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Investigations on the Altered Plane as a Creative Element in the Visual Arts

Stephen J.T. Powell

Eastern Illinois University

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INVESTIGATIONS ON THE ALTERED PLANE

AS A CREATIVE ELEMENT IN THE VISUAL ARTS

(TITLE)

BY

STEPHEN J.T. POWELL

THESIS

SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR THE DEGREE OF

MASTER OF ARTS

IN THE GRADUATE SCHOOL, EASTERN ILLINOIS UNIVERSITY
CHARLESTON, ILLINOIS

1978
YEAR

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INVESTIGATIONS ON THE ALTERED PLANE
AS A CREATIVE ELEMENT IN THE VISUAL ARTS

BY

STEPHEN J. T. POWELL

ABSTRACT OF A THESIS

Submitted in partial fulfillment of the
requirements for the degree of Master of Arts at the Graduate School
of Eastern Illinois University

CHARLESTON, ILLINOIS

1978

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This is primarily a report of personal investigation by the author though some relevant references are used.

The work is divided into two parts representing two conceptions of the altered image bearing plane.

Essential to both conceptions is the use of the image bearing plane for its creative potential, rather than as a passive image support.

The modulated plane as image producer is discussed in part one with reference to its use for literal imagery and self derived imagery. Also mentioned are related printmaking, papermaking, plastic forming, and additive low relief techniques.

Part two deals with spatially related planes as image supports and as sources of imagery. Topics covered are angular intersecting planes, the split plane, and superimposed planes.

Also included are discussions on the author's approach to materials which emphasized the use of all materials in a manner harmonious with the physical structure of the individual material.

A brief overview of modern art tendencies in relation to the image bearing surface is included.

As the third dimension is employed in all graphic works mentioned, the relationship between two and three dimensional artistic disciplines is explored.

A case is made for the acceptance of these works as having a natural aesthetic base.

Several works and the techniques of their production are described.

Four color and six black and white illustrations are included.

90 pages.

CONTENTS

CHAPTER I.	The Problem and Definition of Terms	p. 1
I.	The Problem	p. 1
	Importance of the Problem	p. 2
II.	Definition of Terms	p. 3
III.	The Nature of the Picture Plane	p. 3
CHAPTER II..	Justification of the Problem	p. 9
I.	Personal Basis	p. 9
II.	Historical Basis of the Approach	p. 13
	Realization of the Plane	p. 13
	Scientific Approach	p. 16
	Influence of Materials	p. 17
PART I. THE MODULATED PLANE		
CHAPTER III.	The Modulated Plane for Imagery	p. 19
I.	Object and Image United	p. 19
II.	The Dimensionally Stretched Canvas	p. 21
	Frontal Space Engaged	p. 22
	Planar Interaction with Frontal & Rear Space	p. 24
	Tension Induced Dimensional Stretching	p. 26
CHAPTER IV.	Modulated Plane for Literal Imagery	p. 28
I.	Created Form As Imagery	p. 28
II.	Natural Form As Imagery	p. 29
	Limits of the Process as a Form of Realism	p. 31
III.	Aesthetic Considerations of Presentation	p. 32
CHAPTER V.	Self Derived Imagery From a Modulated Plane	p. 34
	Skylight Canvas	p. 34
	Gravity Denied	p. 36
	Tie Die	p. 36
	Other Materials	p. 38

	Modulation By Folding	p. 39
	Pellon	p. 40
	A Large Scale Work	p. 41
CHAPTER VI.	Planar Modulating Printmaking and Related Processes	p. 46
	I. Printing Processes	p. 46
	II. Paper Making	p. 48
	III. Plastics	p. 49
CHAPTER VII.	Additive Modulation	p. 55
CHAPTER VIII.	Painting or Relief Sculpture?	p. 60
	PART II. SPATIALLY RELATED PLANES	p. 63
CHAPTER VIV.	Angular Associated Planes	p. 64
	I. Right Angle Composite Planes	p. 64
	II. Forty Five Degree Related Planes	p. 68
	III. Multiangular Planes	p. 71
CHAPTER X.	The Split Plane	p. 74
	I. Slats	p. 74
	II. The Cut Canvas Plane	p. 80
CHAPTER XI.	Superimposed Planes	p. 82
	I. Laminations	p. 82
CHAPTER XII.	Summary	p. 87

Bibliography

LIST OF FIGURES

Figure 1 (a)	Variables in Graphic Arts	p. 5
Figure 1 (b)	Variables in Graphic Arts	p. 7
Figure 2	"Airotica"	p. 23
Figure 3	A <u>Structural Record</u>	p. 36
Figure 4	<u>Ditch It</u>	p. 50
Figure 5	Stretched and Bubbled Styrene	p. 54
Figure 6	Double Modulated Styrene	p. 54
Figure 7	Untitled Additive Modulation	p. 58
Figure 8	Modular projecting 45 degree related planar surface	p. 72
Figure 9	Striped Slats	p. 79
Figure 10	Mokume belt buckle	p. 85

PREFACE

This is an account of personal experimentation with the picture plane, largely within a one and a half year time span. Thus, it cannot hope to be all inclusive. An attempt is made, however, to include all conceived possibilities within the material limitations whether they were successfully materialized or not.

The approach is primarily based on a painterly point of view. Classification thus comes from a graphic arts outlook even though in many instances a different classification would be suitable when placed in another context.

Emphasis is on personal experience and conceptual development as expressed by the investigator's works. No claim is made that the discoveries are necessarily unique or unprecedented yet all discoveries expressed as such were derived independent of conscious outside influence.

Though here organized in a logical sequence and expressed scientifically, most of the processes were developed in a intuitive manner. At many times it was not realized that any development within a conceptual structure was being made. With hindsight, it is comparatively easy to order and categorize the past but it is difficult to bring to this thesis the immediacy of the artistic process. It is in these times that development takes place and where in meaning lies.

The act of documentation imposes limitations. As the self-imposed documentation point approached, the investigator more consciously attempted to meet the requirements of the problem. As art is a creative process the function of problem solving threatens the more haphazard intuitive process. Thinking of possibilities may produce variation but seldom does it produce new possibilities. Not thinking or working intuitively does create possibilities. Acting without preconception also may precipitate discoveries.

This document is organized by process rather by medium or chronology as novel techniques and approaches to common materials are presented. This organization may misinterpret the data as the many avenues were pursued intermittently and often simultaneously. Influence and development was thus not linear within a process. As most satisfactory works were not goal directed, the process structure did not exist during their creation. Inferred influence may thus be invalid.

Research can be valuable but also stifling to a creative artist. Knowledge of other work can either direct the artist along another's path or cause him to not pursue courses that might have alternative developments. Ideally, research could provide conceptual stepping stones but as research provides informational knowledge without the experiential knowledge its value to a working conceptual development is questionable.

With these reservations, this work is humbly submit
as an investigative document.

CHAPTER I

THE PROBLEM AND DEFINITION OF TERMS

The classification system of fine art has as its primary division the distinction between two and three dimensional works. This is a necessary semantic division yet it is somewhat conceptually limited in relation to "modern art" in general; and in particular to this problem.

This paper is not an attempt to redefine this division but it does examine a body of work that exists within the wide boundary between these traditional concepts.

This examination by its nature and intent questions the importance of the distinction and its consequent pre-conditioning of the artist. However, this paper was written by a pre-conditioned artist who worked within the framework of these concepts and as such is based on the very division that is questioned.

I. THE PROBLEM

Under investigation is a group of works in which (1) an image is directly dependent on the use of the third dimension as image source or (2) the third dimension is used as the essential means of presentation for an otherwise two dimensional image.

Primary to the problem was the use of the image bearing plane as a creative element in the production of a work of art. In most cases it was the primary creative variable.

The works of art that constitute the body of the inquiry are the result of two general conceptions of the means to actualize the interaction of a plane with space. The means studied are modulation and spatial relation of planes. These concepts constitute the limits of this inquiry.

Importance of the problem. Much research and experimentation has been done in the past in the search for stable and enduring surfaces and grounds for imagery. The creative potential of the surface has been largely ignored due to the functional aims of the research. As it is now possible for the North American artist to purchase "proven" ready made primed canvasses and papers in standardized format and sizes, the need to experiment with the surface is seemingly gone. It is this technological sophistication that allows the plane to be researched in a non practical manner. But it was in reaction to this technologically perfect and thus impersonal artistic surface that that this investigation was founded.

The intent of this thesis is to demonstrate that the image bearing plane can have an active role in the creative process as well as the passive image supporting role.

II. DEFINITION OF TERMS

Two dimensional refers to objects having width and height but no depth. The inclusion of the depth element renders an object three dimensional. A plane is "a flat or level material surface."¹ As used in "image bearing plane" it refers to the physical surface to which pigment has been added. The "planar axis" refers to an imaginary straight line passing through a plane at a zero degree angle, thus being concurrent with it. As used here, it refers to the orientation of the whole plane. Modulation here refers to the manipulation of a flat surface to produce planar modification while maintaining the continuity of that surface. An aesthetic refers to a way of perceiving or appreciating that is not necessarily based on the beautiful.

III. THE NATURE OF THE IMAGE BEARING PLANE

Although the image bearing plane is normally considered to be two dimensional, it like any other physical plane occupies physical space and thus has depth. This physical nature can be overlooked particularly in the context of illusionistic art where this plane is conceived theoretically as a transparent picture plane through which pass all the lines of sight between the eye of the viewer and the apparent positions of the subjects depicted."² The physical nature of the real plane cannot be overlooked by the practicing artist or the informed viewer, however. As an object the plane has mass and bulk that must be dealt

¹John P. Bethel (ed.) Websters New Collegiate Dictionary (Springfield: G & C Merriam Co. 1958) p. 644

²Ralph Mayer, A Dictionary of Art Terms and Techniques (New York: Thomas Y. Crowell Company 1975) p. 294

with on the physical level. The modern conception that a painting must assert its flatness has practically negated the theoretical plane and left only the physical surface of a concrete form.

The concrete forms conventionally employed in North America are the "stretched canvas" for painting and rectangular paper for drawing and water color. Masonite, cardboard, plastic, and linen are also employed, usually within the rectangular framework. Surface variations are minimal on these surfaces. Size is usually limited by practical considerations locked to the physical nature of the plane.

The physical nature of the image bearing plane has importance beyond utility. While printing and painting are primarily categorized by a process difference, they also normally employ different planar materials. Water color and other easel paintings are distinguished solely by surface differences. (Drawing is separated from painting only by the state of the pigments, as these forms of expression often share common surfaces.) The surface nature thus has some function in the distinction between disciplines. If the plane has definitive importance along with the media, why should the planar material be selected for utility while the media is selected for its creative potential?

A literal explanation of any graphic work can be found in Figure 1 (a). It does not include any creative content (the viewer).

FIGURE 1 (a)

VARIABLES IN VISUAL ART

- (a) PIGMENT + SURFACE = VISUAL
- (ie) paint + canvas = painting

PIGMENT VARIABLES

- (1) state
---solid, liquid, gaseous suspension
- (2) form
---stick, paste, lozenge, emulsion
- (3) hue
- (4) value
- (5) intensity
- (6) base
---water, oil
- (7) method of application
---direct, indirect (includes tool variables)

SURFACE VARIABLES

- (1) substance
- (2) thickness
- (3) weight
- (4) density
- (5) flexibility
- (6) plasticity
- (7) strength
---impact, rip, fold
- (8) texture
- (9) durability
- (10) stability
- (11) size
- (12) stretch
- (13) weave (fabrics)

6

Two ways of seeing a graphic composition are presented. They are not meant to be definitive but to demonstrate the number of graphic art variables.

Surface variables are usually selected for utility, availability, or compatibility with a pigment; whereas pigment variables are largely selected for visual effect or manipulative quality. Pigment variables are thus fully exploited in the creative act while surface variables are ignored as a part of creative content. Surface variables are ignored as part of creative content. Surface variables are less conducive to creative manipulation than are those of the pigment, yet if even one element can be exploited creatively it can lead to new forms of expression and a new approach to imagery.

Even within the figure-ground analysis (Figure 1 (b)) the number of elements can be seen as equal. As certain pictorial elements are controlled or eliminated by an artist (to be discussed in Chapter II) surface elements tend to become more apparent as actual constituents of the graphic work as opposed to a passive supportive role. For example, in a flat color field painting the pictorial element of form, space, texture, and for the most part composition, would be negligible in effect. The surface elements of size and shape would then become the real space and form of the painting.

FIGURE 1 (b)

VARIABLES IN VISUAL ART

(b) FIGURE ON GROUND = VISUAL

FIGURATIVE ELEMENTS

- (1) color
---hue, value, intensity
- (2) composition
- (3) texture
- (4) space

GROUND ELEMENTS

- (1) size
- (2) shape
- (3) material
- (4) surface
- (5) form

The surface of the ground would be the painting's texture. This would not render the painting invalid per se or inferior to a composition employing dominant pictorial elements. This demonstrates that figure and ground elements are not opposed to each other but inescapably mixed and that ground elements have a creative role in the total presentation of most visual works.

Surface elements have considerable importance in the definition of disciplines. The final appearance of a work and even the scale and nature of the composition in some instances is influenced by the plane. The surface is thus an intrinsic and vital part of any graphic work.

On this basis it was seen as valid to investigate the use of selected surface variables (those of a planar nature) as more than just intrinsic parts of composition.

Treated as equal in value to pigment variables these surface variables were used as dominant creative variables. This approach keeps these works within the context of the visual arts.

CHAPTER II

JUSTIFICATION OF THE PROBLEM

Through the work produced as a result of this investigation can stand on its own aesthetic merits without justification, it is felt that the methods employed in production need both personal and historical justification for the purposes of this written study. As practical techniques they require no support. It is assumed that any artistic means are valid if they lead to an aesthetic end. Since a means separate from an end is proposed here, personal and historically valid bases are included.

I. PERSONAL BASIS

A conventional stretched canvas was previously employed by the investigator as a painting surface. A "stretched canvas" consists of a wooden rectangular frame over which canvas is stretched tightly and secured by tacks or staples. The surface is then primed by applying several coats of Gesso or other painting ground.

The investigator became acutely aware of the dimensional nature of this painting surface early in his schooling. As long as the scale of the work was small the negative consequences of the planes physical form; weight and bulk, were minimal. Larger scale works became increasingly difficult for the artist to store and preserve in Illinois and to transport easily and safely to Ontario. The elimination

of the comparatively massive structure that supported the thin durable picture plane was a logical step. The "Nomadic" series of paintings 1975 were a result of this functional consideration. Conventionally produced by a mask and spray technique, they are presented as bordered free planes "stretched" on any supporting surface by nails in gromet holes at the corners. During storage and transportation these paintings are light in weight, compact, and protected from light and dirt. They require only three more nails than a conventional painting to hang. Aside from the benefit to the artist, this form or presentation is beneficial to the art appreciator. Americans are becoming nomadic, in that they now make major moves and relocate every eighteen months to two years. One year leases are common.³ It was hoped that this series could provide a format for fine art that would fit in with this life style.

Though conventional in image, an awareness of the picture plane as a separate entity from its frame was gained from this experiment. This in turn influenced the development of modulated planar images.

³HENNESEY, James and Victor Paponek, Nomadic Furniture (N.Y. Pantheon 1973) p. 1

The desire for immediacy of expression was another driving force in the abandonment of the stretcher frame and consequent employment of the plane for image production. The use of raw canvas by the investigator was similarly motivated.

The length of time between the desire to paint and the construction of a suitable stretched surface was creatively intolerable. The unstretched canvas that thus came to be used was an unstable form that lent itself to creative use more readily than the stretched plane which was more suited to passive utility.

Unprimed canvas suggested and allowed full use of the painting surface as a fabric. Gesso could then be applied with regard to its creative or functional effect rather than as a mechanical process in the production of a surface.

The investigator had been using a fairly primitive but efficient paint applicator since 1976. It consisted of an industrial quality hand operated atomizer containing water diluted acrylic paint. This tool provided excellent control of particle size and coverage but offered no means of controlling spray path size. Stencils and other masks were thus used to provide edges and delineate forms. Alternate means to interrupt parts of the spray field and thus control the spray path were ready to be exploited. The picture plane itself proved to be ideal for this purpose, and in turn provided an image that was self derived.

An interest in minimal tensile structures was held by the investigator. The consequent interest in the innate structural properties of materials was to influence the nature of the investigation of spatially related planes. A strongly experimental approach to technique was characteristic of the artist. The exploration of the plane as a creative variable was a natural choice as it was an immediate problem and represented a previously unexploited means of expression.

The prevalent artistic concepts in the early 1970's indicated that to be relevant a painting if not illusionistic must assert its flatness or become literal form. The evolving processes employed in this investigation seemed to satisfy requirements of both of these alternatives to illusionism. The surface was asserted. It was no longer flatness that was asserted because the surface had literally become form. This was an unconscious development that became evident in the compilation of this paper.

Though this inquiry is historically justified through its relation to modern concepts of pictorial space it was not based on knowledge of modern art developments. Though nearly scientific in approach the inquiry was not a formal problem based on the strict and conscious elimination and control of variables. It was a directed intuitive investigation of common painting materials within the limits of the artist's time, social, geographic, and economic

situation. This does not however render the following historical development meaningless as it seems apparent that men develop along certain lines in relation to their time regardless of direct influence. As a man is a product of his time so too is his work linked to the prevalent opinions of that time. This thesis then can be seen to rise out of the progressive tendencies in modern art rather than from a direct influence by the history of this development.

These tendencies are seen by the investigator to be threefold: the development of a progressive realization of the surface bearing the picture plane as a real entity, the exploration of the intrinsic properties of materials and their limits, the control or elimination of certain graphic elements to place full emphasis on one developed element. This investigation was based on these tendencies. The following brief overview of modern art developed concepts prevalent in modern art.

II. HISTORICAL BASIS OF THE APPROACH

Realization of the plane. Throughout modern art there can be seen a progressive realization of the supporting plane as a separate reality existing as itself apart from illusionistic purposes. This can be seen initially in abandonment of classical realism and its "window to the world" perspective. The picture plane at once became concurrent with the surface. Illusionistic space thus became another element that could be subservient to elements such as shape, color, or pictorial arrangement. Manet in rejecting Renaissance perspective as

academic, severely reduced illusionistic space in his work. These works were abstractions in nature that emphasized color relationships. The Abstract Expressionists denied illusion as a concrete goal and concentrated on the relation between the artist and his materials at the time of creation. Thus, the surface image represented only itself. The scale of a work became an important element as the literal space occupied by the plane replaced illusionistic space. Because of this literalness of the paint on the surface, internal relations between forms and colors became the dominant consideration. This was the primary formal element of Cubist paintings. It was abandoned for the "all over" composition of Jackson Pollock which reduced painting space to surface level. This type of composition can also be seen as a product of the elimination of some painting elements for the benefit of other elements. Even figure ground relationship was eroded in the "color-field" paintings of the 1960's. "That it was important for painting to affirm its actual identity, as opposed to attempting to create a sculptural illusionism, ... became one of the central tenets of American painting of the sixties."⁴ This is demonstrated in Barnett Newman's "non-relational" mode of composition which eliminated all internal relationships within a painting by employing a single image oriented only to the framing edge. Mark Rothko's rectangular compositions

⁴Barbara Rose, American Painting The 20th Century (Cleveland: The World Publishing Company 1970), p. 86

rigidly echo the framing edge making composition subject to the physical boundaries of the plane.⁵

The contraction of illusionistic space that began with Manet pushing the background plane forward was taken to its extreme in the sixties "when a number of artists began treating plane not as the foreground plane behind which space was illusionistically depicted, but as the background which an image either literally (in Rauchenburg's case) appeared to project."⁶ A further interest in the literal surface was shown in the stain paintings of Helen Frankenthaler, and Morris Louis. Frank Stella in 1960 cut notches in the sides of a group of paintings including Marquis de Portage to shift the emphasis from the internal relationship of lines to the form derived from the internal bands of aluminum paint. This realization of the plane was best expressed by Al Held who said "The rigid logic of a two-dimension aesthetic binds us to the canvas surface making it an end in itself, not a means to an end."⁷ It seemed that after this point an artist must choose between renouncing painting for real three dimensional objects or reformulating illusion to be consistent with flatness.⁸ This investigation resulted in paintings that are real objects, meaning that painting did not have to be abandoned. The image was also consistent with the surface but this

⁵Ibid

⁶Rose, op. cit. p. 97

⁷Ibid p. 97

⁸Ibid p. 106

surface was no longer flat.

Scientific approach. The in depth exploration of one of the graphic variables while elimination or controlling (in the scientific sense) the others seem to have developed to be the standard modern method of artistic innovation. For example, the abstract expressionists eliminated imagery to explore color and brush stroke outside of the realistic context. The impressionists sacrificed detail to present the impression of light on objects. In more recent times this way of working became acceptable as more limitations were imposed. This can be seen in the observation that "In opposition to older art their (Irwin, Olitski, Reinhardt) works look relatively devoid of pictorial incident, as does much of American abstraction in the sixties, since composition has become subservient to a color and light experience,"⁹ The practice of working in series had become by the sixties a standard procedure, "...as abstract art became increasingly self conscious and concerned with articulating and solving a given set of formal problems."¹⁰ This formal control of elements achieved its zenith with regards to pigment variables in 1951 when Rauchenburg exhibited his first white painting. Though many means of exploring limited variables still exist, the development of a blank canvas as a means of expression literally left the surface as the only unexploited variable.

⁹Rose, op. cit. p.92

¹⁰Ibid

Of course the idea behind a work could take dominant importance away from the other elements. The ultimate expression of this concept was undertaken by the conceptual artists of the late sixties who felt that they could totally bypass illusion and present reality.

This study follows in this modern concept of stylistic experimentation by control of elements. For example, many of the works were derived by making the method of paint application a controlled variable while allowing the altered plane to become the creative variable. The value and intensity of the pigments was controlled in that they were similar regardless of hue. Color use was systemized by progressively mixing analagous colors from intuitively chosen base hues.

Influence of materials. A third tendency in modern art expression is seen by the investigator to be the influence of the chosen materials on the artist and in turn his expression. In many cases and including this study this took the form of exploring the limits of a material.

Certainly the action painters experimented with the impact of hastily applied rough areas of color. The presented image demonstrated splashes and "on canvas" paint mixtures that reflected the nature of the painting material almost as much as it displayed the artist's action. Pollock explored the effect of dripped paint. The paint stood as itself without influence of brush or evidence of the artist. It could be

said that "If Pollock had something to offer, therefore, it was not a surface look, but a way of working, an attitude that was in its rejection of the conventions of easel painting, anti-academic and radical."¹¹ Johannes Itten's basic design course at the Bauhaus involved exercises that were to reveal how "the material sets up its own limits for the task of imagination."¹² Hans Hoffman taught at Black Mountain College before 1950, an emphasis on surface as plane and as matter.¹³ It is not unusual then to find a Hoffman influenced artist such as Rauschenburg saying "I'd really like to think that the artist could be just another kind of material in the picture, working in collaboration with all the other materials."¹⁴

Thus many of the factors of the investigator's approach can be seen as contemporary exploration of problems that arise from the very formats of graphic art. These problems have been progressively more important to the creative artist as other limits have been removed. As art became free from function any limits to its expression were attacked by the artists.

¹¹Rose, op. cit. p. 100

¹²Rose, op. cit. p. 61

¹³Ibid

¹⁴Carroll Clark, Robert Rauschenburg, Kathleen Preciado (ed.) (Baltimore: Welk Press 1976) p.5

PART I. THE MODULATED PLANE

CHAPTER III

THE MODULATED PLANE FOR IMAGERY

The techniques that are the basis for this imagery were developed from accidental occurrences through experimentation.

I. OBJECT AND IMAGE UNITED

In the summer of 1976 on the Greek Island of Lindos, a small piece of raw canvas was soaked to remove folds from packing. It was then stamped out on a floor constructed of rounded beach stones. After being dried by the sun, the canvas was found to have concave and convex contours derived from the floor's surface. The gently rolling surface was supported at waist height parallel to the ground. Selected colors in the blue to violet range were sprayed independently at different fixed elevations and directional angles to the plane. The resultant color field was a product of the interference of the altered plane with the directed pigment. Though it was not analyzed as such at the time, this was the artist's first use of the picture plane as the primary creative variable in the production of a painting. The pigment applying tool had not been manipulated but the surface had been.

The excess paint from this experiment was sprayed onto

another canvas that was still crumpled from traveling. This proved to be the basis of another ramification of the modulated planar approach to painting that is discussed in chapter five.

A new form of realistic painting had emerged. If selected fixed colored lights had been shone on the surface from which the painting was derived the same visual effect as presented in the painting would result. When stretched and viewed in normal light a strong illusion of depth and projection is created by the color field. This illusion was not a result of illusionistic painting but the result of painting an uneven surface. A degree of inaccuracy is inherent in the process due to the innate characteristics of the recording plane. The thickness and flexibility of the plane largely controls the degree of fidelity between the actual surface and the illusionistic surface. Any image making process which transposes one reality to another must use a medium which imparts aspects of its nature to the image. The canvas imposed certain limits on this style of painting much as the limited intensity of certain pigments might impose on the artist's ability to reproduce reflected light from a subject. Even in photography, which is one of the most exact forms of transposing surface reality, the light sensitivity of the film and paper, which is a product

of their chemical nature, imparts its influence on the resultant image. The grain and contrast of photo paper could thus be compared with the texture and flexibility of a canvas used as a recording plane.

At the time of this experiment the most important aspect of this painting was the feeling that the resultant image was a painting of water by water. This was of course not strictly true as man had intervened in the process twice; in the laying of the floor plane and in the introduction of the canvas plane. The aesthetic value of the work, however, lies with the sea. The motion of the sea that is reflected in its surface is also reflected in its effect on the rocks, that were grouped to produce a floor. The image then, not only strongly resembles rippled water but is a result of rippling water.

This process of imagery does not have innate aesthetic value as it, like any other artistic process, can be well or poorly used. But its first use did display its aesthetic possibilities as well as its innovative appeal. Though founded on a natural aesthetic base, the validity of planar alteration as an artistic process and its potential for expression was thus confirmed.

II. THE DIMENSIONALLY STRETCHED CANVAS

A conscious attempt was thus made to employ this technique within the boundaries of a studio. Certain conventions

of "easel" painting were maintained though the stretcher frame that the easel would support was already abandoned. This was probably due to the artist's pre-conditioning and the studio atmosphere.

Frontal space engaged. Airetica (figure 2) was produced by tightly stretching a water soaked raw canvas over several irregularly spaced three inch projections from a wall. The canvas was stapled to the wall in several places between projections to heighten the severity of relief while reassuring the planar axis.

Liquitex modular color mixed with water diluted flat white latex was used for the initial coats. Subsequent coats consisted of water diluted pigment. All coats were sprayed as before from different angles, directions, and distances. The spray method allowed up to twenty overlapping "layers" of paint without appreciable loss of brightness or fidelity to form. The use of the modular color system allowed for control of color variables. This reduced the total number of creative variables in the process.

Ironically this painting was less portable than it would have been had it been conventionally stretched. This immobility during the painting process caused problems in paint application. The airborne pigment was subject to gravity and thus regardless of initial direction it eventually went down. The limited power and gravity affected paint reservoir of the atomizer made parts of the

FIGURE 2



immobile plane difficult to spray.

Presented as a conventional stretched painting, the strongly illusionistic surface suggested imagery of breasts and navels to several viewers. This led the investigator to produce a similarly stretched canvas entitled Fantasy II. This canvas was primed with a mixture of acrylic latex and modeling paste so that it would retain its form and rigidity when removed from the inducing forms. Cast plaster nipples were inserted into holes cut at the high points of the surface. Spray painted with low value reds and yellows the finished painting presented literal imagery through the use of literal space. While possessing many attributes of painting this work also has sculptural characteristics. A discussion of this distinction appears in Chapter XI.

Planar interaction with frontal and rear space. The previous two works had great modulation but it was in only one direction from the fixed wall plane. A truly dimensional plane, pushing into space in both directions from its axis, was sought. To this end the edges of a rectangular canvas were stapled to the inside edges of a wooden frame. This served to maintain the planar axis while the surface was altered. One point at a non right angle to the plane and within the projected boundaries of the plane was chosen on each side of the plane. Nylon string was strung

from different selected points and pulled tight. This canvas also was soaked with the latex modeling paste mixture on both sides to induce rigidity. Painted on both sides with the previously mentioned spray technique and removed from the frame it became a free hanging, double sided, modulated image bearing plane. This canvas was a departure from the developing procedure also in that the canvas itself became the form that was painted. No inducing form was employed, only tension was applied to the plane.

This painting remains untitled as its imagery is a failure. This is due mainly to color selection. This served to remind the artist that color was still an active variable in the process. As such it could have determining effects on the success of a work regardless of the success of the planar alteration. Elimination of color would be the only way to truly control this variable. But would the resultant altered plane still be a painting?

A group of dimensional white "paintings" were created at different times of different materials in an attempt to allow the altered plane to control visual effect on its own. These works will not be grouped as such as they were results of different processes. Their sculptural nature will be discussed in Chapter XI. Of relevance is the fact that Rauchenburg's white paintings of 1951 were meant to be perceived as open

uninflected color, incorporating the shiftint light and shadow if their environment onto the surface of the canvas.¹⁵

Tension induced dimensional stretching. In 1977, near the end of this investigation, a painting derived from a technique used in the large scale work discussed in Chapter five was produced. Though the surface alteration and consequent imagery was similar to that of Fantasy II, the means of alteration was different and procedurally superior. The planar alteration and structure of Properly Stretched Canvas was induced and maintained by bamboo sticks and steel rods of various lengths placed under tension in tucks sewn into the back of the canvas plane. The resultant tension in the whole structure served to stretch the rectangular canvas. Planar modulation in the form of projections and hollows was induced by, respectively, placing separate sticks between the plane and the rods at right angles to the plane, and sewing points on the plane to tensed rods. A self maintaining planar modulated painting was thus produced independent of a supporting frame, without a separate inducing form, and without reinforcing the plane itself. This structure allowed mobility during the painting process, used the image bearing surface for its full potential, and resulted in a lighter than normal painting. These tension produced modulated planes represented the limit to dimensionality

¹⁵Clark, op. cit. p.66

possible with a canvas plane if the integrity of the outer shape, structural unity, and planar axis were to be maintained. These conceptual limits of the painting format need not be respected and thus represented further variables to be exploited.

CHAPTER IV

MODULATED PLANE FOR LITERAL IMAGERY

Certain habits of "easel" painting had been adopted by the artist on his return to the studio. It was soon realized that the edges of the canvas piece need not maintain planarity while the surface is altered. For the canvas to assume a form it need not be stretched at all. Verticality of the working surface presented only disadvantages to the artist's favored method of paint application.

I. CREATED FORM AS IMAGERY

As the visual effect of these paintings relied heavily on the form that was transposed to a visual document, more emphasis was at this time placed on the "subject matter" than on the already developed technique.

"Form inducers" had previously been employed to introduce form to the canvas. Now the canvas was to be looked at as a medium through which an outside form (either created or natural) could be visualized.

Buy Product was the result of a soaked rectangular canvas being draped over a minimal planar form. This consisted of a nylon cord strung between evenly spaced points that radiated out from a corner in two straight lines parallel to the ground and necessarily at 90° to each other. Once dry the canvas was spray primed and selectively spray painted from all accessible angles.

While reproducing the linearity of the form with great fidelity, there coexisted on the canvas the painted evidence of the solidarity of the canvas and of the minimality of the strung webs. The nature of the painting process was also evident, as the linear image existed without painted lines as an integral part of the overall color field. This was the most visually honest painting of this series up to this point, yet it had limited aesthetic appeal, appearing cold and mechanical due to its geometrical precision.

II. NATURAL FORM AS IMAGERY

The investigator turned back to natural forms as subject matter as the resultant images would be imbued with natural aesthetic appeal. Portable forms were sought as they allowed more freedom in the painting process.

Reliquae, Death of the Artist's Model began with the secretive abduction of a mannequin. She was subsequently laid prone on the studio floor and covered, ankle to head with a well worn water soaked canvas. Though only a symbolic death was involved, an element of drama pervaded the whole process. Latex based pastels and water extended pure hues were sprayed from all directions at primarily low angles. The "free standing" position and horizontality of the canvas facilitated great control of the spray and consequently increased form revelation. Unusual and

pleasing color effects resulted from the flexibility, sensitivity, trace color and absorbant characteristics of the recycled canvas. The mannequin supplied a rigid articulated form, "blood" (previously applied paint) that soaked through the canvas, and unmoving patience over the series of days required to overlap sprays with clarity.

Experimentation with Skylight Studio's "gesso primed canvas" pad material proved to be particularly rewarding. It was found that when soaked, this thin single weave fabric became extremely pliant. For Self Portrait 1976 this material was water soaked, draped over the artist's face and molded to his contours. When dried, in this case by a hair dryer, the material regained its original rigidity with no damage to the gessoed surface. Unprecedented freedom from the subject matter was thus gained. The canvas was then removed from the subject and painted horizontally in the usual manner at a comfortable height. The painting process and consequently the image was greatly facilitated by this complete mobility of the plane. Fine fidelity to form was possible due to the thinness of the material. Bright colors resulted from the white primed surface. Unfortunately the material was only available in an 18" x 20" size which was smaller than the artist's preferred scale of work.

Limits of the process as a form of realism. This process was initially discovered as a realistic image process. These early images were derived from planar forms however. As subjects of a more free standing nature were chosen, certain limits to realistic imagery were discovered.

The small size and high relief present in Self Portrait when compared with the larger previous works made it apparent that the degree of conformity of the image to the subject matter was subject not only to the depth of the object but to the size of the canvas also. The degree of intervention in the image by the planar material was directly proportional to depth and surface detail of the subject matter. Fidelity of image to form also decreased proportionate to the distance from the center of the canvas, on free standing objects. This proportion was dependant upon the relationship between the size of the canvas plane and that of the object.

Flexible planar materials enter the third dimension by stretching, folding, pleating, or bending. The characteristics of each material (ie paper, Pelon, canvas, linen) determine which of these adaptations and to what degree they will make. These adaptations become visual elements (some more than others) that are as apparent as the dimensional characteristics of the subject matter.

The characteristics of the planar material itself, as manipulated by the artist, thus determine the degree of abstraction of the subject matter present in an image. The limits of this technique as an alternate form of realism are in turn dependent on these characteristics. This limit served to reassert the creative role of the plane in the process. The interest in literal imagery had threatened to make the plane merely an object of passive utility in the transposition of reality to image.

III. AESTHETIC CONSIDERATIONS OF PRESENTATION

The Self Portrait canvas was soaked, reflattened and glued with acrylic medium to a picture frame. The Reliquae canvas was however, resoaked and stretched like a pelt within a knock down rectangular wooden frame. Nylon cord laced through gromets along the canvas edges and around the frame members held the viewing surface flat and maintained the structural integrity of the tongue and groove cornered frame. This presentation introduced a high degree of portability to an otherwise ungainly four foot by seven foot painting and maintained harmony with the "ancient" appearance of the overworked, ragged edged canvas. A unity of concept and presentation such as this has seldom been achieved by the investigator. Presentation seems to present the major

artistic difficulty in altered planar derived works. Integrity of process seems to deny conventional stretching of canvases produced off the stretcher. Honestly hung dimensionally derived painting seems to lack finish. Their unframed edges do not proclaim "this is fine art" as a conventional painting format might. This unfinished appearance may be due to a habitual expectancy of the viewer rather than due to any innate aesthetic factor. As tapestries, posters, and carpets are currently hung unframed, perhaps this practice may be carried over to paintings without jarring the appreciator.

Modulated planes that are presented in their dimensional form present a separate problem in that no standard format exists for exhibition.

A change in artistic standards is likely to be concurrent with social value changes. Functionally based value changes in North America show a tendency towards the value of minimality, portability, and structural honesty. These social values were present in ancient Japan which had geographically limited space and raw materials. Such values are evident in the traditional forms of Japanese art which are brush painted scrolls and screens, and decorated pottery and other functional objects.

Though practicality and aesthetics are presumed to be

at odds with each other; practical elements influence the artist's manner of expression and taste of the audience. Though aesthetic standards exist independent of taste, the aesthetic exists within the artist-audience interaction. As such, practicality is an unavoidable element in mass art.

Tension based methods of presentation offer the best solution to the artist's problem. They are minimal and employ the full and therefore best use of all components in the work. They are technologically superior and thus complement a modern use of art material. They are simple and thus follow the "form follows function" ethic. Though employed wherever possible in this study the possibilities are so vast that the development of tensile presentational structured must be a separate study.

CHAPTER V

SELF DERIVED IMAGERY FROM A MODULATED PLANE

The crumpled canvas mentioned in Chapter III demonstrated to the investigator that self derived imagery was possible. Precise dimensional characteristics of the canvas were recorded on the canvas itself the moment that it was sprayed with the waste paint. As in photography a record "shot" is not necessarily artistic. It was reasoned however that a canvas could be consciously formed to produce a visual record that was both visually appealing and accurate.

The physical limitations of a material determined to what degree the form could be altered within the artist's conceptual and manipulative abilities. The investigator did not however view these characteristics as limits but as innate characteristics that could contribute their nature to the image.

As in the previously mentioned works color selection had a great deal to do with the aesthetic appeal of the finished work. The factors within the paint application process determined the fidelity of image to form.

Skylight Canvas. Skylight Studio's canvas pad material provided excellent characteristics for self induced imagery. Planar alterations consisting of folds, bends, ripples, curls, and curves could be induced to the wet canvas. Once dry, the canvas retained its new form independent of support.

This unique characteristic was particularly liberating, as total concentration could thus be given to the painting process. Mobility of the surface, which was gained, allowed optimum use of the primitive spraying system. The lack of extraneous materials to maintain the form also assured that only the characteristics of the altered plane itself were recorded. It was intended that these paintings of the Structural Record series would be paintings of canvas on canvas. (figure 3) With the canvas as subject matter it was felt that the natural reaction of the material to external forces induced along its planar axis would more accurately portray its true nature than if it were induced into an extreme form that required the addition of mechanical devices to maintain the form.

Pictorial unity was obtained by this approach as the visual elements derived from the modulation alteration were naturally related in composition due to the necessary physical relationship of modulated elements.

A minimal amount of artistic control over the form to be recorded was seen to be desirable. This reflects the investigator's interest in "found art" and other expressions of the natural aesthetic. The belief that the innate properties of a material have intrinsic aesthetic potential was corroborated for this material by this pictorial series.

FIGURE 3



Gravity Denied was a painting derived from the gravitational effect on a well worn, and thus sensitive, water soaked canvas rectangle that was supported at three points against a plane. As a product of gravity its image is totally natural. The artist acted only as a facilitator in placing the elements together. Heavily saturated with sprayed latex primer it obtained enough rigidity to be removed from the supporting points. Unlike the Structural Records it was not stretched flat for display. Instead, it was hung upside down from a single "D" ring, thus denying its origin. The spraying of the primer assured that the form would not be altered by the process. Unusually bright pastels comprise the color field that subtly interacts with the visual effects of the actual form. The most sculptural of works in this vein. It not only retained its dimensionality but also has non rectangular edges.

Tie Die. The tie and die process is an ancient and often used graphic technique that employs planar alteration as its primary image source. It is considered a craft rather than an art because of its method of pigmentation. It does have severe limitations to its imagery, as parts of the material itself are bundled to resist die penetration. Only one color can be applied at a time to somewhat unpredictable areas. As pleats, bundles, and twists are the only self-resisting

configurations, imagery is limited. A related technique in which the material is sewn into various resisting configurations offers greater design freedom and control. With accurate tight sewing, no limits to possible imagery exist except those inherent to the die process. Self resisting precludes visual feedback during the image making process. This, the limited die colors, and the ability to add only one color to a particular configuration at a time represents the major limitations to this as related to the visual results of the investigator's modulation derived paintings.

Other Materials. Paper was used as an alterable plane by the investigator and presented as such to a beginning drawing class at Eastern Illinois University during an intern teaching experience in the Spring of 1977. The process involved modulating the plane in any manner suitable to the material. An image was produced by dusting the surface with powdered graphite and then rubbing it with cloth or fingers. A lightly manipulated soft pencil and graphite coated stumps were also employed to record the form. A great variety of images resulted from the class experiment. They ranged from figurative vased flowers to abstract galaxies. Though this indicated that the technique could be utilized with a high degree of control, there was a disappointing "sameness" in the appearance of these works. It is felt that this was due

to the limitations of the drawing media in relation to this concept. There are inherent limits in both the paper plane and graphite as an image maker. Unlike fabric, paper does not stretch appreciably and when folded or crushed, creases permanently. The creasing was eliminated by hot pressing and subsequent dry mounting of the paper to a backing board. The pressure required to apply carbon to paper precludes any delicate projections or other subtleties of form. The absence of color allowed only one facet of the altered plane to be recorded in each drawing. These same limits are present in the frottage or rubbing process which was also taught in this beginning drawing course. This technique is similar in concept to the investigator's use of the modulated plane as a producer of literal imagery. The paper plane however necessitated the use of strictly planar and very low relief images or textures, limiting its creative use considerably. The graphite, or crayon, must come into contact with the image producing source; this eliminates subtlety of form and evidence of any interaction with the paper plane.

Modulation by folding. Another type of work that used directly applied pigment was investigated. A drawing was made with all imagery derived from the masking effect of bent in planar edges. The inability of the plane

to accept folding without damage necessitated the use of another material.

A canvas rectangle was primed, off the stretcher, with a large brush. During the process acrylic paints were placed on the brush to create multi hued pastels with each stroke. During the painting, the edges were periodically folded in towards the middle, masking previously painted areas and creating straight line and singular edges. A double sided painting was thus produced with related images. Each composition had geometrically related color field areas that were inter-related and harmonious by nature of the process. The planar edges were affirmed and reflected in all aspects of the composition. The process in this case assured a unified and pleasing composition.

Pellon. Pellon is the brand name for ~~a polyester~~ interfacing material. It is available in several weights and textures. Possessing great fold resilience and slight absorbancy, this non woven fabric has the good qualities of both paper and fabric. The ability of the material to be folded, crushed or twisted, and still spring back to planar form with no evidence of abuse made it more suitable than paper for use with this technique. Its inherent springiness made "form maintainers" necessary however. A blowpipe was used to spray diluted

India ink onto the crumpled surface. Different dilutions were used for value control. The coarseness of spray was directly controlled by mouth pressure. Cardboard tubes held aspects of the form while different sized mesh screens held other parts in the desired configuration. An interesting interplay resulted between the regularity of the masking grid and the fluid angularity of the crumpled areas. (Frontspiece)

Pellon and canvas proved to be far superior to paper for planar altered works. Spray pigments consistently provided sharper, clearer, and more detailed images than did solid pigments as no pigment or tool pressure was applied to the surfaces.

A large scale work. Though the experimentation with different picture plane materials was rewarding, the investigator returned to raw canvas as it was available in larger sizes. A six foot wide, twenty five foot roll of canvas was purchased as stock material. The vast size of the roll however so impressed the investigator that he could not bear to cut it into pieces. Starting at the left edge of the horizontally suspended canvas and working progressively to the right over a period of eight months, a conscious attempt was made to explore

as many techniques of dimensionally altering a wall ⁴²
suspended plane as could be conceived.

Bright hues lightly sprayed on a primed tensile modulation of the plane began the work, entitled Conquer and Divide. The canvas was pulled out toward the viewer by threads attached to curved steel rods whose bases were sewn into the canvas. It was also pushed out into the viewer's space by projections from similarly attached steel rods behind the canvas. A dimensional transition was provided by an area of canvas stapled to itself. This lead to a flat image area produced by the same process.

An airbrush had been purchased just before this painting was begun. This tool facilitated greater control of paint application, which in turn allowed the visual realization of smaller surface alterations in the form of visual detail. Gravity had less effect on this compressed gas powered tool than on the atomizer so the more convenient verticality of the canvas was not a limiting factor. This verticality did however necessitate suspension points, which imposed planar alterations of their own in reaction to the mass of the canvas.

The second suspension point produced ripples that were captured by rolling with a multi hued paint roller.

Judicious overspray "antiqued" this area and so unified it with the preceding section. The next major compositional area is a visual pun. The image was produced by stapling the canvas irregularly to a stretcher frame and painting it in the established manner. This image of "incorrect" stretching was then conventionally stretched for display in the midst of the unstretched canvas. This stretched plane was also made to project out from the overall picture plane, asserting a real dimensionality apart from its origin.

The next visual center is also derived from the stretching process and toys with the concept of dimensionality as image source. As such it is a visual parody of the process. A rectangular area was stretched tightly and then painted in the usual way. As the surface was not dimensional except on the textural level a monochromatic rectangular area resulted. The stretcher was however removed. Released from the tension, this area has modulation induced by the free hanging nature of the canvas as a whole. An impression of color modulation is thus produced across the area when viewed in indirect light. Surrounding this area are the pictorial results of several alteration techniques that will not be described in detail though the visual effect of each technique is unique and pleasing. These processes included sewing the canvas to itself, stapling it to itself,

stapling it to the wall, stapling to boards with projections, irregular stapling to a board, sewing canvas in tight configurations with progressive masking of areas, bunching and wrapping with copper wire, pleating and grouping with copper wire, and supporting in configurations with boards and with steel rods. Transition between techniques was achieved through painting the gravity exaggerated natural compensations of the entire plane to any single alteration in that plane. The final section of canvas derived its images largely from the wrinkles that were naturally present at the end of the roll. Literal planar alteration exists in this section also, through the tension induced by curved steel rods and a straight bamboo pole, which are secured at their ends by tucks in the fabric.

An all over composition was thus obtained, while maintaining several related pictorial and formal incidents.

This painting was the culmination of the investigator's works of self derived imagery. The modulated plane as its own image source was seen by the investigator as the method that offered the greatest range of creative use of all the modulation techniques.

Several general tendencies could be seen in the progression towards this means of expression. They were: The stretcher frame was abandoned, stretching in any form was avoided to provide greater mobility during the painting process, horizontality of the painting surface

was selected over verticality wherever practical for increased image control, and subject matter was progressively simplified and eventually eliminated.

An awareness of the picture plane materials limits and possibilities were thus gained. Though these tendencies can be seen to be anti-establishment in their rejection of traditional artistic practices, the motive was not blind revolution. A liberation of the artist and a consequent new form of expression was gained through this liberation of the picture plane.

CHAPTER VI

PLANAR MODULATION PRINTMAKING AND RELATED PROCESSES

All intaglio and relief prints are the products of planar modulation by definition, and as such, represent the largest and most commonly accepted use of planar modulation in graphic arts. The modulation of the image plane is not the primary motive of the printing process however unless an embossment is sought. The plane altering limits of the embossing process are thus of great importance to this thesis.

I. PRINT MAKING PROCESSES

A series of four related prints, based on the images of discarded "tin" cans, employed several plane altering techniques and led to the exploration of the limits of the embossing process.

The discarded metal container was seen as a perfect symbol of United States life; at once highly sophisticated and wasteful. The repeated flattening of cans by automobiles rendered certain ones to be both aesthetic objects and suitable printing "plates".

A group of photographs by Stan Levey with crushed cans as subject matter, led the investigator to believe that this aesthetic appeal could be transposed into art as well as being appreciated in the "wild".¹⁶

¹⁶Stan Levey, "Artifacts-Portfolio", Audience, (September-October, 1971) Vol. I, No. 5, p.21

Johnson at 10 was an edition of prints made on location from an aluminum can partially embedded in asphalt at the intersection named in the title. A relief print was attempted by inking up the road and printing with pressure applied by the investigator's motorcycle. Better results were obtained by placing rice paper over the can and rolling with an inked brayer. The resultant image was a product of the paper plane's interaction with the relief road plane.

A Question of Balance, a combination serigraphed and embossed print proved that with abundant padding, a flattened can could be safely run through a press. Using well soaked, high rag content paper, the depth of the can was just accommodated without ripping the paper.

A more complex interrelation of processes was used in N. American Primitive. A coke can was hand crushed with a segment of concrete slab so that its perimeter was octagonal. Interior forms of a circle and a square were formed with the former top and bottom of the can. Triangles were produced at the corners by the folding of the can. A dimensionally induced serigraph was made of the high points of the can by making a rubbing of the can with litho crayon, using the screen as the recording plane. This positive image was turned into a printable negative by coating the screen with water soluble

Lepages glue and then washing out the crayon with Oleum. A paper stencil screen was made of the crumpled Coke graphic. This was overprinted with the high points in black. The can was registered with the image and impressed into the back of the paper to produce a frontally projecting image. The title referred to the artist who used a primitive crushing method to produce the geometrically balanced image from a technologically sophisticated object. It also reflects the artist's opinion of a society that places so little value on these materially and structurally refined containers.

II. PAPER MAKING

The quarter inch depth achieved in these prints represented the greatest extent to which any locally available paper could be stretched in either direction from planarity. As further relief was desired, the investigator began the manufacture of his own paper. Following a procedure used by David Finkbeiner¹⁷ a latex rubber mold was made of a glass mounted partially crushed aluminum beer can. A plaster back up mold was made of the entire composition. Paper pulp was poured onto the composite mold and excess water squeezed out. After complete drying, the cast paper print, entitled Ditch It was removed from the mold. A relief print

¹⁷Ross Romano, The Complete New Techniques in Printmaking, (New York: The Free Press 1972), p.49

with greater depth than a normal embossment was thus produced with no stress or damage to the picture plane. (fig.4) This process was repeated with several other found objects that had either too high a relief surface or were too fragile to run through a printing press. Twinkies, Table Setting, and an untitled work were produced from plastic molds.

An untitled work having a depth of two inches was produced by a more conventional paper making process. A paper making mold was constructed so that water could pass through the mold while the solid particles of pulp were retained. A conventional mold is flat with a uniform grid. The investigator's mold however had two levels composed of different grid materials with "found" objects attached in places. This work and two others that each employed plaster molds as form inducers caused the investigator to reevaluate the legitimacy of this procedure as a printing process. Images were still being impressed into the surface of the paper but as the depth of relief became greater, so did the the thickness of the paper. The works threatened to become relief molds that could just as well and more easily be cast in some more durable substance.

III. PLASTICS

A more efficient method of introducing high relief

FIGURE 4



into a plane was investigated. Though the planar material used was not paper but acrylic styrene the process employed to modulate the plane was much like the embossment process and is thus included here.

As water is used to soften a paper plane, so heat is used to soften a plastic plane. Great pressure is used to impress the paper surface. The amount of pressure needed to impress plastic varies with the thickness of the plastic and the amount of heat applied but it is very little when compared to that exerted by a printing press. Instead of pressure being applied from the top through pads against a bed, the plate or mold is cranked up into the hot plastic plane which has its edges clamped in a supporting frame. Vacuum pressure is used to suck the plastic around the form.

As normally used, a depth of image of one or two inches can be obtained with good fidelity. Though this represents a greater depth than that possible on a press, the limits of this alteration process were sought. Many examples of this investigation can be seen in the Mural-Environment in the Northeast entranceway of the Applied Arts and Education Building on the campus of Eastern Illinois University.

Though the resultant pieces had high relief surfaces, the intention was that they would have a predominantly visual effect. To this end a highly reflective white

material was selected. Viewed from the side, the relief is evident, but when viewed frontally, each piece exhibits a unique visual effect in the combination of shadows and reflections from projections and hollows. This effect changes with each movement of the viewer.

The same plaster molds that were used in paper making were vacuformed and the results compared. The fidelity to form was identical except in concave molds. As the vacuum was unable to pull the plastic into the hollows, unless alterations were made to the mold, these results were inferior to those in paper. The surface and integrity of material was deemed better in plastic. The durability of material was equal; each was subject to different hazards. Aside from the vacuform process, three other methods to alter the plastic plane were devised. The simplest method was to allow the heated plastic to sag. A domed form was thus produced, its shape a result of gravity and the shape of the supporting frame.

Unique results were obtained by cranking the open end of an otherwise airtight can up until it became sealed by sagging styrene. The air inside the can was heated by the overhead element. Thus through air expansion a small dome was formed on the rim of the can. The can was then pushed further up past the planar axis to produce a smooth curve from the rim to the frame.(Fig.5)

A double modulation was produced by cranking a circular array of vertical steel rods into a slightly heated styrene sheet. A related set of parallel arrayed rods were immediately pushed from the other side into the sheet, producing planar alterations in both frontal and rear space. (Fig.6)

Numerous pieces were produced with minor variations on these four processes with largely rewarding results. For planar modulation alone, heated plastic is superior to all other materials investigated as its stretch and conformability is practically unlimited. Employed for form reproduction it imposes little of its own nature to the results. Its stretch can be used creatively as was demonstrated by the non vacuum techniques. The high gloss of the acrylic styrene precluded permanent painting of the surface. Matte surfaced plastics will accept paint but their lack of absorbancy renders them less receptive to subtleties of paint application than any other material investigated. Heat resistnat inks such as Naz-Dar's Plasti-Vac Gloss Ink, 7000000 series can be used to screen print on plastics before they are formed.¹⁸ This is probably the best way to apply color to dimensionalized plastic planes. Of course, in this case, the image would not be a product of the alteration but would be altered along with the plane.

¹⁸ op. cit. Romano p.52

FIGURE 5

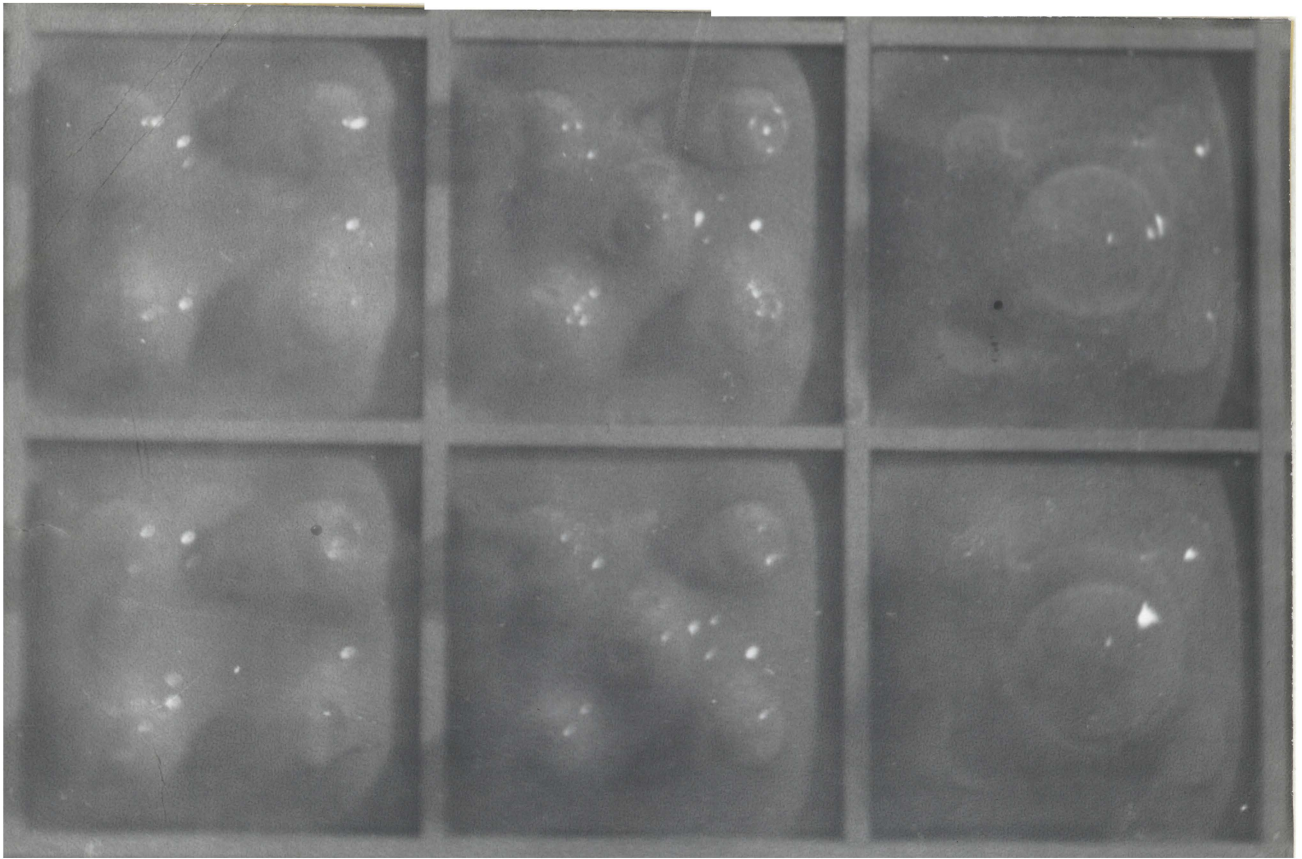
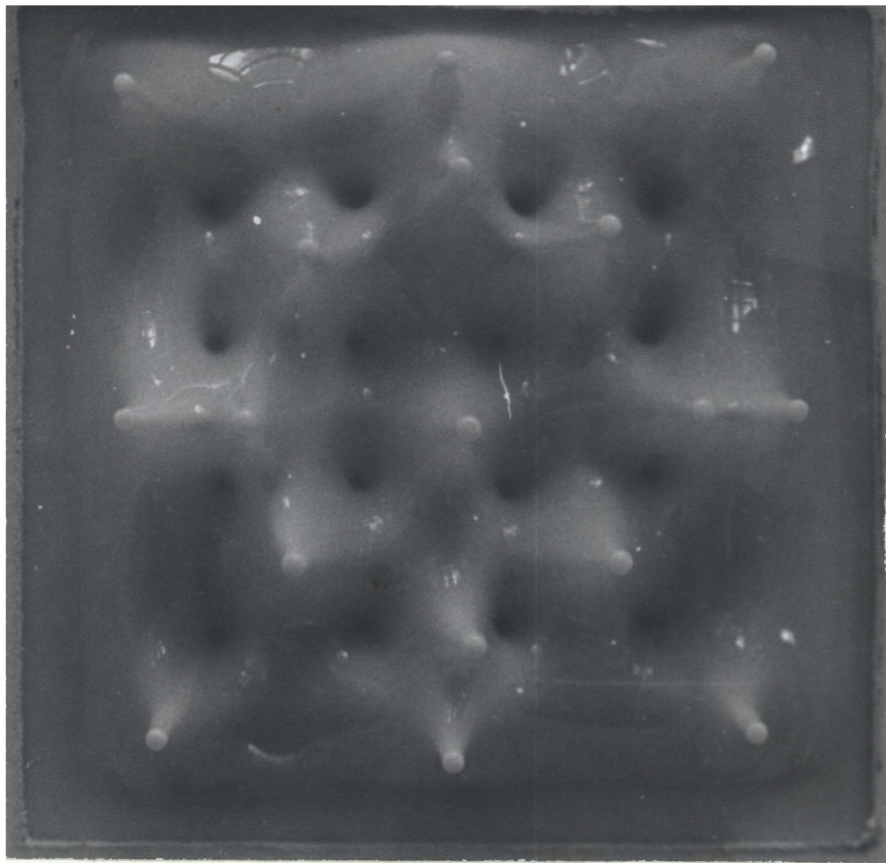


FIGURE 6



CHAPTER VII

ADDITIVE MODULATION

As painting is an additive process in which paint is placed on a ground, it is natural that the plane would first be dimensionalized by additive processes. The impasto technique in which paint is applied in outstandingly heavy layers or strokes¹⁹ is a minor planar alteration technique that has been used since classical times. Impasto paintings are not usually considered relief as the height of the paint is minimal and the placement of color is considered to be the main reason behind the technique. Painters using oil base paint were limited in the degree of additive relief possible, due to the long drying time and tendency to crack of thick oil paints.

The advent of acrylic based paint systems allowed artists to use thicker paint layers and to create colored dimensional surfaces with paint compatible modeling paste. As the investigator used acrylic paints, this type of modulation was investigated. Other non-paint based dimensional graphic systems are also currently exploited by modern artists. These included montage and combine-paintings in which paint, graphics, and three dimensional objects are incorporated into a usually horizontal, planar based work. This type of work was not investigated.

¹⁹Ralph Mayer, A Dictionary of Art Terms and Techniques, New York, p. 192, Thomas Y. Crowell Company, 1975

The investigator's first dimensional painting was a result of the additive process. One of the two small canvas paintings entitled Woman in the Landscape of 1973 was dimensionalized by building up the surface with a mixture of acrylic paint, plaster of paris and acrylic modeling paste to a height of one and a half inches in places. Its companion piece was totally flat, a product of the mask and spray process. The two pieces had identical compositions but drastically different surfaces. It was while spraying this piece that the investigator learned that the direction of spray could alter color placement on a dimensional surface.

As the investigator subsequently abandoned brushes for the spray bottle it was not until 1975 that another additive painting was attempted. Again using a plaster and modeling paste mixture on a canvas plane, a relief surface was built up. Desiring a great degree of relief, plastic mesh material was sewn to the canvas to facilitate adhesion of the added material. Non painterly in approach; vaseline coated plaster body molds were used to form the surface of the painting into smooth curves. After refinement of the surface several coats of white paint were applied. The finished painting exhibits a biomorphic form that smoothly emerges from the canvas plane. Though visually appealing, this painting was a procedural disaster.

A horizontal brace was necessarily added across the back of the plane and screwed into the painting to support the added mass which was three inches thick at the middle.(Fig.7) A painting of this scale (32"x42") should only be attempted on a ridged planar material if paint thickness is to exceed one inch. The use of Polyfilla on a masonite surface is recommended to anyone wishing to attempt a work of this nature.

As the investigator was at this time committed to the use of a canvas plane and the anthropomorphic imagery, a combination additive and modulated planar work was seen as a solution.

By saturating the canvas with plaster and adding a thick coat to one side, the depths and projections of the plaster molds could be accommodated by modulating the plane. In this way, the addition of excess mass to the plane was avoided. The weight of the piece and the problem of cracking were thus limited. This piece was also painted white to emphasize the interplay of light on the highly variegated surface. The destruction of this work by crushing pointed out the lack of flexibility inherent in a high relief painting. Either a more flexible or more impact resistant material should be employed in the production of like works unless they are to be permanently installed.

No further experimentation with additive processes



was made as pure planar modulation offered equal dimensional possibilities with a lighter and more durable end product.

CHAPTER VIII

PAINTING OR RELIEF SCULPTURE?

Several of the works previously discussed maintained their planar alteration. Though the distinction of two dimensional works from three dimensional works is considered by the investigator to have primarily academic significance a case is made in support of the presentation of these pieces as works of visual art. It is his contention that these relief surfaced works are primarily visual and thus should be considered to be paintings. This belief is based on many factors not the least of which is the artist's attitude to the works. Having had schooling in two dimensional art it was natural for the investigator to attempt to produce visual works from his new found interest in literal form. The materials used in the investigation were primarily those of the visual arts. All works were derived from planar surfaces. Modulation was originally approached from standard painting processes (canvas stretching and paint application). The format of presentation in most cases was that of the visual arts. A rectangular shape was usual. A vertical wall suspension was used for a primarily frontal display of most images. The original planar axis was usually maintained so that, though the surface may be relief, a general planarity existed.

The lack of colored paint on the white pieces previously discussed renders them more difficult to defend as paintings. On some the materials were painterly. On all but the installed works the format was painterly. Technically, they may be relief sculpture but their intent was visual. The white surface responds to all light directed at it regardless of color intensity or degree of diffusion. The perceived surface is thus purposefully placed out of the control of the artist in that the planar alteration was not recorded by directed color but was left as a pure light reflective surface to respond to environmental conditions. The perception of the surface is thus dependent on the position of the viewer and the direction of the viewing light.

With no visual cues light has considerable bearing on the perception of a dimensional surface. An object with a shadow on the side away from the light must be convex just as one with shadows towards the light must be concave. The viewer's perceptive mechanism interprets the shape or contour from this evidence. It is interesting to note that in the absence of definite clues as to direction of light the brain reverts to the most usual or logical interpretation. Presumably due to the lighting used by most right handed persons an object or photograph is usually interpreted as if the light source is from the upper

left hand corner.²⁰ This phenomenon can be exploited by the artist in his presentation.(Fig.9) However, when confronted by an actual surface, a viewer can usually ascertain its true nature by changing his position in relation to it. All of the investigator's dimensional works currently use only environmental light in their presentation though this is due more to limited means than intent.

²⁰John Tovey, The techniques of Kinetic Art, (B. T.) Batsford Limited London Van Nostrand Reinhold Co., N.Y.) p.53

PART II

SPATIALLY RELATED PLANES

The following chapters deal with the investigation of a different conception of the dimensionally altered image bearing plane. In part one, the visual results of modifying a plane to interact with space in either direction from the planar axis were investigated. In this section, the plane is not modulated, instead an interaction of planes is used to present a unified pictorial image. As the planes interact in real space the third dimension is used during the artistic process or as a means of display for an otherwise flat image. Though conventional image could be so displayed the creative use of the expanded visual area as it related to the whole of the work was investigated.

CHAPTER VIV

ANGULAR ASSOCIATED PLANES

On a flat image bearing plane within a given picture frame a finite amount of visual data may be presented. Indeed illusionistic space and detail may be used to make greater use of the physical space but this space is none the less finite. Is there a way to increase the amount of visual surface within a given frame?

The space between a viewer and a given image is active space. This becomes evident if one's view of the work is interrupted by another viewer. If a graphic work interacts with this space in its presentation, could not this space be used creatively?

This investigation of angular intersecting planes was directed to answering these two questions.

I. RIGHT ANGLE COMPOSITE PLANES

By placing a plane at ninety degrees to an equal sized plane the total visual surface would be tripled with the actual visible surface at any one place increased by up to one half. The amount of increase would depend on the position of the viewer. That more "picture" can be placed in a given area is important but of more interest is the fact that the visual area would change with respect to the viewers position. By employing the viewing space

in this end the following ways, a graphic work can exist as a factor of time, in that a viewer's time-space must be employed for full appreciation of the surface. This interaction with the fourth dimension is normally reserved for sculpture.

One intersecting plane seemed unwieldy and impractical for wall presentation as in any setting other than a gallery the surface would impinge on the viewer's functional space. Paintings to be hung at ceiling-wall, floor-wall, and corner intersections are projected uses of the single right angle planar intersection that would not impinge on the viewer, as existing architectural space would be used. These uses however do not offer any great increase in visual space or employ the viewers mobility for effect.

By increasing the number and decreasing the depth of projection of the right angle elements a space efficient and more normal visual art format could be obtained from this surface altering concept.

The investigator chose ninety degree elements that projected a distance equal to the space between them for the surface of the drawing Model 1. It was felt that this spacing would provide an equal amount of visual area for each of the three visual planes and allow for even transition of image. As the investigator viewed this drawing surface as a dimensionally projecting image

bearing plane as opposed to several separate intersecting planes, unity of composition was seen to be vital. Concentric circles were thus used as imagery on the back surface. Each of the right angles surfaces supported curved lines that became elements of concentric circles when viewed from either side at forty-five degree to the back plane. The "logical" drawing composition was visible from three positions. At all intermediary points of view fragmented related curves were visible. If there were only three "right" viewpoints to this drawing (or any other on this type of surface) then effective visual space was not greatly increased. The intermediary viewing positions were however visually interesting on their own and offered continually changing relationships to the mobile viewer. If these other views served only to compel the viewer to find the "right" viewpoints they would serve an artistic-conceptual function.

In the drawing Open Grid the investigator employed the same proportions of visual area and made the visual data subject to the same proportions. Horizontal straight parallel ink lines transverse the vertically divided surface. Spacing of lines is equal to the spacing and depth of the slats. The unity of composition is maintained regardless of horizontal angle of view. Vertical view angle can change the continuity of the image, however,

activating the grid effect through the fragmentation of the drawn lines.

In both of these works the minimality of the image emphasized the characteristics of the image supporting plane and its ability to activate the space of and in front of the drawing. This minimality of image is not necessary for this type of surface as any related or interconnected imagery could be used.

Such image bearing planes are not new. The investigator's use of this type of surface was instigated by his viewing a stop sign which used ninety degree projecting planes as blinders to mask the "stop" graphic from the view of users of one of the two roads that intersected at an acute angle.

To the best of the investigator's knowledge this type of image bearing plane was first used in an artistic manner by Carlos Cruz-Diez in his Physichrome series begun in 1959. In an attempt to paint with light instead of pigments, and based on Land's work on the additive properties of colored light, red and green strips of cord were placed at right angles to the surface of the picture. He said of Physichrome no. 3 "The solution I found with more plastic possibilities for making the most of color

reflection, was that of constructing a surface made of parallel blades controls the admission of light. The result thus obtained is that of a changing chromatic atmosphere and not that of plain color simply painted on with a brush." In 1962 he began to use other colors besides red and green and introduced background shapes with clearly defined contours which appear and disappear with the movements of the spectator.²¹ Thus pure color as well as pure line may be used with this type of surface.

II. FORTY FIVE DEGREE RELATED PLANES

A plane bent to a forty five degree angle along a line through the midpoint of its sides would become a planar three dimensional form with one surface visible from each side through a range of forty five degrees from the original plane. Both surfaces would be visible through the same range in front of the form. A greater visual surface could thus be placed within a given rectangular area.

The small drawing Model 2 made use of this simple bent plane as a ground. To make the surface more responsive to viewpoint changes three equal sized, rectangular planes were placed on each side of the midpoint of the plane at ninety degrees to the original plane (twenty two and one half degrees to the surface). Concentric circles were again used as image to provide unity of design and emotional neutrality.

²¹Cyril Barrett, Op Art (Viking press, New York, 1970) p. 163

Though effective the best use of forty five degree related planes had not been made, for though the visual surface was increased, a bulky form had been created in the process. The major utilization of the viewers time-space was through the slats which were still at ninety degrees to the original planar axis.

A more visually efficient use of this concept with less dimensional projection could be achieved by constructing a surface solely of several regular forty five degree triangular corrugations. It was found that this type of surface was used by several local Venetian and Florentine painters to make an image of Christ to change to that of the Virgin in response to a viewers movement.²²

More recently this surface type was used by Yaacov Agan in Composition 1965 in which two distinct straight line and angular compositions could be seen from the sides with an integrated composition visible frontally.²³

Towards similar ends masonite was purchased and cut into slats. The material proved too heavy for this application, given the investigator's attitude to portability and maximum use of a material's intrinsic properties. In late 1977 a solution was devised. A canvas plane was marked with parallel lines at three inch intervals. With one end stapled to the studio floor, folds were made along the lines and stapled down so that alternate three inch segments were

²²John Tovey, The Techniques of Kinetic Art, (B.T. Batsford Ltd. London, Van Nostaand Reinheld Co. N.Y.) p.50

²³ibid, p.52

exposed. A stencil induced image of multiple overlapping rectangles was sprayed on the exposed canvas. The folds were then reversed to expose the bare canvas and mask the painted areas. The same stencils and a similar color scheme were used to produce a similar image. With gromets placed at the edges of each fold the canvas could then be stretched on a knock down armature frame that, through tension and two supporting rods at the top and at the bottom, held the painted segments at forty five degrees to each other in a zig-zag fashion. This painting was unique in that planar modulation was used in the production of a painting that was presented in the configuration of spatially related planes. Through the use of canvas under tension the required geometrically regular surface was produced with a minimum of weight.

Another solution to the problem of excess structural mass in forth five degree corrugated dimensional planes resulted from the modular use of a mass produced vacuformed plastic element. Intended commercially for use as car top advertisement bearers each of the approximately twenty inch by four inch units was essentially two angular planes connected by a flat top and angular end planes for durability. Installed in fourteen vertical rows, seven units high, in the mural environment in the Applied Arts and Education Building of Eastern Illinois University the units together comprise a

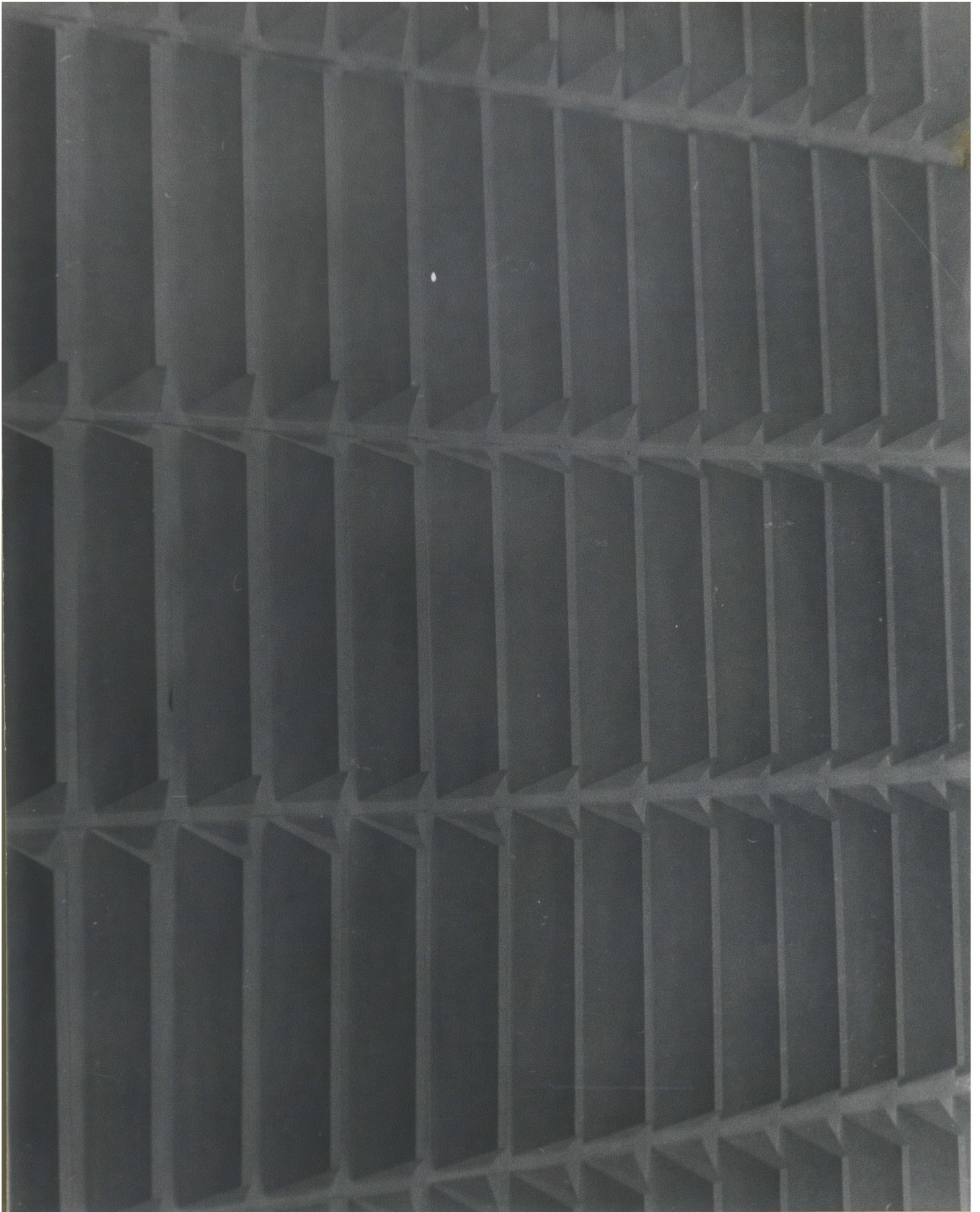
regular angularly ridged surface. (Fig.8) Left white, devoid of image, this piece conveys the impression of functional sterility yet provides subtle visual changes to those who look as they pass by. Technological in appearance its only function was to reflect the ever changing environmental light with its many facets. The functional use of this form for solar collectors or reflectors is implied by its location.

III. MULTIANGULAR RELATED PLANES

One hundred eighty degrees of space in front of a visual surface had been activated by organizing the image bearing surface in the two previously mentioned geometric manners. Could a multiplanar structure be made that would offer a visual surface to all viewpoints; activating three hundred sixty degrees of space? This was the function of the kiosk in presenting graphic material, usually of a commercial nature, throughout a greater range of view than that possible with a billboard. Some study of cylindrical image bearing planes was made, resulting in one incomplete work that employed a simple crossed belt to turn two cylinders in opposite directions so that their visible surfaces continually moved in toward or out from each other.

The kiosk is of course not a multiangular concept but its existence and use does support the investigator's belief that there can be a free standing three dimensional painting or other visual work that is not a painted sculpture.

FIGURE 8



In the search for a work of this type that was not in the form of a regular geometric solid, two eight inch square templates were used to hold eight, eight foot by three inch masonite slats in angular relationship to each other. Minimal in design the structure was held together by the tension induced by the slight disparity of slat angles between the templates. The angles were chosen in the attempt to present at least one planar surface to the eye from all positions without relating the planes at ninety degree, forty five degree, or 180 degree angles. Presented vertically the painting was free standing on the ends of its component planes. Sprayed from six equidistant positions with different colors each individual plane revealed its position in space at the time of spraying by the amount and type of paint mixture on its surface while the totality of the work from any one point demonstrated a uniformly varying color field. Though rectangular in shape and composed of planes the piece was mostly columnar as the original combined width of two feet was compressed into eight inches by the angular arrangement of the slats. Though this work was dismantled and its units used in a later painting it expressed the possibility of a free standing painting "in the round".

CHAPTER X

THE SPLIT PLANE

A split plane for the purpose of this discussion is any discontinuous or intermittent plane. Usually produced by dividing an existing plane into segments the plane maintains its identity as one discontinuous plane as opposed to several separate planes by unity of material, surface, visual surface and close proximity of units.

I. SLATS

Two double sided canvases had already been produced as a result of this investigation. They required free from the wall hanging to present both visual surfaces. By cutting the visual surface plane into smaller units that could be rotated, both sides of an image support could be used while maintaining a flat to the wall presentation format. Thus twice as much visual data could be placed within a given picture frame. Further increase of data per amount of space could be achieved by placing a second image bearing plane behind the slats, by employing the infinite intermediary slat positions as part of the composition, or by using three sided units (equilateral triangles in cross section) instead of the two sided slats.

The rotatable units chosen were however rectangular slats of much greater length than width. As the slats rotate along the central axis of their length the smaller

the slat width the less the painting need project from the wall and the less obvious the transition from surface to surface would be. However, the smaller the slat width the more mechanism would be required and the greater the discontinuity of each composite plane.

As Childs Play was a work based on this concept that was oriented to viewer participation and initially did not display any painted image. The planar material used was a pebble surfaced Pellon that was cut into two and one half inch wide strips and stretched horizontally between independently rotatable holders set into a wooden frame. This independent rotation of each end of each slat and the flexibility of the material led the investigator to initially present the work as a white painting. An almost infinite planar variability was possible through the compound twists that could be induced in each slat. When viewed as a whole, the work offered a unified light reflective field that could be varied by the viewer.

A second state of this work was created by spraying each of the many chosen configurations with a separate color. The two surfaces and the dials thus held a graphic record of their respective positions in space during the painting process. Another painting record of this event exists in the form of a flat canvas which served as a background plane. It received all of the airborne paint that did not contract either of the two frontal planes

in any position. It graphically represents the negative areas of space that are invariably present in this type of split plane.

A more rigid surface such as masonite or aluminum would have better served the initial purpose of providing a format for a double sided graphic work. Commercially available venetian blinds would however serve this purpose well.

Masonite. This dense wallboard is manufactured from exploded and compressed wood fibres through a patented process. Introduced in the late 1920s, it is the most suitable wallboard material for painting as it is not prone to warping on the application of gesso²⁴, and has little twist. It is however far heavier than canvas and will not fold or roll.

Cut into three inch wide strips to be used as a double sided image bearing plane, it revealed an ability to bend and return to its flat form on the release of pressure. The degree of bend was found to be directly proportional to the amount of force applied to its ends along its planar axis. This physical property suggested artistic applications that were more interesting than the predictable use of the slats for their rigidity.

A series of slats were placed next to each other on the studio floor with their ends at ninety degrees to a fixed board. Pressure was applied to the boards by

²⁴Ralph Mayer, A Dictionary of Art Terms and Techniques, (Crowell Co. N.Y. 1975) p.424

moving the free ends toward the fixed ends with another board that was also on the floor but not parallel to the fixed board. Each slat curved in a progressively higher arc proportionate to the decreased distance between its ends as a result of the angular relationship of the end boards. A straight line relationship was thus transformed to a curvilinear relationship.

This work was transformed into a graphic work that demonstrated the reaction of a planar material to the proportions of its framework. A minimal framework was all that was required. This framework consisted of two aluminum clad pieces of right angle trim and four evenly spaced loops of nylon string. The primed slats were numbered and placed with their short ends in the inside angle of the top and bottom frame elements. The strings provided adjustable pressure that held the piece together and introduced the curve to each element of the composite plane. The tension was adjusted to provide a smooth transition of curves from the strongly curved side elements to the flat middle element.

Suspended horizontally on brackets, away from the wall, each curve was free to become concave or convex at a touch. Several horizontal colored lines were sprayed on the surface at a fixed rate of pigment flow, constant speed, and consistent distance from the surface for each

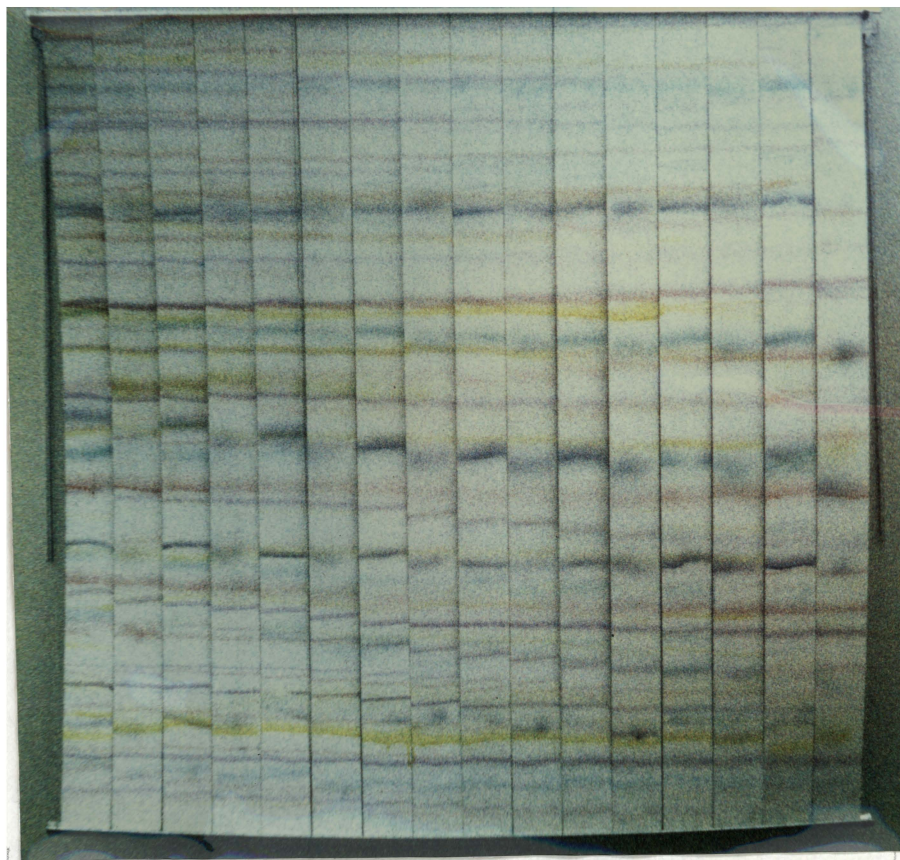
of the configurations the composite plane was put in. The thickness, density, and continuity of each line was thus controlled by the distance from the airbrush to the surface. This distance was a factor of the curve at each point along each slat's length. The encountered curves thus controlled a major aspect of the image. The visual surface exhibits a record of some of the many possible planar alterations while the form of the work at any one time exhibits a concrete example of one of these alterations. (Fig.9)

This and the "Play" piece constitute another form of structural record painting. The record coexists with the still alterable form. The visual data is thus incomplete and incompletable. These images could exist independent of their inducing planes but they would then have no meaning.

As mentioned before, process alone is no basis for an aesthetic. The employment of an innate property of a material does however provide a natural aesthetic base. If an artist can use this skill, way of seeing, or methodology to create meaning or pleasure from such a basis then a true aesthetic could exist.

The ability of masonite slats to bend in graceful curves from their own weight inspired the painting Sky Blues Grass. Though essentially a slatted discontinuous plane this painting could, depending on its adjustment, occupy as much frontal and rear space as it did vertical and horizontal space.

FIGURE 9



This and its free standing nature gives it strong sculptural characteristics. The intent of its structure was to provide visual stimulus by the interaction of color with closely related color and with "empty" space. Each side of the composite plane which consisted of sixteen three inch by one fourth inch by eight foot long slats was spray painted with many blues that radiated upward in value from bottom to top. This insured unity of the plane. The edges of each slat were painted bright green to assert the identity of each unit of the plane and to provide linear composition when the painting was viewed from any non frontal or rear position.

The free standing plane was achieved by using a tension support system. A foldable framework base held the bottom edge of the composite plane in a central groove and the top edges of each of the planes component slats with sixteen nylon strings. The strings, attached to the outer edges of the base, could each be adjusted in length by a simple friction device to adjust the degree of verticality, and to some extent the degree of bend, of each slat. The lack of rigidity inherent in so shaped masonite pieces determined that a bend in one direction or the other from vertical would occur.

It was the interplay between the original plane which was maintained at the base and the violation of the continuity of the plane, which increased toward the top,

that gave the work visual as well as literal tension. The sky analogy was carried through the unity in color and plane near the base being gradually transformed to lighter color and literal space in the upper reaches. The grass analogy was represented by the sculptural bending of the piece. Each green striped slat could be seen as an individual unit that was responsive to the slightest touch or breeze. These lyrical separate but unified movements contribute to the musical analogy.

All three masonite paintings mentioned, though heavy, were designed to be easily dismantled into stackable component pieces. Physical space may by these means be activated without requiring great mass or a permanent location for the work.

II. THE CUT CANVAS PLANE

Fontana first used cut slits in his canvas plane as painting elements in 1949.²⁵ This is an obvious way of splitting a plane, that has no doubt been used by many painters in many times when dissatisfied with a work. The creative use of such an element is however different. In an impure form the pierced plane was used by Robert Raughenburg in Reservoir in 1961. This combine painting has as one element a spoked wheel rim set into a hole in the canvas surface.²⁶

The investigator produced a cut canvas plane work in 1977. It was primarily a white painting, having

²⁵Guy Brett, Kinetic Art, (N.Y. Reinhold Book Corp.) p.71

²⁶Clark and Priuade, Raughenburg (Baltimore, Wolk Press 1976, p.87

two canvas planes stretched three inches apart in depth. The back plane was visible through straight non parallel, non-intersecting slits in the front plane. The front plane was modulated by sewing the two planes together in some places and by placing steel rods between the two surfaces in other places. The front split modulated plane reflected light and created shadows on itself and the back plane. The only colored paint used in the work was a high intensity light green which was sprayed on the back sides of the front plane. This non visible pigment imparted a subtle green glow to the work as it reflected any light entering between the planes.

Though this work was directly influenced by a photograph of Fontana's Concetto Spaziale 1964²⁷ The investigator modified the split plane concept with elements derived from other aspects of this study.

²⁷Bret, Loc. Cit.

CHAPTER XI

SUPERIMPOSED PLANES

Two or more planes superimposed on each other can be used as in the last work mentioned as inter reacting image surfaces. The use of transparencies to overlay and relate images is such a use about which a complete volume could be written. Though the use of pierced planes, plexiglass or glass as superimposed image bearing surfaces dissolves the actual surface and employs real space as a component of the visual display, no real planar alteration is involved. To use superimposed planes to produce images, the investigator turned to two normally three dimensional disciplines for technique.

I. Laminations

Both techniques use superimposed planes in the form of laminated materials. Laminations are formed by the joining of superimposed planes along their facing surfaces. Both techniques involve modulation of a laminate to produce visual data.

Mokume. This is an ancient metalsmithing process of Japanese origin that was used by the investigator to produce three flat image bearing planes that were subsequently used as elements in jewelry pieces. The word "bearing" as used above is misleading as the image produced is not added to a plane but is an intrinsic part of that plane. The image is totally derived from and controlled by the

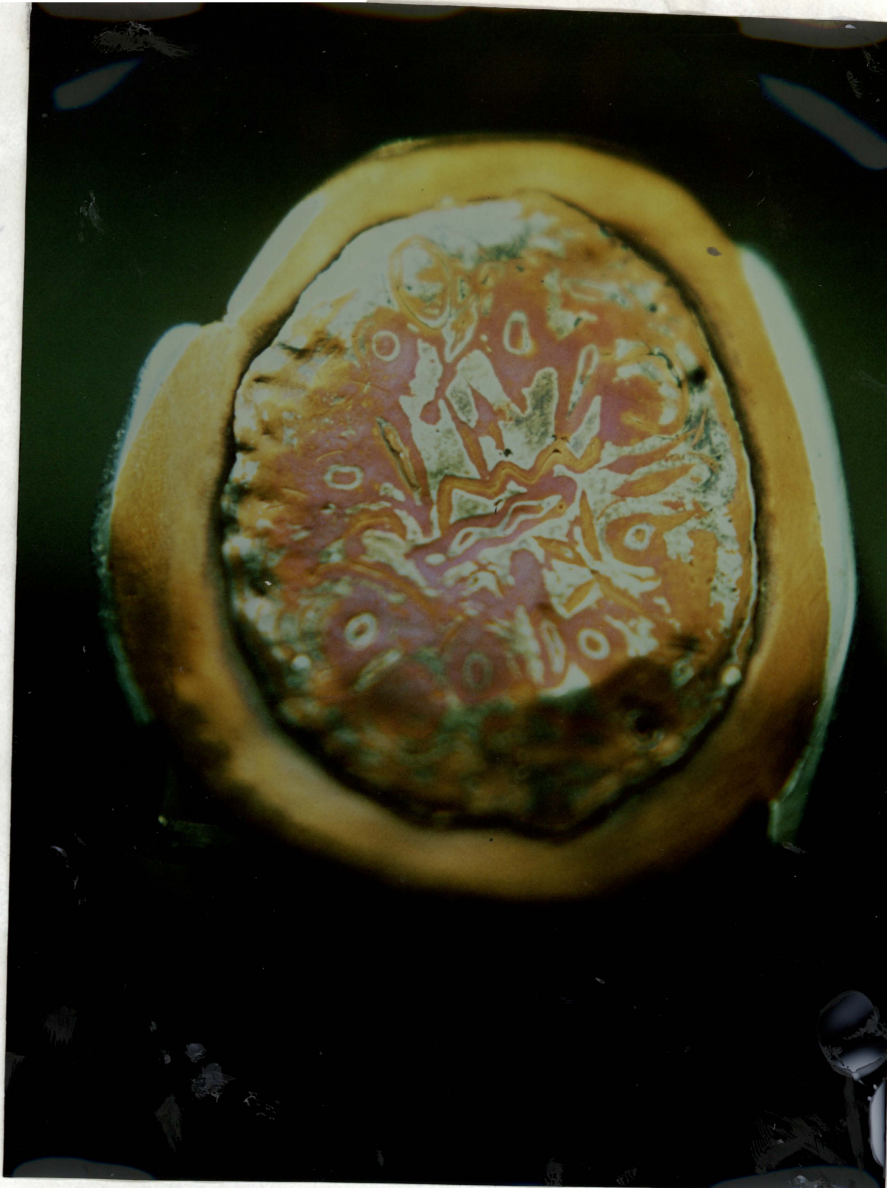
type and degree of planar modulation.

Copper and brass, and silver and copper sheets were soldered together in alternate layers. Each unified laminate was then modified by either or both of two methods. In the first method the top surface of the plane was pushed up by applying force to the back of the plane with a chasing tool or a ball headed dapping tool, while the piece was padded by leather or rested on a dapping block, respectively. The resultant relief top surface was then filed off flat to reveal a two color cross section. Much like a contour map in appearance, a mokume piece is similar also in that the height, shape, and depth of the surface modulation directly controls the surface image.

The other method used was that of cutting into the laminate with a triangular pointed burin to reveal its component layers (up to seven were used by the investigator). The piece was then forged flat to display the "strata" in a graphic form. The thus formed linear patterns radiated from the edges and along the length of each cut. (Fig.10)

Control of the image was thus possible through control of the manipulation of the image bearing plane. But thickness, number, color, and organization of the component layers of the plane have an equal role in determining the final image. In this technique, as in some of the others

FIGURE 10



mentioned, the investigator came close to the ideal of becoming another kind of material in the work by sacrificing part of his control, of the finished image, to the planar material.

Marini. This is the name given by Jane Peiser to an image bearing piece of multi-colored clay produced by a lamination process. These products were named after the person from whom Ms. Peiser learned the technique. The investigator has produced several plate forms bearing this type of imagery.

This was definitely an image oriented ceramic technique as to both Jane Peiser and the investigator the form of a piece was of less importance than the visual surface.

Laminations were made of colored porcelain clay by rolling out slabs of several colors. These were misted with water from an atomizer and slapped together until the surfaces fused. A lamination of this type was simply cross sectioned with a taut wire. Each section was then rolled into a thinner slab to be placed on a background slab as a design element. This rolling modified the image that was essentially a product of the thickness and arrangement of slabs.

A complex lamination of thin slabs was also laminated with other simple forms such as coils, squared coils, concentric tubes, and thick slabs of various cross

sections. In this way a composite lamination with a controlled and visually interesting cross section was created. Peiser's work is figurative and thus she has created Marini's with images of such things as children, fences, and flowers. She also employs cookie cutter like tools to cut shapes from rolled out "abstract" sections. The investigator's work was purposefully less controlled with laminations built intuitively for varied color effects. The natural edges of each section as modified by rolling were always maintained in the investigator's compositions. Other types of sections, such as "V" cuts were also used by the investigator for unique visual effects.

Thus through modulation of laminations, two dimensional imagery may be produced. It is noteworthy that material usually used for strictly three dimensional work was used for this imagery. This was due to the manipulative characteristics of both clay and fine metals that make them more suitable for this type of imagery than any graphic materials.

CHAPTER XII

SUMMARY

Planar alteration can and has been used as a creative element in the production of visual art. Though the aesthetic merits of these works must be judged by others, the investigator has presented a case for their having a valid aesthetic base, and believes that the works are as pleasing and conceptually valid as any other type of visual art.

The employment of all materials used in a manner basic to the individual material was a dominant approach and as such represents almost a parallel thesis on the investigator's attitude to materials.

Both modulation and spatial relation proved to provide successful imagery. The imagery as a result of modulation seemed to be more appealing and varied on a strictly visual level than the imagery of spatial relation, except in the case of superimposed planes. These related planes were of course modulated to produce imagery so they cannot be said to be pure related planes.

Several dimensional and solely visual works were produced in the course of this investigation. This was a natural result of the experimentation with three dimensional forms. These works served to expand the investigator's conception of the image bearing plane.

It is hoped that this work expanded the general conception of the possible nature of the image bearing plane.

No doubt other means of planar alteration , and production of imagery from these alterations. exist. Other surface or ground elements seem to offer equal potential for use as creative elements.

These elements seem to offer valid, unexploited sources of imagery and technique in times when every artistic manner and concept is explored in an almost exclusive way.

The investigator's involvement with the third dimension and even "three dimensional" media in this study is a practice that is prevalent in visual arts today in many forms. Few of these other forms use the third dimension in so pure and openly stated manner.

Planar modulation may be used as a form of realistic painting when the object to be recorded has low relief. The same processes may result in totally non figurative paintings when used for self derived imagery. The process then does not greatly limit the artist's range of possibilities.

Additive modulation offers a great range of applications far beyond the limited investigation presented here.

Spatially related planes tend by nature to be suitable for optical effects related to both kinetic and op art forms.

Their kinetic nature is intrinsic in that so altered planes require the viewer to alter his time space for full effect. This may be used actively or passively as is the case with most of the investigator's work. The optical properties of these forms were not fully exploited in this investigation. The portability and structural minimality of works, stressed throughout this investigation, was more than a philosophical approach as it served to shape the progression of the investigation and the nature of many works.

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