns, and the like. I was attempting to achieve a type of motion, yet saying in the film itself something about motion and about units and things of that nature. At this time, I was taken up with the idea of doing hand drawn films and having my students explore the possibilities of this. It was then that I became less and less involved with painting and more with photography itself. (Illus. 60) I became very aware of the fact that many photographers were taking photographs which we would associate less with a photographic imagery and more with that of painterly imagery. (Illus. 61-63)

Reflecting back to the work of Noel Mahaffey, I realize that I wanted to make films but I did not want to divorce myself from painting so I started to paint again by dividing the canvas area itself up into frames which now seem to me contrived and became more so as time passed.
I turned to drawing units on drawing paper much as the units I would have drawn frame by frame on a film but rather drew them in sequence. (Illus. 64-68)

It wasn't until the spring of 1969 that I became aware of photographic emulsion that could be used on canvas and other materials. I heard of it through a photography student attending Rochester Institute of Technology, and without knowing anything more about it, I sent for the emulsion and began to experiment with it and its possibilities. (Illus. 69-71) During the experimental phases, I became aware of basically two things: a gray rectangle form will have a certain weight in a composition,

"depending on its size, shape, position, color and surface variation. When a photograph of about the same tonality is substituted for the rectangle the visual weight increases, because the image of the photograph gives an added level of meaning to the form it fills."17

I then became aware of the following problem, which is perhaps best quoted at this time.

"The outer skin of things, the epidermis of reality, these are the raw materials of cinema....The pictures....create an

autonomous reality of their own. And from this interplay of images, a transsubstantiation of elements, there arises an inorganic language which works on our minds by an osmosis and demands no translation into words."

The main problem then becoming that of the three-dimensional quality which one can obtain by the use of the emulsion in relation to the two-dimensional flat surface quality that a canvas may possess. I wanted to retain a two-dimensional surface on the canvas with paint and in conjunction with the tonal dimensions of a photograph, bringing the two into a form which for me seems to be a new type of reality. Having proceeded with my experiments, I saw a reproduction of a painting by Jorge de la Vega, which impressed me with its dimensional quality, the use of color, distortion, and photographic imagery. (Illus. 72) This painting I found to be a direct source and inspiration for a much deeper investigation as to the use of photographic imagery and the two-dimensional qualities in painting.

I regard the works that follow as a total summation of experiences. Through discovery, analysis, experimentation, and understanding of the processes employed in the use of the photographic emulsion as well as the problems involving that part of the painting which is paint on canvas. I feel that the art works themselves are complete and successful, for the time.

Perhaps one of the most challenging problems I had to face was what photographs were suitable for the paintings I was about to do, as well as what exposure each negative should receive. In other words, how dark, how light, how many tones should the photograph have and yet make the painterly aspects or those aspects of the canvas which were painted upon, read as a unified work of art with the emulsion.

**PAINTING #1**

I employed the use of emulsion, spray, lacquer,
and acrylic paints in this painting. The emulsion parts of the paintings are taken from four separate photographs. The first photograph reading left to right was obtained by placing the canvas which was treated with emulsion under the enlarger by folding the left part of the canvas under and raising that part around the glasses. The second photograph was exposed and then the canvas was moved under the enlarger so that there appears over the girl's left shoulder, the shoulder to our right, a ghostly type of image. Reading third from the left to the right, the emulsion streaks (brush strokes), as are those of the one on the far right, were simply streaked when the emulsion was applied as is paint.

In this particular painting, the emulsion was treated in such a way that the canvas read 'canvas'; in other words, the canvas can be limp or folded and that emulsion can show brush strokes. Here I was involved with the idea of motion. Perhaps this relates more closely to the film idea than the other three paintings I have yet to mention. Personally, I find the painting to be self-contained.
I feel further that this particular painting was safe in that I knew exactly what I wanted to do, and very little was left to chance. I find this a bit disturbing. Perhaps it would have been better had I tripped up somewhere along the way and been forced into another situation.

With most of my works, after they have been completed, I feel a great deal of dissatisfaction. Perhaps this is what keeps me going -- this constant dissatisfaction. Yet, at the same time, I will recognize and accept it for what it is and learn by it. I do not consider most of the paintings that I feel are finished at the time, ever finished. There is always the chance of a change, or a new possibility, but then one speaks of another painting rather than the present one.

PAINTING #2
(Illus. 73)

Unlike the first painting, in this painting some real problems arose that were unexpected. The figure to the right was drawn over and over and various areas and positions changed as did the colors. I finally ended
This illustration by Chuck Wilkinson was used as a reference for Painting #2
up taking the canvas off the stretcher and starting the
drawing on an entirely new canvas, because I did not
like the position of things. By using paint and emulsion
and trying to achieve a flat surface with a painterly
imagery, one becomes aware that you can only build
up the paint so much and then you are going to have a
texture that is highly undesirable. So with a new canvas
stretched and the drawing done over two times and paint
applied twice and areas of color changing three times,
I had just about reached the limit of what the canvas
would take without building it up too much. This, however,
would not stop me from starting all over again, or applying
the paint thick and not retaining the flat surface, if I felt
a change was necessary.

In the painting, the emulsion part of the painting
at the top, was no problem at all. A negative was projected
left to right as I moved the canvas under the enlarger,
turning the enlarger on and off to expose frame by frame
until I reached the right side of the painting. The painted
areas at the top were placed right over the emulsion after
it had been developed. The effect at the bottom of the skirt or dress shape and that which goes across the canvas moving from right to left, was obtained by having the temperature of the developer and fixative above 75°F. It was warmer than it should have been and as a result the emulsion ran or bled down as it was being developed. This was a problem, but then after I came out of the darkroom, and it was already there, I found the effects very stimulating and tried to utilize them. This is why I feel that this painting is more successful than the first painting. The unexpected was utilized so well. This bleeding of the emulsion effected another color change and also effected the leaving of transparencies and brush strokes in certain passages throughout the painting, which I found very pleasing in the final result.

There are two criticisms that have arisen concerning the painting. One is that perhaps the boot is too clearly identifiable as compared to shapes and passages in the rest of the painting. I personally see where one
might feel that way, but I find that it is a good and desirable incongruity in the work, that helps the work hold together as it does, in the way it does, so well. In using the emulsion with representational painterly imagery, the problem does become one of identity. The photograph itself can be a bit overwhelming because it is so readily identifiable, and we read it perhaps differently than we do the painterly aspects of the painting. That is why in this particular case, the area that contains the photographic emulsion is quite dark, so that some of the tension would be broken down.

The only criticism in opposition to what I have done and I feel eventually may affect the painting would be a slight color adjustment in the green foreground or in the blue stripe on the croquet ball nearest to the viewer. Either one of these areas might be adjusted. I would, however, only be able to do that, at this point, by living with the painting for quite some time. As to whether or not my opinions on this will be strong enough to warrant such an adjustment, only time will tell. At this time,
I feel that the painting is complete.

**PAINTING #3**  
*(Illus. 74)*

In this painting, the canvas was treated with the emulsion on the upper left and right-hand sides. On the right-hand side there was projected on the emulsified part of the canvas a photograph from a segment of the painting itself, as it was being completed. Then the photograph of the painting was projected and developed on the upper right-hand corner of the canvas. On the left side, the emulsion was simply exposed to a strong light without a negative. Many people have found that it resembles a high contrast photograph of foliage. However, this is not the case. The emulsion after being exposed to a strong light and being developed, was taken outside. With a toothbrush, sponge, and Clorox, the emulsion that was exposed was removed selectively, leaving the white areas, which are without emulsion. Regarding the drawing of the figure itself, I had little doubt as to whether the figure was exactly what I wanted
This photograph was used as a reference for Painting #3.
or not, with one exception. The leg, which is draped over the chair arm, is that exception. I spend two days drawing legs and feet in different positions, only to find out that I ended up with nearly exactly the same drawing that I began with. I realize that the foot is the side (semi-frontal) top view, and that the back of the leg, including the heel, are a different eye level. But I find it in keeping with the rest of the figure itself. I was striving for the design quality of the foot itself. The bulldog I feel helps relate to that area that is placed right above the head. The red stripe that runs across behind the head of the dog works well. I find the painting successful. While doing this painting I became more aware of the fact that with the image of the painting itself, projected and developed in the upper right-hand side, the perimeter of a negative has or is a very strong element in a photograph. This element of the edge of the negative and the restriction placed upon the edge by a negative, I utilized in the next painting.
PAINTING #4

This painting began by first projecting a light on two figures and drawing the shadow perimeters of the two figures on the canvas, then placing the canvas in a room with many windows. I wanted to see how the sunlight coming through the windows and through the panes could create a division on the canvas as the sun was rising or setting. These areas, when I found them pleasing, were marked on the canvas. I proceeded to eliminate and distort some of the lines with a pencil. The pencil drawing remained at about the same weight line or value at this point in the work. I decided then to place a fish-type image in the bottom right part of the painting and proceeded to do some drawings of tropical fish. When I got one drawing I thought was good, I modified it and placed it upon tracing paper. Then, taping the drawing to the canvas, I traced it. I proceeded as I had in the other paintings to search for negatives to use and got the idea of projecting images inside the drawings of the figures. Before I did this I decided that
some of the negative areas would be black paint around the tracing of the figures and I started to intensify the pencil lines in the work but I did not carry the drawing to its completion, as was later the case after the emulsion on the canvas had been developed. In the darkroom I proceeded to paint with the emulsion in the areas of the drawings themselves. I went beyond the borders of the drawings with a brush stroke, realizing that I would break down some of the natural boundaries of the negatives themselves and leave them open to the white space of the canvas. I intensified the pencil lines which now were inside part of the photographs to make them more evident. I also related the shape around the belly part of the fish to the opposing movement of the darker band of blue at the right end, and tried to relate some of the diagonal movements of the negative to the pencil drawing and paint. To the left, the purple and yellow ochre streaks were emulsion that were not exposed but developed, fixed, and washed later. They were fixed only to the extent that they were relatively fixed as to
the stopping of the action of the developer. The result was that this area was very light at one time and during a period of two days, it became more yellow ochre, then turned to a purple color. Watching this happen, I decided I would stop the action by using a spray lacquer which photographers use. The spray resists the ultraviolet rays of the sun and it actually stopped and fixed the colors as they now appear. The total result of the painting I find very gratifying.
There are various emulsions which are available for the artist. These sensitizing emulsions can be used on paper, wood, glass, cloth, metal, ceramics and many other surfaces. The print emulsion I chose to use for my work was emulsion CB-101, a product of Rockland Colloid Corporation. The other emulsions available are BB-201, which is a high enlargement speed emulsion as opposed to the emulsion I used, which was of a medium enlargement speed. Another emulsion available from Rockland Colloid is BX-201, for contact speed. They also have a photo-aluminum which comes in a shiny chrome or lustrous matte finish and is processed like bromide enlarging paper for continuous-tone and line prints. (For those individuals who are interested in serigraphy, Rockland also has a screen-making emulsion which they claim to be many times faster than dichromate.) Rather than using an emulsion which one must apply, some individuals may
be interested to know that there is a linen on the market which is photographically sensitive. The linen comes in various sizes; the largest of those, however, being only 16 by 20 inches. This is a product of Air Photo Supply Corporation.

The instructions accompanying the emulsion as well as subbing and hardener for using Rockland continuous-tone emulsions are the same for all types. It may be interesting to note that in the spring of 1969, the instructions I received with the emulsion differ in some respects to the latest instructions I received. Evidently many artists who are now using the emulsion found that certain procedures were not necessary to achieve a final result. (Illus. 75)

Being familiar with the latest instructions from Rockland emulsion, I will now relate the two procedures I found to be the best for me. You should realize that my two methods differ in some ways from the instructions that are given by Rockland and you will find that though you were to use either of my methods, the humidity and the
INSTRUCTIONS FOR USING ROCKLAND CONTINUOUS-TONE EMULSIONS

PACKAGING AND STORAGE:
The emulsion kits are in three parts, containing:
1. The emulsion itself.
2. Subbing powder (in plastic bag).
3. Hardener (in 1/2 oz. bottle).

(1) Using the Emulsion: The emulsion is light-sensitive and should only be opened in the darkroom. Always store emulsion below 70°F in the refrigerator if possible (but do not freeze).

Rockland emulsions can be handled under any red, amber or greenish-yellow safelight. The safelight should be at least 4 feet away from the emulsion. Be careful of ruby bulbs and other devices that are not actually safelight filters, as they may admit white light. For long periods of time, such as when drying the emulsion, shield the emulsion from the safelight or dry in total darkness, as no safelight is safe for a prolonged exposure period. Work in a well-ventilated darkroom at reasonable temperature and humidity.

The emulsion is a gel at room temperature or below. Before using, liquify the portion you will need by immersing the bottle (under safelight) in a pan of hot water until the desired portion turns liquid. (It is not necessary, or desirable, to liquify the entire contents, as excessive heating fogs the emulsion.) Coating temperature of the emulsion should be around 100°F. Avoid overheating.

Pour off the required amount into a clean container of glass, plastic or stainless steel. Do not use containers or tools of iron, copper or brass, which will react with the emulsion. (One ounce of emulsion covers approximately 2 square feet.)

Gently stir in the hardener (3). Use 5 drops of hardener per ounce of emulsion or one bottle per quart of emulsion. As the hardener makes the emulsion insoluble over a period of several hours, do not add it, or emulsion containing it, to the unused portion of emulsion.

Pour some emulsion on the surface to be sensitized, which has been laid flat. (To prevent gelling, it may be necessary to slightly warm the material.) Use a flat stick to push the emulsion over the surface, allowing it to level itself. Push bubbles off to one side. (Bubbles can also be eliminated by spraying the surface with methyl alcohol in a small atomizer.) Allow the coated object to remain flat until the emulsion sets-up or gels, and becomes sticky. Drying can then be speeded by standing the object upright and applying a fan or electric hair dryer. (But do not let the temperature exceed 90°F, or the emulsion may melt.) After the emulsion is dry, the coated object can be stored for several months or can be exposed immediately.

Other methods of coating include dipping (of small objects) in the emulsion or coating with a knife-edge coater (for cloth). The cloth should be stretched flat and the emulsion applied with the coater in a thin, uniform coat. The emulsion may be brushed on the surface to be coated, if desired. If a brush is used, two coats may be necessary to prevent streaking. An airgun may be used to apply the emulsion, thinning, if necessary with warm water. Use at least 40 psi pressure and during coating immerse the spray head occasionally in warm water to prevent gelling of the emulsion. The parts of the spray gun
touching the emulsion should be nickel-plated or made of other non-reactive material. Use adequate ventilation.

Expose with an enlarger or contact printer. A test strip to determine exposure is easily made by smearing a few drops of emulsion (no hardener is necessary) on a scrap of paper, allowing it to set-up until it becomes tacky, then exposing and developing without drying.

Develop like photographic paper, using ordinary paper developer at 68-70°F. For BB emulsions, use Kodak Dektol or similar formula, diluted 1 to 2. For CB and BX emulsions, a soft-acting developer such as Kodak Selectol gives excellent results when diluted 1-1. (For large surfaces, the developer can be further diluted and the development time prolonged.) Developer that is freshly made or too strong may leave a yellow stain after processing, so it is a good idea to let the diluted developer remain in a tray for several hours before using with Rockland Emulsions.

Do not use a shortstop bath. Instead, rinse briefly in clear water after developing and fix in fresh hardening hypo with frequent agitation. In the hypo, the emulsion will "clear". That is, the white, unexposed portions will become transparent. Fix for twice as long as this takes (about 10 min.), then wash for 30 minutes in running water (or 15 minutes if a hypo clearing agent is used.) Dry gradually.

The finished print can be toned or colored with photographic colors or dyes. It can be protected with a spray coating, such as acrylic, lacquer or varnish. Any emulsion remaining on tools, or brown stains on hands, can be removed with dilute bleaching solution (Clorox, Purex, etc.).

(2) Using the Subbing: Make up stock subbing solution by sprinkling the crystals of gelatin in the plastic packet on the surface of 1000 cc (one quart) of cool tap water. Allow the gelatin to swell for 10 minutes, then heat with stirring, to about 120°F. to dissolve the crystals. Store the made-up subbing solution below 70°F., preferably in the refrigerator (but do not freeze).

The subbing solution promotes adhesion on non-porous surfaces, such as glass, plastic and metal. It is not necessary on porous materials such as wood, paper, cloth or even anodized aluminum.

To sub glass or ceramics, first chemically clean the surface using hot washing soda, lye or trisodium phosphate. (Do not use soap or detergents, as they leave an oily film.) Rinse thoroughly in hot water. Warm the subbing solution to 100-120°F. and pour off the desired amount into a clean container. Stir in 1 or 2 drops of hardener per ounce. Apply to the chemically cleaned surface with a brush, cotton, or flow on. Drain off the excess and allow to dry from 2 hours to overnight before applying the emulsion.

To sub acrylic plastic, such as Lucite, Acrylite or Plexiglas: Obtain a bottle of gloss polymer medium (clear acrylic polymer emulsion) at an art supply store. Add 6 drops of the polymer per ounce of warm subbing before stirring in the hardener. Apply to acrylic plastic that has been chemically cleaned first by washing with acetone or cleaning fluid (carbon tetrachloride, naphtha, etc.) then washing with hot water containing washing soda, dilute lye or trisodium phosphate and thoroughly rinsed. Dry 2 hours to overnight and apply emulsion.

Preparing artist's canvas: If unprimed canvas is used, prime with flat white latex house paint. Allow to dry thoroughly and apply emulsion directly over paint. Pre-primed canvas: Sub as for acrylic plastic (above). Note: Artist's canvas may be radioactive, fogging the emulsion. Test a small patch by applying emulsion, allowing it to dry and processing without exposing. If the emulsion turns gray, radioactivity exists and a different material must be used.

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temperature in which you work would affect the end results. Each individual has to do some experimenting to find what works best for him. The first method I used was longer and more time-consuming, with print quality no better.

**METHOD #1**

It may be necessary, if the surface to be treated with the emulsion and subbing is waxy or non-absorbent, to use washing soda, followed by an alcohol bath and then rinsed well. This will help the subbing adhere, even on acrylic paint other than that which is the gesso painting ground. In the first step, it is not necessary that you go into the darkroom. You can open up the box itself, which contains the subbing in a flake form, hardener and the emulsion. The emulsion is covered so that the light will not spoil or contaminate it. After opening the package of powdered subbing, I pour out the subbing into one quart of cool tap water and let it sit for ten minutes. Then I proceed by heating the subbing to $120^\circ$ F., and letting it stand for one-half hour. This is
to prepare the subbing itself. After doing this, I once again heat the subbing to $105^\circ$ F., and add five drops per ounce of hardener. I then put the unused portion of subbing back into the refrigerator. Using the subbing at $105^\circ$ F., I apply it with a soft brush to the area where the emulsion is to be placed upon the canvas. The subbing helps the emulsion to adhere and I let the subbing dry for three hours. It is not necessary that one sub the surface. I found, however, that it was better to do so, rather than taking the chance of the emulsion washing off the surface.

With the canvas treated with the subbing and having dried for approximately three hours, I take the canvas into the darkroom with the emulsion and heat the emulsion. That portion of the emulsion to be used is heated to $98^\circ$F., adding five drops per ounce of hardener. The number of drops added depends on how humid a day it is and whether or not the surface is flat. Then while the emulsion is drying, I spray the surface lightly with an atomizer filled with rubbing alcohol, thereby breaking down any of the air bubbles which might have
formed while I had brushed on the emulsion. The emulsion would then have to dry for approximately three hours.

While the emulsion is drying on the canvas, I take some of the emulsion with hardener and make test strips by placing emulsion with my finger and rubbing the emulsion on some index cards. This enables me to determine what F-stop and what time would be used when I expose the canvas itself under the enlarger. Though it is not necessary to let the test strips dry before one proceeds to expose them, I find it better to do so. You have a better idea of what you will get upon the dry canvas.

After the test strips and the canvas are dry, I place the canvas in an area where it would not be susceptible to the light of the enlarger, by simply turning it to a wall. I then project the image I was going to later project on the canvas on my test strips. I develop them to determine what exposure is suited for the canvas. I develop the test strips as I would
the canvas itself. I dilute the developer (using Dektol) -- one part Dektol to two parts water -- while making sure the temperature is no higher than 68°F. and no lower than 65°F. It is important to note that if the developer itself was prepared recently, it should sit out in the open in a tray, diluted -- one part Dektol to two parts water -- for several hours if not overnight. If you do not do this, there is a tendency for the developer to yellow and spoil the final image.

I place my test strips in a tray, and leave them in the tray with frequent agitation for one-and-a-half minutes. I then proceed to put them into my stop bath -- which is two ounces of 28% acidic acid to two quarts of water -- placing the test strips in this solution for approximately twenty seconds. I then move the strips to the next tray and fix them, agitating or moving the tray frequently. Usually, this takes eight to ten minutes. If I found, though, that the emulsion was clearing or was becoming transparent, I would fix the paper twice as long as it took for this clearing of the emulsion to occur.
This still results in a time of eight to ten minutes. The fixer used was Kodak. The strips then go into the next tray which I had filled with one-and-a-half ounces of Perma Wash to two quarts of water. I follow this with a washing of the test strips in water for five minutes, then placing them in the Perma Wash for five minutes more. Then I put them back in the water for five minutes and then wash the final test strips themselves for fifteen minutes in constant running water.

Because I was using just test strips, however, I usually stopped after developing the test strips and washed them off in water to see what results I had under the safelight. Naturally this did not make for permanence, but rather than go through the rest of the procedure, I would see what I had and what exposure time I should use for the canvas, so it was not necessary to continue through the other procedures. I only mention these procedures at this time because the canvas, after it is exposed would be treated exactly in the same manner that I have described. The only difference
between the test strip and the procedures for the actual canvas, would be the size you were working with.

One cannot place a large canvas in a tray that was eight by ten inches. So, when I was working with the canvas, I placed a plastic cup in each tray, making sure that all the solutions used were at least 68°F., in temperature or under. I then repeatedly poured each solution over the canvas. It is important that these cups used in pouring each solution be only for that particular solution, even though they may be washed out at the end of the developing process. There is always the chance that some of the residue from one solution (if the same cup were being used for two different solutions) could contaminate that solution. The result would be less than satisfactory. In the pouring of the solutions over the canvas naturally the solutions must end up somewhere. Therefore, you must have either a large sink or a child's plastic swimming pool to catch the excess solution which is poured over the canvas. It can be disposed of later. To wash the canvases themselves, I took them out of the darkroom after I had completed the
Perma Wash, placed them out-of-doors, and using a hose, washed the canvas for twenty minutes.

One might think that the canvas and stretchers, after being exposed to all this washing, would shrink. The shrinkage and warpage, to the contrary, is minimal. The advice I would give concerning shrinkage would be to make sure that the painting carry color off the edge onto the side of the canvas approximately one-sixteenth of an inch. The warpage of the stretch itself can be easily remedied by using a wood other than pine, which has a tendency to warp anyway. I found that prepared stretchers by Grumbacher did not have a tendency to warp as much as those I made myself. Also, redwood has less of a tendency to warp. The only problem one has is trying to restretch a canvas on the same stretcher, if it is removed to get distorted projected areas on the canvas, as I did in Painting #1 under Chapter IV, *Photographs of Works*. Once the canvas is treated in a limp position, it is difficult to restretch it, because the shrinkage will be more than if it had remained on the
stretcher. The best way to solve this is to wash the cotton duck or linen which is not yet gessoed in a washing machine and dry it before you begin. This process will remove some of the sizing in the material and thus eliminate much of the shrinkage problem during the process.

METHOD #2

This method, in my opinion, is less time-consuming. I here use photographic chemicals, in some instances, which are stronger, thereby cutting down the time of fixing, washing, and developing. I used this method to obtain the results I did in my present works.

I heat the prepared subbing to 105°F., this time adding six drops per ounce of polymer medium and ten drops per ounce of hardener. I let the subbing dry upon the canvas for approximately three hours and then repeat this, with a second coating of subbing. I note that with the addition of the polymer medium and more hardener, the drying is more rapid. It does not actually take three hours. I then heat the emulsion to 98°F., and add three
drops per ounce of hardener and eliminate the spraying of alcohol. I find it makes absolutely no difference on the texture of the canvas. You will note here that I only add three drops per ounce of hardener rather than as in Method #1 where I used five drops per ounce. I find lessening the drops per ounce of hardener makes the emulsion adhere in a thinner layer. The layer, however, is also more uniform throughout.

I proceed then to develop the canvas after it has been exposed. I develop them at $65^\circ F.$, with the same proportion of Dektol -- one part to two parts of water. I do this by pouring with a cup for two minutes. Then, instead of using a stop bath, as I did in the previous method, I simply rinse them briefly in clear water. Then I proceed to use a Rapid Fixol -- seven ounces to two quarts of water with the addition of two ounces of hardener. The hardener, a liquid type, is used in conjunction with the Rapid Fixol. Both of the aforementioned are products of F & R Corporation. Then I proceed to fix the canvases for approximately three
minutes or twice as long as it takes for the emulsion
to clear. Next I use another F & R Corporation product,
a hypo-neutralizer. I dilute four ounces of this into
two quarts of water, once again maintaining my
temperature between $65^\circ$ F. and $68^\circ$ F. I do this for
approximately three minutes. I proceed by taking the
canvases out of the darkroom and hosing them down
with water, each for approximately twenty minutes.
To maintain the temperature of the developer, fixer,
etc., I use ice cubes. Another way to maintain a low
temperature so that the emulsion will not melt, is to
place water in balloons, tie the balloons, and put them
in the freezer. By putting the cold balloons instead of
ice cubes in the solution, you will avoid diluting the
solution with water.

* * * * * *

I find that the most satisfactory way of coating
a curved surface with emulsion and having it adhere
in a uniform manner is the following: heat the subbing
to $105^\circ$ F. and add ten drops per ounce of hardener. Pour
it on the surface. Let it dry for approximately two hours. Repeat with another coat of subbing. Then heat the emulsion to 98°F. Add no drops of hardener, but instead add distilled water. Add one ounce of distilled water per two ounces of the emulsion. After the emulsion is poured on the curved surface, do not spray it with alcohol. When the emulsion has dried, project the images onto the surface and then proceed to develop the surface as was done in either Method #1 or Method #2.

To help protect the final works, I give them a gloss spray (the photographic sections), which protects and seals out dirt and moisture, and contains UVA, an ingredient that screens out ultraviolet light and increases light fastness of all colors and grey tones. The spray is Century Laboratories Gloss Spray with UVA. I proceed to coat the whole canvas with polyer medium, then give each work a coat of matte varnish.

Some of the things you can do with the emulsion are: brush it on, pour it, spray it on a surface. While the
emulsion is still wet, you can project an image on the surface, then lift the flat surface up, let the image run, and then permit the emulsion to dry. The result is a flowing distortion of the object. You can coat a flexible surface, distort that surface projecting on it and then stretch the surface flat. The result is a distortion by the folding of the material itself. You can use emulsion on plexiglas by putting a black opaque surface behind the plexiglas, then projecting and developing the image on the surface. You can coat the emulsion over painted areas; or develop the emulsion, process it and paint over it. However, by painting over processed emulsion the canvas tends to form valleys and ridges but this, after the paint has dried, flattens out and restores the canvas to its original form. The possibilities of the use of emulsion, whether it be in the fine arts or industry, seem to be limitless.
CHAPTER VI

CONCLUSION

We live in an age of mass culture. We are exposed continually to communications on a broad scale. Yet the artist today is no different than artists of the past. We are all bound to the age in which we live, and express ourselves in those terms. The artist cannot deny the influence of various forms of mass media to which he has been subjected. To deny it would not negate its influence but reinforce its presence.

Photography and the sciences have and will continue to move painting into a new form. (We may even find in the future that society prefers a reproduced art to the original.)

I am searching for a visualization in terms of a reality. A reality of a two-dimensional surface being retained by painterly imagery in certain areas of the painting in conjunction with the three-dimensional
"destruction" of the two-dimensional surface by the use of continuous-tone emulsion exposed to the photographic negative.

I am trying to produce an acceptable reality, working with what we know and understand about the working of man's mind, and how we read things that we visualize.

I feel as stated previously that the artist has really only one task and that is that he remain in his studio as much as possible, and produce valid work. He must lose his identity as an artist and perhaps by way of this become less of an amateur and more of a professional, for once he loses his identity he will relate more strongly to other individuals as a human being. This as opposed to one who is primarily concerned with art as self-aggrandizement. The artist should paint because it gives meaning to life -- a life larger than his own -- and he should produce art just as he eats, sleeps, etc., out of a primary need.

Another task I believe the artist has is to avoid
writing or speaking too often of what he is trying to do, as this priority then becomes his aim, with rounded-off logical exactness. He tends to become a critic or one who theorizes. The danger being that this is only a self-contained concept involved in terms of logic, and, quite foreign to the act of being a painter. It once again forces him to concern himself with being an 'artist', rather than losing this stigma, and about this I have spoken.
CHAPTER VII

BIBLIOGRAPHY

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*Ladies Home Journal,* March, 1970, p. 78-79. (The illustration by Chuck Wilkinson was referred to for Painting #2).

*Life,* Vol. 68, No. 24, (June 26, 1970): (The photograph of the dog was used as a reference for Painting #3. It was an advertisement for the Plastics Division of Allied Chemical Corp.)


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