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FOUND TELEVISION IMAGES

BY

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Submitted in Partial Fulfillment of the

Requirements for the Degree

MASTER OF FINE ARTS

MFA PHOTOGRAPHY PROGRAM

SCHOOL OF PHOTOGRAPHIC ARTS AND SCIENCES

ROCHESTER INSTITUTE OF TECHNOLOGY

ROCHESTER, NEW YORK

August, 1979

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FOUND TELEVISION IMAGES

A thesis report by
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August, 1979

submitted to the
School of Photographic Arts and Sciences
Rochester Institute of Technology

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I. INTRODUCTION

My interest with television imagery surfaced accidentally in November, 1975. I had been reviewing several black-and-white contact sheets when I noticed an image of a television screen. The TV image appealed to me for several reasons; the scan lines added a taste of partial deterioration to the image, the challenge of photographing a two dimensional video screen, and the source of power from the television tube seemed infinite. The literal content of the television imagery appealed to me as my attraction to the imagery grew, and as the potential for symbolism intensified.

The final product of these early images took the form of juxta-positioning the TV images for an abstract, electronic feeling.

Anticipating my thesis. I experienced a growing feeling of frustration for my work with cyanotypes. I began reading everything I could find about the medium of television. I was interested in superimposing single images within the same space. My work with juxta-positioning images on a single two-dimensional page was banal and stagnant to me. I also felt that shooting images from black-and-white television was too restrictive and in reality a majority of American viewers watch color TV.

My readings continued, as I hoped to find a link between the printed page and a form of expression for my ideas. A quotation from Moholy-Nagy seemed to influence my next decision.

"The rectangular canvas or metal screens of our cinemas is really only a mechanized easel painting. Our conception of space and of the relation of space and light, still absurdly primitive, being restricted to the everyday phenomenon of light rays..."¹

I realized that projecting color slides would utilize light rays to form the visual message I was seeking to explore. Adding images together through slide projection would create an illusion of space, time, motion, and sequence. Using a variable length dissolve unit would facilitate the projection of one slide with another at a specifically chosen pace. This technique could open the option of sequencing slides not only by image, but by color, dimension, and depth of feeling.

¹Moholy-Nagy, Lazlo, Painting, Photography, and Film, p.17, MIT Press, 1967.

II. THE THESIS PROPOSALS

The thesis proposals became the written commitment to my idea. It became necessary for me to be more specific in defining and describing what I planned to accomplish. I found it difficult to translate my visual ideas into words. I realized the proposal should be written to contain the specific methods I hoped to employ yet the proposal should not limit my flexibility as the project progressed. From that point on, I found the proposal, and its updates, a very useful guide to my work. At times, when I felt the work was losing direction, I would read the proposal to clarify and further define by development.

My first thesis proposal was not immediately accepted by the M.F.A. committee. My ideas had been enthusiastically received, but the committee felt that details were required for them to better understand and evaluate the nature of my thesis. The proposal was rewritten, with greater details provided to more fully describe some of the techniques I was planning to use. A total of four proposals had been submitted, as changes came up in the development of my work.

III. BEGINNINGS

With the passing of my thesis proposal came many immediate problems; most pressing of which was obtaining a color television. Being a graduate student of meager means meant that the purchase of a color TV was out of the question. I knew that I would need to shoot constantly, so the appliance department at Sears was unreasonable. After searching the bulletin boards at R.I.T., I located a student who repaired and sold color televisions. He agreed to rent me a 19 inch Sony color television for five dollars a week until the end of the school year. I was on my way.

I began shooting immediately, and was faced with many technical questions. The need for a standard image size was essential for dissolving and registering images. The need to maintain the entire picture area meant not only photographing the screen but part of the TV box itself. This meant that the image would have to be shot with light from only the television screen to avoid reflections. Using the available light from the screen, my computed camera exposure was $1/30$ second @ $f/5.6$. I purchased 1500 feet of Kodak High Speed Daylight Ektachrome 35mm slide film, with the same emulsion number to minimize my source of exposure variability.

I entrusted the processing of the film to Color Methods, Rochester, N.Y. My reasoning was two-fold: they had excellent quality control and same day processing. Immediate feedback

was essential to closely synthesize the shooting experience with the results, the slides. I chose to mount the slides myself because of the lower cost involved and the fact that there were very few slides per roll that I considered successful enough to mount.

The first rolls of film were shot to determine the basic exposure and the correct shutter speed. I discovered that only half of the TV screen could be photographed at $1/30$ second; at $1/15$ second a full screen was recorded. The second problem was the appearance of an overexposed horizontal band on each slide at various locations. The artifact was approximately two stops overexposed and detracted significantly from the image quality. Not knowing its cause, or how to alleviate it, I investigated how the television works. I learned that the television image is essentially an electronic beam scanning the screen from top to bottom and left to right; continually repeating itself. The repeating function is called "vertical retrace." My mysterious bands were vertical retrace lines. According to the literature, shooting below $1/30$ second should alleviate the problem. Yet I was already shooting at $1/15$ second, and the problem still occurred. My alternative was to go with a slower shutter speed of $1/8$ second. Since I was using a tripod, a shutter speed of $1/8$ second did not increase blurring. A test roll confirmed my hypothesis, and the vertical retrace lines had disappeared at $1/8$ second.

The camera shooting continued, and I became anxious to see my images dissolve into one another. Access to a dissolve unit was another problem. Investigating the different types of dissolve units opened my eyes to the sophistication of these machines. I needed a unit that would dissolve from a quick cut to infinity and still be fully programable. Most of the machines did not have that flexibility. Then I found the machine of my dreams; a Leitz dissolve unit. Access was a problem, but thanks to Dean Lothar Englemann, of the School of Photographic Arts and Sciences, the problem was solved with the loan of his dissolve unit for as long as necessary.

The slides began to accumulate having shot my first ten rolls of film. It became apparent that I needed a convenient yet comfortable way to view my slides and a light table did not provide enough surface area. I found a slide sorter that would hold up to 80 slides. I purchased five of them, and I now had the capability of viewing up to 400 slides at one time.

IV. THE IMAGES

Sitting on my living room floor, I was alone, except for five empty slide sorters staring at me. Eight-hundred slides waiting to take their place. Where do I begin? Why choose one image over another? The tedious process of editing and sequencing held many unsolved problems. My work began, like pieces of a puzzle waiting to fall into place. I place together; slides with people, slides with no recognizable forms, literal images, abstract images, colors from blue to green to red, simple shapes and complex forms. I heard my senses screaming, "No, it doesn't work, try another. Yes, I like that, it works." A chain begins, my eyes danced from one slide to the next. "It works now, but what does this slide do to the next one," I pondered. I continued to work. Before long, night had come, hunger struck, and my eyes were tired and red. Five hours had passed and it was time for a break. I looked again and the slides, full of color, were glowing in the darkened room. A thread had begun to weave its way into the images and into my mind. Some questions were being answered. The images were mostly abstractions of simple form, well saturated with color. Complex forms were followed by simple ones. The movement of color, was at times, from a light to dark green, to sky blue, then broken by a bright red rose. Alone one image may have seemed weak, but next to another it came to life.

The process of sequencing the slides was enjoyable and free form. Nothing was permanent and changes were of paramount importance so that the sequence of images could grow and take form. Many hours were spent working with the puzzle that was before me while each day produced new slides from the previous days shooting session. When I felt comfortable with the sequence of images, I placed the slides into trays and proceeded experimenting with the dissolve unit.

The Leitz dissolve unit was the machine of my dreams. I was impressed with the simplicity of a machine that was flexible enough to perform sophisticated functions. Dissolves were initiated by moving a mechanical lever called a "slider" that would take a projected image and slowly dissolve it with a slide from a second projector. The rate of dissolve is determined by how quickly or slowly I moved the slider from one side to the next. To advance a slide, the slider had to be pushed down, similar to a normal slide projector. As I worked with the slider, my fingers were learning to dance as my physical movements changed the visual effects of the dissolve.

By working with the dissolve unit, I learned that this technique could provide a transition of image and tone, creating a third space between images, consisting of a transitory mixture of any two slides. My initial questions became relevant once again: what should determine the rate of dissolve? How can I achieve the greatest depth between images? Is simple animation

effective? My greatest concern was getting too close to cinema. It was my contention that a slide show was a totally different medium, creating illusions, but the properties of dissolving slides remained a mystery.

The rate of dissolving slides became rhythmic with visual effects becoming melodious notes. Some images demanded a slow steady dissolve, and others were most effective by a quick cut. The problem of sequencing slides became twice as complex when the dimension of dissolve was added. My slide arrangements changed as my awareness of what happens to a single image merging with a second image developed. Another quotation from Moholy-Nagy became an important contribution to my theme:

"No work (of art) can be explained by the sequence of its elements. The totality of the sequence, the sure interaction of the smallest parts upon one another and upon the whole are the imponderables of the effect."²

As I dissolved one slide into another, I noticed the images began to melt together. My visual fascination become very intense and I searched for a reason why the fusion of two slides creates an emotional response greater than their added parts. I believe a combination of elements caused this phenomenon. First element is content of the image, while the delicacy of the rate of dissolve is critical. If dissolved too quickly, image space becomes unnoticed. If dissolved too slowly, the space goes flat. If dissolved just right, the dimension of third space is created.

²Nagy, p.34.

The animation of slides has an important impact on the viewers overall reaction to the visual presentation. A figure can move slowly across the screen, fading into an ocean of blue space. This effect can be used to bring the viewer back from the depths of abstraction while the eye and the mind continually try to decipher the scene and logically organize the experience. When the gap in logic is great, confusion tends to pervade the viewers mind and senses. If this confusion continues, the eye and mind tend to accept it and forget any logical connections. As the gap between logic and the unknown becomes too great, chaos can result and the viewer may become disoriented; a kind of brainwashing effect. Too many logical connections can create trite interrelationships and weaken the overall impact of the imagery on the viewer.

My task was to maintain a balance between logic and the unknown while still maintaining a visually exciting and stimulating experience.

V. AUDIO IMPUT

May 17, 1976 was an important day in the development of my thesis. After two months of photographing, sorting, and synthesizing sequences, my work was ready to be presented to the first meeting of the thesis board. After the presentation, the board members raised some serious questions about the direction the slide presentation was taking. They wanted to know if it was science fiction, a fantasy, or a dream? To whom was the presentation directed: an objective audience or a subjective creator? They indicated that the presentation was too long, that the viewers interest must first be aroused and then sustained, and that more rhythm and tempo was needed. The most critical observation was the lack of a sound track, which had concurred with my observation that the silence was too great in contrast with the active images projected onto the screen.

A new dimension became necessary and more problems would have to be overcome as the questions continued to appear. Sound and pictures; what makes them work together? Should the music be familiar or totally unique. How would the dynamics and rhythm of music change the tempo of my dissolves? What comes first, the visual or the audio message? How would I begin to add another dimension?

My involvement with the visual aspects of my thesis diminished. I began to listen to all types of music; classical, jazz, rock, and electronic. As an artist, I heard sounds and associated

with them visual images. Would the musician respond similarly? Music and visuals stimulate an emotional response and I needed to find a sequence of sounds that was the emotional match to my imagery. I felt as though I was treading on dangerous ground. After days of listening to varied musical selections, I decided to associate electronic music with my imagery. My reasoning was based on experiments with classical, rock, folk, jazz, and even noises along with my imagery. Electronic music seemed close in emotional output and association to my slide sequence. At times it was only vaguely familiar and at other times completely foreign. The music had to possess movement and vivid dynamics. Searching through the stacks of electronic music at the record shop, I discovered an album entitled, Sonic Seasonings by Walter Carlos. This music was electronic in nature and combined natural sounds of the environment and those produced by a synthesizer. I listened to the album for days while operating the dissolves. The rate of dissolve was becoming influenced by the movements of the music. The need to more closely focus the delicacy of the dissolving images with the ever changing influence of the music was essential. What comes first, I pondered, the demands posed by the rate of dissolve or the dynamics of the music?

When I was ready to program the dissolves with the music, I transferred the selected portions of the record album to one-quarter inch reel-to-reel magnetic tape. The rate of dissolve

had been programmed in my mind; now with both the visual and audio dimensions integrated together. In order to program the dissolve unit, the music had to be played on one track of the stereo tape while the other track would receive signals produced by the electronic slider. The signals produced by the slider initiated and completed the dissolves and automatically operated the slide projectors. To successfully program the dissolve unit required expertise and precision. The programming tolerances of the dissolve unit were not flexible and recording levels needed to be precise and balanced. If this were not so, the electronic signal would be either too weak to operate the dissolve unit, or too strong which would cause the signals to bleed onto the sound track.

The actual programming became a performance. My hands danced to the music and the images. To program the dissolves required timing, accuracy, and a sense of gracefulness. After the slide/tape performance was recorded, I played it back over and over again. My senses were alive as my mind scrutinized every aspect of the presentation. Was I finished or should I go on with my work?

My original proposal planned to incorporate the slide/tape presentation into a box-like structure placed in a gallery. That idea was dropped as I was trying to more closely relate the images from the TV screen into a more powerful visual experience. I had to find a medium that would most effectively translate my audio/visual experience to the audience.

VI. THE VIDEO TAPE

How could I effectively relate to my audience the true impact of the slide/tape presentation? Images abstracted from television were isolated and reconstructed with sound to form a totally new and uniquely sensual experience. My decision to turn the slide/tape presentation into a video tape was a major one. The video tape would represent the return of the imagery to the cathode-ray tube. I could now examine what attracted the viewer to the television screen and why. The tape could be broadcast over an extensive area and the viewing experience changed as receivers were placed in different environments.

I consulted the producers of R.I.T.-TV and we determined that such an airing was feasible. My programmed slide/tape presentation could be reproduced onto video tape, but not without some inherent alterations to the images. The carefully selected slides were cropped automatically by the video camera. There was some deterioration of color and sound quality because of a second generation transfer, but the effect was slight. The visual reception of the images were subjected to the quality of the TV receiver and adjusted to the personal preference of each viewer.

After careful consideration, I decided that translating the slide/tape presentation into a video tape for broadcast was the best direction take. Working with the production crew at R.I.T.-TV was an exciting and practical experience. The staff carried out the production with professionalism and after five hours

of studio time, we produced a 3/4 inch color video tape presentation which was ready for broadcast.

The finished tape was broadcast on June 3, 1976, throughout the day. A color receiver was placed outside the third floor photo cage of the R.I.T. photography building.

Feedback from the viewing audience was varied. The general consensus indicated that the presentation was powerful and unlike images normally produced on the television screen. The content of the show produced collective images into the minds of the viewers that were reminiscent of dreams with violent undertones. The presentation seemed to captivate and induce tangible fantasies not unlike hallucinogenic experiences, as described by some.

VII. THE CRISIS

On June 3, 1976. I was waiting for my thesis board to begin our final meeting. The tape was viewed on a VTR machine in the audio visual room of the Wallace Memorial Library. After the first viewing, the board suggested we view the tape downstairs at the RIT-TV facilities where the tape was seen on a machine of superior quality. After the viewing, a dangerous silence moved in and I knew something was wrong. The air became heavy and the feedback began.

The most significant comment pointed out that changes had occurred by transferring the slides to tape. There was a marked deterioration of the image quality and the crisp, clean slides became mushy and soft, while the intense colors of the slides shifted towards warmer hues on tape. The ending was uncomfortable and unsure, the music tedious. The final word was, "to keep working and make a few changes."

I was close to tears and could not speak. I thought my work had been completed while my thesis board had thought differently.

As I walked to my car that day, I felt as though the burdens of the entire world rested upon my shoulders. My expectations had not been met, and for the first time in my academic life, I had failed a major and important undertaking. I was exhausted, disappointed and angry.

At 6:00 A.M. the next morning, I was boarding a plane for Cedar Falls, Iowa. The following ten days were spent staring

into vast corn fields and wandering aimlessly down dirt roads.
Would I ever finish the thesis I had begun? I had written some
verse in Iowa that best described my feelings:

where did my friend
the artist go?
she sits at night, alone
sipping white wine
as evening grows, she slumps
further
finally, sleep comes
another day finalized
yet, unresolved

a point falters
the snowflake melts
rain falls
and the
humidity rises again
the gate closes
for the evening.

VIII. RE-ENTRY

The month of June passed quietly and quickly as my unfinished thesis collected dust. I could not begin to take up where I had left off. My summer evenings were spent sitting on my balcony, drinking wine, listening to crickets, and watching the stars. Looking back on that month of June, I realize that the dormancy was important and necessary. I rebuilt my strength to continue as enthusiasm for my thesis returned. Too much work, money, and emotional energy had been invested and I knew that I was to complete my work.

I resumed work after July 4, 1976. Reading the journal I'd been keeping for the past six months, I tried to gain perspective on my work. Looking at the critique of the last board meeting, I decided to forget the video tape and produce the final product as a slide/tape presentation. The ending had to be changed, the slides needed further editing, and the registration of the slides had to be very precise. Most importantly, the music had to be less tedious.

An important change in attitude also became apparent. I would continue to work on the thesis until I finished, whether it meant another three months or three years of work. Looking back, I can see that it was almost impossible with my thesis to set a time limit. I vowed to finish, regardless of any factor.

The most difficult change to make was that of the ending. Making a decision about the ending helped me further refine the editing of the slides. The ending would be just that, the end.

The final slides would fade to TV static as the sound cut into audio static, then black, and the house lights would come up in full.

Overall, I was pleased with the contents of the slides, but I discarded slides that did not directly stimulate the observer. The number of images were reduced from 128 to 108.

Music once again was a problem, and became tedious even to me. Fortunately, I happened to locate a local genius, electronic engineer and musician, who helped solve the problem. We worked together to synthesize music that would complement the slides and their rate of dissolve by a process of rerecording, mixing, and remixing of sound tracks. As a result, the original sound track of the Sonic Seasonings had been manipulated to a point where it was no longer tedious but almost soothing.

The final task was the exact registration of the slides. I considered various approaches to the problem. Recopying the slides would mean considerable expense at the risk of losing color saturation and image quality. The availability of a slide mount that would automatically crop the image was non-existent. After consulting with a Rochester audio-visual firm, I decided to create a Kodalith mask of the television screen and simply lay the mask over each slide after which pin registered slide mounts ensured proper alignment.

I was ready to consult my board and my approach for consultation had changed. Instead of a full board meeting, I elected to meet with each member individually. The feedback was positive and I was ready to present my thesis.

IX. THE FINAL PRESENTATION

After nine months of intense work, I would settle for no less than the optimal space to view the slide/tape presentation. I needed a projection booth to subdue the noise of the projectors, but a large auditorium was unsuitable. If the images were over projected, they would fall apart because of the scan lines while too small a space would crowd the audience. After considering every auditorium and room on the R.I.T. campus, I chose the first floor conference room of the photography building because of its well designed projection room, size, and convenience.

On September 10, 1976 arrangements to secure the room and obtain the equipment had been made. At 1:00 P.M. the thesis board had arrived and the show began. The slide/tape presentation lasted almost nine minutes. As the slide projectors were automatically advanced by the Leitz dissolve unit, I viewed the slides cast in the shadows of the review board for which the show was intended. At the end of the presentation, there was silence, a silence that was much different than my previous presentation. The air cleared and the responses began. I had solved many problems and there were no complaints. A smile and a sigh of relief came over me. The entire process was a long and tedious one, but well worth the effort. I felt as though I'd broken some new ground with my creative energies.

Approximately three weeks later, I presented the thesis to the M.F.A. student body in the same room with the same equipment.

The student feedback amazed me and some of the comments are provided below:

"A violent dream-like experience."

"Exciting and powerful."

"It's hard to believe that all those images came from the TV screen."

"Scary, sort of druggy, but it kept my interest."

A discussion followed these comments as to the difficulties involved, my feelings now that I had finished, and where would I go from here.

X. CONCLUSION

The production of found television images resulted in a unique visual and sensual experience for the observer, that was most effectively carried out by dissolving two sets of reconstructed TV images. The result was a spatial and temporal reorientation of television through image enhancement techniques, audio overlay, and by personal interpretation and edification..

In evaluating the success of the slide/tape presentation, it became necessary to recall the response of the viewers; dreamlike, free-form fantasy, and mystic. These are not perceptions of the public at large to today's TV programming from which found television images were derived. Thus the technique of reorientating TV images offers the potential of creating viewing experiences that exceed some other forms of communication. The experience can more completely satisfy the desire of the artist by affecting the receiver in an elastic yet structured manner.

Over three years have passed since the final viewing of found television images had been presented. I was committed to complete the thesis in its totality. In the time that I had dedicated my efforts to completing all aspects of the thesis, I learned that a personal record of my work was of paramount importance in contributing to my eventual success. After such a long hiatus of active involvement, I cannot stress the importance of maintaining a journal, without which this thesis report could not be written accurately and in detail.

During my student days at Rochester Institute of Technology, the relevancy of a thesis requirement was frequently of concern to me. At this time, I feel somewhat qualified to respond. The thesis has given me the confidence and in-depth experience necessary to venture out into the professional world as a capable artist and communicator of the fine arts, as I perceive and know them. The completion of the thesis was a stepping stone from the world of academia to the realities of everyday life.

APPENDIX I

THESIS PROPOSAL

for

THE MASTER OF FINE ARTS DEGREE

College of Graphic Arts and Photography

School of Photographic Arts and Sciences

ROCHESTER INSTITUTE OF TECHNOLOGY

TITLE: FOUND TELEVISION IMAGES

PURPOSE: To show the captivating qualities of television
imagery and to recreate an illusion of kinetic energy
from television by means of a slide/tape presentation.

SUBMITTED BY: Janice Hope Pohland

June 15, 1976

THESIS BOARD

CHIEF ADVISOR: Charles A. Arnold, Jr.
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Weston Kemp
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James Thomas
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OBJECTIVES

1. To create a perceptual environment that supercedes a visual experience based upon extrapolations of television imagery.
2. To explore variable length dissolves, providing a transition from image, tone, and substance; to create an illusion of a third dimension from two sets of projected slides.
3. To synthesize music that is not recognizable, but vaguely familiar without causing association from previous experiences.

PROPOSAL

After photographing television images with 35mm slide film, I will project these slides with two slide projectors, and dissolve the images by using a Leitz dissolve unit. The Leitz dissolve relies on physical motion to initiate and complete the dissolve, and does not require a mental numerical calculation to translate the message.

Photographing images from television presents many choices; the channel, the time of day, and the ability to alter the quality of reception and color balance. The camera, with its short or long shutter speeds, can photograph images from television that cannot be seen by the naked eye. Television has visual stimuli that feeds interest and provides an ongoing relationship with the viewer. An important aspect of television is that it is kinetic i.e. an active image of the screen.

My television slides will be set in motion by using a variable length lapse dissolve. The tempo will vary to build momentum, provide rhythm, and to cause needed movement.

The movement and fusion of the image must use the basic elements of color, dynamism, negative and positive space, visual texture, shape, and form. These images, when in fusion, show that the sum of the two images is greater than its added parts.

The shape of the television image offers essentially a dramatic situation; the viewers' concentration of attention eliminates all peripheral vision on the screen and forces a sense of intimacy. Much of seeing is sheer visual excitement, thus dissolves will show the movement of textures, unsuspected details, and the rhythm of color swelling and diminishing on the screen to cause visual arousal.

Television images will be much like the sounds of a symphony. Notes will be visual ones, relying on transformations of color; comparable to painting with light. Images will move in and out of focus, and recognizable images will be juxtapositioned with unreal ones created by the camera.

The final presentation of this thesis project should be viewed in a room no larger than ten feet by twenty-four feet with a projected image size of approximately three and one-half feet by seven feet. The scan lines, inherent to television images, tend to deteriorate the image when projected too large. The projectors should be silenced by a sound-proof booth or box. These restrictions are essential to maintain image coherency.

The fact that an intimate experience for each viewer occurs should aid in relating the presentation to home television viewers.

APPENDIX II
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