

A black and white photograph of a wooden ceiling with large, white, curved architectural elements. The wood grain is prominent and runs horizontally. The white elements are large, curved, and appear to be part of a modern architectural design. The lighting is dramatic, with strong shadows and highlights.

arts & architecture

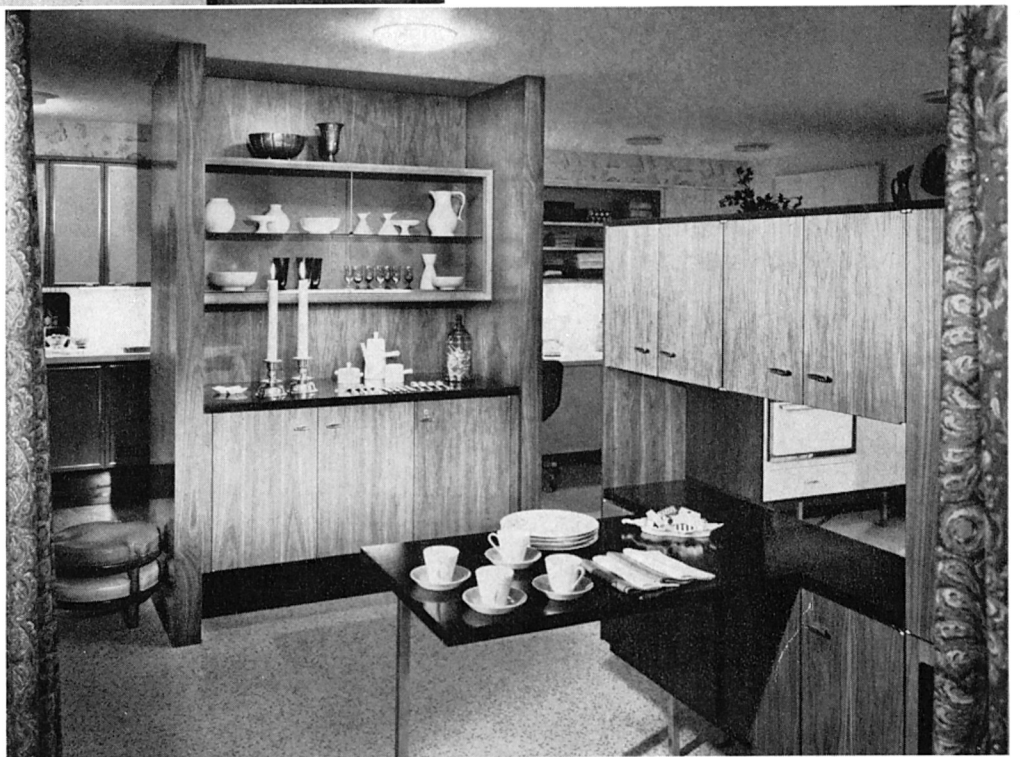
PRICE 50 CENTS

JUNE 1964



CUSTOM KITCHENS BY
St. Charles

Mr. Architect...
**IF YOU'RE DESIGNING
 YOUR OWN KITCHENS**
*You're working
 too hard!*



Let Custom Kitchens by St. Charles—exclusively specializing in quality kitchens—prepare your detailed floor plan on your vellum or ours with elevations and working drawings for job use. Ink perspective on hard board for you to present to your client for both new or remodel jobs.

St. Charles features by far the widest range of sizes, styles, colors and services. Your choice of real woods: walnut, oak,

cherry. Your choice of fruitwood, nutmeg, antique white finish on white birch. Styling: provincial, traditional, classic, contemporary, high-style modern. Also baked enamel in 18 decorator colors, smooth or textured steel. Visit our display rooms. Let us show you how our Architect's program can cut your work, enhance your service to your client, and let you make more money.

CUSTOM KITCHENS BY **St. Charles**

LOS ANGELES: 8660 SUNSET BLVD. • OL. 5-7812

**ST. CHARLES KITCHENS SELECTED
 FOR
 CASE STUDY APARTMENTS #2**

Merit Specified by Arts & Architecture

In Next Month's issue of Arts & Architecture

Human Needs in Housing—A Conference that
Succeeded by Failing

Space-Frame City by Yona Friedman

West Coast Architects II: William W. Wurster
by Esther McCoy

arts & architecture

Please enter my subscription to

NAME (PLEASE PRINT)	☐ 1 year —\$5.00
STREET ADDRESS	☐ 2 years—\$9.00
CITY	☐ 3 years—\$12.00
STATE	☐ check enclosed
ZIP #	☐ send bill
NAME OF YOUR FIRM	
TYPE OF BUSINESS	TITLE OR OCCUPATION

These rates apply to subscriptions to U.S.A. and Possessions only.
Elsewhere: one year \$6.50, two years \$12.00, three years \$15.00.



BUSINESS REPLY MAIL
FIRST CLASS PERMIT No. 49323, LOS ANGELES, CALIF.

arts & architecture

3305 WILSHIRE BOULEVARD
LOS ANGELES, CALIFORNIA, 90005



Cover: Culver City school auditorium by Flewelling & Moody. Photo by Julius Shulman.

EDITOR: David Travers

EDITORIAL ASSOCIATES

Amir Farr
Dore Ashton
Peter Yates
Esther McCoy
Susan Jonas
Alfred Auerbach

LAYOUT

John Follis
Frederick A. Usher, Jr.
Ken Chapman

EDITORIAL ADVISORY BOARD

John Entenza
William Wilson Wurster, F.A.I.A.
Walter Gropius, F.A.I.A.
Nathaniel A. Owings, F.A.I.A.
Richard J. Neutra, F.A.I.A.
Welton Becket, F.A.I.A.
George Vernon Russell, F.A.I.A.
Maynard Lyndon, F.A.I.A.
Victor Gruen, A.I.A.
Marcel Breuer, F.A.I.A.
Paul Thiry, F.A.I.A.
William L. Pereira, F.A.I.A.
Harris Armstrong, F.A.I.A.
Robert E. Alexander, F.A.I.A.
John Rex, F.A.I.A.
A. Quincy Jones, F.A.I.A.
Whitney R. Smith, F.A.I.A.
Gregory Ain, A.I.A.
Pierre Koenig, A.I.A.
Ira J. Bach, A.I.P.
Harry Seidler, A.R.A.I.A.
Konrad Wachsmann
Paul Rudolph, A.I.A.
Craig Ellwood
Isamu Noguchi
Finn Juhl
George Nelson, F.A.I.A.
Gyorgy Kepes
Arthur Drexler
Garrett Eckbo
Edgar Kaufmann, Jr.
Dorothy Liebes
Harry Friedland
Herbert Matter
Edward Frank, A.I.D.
Harold W. Grieve, A.I.D.

PRODUCTION MANAGER

F. Stuart

CIRCULATION MANAGER

Paula Jones

ADVERTISING REPRESENTATIVE

Arden E. Roney & Associates
580 South San Vicente Boulevard
Los Angeles, California 90048
651-3930

149 California Street
San Francisco, California 94111
981-0848

5 East Erie Street
Chicago, Illinois 60611
787-3717

317 Stephenson Building
Detroit, Michigan 48202
875-7978

200 Park Avenue, Room 345
New York, New York 01017
986-0625

208 Almeria Avenue
Coral Gables, Florida 33134
444-8326

751 Main Street
Waltham, Massachusetts 02154
889-3475

arts & architecture

CONTENTS FOR JUNE 1964

ARTICLES

The Concept of Density and the Sameness of All Matter by Gosta Edberg	20
Design for the Pedestrian by Robert Zion	26

ARCHITECTURE

House in Australia by Harry Seidler and Associates, architects	14
Exhibition Hall by Meiji Watanabe	16
House by Rick Farber and Associates	18
The Derivation of Surface Responses to Selected Environmental Forces by Ralph Knowles	21
Four-Level House in Florida by William Morgan, architect	24
Country Club by Alper and Alper, architects	30

ARTS

A Colloquy of Sculpture	6
Art	8
Books	10
Light Mural by Michio Ihara	28

FEATURES

Notes in Passing	13
New Fabrics for Herman Miller by Alexander Girard	29
Merit Specified Products for Case Study Apartments No. 2	32
Reader Service—Product Literature & Information	35

ARTS & ARCHITECTURE is published monthly by Arts & Architecture, Inc., 3305 Wilshire Boulevard, Los Angeles 5, California. Established 1911. Second class postage paid at Los Angeles, California. Price mailed to any address in the United States, \$5.00 a year; to foreign countries, \$6.50 a year; single copies 50 cents. Editorial material and subscriptions should be addressed to the Los Angeles office. Return postage should accompany unsolicited manuscripts. One month's notice is required for a change of address or for a new subscription. The complete contents of each issue of ARTS & ARCHITECTURE is available to subscribers in a Microfilm edition.

A COLLOQUY OF SCULPTURE

PETER YATES

My longtime correspondent Ralph Stackpole, Mrs. Stackpole, and their son, the well-known photographer Pete Stackpole, stopped for an overnight visit; they were driving north from Tacambaro, Mexico, where the senior Stackpoles had been staying for three months as guests of a friend. After the war, Ralph and his wife returned from his native San Francisco to take up residence in her native Auvergne, the high, rocky plateau country of the Puy-de-Dome in central France. We read so much about the ugly, unwanted American, who drags his suburban provincialism with him like a house-trailer into every country of the world, it's a pleasure to know the other sort, who, like Gertrude Stein, travel in another country as if they were not foreign.

Ralph himself, in the many letters of our correspondence, has abundantly made clear his companionship with the stone-housed community of Chauriat, where he plies his chisel as an amateur sculptor. He sent me years ago a photograph of Chauriat, from the air, so settled in its place that it has spread scarcely a dozen houses outside the sharply-outlined oval formerly enclosed by the town wall. This is not the chateau country of the tourist; the ruins on nearby high outcrops were real keeps, dating from the middle ages, brutal defenses from which men emerged to do battle and pillage. The native heroes are Vercingetorix, who stood off the Romans, and his Gaulish partisans never subdued among their rocks.

After breakfast, Ralph sat me down to read poems by the local school-inspector, whom he ranks among the best poets of France. Not of Paris. I have good hope of seeing some unpublicized parts of France this summer, when Ralph guides us from Paris to Chauriat and thence to Lausanne.

Then we went outside, where Pete Stackpole had set up two carved posts, some of Ralph's sculpture from the three months at Tacambaro. We looked over his drawings, photographs of his stone sculptures; and Mrs. Stackpole showed a small tapestry and photographs of the large tapestries she sews with thread from Aubusson, not far from Chauriat. The similarity of large abstract shapes in her designs and his declares spiritual communion, but

each is independent.

One like myself who handles rocks, knowing the feel of their shape, fitting them together mortarless in terrace walls or laying them for steps, who delights in the occasional *found* sculpture, will have always a feeling of withdrawal in the presence of the made carving, which defaces and deforms rock or wood to make it appear what it is not. Marble is another matter; one thinks of it as stone but not rock. I feel also, I must confess it, a suspicion of the large rock-resembling bronze lumps of Henry Moore. I ask why he has abandoned stone, such as he formerly carved in these designs, to make instead bronze effigies of rocks. Bronze is to be shaped, worked, rounded, poured; stone is to be carved; rock is to be cut, not too much.

Moore's magnificent bronze *Bone Figure* enlarges the small, common castoff to an heroic appreciation, an elemental, visual revaluation of bone, humanely large. Bronze cannot enlarge a boulder. Moore's lumpish pregnant women, his family groups, his helmets, his little hand-size pieces speak the language of bronze, as Epstein spoke it. His *Standing Figure* projects a vital essence of life through bronze.

I rebelled against Rodin, as I have rebelled against Wagner, after admiration. One waits too long among these amorous curves for climax. Eroticism lacking the sharpness of individuality, the personality of human difference, becomes a symbol of emotion, the sentimentally mythologized religiosity of De Rougemont; Dante would have been done in by it, if he had not ventured the Inferno. Freud found leverage from the same region to externalize this torment. Eroticism is the amoral sofa-cushion of the bourgeois, the secret dream-passion of Madame Bovary and Swann, in which no one really lives and no thing really changes; it is a perpetual memory of imaginary lives, fantasy-bound by theories. Marble and bronze in the erotic aspect are made one medium for modeling, amorphous, an imaginative cloud or sludge. The 20th century mythologies of Freud, Jung, De Rougemont, and so many others — the silly psychologist who invented an entire book to superimpose a fiction upon a motive of the Second Symphony by Gustav Mahler — resemble the half-formed head or shape emerging from unshaped matter which was so favorite a theme of the late-romantics, who lived and died fervently a positive or a negative estheticism.

No, I can admire, even where I find no grip for knowledge, but I cannot pretend thinking where thought is not wanted, where the artist symbolically insists on my agreement. Symbolism of this sort, taken in reverse, is the rationale of the Napoleon-cult, the Robespierre-passion, imperialism and the White Man's Burden, the Hitlerian mythology, the Wagnerian religion, the fashionable beard of the fashionably verbal artist.

I have had for these reasons a strong feeling for my friend Ralph Stackpole, who sent me his photograph, white-haired, squatting to chip a stone construct of rock that is rock. Now he showed me other of his sculptures, not tone-poems insinuated in a shade of sculpture but stone shown forth as stone, wood as wood. His drawings, like Henry Moore's, are sculptured.

Here, cantilevered upon a base which exists only to support it, a thick stone floats, sharp-edged and wavering in form like a leaf; and from this rises a thick vertical plane — stalk, stamen, or what an archeologist would call a stela — abstractly incised by a design sufficient to divide the work of art from that of accident, but no message — no imitative applied decoration as of *art nouveau*. The major portion of our visual art at present is no more than *art nouveau* translated, self-consciously self-admiring in a novel image. A stela is of course a vertical rock tablet, carved to bear, graphically or verbally, a formalized statement, record, proclamation, message. This, leaf and vertical, eight feet high, does not represent but is — a celebration in rock. No one need photograph this sculpture against the heath to impart drama; the shapely rocks will do as well in a garden. The sculpture may enter a museum but does not belong there. Nor does it impose itself like an act of mind against the world; like the boulder in a Japanese pool, of water or of sand, it has place.

Difficult for me therefore to estimate whether Ralph Stackpole is or will be, for other eyes and stone-handling hands than mine, the superb sculptor that I see him. In the presence of work by the great stone-cutters, of Egypt, the Doric temple-builders, the makers of Stonehenge, the Olmec and their many-tribed descendants, his work would not be embarrassed. Found, unexplained, at a long distance in time, no cultural theory, only an immediate

MOST ARCHITECTS ARE CONCERNED ABOUT YOUR HEALTH AND COMFORT



THAT'S WHY . . . along with other modern and advanced equipment, you'll find more and more Ogdan Water Purifiers specified for new homes or apartments.

THE ARCHITECT . . . who specifies an Ogdan Purifier is thinking of you and your family by providing spring fresh drinking water right from your faucet. No more chlorine, algae, rust, dirt or bad taste . . . and no bulky, bottled water dispensers. The Ogdan Water Purifier is the latest addition to health and pleasure in your home.

There is an OGDEN WATER PURIFIER to fit your every need.

OGDEN FILTER CO., INC.
4214 SANTA MONICA BLVD., LOS ANGELES, CALIFORNIA
MANUFACTURERS OF PURIFICATION EQUIPMENT SINCE 1929

response could be derived from it. If Sir Herbert Read actually wishes to dispense with "culture," here is an example of the culturally unsponsored artifact. If Juan O'Gorman genuinely holds that integral or natural art, as opposed to technical art, is the more desirable, and that such art is the outcome of an aboriginal pleasure, my friend squatting in the open court of his stone house at Chauriat retains the aboriginal gesture. An inexplicable marvel, a stone melody without a theme.

We are so accustomed to dragging naked folk-music into the academy, capturing it by notation, tape, and record, harmonizing it for music, we had until recently almost forgotten to value the folk-melody for what it is, a few tones inflected by voice or instrument, antipodal to our deliberations. Ralph Stackpole has written several times of hearing such anonymous melodies sung in the fields or among the grapes.

Now Charles Seeger at UCLA has invented an electronic device, or melograph, to translate the recorded melody directly by writings on a graph, the height giving the exact wavering of the pitch, the length, the duration, the thickness of the line, the relative volume of the sound; and by rerecording at various levels a group of profiles will document the timbre. Though farther from music, as we think of music in notation, it is closer to the thing itself; from it, with skill, one can read and reproduce the original melody in its exact consistency as it was heard. What we capture, however, will be just the one-time-sung, not the true melody, which is not an ideal but that which is attempted.

Ralph Stackpole himself participates in culture, though his art escapes its influence. He lugs his heavy rock sculptures to the *Salon de Mai* in Paris and to other galleries. His work has been recognized and praised. But he is not of the moment and fashion; I doubt whether moment and fashion can see what he has done. I rejoice that I am able to do so and can praise it.

All the theoretical idealism of the 19th century poured itself into Wagner's *Tristan* and Rodin's *The Kiss*. Both are male conceptions, the female acceptably receiving the male ardor. Much of 20th century art has merely altered the dynamics, as when the tall, lean, angular granddaughter of Margaret Fuller and George Eliot, in the Hemingway-style literature, gives herself without much asking and wishes to know afterwards if "I was all right." Such idealism needs only a dictator — who may be Moses or as likely Aaron — to become an idealized substitute for the distractions and perturbations of democracy. Margaret Fuller and George Eliot, being strict-minded persons swimming strongly across currents which sometimes swept them away, would not have been pleased by the Hemingway-style granddaughter or the substitution of idealism — preacher-positive or psychoanalytic negative — for the practical difficulties of morality.

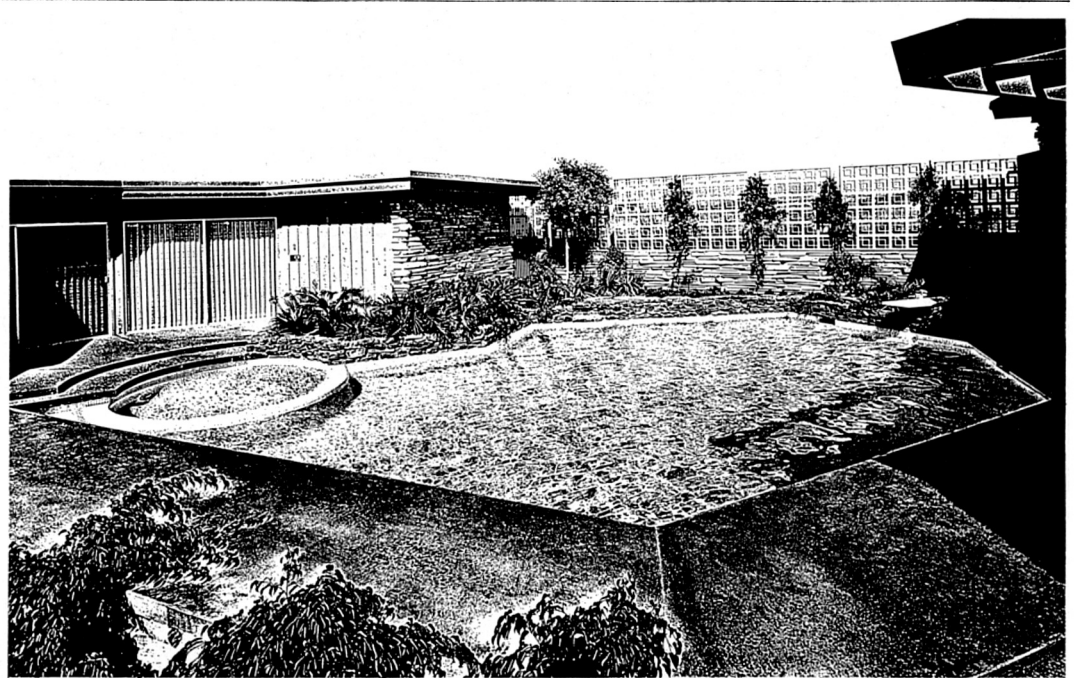
Idealism cripples democracy in the same way that the opposing definitions of the nature of Christ and of the Trinity fractured early Christianity. Theorists with no more than a vague conception of the human saw no wrong in brutality and mass-killing for the sake of their semantically distinguished definitions of the divine. Folk the world around are still fighting and conspiring for the sake of nationalisms and political idealism as unreal as the unity of the Austro-Hungarian empire, while failing to grasp such fundamental differences as the incomprehen-

sion of motives between the Confucian traditions of the rural South Koreans and the westernizing ideas of Seoul, between the peasant culture of France that receives De Gaulle in the ancient tradition of the Kings of France and the Parisian debris of culture which insists that France must still be Paris.

American Negroes, having opened by the spiritual power of sustained non-violence the tomb of their exclusion, are now being instructed not to rejoice in their increasing strength but to arm themselves with an idealized exclusion made up hatred and resentments. The political leader gains by it; their humanity does not. All over the world, newcomers to political leadership are cashing in gains of long-term policy for a short-term run of power as boss.

Idealism is the higher motive which overrides and justifies all mistakes. It fails particularly to admit the American anti-ideal of pragmatism (knowledge as ability to do), a talent which individual Americans in large numbers conspicuously demonstrate but which in mass-policy they fearfully and contemptuously oppose.

(Continued on page 33)



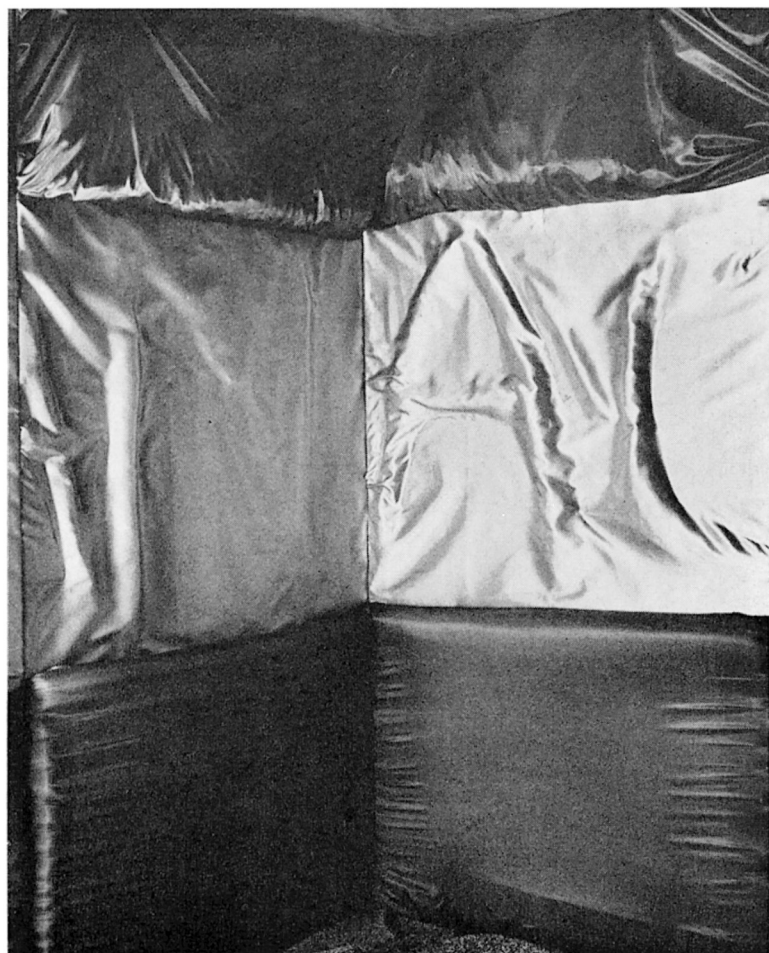
This is a most unusual pencil, and it belongs to a most unusual company. Both should be working for you. Consider... Because faithful execution of your design is imperative, you are meticulous when choosing a builder. Rightly, you demand experience and proven capabilities. You demand knowledge of your professional requirements, and you demand consummate workmanship. That pencil belongs to Fiesta Pools, a company with such qualifications. Fiesta maintains a Commercial Division of swimming pool engineers who are assiduously attentive to every detail of your design. Equally important, Fiesta is the only pool builder which uses no sub-contractors in swimming pool construction — there is never shifting of responsibility. You are invited to write for Fiesta's technical bulletins and brochures — no one will call on you without your request. (Incidentally, the pencil is very sharp because it symbolizes Fiesta's pricing policy.)

Fiesta Pools

EXECUTIVE OFFICES: 9830 ATLANTIC BLVD.
SOUTH GATE, CALIFORNIA • LO 7-8825

ART

DORE ASHTON



Robert Whitman
Detail of "Whitman Room" 1964
Cloth, foam rubber, wood; 8' 4" x 8' 4" x 4'

Courtesy Sidney Janis Gallery

A friend of mine who recently lectured in a small midwestern city was told by a local lady that hers was a most unusual city: everyone, or nearly everyone paints.

Obviously the lady was ill-informed. Her city is typical. Everyone paints everywhere. The same person who wistfully says, if I could only write, what a story I could tell, doesn't hesitate to take up a brush. I have never heard anyone say if I could only paint, what pictures I could paint.

What becomes of all these millions of paintings? Well, a few of them wind up in the galleries of New York. In fact, more than a few. I read not long ago in a foreign newspaper that we now have about 500 commercial galleries.

All of this is quite embarrassing for the art critic who, like anyone else, has a saturation point. It is not only the physical impossibility of visiting all these busy enterprises that impedes him. It is the psychological impossibility as well. It is really a fool's errand to try, under the circumstances, to sort out all the elements of what's going on. At best, the critic must fall back on the vaguest observations concerning "trends" — a term better suited to the advertising business and Wall Street than to the visual arts.

The time has come around again for the seasonal stock-taking. The season is almost over. The elite repair to Venice. The rest dissolve on eastern and western shores. Silence descends on Madison Avenue. And where have we been?

We've been deluged with pop art, for one thing. But we've also had our share of other varieties of reaction to the long reign of abstract expressionism. For the sake of good bookkeeping, I shall try to characterize them.

There are abundant signs that the efforts to restore the human figure to painting will continue. For the moment, not much of value has turned up. One of the most popular manners, for instance, is the pseudo-naïve approach in which the figure is



George Ortman
"Season" 1964, 80" x 124", oil

Courtesy Howard Wise Gallery
Photo: Oliver Baker Associates, Inc.

treated very simply as a cut-out. The silhouetted figure is generally placed against a flat background, its features rendered with minimal attention to their unique character. Those who are determinedly naïve give a certain sweet awkwardness to their images. Those more intent on finish tend to adapt the smooth stylizations of fashion magazines, pretending to make sophisticated use of these popular sources, but in reality, merely borrowing mannerisms.

I mustn't forget to include under this category the school of painters I think of as the bunting boys. They are multiplying astonishingly all over the country. Their characteristic is that they cannot make a picture without putting Old Glory somewhere in it. Bunting painters have considerable advantage in the silhouetted-figure-mode since they can rely on stripes to make an ornamental abstract setting. Very chic.

I also ought to include the newspaper clippers in this category. These are painters who imitate the blurry, strong-contrast effects of newspaper photography in paint. Some actually use the newspaper photo by screening it directly on the canvas, or by pasting it on.

Then, there are the crude-nude painters. They have not quite forgotten abstract expressionism. These nudes are generally fretting and struggling in a chaos of paint, their bodies held together by dark outlines, their individual characteristics carefully ignored. Echoes of the primitivistic passions of the early part of the century occur, but so feebly as to be neither nourishing nor obstructive.

Much of the so-called return to the figure may be taken as a sign of reaction to the high abstraction proposed during the abstract expressionist era. But it is odd that there has been no similar resurrection of the still-life. Nor do the dominant ways of treating the figure today seem to support Delacroix' interesting theory:

"Realism is the grand expedient which innovators use to revive the interest of an indifferent public at periods when schools that are listless and inclined to mannerism do nothing but repeat the round of the same inventions."

According to Clement Greenberg, the grand expedient would be not realism, or return to concrete experience, but rather an even more astringent abstractions. Giving his attention to the painters who have, as they say, hardened up their compositions, making liberal use of lateral expansion and the sharply defined plane, Greenberg firmly declares that what he calls "post painterly painting" is the best way out. He seems to be saying with Kant that painting is nothing but a sensuous evocation of our inherent pleasure in the beauty of design. In an article on Noland and Louis, he wrote that "the configurations in the paintings of these artists are not meant as *images* and do not act as images; they are far too abstract. They act to organize the picture field into eloquence."

Although it is a little disheartening to think that Greenberg and his followers are still fighting the battle Roger Fry undertook more than forty years ago, there is no question that the kind of painting which attempts only to organize the picture field into eloquence is rapidly becoming the major mode. It has many sub-categories: the *ornamental* in which I include Noland; the *programmatic* in which I include Stella with his series paintings; the *optical* which attracts many younger painters with its trick

effects, and the *constructivist* which repeats certain experiences of the early part of the century.

Quite the opposite in intention but allied in manner is the new symbolist movement. Many of these painters also use the single-dimensional vision of the post painterly painters, but they do so thinking always of the extra-pictorial meaning, the first thought which was with them as they approached their empty canvas. They tend to take the classical symbolist stance, relying on symmetry and the mysterious properties of number to suggest more than a mere pictorial organization. Sometimes, as in the case of George Ortman, they spell out the symbolism with intentional precision.

Ortman, by the way, just had an exhibition in which he analyzed — or some might say parodied — three masterpieces: Botticelli's "Spring", Gauguin's "Whence come we, What are we, Whither are we going" and Matisse's "Piano Lesson." In the press release accompanying the exhibition, which I presume was checked by the artist, and to which I think he assented, a revealing statement is made:

"Supplementary drawings in Ortman's last show indicated his selective procedure in shaping symbolic detail. Now it is evident that the diagrammatic structure of the pictorial field as a whole is regarded the same way. Not only the thing contained, but the container itself is a loaded symbol. A picture is a world intact. Time is an outside factor. Flux resides solely in the symbolic ambiguity of the given form."

Ortman himself is quoted:

"I work in a world of momentary dreams and eternal realities. In the illuminations and constructions, the consciousness of the past is given over to the consciousness of now. Ambiguous symbols create a new spatial and psychological expression. The eternal realities and momentary dreams become one."

Ortman's analyses are made in terms clear only to himself. His diagramming, like the diagramming of most painters concerned with numerical or mystical relationships is elaborate and inscrutable. His bisections of line, constructions of triangular or oval progressions, and separations of volumes are guided by no visible law. Just as the artists who worked out theories of the golden section in the cubist period rarely succeeded in applying their theories intact, so Ortman's preparatory studies with all their diagrammatic symbolism, seem independent of the final work to which they are applied.

In his Botticelli interpretation, Ortman succeeds in vignetting and highlighting details which, set off by neutral areas, take on the "momentary dream" quality he speaks of. But in the Gauguin, all his intricate dissections and rearrangements tend toward pastiche rather than a new entity with psychological overtones controlled by him.

Ortman's abstractions — those canvas constructions in brilliant color — also carry the symbolist's intention and many of them, as we gathered from his last exhibition, are rationalizations of his analyses of the human figure. The triangles, crosses and squares he manipulates so eloquently are intended to convey somehow his belief in eternal realities. Here he joins other symbolists of his generation in holding as a matter of faith the notion that intention, if serious and passionate enough, makes itself somehow felt.

I don't have to enumerate the species of pop art, but I will note two tendencies: the gadgetry aspect, in which certain playful temperaments make things that are noisy or move or take up space like furniture. The other: the "entero syndrome" which relates to all the mazes, tunnels and "feelies" with which we have been presented this year. The term is, I hope, self-explanatory.

One of these was on view in Sidney Janis' presentation of seven

new artists. It was a pink and blue satin chamber, dimly lit, into which the spectator stepped gingerly on an uneven cushioning of foam rubber. Conceived by Robert Whitman, erstwhile happening-maker, the room aims to play on visceral responses, or slightly more elevated Freudian associations. (This is not so obvious a sexual prank as the box sent in the mails recently with a hole for the finger to enter and a lining of fleshlike sponge rubber which tended to close around the finger.)

The Janis show is a reliable index of the way the wind is blowing. It contains not a single painterly painter — nothing that remotely resembles the work which brought this gallery renown. A run-down, artist by artist, provides a guide to the latest "trends".

Larry Bell: A group of constructions that he calls glass and mirrored sculptures. Most of them are more or less squared boxes, each glass side engraved or tinted so as to work in concert with its opposite mirrored image. Much of the ornamental detail recalls art nouveau, not in its form but in its effect. A concern with mirror-images, or symmetrical repetitions, with crystal and its frankly decorative aspects, dominate Bell's work. Elegant and ornamental.

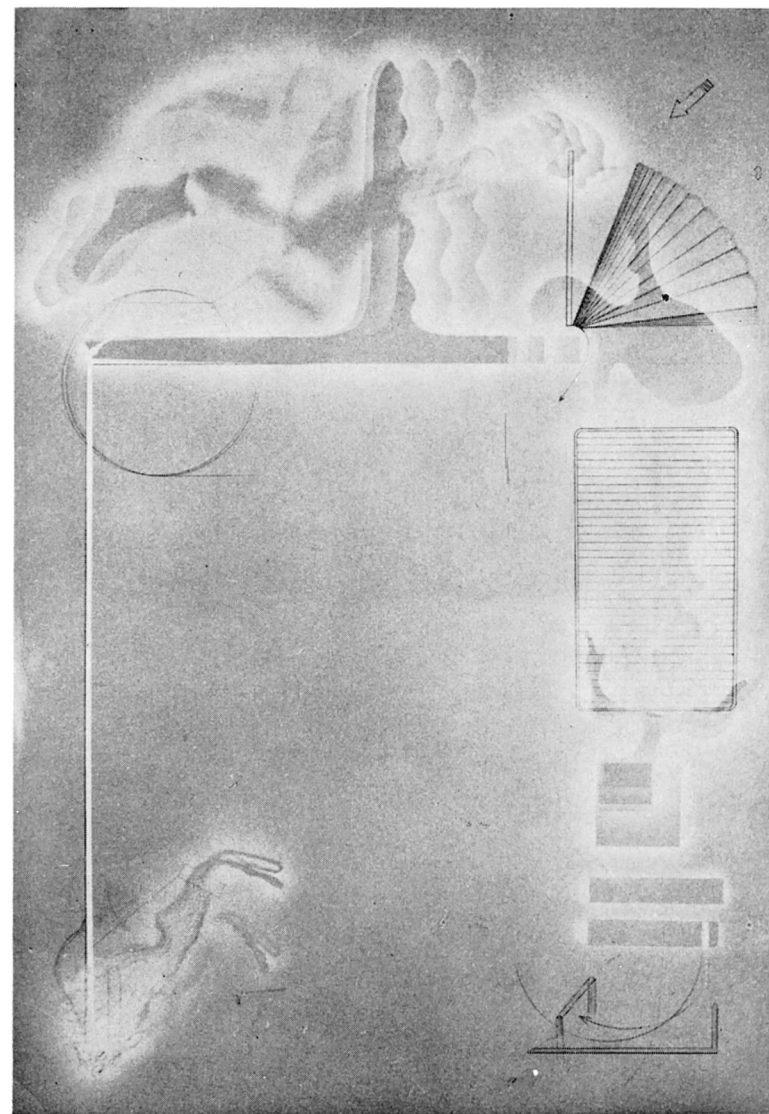
Robert Irwin: Large oils on canvas painted in a single hue, carefully unvaried, on which he glues two slender horizontal elements. These "space qualifiers" work feebly, and do not give the illusion of expanding spaces. The peculiarly dead pale colors of his single surfaces defeat all animation. The passivity of these canvases more or less typifies the branch of the esthetic movement in which totally non-committal effects are sought.

Norman Ives: Shows a large fabric collage of red, black and white elements. They are squared off and balanced well. The hand of the typographer seems present in the layout. They lean on classical constructivist principles and don't present any singular challenge. Well done, professional, attractive but hardly new.

Charles Hinman: Leaves out areas in a new twist on *de Stijl*.
(Continued on page 33)

Arakawa

"The Discovery of the Second Den of Perspective" 1963, 91" x 63", oil
Courtesy of Sidney Janis Gallery



Norman Ives

"Reconstruction" 1963; Red, white and black fabric collage; 14' x 5' 10"

Courtesy Sidney Janis Gallery



BOOKS

ROBERT JOSEPH

ART TREASURES OF THE UNITED NATIONS by Jacob Baal-Teshuva, (Thomas Yoseloff, \$7.50) offers a brief resume of the art work, the background of the art, and the personalities involved in the collection of art — from Assembly gavel to tapestries and murals and sculptures. An eye-filling account with color and black-and-white plates. A pictorial delight.

EPOCHS OF CHINESE AND JAPANESE ART, Vols. I & II, by Ernest F. Fenollosa, (Dover Publications, paperback, \$2.50 each) is an outline of history of art of the Far East, for the student of art and the art-lover, a best-buy of this classic text which has been an authoritative source for almost half a century.

THE MOSAICS OF JEANNE REYNAL, Text by Dore Ashton, Law-

rence Campbell, Parker Tyler, Elaine de Kooning, Bernard Pfriem & Jeanne Reynal, (Wittenborn & Co., \$15.00) is a comprehensive one-volume study of the amazing career and work of Jeanne Reynal, one of the foremost exponents of the modern mosaic. Mosaic art, dormant for centuries under the scourge of Renaissance contempt, has been finding its level among the arts as a result of a fuller understanding of its function — not imitation, but, as the Introduction says, "the creation of a special kind of light-reflecting and light-modulating surface." A guide, a history, which goes back to the Sumerians, and a full pictorial report of a highly respected artist at her work by a number of experts including A & A Art Critic Dore Ashton who contributes a critique and evaluation of Jeanne Reynal's work.

NOTES ON THE SYNTHESIS OF FORM by Christopher Alexander, (Harvard U. Press, \$6.75) offers an exposition on applying the relatively simple solutions for mathematical problems which we may attack with simple tools and rules, to the more complex problems of form and design. The difficulty of design, states the author, is that we try to diagram forces whose field we do not understand. The author's findings will appeal to those interested in concept formation.

ANCIENT GREECE: THE TRIUMPH OF A CULTURE by Robert Payne, (W. W. Norton, \$8.95) proves that it is possible to say something new, something fresh, and something vital about Greek culture and its heritage without discovering the Library of Alexandria intact, for here is history at its best, a synthesis of Greek lore and tradition, eschewing the erudite and complete Breasted approach, or the inundations of the incomparable Rostovtzeff. The Greeks were probably at once the sagest and the most foolish of people who eventually bent first to the Oriental trappings which Alexander the Great shipped back to the Peninsula, and later to the noisy belligerence of uncouth but efficient Roman legions. But before their political and military demise the Greeks left an heritage which has been equalled in the apotheosis and dynamics of an Idea, and in taste and culture only by the Chinese and the Hebrews. It is an unnerving fact for the uninitiate to discover that the Greeks knew as much about Godhood, the Atom, Perfection, Serenity and man's relationship to the Universe as we do, and Robert Payne, writes with a command of his material, and a grasp of centuries of human achievement. This illustrated treasure is further enhanced by a comprehensive evaluation of the great personalities of great Greek Ages — the playwrights, the philosophers, the military leaders, the tyrants. We are all Hellenists, and we owe ourselves the obligation of seeing ourselves in *Ancient Greece*, one of the outstanding books of the publishing season.

GREEK HERITAGE, the American Quarterly of Greek Culture, (\$5 a quarter) is the second of this new series of Art-History-Literature books, patterned in spirit after *American Heritage*, an indispensable companion piece to a study as fine as Robert Payne's. This handsome publication contains both ancient and modern Greece and its culture.

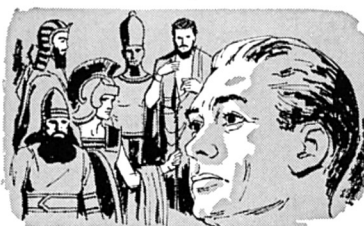
22 FAMOUS PAINTERS & ILLUSTRATORS TELL HOW THEY WORK by Mary Anne Guitart, (David McKay Co., \$6.50) offers a series of intelligently written inter-



with inner vision...

**YOU
CAN
DO
THESE
THINGS!**

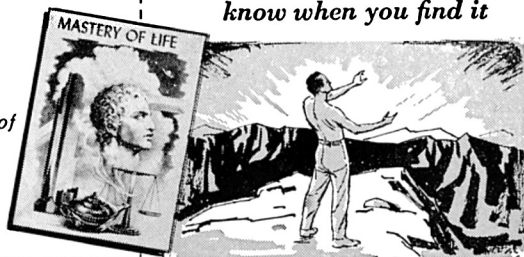
**LIVE A 1000 LIVES
in One Lifetime**



**SEE WITHOUT EYES
by inner perception**



**SEARCH FOR
THE UNKNOWN
know when you find it**



There are no physical limitations to *inner vision*...the psychic faculties of man know no barriers of space or time. A world of marvelous phenomena awaits your command. Within the natural—but unused functions of your mind are dormant powers that can bring about a transformation of your life.

The Rosicrucians (not a religion) are an age-old brotherhood of learning. For centuries they have shown men and women how to utilize the fullness of their being. This is an age of daring adventure...but the greatest of all is the *exploration of self*. Determine your purpose, function and powers as a human being. Use the coupon below for a free fascinating book of explanation, "The Mastery of Life", or send your request to: Scribe: K.T.F.

THE ROSICRUCIANS (AMORC)
SAN JOSE, CALIFORNIA

THIS FREE BOOK

Scribe: K.T.F.
Rosicrucian Order, (AMORC)
San Jose, California, U.S.A.

Gentlemen:

I am sincerely interested in making the utmost of my powers of self. Kindly send me a free copy of "THE MASTERY OF LIFE".

NAME _____

ADDRESS _____

views, questions and answers with the members of the Famous Artists School in Westport, and a study of how each mastered technique and then went on to develop individual style. The diversity of questions and answers make what might have been a static poll into an interesting analysis of modern art and illustration.

THE ORPHIC VISION by Gwendolyn Bays, (U. of Nebraska Press, \$7.50) offers a study of the mysticism of Rimbaud's poetry, and the symbolism of Hugo's later poems. For the student and the scholar of the aesthetics of the subconscious and the Illuminist School of Romantic poetry.

GILBERT STUART by Charles Merrill Mount, (W. W. Norton, \$10.00) is a significant contribution not only to the history of American art, but to American history itself, for Stuart was the "court painter" of the American Revolution and post-war, and Federalist periods, and this first complete and definitive account, painstakingly researched is both good reading and brilliant history. Charles Mount is himself a portrait painter of international repute, and a shelf of works on painters and painting are already testimony to his knowledge of technique as well as the historical background from which they and their masters emerged. Stuart, before he came to renown as an American painter — he was born in Rhode Island, the son of a Stuart sympathizer and refugee from Hanoverian wrath during the time of Bonnie Prince Charlie — worked in England under Benjamin West, knew the Grub Street group, and painted the Georgian world until his return to America to begin a new career in 1793. He began by selling his services for \$50, in those days a good sum. A portrait of Washington was painted for \$600, a fortune. This is a highly readable, fascinating history of a talented, mercurial and dashing 18th Century Citizen of the World.

TALES OF THE FRONTIER, Selected and Retold by Everett Dick, (U. of Nebraska Press, \$6.00) offers a *fresh* collection of frontier stories from Lewis and Clark to the Cherokee Strip. Some of the yarns are standard, made new by the author's telling; some of them are new (to this Western enthusiast, at least,) and all of them are readable. The book includes a number of useful maps. For sheer good reading about the West this one is highly recommended. **WAR EAGLE: A Life of General Eugene A. Carr** by James T. King, (U. of Nebraska Press, \$6.00) is the story of a man who gave forty years of service to his country as a soldier, Indian fighter, Civil War hero, and lived the typical life of a career officer on the frontier. Particularly interesting is Carr's running fight with the War Department to clear himself of a charge of breach of discipline during an attack on Indian encampments and his efforts over many years to win a coveted Brigadier Generalship. He was promoted only to learn that he was expected to resign immediately. The politics of the War Department after the Civil War to the turn of the century is colorful reading. In **AL SIEBER, CHIEF OF SCOUTS**, (U. of Oklahoma Press: \$6.95) Dan L. Thrapp maintains that frontier generals, which would include Carr along with Crooks, Miles and Sheridan, did their best fighting and best maneuvering when they were supported by competent Scouts; Al Sieber was one of the best. Sieber was everything Kit Carson, Bridger and the other Scouts said they were. German-born, fatherless Albrecht Sieber emigrated to Lancaster, Pa. with his mother and his brothers and sisters, when he was still a child. To Minnesota where he enlisted—with his mother's permission — and then a restless veteran, he went out west and became a frontier legend.

THREE: 1964 offers three novellas, unrelated except by the excellence of their writing. "Going the Other Way" by R. H. Robinson is a story of growing up on the river, the realization that boyhood is behind and manhood just around the bend. Moving and nostalgic. "Mister Jack" by Eleanor Widmer is reminiscent of Clifford Odets' "Awake and Sing," the story of a middle-class Jewish family during the Depression, the frustrations, the dreams, and the pettiness of dull lives. "The Coming of M. Alazay" by Egon Pohoryles is the maturest of the three stories. M. Alazay, an about-to-be retired French civil servant devises a suicide leap from the Eiffel Tower to bring attention to the injustice of the world against Him, the re-incarnation of the Saviour Himself.

(Continued on page 34)



For
Your
Information

Q.: Do you have any information on recommended grades of redwood for various uses?

A.: According to the chart compiled by the California Redwood Association, in the all-heartwood classification under Finish Grades there are the Certified Kiln Dried Clear V.G. Redwood, the standard grade for bevel, bungalow and Anzac siding for which the properties of superior finish retention and resistance to weathering are especially important, and the Certified Kiln Dried CLR Redwood for quality architectural construction and fine millwork. The Construction Grades in the all-heartwood include the Select Heart Redwood used for retaining walls, posts, curbing, framing, roofing and decking where strength and high durability are required, and the Contn. Heart Redwood for hotbeds, fire walls, fencing, framing, etc. Grades which may contain the less durable sapwood include two Finish Grades, Certified Kiln Dried A.V.G. RWD. and the Certified Kiln Dried A - RWD. Under Construction Grades there is Utility Redwood for painted surfaces such as barn boards, garage rustic, storage sheds and similar uses where clear grades are unnecessary; Sap Common Redwood for sheathing, sub-floors and other construction not demanding the decay-resistance of all-heartwood; and Merch. Redwood containing usable stock for sheathing, sub-flooring and temporary construction. The latter can frequently be recut without excessive waste for low-cost structures, fencing and similar uses.

Q.: My problem is fencing for a parking area that will surround a market building I am doing. I want it to add rather than detract from the general appearance but it must be both durable and economical. What can you suggest?

A.: At a cost of only pennies more than bare metal chain link, you can get vinyl-protected steel chain link fencing in permanent, maintenance free colors. This type is made from high strength steel wire with the durable protection of pure zinc galvanizing and the permanent, tough, bakelite polyvinylchloride covering. It will not rust, corrode or fade and is available in all popular sizes including the 12 gauge, 1 1/4" childproof mesh in heights from three to twelve feet, the 11 gauge, 1 1/2" mesh economy fence, and the 6 and 9 gauge, 2" mesh heavy duty. Tennis court fabric is also available. Colors include turf green, aquamarine, fresh pink and white. The fencing can be either one color or the color and white. Custom colors or combinations may be had on order.

Q.: I have a client who wants to have a Bermuda type roof on his house. Can you give me any information?

A.: First, there is the Zonolite cast-in-place Bermuda roof. It is applied over three layers of 15 lb. asphalt saturated felt with bonding flakes imbedded in the final coat of asphalt. It is completely incombustible, has insulating qualities to increase the efficiency of air-conditioning and heating equipment, and weighs only 4 lbs. per square foot. It has the appearance of having individual tiles but is actually formed and cast in place on the roof. The texture is interesting and it can be painted with heat reflective white or any of a wide range of pastel shades. Then there is the Zonolite Bermuda roof tile that has all these same qualities but comes in tiles 12" by 20" with an overall thickness of 2" and an exposure of 12" by 18". This type weighs 600 lbs. per 100 square feet, has a K Factor of 0.76, and can be painted white or any pastel shade desired.

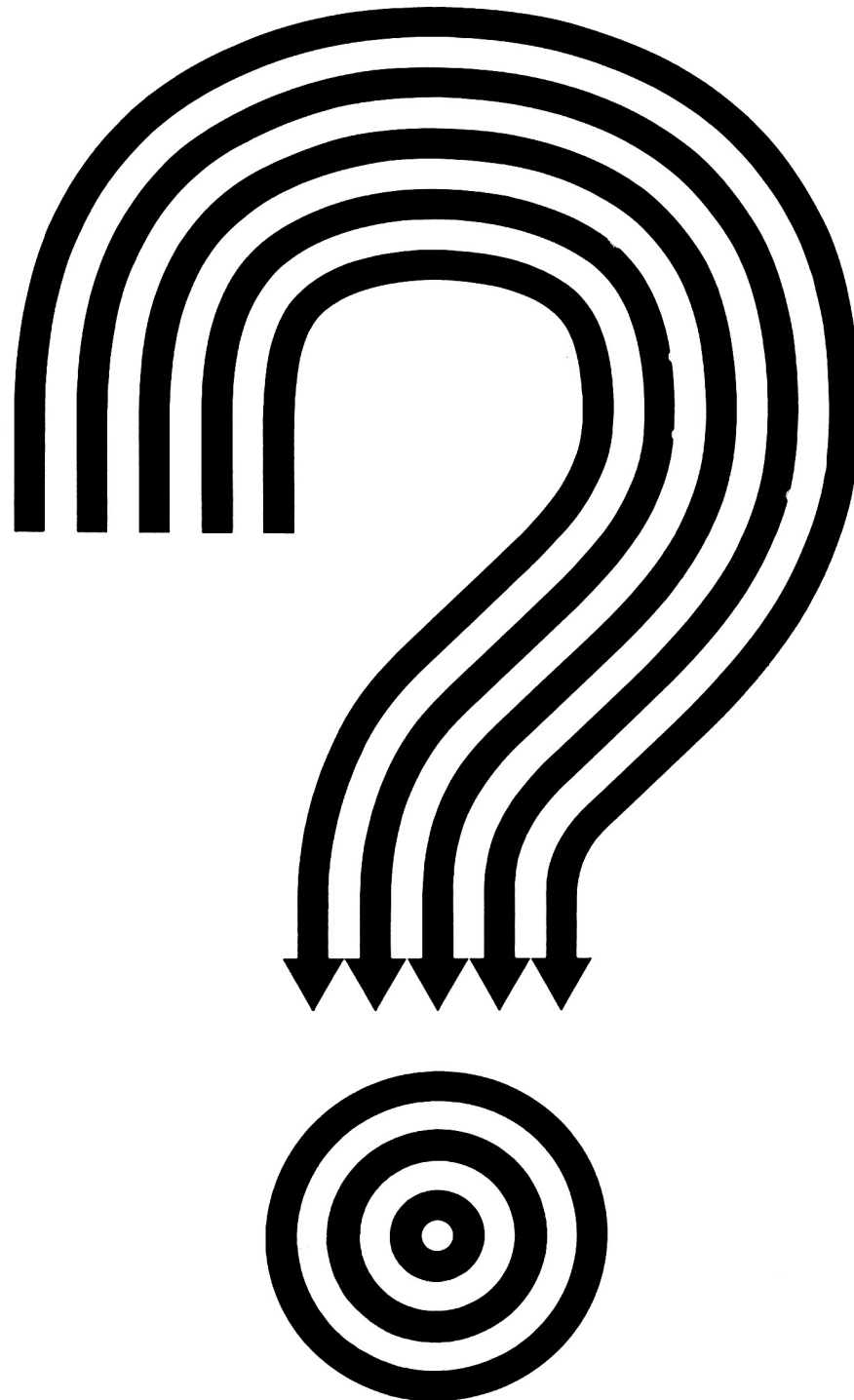
Building Center

7933 West Third Street

Los Angeles, California

International Design Conference in Aspen, June 21-27, 1964. A discussion of freedoms and restraints in design, architecture, and visual communications. For all information write to the International Design Conference in Aspen, Box No.1247, Aspen, Colorado

Design '64: Directions & Dilemmas



DESIGN: CHERMAYEFF & GEISMAR ASSOCIATES

It has to be admitted at this point that there is no easy solution to the urban ills afflicting the U.S. No single nostrum will revivify the City, put it on its feet again. The problems are so vast and on so many levels—practical, theoretical and esthetic—that every attempt to particularize from the eloquent generalizations heard on all sides merely serves to make plain that there is no one environmental panacea. You don't prescribe a single medicine for a patient down simultaneously with diphtheria, the pox, ulcers and assorted morbidities. It is just as plain that permanent cures will not be effected by the various treatments now being pursued across the country—the freeway tracheotomies, the plastic surgery or the host of other medical analogies that suggest themselves. The cause must be treated not the symptoms. Temporary measures will at best provide only temporary revitalization and rejuvenation; meanwhile the underlying causes will continue to devastate the already ravaged phiz of our land- and cityscapes.

Despite the ringing of tocsins, the ultimatums of disaster being urged upon us by estheticians, historians, economists (and journalists) of various persuasions and despite the recent popularity of architecture (and architects) as *News*, just how important are architecture and the architect considered in the scheme of things? The architect's role in shaping contemporary civilization isn't easy to discern. The behavioral sciences have only lately come to architecture and are by no means certain what part to assign to the architect or even how to go about measuring architecture's social consequences. Needless to say, the scientists are approaching with caution. They haven't forgotten the hornets' nest that fell around their ears when they started poking into religion, another area of dogma and passionate intuition. Esthetics, like religion, is a synonym for controversy. But the behaviorists can no longer ignore architecture, man-made environment. Still where does it fit?

Ernesto Rogers recently said, in substance, that the architect's role has become a negative one since he relinquished control of building design to the developer. John Burchard and Albert Bush-Brown in *The Architecture of America* assign architecture a part, perhaps more than that of a spear-carrier, but far from that of a principal. "Let us not claim too much for architecture," they say. "Families living in architecturally undistinguished homes may be abundantly happy, while a pleasure dome may be a seat of despair. No doubt, progressive ideas about elementary school education have been aided by recent school architecture, but architecture remains only an instrument of education, not the teacher, and fine new school buildings do not guarantee that Negroes will be tolerantly and well educated in Virginia. The skyscraper helped centralize businesses, and separated them from the sources of production and distribution; but it did not originate

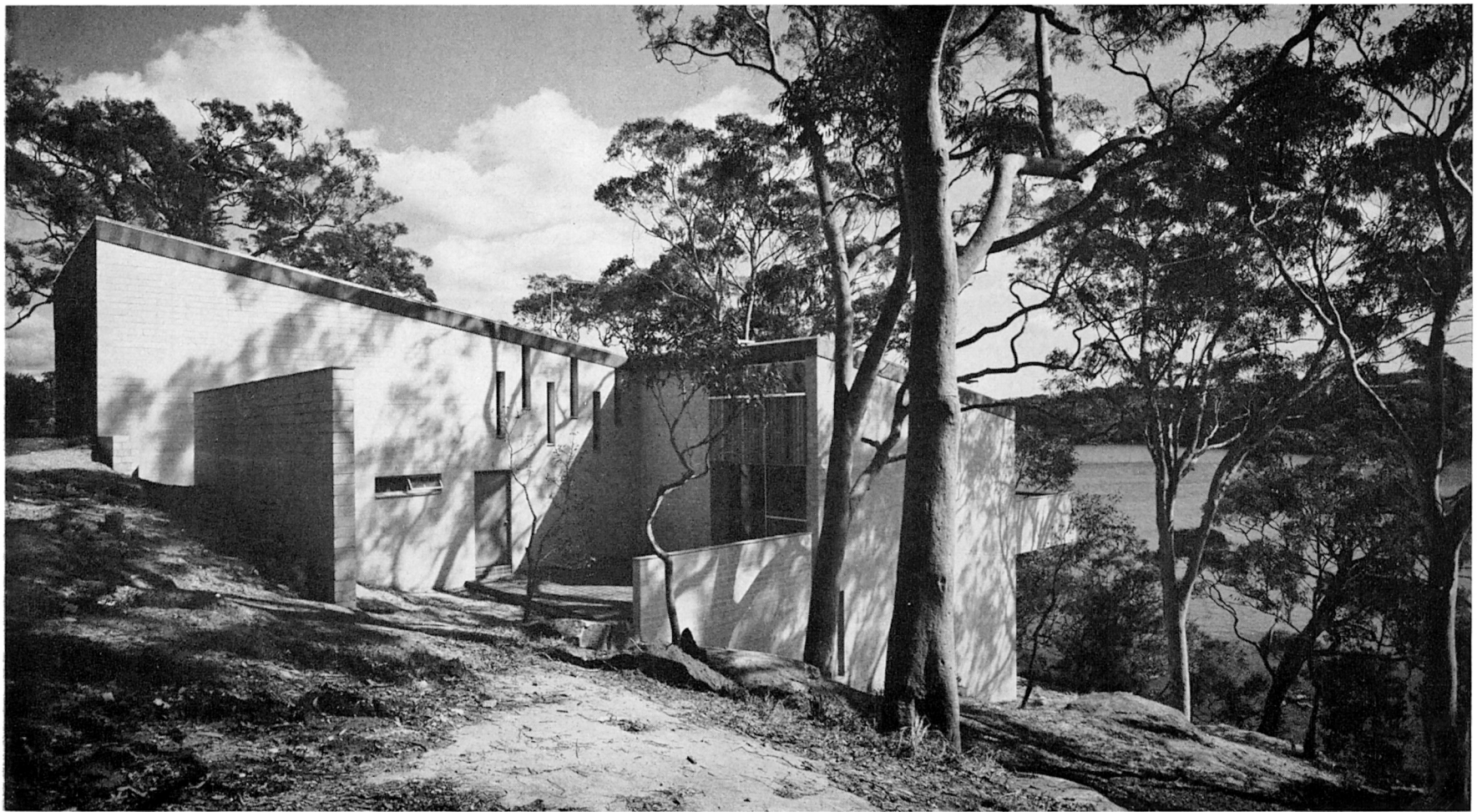
centralization, which began before the appropriate architecture and its essential technical partners were fully accepted."

The ratio of architect-designed to non-architect-designed buildings in the U.S. must make even the architect wonder if architecture is important to anyone but himself and his family. It's not surprising then that the public considers architecture a big word with little meaning. The public is accused of accepting ugliness and squalor as the price of industrial and economic progress—not out of built-in Philistinism, out of bone-deep indifference. "Architecture is okay if you go for that sort of thing, if you have time. But what's in it for me?" That's no empty question. It's moral and philosophical relativism at work. It has to be answered straight—no obscurity, no vague promises, no myths. No theoretical or esthetic verbiage.

Architecture is important, never more so. But there have been no sustained efforts to tell the public in personal terms the importance of architecture or the lack of it, to show people what's in it for them.

The Los Angeles Architectural Panel, up to now a group searching for a purpose, is going to try. The Panel, a membership of about 800 professionals and laymen, has assembled an exhibit which demonstrates that thoughtful and pleasing architecture can be and is being created—here and there. The point made by the photographs, all contributed and mounted by Julius Shulman, is that if quiet, enjoyable, successful environments can be created—even though in mournfully small numbers—in the face of public indifference, how much more is possible if the public would demand it. In a democratic republic, the people are the final arbiters in any area in which they care to raise their voices, says Exhibit Chairman Bernard Zimmerman. In the last analysis the architect's client is the public, as taxpayer, corporate stockholder or as buyer or lessee. The trick is getting people to care in sufficient numbers. Reform needs popular support.

So does the Panel. As always seems to be the case where a few who care, who are willing to devote time and energy to something worthwhile, something that contributes, lots of advice and very little help has been forthcoming. Money is always a problem. The exhibit will open July 10 at the Los Angeles Museum of Science and Industry. After four weeks there it is hoped that it will tour the country. The Panel, knowing that educating the public is an Sisphian task, plans to establish the exhibit in perpetuity, up-dating it annually. If it fails, and it will, to convince a majority of the people this year that ugliness and squalor are the price of indifference not of progress, then there is next year and the year after. Education is a slow and painful process, but by this and other appeals, the Panel hopes to increase the ranks of the minority who care to a point where it becomes an effective minority.



**HOUSE IN AUSTRALIA BY HARRY SEIDLER
AND ASSOCIATES, ARCHITECTS**



Built on a steeply sloping site facing an inlet from the sea near Sydney, this house was designed for a couple who required a home in two parts, one for their own use and one to accommodate their visiting children and grandchildren.

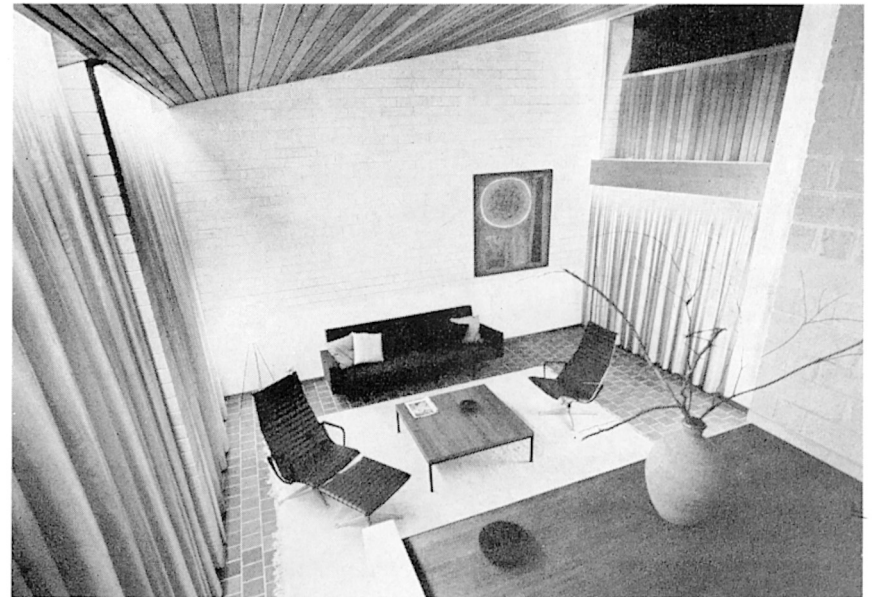
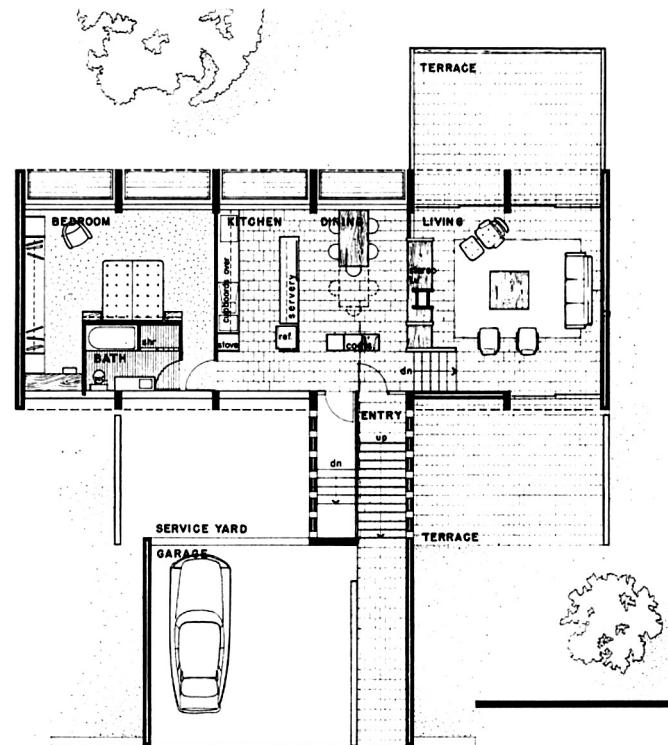
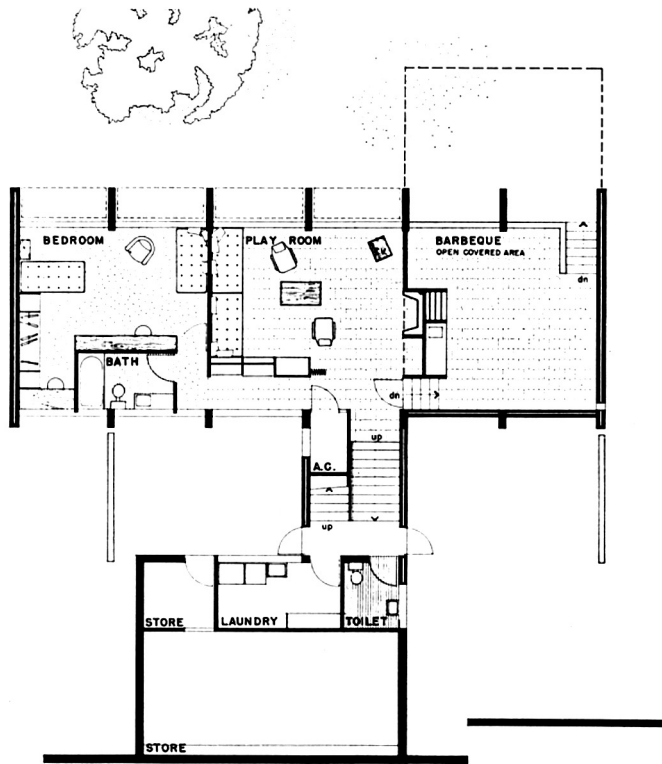
The plan evolved separates these two parts on different floors with all major rooms facing the water view. The upper level is for the owner's use—living, dining, kitchen and bedroom suite. The lower floor contains the guest bedrooms, playroom and an outdoor covered area where barbecue meals can be served.

The different levels of the house are adjusted to the slope of the ground. A double garage is at the top, off the access road and steps lead down to the main part of the house. The living room is on a lower level and given importance, not only by its increased height, but also by its relation to

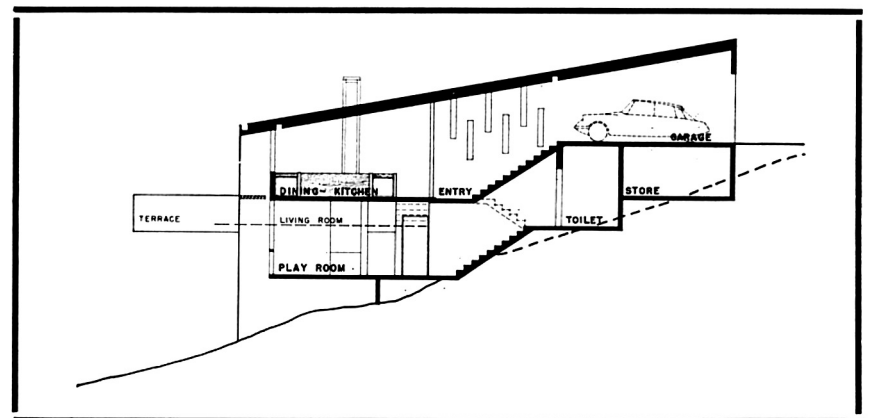
ample outdoor living areas, the large suspended terrace facing the water and a shady patio on the approach side.

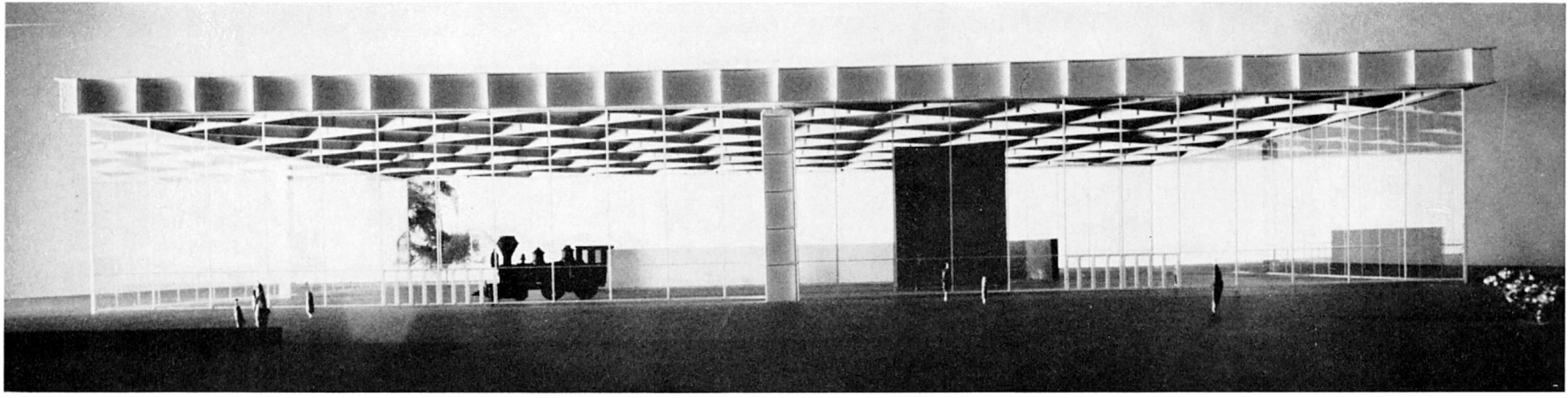
Construction and use of materials are closely related. The walls are of white concrete blocks forming evenly spaced bays. The piers act as structural support and protection against horizontal sun. Floors are of concrete with the cantilevered terrace supported by structural rails. The roof is of timber covered with aluminum roofing. Only three materials are used: white concrete blocks, ash timber for ceiling, spandrel walls, sun-protection slats and all furniture units. Floors in the main living areas are of dark gray quarry tiles.

All windows and terrace doors are of horizontal sliding aluminum frames. Curtains are yellow silk and the couch is dark blue with bright accent cushions.



PHOTOS BY MAX DUPAIN

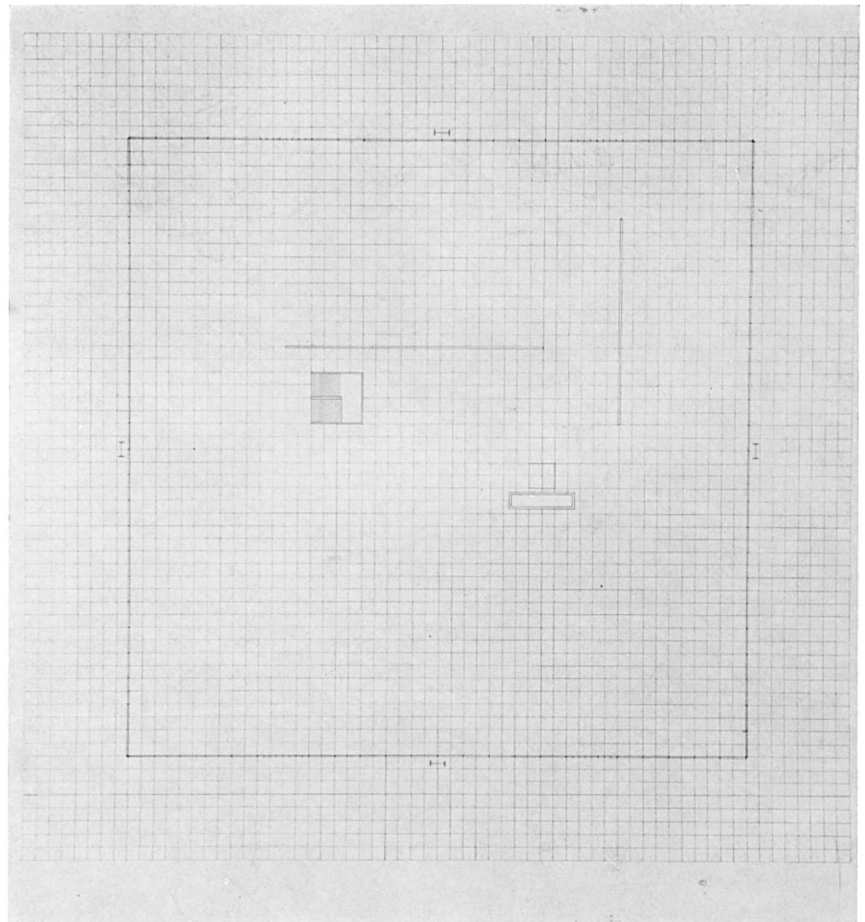
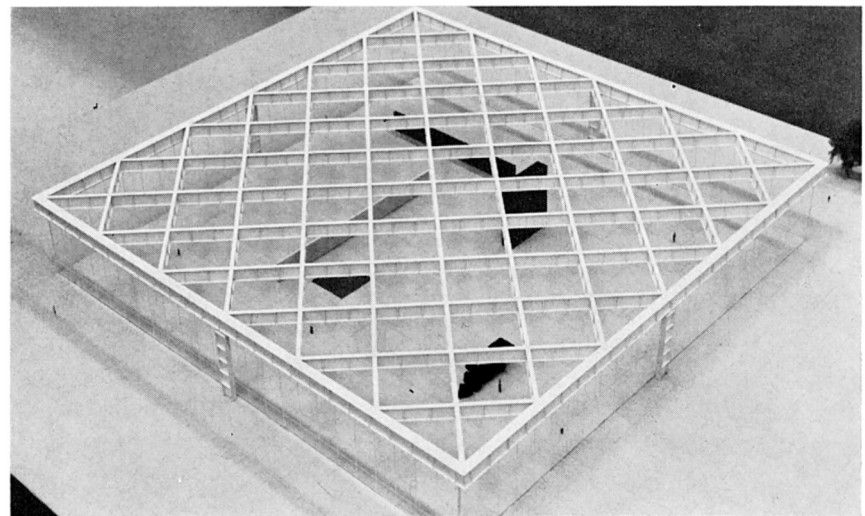
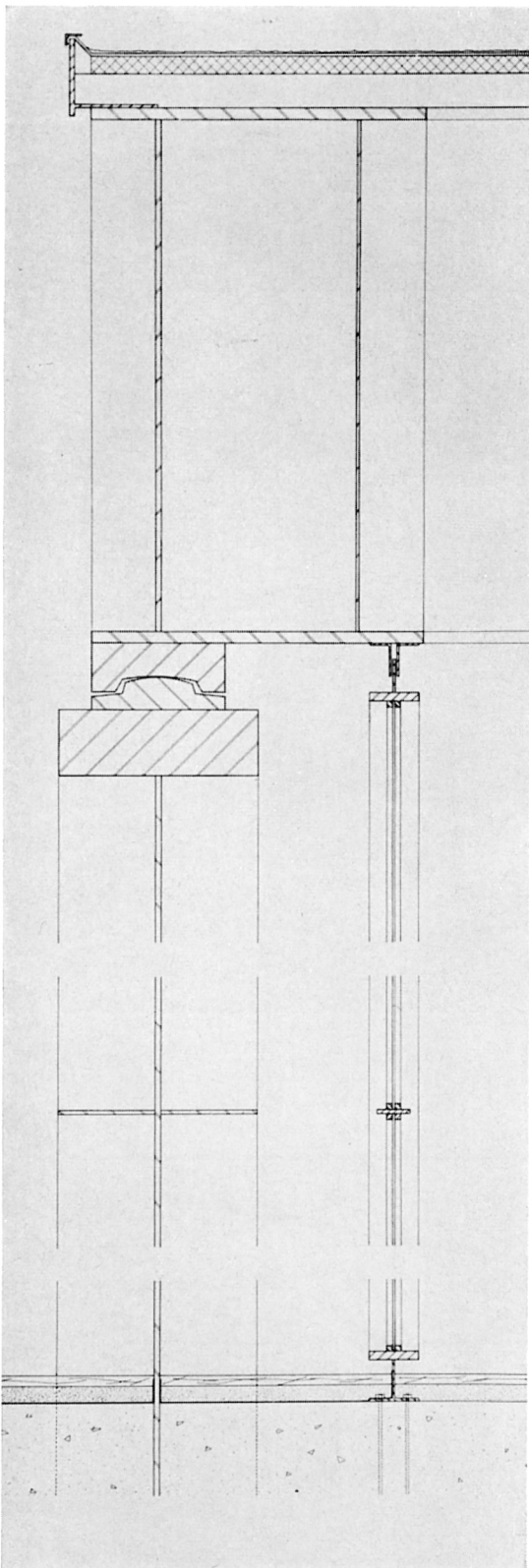


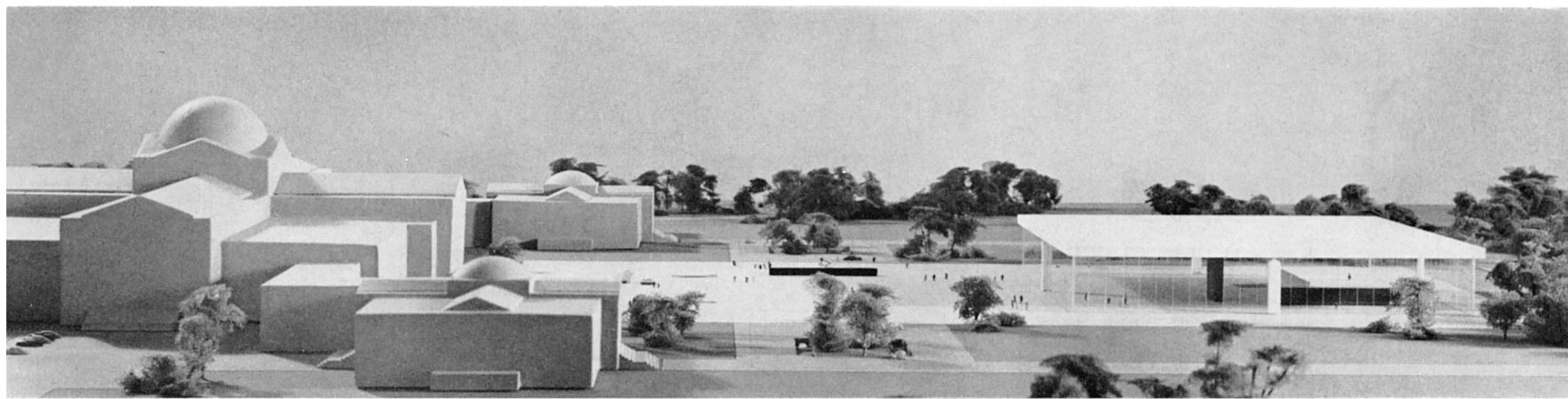


EXHIBITION HALL BY MEIJI WATANABE

FROM A MASTER'S THESIS, ILLINOIS INSTITUTE OF TECHNOLOGY

MYRON GOLDSMITH, THESIS ADVISOR





The visual challenge to the contemporary architect lies in achieving a satisfying resolution of structure and employing it to fulfill the esthetic need of today. Grid structures in general possess the natural characteristic of unity; the full architectural expression of this quality formed the principal aim of this study and has resulted in a building which is transparent and monumental at the same time. The character of this exhibition hall, designed as an annex to house the Chicago Museum of Science and Industry's extensive railroad locomotive collection, is displayed by the openness which allows it to be integrated naturally into the surroundings and thereby minimizes the barrier between objects exhibited and the living community in which they exist.

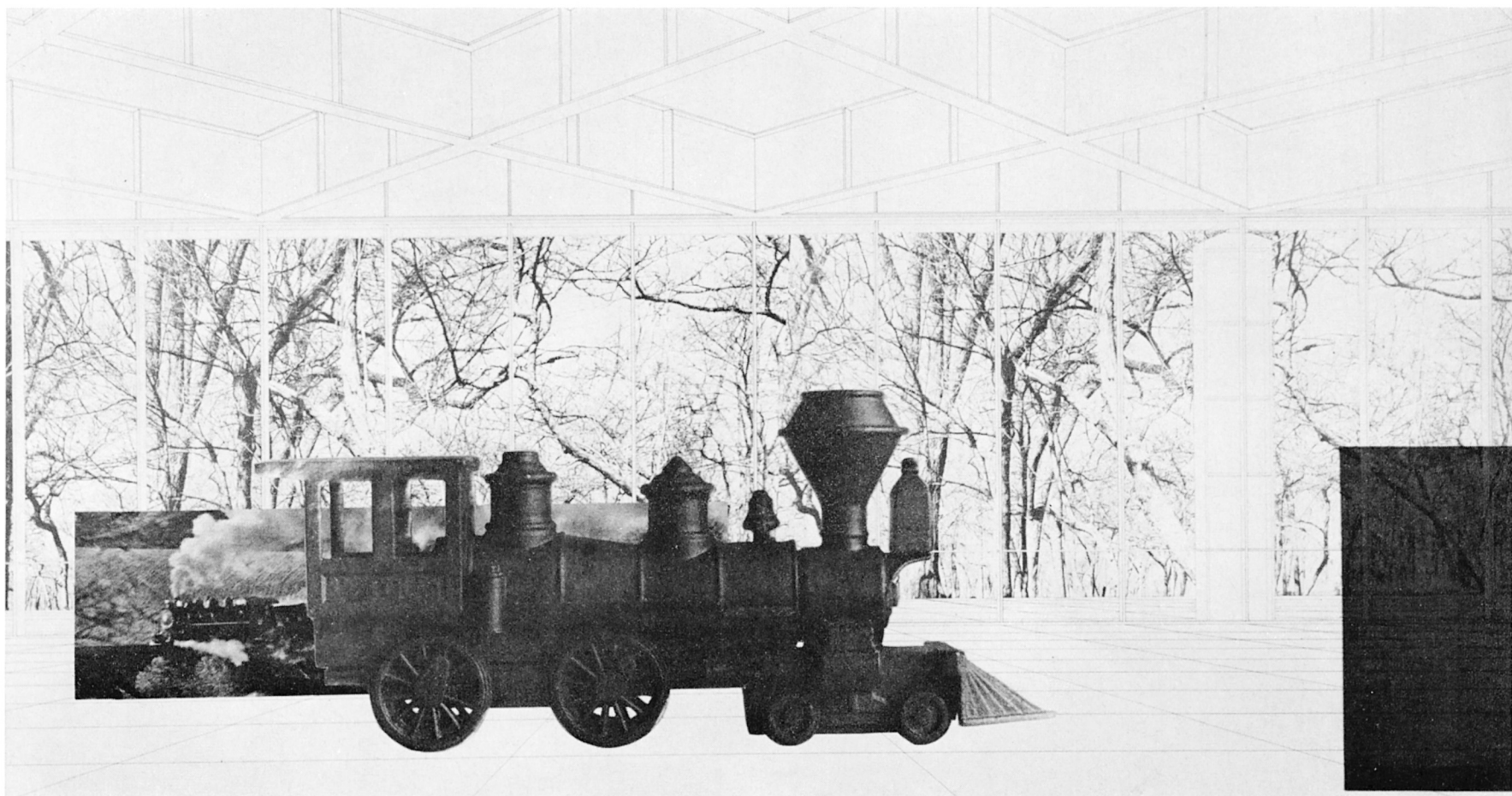
The roof proposed is 300-foot-square clear span consisting of two-directional diagonal grid of eight-foot-deep welded steel girders 35' on centers, spanning from a peripheral box girder. The structure could also be of reinforced concrete but steel was selected here for reduction of dead load and because of its potential elegance. Of the various support-

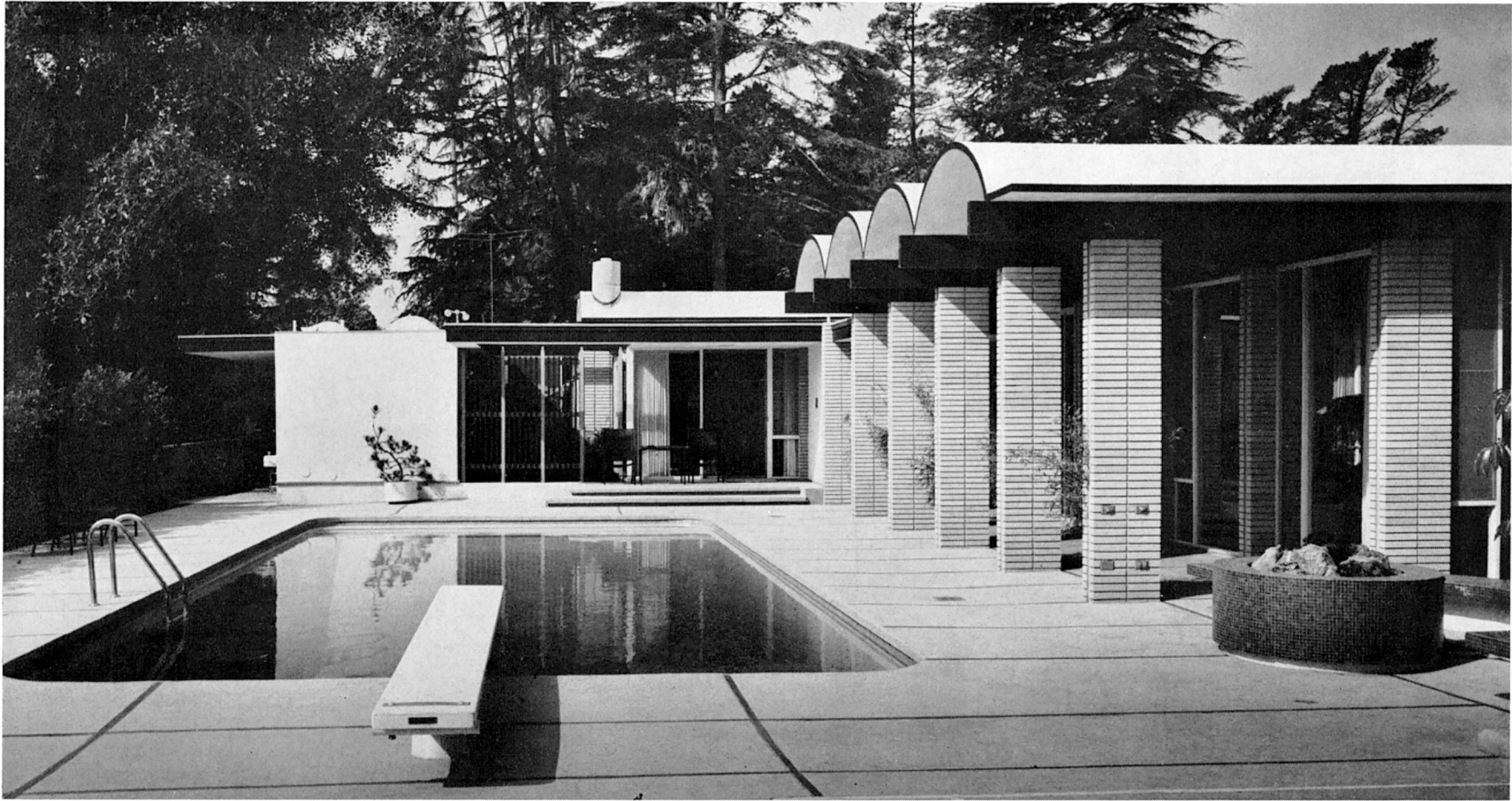
ing systems studied, the present one in which the roof receives peripheral support at the midpoint of each of the four edge beams was chosen for its superior cantilever expression.

The hall is enclosed in $\frac{1}{2}$ " clear plate glass placed behind the steel columns to establish a clear articulation between the glass and steel.

In addition to the exhibition area, the hall would contain machine room, storage room and washrooms in the basement. Office, library and assembly hall are in the existing building. To achieve flexibility in the exhibition area, proposed partitioning is movable with the exception of two permanent walls, one blue and one yellow, and the core, red. The colors were dictated by the strong nature of the exhibition.

Parking would be underground and a plaza constructed above the parking space to provide an area for outside exhibits and special exterior murals and sculpture, accenting the present park-like atmosphere of the museum. The new building would be placed along the main axis of the existing structures to establish a strong symmetrical character.





The unusually wooded and shady site of this five-bedroom house in Brentwood (West Los Angeles), Calif., prompted the use of a vaulted roof with glass transoms to capture as much as possible of the light filtering through the trees. The vaults extend beyond the enclosure and are supported by brick columns, creating a covered entry way and patios adjacent to living areas. Outdoor orientation includes the swimming pool, badminton court, private garden adjacent to the master bedroom and a private patio shared by the two children's rooms.

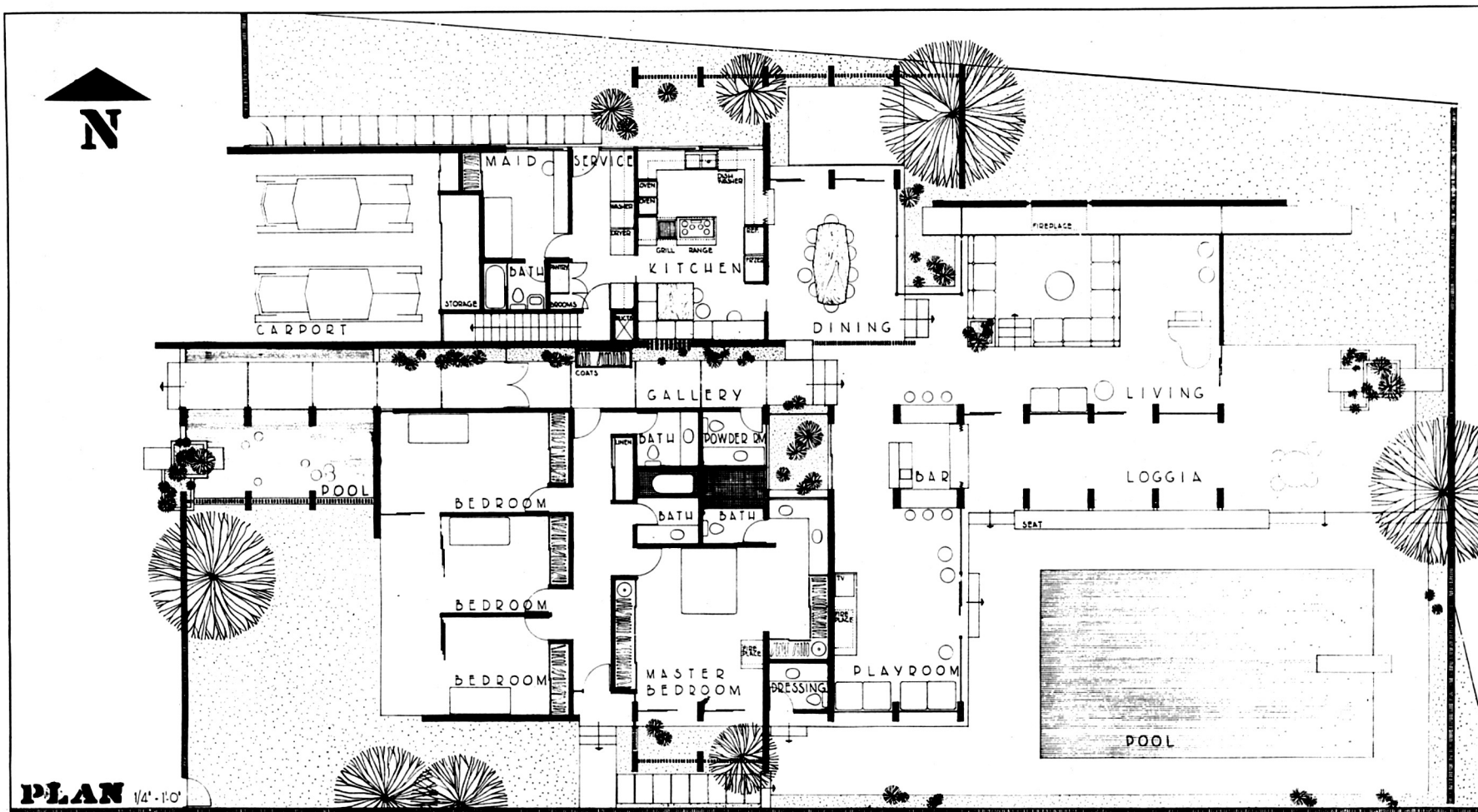
Exterior wood screening and sculptured wood frieze on fascias are repeated on the interior; in addition to wood screen partitioning inside, several glassed garden areas substitute for solid wall separation. The 40-foot-long brick fireplace wall and marble hearth penetrate glass walls at either end of the living room.

Floors are of terrazzo and major structural materials employed were Norman face brick, supplied by Pacific Clay Products of Los Angeles, and laminated wood for the beams. Total house area is 4500 square feet, containing living room, dining room, kitchen, five baths and playroom in addition to bedrooms.



HOUSE BY RICK FARBER AND ASSOCIATES

Associate Architect, Matthew Goodwin



THE CONCEPT OF DENSITY AND THE SAMENESS OF ALL MATTER

by Gosta Edberg

For several years the author of this paper has been teaching basic design and composition in the arts at the School of Architecture of the Institute of Technology in Stockholm. Since today's philosophies of art seem to be nebulous, to say the least, we have sometimes retreated to the firm philosophies of the Bauhaus. Those philosophies, to a large extent, still govern designs of architecture and the applied arts in many parts of the world. Painting and sculpture do not seem to be as inflexibly influenced by the Bauhaus. However, the Bauhaus principles, which thus enclose architectural thinking on all sides, no longer seem to be able to carry the cause of design forward. Therefore, we have tried to find a path away from or beyond the Bauhaus teachings. The following idea, called the concept of density and the sameness of all matter, is one attempt in that direction. It is solely an artistic concept; it is based on philosophies about the structure of the universe and other ideas of recent science as understood by the layman.

The purpose of this paper is to present an idea, and to provoke similar thoughts in the mind of the reader. No attempt has been made to propose actual compositional solutions. At this stage, any such attempt would only result in the restraining of imaginative thoughts. So far, one can only vaguely anticipate what the new world-image, created by science, will mean to the arts.

Theories of composition in the arts in all times have been based on the prevailing conception of space and its organization and the concept of nature and man's place in the universe. In prehistoric times, the arts mirrored prehistoric spatial, superstitious, and religious beliefs. In ancient Egypt and Greece, painting and sculpture represented spirits, usually of a religious kind, materializing hopes and fears about life and death, fertility and reproduction. Art of the Middle Ages clearly reflects the prevailing idea of the structure of the universe.

The scientific and technological explorations and inventions of the Renaissance changed en-

tirely all conditions for the creative arts. The geometrical technique of linear perspective and the invention of techniques that give the illusion of depth on a flat surface became common knowledge. Until our day, the views of the Renaissance have dominated the arts. It is fruitless to debate whether art is an inspiration to science, or science to art, or if they both proceed along parallel lines. The artist is affected by the level of knowledge of the civilization in which he lives. The artist is part of his culture, whether it is mainly religious or scientific. Artists and writers are often makers of images of perception; they make the vision of reality. They have formed the image of God, heaven and hell. Such images become common knowledge although they are purely a construction of artists and writers. Imagination is the agent that helps the artist to create. Imagination means a step away from the accepted reality that everybody sees. Imagination means inner image, carried by the waves of civilization.

During our century, theories of composition in the arts have been closely linked to the theory of perception of Gestalt psychology, which is descended from the world-image of Galileo and Newton; that is, to a great extent founded on a mechanical image. The dominating design theories, those of the Bauhaus, Germany, and the School of Design, Chicago, with their offspring, "the international style", have very close links with Gestalt theory. Although the Gestalt psychologists worked out and produced their important theories around the same time (1910) that Einstein envisioned his revolutionary concepts of movement, time and space in the universe, the Gestalt theories disregard his thoughts.

In the Bauhaus theory of composition, elements of design, including movement and direction, are regarded or at least studied as fixed in a motionless room without air or other spatial matter. The ultimate sculpture is the self-contained sculpture, a volume alone in nothingness. Very rarely are elements of emotional or metaphysical quality considered real. Mechanical and geometrical laws, Newtonian and Euclidian, are supposed to govern relations among all elements. Elements are assumed to be related to each other much in the same way as Newton thought that celestial bodies were related to each other.

In common thought of our day, Newton's world-picture is still prevalent, although it is not altogether valid in the thinking of advanced science. In the above lies hidden the provocative implication that the Gestalt theory of perception and the Bauhaus theory of composition do not any longer fully serve the world of creation in the arts. What comes next and how will the idea of perception develop? Where and how do the theories of relativity and the sameness of all matter enter the field? How does our new image of the universe tend to change concepts of composition in the visual arts?

The Greek philosopher, Anaximenes, who lived in the sixth century, B.C., thought that the universe was composed of infinite air and that the differences of material we see around

us depend upon the rarefaction or condensation of air. Rarefied air becomes fire, compressed air becomes cloud and if the density is increased, it becomes water, earth and finally stone.

In science today, it is also assumed that all objects, different as they may be in appearance, are of similar construction and composed of the same matter. The same basic elements, sometimes called photons or light-quanta, are the units of matter. These basic units are constantly moving in streams of flow: they are dying and others are born to take their place. The variances of different matter or materials depend only on the degree of density of the field of basic units. Accordingly, we may say that the surface of a material is not physically a surface, but the two-dimensional continuum at which two areas meet whose densities are not the same. In the world-image of the theory of relativity, neither finite nor infinite spaces exist. The objects that we carve out of the universe have no significant existence except for the service they appear to perform.

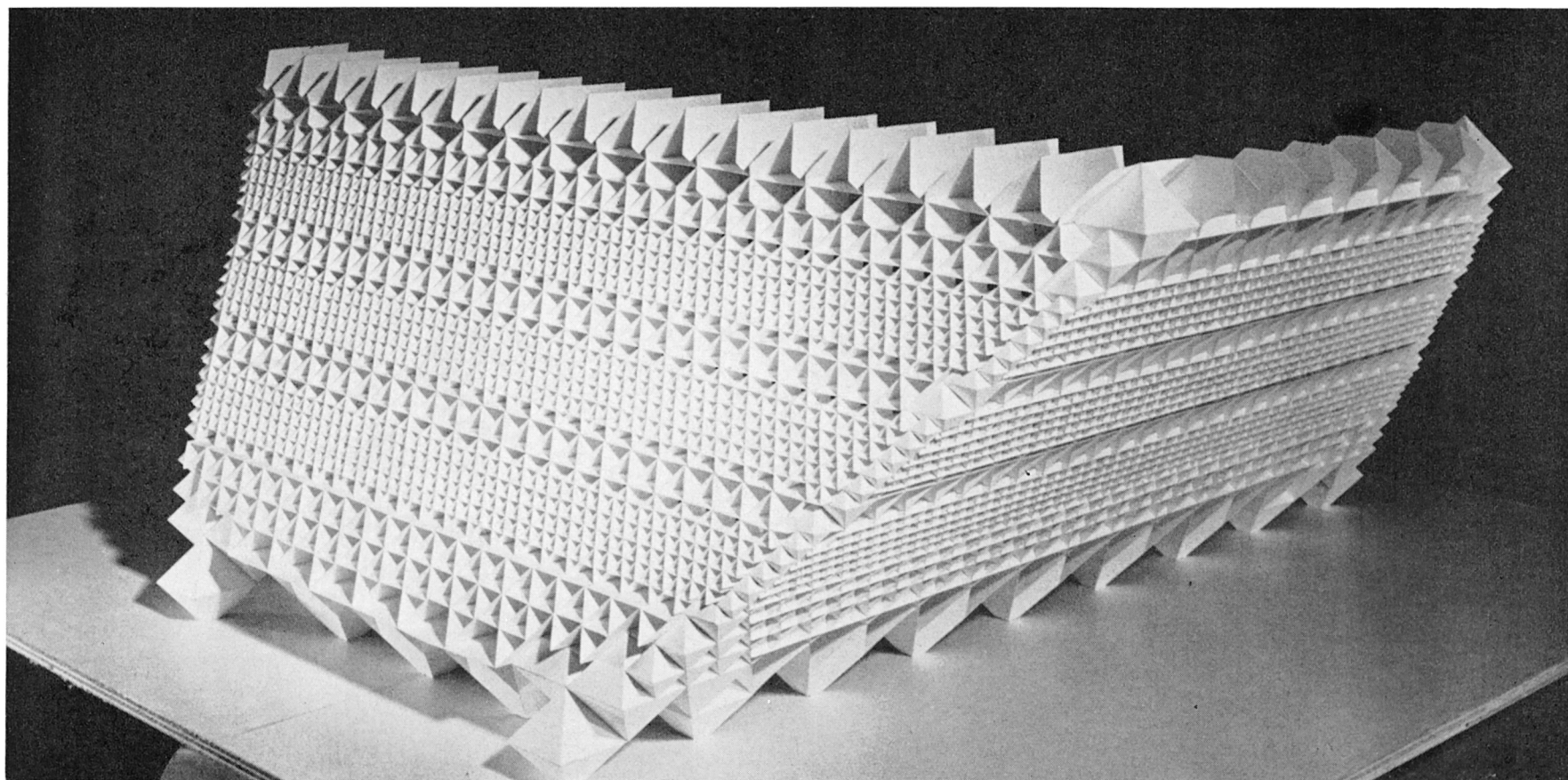
If taken literally, the scientific theory of the sameness of all matter means that the walls, ceiling and floor of a room cannot be regarded as finite enclosures, but instead, must be interpreted as changes of density in a sea of endless volume. The walls occur, where constellations of elementary units meet other constellations of elementary units. The density idea becomes still more fantastic if we consider that the basic units are constantly flowing and that their life-span is shorter than our imagination can grasp. The densities, as such, change contents all the time, but their quality as density does not change. The life of the units can be compared to human life.

The basic units not only compose matter we can see, feel and perceive, but also (as far as perception goes) such forms of energy as light, electricity, radioactivity and other types of rays. It must also be noted that the electrical currents which are produced in the human brain and body in the processes of thinking and feeling, are basically of the same nature as other electrical currents. Subsequently, they generate power-fields and activity of the basic units. The interpretation in the human sense organs of a work of art, of its form as well as of its meaning, can be included in the density concept.

Let us assume that we understand the structure of our new image of the universe. The word density, as used here, simply tells us about the distances between the basic units, whether the activity of these units originates in an impetus of mechanics or emotions. High density — small distances between basic units; low density — large distances between basic units. The units of matter and the units of emotions are the same, although they are not of the same origin. The density and activity of the basic units constitute the quality and intensity of matter and emotions.

If human vision could span a wider field of wavelengths than it does, we could see right through matter and experience its structure in a direct way. But what we cannot actually see,

(Continued on page 32)

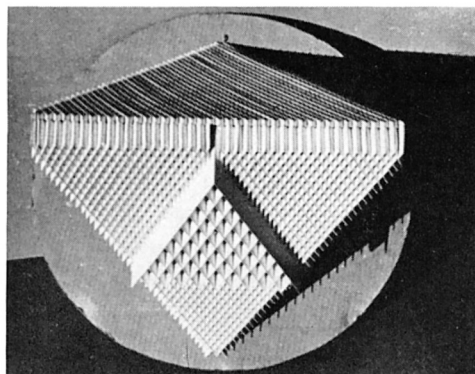


Model of a high-rise building developed from tetrahedron light-gravity studies (see below)

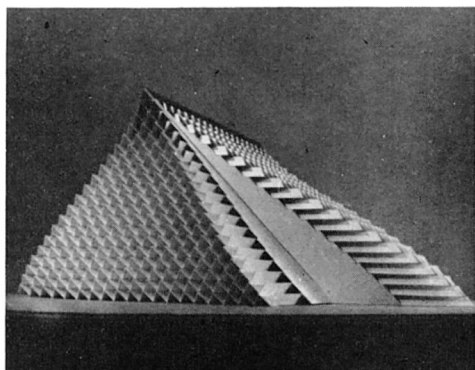
THE DERIVATION OF SURFACE RESPONSES TO SELECTED ENVIRONMENTAL FORCES BY RALPH KNOWLES

TETRAHEDRON

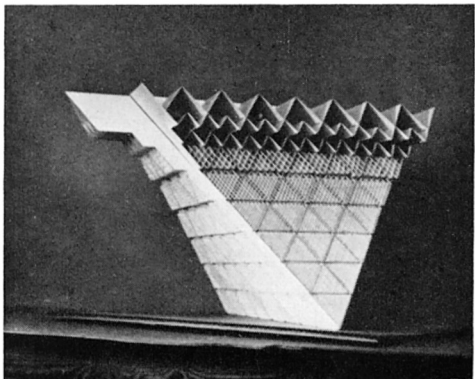
Model shows surface response of tetrahedron in light control study. Total exclusion of light from the surface of the form is produced by planar extensions. Latitude was fixed at 30° N. for all light studies. View is to the north.



Planes of gravity study model are graphic indicators of tetrahedron's response to a symmetrical load applied to outside surface and considered to load each point at the same elevation equally. Geometry here is fixed; studies not shown were also made of various forms assuming changing geometries.



Combined light and gravity. Model is one of studies of tetrahedron surface responses to simultaneously acting forces of light and gravity. Geometric ordering here is systematically changed to allow the same force in each line segment; light is excluded from surface between 8 a.m. and 4 p.m.



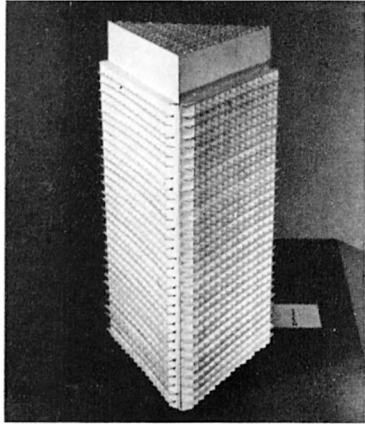
In a time of unprecedented ability to form (or deform) our environment, the professional architect has a responsibility to treat that environment with respect, based on an understanding of the major forces which, if treated arbitrarily for any reason, will react against us as has happened in the past. It is no longer enough to perpetuate an existing body of knowledge as a stylistic vernacular. The body of knowledge must be kept dynamic by constantly adding to it and its expression in form must be made clearly in terms of possible alternatives.

While it is true that design depends on imagination, imagination itself depends on the terms of reference given to it. These should be in the form of the most reliable knowledge available. The purpose of this project was to organize and relate information concerning surface response to the forces of light and gravity (wind, and heat determinates were also studied) using as forms the ellipsoid, cube, hyperboloid of revolution of one sheet, prism and tetrahedron. The reason for selecting these particular forms was that they offered a range of surface relationships and orientation. To facilitate the ultimate spatial ordering of form volumes, systems of intersecting planes are considered to produce fundamental ordering only when they are generated from the physical limits of the form such as sides, edges, and vertices. Axes are considered physical limits of forms of revolution. This strict method of ordering the surfaces was employed to limit the number of possible spatial orderings, secondly to give a basis for comparison of forms and finally to allow future spatial organization of the internal volume of the form. A further advantage of the planes was that in addition to being projected inwardly for spatial development of the volume, they would be projected outwardly as graphic indicators of surface response and also become the basis for a structural system made up of planes.

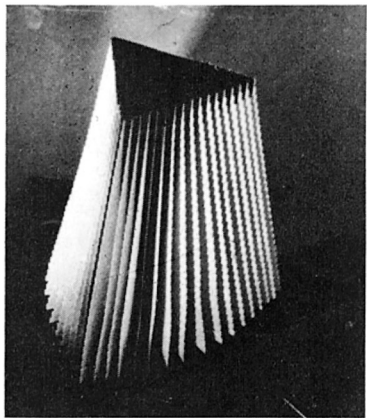
In the first phase, a study was made of the surface response of the five forms to a single force acting separately. In the light study, various systems of sun control based on planar extensions from the surface were considered and compared for efficiency. The latitude was fixed at 30° N. In the gravity study a symmetrical load was applied to the outside surface of each form and was considered to load each point on the surface equally at the same elevation. The models shown indicate changes in size, shape and attitude of planes in response to the force in action.

In the second phase, the two forces—light and gravity—were considered as acting simultaneously. The number of possible surface responses had no apparent limit. However, only those which displayed the least

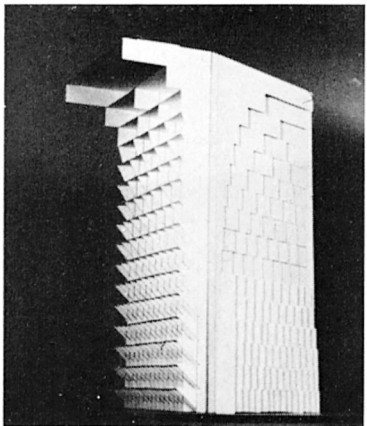
PRISM



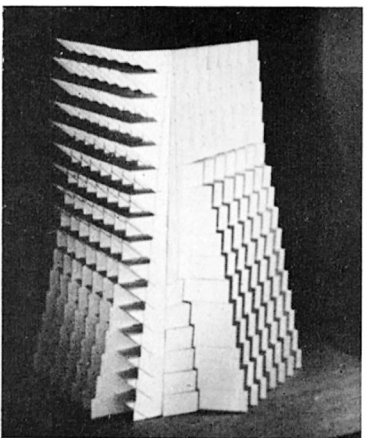
Light study, north edge



Gravity study, regular geometry



Light-gravity, 46.3% redundancy



Light-gravity, 39.2% redundancy

Ralph Knowles would like to acknowledge and thank the following people who contributed generously of their time and energies in the production of this work:

William K. Turner, Asst. Prof. of Architecture, Auburn University; Stanley P. Steinberg, architect and engineer; and the students of the Fourth Year Class; listed after the form on which they worked.

Cube: C. A. Boutwell, W. W. Brown, R. M. Freeman, G. H. Oldham, J. M. Smith C. J. Snook.

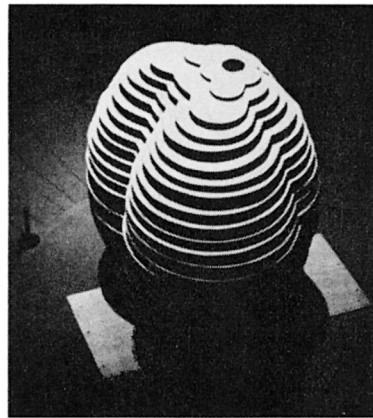
Ellipsoid: J. W. Bowden, J. I. Carrera, H. S. Hill, B. D. Knodel, L. M. Leeger, W. L. Richmond.

Hyp. of Rev.: R. M. Cugowski, B. F. Love, S. B. Todd, J. B. Williams, C. D. Woodfin.

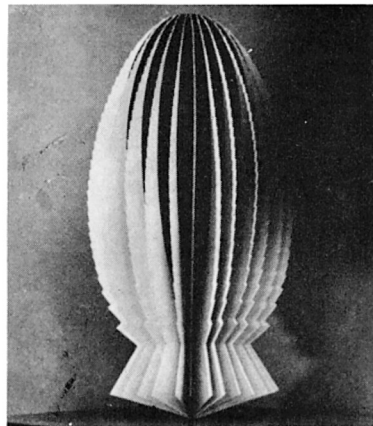
Prism: S. P. Acton, J. H. Ballard, A. L. Binkley, J. H. R. Brady, J. K. J. Colman, D. L. Meador.

Tetrahedron: R. R. Biggers, J. B. Coykendall, D. E. Egger, B. L. Hagler, J. T. Regan, W. T. Savage.

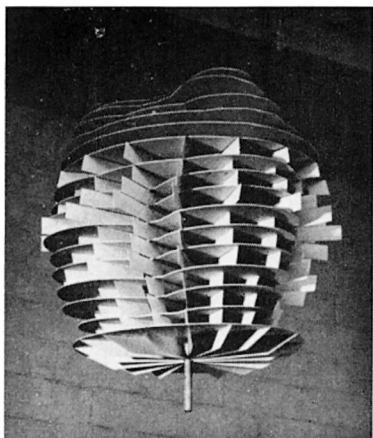
ELLIPSOID



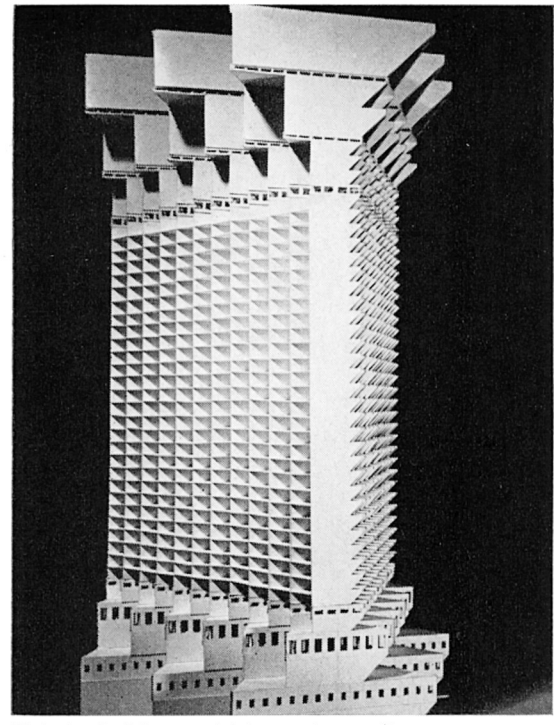
Light study



Gravity study



Light-gravity, 77.3% redundancy



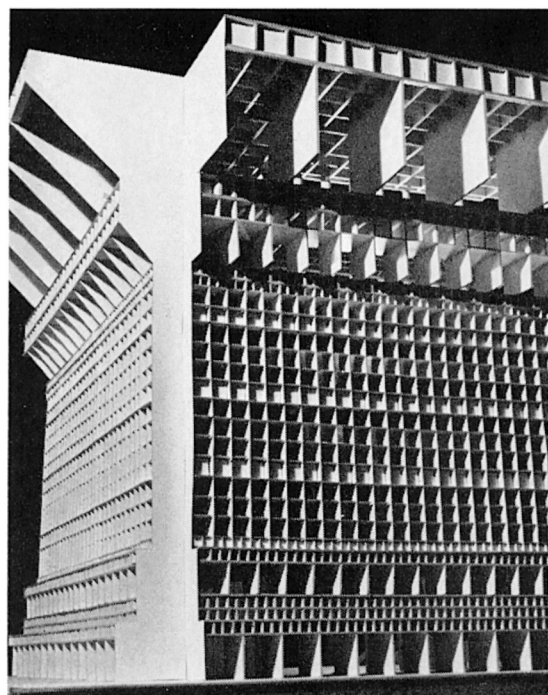
High-rise building model from prism studies

redundancy were considered. The ideal manifestation would be if a combination of the planes of maximum efficiency for gravitational loads were also of maximum light control efficiency and vice versa. Again the models are graphic indicators of the combined forces. Smaller ratios of redundancy (calculated to be the sum of areas working in response to light and gravity alone divided by the total area of responding planar surface) were obtained by making certain organized changes in the basic system of planar intersection.

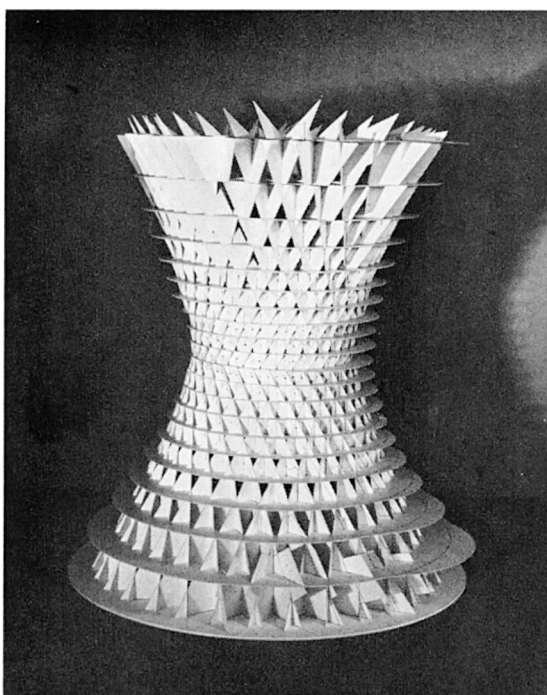
In the final phase, the results of the studies were projected into a high-rise building problem. Structures were to be 300 to 400 feet high and built of concrete by present on site and precast methods. Equations were first written for 100% efficiency (zero redundancy) to give a clear idea of what the required overt changes from top to bottom looked like. The program called for a minimum of overt changes in the private spaces within the buildings so as to provide the largest possible amount of similar spaces, which meant retarding changes required by the two forces to a point where they would be allowed to show themselves in the public areas of the building where a variety of spatial ordering is more appropriate. Again, the variety of spatial conditions was not to be derived from a program but from the natural progressive changes which take place when the two forces of light and gravity are dealt with simultaneously, merely restricting the change as much as possible in the private spaces and allowing it to accelerate in the public spaces. The problem of public space at both top and bottom of the forms was set in order to determine if we had a reasonable understanding of how to move from an area of overt change to one of no overt change and back again to overt change.

In the models, the rather great depth of the vertical systems makes them strong in bending normal to their plane and allows for a minimum of lateral support. One of the schemes—the prism—takes maximum advantage of this by suspending floors in the private space section for the entire height of the section. The rest of the schemes generally work with the idea that there is something to be gained by building large horizontal trusses periodically which define blocks of space three stories high. Since the quality of light coming through the vertically oriented systems is different on each side, despite the universal condition of no direct rays entering, the difference is accommodated in the way the floors within these three-storied blocks of space are perforated, dimensioned, located, and so forth.

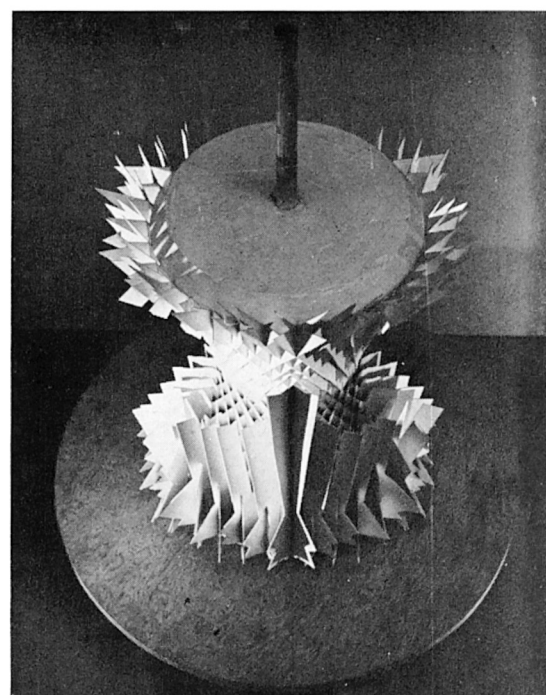
The fact that the ideal of zero redundancy was never approached in this study using selected geometric shapes, suggested a second study dealing with form responses to environmental forces, letting the forms derive entirely in response to the combined dictates of light, heat, gravity, air and sound. Such an investigation is now in progress. The complex three dimensional nature of the shapes being produced implies that the results will be most applicable to group (urban) form rather than to single building forms.



High-rise building model from cube studies

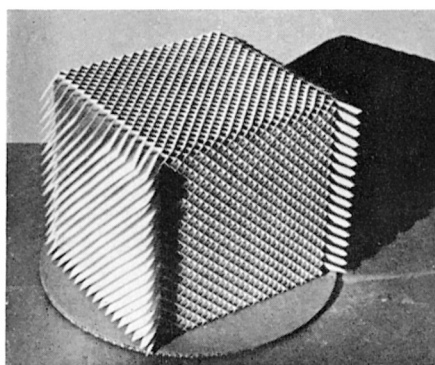


Hyperboloid, light-gravity

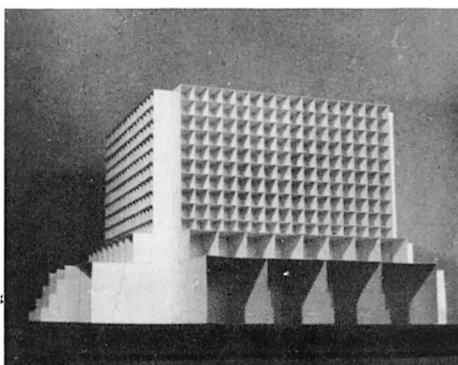


Hyperboloid, light study

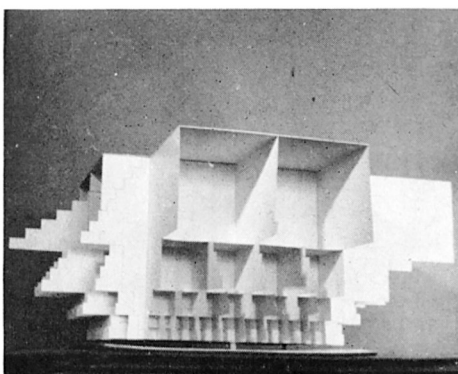
CUBE



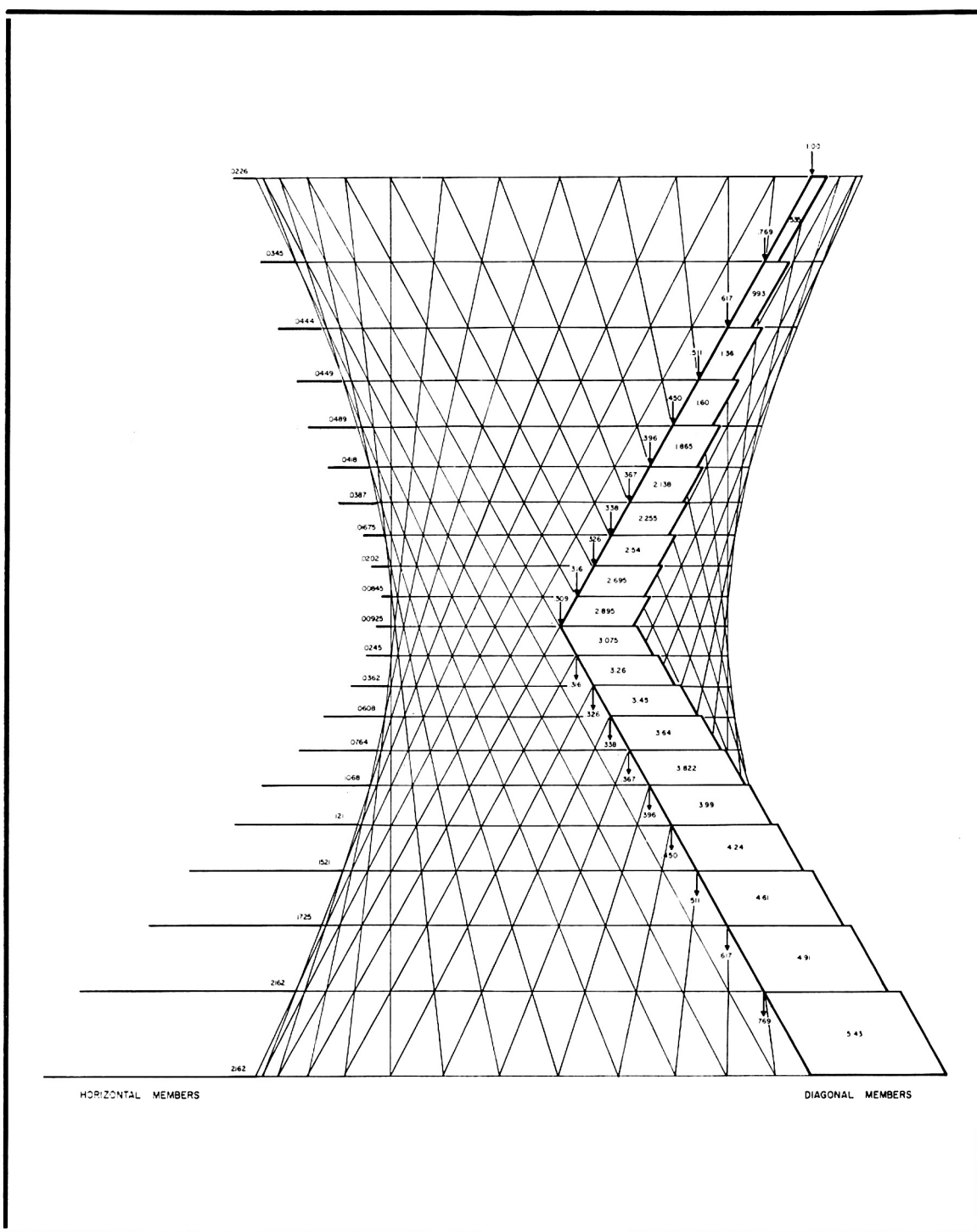
Light study from N-E corner



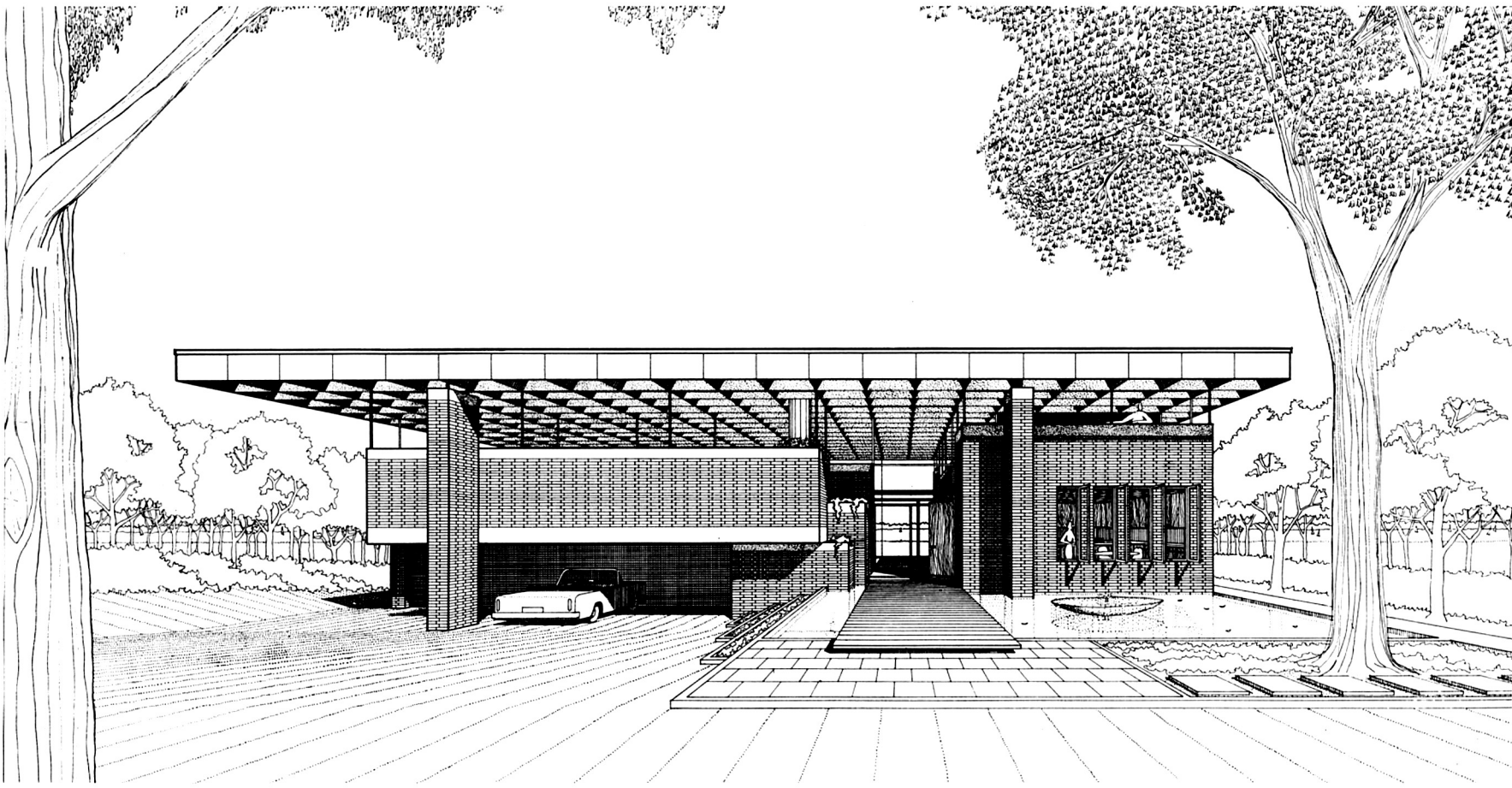
Light-gravity, 68.5% redundancy



Light-gravity, 70.2% redundancy



Hyperboloid, gravity graph



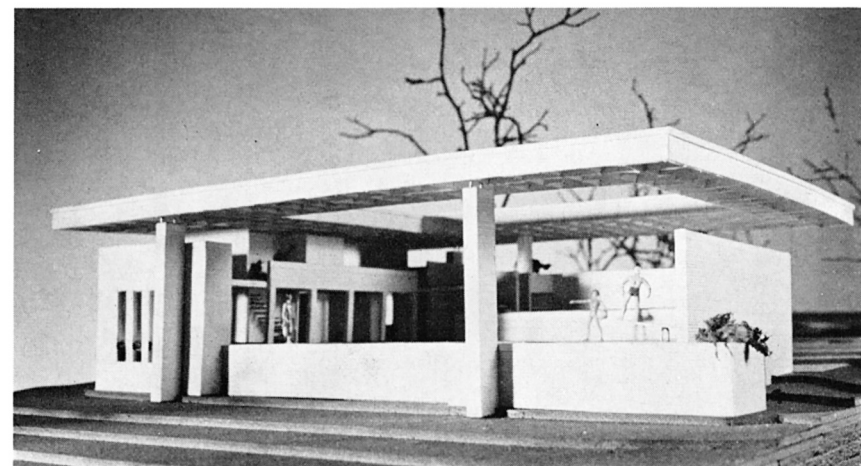
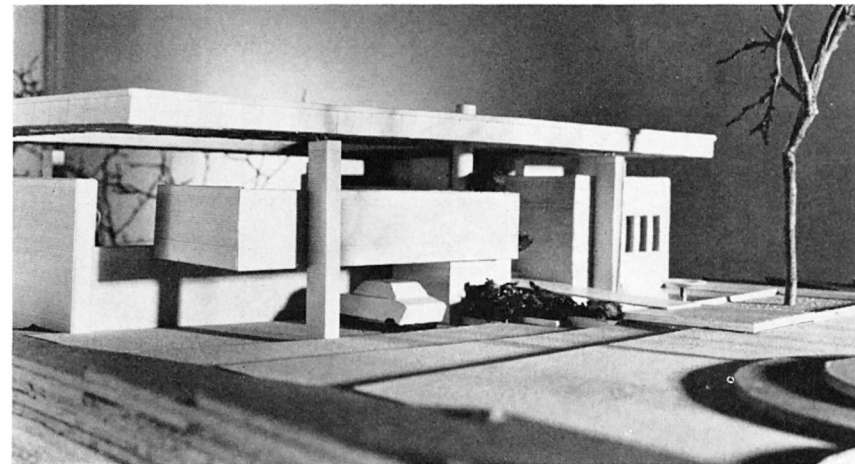
FOUR-LEVEL HOUSE IN FLORIDA BY WILLIAM MORGAN, ARCHITECT

STRUCTURAL ENGINEER, J. N. HUTCHINSON

The site of this residence is the densely wooded west slope of a St. Johns River tributary near Jacksonville, Florida. The clients require swimming pool enclosed by an insect screen and visually shielded from the road to the east and from neighbors to the north and south and functionally arranged for swimming parties and entertainment. Shelter for four cars, a fountain and pool entry, *all'aperto* dining terrace, and a varied sequence of interior spaces were desired. A minimum number of trees will be removed for construction and landscape maintenance limited to mowing ground cover twice a year. Exposed natural materials requiring minimum maintenance are to be used. Drapes are not desired.

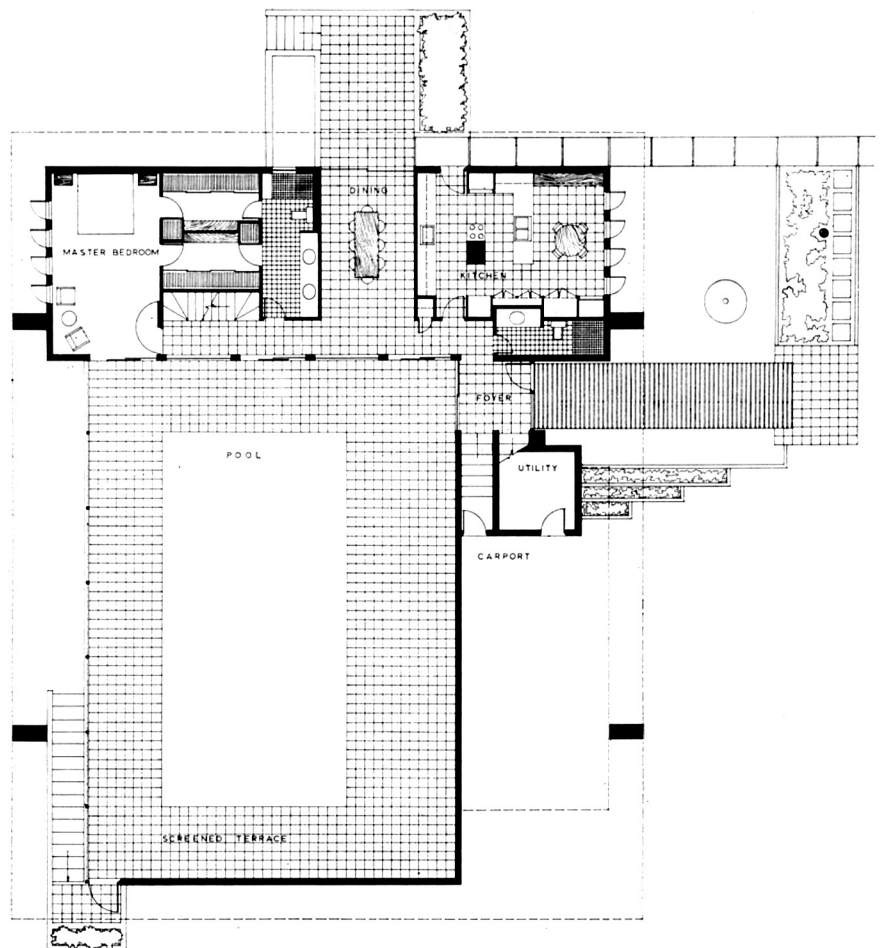
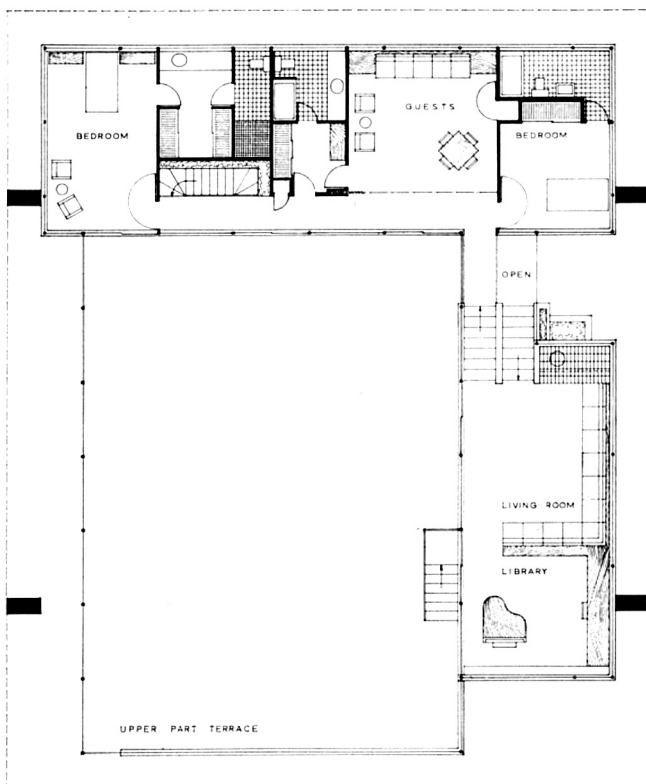
The entry drive and parking areas are cut into the site about two feet, minimizing the cut and fill required and de-emphasizing automobiles in relation to the house. A magnificent hickory tree marks the main entry approached by a bridge over a fountain-fed pool. To the left, steps ascend to the living room; in front, sliding glass doors open onto swimming pool deck; and to the right a gallery leads to the kitchen, dining room and master bedroom. A stair descends from the foyer to the carport. The fourth and highest level contains the son's, guest and maid's rooms. A second stairway connects the pool deck with upper level dressing area. Ceiling heights vary from 7'4" in sleeping areas to 11'8" in the living balcony and 15'8" at the pool deck.

Four masonry piers support the 68' by 84' roof. Acoustic plastered ceiling coffers express the 4' steel joist roof structure. Walls are white Norman brick, exposed both sides. Carpeting covers upper level floors. Slate floors cover slabs on grade. Air conditioning equipment is installed in a 20' by 24' storage room below the master bedroom and dressing area. The negotiated contract totals \$60,000.00 for the basic house, with an additional allowance of \$20,000.00 for the swimming pool and equipment, professional fees, landscaping and carpeting.





PHOTOS BY ALEXANDRE GEORGES



DESIGN FOR THE PEDESTRIAN

BY ROBERT ZION

A paper delivered at the International Design Conference, Aspen, Colo.

There has been a good deal of overlapping of the professions in this conference. Yesterday, we had Arthur Cohen, who is an editor, theologian and poet. We had Dr. Von Foerster, physicist and comedian, and for a few moments, Dr. Menninger proved himself to be a high class urban designer, with his bicycle paths through the city, pedestrian ways, and parks that actually can be used.

With the indulgence of the doctor, I am going to try my hand at medical diagnostics, just to pinpoint the ailments which I think are besetting our urban designers. These, I think, are two. The first I call Hardening of the Categories, a sort of occlusion of the imagination. It evidences itself, first of all, by the recurrence in the vocabulary of the patient of several telling words; "impractical," in the sense that the grand boulevards of Paris and the Green Parks of London are impractical; "unfeasible," as the canals of Venice or the siting of San Gimignano; "impossible," as Dr. Menninger's bicycle path through New York City. The prognosis in these cases, I'm afraid, is negative. And 90 days in a clinic or 180 days is not going to aid a planner or designer who has begun to use "impractical" and "imaginative" synonymously.

The second ailment, I'm more hopeful about. This is a type of megalomania. As designers today we're thinking too "big." As we design entire regions, new cities, micro-climates and whatever the other terms are, nobody any more seems to have time for small details at the pedestrian level. And these are the very elements that can make life in the city comfortable and pleasant, and even exciting. I would like to review some of these aspects, these details of urban design that have been ignored.

Pedestrian design elements that we're going to discuss today include pavement, city lighting, street furniture and others. First of all, the pavement. When you consider that in order to remain upright, every one of us must be aware at all times — at least subconsciously — of what's going on at the floor, it's amazing how little time and effort and money is expended in the design of the floorscape. The floor can be more than something to walk on or even good to look at. It actually can instruct the pedestrian or the automobile as to how a space is to be used. By color and texture, we can invite people or we can keep them out, we can encourage entrance, or exit. We can warn a driver, by the texture under his automobile, when he has gone beyond his precinct.

In the Campidoglio Square, designed by Michelangelo, the pavement design is used to reaffirm human scale. The large white bands are strong enough to "lean upon." So successful is this design that the pedestrian feels sufficiently at home in this area to read a newspaper and defy the autoist. Typical of some of the richness of common materials available today is seen in the European pattern made of granite blocks. The design is determined very simply by the arc which the workman can describe with his arms; he kneels at the center and just sets the blocks and sand to as far as his arms reach. We have all these materials in America which are used so artfully in European pavements. In Spanish pavements, brick and blue stone are used in combination. In another, a handsome exposed aggregate is used in place of ordinary concrete. In Italy, a decorated,

paved strip is placed between the sidewalk and the street, which in America usually starts out as grass but ends up as mud. Throughout Europe, one sees handsomely colored stones embedded in mortar to relieve monotony in the floorscape. And on the Spanish steps, in Rome, the most elegant manhole cover in the world! A star, fashioned in travertine. A fine contrast to the gaping holes we find in our own cities.

Now, let's consider street lighting. Every automobile today comes equipped with two headlights. Some even have four and it is not inconceivable that in the next few years, there will be models with six and even eight, perhaps as status symbols, or the *coup de grace* in the battle for built-in obsolescence. The pedestrian, however, carries no illumination whatever, yet he is relegated to the sidewalk, where his light is only the reflection from the street light, or the overflow from shop windows and neon signs. I make a plea here for the reorientation of city street lighting to the convenience and safety of the *pedestrian*. It was done in olden days, even in America. These lights can be part of the architecture and will thus relieve the clutter of the sidewalk.

In Denver, interestingly enough, in the Mile High Development, there are excellent solutions to street lighting. In a city in Denmark, I found an example of playful urban lighting — an avenue of white globes just strung from the trees. Public officials in New York and Chicago will tell you this can't be done — it's against the law, etc., but it works and it's handsome. In Marseilles, on the waterfront — and I'm certain that this is not mere happenstance — there is a tenderness exhibited in the design of the street lamps which have been made to reflect the masts of ships so that they don't intrude on this romantic scene. It is difficult, if not impossible, to tell the masts from the lighting standards.

Next, I'd like to talk about simple amenities. Any civilized city must provide for the basic comfort of its citizens. Yet, how many cities in America today provide any sort of shelter from the wind or rain for people who use surface transportation? To be a bit more basic, has any designer ever considered the plight of the stranger in town, or the foreigner — which is even worse — who has not developed, over the years, a personal Baedeker of available toilet facilities. We just turn our backs on this entire problem. I know there are difficulties to the solution — policing and sanitation — but they certainly can't be above a nation that has mastered nuclear fission.

A sign that I think embodies the benevolent spirit which I am driving for, is one which appears on a dock in Stockholm, Sweden. It's aimed at the one in a hundred or a thousand, perhaps, who is interested in birds. The sign says, "Will you stand at this site? At some time during the day or night these are the birds which you may see from here." I'm not especially interested in birds, but it still gave me a very good feeling to know that someone is interested in providing this information for those who are.

My next topic is street furniture. I assume that we all know what street furniture is. These are the objects that furnish our sidewalks . . . trash baskets, benches, bus stops, etc. The British, several years ago, made us very conscious of the treatment of our streets in an article called, I

believe, "Manmade America."

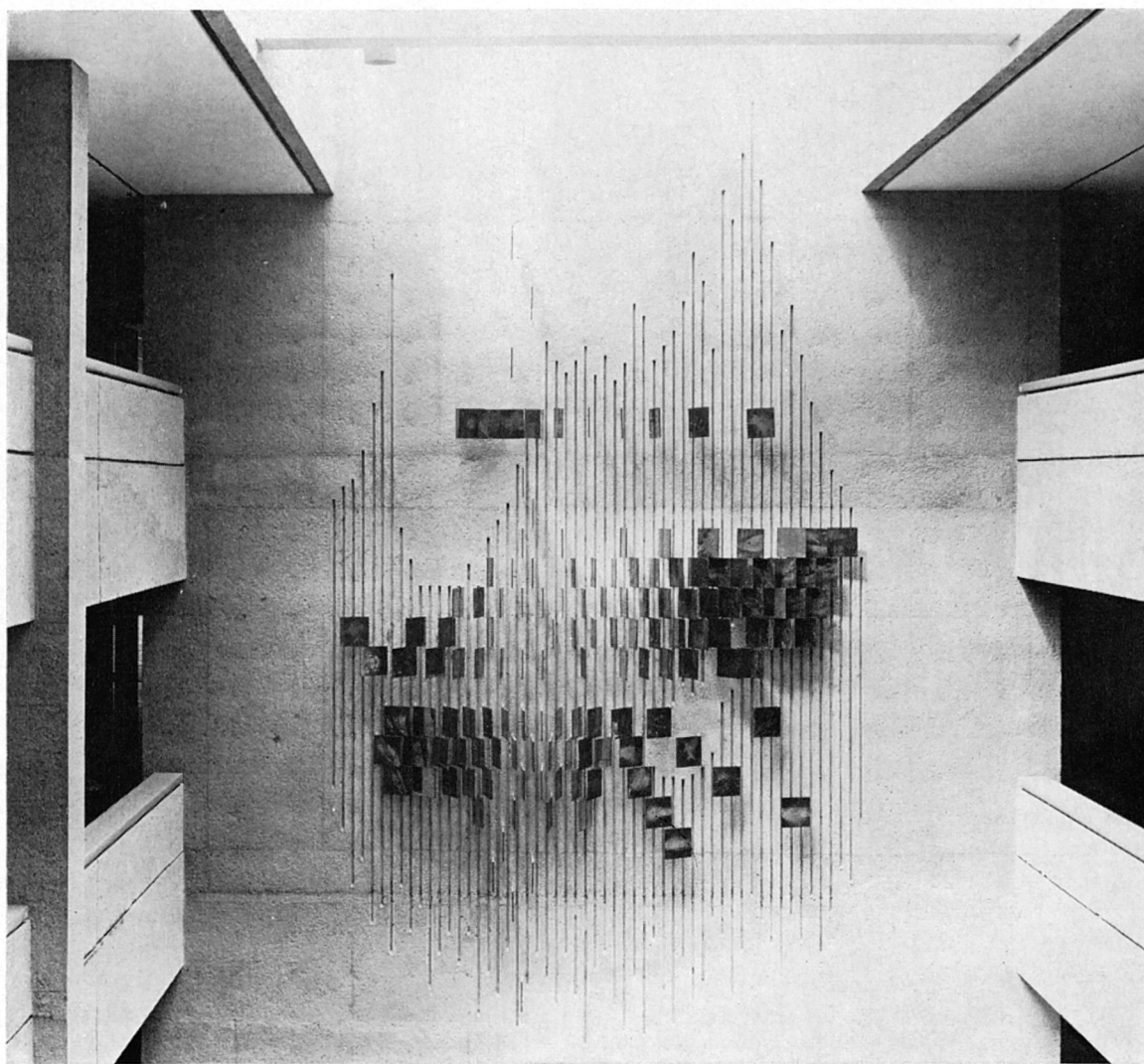
I would say that there are three basic requirements for good street furniture design. First of all, it must work; it has to be efficient. Second, it has to be appropriate to the site. You wouldn't expect the same design to be appropriate both to a city and a rural town. And lastly, unfortunately it is lastly, it must be good looking. But what we want is a combination of all three. Here in America, at Jones Beach is an entire set of appropriate, efficient and good looking street furniture. A waste basket, at this beach along the Atlantic Shore, is a ship's ventilator which was bought from a marine hardware company. It's painted gray — the inside is painted orange, and just begs to have something thrown at it. And you can't miss! The target is so big, that it can take ten copies of the Sunday New York Times without even belching. The benches are the superstructures of a boat. They're at sitting height, and even have small portholes. There is a drinking fountain made of a little pedestal for children, and a capstan wheel, also a drinking fountain.

The next section, I entitle "Delight." There are some facilities in cities that Americans know nothing about. You can find them in most European towns, however. These are services that aren't going to make much money, but when they're there they contribute immeasurably to the pleasure of city life. You are all familiar with the bookstalls of Paris, the flower stands on the Spanish steps, and the outdoor cafes of every country in Europe — even in Russia for that matter. If these businesses can't afford the rents in midtown where their services are needed, then I think it's the obligation of the city to subsidize them in some way; perhaps take over a parking lot and install the simple pipe frames and canvas shelters that are needed for these amenities. As in the ice cream cone stands in Stockholm, bookstalls of contemporary design, or outdoor cafes, these structures can be made of plastic, or perhaps canvas. It's as simple as that. It wouldn't cost more than two or three hundred dollars for the city to erect them and then rent them as concessions. And I'm not thinking of the credit card type of restaurants. These would be cafeterias possibly for soft drinks and sandwiches.

In the field of graphics, what has happened in our country and many others too, is that the materials and the scale that are suitable for Piccadilly and for Times Square, have become universal. Too often, signs and posters are designed without regard to scale or suitability. Regulations as to size and materials do not solve the problem. What we need above all else is good Design. In Portugal, interestingly enough, I found some excellent posters beautifully designed. And there was even some tenderness involved in the way in which they were posted on buildings.

Most designers talk nostalgically about the old-fashioned signs of a boot for a shoemaker and a cow's head for a butcher, etc. They're gone, but not really. There is a series of such signs designed in a contemporary way for stores in Valingby, Sweden, and they're just as recognizable as if they were flashing neon. They're all abstractions and magnificently done.

In conclusion, let's say that as designers, we must begin to "think small" to reintroduce to city life the details that bring pleasure to the pedestrian.



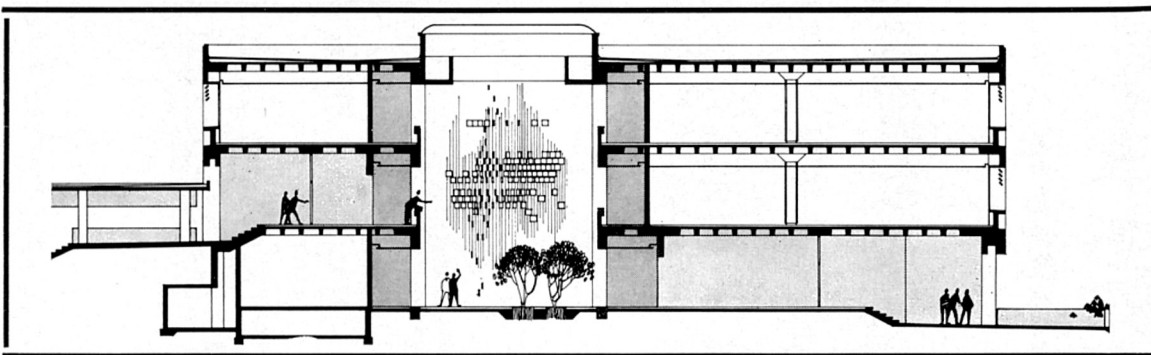
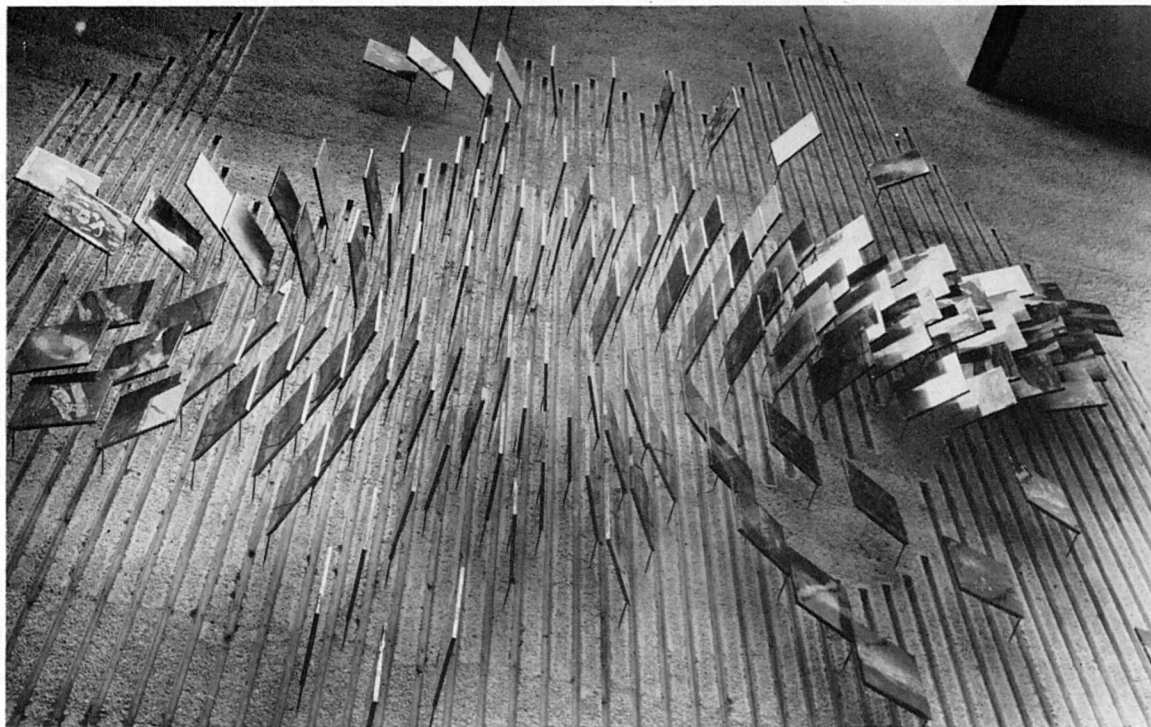
LIGHT MURAL BY MICHIO IHARA

FELLOW OF THE GRAHAM FOUNDATION FOR
ADVANCED STUDIES IN THE FINE ARTS

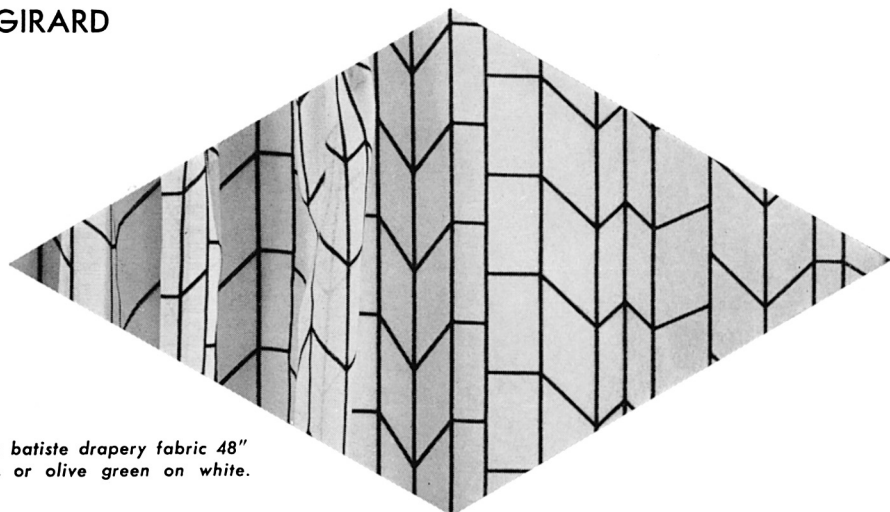
In July of 1962 I was asked by William Haible of Anderson, Beckwith, and Haible, to design a mural for the wall of an interior courtyard of an office building (now occupied by Sylvania Electric Company) in Waltham, Massachusetts.

The sand-blasted concrete wall, 32' x 50', stands at the north end of the courtyard, 32' x 70', which is illuminated by a skylight. To take advantage of the constantly changing overhead light, I planned a "light mural" of one-foot squares of copper sheet (given dimension by folding the copper over 1/2" plywood and gluing with Epoxy). To give an individual character to these 150 modular units, I "painted" them with flux under heat. Each one is secured to the wall by two copper rods projecting 5" from the wall. They are set at different angles; in addition to the changing light, this provides, in effect, a different design at each step to daytime passersby. The vertical lines are one-inch-deep grooves in the wall. At night, the mural is lit dramatically by flood lights from above.

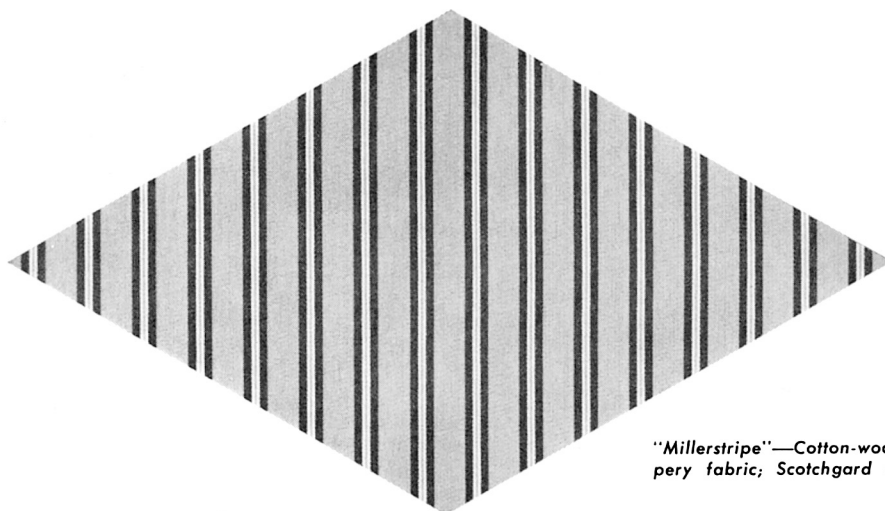
My interest in modular design goes back to my early drawings and paintings, in which organic modular forms predominate. In sculpture I am concerned above all with two things: time as a creative element which allows change and motion; and nature, combining forces of light, wind, heat, and manpower for constructive ends. Analogies with growth in nature and democratic action in society are completely relevant to my aims. — MICHIO IHARA



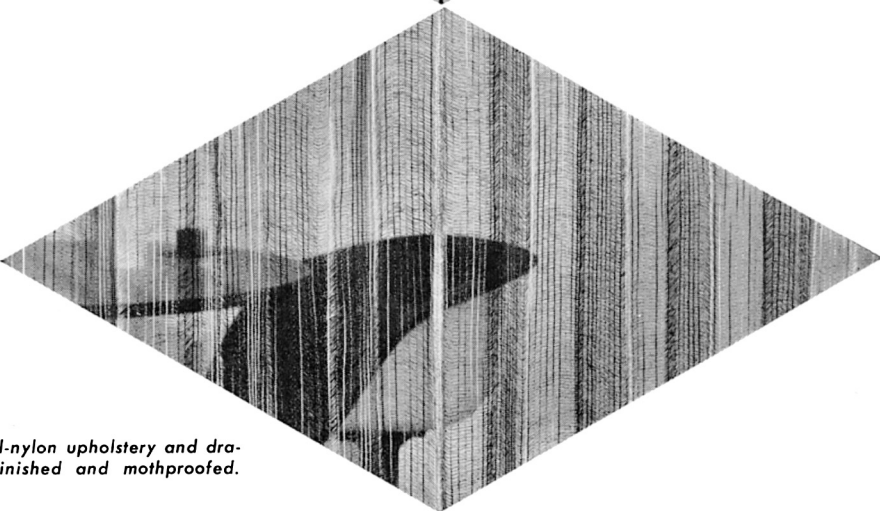
NEW FABRICS FOR HERMAN MILLER BY ALEXANDER GIRARD



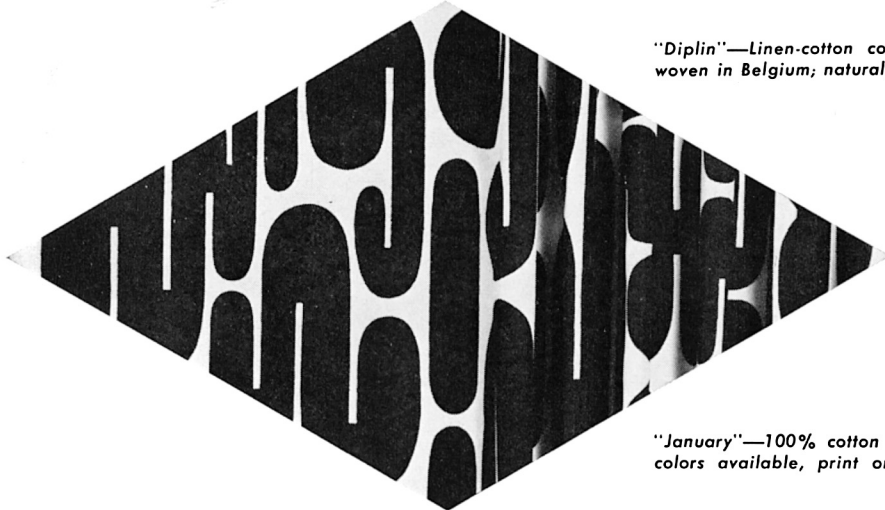
"Graph"—100% Dacron batiste drapery fabric 48" wide; black, ultramarine, or olive green on white.



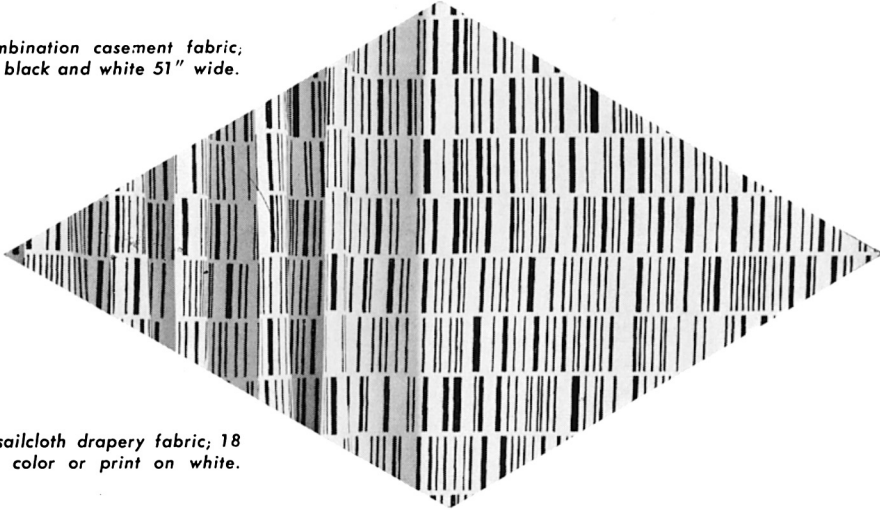
"Millerstripe"—Cotton-wool-nylon upholstery and drapery fabric; Scotchgard finished and mothproofed.



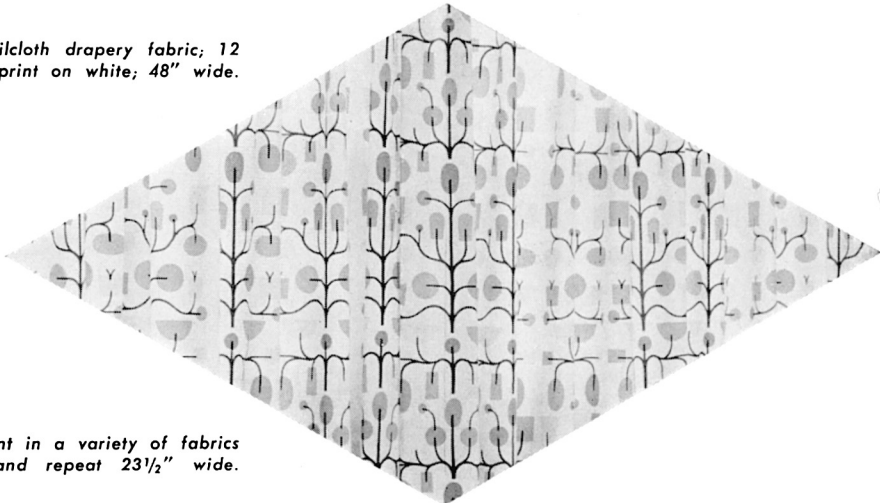
"Diplin"—Linen-cotton combination case-ment fabric; woven in Belgium; natural, black and white 51" wide.



"January"—100% cotton sailcloth drapery fabric; 18 colors available, print on color or print on white.



"Lines"—100% cotton sailcloth drapery fabric; 12 colors, print on color or print on white; 48" wide.



"Fruit Tree"—Drapery print in a variety of fabrics and colors; 48" wide and repeat 23½" wide.



COUNTRY CLUB BY ALPER AND ALPER, ARCHITECTS

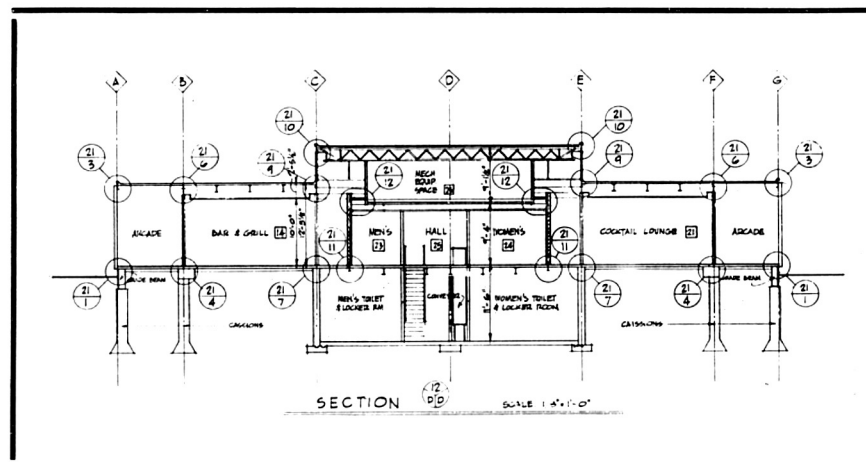
The program called for a club house containing pro shop, bar and grill and locker facilities for 300 to 400 golfers daily and restaurant and banquet facilities for the general public. The architects were also assigned to do the interior design and furnishings and the landscaping adjacent to the building, including parking facilities.

The 18,000-square-foot building is adjacent to the 1st tee and the 9th and 18th greens of the 18-hole golf course, and the 1st and 9th greens of the nine-hole golf course. The architectural concept of the building was to erect a structure that would be so light and so open that it would be visually part of the site. The structure is an independent steel frame. The exterior walls are set back 10 ft. from the edge of the roof forming an arcade around the entire building. The exterior walls are common brick painted white and plate glass set in aluminum frames.

Separate entrances divide the traffic flow. The golfers use the east entrance and the public the west entrance. The kitchen was set in the center of the building so that it can serve the formal dining room, the golfers grill and the three banquet rooms. Deliveries are made through the basement and brought up on a conveyor. The space above the kitchen houses a large air handling unit which supplies heated or cooled air through the grills along the interior brick wall. The entire south end of the building is exhausted through the kitchen, using the necessary kitchen exhaust system. This ventilates the entire building except for the locker rooms which are independently ventilated.

A theatre occupies a portion of the basement area originally planned for golf driving ranges.

The building was designed on a 20-foot-square module. All the spans are 20 feet except for the center bay which is a clear span of 40 feet. The arcade is a 10-foot bay framed with exposed steel decking. All columns, except those along the exterior perimeter of the arcade, are "fire-trols" with a two hour fire rating. In order to provide the two-hour rating throughout the building a U.L. tested fire resistant ceiling was used. The ceiling, consisting of an exposed lay-in grid of steel and acoustical boards, covers 80% of all ceiling areas in the structure. Cost of construction was \$17.50 per square foot.

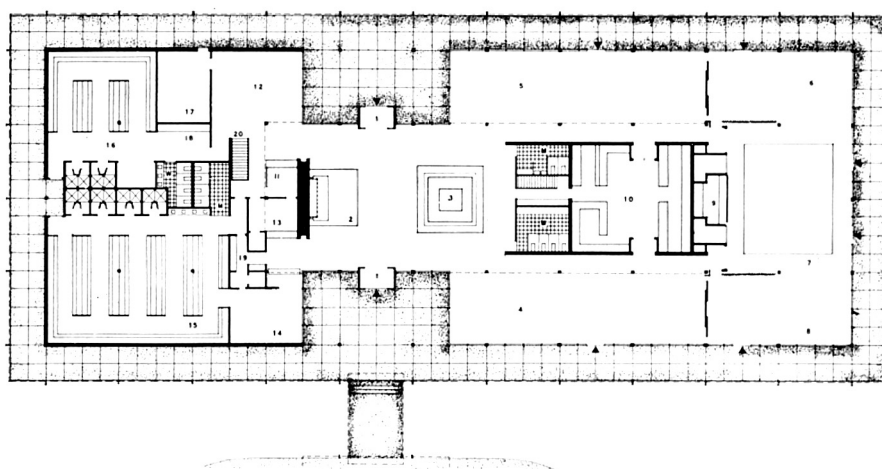
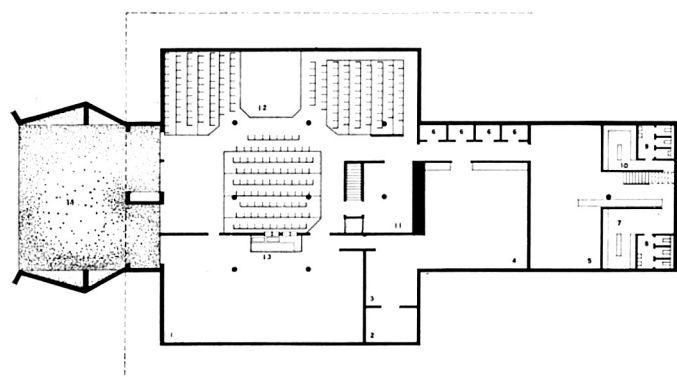
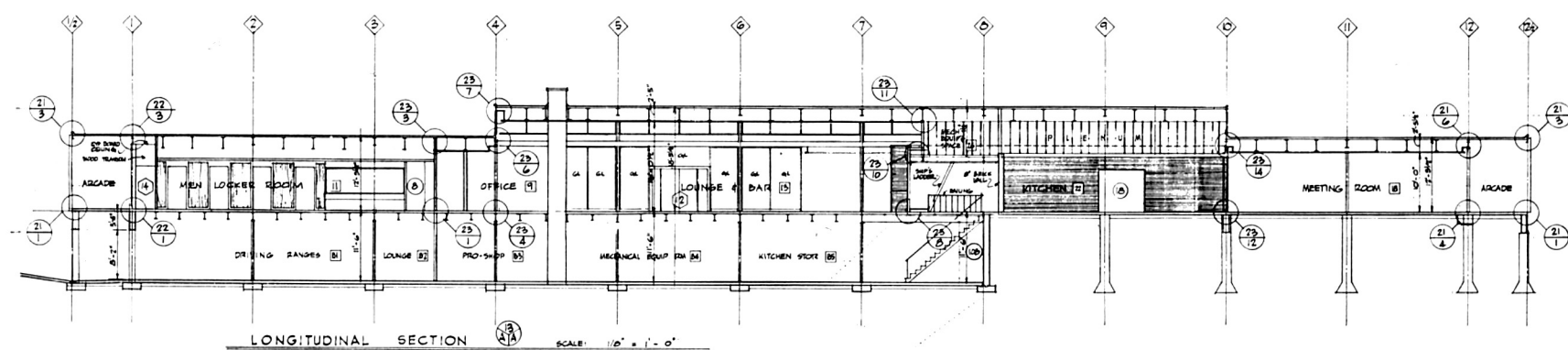




PHOTOS BY HURE HENRY, HEDRICH-BLESSING

WILLIAM S. SILBERBERG & ASSOCIATES, STRUCTURAL ENGINEERS

ABRAMSON & KLIPP, MECHANICAL ENGINEERS



PRODUCTS



merit specified

FOR CASE STUDY APARTMENTS NO. 2

Killingsworth, Brady & Associate, Architects

The following list of specifications represent those products considered by the architects on the basis of quality and utility as being most suitable to Case Study Apartments No. 2 and have thus earned the right to be "Merit Specified" within the meaning of the Case Study House Program. Additional products will be added to the list when specified by the architects.

STRUCTURAL

Cement—Portland Cement Association, 816 West Fifth Street, Los Angeles, California.
Riverside Cement Company, 2404 Wilshire Blvd., Los Angeles.

Steel Columns—Bethlehem Steel Company, 6000 South Boyle Street, Vernon, California.

Framing Lumber—American Plywood Association, 1119 "A" Street, Tacoma 2, Wash.
Hemphill-O'Neil Lumber Company, Inc., P.O. Box 667, Chehalis, Washington.

West Coast Lumbermen's Association, 1410 S.W. Morrison Street, Portland 5, Oregon.

Roofing—Owens-Corning Fiberglas Corp., 5933 Telegraph Road, Los Angeles 22.

DOORS AND WINDOWS

Sliding Glass Doors—Arcadia, Northrop Architectural Systems, 5022 Triggs Street, Los Angeles 22.

Slab and Wardrobe Doors—General Veneer Manufacturing Company, 8652 Otis Street, South Gate, California.

Shower Doors—American Shower Door Company, Inc., 936 North Cahuenga Boulevard, Los Angeles.

Jalousies—Cal-State, 2473 Fletcher Drive, Los Angeles 39, California.

Plate Glass—Pittsburgh Plate Glass Company, 1413 Cravens, Torrance, California.

Obscure Glass—Mississippi Glass Company, Fullerton, California.

Sliding Door Closers—The Kelly Klotzer Company, 20367 Gault Street, Canoga Park, California.

Door Hardware—Schlage Lock Company, 3467 West 8th Street, Los Angeles 5.

FURNISHINGS

Furniture—Crossroads Manufacturing, Inc., 15250 East Whittier Boulevard, Whittier, California.

Frank Bros., 2400 Long Beach Boulevard, Long Beach, California.

Designed by George Kasparian for Kasparians, 7772 Santa Monica Boulevard, Los Angeles 46.

Knoll Associates, Inc., 8936 Beverly Boulevard, Los Angeles.

Herman Miller, Inc., 8806 Beverly Boulevard, Los Angeles.

Scandiline Furniture, Inc., 2175 Signal Street, San Pedro, California.

Paintings—Orlando Galleria, 17037 Ventura Boulevard, Encino, California.

FIREPLACES

Masonry—Pacific Clay Products, Los Angeles Brick Division, 1255 West 4th Street, Los Angeles.

Dampers—Superior Fireplace Company, 4325 Artesia Avenue, Fullerton, California.

ELECTRICAL

Kitchen Lighting—Globe Illumination Company, 1515 West 178th Street, Gardena, California.

Electrical Supplies—Consolidated Electrical Distributors, 1700 - 17th Street, San Francisco, California.

Low Voltage Lighting—Coronado Manufacturing Company, 1247 East Hill Street, Long Beach, California.

FINISHES

Quarry Tile—The Mosaic Tile Company, 131 North Robertson Boulevard, Beverly Hills, California.

Ceramic Tile—International Pipe & Ceramics Corporation, 2901 Los Feliz Avenue, Los Angeles.

Counter Tops—Laminart, Fabirion Products, 6430 East Slauson Avenue, Los Angeles 22.

PLUMBING

Kitchen and Bathroom Sinks—Graning Company, 4100 North Arden Drive, El Monte, California.

Water Heater—Day & Night Manufacturing Company, 855 South Anaheim-Puente Road, City of Industry, California.

Water Purifier—Ogden Filter Company, Inc., 4214 Santa Monica Blvd., Los Angeles.

CABINETS

Kitchen—St. Charles Custom Kitchens, 8660 Sunset Boulevard, Los Angeles.

GARDEN

Concrete Staining—Kemiko, Rohloff & Company, 918 North Western Avenue, Los Angeles 29.

Pool and Pool Equipment—Fiesta Pools, 9830 Atlantic Blvd., South Gate, California.

THE CONCEPT OF DENSITY AND THE SAMENESS OF ALL MATTER—GOSTA EDBERG

(Continued from page 20)

we can imagine. We not only can, but we are forced to imagine, since we have accepted the new image of the universe. This is important. How will the idea of density as a compositional element fertilize ideas of the plastic arts?

The density concept may perhaps be more easily understood if we use it in an analysis of an existing work of art. If we analyze a picture according to the Bauhaus system, for example one by the cubists or by Malewicz or Albers, all contemporary with the Gestalt psychologists, we first note a number of color areas, hard-edged or not, and their figure-ground relationship of positive-negative. Then we balance these color-patches as one balances one object with another on a scale. We group the patches or picture elements; we draw lines of interest among them; we try to find among them rhythmic orders of nearness, similarity, closure or common fate. Sometimes, groups of elements appear to be moving along the visible or invisible lines of the picture, sometimes even towards a point outside the picture plane. The idea of directions, horizontal, vertical and left or right diagonals, as explored by such painters as Seurat and Mondrian, enter the analysis. But these movements and directions are thought of for the sake of analysis, as arrested and frozen still; a movie film that has stopped.

If the density concept is added in analyzing the same picture, the results of the Bauhaus analysis still hold true, that cannot be denied. But broader and more general results will be achieved if the theory of the sameness of all matter and the density-concept are applied. In such a case, the direction of visual flow on the surface would only be regarded as a secondary phenomenon. The picture elements would be perceived as containers of movement and emotions, in which containers and elementary units of density constantly change. Essential for the picture would be the changes of the density of its matter, also the changes of the densities of exaltation and experience.

The behaviour of the elements of the Newtonian world and of Bauhaus theory can be regarded as special cases of the more general law about the sameness of all matter and its movements. Therefore a work of art, as seen by the Bauhaus, can be regarded as a flow of density movements arrested and frozen onto a picture plane or volume in the same way as life was arrested in Sleeping Beauty's palace.

In experiments of form according to the Bauhaus, the figure-ground relationship is always either non-existent or in constant fluctuation. In the density-concept and in theories of perception of the visual world, like those of J. J. Gibson¹, the ground or the space relative to the figure is always changing. The ground is as important as the figure for perception. J. J. Gibson has said that linear perspective, which is really untrue to the visual world, is only a special result of a more general perspective, mainly characterized by changes of the density of texture. Vision accounts for much more than the mere projection on a picture-plane; it always takes in the whole visual world and not only the visual field. The visual world means the total space perceived, while the visual field means only the projections of optical stimulus on a picture plane or the retina.

In the density concept everything, including the spectator, must be thought of as moving and the whole visual world must be considered.

A passenger in an airplane looking out through his window, at another airplane moving in the opposite direction, experiences a problem of relative motion and its densities in judging whether his airplane, the other airplane or the ground and the clouds or all of them are moving.

¹J. J. Gibson, *The Perception of the Visual World*

The density concept not only accounts for mechanically functioning elements, including color and texture, but also for direct, associative and metaphysical meanings. All elements and qualities produce activity among the basic units. Experiences from other senses than vision can and should perhaps also be included in the density concept. This is true not only in the case of synesthesias but probably also, if the total of all sensoral impressions is considered.

If everything in the world had the same blue color, it would not be possible for us to perceive this blue as color. Perception begins with the beginning of changes and the appearance of contrasts and controversies. In the existence and activity of constant change, harmony of experience is hidden. The proposition of this paper then must be:

The constant changes of density are the basic and primary elements of composition. Elements such as line, surface, volume and time and the qualities of color and texture and meaning are special results of the density concept; they fall into the fold of the sameness of all matter.

If a piece of art or architecture can be experienced in terms of the world of density rather than in combination with associations of the Newtonian image of things, man's eyes and mind may be opened for new and richer visual experiences and for new fields of creative thought, which in a true sense are in pace with the flow of the world we live in and also with advanced theories of science.

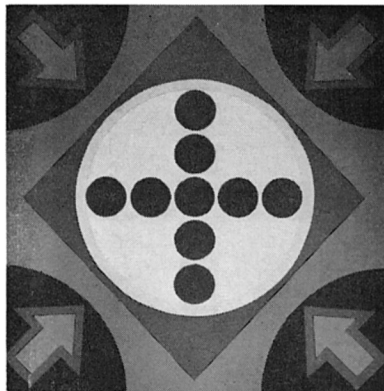
ART

(Continued from page 9)

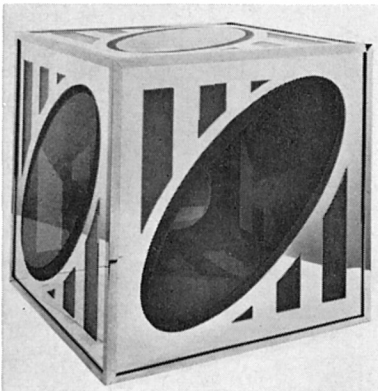
He puts together canvases of the actual shapes of his selected forms. The unity is achieved then either through the careful equipoise of these cut out forms, or by relating the sections with string. His work has a large, airy feeling, and he handles his balances and contrasts firmly. But again, the mere esthetic arrangement of forms leaves something wanting.

Robert Slutzky: A young artist who never showed in New York before, and one wonders why his first chance is in so distinguished a gallery. Slutzky is in the dead central area of the territory staked by Mondrian's lesser followers. He even uses the diamond canvas to show his abilities as a manipulator of color volumes and planes. But his proposals are old, his personal touch tentative, his paintings dull.

Arakawa: The most interesting of the lot though I can't say I liked his paintings. They are very refined, very carefully painted in the palest of *grisaille*, and very much indebted to certain drawings of Duchamp and Picabia. Arakawa is up-to-date in his motifs: polemics about laws of perspective, and poetic essays on "Inside the Vibration Machine of a Funnel Within a Funnel Becomes One Hundred Thousand Funnels." Only it becomes it like the Duchamp nude became mobile; like certain dadaist diagrams became active and so on. Arakawa's immaculate technique and his propensity for glib commentary on established contemporary phenomena puts me off. But there is no question about his relative originality in this exhibition, and his quality of assurance.



George Ortman
"Ring" 1963. Painted Construction,
48" x 48"
Courtesy Howard Wise Gallery
Photo: Oliver Baker Associates, Inc.



Larry Bell
"Lux at the Big Apple" 1963-64
Glass and mirrored sculpture,
24 1/4 x 24 1/4 x 24 1/4
Courtesy Sidney Janis Gallery

A COLLOQUY OF SCULPTURE

(Continued from page 7)

When I last encountered Rodin's *Kiss* not as photograph but in marble, at the center of the Rodin Museum in Philadelphia, I knew at once that what I saw was wrong, that it was a copy, and searched all over the sleek marble until I found the name of the stonemason who had reproduced it. I have never bothered to inquire whether the job was done directly under Rodin's supervision, and I cannot be sure wherein the difference lies between the calipered copy and whatever may have been the original, carved or modeled by the sculptor and then reproduced in stone. The question raised seemed to me then more meaningful than any explanation and has remained so. I reviewed the question while walking about among the exhibits of Arp's sculpture at the Museum of Modern Art several years ago. Everywhere one read on the label that this sculpture had been modeled in some plastic material and afterwards reproduced by an artisan in stone. Beautiful stone, I will admit, but it had nothing to do as sculpture with the act of carving. The art was as secondary as when engraving does substitute duty for painting, as treacherous as art by photograph, Malraux's "museum without walls." We have slight wish nowadays to substitute the engraving for the painting or the piano transcription for the symphony; art rendered insubstantial by the photograph and music performed and in a sense rendered unperformable by record and by tape have stirred up newer and perhaps more treacherous perils.

At the great Mexican show here I observed with pleasure how all day long the passing viewers, children and adults alike, would reach out their hands to caress the rough surfaces of the sculpture, the rough indeed more than the smooth surfaces. One would scarcely be drawn to caress a sculpture by Lipchitz, although one might touch it, as I observed at the fine showing of his work last summer at the University of California, Los Angeles. At the Henry Moore show, in the Los Angeles Municipal Art Galleries, the visitors both touched and caressed. But more often, at these shows, they acted as if the sculpture were a telescope and looked through it.

The object exists for itself and to be seen through. The question is to what degree the object should exist as a means of seeing something else. Sculpture has been from ancient times the vehicle of idea, probably, apart from words, the chief vehicle. For the illiterate, until recent years the majority of the people, sculpture, in its double form as representation and as sacred edifice, conveyed most meaningfully the status of authority and the message of the god — permeated always by that other aspect of religion, Virgin or Kwan-Yin, to which even the least individual can appeal. This art was seldom in our narrow sense *esthetic*, except during periods of luxury and imitation; it did not point elsewhere for a meaning; it contained the authority, the message, and the presence; it was not therefore symbolical. When authority, message, presence had departed, sculptor and architect aspired to substitute their own purposes, symbol and esthetic. Authority became representation and too often misrepresentation, the statesman in a toga. Message became estheticism. Presence struggled to maintain itself, diverging into symbolism, the telescopic looking through towards an intended meaning.

Not surprising, therefore, that sculpture as an art nearly gave up the ghost — I mean it literally. In the present revival we should look again for authority, but it has not yet found an assured method and prefers monumental-ostentatious building, large flat surfaces of glass now substituting for rock. We should look for message, and we do find it, usually in bronze; we find also a prodigious waxworks of estheticism. We should look for presence, which has never entirely departed from sculpture — presence that is too often not integral but dramatic. We should look also for a new element, perhaps the newest and least recognized, the thing itself. This may be our truest reaction against the vitiating idealism of the symbol.

As we return to sculpture of past ages we learn by scholarship and by a symbolizing effort of the imagination the original significance of the object, how it is to be seen and to be seen through. We see also the nature of the material and the character of the working. Clumsily, in our own habit of mind, we labor to achieve something of these two contrasting elements. We appreciate and

value the workmanship, however particularly dramatized, of Henry Moore.

Literate esthetes like Sir Herbert Read, everywhere read and nowhere quite taken seriously, exhort us to build around art a new Utopia of the workman, extending through politics and back into art. In his little book *To Hell With Culture* Sir Herbert quotes repeatedly from Hitler — the book was written during the war — and finds himself required to differentiate his meaning from that of Hitler, who so seductively sounds like him. The reason is plain enough. Sir Herbert's esthetic Utopia of working men must be established as a state; it must be managed, directed, ruled by somebody; and as many an historian has pointed out, with greater or less reluctance, the best of Utopian rulers, Plato's hypothetical philosopher-king, whether alone or as a committee, is a dictator or dictatorship.

Juan O'Gorman, whose permission to enter the U.S. had to be pried loose from the State Department so that students at many universities might listen to him, told us to believe that the Mexican squatting in his grass hut carving stone ornaments for the latest civic pyramid was at one with nature and his art all pleasure, but didn't explain why each of these temples was in turn abandoned when the simple man, as historical surmise now tells us, revolted or walked out on the priestly hierarchy, whose pyramids his blood might one day paint red — or as O'Gorman might say, "integral with nature." Mr. O'Gorman failed also to mention that these pyramids, now whelmed in jungle, were once the central feature of great cities, as large and arbitrary in government as any in Europe.

O'Gorman told us the square block of the University of Mexico library divides between an ugly international style rectangular box and his integral with nature mosaics, but he didn't say what would be a better, more integral shape to cover six floors of book stacks. More Irish blarney than Mexican integrity, and the audience loved him; he had to talk twice the same night.

"The integrity of man with nature" is another of man's idealistic misconstruings, which serve his mind for a hand axe. From the moment any creature picks up a stick or a piece of rock to use it for a tool, the creature is no longer at one with nature. The tool may be also a weapon: no weapon blunter or more clublike than the bigoted notion that one set of principles is wholly right and another set wholly wrong. Mathematics has outgrown such bigotry to its immense advantage during the last century. Politics and Christianity have seen ecumenical visions. Moral law has not been written out to be perpetually reenacted; it must be continuously striven for and rediscovered. Any law is fundamentally evil which denies the possible rightness of an alternative. It is silly to deny the architectural or esthetic practicality of a box by saying that it is not beautiful. A slab-sided figure can be as beautiful as any. The fault is to take any premise of beauty for granted — or deny it.

Let us admit instead that the explaining, the symbolizing, the estheticism, the justification, the substituting of an idealistic rationalization for the pragmatic necessity of art has been leading us astray; we need to return to art to look at it and look through it. We need to put art to use, living in and with it, as a part of our lives, our own lives: not to make art objects for any other purpose than to make them; and that art is simply skill, our skill, its content not symbol but ourselves. Assembled in the mass, this content is and stands for our culture, and is in that significance artifact rather than art-product — its artificiality as art-product our own artificiality — the externalizing of ourselves. In the single instance it can be as isolate and final as the individual. The individual eye can see in and through it a microcosm of the humane world.

BOOKS

(Continued from page 11)

Readers of 18th Century literature will find Calhoun Winton's *CAPTAIN STEELE: The Early Career of Richard Steele*, (Johns Hopkins Press, \$5.95) absorbing reading, for his is a fresh account, based on new material, of the politician's and journalist's earlier years. There was nothing more bitter or more filled with chicanery than English politics in the early years of the 18th Century, and Steele was as good an in-fighter as the Whigs or Tories of the time could boast. An interesting and well-written study of a great essayist and middling politician.

A TRANSACTION OF FREE MEN by David Hawke, (Charles Scribner's Sons, \$5.95) offers the well-written and well-reasoned Biography of the Declaration of Independence, the expression of moderate and literate men intent on doing a political violence most if not all of them might have abjured under any other conditions. What emerges in this very readable account of what went into the making of that document is the spirit of compromise which existed among the proponents which carried over into the Constitution-to-be, and the silent clash of wills between two titans of Revolution: Thomas Jefferson and John Adams who worked to bring it into being, and then to get it adopted.

INTERMARRIAGE by Albert I. Gordon, (Beacon Press, \$10.00) is an intensive study of one aspect of America's marital problem which is gaining more attention as economic, social, religious and ethnic barriers fall in many areas of our community life. The author, a noted authority on questions dealing with Jewish life, here takes on a broader theme and studies interfaith and interracial marriages: Baptist, Nisei, Negro, Hindu, Jewish, Catholic. A series of questionnaires, interviews and conversations from some of these so-called mixed marriages discusses the small triumphs, the great triumphs and the ever-present tribulations of almost all of these unions. The Faiths themselves are quoted by church, synagogue and doctrinaire authority, and express unanimous opposition to mixed marriages, with the exception of the most liberal, least fundamental of the groups. The Church, standing for all formal religion, concerns itself with its own strength and growth and must, therefore, oppose anything which would diminish its adherents. What of those marriages in which one party agrees to accept the faith of the other partner? Under the most optimum conditions the author cites convincing evidence that they can work. However, Rabbi Gordon feels that the cold, objective and documentable fact is that the odds are against success where such conditions, rare in themselves, are not present.

MAGNIFICENT MASQUERADE by Charles Keats, (Funk & Wagnalls, \$4.95) is the incredible story of Philip Musica whose swindles rocked the financial and political structure of the continent. A genius at bucket shop operations on a scale unknown even in the days of the smartest of the Robber Barons, Musica's accomplishments in financial guile are so unbelievable that the author himself admits that he still can't bring himself to accept his own findings. As early as 1909 Musica was bribing customs officials to get his imported cheese into New York at a price that would dominate the parmesan market. This was his modest beginning. Musica as Dr. F. Donald Coster lived in fear of perjury indictment, of murder, of being found out financially and socially. His manipulations make Ivar Kreuger an amateur. His pose as an Heidelberg Ph. D., as a world banker and as a philanthropist are great reading in this exciting account of a bizarre man in a bizarre era.

Paul Mantoux's *THE INDUSTRIAL REVOLUTION IN THE 18TH CENTURY* has generally been accepted as the authority on the rise of the industrial and mercantile classes in Europe. In a summary chapter Mantoux wrote, "How was it possible to improve the condition of the working multitude? For the artisan . . . this question did not arise . . . his claims had no revolutionary character. He did not question the established order of things, and the thought of obtaining a freer and better life by a complete overthrow of the social structure had never occurred to him. We have now in *THE MAKING OF THE ENGLISH WORKING CLASS* by E. P. Thompson, (Pantheon Books, \$15.00) a deep and penetrating study of the English Industrial Revolution, 1780 to 1832, which rejects the social and economic concepts of a generation of scholars and states that the English working class, according to the author's research and new material, was highly organized and acutely aware of its stake in the Revolution which it was consciously and deliberately fomenting. Thompson leans heavily on a primitive concept of "conspiracy of history" to state his case, bringing together many single and diverse strands to suggest that the Luddites, the English Jacobins, the factory malcontents were all part of a gigantic early 19th Century scheme to overthrow the Hanoverian Establishment. The scholarship is prodigious; it is also a little pat occasionally.

READER SERVICE — PRODUCT INFORMATION

Turn to page 37 for prepaid inquiry card.

(246) Hydro-T-Metal, a homogeneous, non-ferrous alloy of zinc, copper and titanium which offers the longevity benefits of copper at much reduced cost. The material is used for sheet metal work and plaster accessories as no painting is necessary initially or for maintenance. Hydrometals, Inc.

(247) A masonry veneer of fabricated stone with the realistic appearance of quarried stone. Made of concrete, crushed rock and sand, it is available in a variety of natural colors and comes in sheets approximately 3' x 4' in size and one inch thick. It can be used as an exterior or interior finish. Loma Stone Sales Company, Inc.

(248) A variety of colors and textures in facebrick including Norman, Roman, Colonial Amsterdam, Economy Norman, Hillcrest Splits and Alberhill Pavers. Also manufacture Kord Modular and oversize common brick, fire brick and flue lining. Los Angeles Brick & Clay Products Company.

(249) Vetrum venetian glass mosaics, Lake Como Italian pre-cast marble mosaic tile with recessed or smooth surfaced matrix, Cremona and Appiani Italian quarry tile, Latco vitreous porcelain ceramic glazed or unglazed tile, and decorative tile from Spain and Holland, for use on exterior and interior walls and floors. All are available in a myriad of colors and patterns. Los Angeles Tile Jobbers, Inc.

(250) Dual Window Wall, a system consisting of a metal louvre exterior with glass louvre interior, both movable. Also manufacture aluminum louvre windows, frame or strip hardware, Roller King aluminum rolling windows and doors, and Aqua King shower and tub enclosures. Louvre King, Inc.

(251) Cam operated, stainless steel, louvre window strip hardware and overhead suspended aluminum rolling window with Fiberglass screen. Also manufacture an aluminum nail-on surround for louvre windows with steel or aluminum hardware and a bottom rolling aluminum sliding glass doors. Louvre Leader, Inc.

(252) The Series 300 aluminum sliding window for commercial use and the Capri Cavalier aluminum sliding door with outside slide design. Also available is the residential line including the Rollmaster, an aluminum sliding window with both sections removable, and the Capri Cadet aluminum sliding glass door. Lujon Corporation.

(253) Marlite plastic finished wall panels for residential, commercial and industrial use, featuring wood grain reproductions, decorator patterns and pastel colors available in sheets and planks and developed by Raymond Loewy Associates. Also exhibit Korelock, a hollow core paneling which requires only a backing of studs or solid nailing or furring strips. Marsh Wall Products, Inc.

(254) Manufacturers of roof scutles of heavy steel construction

with spring levers and lock and padlock hasp, and steel ceiling hatches. Both products are available in special materials and sizes. Metal-Tite Products.

(255) Ornamental garden art in cast stone, including statuary and bowls for fountains and a variety of designs and shapes in garden benches and planters. Available in natural or white as well as custom work in colors to match almost any decorative scheme, for indoor and outdoor use. Monterey Garden Art.

(256) A complete custom kitchen, designed by Jeannette Coppes, N.S.I.D. Included is the contemporary Paul McCobb line suited to open plan kitchens, also used for built-in storage throughout the house and assembly for office furniture, and versatile 600 Series adaptable to any period from Cape Cod to oriental modern. Cabinets are of northern maple finished in natural grains of maple, autumn-tone, fruitwood, driftwood and walnut, and in 16 decorator colors, with choice of hardware. Mutschler of California, Inc.

(257) The Viking Spacemaker, a complete sliding door pocket including door, frame and hardware, the Feather-Touch Bi-Fold wardrobe wall with Novoply core, the Cinderella mirrored sliding wardrobe door and the Feather Glide by-pass wardrobe wall, all pre-fabricated, packaged and ready for installation. Nordahl Manufacturing Company.

(258) Pictorially a full line of industrial, commercial and residential plumbing ware in both pressed steel and vitreous china. The most recent additions to the porcelain-on-steel line are the new round pullman lavatory and the corner bath-tub built around a sump. Norris-Thermador Corp.

(259) A complete line of electrical built-ins including exhaust fans, hood and fan combinations for range and oven, bathroom heaters, and ventilators, door chimes, food center, stereo, inter-com and radio combinations, and barbecues, both electric and charcoal. Nu-Tone, Inc.

(260) Wood stains made of pure pigments ground in linseed oil, including semi-transparent penetrating stains in brown and gray tones that allow the grain of the wood to show through, and heavy bodied stains that give the wood an opaque finish. Other products are the redwood, roof and special purpose stains and pre-stained wood siding. Olympic Stained Products Co.

(261) Manufacturers of built-up dor asphalt shingles. Storm-Lap asbestos shingles, roof coatings including Coolite, Colored Coolite, Alumi-shield, and Nu-White, Grip Deck roof decking, and asbestos cement siding. Also make Griplath and Type-X gypsum lath, dry-wall systems, batt and roll insulation and Mastipave bituminous flooring. Pabco Division, Fiberboard Paper Products.

(262) Distributors of and exhibiting vinyl coated wall fabric. Nauga-

hyde and Naugawall manufactured by U.S. Rubber Co., Coated Fabrics Division, and Lackawana Leather manufactured by Lackawana Leather Co. Pacific Hide & Leather Company.

(263) Provide a courtesy service to the architects on all industrial, institutional and commercial projects to help plan for raceway apparatus closets, PBX equipment rooms, cable rise systems, main terminal room and service from the street. Pacific Telephone Company.

(264) A high-pressure decorative laminate in a wide variety of types including Genuwood utilizing genuine wood veneer, wood reproductions, solid colors, and designs and custom fabric-surfaced laminates. Parkwood Laminates received the American Institute of Interior Design International Award for excellence in design. Parkwood Laminates, Inc.

(265) Manufacturers of a complete line of A.G.A. approved heating and air conditioning equipment including the Pace Setter, Imperial and Spacesaver forced air units, Miracool all gas air conditioner, electric air conditioner for outdoor use, and Econoair, combination heater and air conditioner utilizing gas and electricity. Also make Panel-air forced air wall heater, Sabara wall heater and unit heaters with Astrogard steel heat exchanger. The Payne Company.

(266) Pearcelite, a fabricated marble with a hard, smooth, lustrous surface, non-warping and spotting, and impervious to stains including alcohol, cosmetics and medicinal preparations. Used for walls, pullman and furniture tops, stall showers, etc. Pearcelite, Inc.

(267) Sculptured, three dimensional hardwood panels with limitless use for area dividers, doors, screens, interior sun control and decorative sound control when used on walls or ceilings. For exterior use sculptured redwood is also available for fencing, patio enclosures and various types of commercial installations. Also display Sculpturelite, a combination of solid carved wood and translucent plastic for subtle commercial lighting. By utilizing a sound absorbent pad instead of extruded plastic, acoustical qualities are obtained. Penberthy Lumber Company.

(268) Quality medicine cabinets, including the new Dubarry and Cavalier with gold and white wood frame and polished plate glass mirrors to harmonize with gold bathroom brass goods and accessories. Also display residential and apartment house mail boxes, built-in ironing board, range hoods, directories, fire extinguisher cabinets, bathroom appointments, and a complete line of building sheet metal specialties. Perma-Bilt Steel Products Company.

(269) Manufacturers of a quality line of devices for crowd control certified attendance records and fare and admission collection for stadiums, racetracks, fairs, auditoriums, amusement parks, sub-

ways, baseball parks, industrial plants, markets, libraries. Perey Turnstile Company.

(270) A resilient polyurethane decking, flooring and roofing plastic that is metered, dispensed and sprayed by factory approved Franchised Applicators. A pure plastic rubber, Urapol 823A, is available in a variety of decorator colors and unusual textured finishes. It is an esthetic and practical coating for concrete, wood, lightweight cellular concrete and metal as well as a remedial coating for all existing surfaces. Poly Resins.

(271) A complete line of tile including Space-Rite and Perma-Glaze ceramic tile and the Designer Series and Signature Series decorative tile designed by outstanding artists in a wide selection of colors. Also available in Summitville quarry tile. Pomona Tile Company.

(272) A complete line of turf sprinklers, various pop-up sprays, ground cover and shrub sprays, combinations, irrigators and bubblers, featuring rise openings of standard steel or iron pipe thread dimensions, and all bodies and lids of sand-molded heavy red brass. The sprinklers are designed to simplify parts, make the design of complex sprinkler systems easier, and facilitate possible future changes in a system without changing the piping and valving system. Rain-O-Mat Sprinklers, Inc.

ROOF STRUCTURE CEILING AND INSULATION...



*all in one fast,
low-cost operation
with Douglas Fir
Roof Decking from*



**Hemphill
-O'Neill**
LUMBER CO., INC.

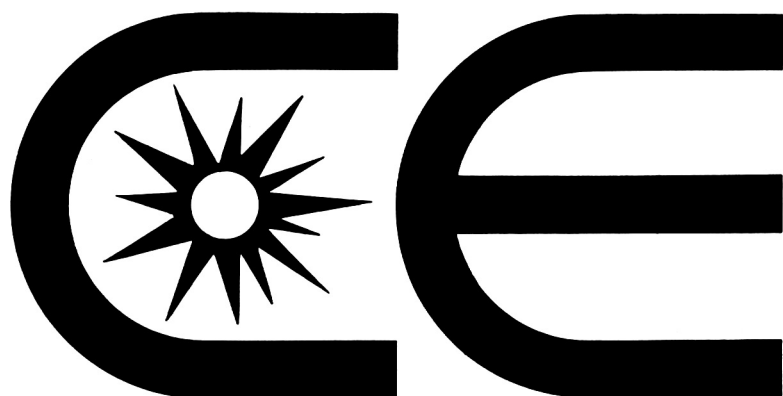
POST OFFICE BOX 667
CHEHALIS, WASH.

WHAT'S IN A NAME?

Identity? Yes, but much more.

We pledge that our new name will continue all our old qualities.

SERVICE-INTEGRITY-RELIABILITY
to the electrical industry.



CONSOLIDATED ELECTRICAL DISTRIBUTORS

FORMERLY Incandescent Supply Company / Phillips & Edwards Corporation,
The Electric Corporation, Grey Electric Company, San Francisco Lighting Co.

PRESENT AFFILIATES Electrical Suppliers, Inc., Fresno and Merced, California,
Kitchen Electric Supply Company, Reno, Nev., Electrical & Mechanical Supply
Companies of El Paso (Tex.) and Roswell (N. Mex.), and The Stubbs Electric
Company of Portland.

(291) A new and revolutionary collection of vinyl wall coverings in textures and patterns. Also manufacture a complete line of repeat pattern and scenic wall papers, including vinyl protected papers, and import textured, burlap, silk and foil wall coverings. Albert Van Luit & Company.

(292) The new and improved Sauna dry heat bath for use in residences, hotels, hospitals, country clubs, etc., to improve health and relax nerves. Electric units heat the redwood lined room to 175° or more in 15 minutes and keep humidity below 6% for ease of breathing. Thermostatically controlled, it is inexpensive to operate, and is available in sizes from 4' x 5' to the 1 large 20' x 30', heated by two or more units in connecting series. Viking Sauna Corporation.

(293) Mo-Sai exposed aggregate precast facing. Also have Granux, a polished facing of reconstituted granite, and are custom fabricators of all types of precast concrete products — decorative, architectural and structural. Wailes Precast Concrete Corp.

(294) Facings and related precast and prefabricated items utilizing natural stone, and a rotating display of stone available in the 11 western states, illustrating an extensive stock. For the architect, decorator, landscape architect and color consultant, a unique service including information and availability of unusual and interesting stone from the many small, remotely situated quarries represented. Western States Stone Co.

(295) Mod'rn-Form all Formica modular cabinetry for hospitals, professional buildings, and laboratories. Also available, a service including the complete furnishing of equipment and supplies required in buildings of this type. Western Surgical.

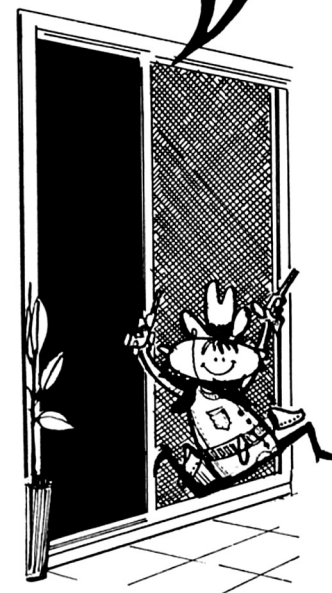
(296) Rilco laminated beams, Roddis prefinished hardwood plywood and doors including hollow and solid core, sound, X-Ray, fire and plastic laminate covered, Versabord particle board, Timblend flake board, and 4-Square exterior and interior plywood, a wide variety of siding and paneling, framing lumber, fencing, and red cedar shingles and shakes. Weyerhaeuser Company.

(301) Decorative escutcheons and handles, mortise, cylindrical and monolock sets, panic exit devices and door closers suitable for residential and light and heavy commercial buildings. Also manufacture a complete line of builders hardware for all types of construction. Yale and Towne Mfg. Co.

(302) Stainless steel sinks including a custom sink, bar sink, vegetable chopping block sink and a double bowl sink. Also manufacture 800 standard sink and work surface combinations in stainless steel and custom sinks for residences, hospitals, laboratories and restaurants. Zeigler-Harris Corp.

(303) TV wall shelves by Gusdorf offers quality styling with vertical adjustments and swivel action for convenient viewing. Ideal for bedrooms, motels, hotels and store displays; wherever space is at a premium. Gusdorf & Sons, Inc.

Automatic Sliding Door Closer



Make all your SLIDING SCREEN DOORS

open easily and freely at the touch of your finger . . . and then

CLOSE AUTOMATICALLY

When you specify the Kelly Klozer with all sliding screen doors, you insure for your client a sliding screen door installation as close to perfection as possible.

Kelly Klozer Company services and adjusts the screen so that it fits perfectly, replaces all standard rollers with high-quality sealed ball bearing rollers so that the screen will roll with a baby's touch.

Kelly Klozers are manufactured in various models to accommodate all makes of sliding doors, and the proper model is installed so that the door will close as smoothly and gently as a summer breeze.

Specified by leading architects for motels, hotels, hospitals, commercial installations and fine residences.

Also available for sliding glass doors.

Factory installation available in Southern California.

KELLY KLOZER

P. O. Box 25
Reseda, California
Phone 347-8258

Manufacturers of pneumatic
door closers for sliding doors.
Established 1956



arts & architecture **READER SERVICE**

For Manufacturers' Product Literature and Information

1. Circle number on coupon corresponding to the number preceding the listing.
2. Print name and address and occupation.
3. Remove and mail prepaid, addressed card.

(1) A complete package of information literature on new Armstrong Ventilating Acoustical Ceiling systems has been compiled for architects and engineers by the Building Products Division of the Armstrong Cork Company. Fully illustrated brochure gives complete details on basic operation of the new ceiling system, shows how it reduces air conditioning costs through elimination of air diffusers and a large amount of supply duct work; case histories of actual installations; available at no extra cost. Armstrong Cork Company.

(2) An attractive, 32-page booklet describing a number of steel-framed homes is available from Bethlehem Steel Company. Write for Booklet 1802. Color and black and white photographs describe outstanding steel-framed houses in many areas in the United States. Floor plans, construction information, and costs are described. Examples of mountain cabins, apartments, and steep hillside site solutions are shown. Bethlehem Steel Company.

(3) New informative brochure available from Cervitor Kitchens, gives all important specifications, details and features of their space-saving kitchen units; under-counter, built-in, free-standing units manufactured in limitless sizes, with or without range, oven, sink; carefully crafted in walnut, laminate, etc.; ideal for offices, homes, apartments, patios. Cervitor Kitchens Incorporated.

(5) Handsome illustrated folder describes and gives complete details on the Container Corporation of America Color Harmony Manual based on the Oswald system, and designed to improve the planning and use of color by artists, designers, manufacturers and consumers. Folder includes sample color chip. Container Corporation of America.

(6) Interior Design: Crossroads have all the components necessary for the elegant contemporary interior. Available are the finest designed products of contemporary styling in: furniture, carpets draperies, upholstery, wall coverings, lights, accessories, oil paintings, china, crystal and flatware. Booklet available. Crossroads Mfg., Inc.

(7) Stained Glass Windows: 1" to 2" thick chipped colored glass embedded in cement reinforced with steel bars. A new conception

of glass colored in the mass displays decomposing and refracting lights. Design from the pure abstract to figurative modern in the tradition of 12th century stained glass. Roger Darricarrere.

(8) Plywood For Today's Construction, a new catalog with basic information about fir plywood properties, grades, types and uses has been published by Douglas Fir Plywood Association. The 20-page booklet, indexed for A.I.A. filing systems, also contains information about special products and about plywood floor, wall and roof construction systems. A special new section discusses plywood component construction. Single copies of the booklet S62 are free. American Plywood Association.

(9) Two new pamphlets on folded plate roofs and stressed skin panels are available from the Douglas Fir Plywood Association. Each brochure contains structural details, illustrations and descriptive text; valuable addition to any collection of data on components; updates previously available information; other booklets in the components series describe box beams, curved panels, trusses and pallets. Available free to architects, fabricators, and builders. American Plywood Association.

(10) Furniture: A complete line of imported upholstered furniture and related tables, warehoused in Burlingame and New York for immediate delivery; handcrafted quality furniture moderately

priced; ideally suited for residential or commercial use. Dux Inc.

(11) Contemporary Fixtures: Catalog, data good line contemporary selection recessed surface mounted lense, down lights incorporating Corning wide angle Pyrex lenses, recessed, semi-recessed surface-mounted units utilizing reflector lamps; modern chandeliers for widely diffused, even illumination; Luxo Lamp suited to any lighting task. Selected units merit specified for CSHouse 1950. Harry Gitlin.

(12) A new, 12-page executive furniture catalog has just been completed by Hiebert, Inc., manufacturers of a complete line of executive office furniture. New catalog contains detailed illustrations of the line, including executive desks, secretarial desks, side storage units, corner tables, conference table, executive chairs, and side chairs. The center spread features a full-color photograph showing the various Hiebert furniture pieces. Copies of the catalog may be obtained free of charge. Hiebert, Inc.

(13) The 36-page Hotpoint Profit Builders catalog for architects and builders contains specifics on Hotpoint's full line of products, including built-in ovens, dishwashers, disposers, heating devices, refrigerators, ranges, air conditioners, laundry equipment. Also included are diagrams of twelve model Hotpoint kitchens with complete specifications for each. Hotpoint.

(14) Interpace has published a 6-page brochure on the new Contours CV, a lightweight ceramic architectural facing for exterior and interior use. The brochure features photographs of 12 standard designs in a wide pattern variety ranging from those achieving medallion effect to ones which vary the play of light. The brochure also details dimensions for individual custom designs which can be designed up to 11 1/4" x 11 1/4". International Pipe and Ceramics Corp.

(15) Catalogs and brochures available on Multalum and X-Alum series of contemporary furniture designed by George Kasparian. Experienced contract dept. working with leading architectural and interior design firms. Kasparians, Inc.

(16) Complete line of furniture designed by Florence Knoll, Harry Bertoia, Eero Saarinen, Richard Shultz, Mies van der Rohe and Lew Butler as well as a wide range of upholstery and drapery fabrics of infinite variety with color, weave and design utilizing both natural and man-made materials. Available to the architect is the Knoll planning unit to function as a design consultant. Knoll Associates, Inc.

(17) Lietzys Porcelains announces the addition of two new shapes to their line of porcelain cabinet pulls bringing the line, designed for the use of architects and interior designers, to a total of eight designs. All pulls available in four colors delivered from stock: white, black, cerulean and amber. On custom order pulls can be produced in ten additional colored glazes. Lit-

(Continued on next page)

Card
good
until
9-30-64
Allow
2 months
for
processing
and
delivery.

Circle Number for Desired Product Literature and Information

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60

201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216	217	218	219	220
221	222	223	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239	240
241	242	243	244	245	246	247	248	249	250	251	252	253	254	255	256	257	258	259	260
261	262	263	264	265	266	267	268	269	270	271	272	273	274	275	276	277	278	279	280
281	282	283	284	285	286	287	288	289	290	291	292	293	294	295	296	297	298	299	300
301	302	303	304	305	306	307	308	309	310	311	312	313	314	315	316	317	318	319	320

Name _____

Address _____

City _____ State _____ Zip # _____

Occupation _____

erature, free upon request, contains samples on full color line. Sample board with the eight shapes in the four stock colors can be had for \$5.00 f.o.b. Mogadore, Ohio. Lietzke Procelains.

(18) Lighting: A completely new 12-page, 3-color brochure of popular items in their line of recessed and wall mounted residential lighting fixtures is now available from Marco. The literature includes typical installation photos as well as complete specifications on all items. Marvin Electric Manufacturing Company.

(20) Contemporary Clocks and Accessories. Attractive folder Chronopak contemporary clocks, crisp, simple, unusual models; net lights and bubble lamps; George Nelson, designer. Brochure available. One of the finest sources of information, worth study and file space.—Howard Miller Clock Co.

(21) Lanterns, a major innovation in lighting designed by George Nelson and manufactured by the Howard Miller Clock Company, are shown in a two-color, four-page brochure. The illustrations show all 21 styles in four models—ceiling, wall, table and floor—and include the large fluorescent wall or ceiling unit designed primarily for contract installation. Each is accompanied by dimensions and price. Distributed by Richards Morgenthau, Inc. Howard Miller Clock Company.

(22) Selections from the diversified decorative accessory collections designed by George Nelson for the Howard Miller Clock Company are presented in a new illustrated, four-page brochure, available to architects and interior designers without charge, upon request. The brochure covers clocks (both built-in and surface mounted); bubble lighting fixtures; net lights; planters; room dividers; and the versatile space divider, Ribbonwal. All information necessary for specifying is provided. Howard Miller Clock Company.

(24) "The pleasure of planning your home with Mosaic Tile," a new 24-page brochure, depicts unusual uses of tile and presents a variety of home planning ideas; large selection of handsome color photographs. Tiled steps, hallways, tiled fireplaces, kitchens, bath-

rooms, patios and swimming pools show the versatility and wide color choices as well as low maintenance costs and lifetime advantages of ceramic tile. Mosaic Tile Company.

(25) Completely new full-color 28-page catalog of Mosaic ceramic tile manufactured in California and distributed throughout the area west of the Rockies. First presentation booklet form of tile in the Harmonitone color families; includes decorated glazed wall tile, new Staccato palette in one inch square tile, and Byzantile. Catalog available upon request. The Mosaic Tile Company.

(30) Lighting Fixtures: Complete range of contemporary designs for residential and commercial application. Write for new 20-page catalog—Chandeline—a different concept in lighting. Prescolite Manufacturing Corporation.

(32) Manufacturers of contemporary furniture, featuring the Continental and "Plan" Seating Units, designs by William Paul Taylor and Simon Steiner. Selected Designs, Inc.

(34) Full color illustrated brochure describes new Thermador Bilt-In Dishwasher: stainless steel is used for actual tank and inside door liner of washing compartment eliminating chipping, staining, rusting, odor problems, specially developed insulating, sound-deadening material makes operation nearly noiseless; new exclusive "washing arm", food residue separator, drying system, completely automatic, service-free controls; style and color co-ordinated with other Thermador Bilt-In kitchen equipment; brochure gives detailed specifications. Thermador.

(37) Filon Corporation offers a 4-page brochure on FiLite, the translucent Fiberglass ceiling panels, which insure even, shadow-free light diffusion for the home, business and industry. Also available is the newly revised and expanded AIA file containing complete product data and technical specifications for Filon products. Filon Corp.

(38) Key to Elevator Planning. A 12-page brochure is available containing hatchway and penthouse layout information and standards for hydraulic and electric passen-

ger and freight elevators. The National Association of Elevator Contractors.

(40) Wood/Line, Globe's newest fixture series, accents the texture and patina of real walnut with the cool (all over glow) diffusion of milk white plastic to provide the handcrafted look in lighting. Globe Illumination Company.

(41) A free 28-page catalog by Steelcraft explores the great flexibility that can be achieved with America's finest line of standard metal doors and frames. Included are a variety of door styles in many finishes and a list of the accessories they can be prepared to accommodate. Special attention is given to Steelcraft's extensive line of Underwriter Labeled fire doors with matching frames, transoms and removable mullions. Another section features "custom" frame designs that can be achieved with Steelcraft standard frame components. Steelcraft Manufacturing Co.

(42) Scandiline Furniture offers a 36-page catalog "Scandinavian at its Best". Many new items in the residential line are pictured as are those in the new office furniture division. The design-awarded, hand-printed Swedish lampshades for ceiling and wall hanging lamps are detailed. Price lists available. Scandiline Furniture, Inc.

(43) Scandiline Pega Wall System is the ultimate answer for any storage or service requirement. Unlimited combinations can be designed. The system is available either wall hung or free standing with 12 alternate leg heights. This patented construction, designed by Ib Juul Christiansen, is imported from Norway by Scandiline Furniture, Inc.

(44) Executive Desks: New collection by Brown-Saltman features designs by John Follis and Elisha Dubin. Manufactured in Southern California; complete local inventory available for immediate delivery. Brochure shows executive desks, conference desks, executive storage units, etc. Brown-Saltman Company.

(45) Aluminum Railings: Post bases and cinchrail aluminum railings are illustrated in 12-page booklet. Installation drawings included. Michel & Pfeffer Iron Works, Inc.

(46) Orlando Galleria has continuous exhibits of fine paintings and sculpture. Free schedule of exhibitions available. Orlando Galleria, 17037 Ventura Boulevard, Encino, California.

(47) Ogden water purifier converts tap water to pure, spring-like drinking water by a scientifically developed, disposable cartridge. The small, compact, stainless steel unit is easily installed either above or below the sink. Portable and industrial units available. Ogden Filter Company, Inc.

(48) Complete information concerning the new automatic door closer for screen, glass and wardrobe doors by Kelly Klozer. \$18.95 installed, can be used on your present sliding screen door and features mechanism adjustable to door weight and an automatic safety stop when interrupted. The Kelly Klozer Company.

(49) Lighting brochure, offered by Consolidated Electrical Distributors (formerly Incandescent Supply Company / Phillips & Edwards Corp.) describes its electrical services, supplies and apparatus for commercial, industrial, residential, outdoor and decorative lighting, electrical appliances and housewares. Consolidated Electrical Distributors.

(50) Mastery of Life, a free booklet explaining the Science of Living taught by the Rosicrucians; a way of life of personal attainment and self-assurance by developing the creative forces within the individual. Rosicrucian Order.

(51) Brochure-catalog containing complete price information and illustrations of the new modular carved wood panels by Panelcarve. "Handcrafted by machine" the panels may be assembled into a variety of design combinations for doors, table tops, room dividers, paneled walls, desk components, planters, cabinets, etc. Panelcarve.

(52) Douglas Fir Roof Decking, an architect's and builder's guide to its use and availability, is the subject of a new 4-page brochure by Hemphill-O'Neill Lumber Company. The manufacturer produces quality decking in random and specified lengths to 24 feet, making possible rich, dramatic ceilings at low cost and with greater unbroken spans than commonly available. The brochure offers complete installation and manufacturing specifications. Hemphill-O'Neill Lumber Co., Inc.

(53) Four-page color brochure shows Facebrick residential, office and institutional installations. Contains Facebrick color-selection chart and Name-Texture-Size-Color specification information. Cost guide table compares ultimate wall costs of Facebrick with other materials. Free from Pacific Clay Products, Los Angeles Brick Division.

(54) Fiesta Pools offers technical and non-technical literature describing facilities, capabilities and experience in executing architects' swimming pool designs. Information about Fiesta's Research and Development Division, and fully staffed Commercial Division. Fiesta Pools.



BUSINESS REPLY MAIL
FIRST CLASS PERMIT No. 43623, LOS ANGELES, CALIF.

arts & architecture

3305 WILSHIRE BOULEVARD

LOS ANGELES, CALIFORNIA, 90005



This is what they're saying about

CITIES

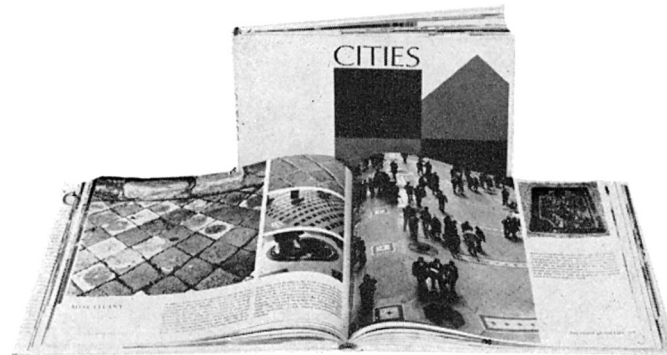
by Lawrence Halprin

"I think this is one of the finest books on the subject. Every page is an experience. The point made in the book is greatly needed at this moment and could scarcely have been better made."—*Edmund N. Bacon, Executive Director, Philadelphia City Planning Commission*

"A unique inspiration for community architects. It richly presents the elements that can make spacious, flexible backgrounds for good living here and now."—*Clarence S. Stein, Consultant, City and Community Planning Development*

"A sensitive presentation of the activities, form and textures that make cities livable."—*Burnham Kelly, Dean, College of Architecture, Cornell University*

"Halprin views the cityscape as an evolving process . . . and the elements of the urban landscape in broad historical perspective. His rich array of pictures give fresh meaning to immediate problems by relating them to old forms and world-wide experience. The reader will find his daily round more interesting and his personal judgment sharper, after perusing this book."—*Catherine B. Wurster, Prof. City of Planning, University of California, (Berkeley)*



In this refreshing, new book Lawrence Halprin observes cities through different spectacles—as an urban planner, as an architect, as a landscaper, as an artist, as a political man, as a social scientist, and as a humanist. Mr. Halprin believes that cities always have provided, and will continue to provide, a creative environment for men. He defines this environment in his own perceptive words and pictures. Over 400 superb photographs. A beautiful as well as a practical source book for the architect.

Here is a partial listing of the Contents.

URBAN SPACES: streets / plazas / parks. GARDENS BETWEEN WALLS. FURNISHING THE STREET: light / benches / signs / clocks / sculpture. THE FLOOR OF THE CITY: granite sets / pebbles / cobbles / cut stones / brick. THE THIRD DIMENSION: steps / ramps / walls / fences. WATER IN THE SQUARE: waterfalls / jets / pool bottoms. TREES FOR ALL SEASONS: design / pruning / trees for use in the city. THE VIEW FROM THE ROOF. CHOREOGRAPHY.

10¼ x 8¼ oblong. 224 pages. \$15.00

ARTS & ARCHITECTURE
3305 Wilshire Boulevard, Los Angeles 5, California

Please send me the books checked below:

- | | | |
|--------------------------|---------------------------------|---------|
| ☐ | CITIES | \$15.00 |
| | Plus handling | \$.25 |
| | Total | \$15.25 |
| ☐ | DESIGN & FORM: The Basic Course | |
| | at the Bauhaus | \$12.00 |
| | Plus handling | \$.25 |
| | Total | \$12.25 |

NAME _____
(Please print)

ADDRESS _____

CITY _____ ZONE _____ STATE _____

I am enclosing \$ _____ as full payment for these books. Please add 4% sales tax if you live in California.

Design and Form: The Basic Course at the Bauhaus, by Johannes Itten



Here, for the first time, is a complete description of the content and purpose of the famous Basic Course at the Bauhaus in Weimar, Germany—written by the man who organized it at the invitation of Walter Gropius. Of particular interest to the architect because it presents some very exciting documents on the evolution of modern art education. Each of the 160

illustrations have a detailed description which help the reader understand the purpose of art education. Nature studies as well as studies of form and abstractions, together with a few plastic works and works in the applied arts are included. 7¾ x 10¾. 200 pages. 160 illustrations. \$12.00

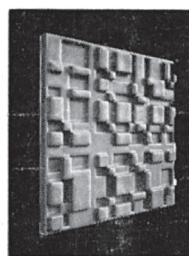


Going places fast—Contours CV

The increasing popularity of this high-fired ceramic wall facing offers multiple advantages. Raised or incised patterns, with matching flat-surfaced pieces, afford the designer unique opportunities to achieve unusual textural interest and decorative effects. A variety of standard patterns currently are available, in nineteen colors ranging from rich tones to pale pastels. And your own designs and colors can be custom produced at low cost.

Contours CV is lightweight, easily applied like glazed wall tile or adhesion-CV, and withstands freezing climate. Yet it is priced to fit the budgets of most jobs. Our counsel, based on experience with widely varied

applications, is yours without obligation. Write for technical data, or see your Gladding, McBean Building Products Representative. Better, visit one of our salesrooms, where you can see and feel the beauty of Contours CV itself.



CONTOURS® CV

A Gladding, McBean building product by
INTERPACE
INTERNATIONAL PIPE & CERAMICS CORPORATION

LOS ANGELES / SAN FRANCISCO / PORTLAND / SEATTLE / SAN DIEGO
SPOKANE / SALT LAKE CITY / PHOENIX / DENVER / SACRAMENTO

MR JULIUS SHULMAN
7875 WOODROW WILSON DR.
LOS ANGELES 46, CALIFORNIA
EP