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Painter Symbol and Science

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AUGUST 30, 1972
Prof. Fred Meyer, Advisor
DEDICATION

This thesis is dedicated to Ed Vargo, S.V.D.

The example of his religious commitment and its effect on my personal and spiritual growth, has played an important role in the actualization of the theories and inspirations involved in this creative response.
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INTRODUCTION
PURPOSE OF THESIS

The purpose of this thesis deals with the development of a twentieth century religious symbolism created through the unification of intricate microscopic images from the fundamental physics of nature (space, matter, time, and motion) with the precision of hard-edge painting (flat unmodulated color areas, space, and line) on shaped canvas.
SCOPE OF THESIS

I have accomplished the demands of this thesis project through the study of three distinct areas:

1. A survey of visual symbols beginning with primitive man's creation of symbols to twentieth century man's use of symbol. The development of the religious symbol within this context is closely examined.

2. The development of hard-edge philosophy beginning with Malevich's theory of the existence of painting as completely independent from imitation of the external world, and the influence of these ideas on such artists as Kenneth Noland, Josef Albers, Barnett Newman, and Frank Stella.

3. The revelation through an electron microscope of the physics of nature as the inspiration for the development of a new religious symbolism. This study includes an investigation of Bettina Brendel's work on the physics of nature.

These areas of research have been actuated through a series of seven acrylic paintings dealing with the Seven Days of Creation as presented in the First and Second Chapters of Genesis. The visual aesthetics of hard-edge (color, shape, space, and line), the microscopic images from the physics of nature, and the shaped canvas are used to enhance the symbolic religious content of the subject matter.
chapter one

DEVELOPMENT OF PICTORIAL SYMBOLS AND IMAGES
From the earliest developments of man's existence he began to create pictorial symbols for communicating with the world and the larger universe, with other human beings, and with himself according to his beliefs and feelings about and toward the focus of his concerns. The symbol became a throwing together or a combination of an abstract idea with a visible sign. These signs were transformed into symbols, communicating specific messages to the beholder. Such symbolism has played an important role in the world of art from primitive man's creation of abstract signs and symbols to twentieth century man's varied use
of symbol within his technological environment. This cultural symbolism has changed throughout the history of man, each speaking to and about some aspect of its particular culture. The bison in the cave was a symbol in the sense that it was an integral part of the victory of the hunt.¹ Today also, communicative symbolism has become an integral part of our environment reaching man through billboards, newspapers, magazines, television, radio, and roadsigs. What role has the religious symbol played within this historical development of symbolism, and how do these symbols reflect religious meaning?

Symbolism and its use for the representation of religious ideas had been common among all ancient peoples. The reflection of religious meaning by such symbols depended upon the intentions of the artist in creating them and the understanding and acceptance of them by the particular culture in which they were created. In a superstitious manner, the bison was to Prehistoric man a religious symbol. The Egyptian's use of religious symbols revealing his belief and relationship to Ka, the double life

source, and Ra, the sun-god, are still a mystery for us today. The Classic Greek revealed his religious philosophies through the use of mythological symbolism, such as the eagle of Zeus and the owl of Athena, and the Roman developed religious symbolism to communicate his belief in the divinity within the human emperor.\(^2\)

Within the earliest developments of Christian art, abstract symbols were adapted and created to communicate the new concepts of a new religion. In early Christianity the miraculous elements, the mystical ideas of spiritual regeneration through faith, and the salvation of the soul soon became dogma. The converted pagan was called upon to express in visible forms of art the ideals and doctrines of his new religion. He was faced with the problem of showing visibly the salvation of the soul or the resurrection of the body. He turned to the use of symbols to express his new, abstract, mysterious concepts. So, Christian art, of necessity, became symbolic since in these early beliefs there is always the element of the supernatural, an element which cannot be represented directly. The early Christian kept away from

figurative representation of his religious beliefs because the Jewish element in Christian thought condemned the use of human images. It was believed that spiritual things were degraded by taking corporeal shape. The actual figurative image of Christ did not make its appearance until the year 200 A. D.\textsuperscript{3}

The first efforts of Christian symbolism and its early struggles with the mode of utterance was largely pagan. These symbols represented an attempt to clothe the spiritual ideas of the new faith in the garb of tradition by using familiar symbols of the contemporary classical religious cults. The symbols of early Christian origin depicting the shepherd, the fish, and the cross can all be found within the Egyptian, Gree, or Roman concepts.\textsuperscript{4}

The cross symbol, the so-called "Nile Key"\textsuperscript{5} was sometimes employed on Egyptian tapestries after the fifth century B. C. To the Egyptian it symbolized life, so the Christian's adaptation of this symbol as the tree of life is easily understandable. In the same way, the shepherd image illustrated in the catacombs shows close resemblance to the shepherd images found in the Roman paintings.

\textsuperscript{3}Hulme, F. E., Symbolism in Christian Art, (London: London House Ltd., 1910).

\textsuperscript{4}Swift, Roman Sources of Christian Art, p. 43.

\textsuperscript{5}
at Pompeii. Thus, the early Christians used existing images of the pagan world to communicate his new religious concepts.

Today, man's concepts, intelligence, and world have changed. He has developed a new set of symbols which are recognizably related to his environment. Modern man's scientific mind has realigned his goals and his world view and amidst this industrialized world the Christian message has clung to the respected symbols of a past age which have now become historical monuments for the scientific mind. The church can choose: it can either alter its attire by searching for new signs and symbols which are related to man's modern environment, or it can cling to old forms, methods, and symbols which became sacred through centuries of tradition, and thus remain irrelevant and out-dated.

In response to this need, my interests and works of art from the beginning have dealt with the development of a new religious symbolism relevent within our modern environment. I have been forced to ask myself whether art and religion are so segregated that the unity which historically

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existed between the two is no longer possible. Do religion and science appear to be so contradictory that scientific facts are doing away with old religious beliefs, beliefs such as those which deal with the creation of the universe?

Prior to the acceptance of cultural symbols as communicative images, they were first developed as personal, creative responses to unique ideas or images by particular artists. My search for new religious symbols has lead toward a personal response to existing images of nature scientifically discovered during the past ten years. Experiencing and exploring the images seen through an electron microscope, I found myself reinterpreting these images within a Christian context, thus: they have become the source of pictorial creativity in the development of this new religious symbolism. Intuitively responding to these images, I have transformed and manipulated them in an effort to give them a new spiritual meaning reflective of my beliefs.

Symbols and images created by artists have either become universal in conveying specific messages within a culture, or they have remained
the personal language of the artist, conveying a variety of meanings or messages to their viewers. The study of such artists in the twentieth century and their search for new personal images has played an important role in aiding my search for a new symbolism. Artists have always used nature and natural philosophies as a source of inspiration for their work. Their concern deals with the interpretation and relationship of these sources of inspiration to their own experiences. By reaching beyond the traditional world of art they were able to arrive at new and original images.

One of the first artists of our century to deal with the discovery of abstract symbolic images, whose work was religiously orientated, was Kazimir Malevich. By presenting abstraction in its ultimate geometric simplification of black on black and white on white, his intention was to create a spiritual vision, a search for a product which for him was a reflection of his personal search for a supreme creator. For me, his work is a place of activity as well as a place of retreat. In viewing his work I cannot help but grasp this spiritual
revelation, be it the supremacy of pure feeling in the creative act or the reflection of a supreme creator. It does communicate a specific significance as a religious work through the use of abstract images.

This concern of Malevich, dealing with abstract symbolic qualities, influenced a number of American artists, artists in search of concrete, hard realities. These artists were, "involved in chromatic abstraction, focusing on single, central images in terms of large, barely inflected fields of color."7

During the late forties while such painters as De Kooning and Pollock were exploring the gestural application of paint on the surface of the canvas, Barnett Newman was exploring a reductive technique of abstraction, emphasizing the strength and power of large areas of pure color to create a dramatic impact. Newman's art simplified itself into flat fields of color and the interaction between them. His compositions were structured without a concern for internal relationships of geometric forms. He explains these

aspects of his concern in the following statement:

...Instead of using outlines, instead of making shapes or setting off space, my drawings declare the space, instead of working with the remnants of space, I work with the whole space.

The visualization of these ideas were actuated by dividing his color fields with irregular vertical bands. He was the first to introduce a pictorial structure based on the relationship of the single image with the framed edge;

...Newman's engagement with his 'space' and his medium is so full that he is able to take all his shape from the edge without investing shape or edge with any compositional meaning. Newman's interests in the sublime become a powerful self-consciousness, a self-consciousness which reaches its limits when it employs the edge to advance the insignificance of the edge.⁹

Prior to these interests in color interactions by Newman, Josef Albers was experimenting with color variations. These experiments, begun in the twenties, led him to produce subtle tonal illusions in a long series of paintings in which the formal structure was reduced to squares within squares. This experimental background brought him into prominence in the sixties, by acting as a foundation for a new and distinct philosophy of color and image.


Two other artists interested in the structure of color are Kenneth Noland and Frank Stella. Their interests led them toward experimental developments of the shaped canvas. Noland's work developed directly from the chromatic abstraction of Newman.\(^\text{10}\) Noland added new dimensions in developing his presentation of color. He was concerned with the relationship of the pictorial image with the framed edge, applying the paint directly to the raw canvas to create a soft, blurred, bleeding, stained edge.\(^\text{11}\) In his most recent works he evenly saturates the entire canvas surface with closely keyed stained colors within the shaped surface. "This space which Noland creates is determined by the interaction of contrasting adjacent hues, not with drawing or value contrasts.\(^\text{12}\) In this sense his work deals with pure space which is optical, avoid of tactile sensations which are usually associated with line and value contrasts.


Frank Stella was also involved with the generating of surface composition with border edges. In the earliest developments of his shaped-canvas he reduced illusionism to its minimum by creating flat paintings of shaped metallic stripes. After realizing the way the human eye perceives pictorial space, it was impossible to produce such works without some illusionism. He thus began creating paintings which dealt with complex and contradictory illusionism. Influenced by the studies of Newman and Noland, within these paintings he began dealing with the primacy of color, creating the maximum surface tension by contrasting matte and gloss finishes with his colors.

These artists have searched for and discovered new images which are not based on set formulas or mathematics, but rather are intuitively created. Responding intuitively to modern discoveries of nature, such as atoms and their particles; electrons, neutrons, photons, and mesons, Bettina Brendel has been involved in these discoveries of physics. Her work is a creative response to,

...Gas molecules traveling at high speeds; the Quantum Field around and within the green circle

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of a neon argon laser-beam; Electron diffraction patterns created when a beam of electrons pass through the crystal lattice; Diffraction images of light from the distribution of photons when passed through an aperture.\textsuperscript{14}

Her creative response to these images is rendered in acrylic on canvas. In her "Diffraction" painting she presents a double image of light interference rings and electron diffractions within the red-violet region of the spectrum. (see fig. 1.) She has used these new images of her scientific environment as an inspiration for her work. She states:

\ldots \text{Let science inspire you! Let its propositions and theories be visual inspiration for you leading you into visual experiences! Do not simply let the computer draw your picture, but let the idea of the complex binary system, by which it operates, be a source of inspiration. A three-dimensional hologram produced by a lasar-beam is only worth as much as its creative content. New materials in themselves have no other merit than to facilitate a better realization! The field of ideas is the territory of the artist as well as the physicist.}\textsuperscript{15}

Stimulated by the searching qualities and the images created by these artists, I have eagerly struggled toward the goals I've set for myself, goals in search of images and symbols which convey


\textsuperscript{15}\textit{Ibid., p. 44.}
both the inward and outward, the visible and invisible reality of twentieth century man and his relationship with his environment and creator.

Beginning with the earliest developments of my work, I was involved with this interest in religious symbolism. My earliest efforts attempted possible solutions through the distortion of religious figures created through the use of thick paint applied with a pallette knife. After a number of these works I began realizing they only became traditional subjects covered with the film of a more advanced technique. This was not the answer I was searching for. At this time my drawings were more attuned to a unique presentation of these interests. Rendered in colored pencil, these drawings were done from live models showing the inner structural components of bones, muscles, and cells with the exterior formation of this structure. (see fig. 2 & 3.) This area of microscopic inquiry into the invisible mysteries of life was the area I wanted to explore and incorporate into my paintings. I was faced with the question: How do I incorporate the delicateness and inner message of these drawings into the painted
media? Several experiments followed which lasted more than three years until I finally touched on a workable solution to the problem. These experiments eventually led toward the use of flat color areas with circular shapes enclosing photomicroscopic images. I was able to show the modern mechanized world through the use of geometric flat colored shapes and the mysterious elements of life and nature by using the abstract, geometric, circular, microscopic images. (see fig. 4.)

The circle has become the one image which has been consistent throughout this search. The circle has always been related to the natural and the divine; since ancient times a simple circle has represented eternity for it has neither a beginning nor end. The circle implies perpetual motion; it becomes a polygon with an infinite number of sides.16

Uniting these two distinct images in a workable solution created new visual and aesthetic problems. This opened several avenues of experimentation to me. Dozens of paintings followed.

I then came to realize I was exhausting the subject and began to repeat myself. There had to be a better way of making my statement. Since I was working with definite planned geometric shapes within a square canvas, I confronted myself with the possibility of shaping the canvas. (see fig. 5.) This opened the possibility of my paintings becoming sculptural in the development of the shapes and the two-piece, bi-level canvases. By creating two-piece canvases I am able to create strong visual relationships between the smaller and larger pieces. They have become a great aid in making the message more dynamic.

I now use the shape and the edge of the canvas to enhance the dynamic thrusts of the unmodulated color areas, shapes, and lines on the surface. Both, the colors used and the linear relationships, present a varied field of spatial representations. The length and width of line edges, the flat geometric structural shapes and their positioning, the microscopic areas, and the lines relative to the outer edges of the picture surface which influence the spatial functioning, all become symbolic.
I am striving for a relationship of all these visual energies to create my pictorial message, a message conveyed symbolically.
chapter two

GENESIS: TOPIC OF INSPIRATION AND CREATIVITY
I have chosen Genesis as the topic of inspiration for the paintings produced in this thesis because it involves the unique elements of Religion and Science.

In this scientific world which is probing further and further into space every year, and a world in which physics and chemistry are making such strides, the chapters of Genesis which deal with the creation of the universe and man appear to some to be without basis. And, in truth, the Christian's convictions that these chapters are historical fact have been proven wrong. These convictions of Genesis as historical fact must
now be changed because of our scientific discoveries. We must realize that the first chapters of Genesis are spoken in the popular style and language of the origins of the human race and they are simple and pictorial to suit the mentality of unsophisticated people. These chapters are no longer looked upon as historical but simply as a declaration of the fundamental truths upon which the plan of salvation rested. Once this is realized, no scientific discoveries can disprove the Christian's and Jew's belief in God and His role in the creation of the universe. Faith can neither be proved nor disproved by scientific exploration because the believer goes beyond the experimentally verifiable.

Genesis can now be considered from a different point of view, one which is both scientific and religious. Genesis now becomes involved in the process of evolution. Life and its beginnings become the; "form assumed by matter when it reaches the level of a unique grouping together of its own accord from a vital principle, force, or need."17

This is the Genesis of the modern world, be it seven days or seven billion years. The process of evolution from atom to human life has taken place as part of a Divine plan, which is the point of Genesis as well as the Genesis I communicate in this thesis project.

The first two chapters of Genesis deal with the seven days of creation. The following seven paintings capture my belief in the inner spirit and meaning involved with each aspect of the creative process of our universe.
GENESIS 1:3
“God said,
‘Let there be light’,
and there was light.
God saw that light
was good,
and
God divided light
from darkness.
God called light
‘day’,
and darkness
he called
‘night’.
Evening came
and morning came:
the
first day.”
Since the first day of creation deals with the creation of light, this has become the most important element within the first painting. By creating a slight curve on the center edge of the two stretchers used, I was able to use these two meeting curves as an opening at which to begin a precise color gradation of yellow extending across the entire surface. The end result is an illusion of a specific growing light source.

Within each of these paintings, I have used variations of colored stripes as a dynamic unifying force. Their particular positioning within each work creates specific movements across, through, or around the painting. They become symbolic of the Divine creative force involved in the creation of the universe. The shapes, lines, and colors are all used in each work to focus attention towards the most important image used within the work; the circular photomicroscopic image related to each element of creation.

To help create this dynamic thrust across the canvas within the first painting, I have used a back brace in the building of the stretcher to push the canvas outward three-quarters of an inch.
more than the rest of the surface. By meeting two opposite value contrasts at this point of projection on the canvas, I have been able to create a strong illusion of space and movement.

The photomicroscopic image used as a stimulant in this particular painting has been the pattern formed when a beam of light has been dispersed and then brought to focus on an aluminum surface.

b. Detail of Genesis 1:3.
GENESIS 1:6
"God said,

'Let there be a vault
in the waters
to divide the waters in two'.
And so it was.
God made the vault,
and it divided the waters
above the vault
from the waters
under the vault.
God called the vault
'heaven'.
Evening came
and morning came:
the
second day."
The second day of creation deals with the creation of space. My main interest in developing the meaning of this particular aspect of creation was to create a strong illusion of space. The particular horizontal movement of the shaped surface, the bold curvilinear shape within this surface, and the predominantly cold colors have all aided in developing this experience of space.

The photomicroscopic stimulant for this painting has been the pattern created by the diffraction of DNA for studying the structure of molecules. Because this pattern suggests progressive static stages of motion, I have used this characteristic to suggest the same illusion within the circular framework with the use of precise color gradations.
GENESIS 1:6
a. Diffraction pattern of DNA for studying the structure of molecules.

GENESIS 1:9
"God said, 'Let the waters under heaven come together into a single mass, and let dry land appear'. And so it was. God called the dry land 'earth' and the mass of waters 'seas', and God saw that it was good. God said, 'Let the earth produce vegetation: seed-bearing plants, and fruit trees bearing fruit with their seeds inside, on the earth'. And so it was. The earth produced vegetation, plants bearing seed in their several kinds, and trees bearing fruit with their seeds inside in their several kinds. God saw that it was good. Evening came and morning came: the third day."
The third day of creation deals with the creation of earth and plant life. I was confronted with the most problems in this painting. I wanted to create a strong forceful movement across the surface of the canvas capturing the photomicroscopic image within it. I've created this effect, but each time I look at the work the forceful figure almost becomes too powerful.

In this painting I have used greater color variations in the lines than in the two preceding paintings to convey the idea of visible and invisible colors found in the earth's great variety of plants.

For this painting I have transformed the photomicroscopic image of plant cells to convey this aspect of creation.
GENESIS 1:9
a. Microscopic image of plant cells.

b. Detail of Genesis 1:9.
GENESIS 1:14
"God said, 
'Let there be lights in the vault of heaven 
to divide day from night, 
and let them indicate festivals, 
days and years. 
Let them be lights in the vault of heaven 
to shine on the earth'. 
And so it was. 
God made the two great lights: 
the greater light to govern the day, 
the smaller light to govern the night, 
and the stars. 
God set them in the vault of heaven 
to shine on the earth, 
to govern the day and night 
and to divide light from darkness. 
God saw that it was good. 
Evening came 
and morning came: 
the fourth day."
This verse within the first chapter of Genesis deals with the creation of time, day, and night. Specification of an inner experience of time was the basic intention in creating this painting. I have used juxtaposed elements at the two opposite ends of the work to create this effect. On the left side of the painting I have used a gradual curved gradation of color stopping at the edge of the curved shape. This precision in the use of color gradation was obtained through exact measurement of additional paint for each changing color. This gradation of color is juxtaposed at the opposite right side with a definite visual movement forward through the structural building of the smaller piece of canvas. The illusion of forward movement juxtaposed with the reality of forward movement has been beneficial in producing an experience of motion and time within the canvas.

I have used a complementary color contrast of hot and cold colors to help convey the experience of light and darkness, day and night.
Since light plays an important role in the contrast between day and night, I have used the diffraction pattern of light produced by neutrons striking a powdered-iron sample as the photomicroscopic stimulant. This diffraction pattern captured by the camera also conveys an illusion of movement, thus this illusion is used to enhance the experience of time.
a. Diffraction pattern of Neutrons striking a powdered-iron sample.

b. Detail of Genesis 1:14.
GENESIS 1:20
"God said,

'Let the waters teem with living creatures,
and let birds fly above the earth within the vault of heaven'.

And so it was.

God created great sea-serpents and every kind of living creature with which the waters teem, and every kind of winged creature.

God saw that it was good.

God blessed them saying,

'Be fruitful, multiply,
and fill the waters of the seas;
and let the birds multiply upon the earth'.

Evening came and morning came: the fifth day."
During the process of evolution, at one stage within the history of planet earth, both kingdoms of plant and animal life might have been derived from the same source. It is believed by some scientists that Euglena Gracilis, a microscopic single-celled organism of the kingdom Protista which embodies both animal and plant traits, may have been this source.  

Depiction of this important single-celled organism has been my aim in showing the creation of animal life in the fifth stage of creation. The shaped canvas, the basic earth colors, the strong linear movement, and the gradation of color all create a definite focus toward this single-celled photomicroscopic image. For me, this painting captures and conveys the message of Genesis to a greater extent than the other six. It has become the most personal work within the series.

GENESIS 1:20

b. Detail of *Genesis 1:20*.
GENESIS 1:26
"God said,

'Let us make man in our own image,
in the likeness of ourselves,
and let them be masters of the fish
of the sea,
the birds of heaven,
the cattle, all the wild beasts,
and all the reptiles that crawl the earth'.

God created man in the image of himself,
in the image of God he created him,
male and female he created them.

God blessed them, saying to them,

'Be fruitful, multiply,
fill the earth and conquer it.
Be masters of the fish of the sea,
the birds of heaven,
and all living animals on the earth'.

God said,

'See, I give you all the seed-bearing plants
that are upon the earth,
and all the trees with seed-bearing fruit;
this shall be your food.
To all wild beasts, all birds of heaven,
and all living reptiles on the earth
I give all the foliage of plants for food'.

And so it was.

God saw all he had made, and indeed it was good.

Evening came and morning came:
the sixth day."
I consider the creation of man the most important aspect of creation. Attempts to bring across this importance caused me a great deal of difficulty. Attempting to capture the mysterious element of man, as being created "in the image and likeness" of his creator, was the focus of attention. My intentions were to superimpose the face of man within the microscopic image of a fertilized human egg. The first stages in developing this image were attempted by presenting the soft tonal qualities depicted in the actual photograph of the human egg. Because of its different technique, in context with the rest of the painting, it did not function properly. I spent two days of frustration reworking this area until I had changed it into flat areas of color to technically relate it with the rest of the painting. This reworking created a build-up of paint within this area of the canvas so I increased this thickness of paint and used it as an intricate part of the whole. Despite the difficulties involved in producing this photomicroscopic transformation, the painting does convey my intentions. Yet, the
end result may speak too specifically in conveying the message. At this point I am not sure if it does, or does not. Perhaps in redoing this work I would approach my problem differently, but I do feel the painting works well visually so I am satisfied with it.
GENESIS 1:26
a. Microscopic image of a fertilized human egg.

GENESIS 2:1
"Thus

heaven and earth were completed
with all their array.

On the seventh day
God completed the work
he had been doing.

He rested on the seventh day
after all the work he had been doing.

God blessed the seventh day
and made it holy,
because on that day
he had rested
after all his work of creating.

Such were the origins of
heaven and earth
when they were created."
In dealing with the seventh day of creation, it being a day of rest and joy, I have created a work which is visually experienced quite differently within the context of the other six paintings.

Structurally the canvas does not create a predominantly vertical or horizontal movement, but rather, a circular movement with the surface image enhancing this movement. I have used subtle, pastel, Spring-like color variations to create a more relaxing, joyful surface. I have not used the strong color variations and interactions of straight lines within this painting, as used in the others, because their symbolic content is not involved in this last day of creation.

In depicting the precise, the mysterious, and the invisible aspects of creation I have used the photomicroscopic image of the delicate symmetrical patterns created through the diffraction of molecules on a platinum needle point.
GENESIS 2:1
a. Diffraction pattern of molecules on a platinum needle point.

b. Detail of *Genesis 2:1*. 
CONCLUSION:

There have been two steps involved in the creation of each painting presented in this thesis. First, preparatory sketches were made in search of geometric shapes which set up a play between the actual shape of the canvas and the images depicted on its surface to convey the inner meaning of each selected verse of Genesis. Each frame generated the composition within its borders and, at the same time, the internal dynamics of the painting conformed to the frame and shape. Thus, the two were planned together before a final decision was made in the building of the stretcher.

Secondly, having worked as a mechanical draftsman, I learned the importance of precision and craftsmanship, both of which have had their influence in my creative works as an artist. I felt accurate craftsmanship was important because it has an over-all effect on both the image and the importance of my message. Accuracy in the stretching of the canvas and preparing its surface have become a part of this concern for precision and craftsmanship. A color sketch
was always made to program the specific colors used in the final work. (see figs. 6 & 7) The number of coats of paint within each area was planned in relation to each color, its thickness, and its application to create the specific illusions I was striving for.

Each painting presented in this thesis report includes a photograph of the actual photomicroscopic image used as a stimulant for the work, its creative, painted transformation, and a final photograph of the completed painting. These have been accompanied with a scriptural quotation from Genesis, the quotation which has inspired each work.

The paintings presented in this thesis have become the fullest statements of my interests and goals. As in the past, I am sure there will be more avenues open for research in the future, avenues which will aid, to a greater degree, in this development of a new religious symbolism.
fig.6. Color sketch for Genesis 1:14.

fig.7. Color sketch for Genesis 1:26.
SELECTED BIBLIOGRAPHY


**PERIODICALS**

