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THE INTERACTION OF SPACE VOLUME AND FRAMES,

WITH THEIR ASSOCIATED IMAGES AND ILLUSIONS:

PAINTINGS, ILLUSTRATIONS AND THOUGHTS.

By

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Submitted in Partial Fulfillment
of the Requirements for the
Degree of

Master of Architecture in Advanced Studies

at the

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

May 1978

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C O N T E N T S

A B S T R A C T

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The introduction to the thesis presents the reasoning for the thesis content and format.

The first part of the thesis is a historical perspective of space volume and frames. This perspective gives an account to the major historical views and development of the subject, followed by notes, comments and observations in addition or in opposition to current views.

The historical perspective covers the views of Leonardo Da Vinci, Cézanne, Cubism, Neo-plasticism, Abstract-Expressionism, Pop Art and Op Art. After a brief discussion on the relations between 2 and 3 dimensions, I tie the historical views to my work by redefining the subject and describing the characteristics of space, volume and frames - redefined.

The following chapter relates the redefinitions to a particular series of paintings which juxtapose images with physical environment. The sixth chapter accounts for a general description of the participating elements and sources of images in the following paintings, illustrations, environmental pieces and thoughts. Conclusions are abandoned in favor of the process.

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Introduction

When writing a research paper on a stated subject, the prerequisites are a good familiarity with the topic and a personal interest in it.

The knowledge of the topic can be acquired by a few methods: One is extensive research of all the information available on the topic itself and on related subjects that help clarify certain points. That done, the material should be analyzed, categorized, excluded or included.

The other method is to experience the subject itself, for example, a painter or a sculptor attains knowledge of art by experiencing it, the activity of experiencing can be mental or physical and in most cases the combination of both. Still another method to acquire knowledge of a subject is by hypothesizing - using the facilities of imagination and correlation.

Finally there comes the synthesis of the gathered information and the drawing of conclusions from all the prior activity.

It is difficult for an artist to make a statement and draw conclusions from his activity. If he could, he probably would choose to write them. If he prefers to represent his art in another medium, there is probably no inherent significance in his choice of medium.

Since I have some affinity to impossible tasks, I tried to gather some information about the chosen subject, but I could not go beyond the process itself. So I gathered and presented the components as mental activity - fermentation of information, hypothesis and thoughts, and the experience of the subject in painting and illustrations and drawings.

(The presentation of my experiences suffers from the black and white format requirements or perhaps the choice of the subject is poor with regard to the required format).

1. SPACE VOLUME AND FRAMES IN HISTORICAL PERSPECTIVE

A. Leonardo Da Vinci's Concepts on Space and Volume

In the 'Treatise on Painting', Leonardo da Vinci presents two principles of the "Science of Painting":

"The first principle is: point, line, surface and body bound are together a given surface . The body is only a representation of a body, because in fact painting does not extend beyond the surface".[1]

"The second principle is: The shadow of the body represented - this shadow according to Leonardo, gives sculptural relief to the surface".(*)[2]

(*) When illustrating these major principles, Leonardo excludes color and stresses his affinity to form.The activity of painting is recognized as drawing, or more accurately, the first principles of painting are within the realm of drawing.

The place of color is only secondary.

After stating these principles Leonardo lists the components that
are included in the science of painting:

1. The colors of surfaces.

2. Forms of bodies bound by them.

3. Proximity and distance - proper degrees of distance.

This science is the source of perspective or visual lines, the
major principles of which are:

1. Outline of bodies (design, configuration).

2. Diminution of color at varying distances.

3. Loss of distinctness of bodies at varying distances.

Then Leonardo proceeds with his theory by first enumerating eight
parts of painting and finally reducing them to two major elements.

The eight parts of painting are: darkness, light, body, form,
location, distance, proximity and motion and rest. He then refines
the list and stresses five parts: surface, form, color, shadow and
light, and proximity and distance.

Leonardo finally narrows the list down to two elements: form color
and determines their hierarchy: "Which is of greater importance: that
the form should abound in beautiful colors, or display high relief ?

Only painting presents a marvel to those who contemplate it,
because it makes that which is not so seen, to be in relief and to
project from the walls; but colors honor only those who manufacture
them, for in them there is no cause for wonder except their beauty,

and their beauty is not to the credit of the painter, but of him who has made them.

A subject can be dressed in ugly colors and still astound those who contemplate it, because of the illusion of relief"[3] (notes/ footnotes)

"What is the primary subjective of the painter? to make a plane surface display a body in relief by the use of shadow and light. Therefore,whoever avoids shadows avoids the noble mind but gains glory with the ignorant public, who wants nothing in painting but beauty of color, forgetting the beauty and marvel of depicting a relief on what in reality is a plane surface"[*][4]

(*) There is no argument on the point of the perfection of relief as one of the ends in representational painting. The problem is with the means employed to achieve clarity of three dimensional forms on a plane surface.

Leonardo goes into the instruction on the use of color in great detail always referring to the subject matter of nature:

"White for light, yellow for earth, green for water, blue for air, red for fire, black for darkness"[.](5)...

The eight colors of nature are: black, white, blue, yellow, green, ochre, black-berry   red. Then hues, reflected colors and diminution according to proximity of distance.

In reflecting science in painting Leonardo stresses the importance of accurate observation of nature and its processes at any given situation-motion and rest, dynamic or static. The only time he lets the artist express his personal convictions is in the process of choice of his subject matter and its formal arrangement - design configuration.[*]

(*) Although Leonardo was familiar with the optical qualities of colors, the receeding and proceeding of different colors in relation to neighboring colors, he employs them as a decorative element to light and shadow, which, along with layout and perspective, create the three dimensions of a painting. Being aware of the dangerous effects that may result from decorative application of color Leonardo stresses the judgement of their relevancy so that the showy effects of beautiful colors would not distract the viewer from the three dimensional relief.

When facing the elements of arbitrariness, like subject matter and compositions, Leonardo refers to them as the art of painting rather than science of painting, which combines the observation and execution.[*]

He refers to the invention if the components of the composition as the principal part of the art of painting. The second part is that of movement where the people represented should be intent on what they are doing. "Which is more difficult?" he asks,"shadow and light or good design? I say ;   that   thing is more difficult which is restrained within a boundary than that which is free, shadows have certain boundaries, and the works of him who ignores them will be without relief. This relief is the most important element in and the soul of painting. Design is free, for although you will see an infinite number of faces, each will be different; one will have a long nose, and another a short one. Therefore, the painter can also take this freedom, and where there is freedom there is no role".[6]

Another example for the usefullness and greater consideration of the measurable over the less defined is the comparison between the light and shadows of bodies and their contours. Leonardo says that

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(*) There Leonardo finds inherent difficulties of scientific classification, and therefore according to his own scientific convictions the hierarchy of importance will point to this which is closer to a "measurable" quality or quantity.

greater analysis and ability are required to depict the outline of bodies than shadows and light, because the outlines of parts of the body that are not pliable, but rather immutable and always the same, while the location and quantity and quality of shadows are infinite.

On the other hand Leonardo stresses the importance of expressivness; the mental and the physical; although they are not measurable, with taking cautions of not over emphasizing them, to the extent of seeming ridiculous.

He says that the most important things that can be found in the analysis of painting are the movement appropriate to the states of mind of each living creature, such as desire, contempt, anger, pity and the like. The beauty and perfection of the parts are of secondary importance, as long as the movement representative of the mental attitude is consistent the finish is not even necessary.

To cause forms to detach from their backgrounds he suggests using the greatest possible contrasts of bright and dark colors. (*) To represent portraits and flesh tone he suggests a background of flesh tone

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(*) In order to maintain the unity of the painting Leonardo avoids
    color changes between the main forms represented and the back-
    ground. He recognizes the potential of relief through optical
    qualities but emphasizes that the light and shadow treatment
    will suffice.

"The walls should be of flesh-color"[7] and the general light will be

defused, as when clouds cover the sun, so that the color intensity

should not be the dominant part of the relief.(*)

(*) The technique used to make the unity of the painting - washes off

   light browns between layers of paint, enhances the use of light

   and shade to create a three dimensional illusion.

B. **Cézanne's Concepts on Space and Volume**

The discussion of Leonardo's theories on pictorial space and volume, represented the ideas and ideals of the traditional painting of the old masters.

The discussion on Cézanne's work does not deny any of those ideas. (as C. Greenberg points out in his essay "Cézanne" - 1951). On the contrary, Cézanne's revelation of his artistic mission was the affirmation of the strive for 3 Dimensional pictorial space through the means and methods of the impressionist color and surface treatment, vision of nature and brush work. (*)

The realization of the painting seems to have come only toward the end of his life, when he accepted the ambiguity of his vision and did not over-exert his painting in order to clarify them as spaces of light and shadow depth, and at the same time spaces of optical-color depth.

(*) The tension and almost impossible combination of these two led to his achievements, and at the same time, to his frustrations in not being able to realize his art as the old masters did.

The impressionists, consistent with naturalism, did not dictate the over all design of their paintings.[*]

Cézanne, on the other hand wanted to bring back the thoughtful and organized structures and compositions of the old masters, without abandoning the motive nature. This is yet another conflict that he tried to resolve by extensive digging and cutting of his volumes in space, and by an extensive modeling of volume and space: as though by this obsessive modeling which sometimes became very cluttered, he would make his structures more pronounced, more volumetric and more positively designed masses and spaces.[**]

Serat and the pointillists succeeded in keeping their painting flat, and the order of their fragmentation helped give stability to their structures which remained stable and somewhat contrived in contrast with Cézanne's charged masses and structures.

(*) If however, there is a sense of dictated design it is not the result of manipulation of forms to make a unified structure but rather a choice of a certain natural "chunk" which had its own inherent structural unity. (The same way a photographer will take a picture of a part which has some natural structural unity and tangible composition).

(**) Yet another conflict that electrifies Cézanne's painting is the metamorphic, and biomorphic quality of his strokes, the fragmented quality which denied the unity it tried to achieve.

Once he came to grasp with his "human interest"(*),the visual
sensations registered by every subject became equally important. The
pictures became more compositional and the weight of the entire picture
was pushed forward into the picture plane, to the flat surface. Thus
another conflict of col<u>u</u>metric configurations on a flat surface was
created which rather than making the volumes read in depth made them
read in contours. They became literal two-dimensional representations
of sil<u>i</u>dity and volume, and no longer sculptural.

Cézanne complained to his last day of his inability to fulfill
his desire for organized maximal illusion of solidity and depth, the
realization of volume and space.

Every brush-stroke that followed a fictive plane into fictive
depth harked back-by reason of its abiding, unequivocal character as
a mark made by a brush-to the physical fact of the medium, and the
shape and placing of that mark recalled the shape and position of the
flat rectangle which was being covered with pigment that came from tubes.

"One has to be a painter through the very qualities of painting"
said Cézanne "One has to use coarse materials".(8)

(*) and not excluded it as C. Greenberg suggests.

The conflict of the nature of paint, and canvas with illusionistic representation is an old one and in the past it was used to enhance the illusion. (*)

As much as Cézanne opposed any sort of flatness in painting and just like Leonardo, stressed the inherent necessity of three dimensional illusion, he introduced flatness into painting, an idea that was taken up by the cubists.

(*) Only highlights and protrusions were painted with Bulkiness, and only movement enhanced with visible brush strokes. Other than that, the paint was supressed to surface of canvas and the canvas covered to smoothness.

C. The Cubists' Concept on Space and Volume

Picasso and Braque, having absorbed Cézanne's last manners of painting, started their cubism by imitating Cézanne's brush stroke planes only to stress the planes, finally modulating them into harder and more angular and defined planes. By this they hoped to achieve a more defined, structural volume and at the same time to stay close to the picture plane, by reflecting flatness off the dipicted volumetric subject. The problem was that if the main subject is treated that way it will detach itself from the background and will create unwanted illusionary space. Therefore, they had to model the space around the object in the same manner, the way Cézanne used to model the cloudless skies.[*]

The design and drawing determined the forms which dissolved more and more into the picture plane. Picasso, Braque and Léger applied Cézanne's rule in their 'analytical cubism' period. "Cézanne's discovery" as Clement Greenberg defines it: "That the eye, by closely following the direction of surfaces, could resolve all visual substance into a continuum of frontal planes had given painters a

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[*] In order to avoid any problems arising from color transitions, from harsh contrasts and from isolated attention to a color, they used subdued colors, and color became secondary again since their concept started as one dominated by form - the pattern was the one to determine the space and picture plane.

a new incentive to the exploration of both nature and their medium -
and a rule, at the same time, to guarantee the coherence of the result"[9]

Braque's major interest was the expression of space:"There is in
nature a tactile space, a space I might almost describe as manual...
What most attracted me and what was the governing principle of Cubism,
was the materialization of this new space which I sensed"(*)[10]

Picasso had the same interest in space but his particular interest
lay in the form, in revealing the form in the most informative way,
which led him to analize the form not from one view point but from many
points. By going around the form he sort of unfolded it, flattened it
on the canvas in a way, that the viewer could view simultanuously 180
degrees of the represented form. This practice led to the flattening
of the form on the picture plane.

The introduction of stencilled letter and collage into the work
of Braque and Picasso marked another phase of intensified expression
of cubist theories.

(*) Braque wanted to convey space as tangible volume, something that
    can be expressed through form and felt as solid as an object,
    which resulted in the analytical period in small complex forms
    fragmenting every little "piece" of space and volume mostly by
    means of light and shade, and making an over all flat facade .

At the beginning Braque used the stencilled letters to clarify
his subject, since it became more and more abstracted and intangible
despite his interest.(*)

Referring back to the collage application, Braque and Gris used
it in a more consistent way than Picasso, but with creation of less
tension and interest. Braque saw in the collage an ever more materia-
lized volume and space, inherent in the nature of collage; something
real, touchable and tangible like a newspaper, a wallpaper or a piece
of colored paper. But still by the same token these "real" materials
are flat, not only in 3 dimensional account but also by literal
association. Newspaper is flat, simulated-wood wallpaper is flat. It
seems that the introduction of collage was a natural, unavoidable
progression to an intensified expression of adhering the painting
to the surface of the picture plane. Picasso's mentality and his
affinity to content and 'message' which reveals itself in later work,
had an important part in the adaptation of the collage, not merely as
formal means.

(*) The abstraction came as a natural continuation of the form fragmen-
    tation and not by clear intention on their part. On the contrary
    it seems that by going back to full representation after abandonning
    cubism, the extent of abstraction went beyond their intention.
    Picasso's neo-classicism probably confirms his exhaustion with
    abstractions.

He once told Françoise Gilot:

"The purpose of the papier colle was to give the idea that different textures can enter into a composition to become the reality in the painting that competes with the reality in nature. We tried to get rid of "trompe l'oeil" to find a "trompe l'esprit".. If a piece of newspaper can become a bottle, that gives us something to think about in connection with both newspapers and bottles, too. This displaced object has entered a universe for which it was not made and where it retains, in a measure, its strangeness. And this strangeness was what we wanted to make people think about because we were quite aware that our world was becoming very strange and not exactly reassuring"[11] (Françoise Gilot and Carlton Lake, Life with Picasso, London 1965. p.70).[*]

The stencilled letters of Braque were not only a means to clarify the object literally but also, as he said: "They enabled me to distinguish between objects which are situated in space and objects which are not".[12] It helps him to emphasize the flatness of the surface and by doing that to remind us that everything behind this surface is also a flat space which is used by the painter to represent space.

(*) These intellectual concerns of Picasso brought him closer to the surrealists and other social concerns and at the same time to an ever increasing expression of his personal mythology in the years to come.

It immediately imports to the viewer that the space he is looking at is material space.(*)

The next phase, the synthetic cubism, sacrificed the naturalistic aspects of the space to the wholistic ones. Braque synthetic cubism emerged through creating first broad abstract planes interlocking and overlapping while negating the shading that took place in the analytical phase. After having an abstract design he introduced a subject to it by either forcing it into the shape of the planes or by superimposing it on them or just by scattering some symbolic signs equivalent to a subject like musical notes or guitar strings.

Picasso's synthetic cubism was more direct in its process and results. He would make the overlapping and interlocking planes in the shape and essence of the chosen subject, either by painting the shapes directly on the canvas or by cutting them out of paper to fit the subject and then applying them to the canvas.(**)

(*) A tangible description of a void, rather than just another representation of a void.

(**) The difference in conception and execution between Picasso's synthetical cubism and Braque's and Gris's lay in the difference between an ideogramatic sense of order and a sensory one.

Gris explains his method of synthetic cubism:

"It is not picture x which manages to correspond with my subject, but subject x which manages to correspond with my picture"[13].

"Cézanne turns a bottle into a cylinder. I make a bottle, a particular bottle out of a cylinder. Cézanne works towards architecture, I work away from it. That is why I compose with abstractions and make my adjustments when these abstract colored forms have assumed the form of objects. For example, I make a composition with a white and a black, and make adjustments when the white has become a paper and the black a shadow"[14]. (Notes in L'esprit nouveau No. 5, Paris, 1921, p. 534).

Picasso's planned shapes applied to the surface were planned and ideogramatic and hence strong, bold, and fresh, with an absolute affinity with design and subject.

Braque's and Gris' were sensory, forcing their subjects on the abstract designs, manipulating them while trying to avoid conflicts as much as possible. Only their great sensitivity allowed them to resolve these conflicts.

It seems to me that sensitivity goes hand in hand with sensory-motor procedure - the synthesizing of the two is an absolute necessity to resolve problem of order . While an ideogramatic sense of order does not require great sensitivities, but more deliberateness.

D. Neoplasticism (De Stijl) and the Concepts of Space and Volume

The De Stijl movement, or as Mondrian called it "the neoplasticism", was founded on three basic modes of thought, or rather guiding examples. First the neo-platonic philosophy of the mathematician Dr. Schoenmaeker who published in Bursum (1915) his work: 'the new image of the world' and: 'The principles of plastic mathematics. The second influence was that of Frank Lloyd Wright, and the third, or rather the first - French Cubism.

H.L.C. Jaffe, the Dutch art historian, insists on the acknowledgment that Schoenmaekers virtually formulated the plastic and philosophical principles of the movement through his cosmic theories: "The two funda-mental complete contraries which shape our earth are: the horizontal line of power, that is the course of the earth ground the sun, and the vertical, profoundly spatial movement of rays that originates in the center of the sun". [15]

Later he writes about the use of primary colors - so essential to the movement: "The three principal colors are essentially, yellow, blue and red. They are the only colors existing.. yellow is the movement of the ray .. blue is the contrasting color to yellow .. as a color blue is the firmament, it is line, horizontality. Red is the mating of yellow and blue .. yellow radiates, blue recedes, and red floats." [16]

F.L. Right's conceptual donation came through his architectural

image interpreted by Hendrik Petrus Berlage, and through Wright's

writings that advocated the emphasis on horizontality and the total

concept of architectural design and man-made environment which was so

dear to the De Stijl philosophy of a man-made resolution of utopian

universe.

Cubism, which Mondrian was exposed to, gave him the initial start

of his particular expression within the group, and to the whole group

it gave the initial images of flat planes and spatial composition. (*)

It seems that Mondrian with his theosophical inclinations was the

one that adopted the Basics of Schoenmaekers theory to his philosophi-

cal-formal searches and to the group's ideals.

He also adopted Bart Van Der Leck's methods of painting and real-

ized their coherence to the movement ideals. But when his development

and ideas led him away from the group he did not hesitate to brake

away from it. (**)

(*) I separate Mondrian's activity and development somewhat from the

     rest of the group under Van Doesburg.

(**) The major difference between Mondrian and the rest of the group was

     that Mondrian never related his concepts to any field, other than

     paintings, or theory which was related to painting and through it to

     the achievement of the universal order, or more accurately the

     universe ordered by action.

Van Doesburg, who espoused the ideal of order as well but with less mystical-wholistic inclinations than Mondrian, led his development and subsequently the movement's path from the hermetic, pure forms in space, to their use in architectural expression by penetrating all fields of the design of the environment.

"The new architecture is anti-cubic, that is to say, it does not try to freeze the different functional space cells in one closed cube. Rather it throws the functional space cells (as well as overhanging planes, balcony volumes etc.) centrifugally from the core of the cube and through this means, height, width, depth and time (i.e. an imaginary four dimensional entity) approaches a totally new plastic expression in open spaces. In this way architecture acquires a more or less floating aspect that, so to speak, works against the gravitational forces of nature".[17]

The combined effort of neo-plasticism gave rise to:

1. The architectural interpretation of open plan space devision which lets space be a continuum of emerging spaces (the way analytical cubism treated space).

2. The dynamism of architectural "open skeletal construction" which made space free of immovable heavy masses and small oppressive openings.

3. A new dynamism and static equilibriuum achieved through the balance of the dynamic asymmetrical arrangement of elements.

4. The use of primary colors to indicate and enhance the certainity

   of spatial arrangements of elements, by taking advantage of their

   optical phenomena of protruding and receding.

5. The development of 3 Dimensional special planning.

6. The technological fabricated and prefabricated elements.

Later, when Van Doesburg associated with Russian constructivism,

he incorporated their ideals in to his movement - the elements of

technology as an image and a goal with its anti-art **connotations.**(*)

(*) In perspective, even though Mondrian did not use the suprematists'

   visual language, he had a clearer philosophical affinity with

   them rather than with Van Doesburg and the constructivist.

   Both Mondrian and the suprematist did not see their artistic

   production in terms of objects applied to the material world,

   solving current design problems.

   Mondrian's work was done towards the 'final' universal

   order while the suprematists - and specially Malevich works

   was intended to be a sort of representation of this 'final'

   order - the relation of man and cosmos.

Most of the inspiration and conclusions of Van Doesburg, Gerrit

Rietveld and the rest of the group, excluding Mondrian, belong to the

exploration of 3 dimensional space and form. Even their paintings

related better to 3 dimensional space conception, to an illusionistic

3 dimensional space.(*)

Their forms always existed in a background that maintained the

illusion of 3 dimensional space being even more explict with this

space upon introducing the exploded isometrics, and later on under

the influence of E. Lissitzky, the diagonal.

Mondrian's development coincided more with the problems of

post-cubist painting. At the beginning, after adopting Schoenmaeker

theories, he still referred to imagery drawn from nature, just like

the cubist. When he painted the ocean and pier series of little plus-

signs on an empty background, he realized the inconsistency of the

natural source of imagery with the new man-made order theory and

abandoned it in favor of the free floating color the horizontal and

vertical color rectangles of Van Der Leck - a dutch painter that

joined the movement.

The next stage of Mondrian's development was the re-evaluation

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(*) They never drew the conclusions of the cubist in regard to painted

   space and picture plane.

of his color scheme.(*)

The next step, in the cubist tradition was the re-evaluation of the picture plane.(**)

With this realization in mind he started to devide the canvas into a rectangular grid of narrow black strips, in different compositional configuration, thereby joining the painting with the flat picture plane.

The special quality of the painting (the "painterly space") was provided by the configuration interplay of the primary colors used within the grid.

(*) At first he used different colors for his rectangles. Although with their optic phenomena of spacial definition in mind, he realized that that kind of attitude to color expressed the significance of personal preference and hence it was arbitrary, non universal, showy and superfluous. He accepted the primary colors yellow, blue, red and white and tones of grey, also from Van Der Leck,who already applied them to his rigorous search.

(**) Mondrian realized that color rectangles with or without borders make the background into illusionary space specially when rectangles are very easily associated with representational images , and when they have different sizes they can be perceived in some sort of perspective, and thereby obliterate the flat picture plane.

Through carefull composition Mondrian manipulated the non-symme-
trical configurations into a perfect balance. This was to point the
way to the new equilibrium of non-symmetrical, dynamic , and varied
and sometimes more interesting spaces in architecture, designing and
planning.

Later on, when Mondrian worked in New York, he started to play
more vividly with his colors and compositions, capturing somewhat the
rythms of the city with its lights, grids and colors. [*]

(*) In this period he came ever closer to Malevich's suprematism of

   capturing the representation of feeling of the ideal new order

   rather than presenting its visual rules only.

E. <u>Abstract Expressionism and the Concepts of Space and Volume</u>

The combined activity of thought processes and formal concepts of art seems to be the so called Abstract-Expressionist-School.[*]

At the same time it includes different characteristics, modes and methods under the same title which hence does not define the school.

The artists who lived and painted at the same period were quite different from one another by nature and output. Some were figurative some non-figurative, some action painters others "meditative" painters.

The one thing they had in common was probably the influence of the artists and philosophers who happened to be in New York at the time of the war: Andra Breton, A. Masson, Hans Hofmann and Mondrian, each one of them influenced a different aspect of concern.

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[*] The lack of prevalance of one of the two mentioned elements, the abscence of dogmatism which was very much a part of classisms, impressionism, cubism, fauvism, german-expressionism, suprematism, neo-plasticism, constructivism, surrealism, and all the other prior "isms", make abstract-expressionism livelier, less definable and harder to dissect scientifically.

Breton had part in presenting the surrealists' preoccupation
with the subconscience together with C.G. Jung's theory of the
architypes of collective subconscience.

A. Masson was probably the biggest influence by the introduction
of surrealist automatism - the non-planned graphic 'doodling' of self-
assertion and 'self discovery'.

From Hofmann they learned to understand cubism and fauvism. The
unity of the painting through the plastic qualities of color combined
with and unseparable from the forms - making together a pictorial
space that maintains the picture plane. From Mondrian they learned the
formal considerations, the clarity, the composition, the unity of field,
.the directness of color, and the freshness of unmanipulated and unbeau-
tified paint.

(*) In a way Masson's automatism contained Braque's sinthetic cubism
    but with less awareness and direction: Both started with abstract
    shapes and then manipulated them into representational figures,
    cubist objects (bottles, guitars) in Braque's case, haunting
    mystical and biomorphic in Masson's case.

The results were documented experience of all the above. By now it is accepted to divide abstract-expressionism into two main streams:

1. The action painting represented chiefly by Jackson Pollock and W. de Kooning.

2. The non-action painting (or as Haftmann calls the Meditative Painters) represented by Barnett Newman, Mark Rothko and Clyfford Still.

Pollock's painting existed on many different levels: They were the physical battle field of the automatism (the 'unmeditated graphic doodlings' of self assertion) and the extreme painterliness which was supposed to obliterate the formal ends making the formal less dominant as a thought process.

They were a battle field of subjects expressed literally, and at the same time expressed through an experience of feeling .

The paintings also were :

- The expression of paint and painting materials at their physical, volumetric, spatial and tactile qualities.
- The expression of conflicting orders in one field working towards unity and rythms.
- The expression of motion in dance rythms of abrupt nervous movements.

- The personal myth transformed to its physical essence and thereby

relating themselves to a universal myth patterns.(*)

At the other end of the abstract-expressionist scheme stands
B. Newman.(**)

If all the experience suggested by Pollock is represented in the

space provided by the canvas itself, Newman, on the other hand, gave

profound attention to the physical space beyond the canvas.

His vertical stripes are composed in relation to the edge of

(*) To me there is no difference if Pollock's paintings are abstract,

     figurative or representational: they have no dependency on classi-

     fication, they do not become less or more conventional or radical;

     they are just felt each as a concrete and different experience,

     Hence I do not understand the different attitudes of the art-histor-

     ians to Pollock's various periods.

(**) It seems that as Pollock arrived at maximal expression through

     maximal action and exertion, Newman arrived at it through the

     reduction of elements to the essential. This wholistic approach

     is identified with state of meditation since the elements provided

     to concentration are minimal and therefore it is easier to concen-

     trate on them.

the canvas and the space adjacent to it.(*)

The scale became a very essential aspect:

Pollock's paintings grew larger, in order to accomodate physical movement, broader gestures and rythm, and at the same time to let the painting "breath" and aliviate the compactness.(**)

De Kooning kept his scale in suitable dimensions to have every point within a hand-reach. Newman called his scale: a 'human scale' since -he sees them as objects of contemplation. There had to exist at least a one-to-one relation. Small canvases also lack in physical impact on the environment - an important aspect to Newman. M. Rothko shared Newman's considerations, although his canvases were not as large as Newman's.

The abstract expressionists' attitude to color varied just like their attitude to everything else . Pollock related to color,

----

(*) Hence he composed the exhibition space with utmost attention and care to avoid any interference of the space adjacent to the hung painting. He treated the painting and the wall as a total composition, and the room as a compact space unit.

(**) I imagine that with small canvases Pollock would not have the chance to "get acquainted" with the painting, as he puts it, before it is all clogged up with paint.

just like to any other aspect, as a physical matter: paint, thick or thin, bright or dark, swirly or drippy, shiny or opaque. [*]

Clyfford Still and Barnett Newman's use of colors was similar: it was anti naturalistic and hermetic. Still's were color slabs, dense and opaque, defying any attempt at 'participating' and 'entering'. They were color-form monoliths. In Still's own words: "That pigment on canvas has a way of initiating conventional reactions for most people need no reminder. Behind these reactions is a body of history matured into dogma, authority and tradition. The totalitarian hegemony of this tradition I despise, its presumptiousness I reject. Its security is an illusion, banal, and without courage. Its substance is but dust and filing cabinets. The homage paid to it is a celebration of death. We all bear the burden of this tradition on our backs but I cannot hold it a privilage to be a pallbearer of my spirit in its name" [18] .

Mark Rothko modulated color through non complementary colors, neighboring hues. The application of hot and cold veils made the color spans luminous, rythmic, vibrating and breathing. [**]

(*) His color had also an important theatrical and athmospherical essence (close to El-Greco's use of color).

(**) To avoid an illusion of depth occuring from his use of color he employed the horizontal slabs which helped keep the sensations on the picture plane.

There is no real difference between the American abstract expressionism and the European one (tachism) in regard to subject matter, philosophy, means or ends.(*)

_____

(*) There is some notable difference in execution.

The Europeans bear the whole art history on their shoulders. Their color is too manipulated, they cannot avoid prettiness, and do not let freshness prevail. The tachists' forms as free as they look, are somewhat contrived.

F. Pop Art and the Concepts of Space and Volume

The spatial revelation of Pop Art does not result in new pictorial space and volume but rather in some new physical spaces and social pictures.

Jasper Johnes and Robert Rauschenberg - the forerunners of Pop art, were the bridge between the abstract expressionism, with all its painterly values, and Pop, with its non-painterly concerns and the prevalance of subject matter. Johnes takes both synthetic cubism and abstract expressionism as a starting point. The flat images of targets and flags are associated with familiar objects. Their representation on canvas does not change them at all. They are the same objects: flags and targets, although not painted the way we are used to seeing them. They are no more representations: they are real objects in physical space.(*)

(*) At the same time these objects are painted in the most elaborate manner; flags, targets, numbers which are universal, objective objects, non-personal subjects, all are transformed in to a very private and personal vocabulary, and their existence becomes ambiguous. Johnes said that choosing that kind of subject matter freed him from the need to design and from the preoccupation with forms, allowing him to concentrate on the act of painting.

Rauschenberg is not so much involved in conceptual activities but more in lyrical expressions. What makes his work so fresh and at the same time age-old is the preoccupation with images: narrative, associative, nostalgic and futuristic. His paintings and assemblages convey the process of pictorial unification of images and painted gestures.[*]

The social aspect of pop art is unseparable from its formal qualities (or rather the lack of new formal qualities).

The reaction to pop varies from enthusiasm to utter contempt. René Magritte on pop art : "The pop artist wish to be contemporary, very much a part of their time, influenced by advertisements for Coca-Cola. Something rather miserable which inspires them. I myself think the present reeks of mediocracy and the atom bomb, perhaps all times have been more or less the same. I don't want to belong to my own time, or for that matter, to any other".[19]

Concerning the criticism of art and culture expressed in pop, Magritte adds:

(*) The images are always taken from printed matter and imbeded in the canvas by transformation, as though to paint representational images is superfluous. Only the unification of the images into a coherent surface requires the personal presence of the artist.

"If we ignore the appearance nearly 50 years ago of Dadaism, then Pop art seems like novelty. The humor of Dadaism was violent and scandalious. The Dadaists decorated the Mona Lisa, for example, with a moustach, or they exhibited a urinal as a work of art. The humour of Pop art is rather 'Orthodox'. It is within the reach of any successfull window decorator: to paint large American flags with a star more or less does not present technical difficulty ... Are we permitted to expect from Pop art anything more than sugarcoated Dadaism? ..."[20]

Others criticize Pop art for its preoccupation with the presentation of popular images "as is", without any effort of social criticism.[*]

Marcel Duchamp wrote to Hans Richter on Pop art :

"This neo-dada, which they call new realism, Pop art, assemblage etc. is an easy way out, and lives on what Dada did. When I discovered ready-mades I thought to discourage aesthetics. In Neo-Dada they have taken my ready-mades and found aethetic beauty in them. I threw the bottlerack and the urinal into their faces as a challenge and now they admire them for their aesthetic beauty".[21]

----

[*] I must disagree with that because the criticism is left to the beholder. The resentment to these popular, banal cultural images does not have to be presented but provoked. The objective presentation gives a truer picture to the beholder. What he does with it is within his sensitivity and sensibility.

But Pop is not only for the sake of anti-art expression. It does not challenge - it presents. It dows not show a path to follow, just a path. It dows not even have any unity of artistic language or conventions in common, realistic, figurative, non-figurative, abstract, formal, two or three dimensional - it is the presentation of an idea in whatever way one wants to present it. It is a language of images and anti-images.

Warhal once said: "The reason I'm painting this way is because I want to be a machine. Whatever I do, and do machine like, is because it's what I want to do. I think it would be terrific if everybody was alike".[22] Detachment, seriality and repetition are for him just as valid an expression, and hence validity of any sort, value or relation is stripped of any hierarchical judgement.

Haftmann says that Pop art and its off-shoots show that artists are once more under the spell of reality, as though it is a regression from the abstract exploration of "the fear and terrible impotence of our imagination".[*][23]

(*) But actually it seems to me that Pop uses different means to achieve similar ends: the use of traditional and popular figurative elements to explore the same void.

(Continued)

(*) Pop art as I see it, is the purposefull creation of meaningless, useless, powerless, ridiculous and indifferent icons, symbols and mental pictures.

By comparison the artist and the beholder are aware of the meaninglessness of any other icons and symbols and hence relieved from the need of attaching any importance to them.

G. The Objectives of Op Art

The products of Op art are the presentation of a playfull
manual to the creation of illusion. It explores optical phenomena,
the language of illusion making.

It is such a direct expression that there is no need for subject
matter ideology or personal convictions. The objects are bare visual
presences.[*]

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[*] Considering objectives of some Op artists, the best results will
be achieved by computer combinations. As for myself, it is hard
for me to understand art without a source of imagery. The study
of relations between colors culminates after all in paying homage
to the square (J. Alber) and illusionistic perspectives. Shimmerings
and movement provoke visual delight, and sometimes deeper feelings
when combined with unfamiliar associative images. This visual
delight is more satisfactory to me when accompanied with associated
imagery, and the more unfamiliar undetected and intraceable images,
the better.

2. ON FORM, FUNCTION AND THE CUBE IN ARCHITECTURE

The relationship between form and function in architecture reminds
me at best of the relationship between form and subject in the context
of synthetic cubism.

The synthesis can be reached in two different methods: by adapting
the form to the function in the manner Picasso adapted his form to the
subject matter, or by manipulating the function to fit the form the
way Braque and Gris manipulated their subject matter to fit their forms.

The other way is to make form and function identical. This is
possible in the realm of engineering more than in the realm of archi-
tecture. A form is identified with a function when they derive from
one another. For example: a geodesic dome is a form derived from the
connection of structural triangles in a certain direction. At any rate
the desirability of a particular solution is decided by a personal
preference. A lamella roof is derived from the specific desirable
function.

The less the structural system dictates a specific direction the
more diverse is its application. Planes, verticals or horizontals will
hardly dictate any 3 dimensional form because their combination is
endless. Functions will be satisfied by or infinately many combinations
of forms. At this point the marriage between form and function will be

directly influenced by a source of imagery. In most cases the image will

coincide with personal ideals or prevaling fashions.

The cube is the product of the simplest form combination to accomo-

date living functions. It is easily planned and plotted, easily struc-

tured and easily combined, multiplied and divided. Hence the first and

primary image of a lived-in volume.

When accepting the cube as a primary image-form there has to be

some sensibility and willingness to depart from it when it does not

accommodate a certain function. When this willingness is lacking then

the cube becomes just another image - the paradoxical image of function.

This is sometimes the case with Mies Van Der Rohe, Le Corbusier and other

architects of the "international style", or the "international image".

As long as an image is valid (and who is to decide) it is just as

vital a source of form to combine with a suitable function.

But an image-of-functionalism dictating form is not only unvalid,

but superfluous and artificial.

3. TWO DIMENSIONS IN THREE DIMENSIONS

Just as in painting one of the objectives and the exciting elements is the creation of 3 dimensions without destroying the acknowledgement of the 2 dimensions surface, the creation of 2 dimensional surface in a 3 dimensional space is equally exciting and challenging.

The compactness, solidity and massivity are the usual characteristics of three dimensional presence of volume. They are taken for granted; they are the usual parts of gravity laws working, "within the system".

To me 3 dimensional presence starts to be interesting and exciting when it defies or poses some problems of solidity without shattering the acknowledgement of their three-dimensionality. This acknowledgement is easier to achieve than painting because of the inevitable physical presence of 3 dimensional object in the 3 dimensional space. For example: a glass window in a wall can be of a threat to the 3 dimensional integrity of the wall. On the one hand it takes away from the solidity of the wall and on the other hand it does not convey a void, like a simple opening will do. It does not provoke tension, it causes awkwardness. A reflective surface will reflect the surroundings and give the surface an affiliation with the image of the surroundings, but at the same time maintain its solidity and hardness of surface.

A great mass of bricks or stones will relate to their earth source but at the same time to their insulating, buffering qualities. A solid should suggest void and a void should suggest solid.

These considerations are present in some of I.M. Pei's architecture:

The 3 dimensional forms that he uses are transformed when viewd from certain angles into 2 dimensional planes. But at the same time the planes are not deprived of their solidity and massive existence in space.

This is achieved by the sharp angular corners used. (That at times convey a threatening presence on the street facade).

The J. Hancock building in Boston derives its beauty from the tension which exists between the 2 dimensional effect and its solidity and massivity of proportions.

In the New Building for the National Gallery of Art in Washington D.C., the 2 dimensional forms are juxtaposed with 3 dimensional volumetric masses and thereby expressing themselves as even more 2 dimensional. The most of modern architecture after the Bauhaus stresses the planes which make the building by separating them or by making their joints and connections visible and explicit.

Picasso in his flat sculpture was intrigued by the tension derived from 3 dimensional sculptural subjects presented as a combination of 2 dimensional sculptural planes.

The surface was rendered in a low relief and treated as a canvas wall should be treated, i.e. without destroying the flatness of the wall or the plane.

Henry Moore, inscribes on his massive forms in the same manner. The inscribed area is always a flat surface for a flat inscription. The imagery derived is that of signs and codes - leteral but not illusionary.

When there is a need or an interest to convey an illusion of depth, then the 3 dimensional environment should be considered rather than just the canvas wall. By considered, I mean that the existing architectural 3 dimensional forms should be applied to the 3 dimensional painted illusions, in the manner the murals in the old churches are done. Another example is Diego Rivera's use of interior architectural features to enhance his paintings which already have some cubic flatness.

The field between the 3 dimensional and 2 dimensional in painting and between 2 dimensional and 3 dimensional in sculpture and architectural forms, is responsible for the tension which provokes responsive images, illusions and associations, by means of shifting back and forth between different perceptions of spaces, volumes, images of unification -

and disintegration, and different states of mind. A constant field

of mental activity that does not need resolutions in order to be

satisfied.

4. THE CHARACTERISTICS OF PICTORIAL SPACE AND VOLUMES : Redefinitions

A. Real Volume

The color realized as matter, paint

Sensuous color-paint.

Tangibility as volume.

Thick paint.

Textures,

Presence of the materials used.

Freshness of paint.

Wetness or dryness of paint,

Bulkiness or lightness of paint.

Different volumes achieved by different methods of application:

Brush, pallet.knife, hands, spray, etc.

Image volume

Painted images of volume.

Thin paint.

Tangibility of volume through illusion,

Associations of volumes.

Visual experience translated into thoughts, beyond the senses.

Realization of volume on a flat surface.

Different feelings projected from volumes: weight, mass, lightness,

stability, solidity, concavity , convexity etc. - achieved by

descriptive representation, or by relations of colors and forms.

B. <u>Real Space</u>

The space occupied by the painting.

The space behind the painting.

The space in front and between viewer and painting.

The space around the painting:

Relations to the edges of the painting, and other paintings in the space.

Relation to the interior space and to architectural features: propor-

tions, dimensions, walls, floor, ceiling, openings, ornaments.

The space in various light qualities and light intensities.

The field of the canvas.

The space in the canvas weave.

The space between layers of paint.

The space between canvas and paint.

The space between veils of thin paint.

The space characteristics created by different methods of application

of paint.

The space created by different textures, cavities and projections.

<u>Image space</u>

Illusionary space: representational or non-representational flat space.

Space between forms, flat or 3 dimensional.

Associative spaces.

Translucencies and opacities.

Continuity and fragmentation of space.

Density and porosity.

Air and Breath.

Suffocating space, radiation, projection and flotation.

Vibrations and reflections of spaces, achieved through representational

or non-representational means.

C. <u>Real - Color Volume</u>

Color as slabs.

Non-natural colors.

Dense application.

<u>Image - Color Volume</u>

Color describing volume.

Colors characteristic of volume.

<u>Real - Color Space</u>

The optical qualities of colors.

Optical relations between colors.

<u>Image - Color Space</u>

Color describing space - forms and space characteristics in

representations and non-representations.

5. VOLUME AND SPACE IN THE "STRETCHER SERIES"

A. Real Volume:

Stretcher (wood, structure).

Canvas.

Paint.

Image Volume

Painted Stretcher.

Painted (or gessoed) canvas.

Colors and textures of volumes.

B. Real Space

The placement of the painting anywhere in space.

All the resultant relations to the space mentioned above.

Image Space

The painted space: the field enclosed by the painted stretcher.

The directions of the painted lights and shades make for an illusionistic relation between viewer and canvas.

The light, shade and 3 dimensional representation of the stretcher,

Dictate the placement of the painting in the interior; up on the

wall, down on the floor on the right or left of the viewer etc.

C. The Objectives of the "Stretcher Series"

1. The representation of reality.

2. Limiting the representation to one object.

3. The representation of an image that does not extend beyond the real object in regard to its physical qualities.

5. Creating illusions which do not refer to other physical subjects.

6. Creating illusions which refer to other subjects only through mental associations.

7. Developing a metaphoric language for commentary and criticism of painting, form, color, history, social and psychological reference, iconism and iconoclasm.

8. Developing metaphors of the relations between the painting and the artist (physical and emotional).

9. Representation of pictorial space and volume

10. Relations of physical space between: A. painting and viewer

                                               B. painting and 2 and 3 Dimensional space of walls and room.

11. The dependency of a comprehensible image on the line of vision.

6. THE PARTICIPATING ELEMENTS AND SOURCES OF IMAGES

A. <u>The material of the painting</u>: paint, canvas, structure, stretcher,

   paper (only materials that stay in the painting not tools and

   brushes).

   Those materials are dealt with as simple and primary elements

   whose articulation and manipulation, formal and literary, provide

   images of spatial relations and of leterary associations. The

   literary images associated are ambiguous and hardly metaphors

   because of the presence of primary materials representations.

B. <u>Images of nature and natural elements</u>: earth, air, water, fire,

   built and unbuilt environment, construction sites and processes,

   organic substences and the participation of viewer.

   Natural sources of images are not treated as representations of

   objects and landscapes, but rather as schemes, diagrams, sections,

   overlaps, micro and macrostructures, reflections of inner land-

   scapes, and formal investigations of space, volume, mass, motion

   and balance of forces.

   Static situations are represented as a resultent balance of formal

   forces and/or mental forces.

   Frames are not used merely as a compositional and unifying device,

   but rather as means to bring the painting from the representational

   illusionary realm to the surface of the painting-object, and

   to evoke tension through the shift between the illusionary and

the real.

C. Elements of order:

   a. Structural order of microstructure - symmetrics and balanced
      forces, geometrical shapes.

   b. Low states of visual orders of intermediate structures: clusters
      of microstructures expressed by unbalanced compositions or even
      distribution of elements on a field - biomorphic shapes, auto-
      matic movements, rythms, expressions of the nerve system.

   c. Macrostructure order of skins, achieved through familiarity
      with complex, surface relations of familiar objects and the
      environment (by misplacing objects in different environment the
      familiar order is violated and hence ambiguity and tension are
      provoked).

   d. The relation between embrionic order - the existing, the ideo-
      gramatic order - the arbitrary placement of elements in the
      embrionic environment, and the sensory order of elements which
      responds to both embrionic and ideogramatic orders the visual
      expression of this order is the circuite-board series.

7. PAINTINGS, ILLUSTRATIONS AND THOUGHTS

   The following chapter will be on account of the elements and
sources of images in paintings, drawings and illustration, followed
by thought processes.
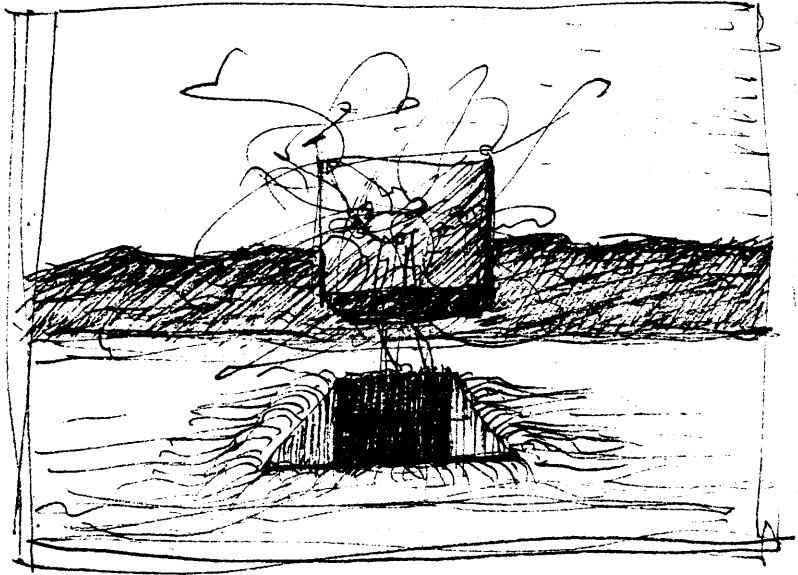
See painting on p. 94

Construction Site

Construction site,

Newly developed land,

Flowing virginal landscape,

Sky, water, earth, marsh land.

Horizontals and verticals of

Basic landscape forms.

Colors of sunrise

of long lasting frozen beginning.

The cube: ideogramatic , planned.

The earth-sky, volume-image-colors

The cube volume-space .

A hole in the ground turns spatial

Loses the earth weight, becomes a section that reveals the under-skin,

And lit from within;

The torment of the skin disappears   from the hole

The violation essence of the skin of the earth is missing in the dig.

The cube radiates lines of iron, reenforcements

Guts, arms,

The exposed conflict of formal cube exterior,

Clean, planned form,

Ordered and easily perceived,

And violent,turbulent ingrediants of macrostructure

The cube is floating above its cavity to be set in

Or above, or just a floating chunk of frozen stone-turned earth.

A "Development" to complement landscape   ,

The need and the function.

A carefully planned pill-box.

In elementary school we were taught to understand experiences.

For example: The beauty of the first sight,

The beauty of experiencing nature at first pure vision.

But it was superfluous, because we felt it.

Therefore the other part of Bialick's[24] peotry was more interesting

like:

"On slaughter"

"In the city of killing"

Now that we don't possess the ability of first sight we can appreciate

Bialick.

By making polemics on art,

We either make art superfluous

Or we deprive ourselves of the "first sight".
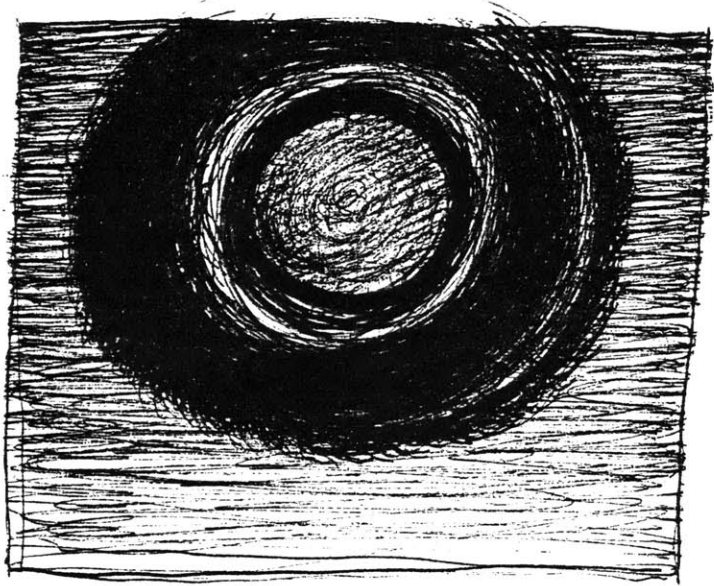
See painting on p. 95

Chackra

Chackra, one of the main ones. Life center, one of them.

Which one, witch one?

One of the main engines

The top chackra, full of hair

On the edges, round, hollow

The bottom chackra full of hair (on the edges)

Both not so round not so perfect forms, alive, thinking

Red crimson, orange and pink

A massive sun disk that does not radiate light

It radiates volume

A fat doughnut floating in space

Rotating with disordered hair but with dark bright center.

Green or orange? deep or protruding,in sky or water, too cerulian

Haybe between 28 years of age and thirty five

How should it stand: up or down, rise or sink

Anyway it's too big and important and clumsy

The main engine is a hairy flat-tire

But the cavity shines when the tire deflates

Because it is made out of color not bound by the cavity Boundaries,

Or background, not even space.

Some people have something in common

A common interest,

A common idea or ideal

A common object

A common feeling.

There are many things in common to some people.

Some people have nothing in common.

Some writers do their best to explain what sort of nothing some have

in common,

When they get tired

They say:

Try to feel it.
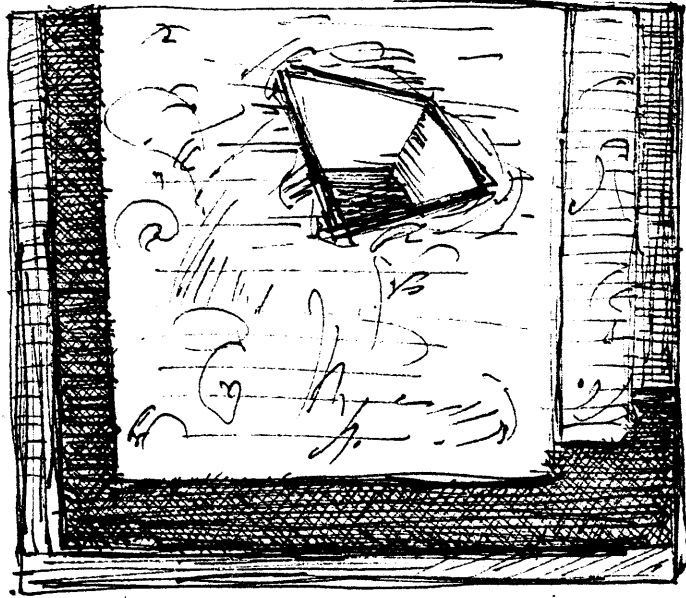
See painting on p. 96

Skies

That which appears to be sky is pink heavy, smeared, thick volume that

makes open space.

That square opening is a cube,

Open, spatial,transparent,lit from within,

Not heavy or square although a cube,

A square space-volume in a heavy volume-space

The dark ultramarine is heavy and not as deep as dark blue is- although

next to pink.

Third frame - light blue.

Fourth frame-of the mind .

Fifth frame-of the earth .

Not for the weight but for a formal conclusion.

Process of, real space to image space, to another image-volume space,

to volume space imagery.

The edge is lost - being a field

The visual frame starts at the dark blue space for its contrast,

But being negative and incomplete it loses power of unity to the pink

sky, which is an open space not well framed and not framing the cube.

The painting stays an open field in spite of its forms.

There are all kinds of skies

Blue and grey, pink and red

And black.

There are deep ones and shallow ones.

Turbulant, bright and calm (some greys are calm too).

They are all made out of some unimportant details,

Like air and humidity,

And reflected light,

In front of nothing

I mean space,

I mean your basic emptiness.
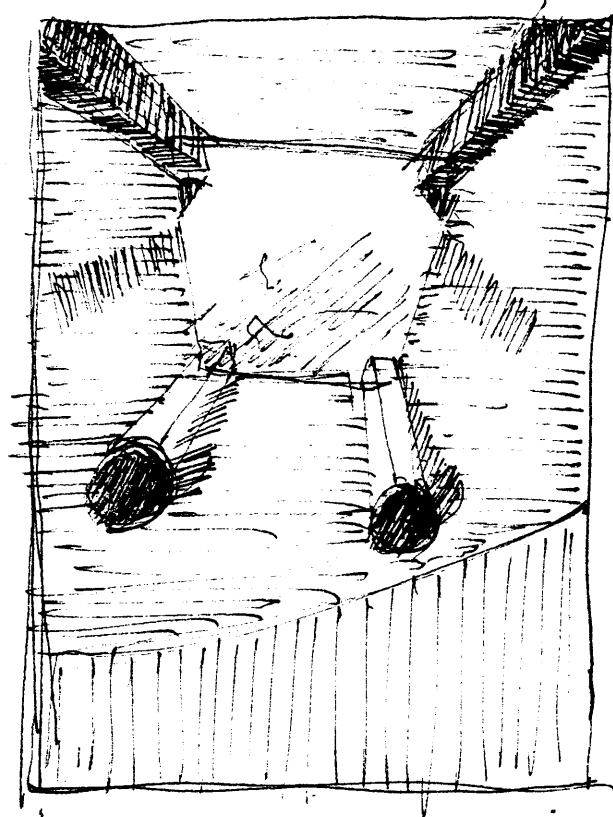
See painting on p. 97

Table

Misplaced object, or placed in a different environment.

A chair attached to a wall, floating, legs forward, going through

biomorphic change in mind first,

And then in surface and texture.

A painting, study for a sculpture - environmental collage.

The first association is with biological forms,

The closest association to a human being , colors of shades of green

and pink somewhat to help the morphosis.

Magritte's apple and rose change size and become strange and
menacing.

O.K. these are very nice,

They are beautiful (chairs)

Now show me a table

One that can be nice too

Also that we can gather around,

Also that I can work on,

Also that I can eat on,

Also that I can sit on,

Also that I can lay on,

Also that I can sacrifice on,

Also that I can take apart,

I say this is really modular

May I hang it on the wall?

Well... If you wish.

I think we have everything now.

At least we won't bump into "nothing"

See painting on p. 98

Landscape-Section

Section through landscape.

Lower part - section through earth and water.

Upper part - elevation.

Earth devided into dark, solidified, compressed masses

And looser, organic still disordered mass.

The water strip is a deep negative volume carrying bright ultra-

marine-blue breath through earthly masses.

Sort of a relief, although saturated and volumatric.

The sky is no different from earth - thick and alive

The edge-frame play with and against the landscape.

At the lower edge, the frame is negative, receding.

Coming forward at the sides and receding at the top.

The landscape is placed in boundaries.

We refer to it as a painting viewed.

But then, at some places the landscape flows into the boundaries,

The thick image-space sky becomes thin, clear and weightless, but still

a unifying frame.

Go back and forth between painted frames and frames of mind.

Leonardo said:

"The first principle of the science of painting: point, line, surface,

body bound by a given surface.

The second principle: the shadows of the body represented - give sculp-

tural relief to the surface.

The science of painting includes:

1. All colors of surfaces.

2. Forms of bodies bound by them.

3. Proximity and distance.

Perspective's three parts:

1. Outlines of bodies (design, configuration).

2. Diminution of color at varying distances.

3. Loss of distinctness of bodies at varying distances.

Eight parts of painting:

Darkness, light, body, form, location, distance, proximity, and motion

and rest.

Five parts of painting:

Surface, form, color, shadow, light, and proximity and distance.

Two parts of painting:

Form and color.

All this is about painting.

Then there are some numbers about sculpture.

Then you can find many more in science of science.

Then you can find many many more in the "Haggadah" of passover and

the "Talmud".

The ancestors had a good taste for analysis.

I can get off on their rythm.

It can provide John Cage with an endless source of rythm.
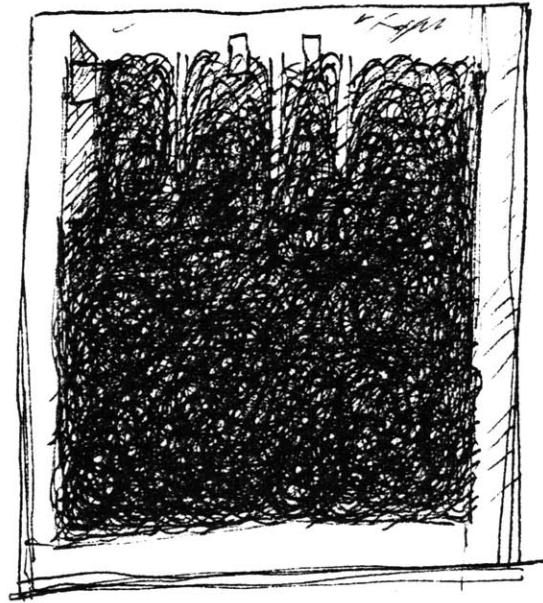
See painting on p. 99

Earth-Section

Section through earth

Different densities at different pressures

Different volumes for different layers.

Some built forms,some cavities,some footings changing the density.

Browns

From washes to thick dark crimson browns.

Light blue wash frame.

It keeps the brown square a man-made section,

Schematic diagram rather than round or eliptical earth chunk.

Light blue edge, transparent image-space for sky,

Real space next to the brown.

And very light, thin wash.

Natural colors,

Pink built forms - not so sharp and not so square.

Hydrogen knew

Something about Oxygen .

They don't look alike

or behave alike,

But they knew about their affinities of structure.

And so it grows

And grows,

Until it becomes a little world and a big world ,

A little infinity and a big infinity.

Then says Novalis:

"When we move from this contemplation (of the pure world within us)

to nature, we find that everything in it is quite familiar to us,

and we have sure knowledge of every form".

Haftmann links it with the ideas of the Romantics.

Klee speaks about 'cool Romanticism'.
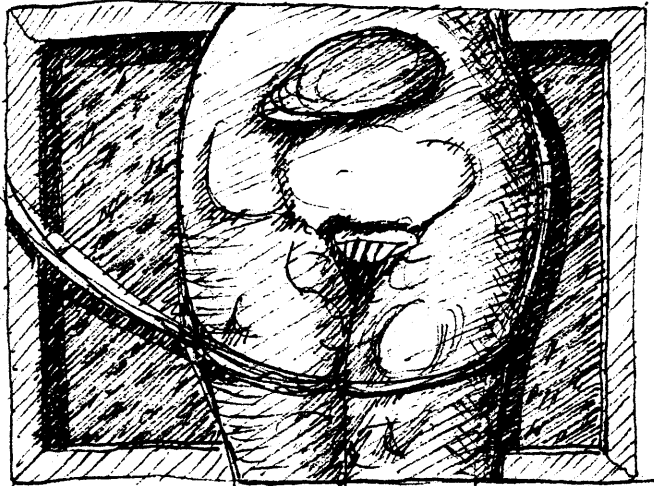
See painting on p. 98

Body-Section

Starting with a nude, loose scrible of lower torso.

Then refining, detailing pinks and greens, soft but fleshy.

The canvas is so thick , the paint layers heavy,

Cuttings off the excess,

Cutting through exterior skin, macrostructure.

Revealing the unprimed, stained second canvas.

The frame is the real structure, the bones of the strecher .

Three dimensions, made of layers of two dimensions .

The torso - cooled off scrible, frozen swirles of paint,

Smiling crotch full of teeth.

Unavoidable cavity in the stomach.

See through section of container

Clear function in blue light.

The energy is gone.

The painting is too contrived , too gooey .

Where is the freshness of the beginning ,

The fresh strokes of the better painting of the mind.

Leonardo on abstract expressionism:

"Which is of greater importance : movement originating from the mental

conditions of living creatures, or their shadows and lights?

The most important things that can be found in the analysis of painting

are the movements appropriate to the states of mind of each living

creature, such as desire, contempt, anger, pity and the like .

and this is to be learned from the mute, who makes such gestures

better than any other sort of man".
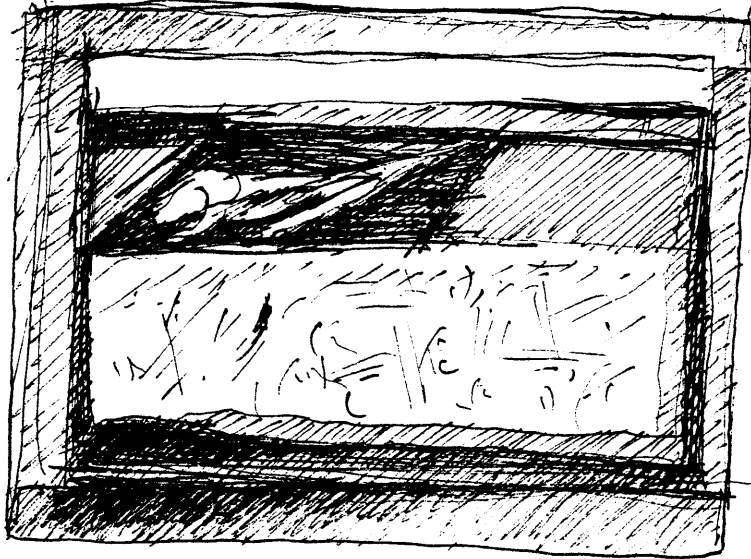
See painting on p. 99

Shore-Section

Snoopy lays on the beach on a brown carpet of open lipped earth.

Stretched like canvas on a strecher, he is dead.

But rather than his soul, his flesh is alive,

Just like that with no meaning,

But for shiny pink and crimson substance.

Where definite earth meet indefinite skies,

Where indefinite skies meet pink borders

But just escape under them much deeper than usual surface pink border,

Where the water is lovely

Full of creature-traces, bouncy and joyous.

The brown mourning frame can't make it sad

Can't become black

Too loose and edgy to freeze or balance.

Snoopy just takes a nap with his guts spilled.

I tend to be emotional sometimes,

I know that it is banal but I can't help it.

To see images on old plastered walls,

shapes in the clouds or on the bathroom floor,

Well, that is not all bad,

"I say you should look for them",

says Leonardo.

And he was also a scientist,

And he also explained the science of art.

But , when it comes to little children,

Or hunger in India ,

It is a problem.

You see,

The test to your emotionality or banality is,

When you hear about the hunger in India for the second time

Or about the holocaust for the hundredth time,

Or about children every day.
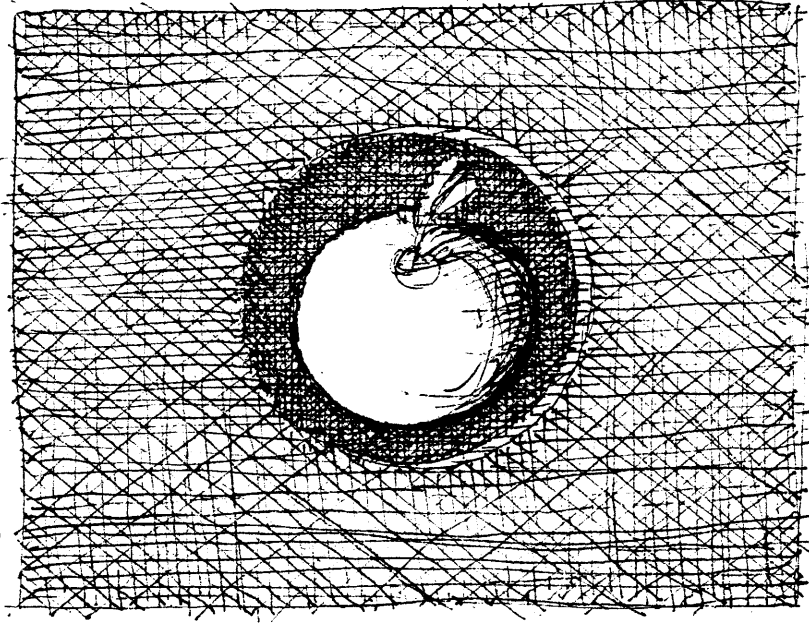
See drawing on p. 100

Filling voids

Haftmann calls it:

Meditative abstraction (B. Newman's paintings).

Rosenberg calls it icons.

Greenberg calls it major art.

Why major art?

Because the spectators become angry,

And anger does not coincide with indifference.

You see, art criticism is local,

But they all mean the same thing.
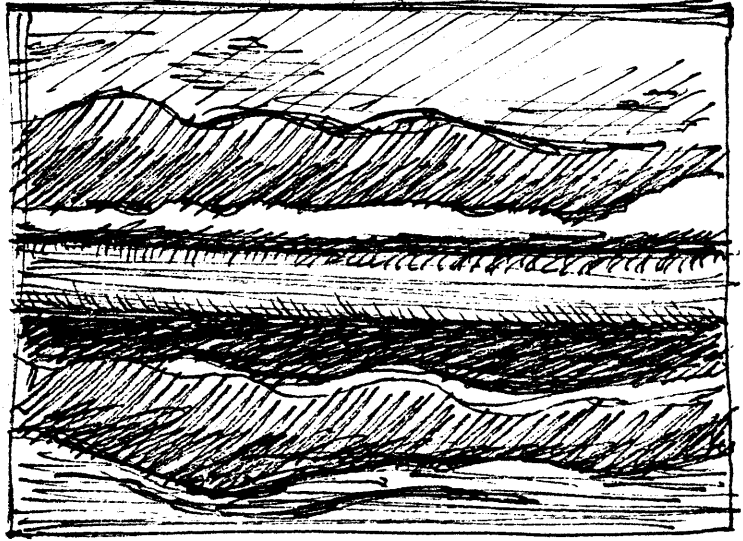
See painting on p. 94

Landscapes

Romantics many times happen to be quite analytical.

It tires me,

Also surrealists.

They show you all kinds of details,

They want to make you feel things

They don't leave "nothing",

They analyze nature and the man-made,

They detail subconscience,

And make you feel how special and moving everything is.

They don't leave "nothing" .

Jackson Pollock said:

"The surrealists are right.All painting comes out of the
unconscious".[25]

How lucky we are, he did not try to spell us.
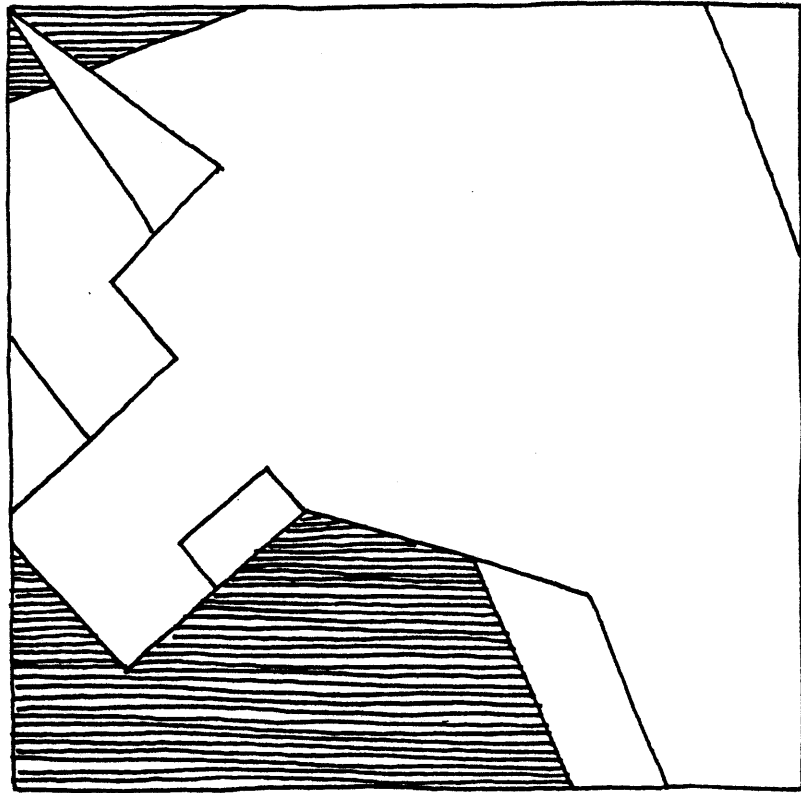
Minimalism

Leonardo asks:

What is the difference between poetry and paintings?

Leonardo answers:

Painting shows facts, poetry, results in words that have wider inter-

pretation.

Then he goes on and proclaims the superiority of painting over other
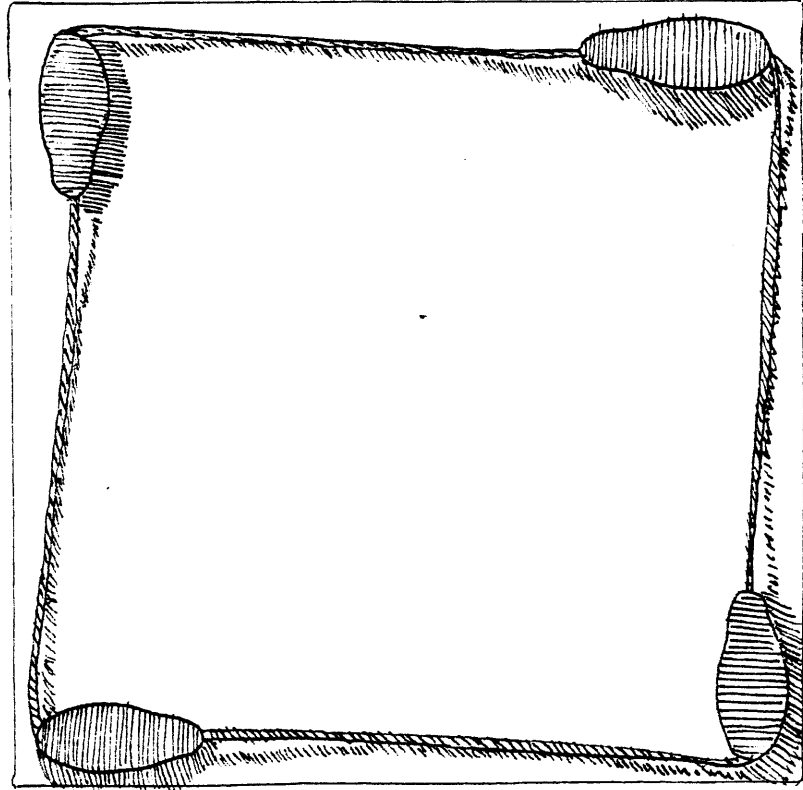
Minimalism (continued)

fields of art.

I say: How about the wide interpretation   of non-representational art.

But really, there is no point to argue .

There are no facts without interpretation,

Clear as their representation might be .

So how about painting some mathematical formulation

Or lines and points and squares

and say: You see a square is a square, and a line is a line.

They might be painterly, but we'll take care of this too.
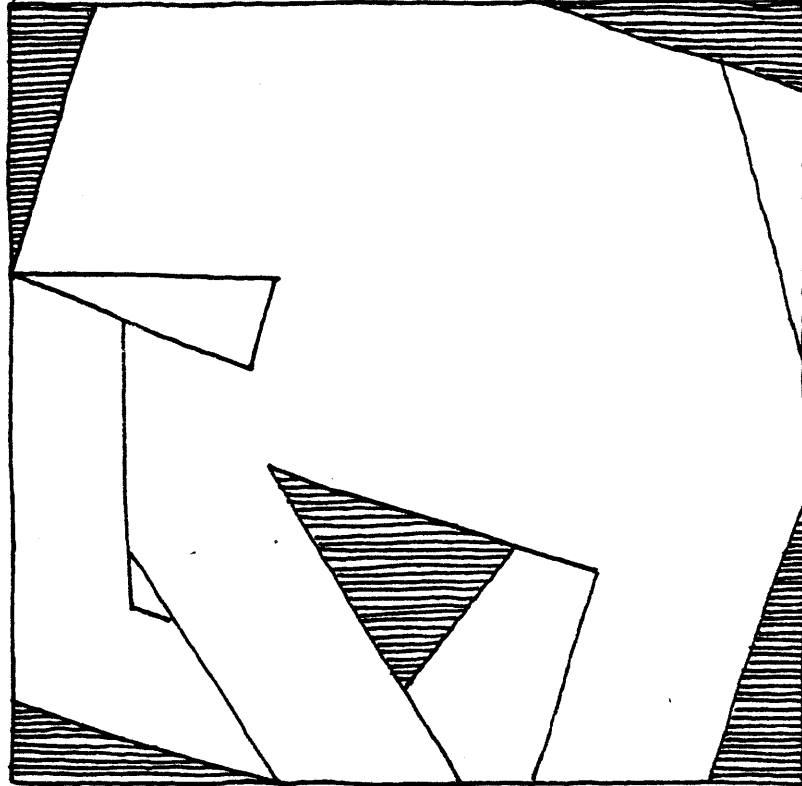
White on White

Hamlet: "Do you see nothing there?"

Well, that means it is bad design

(for some) .

Hamlet: (again, very disturbed) "Do you see nothing there?"

Well, that means it is good design

(for some) .

Hamlet is restless because he cares for everybody,

So he goes to the Soho and comes back with a couple of nothings

on a truck

(they did not fit in his van).

Now ,

Hamlet : "Do you see nothing there?"

You must excuse me sir,

I am not from this neighborhood,

and also I am not into this business.
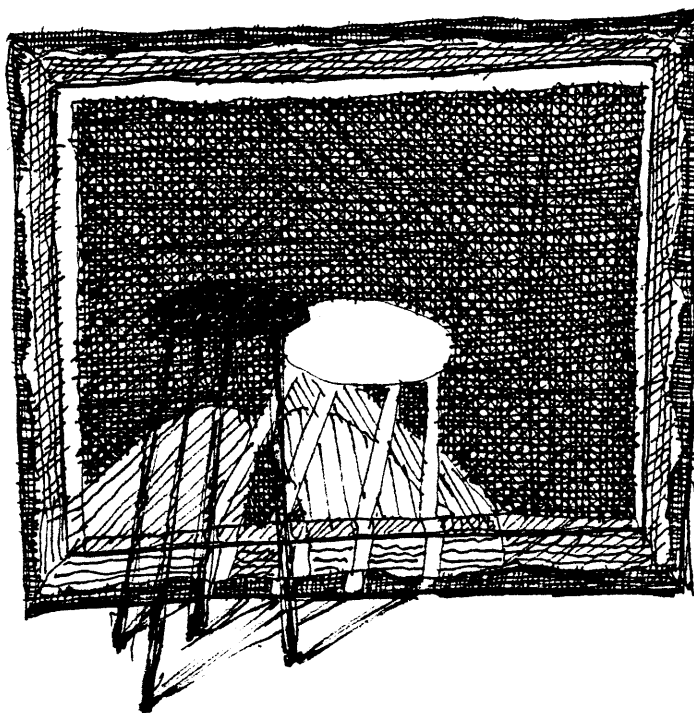
See paintings on p. 101, 102

Negative Stretcher and Chair

Both **stretcher** and chair are painted as a photographic negatives.
(The negative of their photograph appears positive). At the same time
the chair and the canvas are present and as positive as all three
dimensional objects are. The dark middle part of the canvas becomes
an illusionary space lending itself to be associated with images of
space. But at the same time the white shadows of the chair are flat
gesso on flat canvas. Hence the black image-space becomes flat again.

Leonardo said:

"Point, line, surface, body bound by a given surface, are the first

principles of painting.

The body is only a representation of a body, because in fact painting

does not extend beyond the surface".

Magritte the mysticist, understood this principle, and painted a pipe

with an inscription :

"This is not a pipe".

Johnes, who understood Magritte, painted ale inscriptions,

On bronze bottles.

After painting stretchers on stretchers and canvas on canvas.

I would like to paint paint on paint.

Even the cubists and all the formalists are obsessed with the integrity

of the surface,

Because that is what we have,

And Leonardo said it :

"Painting does not extend beyond the surface".
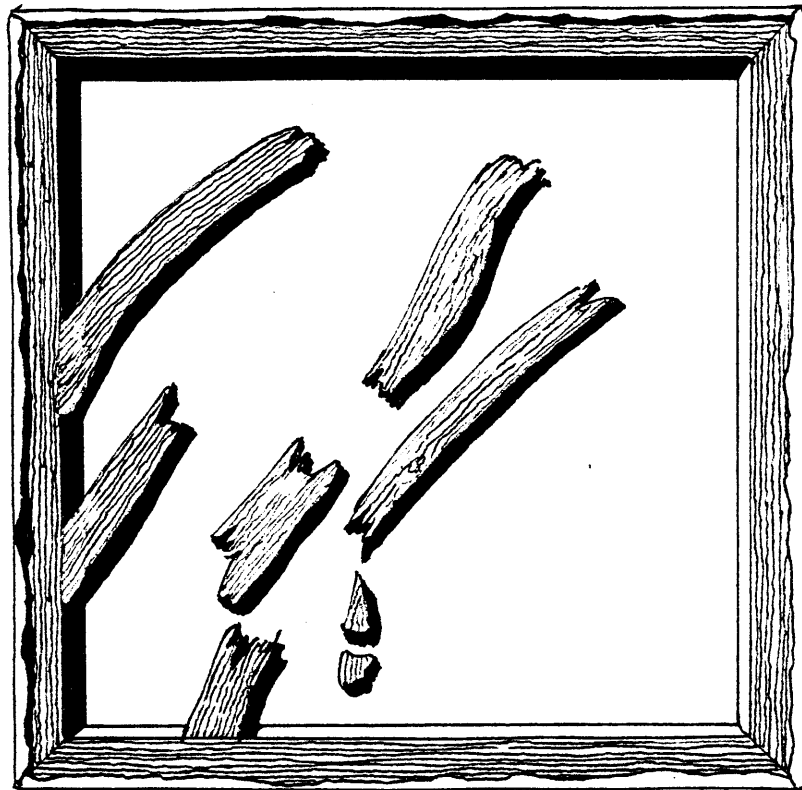
See drawings on p. 103

Origins of Relics

When I look at a monument

By Claes Oldenburg,

I suddenly experience,

I have a very "deep spiritual feeling",

"Mysterious and religious",

Because I remember

And understand !

The wood of the cross

And Noah's Ark,

The stone of the tablets,

The marble of David,

The paint and stretcher of Rembrandt,

And there comes the realization of nature,

The substance of relics.
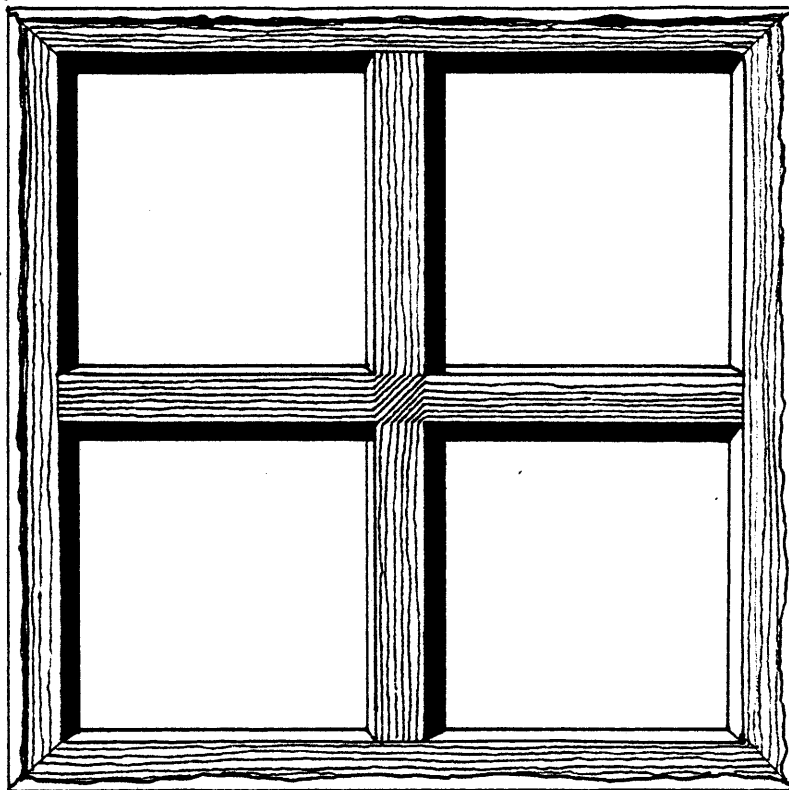
See paintings on p. 104, 105, 106

Concrete Art

Haftmann says:

Jackson Pollock, by a degree of "self destruction that seems almost

inhuman, gave psychic improvisation a monumental dimension".

Ludolph Van Ceulen, a famous German mathematician, in 1596 calculated

the value of π to 35 decimal places:

3.14159265358979323846....

According to his wish, this number was engraved on his tombstone at

Legden, instead of a regular epitaph.[26]

These are only two examples of realization

of concrete art.

There are more examples of more people.
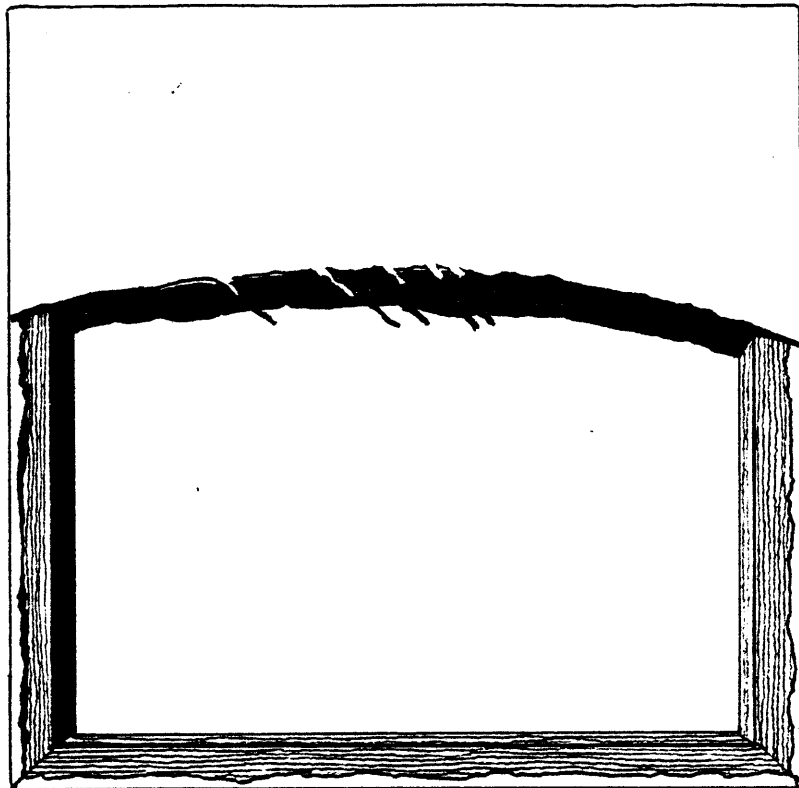
See drawings on p. 107

Work

Inbal asked me to swing her,

And then she asked for this and that,

And I said:

One minute,

And then that and this,

And I said:

But I have to work,

And then I went and swang her,

And this and that,

But before doing it I worked.
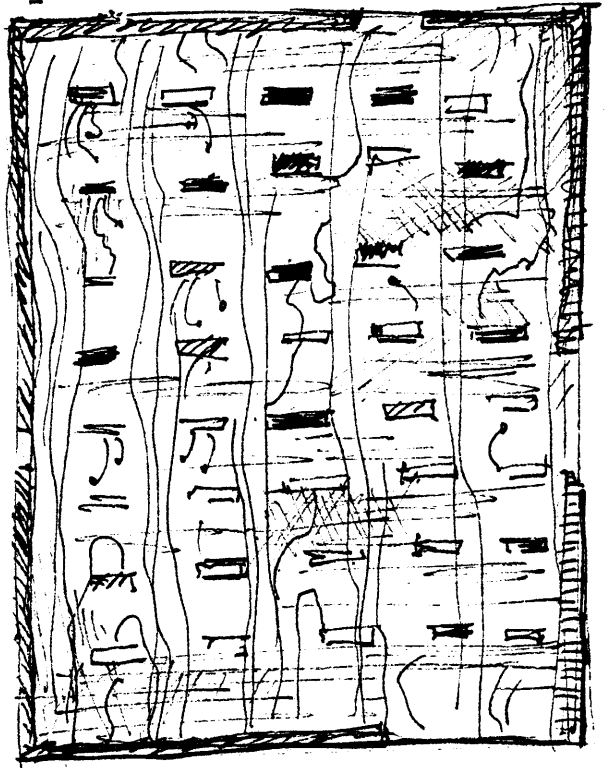
See paintings on p. 108, 109

Circuite Boards

Circuit boards are interesting images.

Let alone the shiny materials,

Their intricate patterns,

And their simple or complicated functions;

Let alone the fetish associations

They remind me of the universal order:

The plane surface or space.

The planned, regulated components attached to the surface in arbitrary

or calculated intervals,

And the twisting, bending avoiding or touching solderwires between the

two and among themselves.

What is this ?

It has a very interesting form.

It reminds me of something.

It certainly has beautiful colors

And it shines.

And it is made of gold.

yes	no	yes
no	yes	no
yes	no	yes
no	yes	no

So you say it is the "Chochen"[27]

Yes, it makes sense, no?
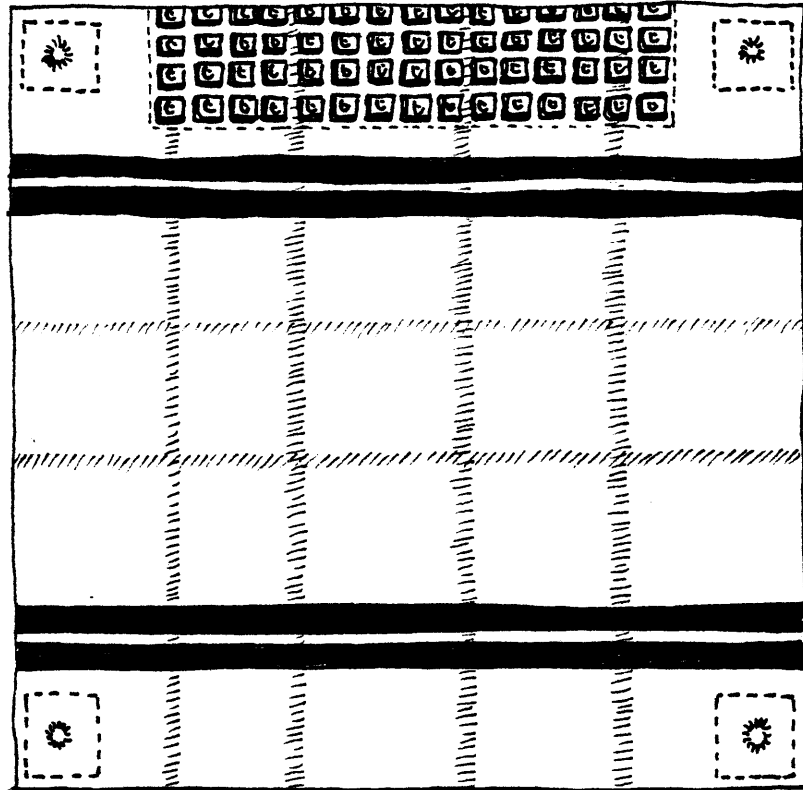
See drawings on p. 110

When the Israelites said:

"We shall do and we shall hear"[28]

They had concrete art in mind.

Realization itself.

And then they were given the physical laws of concrete art.

What to do and what not to do about every aspect of life.

And when you do it every minute of your life, why should you bother to

paint it, and when you don't do it every minute of your life,you still

remember all the intricate details.

And when you don't remember the details you can invent them.

Since you are able to feel an analytical process.
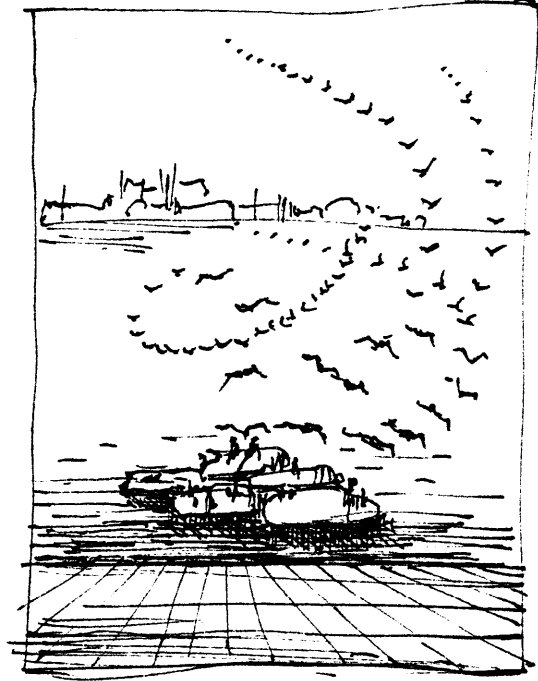
See drawings on p. 111

Seagulls - Sculpture

The idea was to make a kinetic sculpture that will use natural elements as a sculptural presence.

Usually kinetic sculptures use natural element like wind to put a man-made object in motion .

The thought process for this sculpture was in the opposite direction: To provide a man-made object which will put the natural elements into motion. In this specific case the objective was to provide a suitable environment which will attract Seagulls and display their beautiful flight paterns.

The proposed physical structure consisted of four small islands
(6'x6' each) placed one foot above water level,(giving the appearance
of man-made floating masses) and of course free meals to the birds.

At the time I planned the sculpture I consulted an expert on
Seagulls as to what kind of food and surfaces Seagulls prefer.,He
was complaining about the terrible difficulties he encounters while
trying to annihilate the birds ...

Environmental art should be beautiful

And also universal.

It has to work with the environment, otherwise

It will disturb us -

Parts of the environment .

It has to be big enough ,

To be noticed,

And inconspicuous enough not to become a nuisance.

It has to be moral enough,

But still interesting.

Color is optional as long as it is not too strong, or not too weak .

Material is optional, as long as it works with the environment

and is structurally safe .

Form is optional, as long as it is perceived by the environment.

If it is complicated ...

If it is reductive ...

If it is expensive ...

If it is cheap ...

If it is serious ...

If it is not serious ...

etc. etc.

Environmental art is a very delicate medium.

Therefore those who paint , paint,

and those who sculpt, sculpt,

and those who do environmental art, do environmental art.
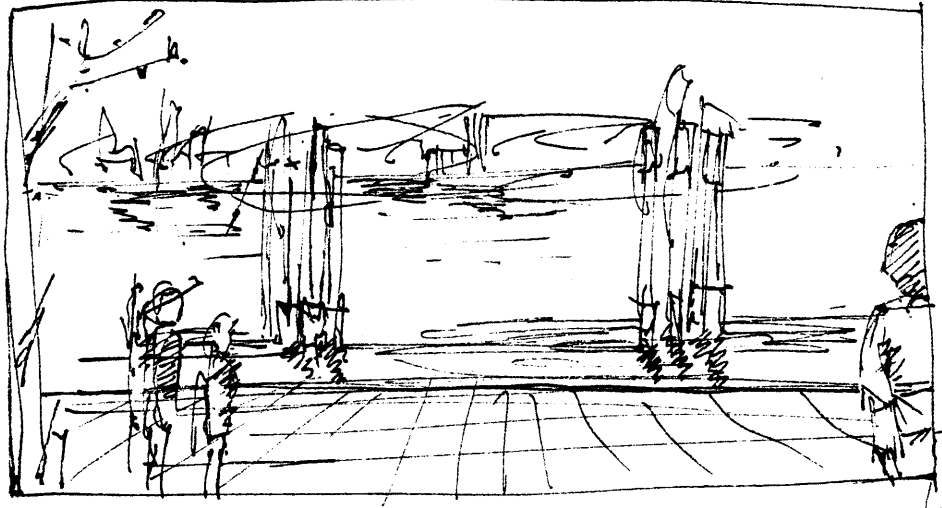
See model on p. 112

Sound Sculpture (designed in collaboration with Christopher Jenny)

A proposal for a sound sculpture to be placed in a water body with a promenade next to it. The sculpture consists of 2 sets of five cutout pipes each.

Each pipe contains a vibraphone element of different notes. The sail on the edge moves with the wind and hits the vibe, and the sound travels through small pipes which rasonate it.

The second set is placed 30 ft away. Each pipe of the second set coincides with a pipe of the first set as to wind direction and harmonic note.

The resulting music is up to the wind.

"Junktion Box" - See plans model and drawings on p. 113, 114, 115.

A proposal for a pavilion for C.A.V.S. at Dokumenta 6, 1977.

This environment would be made of found materials over a simple wooden framework. It would take four people a month to build it. They would be carpenters or artists and use common tools.

The structure ought to be as simple as possible. The found materials must include recycled electronics hardware from NASA. M.I.T. etc. The light-panels, transformers, consoles, etc. in the skin of the "tent" would signal the interface of the nomad/collector artist and technology. It would accomodate a dialogue between the building and works from C.A.V.S.

The building is considered a metaphor of human conditions but its amalogus nature is secondary to its function as an integrator-generator. Unlike the ready-made - the junk of the human condition brought into the museum to be sanctified as art - the C.A.V.S. art - in the embrace of this multi-textured skin, would be remembered for its humanness.

Construction Site
Oil on Canvas 36"x36", 1977 .
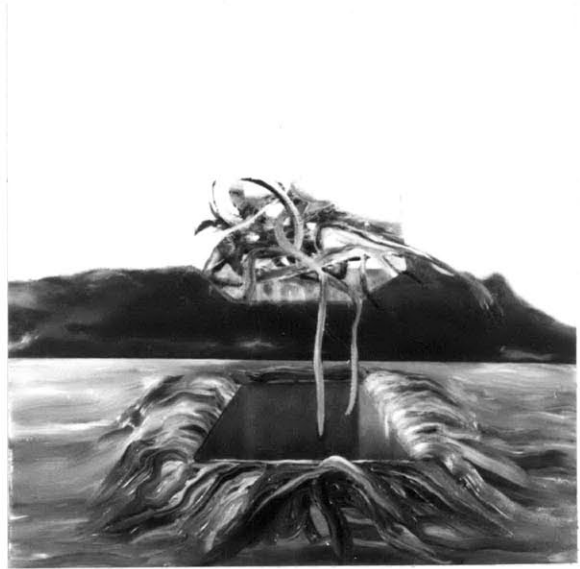
Landscape
Oil on Canvas
39"x48", 1977 .
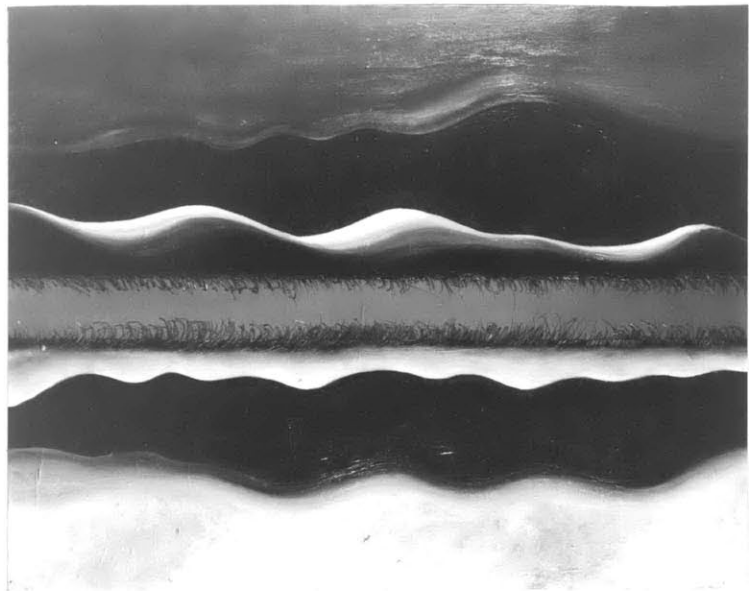
Head , Oil on Canvas
36"x42", 1977 .
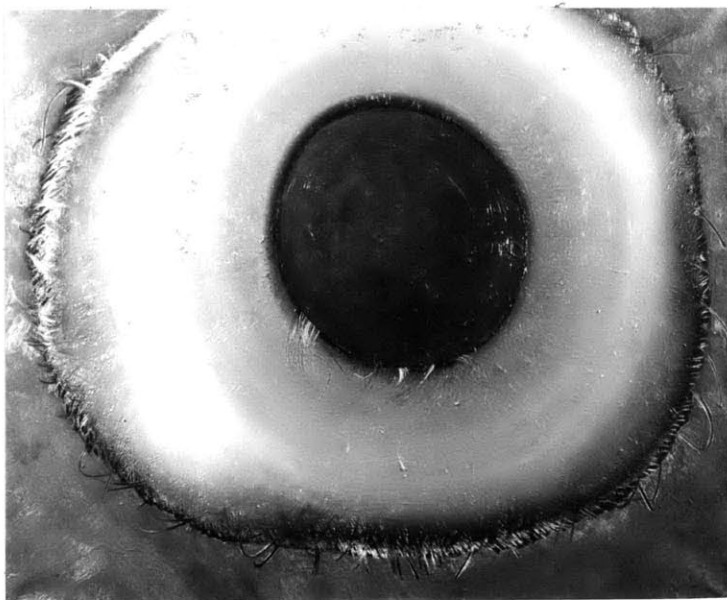
Chackra, Oil on Canvas
28"x34", 1977 .

Landscape
Oil on Canvas, 42"x46", 1978 .

Skies
Oil on Canvas, 40"x44", 1978 .
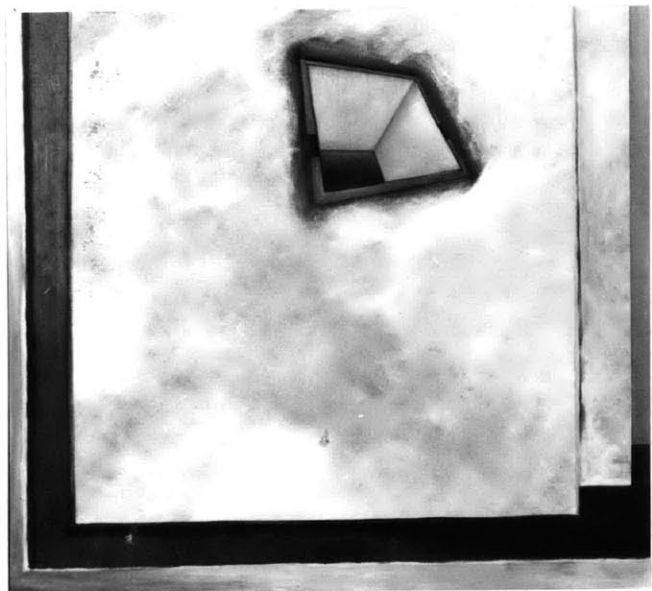
Women
Oil on Canvas, 28"x24", 1977 .
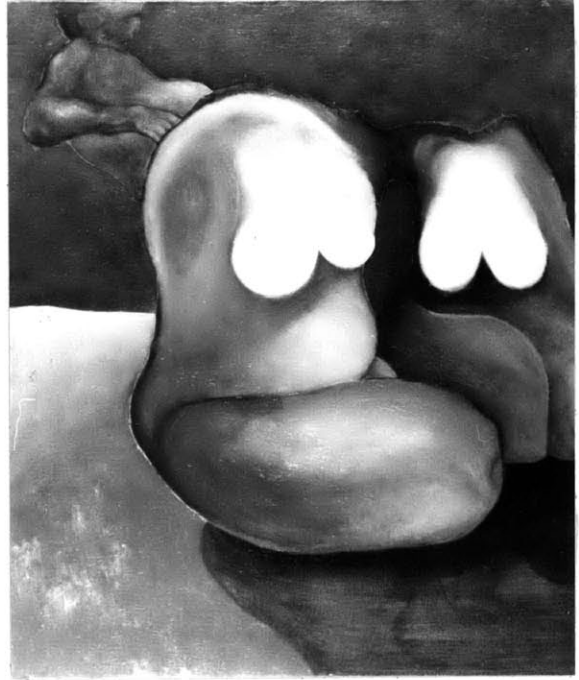
Table
Oil on Canvas, 34"x24", 1977 .
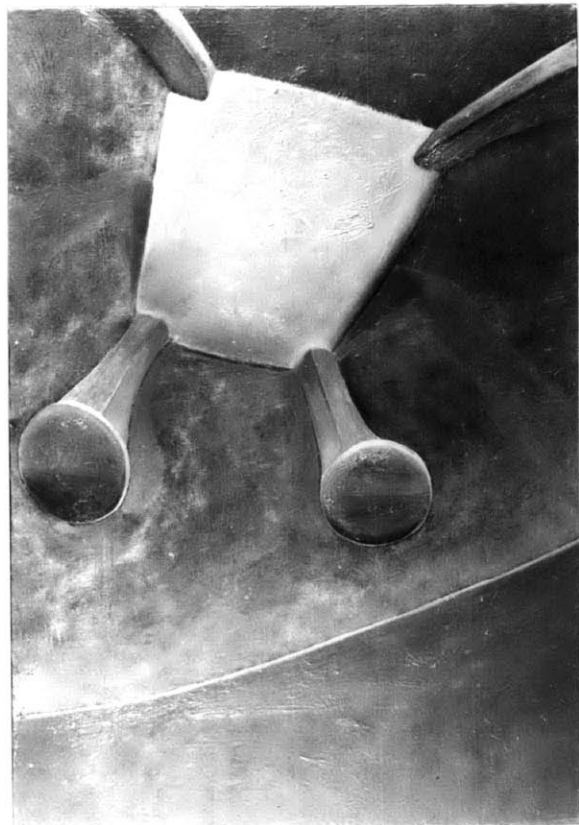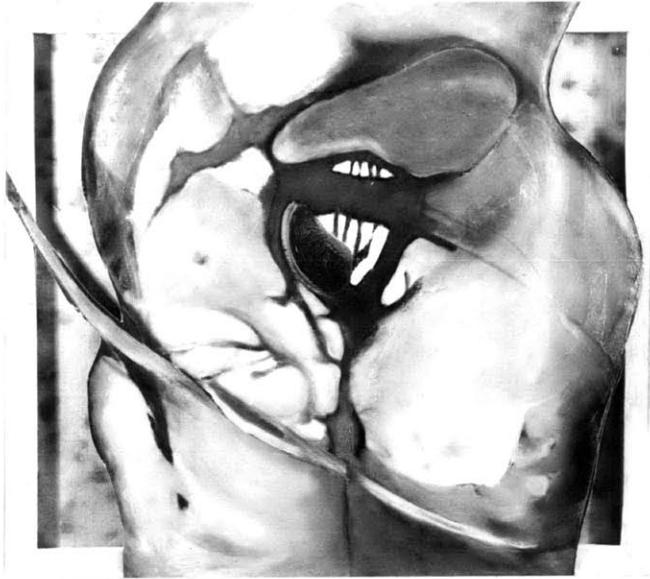
Body Section
Oil on Canvas, 30"x34", 1977 .

Landscape Section
Oil on Canvas, 46"x40", 1977 .
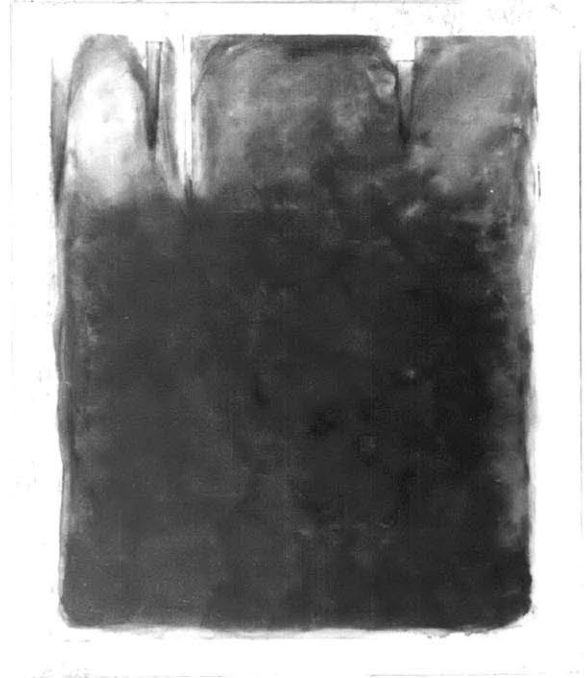
Earth Section
Oil on Canvas, 40"x34", 1977 .
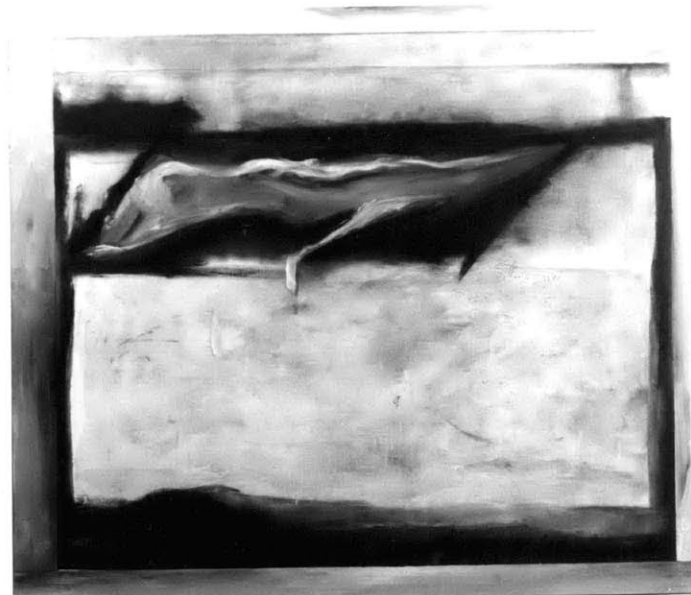
Shore Section
Oil on Canvas, 40"x46", 1977 .
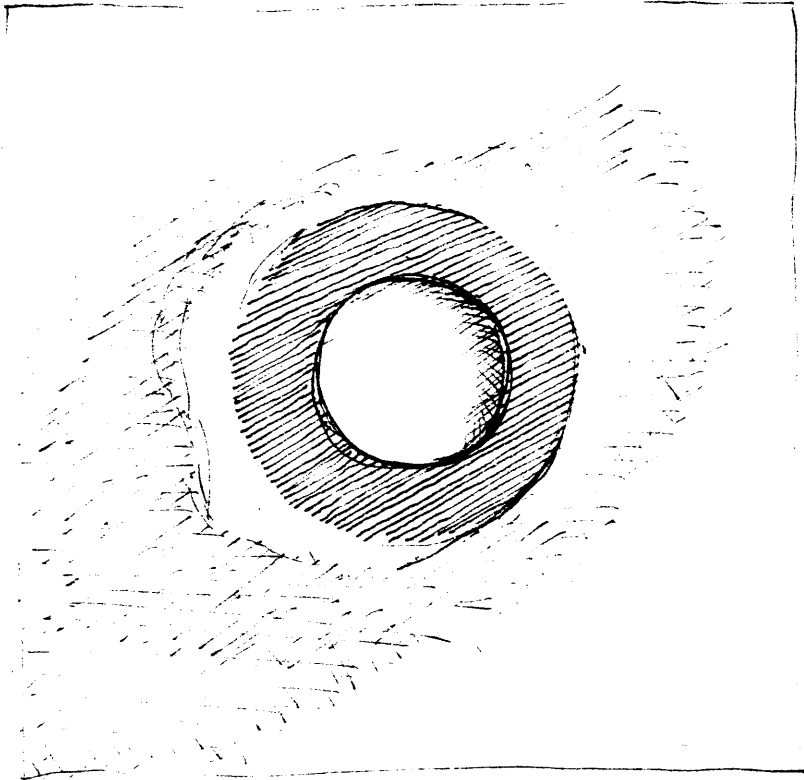
Illustration for Void
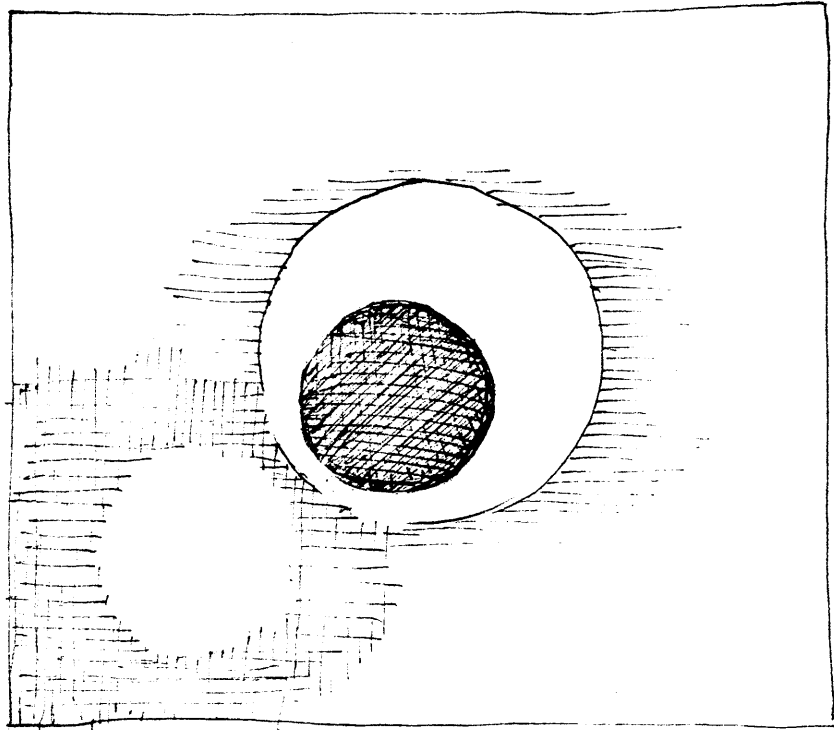
Illustration for void

Negative Canvas
Oil on Canvas, 48"x48", 1978 .

Negative Canvas with Chair
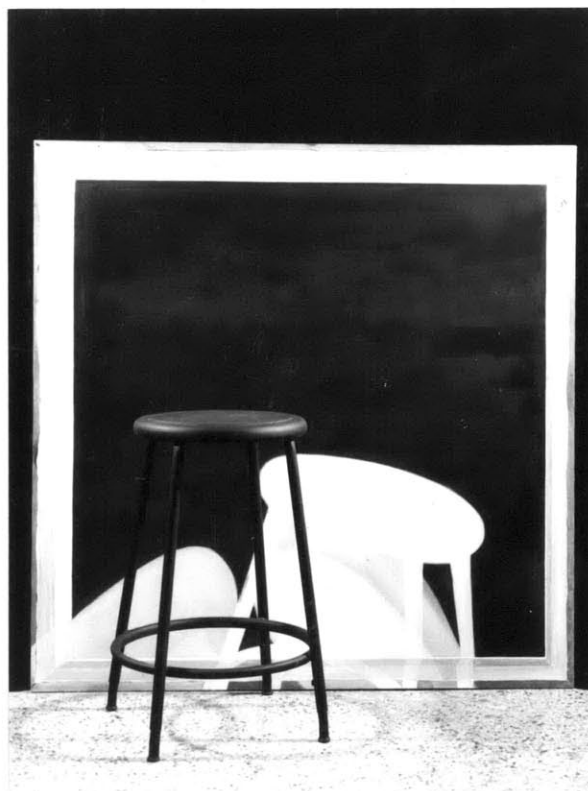
Four Stretcher Paintings with Chair
Oil on Canvas, 1978 .

Negative Canvas with Chair viewed
from left.
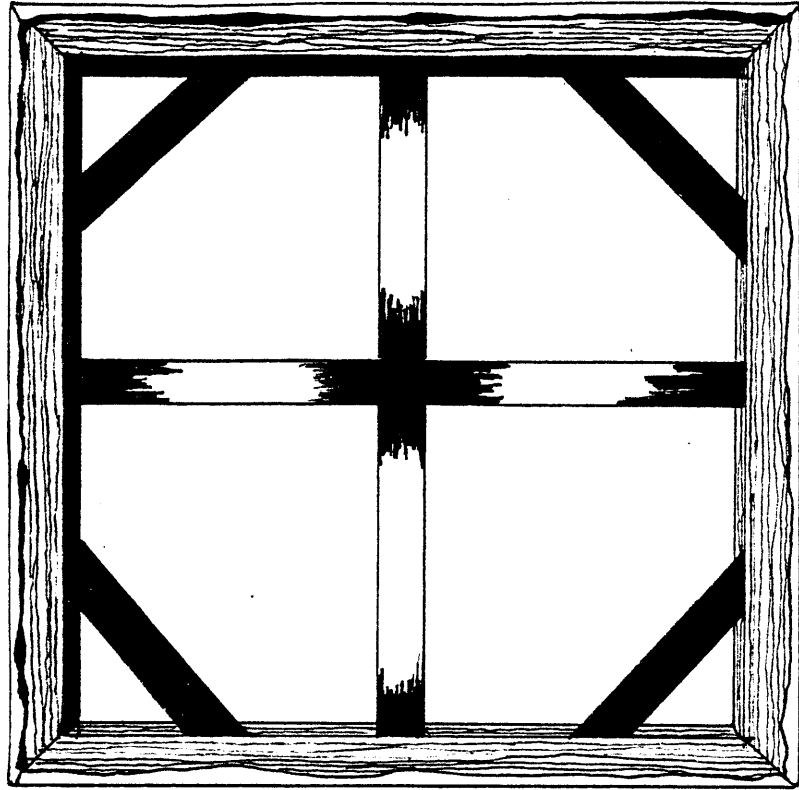
Studies for Iconic
Stretcher Paintings.
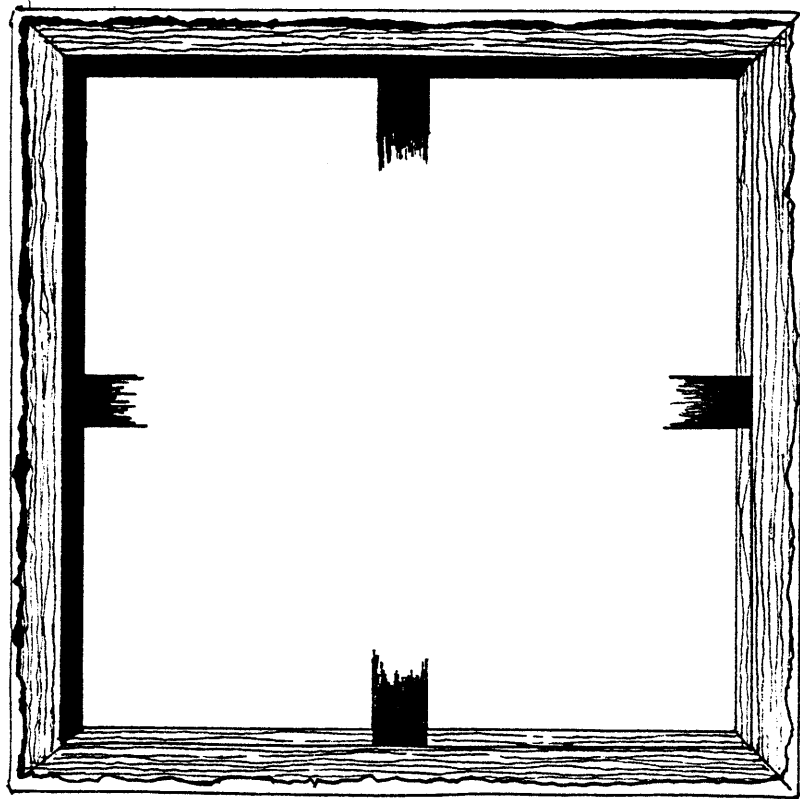
Views from left and right
of Stretcher Paintings — The above view is distorted .

Landscape Stretcher Paintings
Oil on Canvas, 43"x48", 1978 .
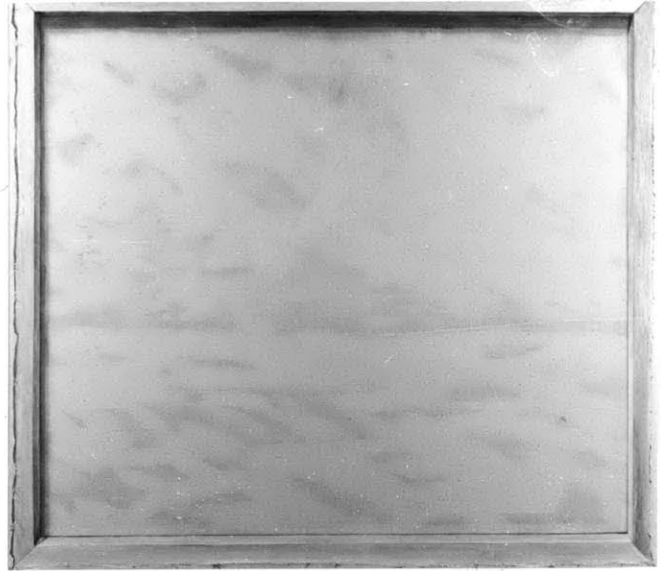
Frontal View
Varying Distortions
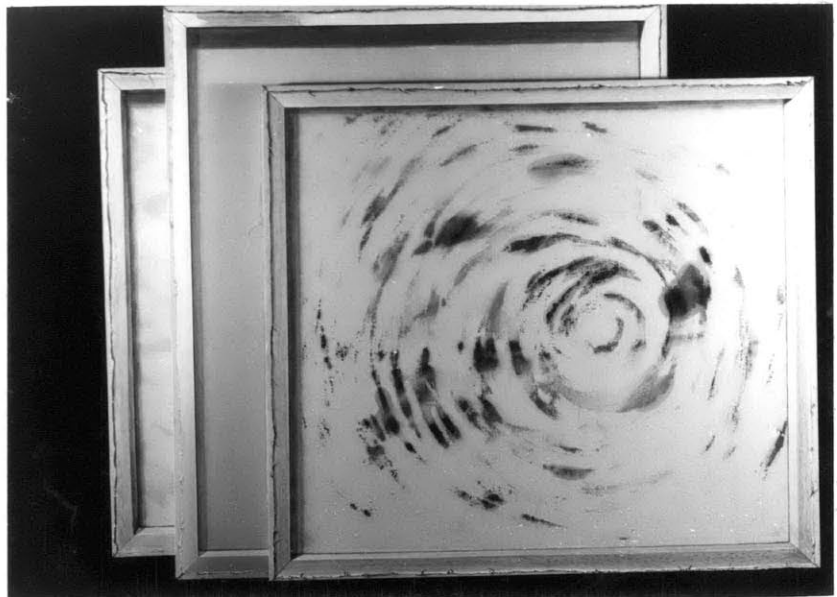
White Stretcher Paintings.
50"x44", 1978 .
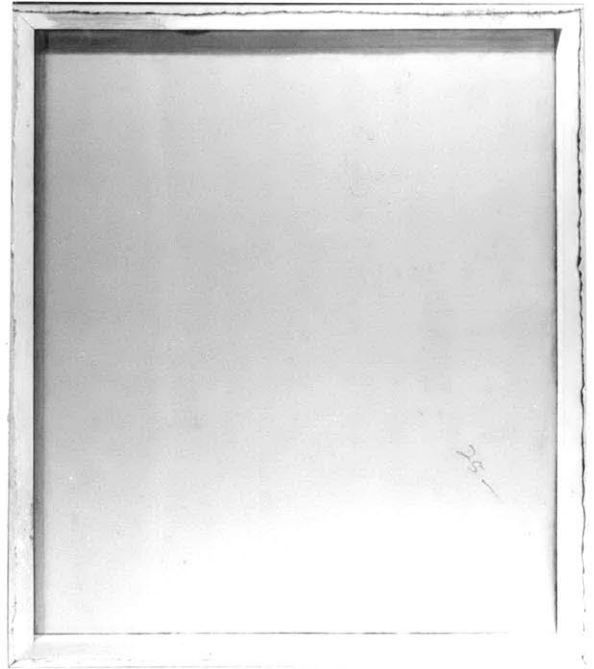
Viewed from left
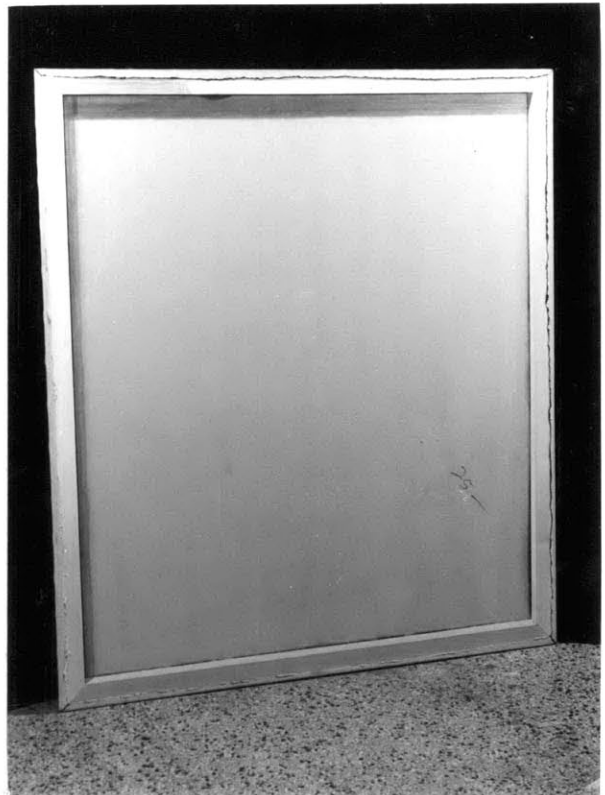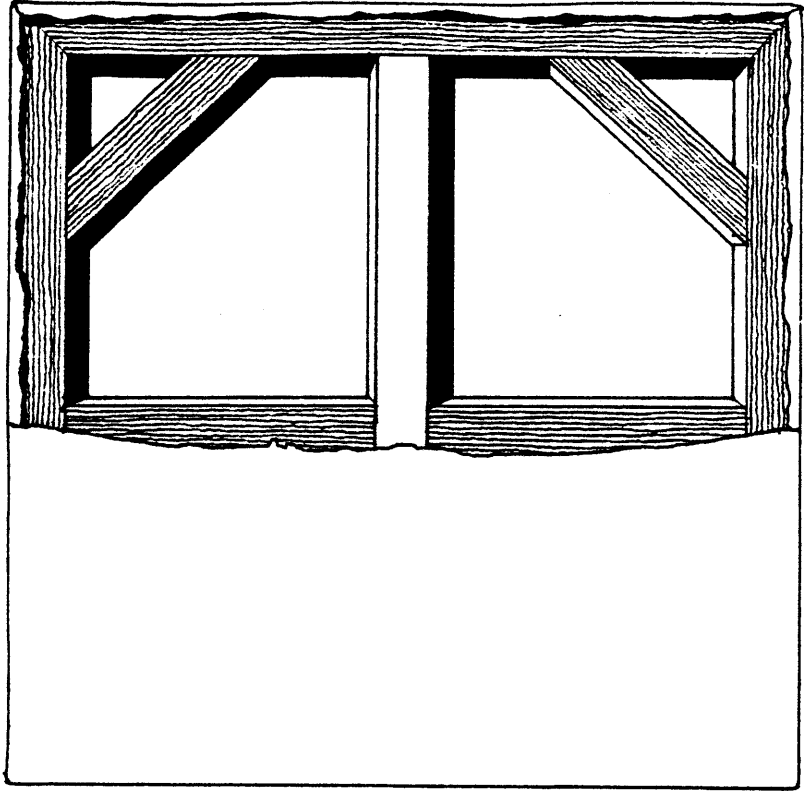
Studies for
Stretcher Paintings.
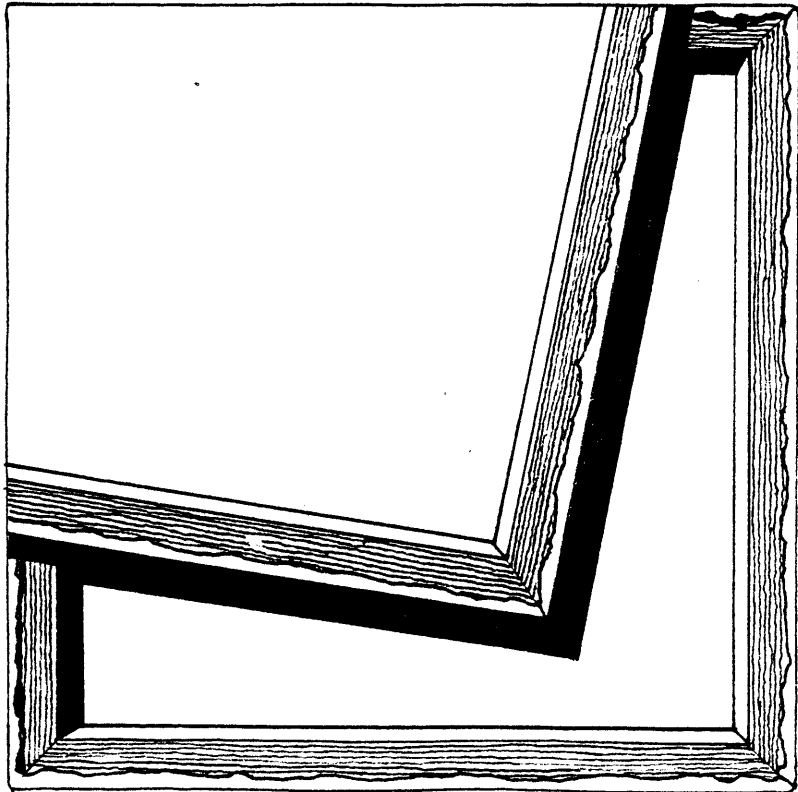
Circuit Board 1
Oil on Canvas, 66"x54", 1978 .
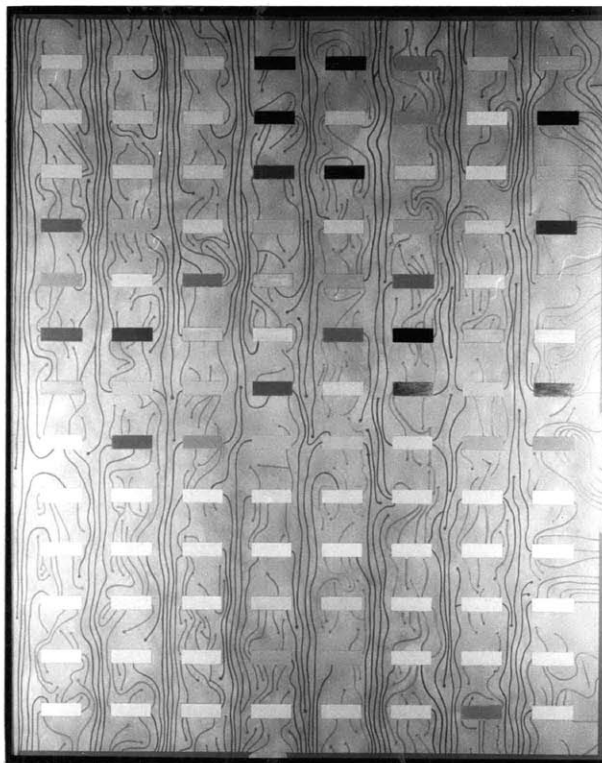
Circuit Board 2
Oil on Canvas, 66"x54", 1978 .
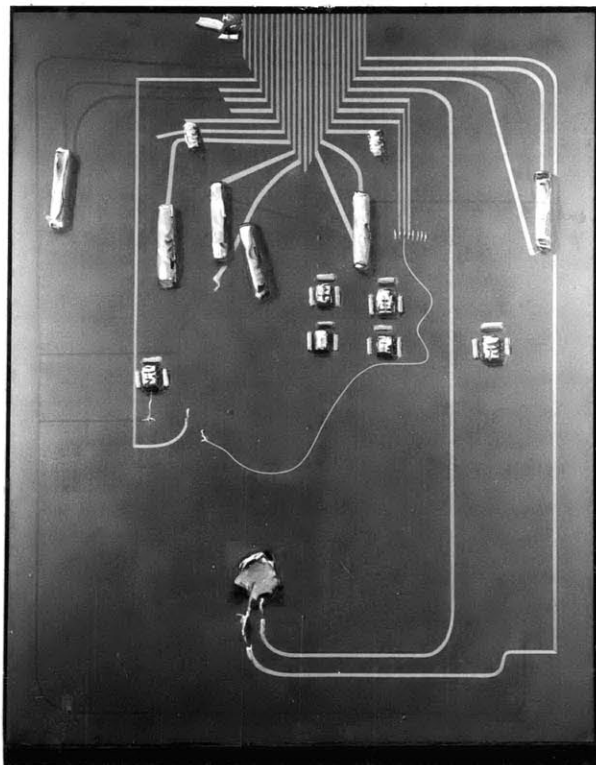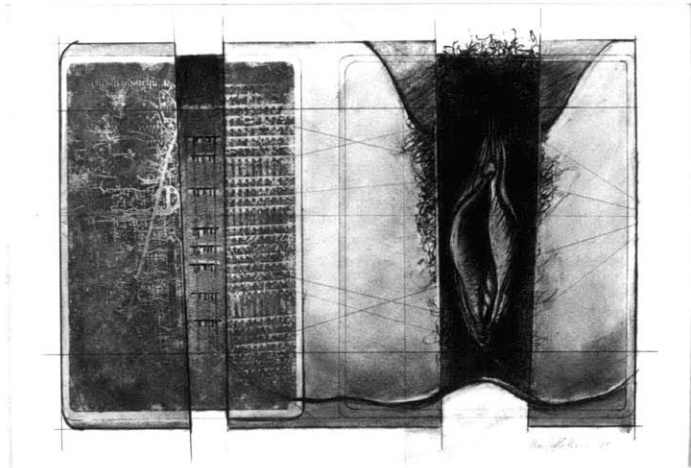
Mechanical Details 1
Oil and Crayon on
Paper
14"x20", 1978 .
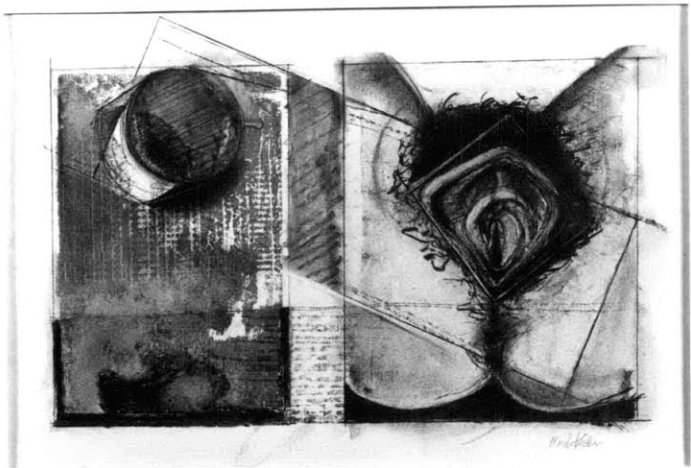
Mechanical Details 2
Oil and Crayon on
Paper
14"x20", 1978 .

Two Principal Engines
Construction Diagram
for Wall Sculpture
Crayon and Ink on paper
11"x14" , 1977 .
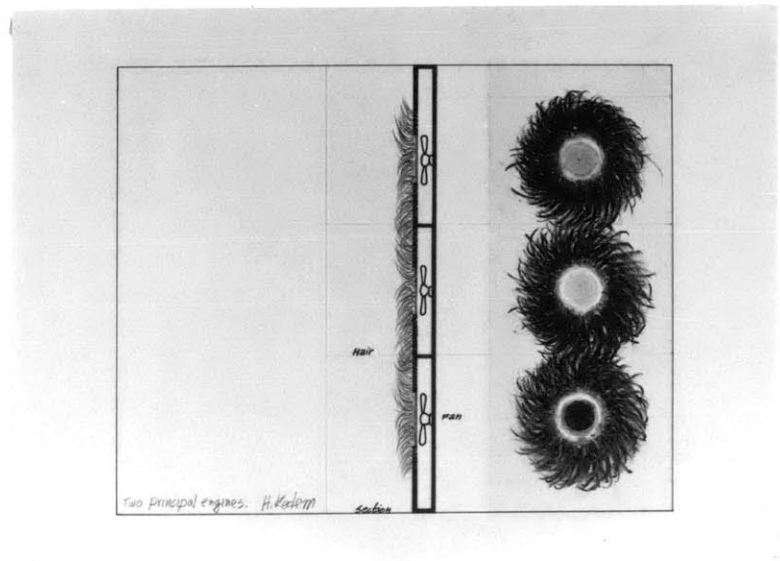
Gangelion
Construction Diagram for
Wall Sculpture. Crayon,
Ink and Collage on paper
11"x14, 1977.

Study for Seagull Sculpture
Charcoal and ackrylic on paper
24"x18", 1977 .

Study for Seagull Sculpture
Charcoal on paper
24"x18", 1977 .

Sound Sculpture , - Model, 24"x12"x48" , 1977 .

Junktion Box. Plan

Site Plan and Statement

JUNKTION BOX - PAVILION FOR CAVS

Dokuments 5   Harel Kedem.
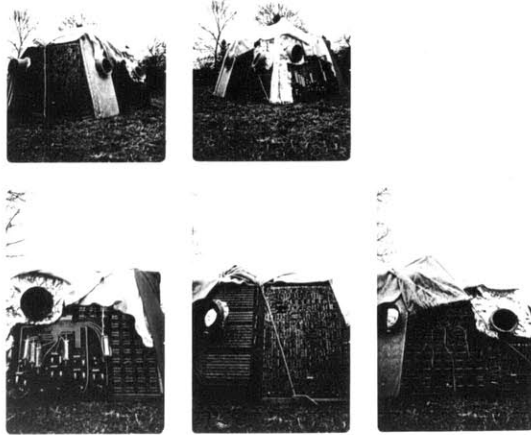
Different views of Junktion Box

JUNKTION BOX - PAVION FOR CAVS

Dokumente 5,   Harel Kedem.

4 ELEVATIONS

To maintain box integrity - discreet access, egress.
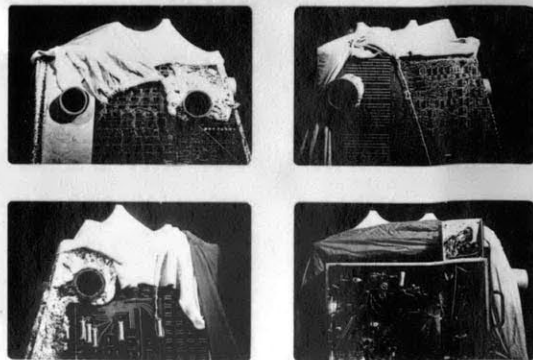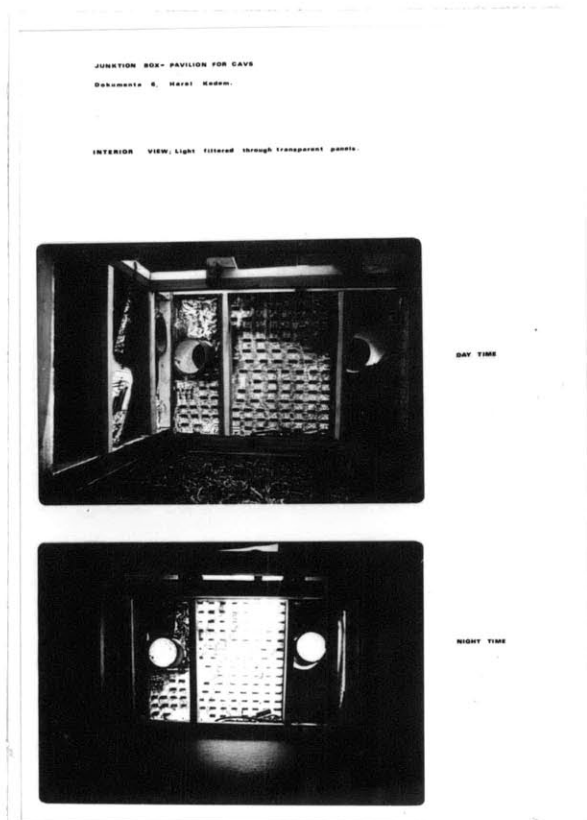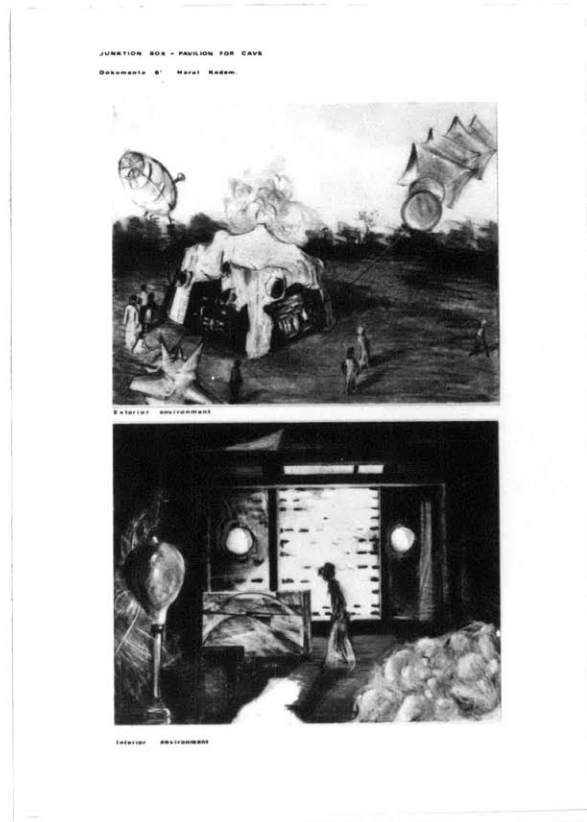
Elevations

Junktion Box

Exterior Environment

Interior Environment

Interior Views

Day Time

Night Time

N O T E S

1- Leonardo Da Vinci - Treatise on Painting, p. 4
2- Ibid
3- Op. Cit. P. 63
4- Op. Cit. p. 161
5- Op. Cit. p. 81
6- Op. Cit. p. 63
7- Op. Cit. p. 143
8- Clement Greenberg - Art and Culture, p. 55
9- Op. Cit. p. 101
10- John Golding - "Cubism" - in Concepts of Modern Art, Tony Richardson
                and Nikos Stangos, ed. p. 60
11- Op. Cit. p. 66
12- Op. Cit. p. 67
13- Op. Cit. p. 74
14- Op. Cit. p. 75
15- Kenneth Frampton - De Stijl - Op. Cit. p. 141
16- Ibid.
17- Op. Cit. p. 149
18- Still Clifford, 15 Americans, Dorothy C. Miller ed. Moma, 1952.
19- Hammacher, A.M. - Rene Magritte
20- Op. Cit.
21- Edward Lucie-Smith -"Pop Art" - In Concepts of Modern Art,
                Op. Cit. p. 226
22- Op. Cit. p. 231
23- Werner Haftmann - Painting in the 20th Century, p. 374
24- H.N. Bialick - A well Known Israeli Poet, his poems were of two
                major themes; nature and the Jewish people.
25- Werner Haftmann - Painting in the 20th Century, p. 348
26- Munari Bruno - The Discovery of the Circle - p. 80
27- "Chochen" was a ceremonial object maid of 12 inlaid precious
    stones inlaid in a flat grid pattern of 4 rows containing 3
    stones each. It was used by the high priest as a sort of an
    'Oracle'.
28- Exodus, Chapter 19 .

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