SOME EXPERIMENTS IN RELIEF PAINTING AND RELIEF ETCHING

by

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PREFACE

The primary purposes of this study are to verbally analyse and interpret the present environmental conditions which are giving birth to contemporary relief expressions, to justify the existence of these expressions, and to comment on my personal experiments in relief painting and relief printing.

Since this study has been chiefly confined to two types of material--discussion of objective facts and subjective analysis, the writer has felt use of footnotes to be unnecessary. A selected bibliography consulted by the writer has been included, and where reference is made to a specific work the source has been indicated by insertion of a number corresponding to the bibliographical listing.

PART I

THE CLIMATE*

> The contemporary artist belongs to an age which is renewing itself. He takes an active part in its transformations, and testifies to them through his works. There is a mystic communion between the visible and the invisible, between the various orders of existence; this communion manifests itself in a creative process, where calculation and lucidity bind action and meditation in a new synthesis pregnant with contemporary moods.
>
> Fredrich Bayl (1)

Today Americans are on the tenacious edge of a new era. One which is witnessing, by analogy, the inauguration of latent buds springing precociously to full bloom. Accompanying the overwhelming splendor of its blossoms is the inestimable power and terror of its thorns. As the era unfolds these two forces unfold with it--launching their unavoidable influences.

A host of scientific sources indicates vigorous, startling changes in store for Americans in the sixties, and these constitute the climate in which the relief surface is being reborn. Some changes have been gaining significance gradually, while others will become conspicuous rather suddenly.

In the next decade industry will intensively exploit automation. Computers, for example, will design other computers, while still others will translate foreign languages into English. Highways will have remote

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*Source material for this chapter is listed in the Bibliography, Part I.

controlled traffic and post offices will use automatic mailing systems, farms--automatic harvesting. Computers will also have a part in aiding physicians with complicated diagnoses. In bio-chemistry, as a result of new techniques for studying DNA, the substance which controls vital activities in all living cells, scientists may gain dynamic new insights into the chemical secrets of heredity, and thereby may be able to control defective hereditary genes in human beings.

New chemicals and materials for every type of industry are being developed marking the near end of austerity in much of the current American designs, bringing a new spirit of aesthetic symplicity.

The promise of plastics as a building material will introduce new shapes for interiors. Strong epoxy resins that can glue steel to glass will replace nails giving faster constructions and tighter joints with fewer materials. Whole panels of prefabricated brick will be available for quick erection. The cold plaster walls of "yesterday" will be replaced by a more comfortable surface having the feel and appearance of rich fabrics. Entire ceilings or walls will glow with electroluminescent light. Central air conditioning, solar heating and infrared ovens will dominate the home scene. And synthetic foods, consisting only of common chemicals (which will be palatable and have abundant nutritional value) will be used widely to relieve the serious world shortage of food.[6]

The rapid pace of communication today will be increased to include the approaching common use of radio and T.V. with stereophonic sound, and world-wide telecasting perhaps by use of earth circling satellites to relay programs from one continent to another. Jet air service will offer

a globe-circling adventure in 54 hours. And counterattack demolition units will be developed for instantaneous operation.

Reaching a new strata of power, advertising now compares with such long-standing institutions as the school and the church in the magnitude of its social influence. The pace at which its stimulas-response patterns is being geared, and the increasing use of abstract symbology has forced its various audiences to sharpen their perceptual senses. And because of advertising, with its powerful influence on American values and conduct, plus the intricate structure of economic abundance bringing opportunity to the mass, the status of the common man has risen to new horizons. With this rise, greater business is generated, new levels of preference in commodities are established and increasing numbers are attending colleges, investing money and taking active parts in politics.[5]

The electronic age has caused fundamental transformations of our world outlook on every possible level of thinking and feeling. Modern man has become more alert, more spontaneous; he finds he must use his sense of touch, seeing and hearing in a different way from that of his ancestors because of that new awareness of the third dimension--space. The revelations of the infinite possibilities of symbols of complex communication in space--machines in space--and man in space are stretching the mind far beyond the level of comprehension to one of awe.

These are but one set of samplings of the obvious constructive influences bringing about the significance of relief surfaces. There is another set equally as impressive as the "blossoms"--it is that of the "thorns."

The man-made world, after five centuries of accelerating scientific discovery and technical development, has expanded so explosively in so many directions that we seem unable to grasp its dimensions or assert warrented authority over its dynamics. Yes, man is aware of this greatness of space, but at the same time, the population explosion has made him aware of "the crowd" and the growing lack of space. The wild growth of our cities, in physical mass, in population, in complexity of human relationships makes them seem endowed with an independent life beyond human control. We have disrupted the atom and soon we will spear the moon, but, there is as much apprehension over the unknown unpredictable consequences that are released as there is joy in the vistas of what life can become.[3]

> Science, in a sense, has been the angel with a sword, evicting us from the smaller, friendlier world in which we once moved with a confidence born of familiarity, and plunging us into a bigger, alien world where our unaccustomed sensibilities are forced to cope with a formidable new scale of events.[3]

As the modern age unveils its new found dignity and energies, amid the rapidity of pace and the fluidity of values, modern man experiences a mounting, acute sense that this contemporary environment has fragmented him. Much of the best recent art indicates this split in man and the separation of his mind from the rest of himself.

> The impulse to recover a lost psychic wholeness, to give the irrational its due, whether in man or in nature, is deeply embedded in contemporary sensibilities.[3]

Man is turning inward to question his attitudes and evaluate his single worth in this new era. Simultaneously, man is turning outward in

a desperate search to comprehend the complex of tensions that control his fate.

With these dynamic compulsions and the opposing forces that are creating them, I believe it is inevitable that the relief surface should become a vital mode of expression. Because of his new realities, man's spiritual needs are in search of a new, adequate art form having something more than a single painting or a single piece of sculpture. The relief surface, in my opinion, has justifiedly arisen to meet these unique needs--in a time of paradoxy, promise and pressure.

PART II

FRONTIERSMEN*

Among other recent shows, the New Media - New Forms Exhibition at the Martha Jackson Gallery in June of 1960 brought together a number of works by artists who have experimented with unconventional materials. The show revealed numerous works, many of which were bordering between painting and sculpture, and all more or less "belonging" to a new art label, rather improperly termed Neo-Dada.

> Neo-Dada appropriated from Dada some of its iconoclastic spirit--its rejection of all preconceptions about what art was supposed to be. However, unlike the Dadas who carried on an organized insulting of modern civilization and who used art as a part of their "shock treatment", the Neo-Dadas are accepting of their condition and are primarily interested in expressing a heightened sensitivity to it.
>
> Sandler (16)

With the unlimited artistic possibilities inherent in Neo-Dada, it is no wonder that many young artists have been attracted to it. Some are very poor artists or dilettantes, while others are very talented ones who stand out among the scores of those who are interested in new media and new forms.

The relief surface makes an impressive claim in this category of works created by unconventional methods and materials; the serious fron-

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*Source material for this chapter is listed in the Bibliography, Part II.

tiersmen who created them are certainly no less significant.*

THE FIRST OF THESE GROUPS IS THAT DEALING WITH HEAVY, MASSIVE RELIEFS, USING SAND AND CEMENT.

Antoni Tapies, a Spanish artist, probably does the most consistently massive reliefs, using a mixture of sand and cement, with a limited palette of muted earth colors. He opposes intensely contrasted areas of varying textures to great, dead, cold spaces. Often specific places are scratched through providing the "necessary accidents" of his compositions. His expressions are generally subtle, architectonic and simple. Similar to these effects and techniques is the work of Emil Schumacher.[1]

Another Spanish painter, Cuixart, is in striking contrast with the work of Tapies. Cuixart's "necessary accidents" become a prolific display of signs and patterns with a more baroque feeling. He uses resins and sand-cement mixtures with the inclusion of such alchemy as the use of metallic powders in gold or copper. Some of his reliefs are very low, while others are as pronounced as those of Tapies.[11]

Enrico Donati and Jean Fautrier produce rather massive works with thick impastos, ridges of matiere and sandy surfaces. The palette knife and the brick mason's trowel are vital tools to them, affording them large simple shapes. Graffito is used often by both artists.[9]

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*Let me say here, that the arbitrary term "Neo-Dada" was originated by the critics and not by the artists, and, on several citings in this chapter of earlier frontiersmen and their works, it may be noted that the label was not in popular use at that time.

The reliefs of Dubuffet are heavy and massive also. He projects his personal images of savagery and primitivism with sand-cement mixtures, however, he also builds up some of his lighter surfaces with materials such as crushed aluminum foil, or paper, tar, or even butterfly wings--gluing them to the "canvas." Very often his works have extensive scratching.[12]

The heaviest reliefs in this first groups are those done by Robert Mallary. Huge chunks of cement, sometimes six or seven inches thick resembling pieces of sidewalk, have often been combined with brick or flat iron bars and mounted on a suitably heavier surface. He is concerned primarily with tenement walls, "cityscapes" and monolithic images.

GEOMETRIC AND FREE FORM CONSTRUCTIONS USING WOOD COMPRISE THE SECOND GROUP OF RELIEFS

One of the first frontiersmen in this group is Ben Nicholson. His geometric reliefs are very precise, simple and low, employing more typically the perfect circle, the square and the rectangle. Some shapes are in "relief," others are in intaglio, and seem to be executed in thin wood or compressed masonite. Nicholson has been creating his reliefs of this nature since 1934. So in a sense he is not as immediate as the other frontiersmen discussed herewith. But his foresight was so precocious and his influence so widespread that mention of him could not be bypassed. Following closely in Nicholson's basic style are two contemporary artists, George Ortman and the Britisher, Victor Pasmore--both creating what they call, "construction-collages". Agam, Tomasello and Otero reiterate influences of Ben Nicholson adding their own unique inventions to the style.[14,9]

Agam is interested in movement. Lately he has produced what he terms "kinetik paintings" on wood panels which are fluted vertically with triangularly faceted ridges--these change color and tone as the viewer passes from one side to the other. Tomasello, on the other hand, constructs pure abstract relief paintings, employing principles of "reflected" color. His simple geometric shapes are suspended from the background surface by short metal or wooden rods. The entire composition is painted a flat white while the underside of his suspended shapes (usually squares) are painted in color, thus, reflecting the hues from the bright background. Alejandro Otero, a Venezuelan artist, has been exploring a non-objective style that produces an expressive play between geometric areas of flat color, juxtaposed with exactly calculated linear patterns in relief. He refers to his work as "color rhythms" which consist of materials such as duco on plywood.[18]

Hans Arp, like Nicholson, has been involved with relief work for some time. His compositions in wood are accomplished in simple free form shapes as contrasted with pure geometry, although he, too, upholds the crisp, precise qualities in his constructions. Some are solid surfaces with relief areas built-up--others are solid surfaces with the design cut out causing space to be the complementary relief.

Less geometric in composition and more involved with three dimensional forms, either mounted on a flat surface or created in the round, are the works of Louise Nevelson. A multitude of wooden "mill ends" from factories to carpenter scraps have been collected and utilized in shelf-like, box arrangements of different sizes. Each box is filled with

infinitely varied yet interdependent forms. Most of her compositions are painted uniformly black, white or gold.[16]

IN THE THIRD GROUP, THE EMPHASIS IS ON COLLAGE-TYPE FRAGMENTS OF PAPER AND FABRIC.

Akin to Nevelson's box-like assortments are the "combines" of Robert Rauschenberg. The latter uses less wood and more collage elements such as pieces of advertisements, thin metals, and splashes of paint to build up his relief areas. His influence, no doubt, came from the German artist, Kurt Schwitters, who is the first pioneer in this style of expression.[16]

> For I could not see the reason why old tickets, driftwood, cloak-room tabs, wires and wheel parts, buttons and old rubbish found in the attic and in refuse dumps should not be a material for painting just as good as the colours made in the factories.
>
> Kurt Schwitters (17)

There are many who are interested in random fragments of wood, metal and paper, but for Manolo Millares and Alberto Burri, fragments of cloth fabrics are more intriguing. Millare's latest striving is concerned with enhancing the dramatic effect of black and white by use of pieces of coarse sacking, torn, stiffened with whiting, and resewn with cords which create gaping holes, giving explosive energies to his canvases.[11]

Burri is less brutal with his cloth and burlap, "draping" arrangements which are glued to the canvas, but dramatic effects are still obtained. On occasions Burri uses large wood veneer squares with his material.[11]

GROUP FOUR CONSISTS OF RELIEFS EXECUTED IN METAL.

With metal and a multitude of tiny industrial scrap products, Zoltan Kemeny meticulously evokes natural rhythms and patterns of nature. His compositions have the appearance of precise microscopic and sub-microscopic world of textures and patterns of stress in molecular distribution. His materials include such items as a multitude of ball bearings and bolts, sheet metal and tubing.

Two other sculptors have been concerned with metal reliefs--Pietro Consagra and Gio Pomodoro. Consagra's emphasis is on planar-spatial relationships. He avoids a purely formal exploration of spatial problems and gives to "sculptural expression" a new emotional power by modeling linear reliefs in very heavy metals such as bronze and lead. Many areas fold into other areas with crisp, direct lines. Conversely, Pomodoro does not model, but cuts, incises and engraves the surface of his metal slabs (usually black lead, bronze and iron), as if he had "an intuitive physical understanding of brute matter" (Sam Hunter).[8]

In the relatively new field of relief printing, there are several very successful printmakers who have been exploring with various approaches to the problem.

Pierre Courtin of Paris is considered by many people there to be the most eminent engraver of today. From a technical point of view "engraving is a tactile art", says Courtin, and herein lies much of the explanation of the remarkable textural and sculptural quality of his prints. "Some of his prints have produced a strikingly embossed and patina-like surface via painstaking engravings on zinc. His paper has to

be treated with utmost care, and his plates are bitten very deeply."[20]

Etienne Hajdu is an artist who has several ideas in common with Courtin. Hajdu is more of a sculptor who obtains harmonious effects "en relief" in his engravings. He cuts shapes from a zinc plate and prints them, uninked, in such a way as to obtain an intriguing white on white embossed printing design. The German printmaker, Rolf Nesch, has developed a method called metal graphic, in which, he too, cuts shapes of metals (and wires) and solders them on the surface of the plate. Nesch builds up his relief like a montage which may have several conspicuous layers for a printing plate.[20, 13]

> Instead of the etching needle and the graver, his tools are shears, wire cutters, and a soldering iron. These plates have a strong relief, and the resulting embossment is exploited a great deal by Nesch.
>
> Peterdi (13)

Because of this unusually deep relief, there is less control in the printing process, and therefore his editions are small--seldom over ten prints in each.

Other significant printmakers who have experimented in various ways similar to the above-mentioned are Stanley William Hayter, Paolo Boni, and Gabor Peterdi.

In conclusion of this chapter, it may be said that these frontiersmen are but a few of the many who are involved with relief paintings and prints. Their expressions take them to foreign materials such as the aforementioned paper, industrial scraps, cement, and plastics, woods, resins and glues--and these in turn take them to such unconventional tools as welding and soldering units, propane torches, spray guns and shears,

kilns, trowels and electric drills and sanders.

An artist, influenced by the pulse beat of his own time, strives to impart his heightened perceptions to the public. According to the forces influencing him, he chooses his medium and his materials for the values they have towards his ultimate expression.

> I think, not only in the arts, but also in many other fields, an important change is taking place, now, in our time, in the frame of mind of many persons.
>
> It seems to me that certain values which had been considered for a long time as very certain and beyond discussion, begin now to appear doubtful, and even quite false, to many persons. And that, on the other hand, other values, which were neglected, or held in contempt, or even quite unknown, begin to appear of great worth.
>
> Dubuffet (12)

of contact cement to the top edge of the wood. At first glance, this project may appear to be a simple task, but hidden difficulties of aligning and gluing made it very tedious to assemble. A rubber base paint, which is soluble in water when wet and water washable when dry, was used on both large panels, the wooden blocks and strips. Polymer tempra and liquitex color was added to selective top areas of the blocks. On the underneath side of one peg-mounted block, brilliant yellow and orange stripes were painted--this produced a subtle, opalescent reflection on the white background. By way of a suggestion, let me say here that if one plans to execute a wooden relief construction, it may be well to consider using an oil base paint particularly if the wood has not been pre-kiln dried. Although the rubber base paint has many attractive features, under these conditions, it does encourage uncontrollable warping where water content is high.

STRIAE, the second relief construction has a more free form shape, employing five relatively large white pine boards of two thicknesses. Each of these boards was cut to desired shape by a power saw and glued to one or two wooden blocks, having two different thicknesses. All five units were then mounted by contact cement to a large primed panel of ¼ inch thick masonite. A linear pattern of channels was cut out from each shape by means of a woodcut gouge and V-tool. The relief and intaglio areas were deliberately scorched and burned by a propane torch with a pencil flame attachment. Certain areas were then painted with polymer tempra and an oily walnut wood stain and slightly sanded.

On today's market, there is a multitude of paste type products

which have unlimited possibilities for use in relief painting. I have experimented with several, finding that such substances as wood putty, plaster, water putty, Elmer's glue, aluminum paste, modeling paste, cement, and fiberglass filler are among the most dependable, workable (and often interworkable) products used for relief painting. It is interesting to note that although the pliable paste characteristic is indigenous of all products in this category, each produces its own set of specific characteristics to the degree that an artist could not substitute one product for another without incurring a noticeable difference in effect.

In the two paintings LANDTRACK and COMPOSITION NO. 3 Durham's Rock Hard Water Putty was applied with a large pallete knife and paint scraper to primed upsom board panels. In the former painting, small, flat wooden sticks were permanently pressed into the semi-wet putty. In the latter painting, a metal rasp was pressed and removed from the hardening putty, leaving only its impression. Both were allowed to dry thirty minutes before polymer tempra was applied to develop each painting. This inexpensive type water putty comes in a powdered form, mixes with water to any concentration desired, and drys rapidly with a coarse texture. Immediately after drying it can be sawed, chiseled, sanded or polished.

Another relief medium which is as workable and fast drying as water putty is liquitex modeling paste, a prepared acrylic polymer putty. Its texture is not so coarse as the former, but its resilence is remarkable. This white, thick paste was used in the painting, COMPOSITION NO. 11 by applying it in calligraphic-like strokes with a plastic squeeze

bottle (similar to the familiar plastic mustard containers). At the partly dried stage, scraps of a routed zinc plate were pressed into the paste and allowed to become affixed to the upsom board surface. After the pastewas dry, the composition was painted with a rubber base paint.

The low relief in **CASCADE** was obtained by squeezing Elmer's glue, from its plastic container, directly on the primed upsom board panel. Because of its more liquid state than materials previously mentioned, it was found to be difficult to control, even when working layer upon dry layers; consequently a high relief was not attempted via this medium. Dry pigments, egg emulsion and polymer tempra were used over the dry glue relief as a wash glaze of dark hues.

Of all the substances I have used in building up surfaces in a relief painting, a fiberglass filler is the most difficult to handle, and yet, one of the most fascinating. I used King Nylon Reinforced Plastic Filler--a product purchased at an auto parts supply company, and one used primarily to fill in small unmalleable dents in the fenders of wrecked automobiles. It is a tenacious, semi-transparent substance that must be mixed with a water-like, chemical hardener. When mixed, almost instantly, the fiberglass becomes warm and begins to harden. This characteristic dictates fast, preconceived action on the part of the artist. In less than seven minutes, the filler is rock hard and ready to be drilled or sanded to a feather edge.

Using a large flat piece of metal as a squeegee I created a very low relief of various textures in my painting, BETWEEN, employing such techniques as graffito and fabric impressions, and incorporating a paper

towel in the wet fiberglass. Selected areas were sanded and the entire composition was painted with polymer tempra and liquitex media. The painting was executed on a mounted plywood on plywood board.

In the painting THAWING a relatively high relief was achieved by use of a large quantity of fiberglass applied in bold strokes to an upsom board panel by a tablespoon and a cake spatula. The area was then painted with a combination of rubber base paint and polymer tempra.

TOLEDO's relief areas were primarily formed by modeling plaster and Elmer's glue into free form shapes which were placed on a temporary surface for drying. Soon after, they were pulled from the background, sanded and glued to the permanent primed upsom board surface. Water putty was then introduced in various areas; after drying and sanding, I painted the composition with polymer tempra. The metallic effect was achieved by mixing LePage glue with bronze powder and applying it to the surface with a soft brush.

MORNING is a composition on primed masonite using a light, air-blown, plastic packing excelsior glued by a solution of Elmer's glue, water and polymer medium. After drying, linear "scratches" were cut into the built-up areas, and aluminum foil was glued in specific places. Both liquitex and rubber base paints were employed.

RELIEF ETCHINGS

THE STONES OF KATSURA, relief aquatint.

The copper plate for this print was composed of five individual

shapes cut, by metal shears, from a thinner piece of copper sheeting. Each shape was hammered to levelness and beveled, then glued in position on the plate by contact cement. A burnt umber Kimber ink and a black Graphic Chemical ink were used. The pre-dampened paper is a white Teton text from Lee's Paper Company. By building up an area on the plate as opposed to the natural etching down into the plate, the reverse property was obtained: the printed shapes became intaglio, while the remaining space became the relief.

EBBING, fiberglass relief.

As in the desired reverse effect of relief noted in THE STONES OF KATSURA, the same technique is used for this print. The plate was actually a thin piece of copper sheeting cut and beveled, with a thick application of fiberglass stretched to a linear pattern. After drying, the experiment was sanded, inked and printed on a thick, dry Bermer paper with black Graphic Chemical ink.

EDEN, relief aquatint.

This print is made from two copper plates. The entire design, with the exception of the horizontal bar in relief, was executed on one plate by a hard ground etching and three stages of aquatinting. The bar was deeply etched in the second plate by a two to one solution of nitric acid. The unexposed areas were protected with a heavy coating of asphaltum. The main plate was inked with black Graphic Chemical ink and printed on a heavy pre-dampened Bermer paper; immediately following, the relief plate was printed. Perfect registration was achieved by fitting the first plate's impression edge on the paper to the second

plate resting on the press bed.

AND THE WILDING THYME BENEATH, lift ground relief.

Upon a light, even, fine grain aquatint, a lift ground using a heavy application of casien paint and a thick coating of liquid hard ground, respectively, established the basic design of this print. The plate was then protected with a heavy coating of liquid hard ground, except in areas of the desired relief, and introduced to a heated bath of two to one nitric acid solution for several minutes. A second, coarser aquatint was then etched in certain areas. The plate was inked with a combination of inks and oil paint, and printed on pre-dampened Bermer paper.

STRATUS, multi-process relief etching.

This is a print with various etching processes on a single copper plate. A hard ground line etching and a coarse aquatint were executed as the first stage. A soft ground of fabric and aluminum foil were then etched, followed by several free engraved lines. In the fourth stage, the relief areas were bitten by a stronger solution of acid than that used in previous stages. Lastly, the second, finer aquatint was etched, giving a completed depth to the print. Pre-dampened Rives paper was used with a black Graphic Chemical etching ink.

IRRUPTUS, power tool relief.

From the photoengraver's scrap zinc plates, I secured a rectangular plate with a commercial hard ground on both sides. With the edge of a vibrating power sander, using coarse sandpaper, I broke the hard ground with the intention of sanding off the entire top surface. From the first

few abrasions a very unusual pattern began to develop on the plate, consequently, I decided to design directly with the power tool. The plate was printed, revealing certain areas that would lend themselves to a raised surface. The plate was then covered with asphaltum leaving the relief areas free to be bitten. By mistake the zinc plate was placed in the two to one solution of nitric acid used for copper plates. It went unnoticed for several minutes, at the end of which time a mild irruption took place--chemically breaking the gound in small places. The plate was immediately removed, and after some deliberation, it was printed. Graphic Chemical ink was used on Rives pre-dampened paper.

CONCLUSION

My personal works have been experimental and those discussed in Part III are but a segment of my intentions and expressions in the relief form. The technical aspect of my paintings and prints has been intentionally stressed for reasons previously stated. However, some mention of the aesthetic wellspring from which my inspiration was drawn suggests acknowledgment.

For several years, I have been vitally interested in the pristine, primeval elements of the earth, with its vast, natural disasters--earthquakes and tidal waves, fires and volcanos, glaciers, hurricanes--and the earth's building back, stage by stage, to richness. I have been impressed time andagain with the subtle and fierce powers of water, wind and ice, which for billions of years, have shaped our land--pouring down slopes, sculpturing channels and battering the headlands. The mountain's back is striped from their lashings and the river rocks are stripped of their mosses because of the rage of these powers.

Man, too, making his mark with plow and ax, has bulldozed and hacked at the earth, for good or for evil, digging and gouging upheavals of treasures in their furrows and engraving magnificant patterns in the acres.

The pregnant resources of grasslands and thickets, plains and hills, cliffsides and shoresides--each, with its own magnetic character has kept me involved with its being and its continual creation; with every new vantage point, in each strange season, they evoke new meanings which I must consider.

And live space: in terms of millimeters and miles, lattitudes and light years--in terms of our personal solar system and that of the infinite millions of others which be strangers to us--these increase my wonderings.

With the growing populace pressing its presence upon us, and with the onslaught of changing private and public values, I am caught in the current of concern for man's relationship to man and to the microcosm and macrocosm of a vaster universe.

These are some of the known forces that permeate my thoughts as I paint, consciously and subconsciously directing my conversation with the canvas.

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