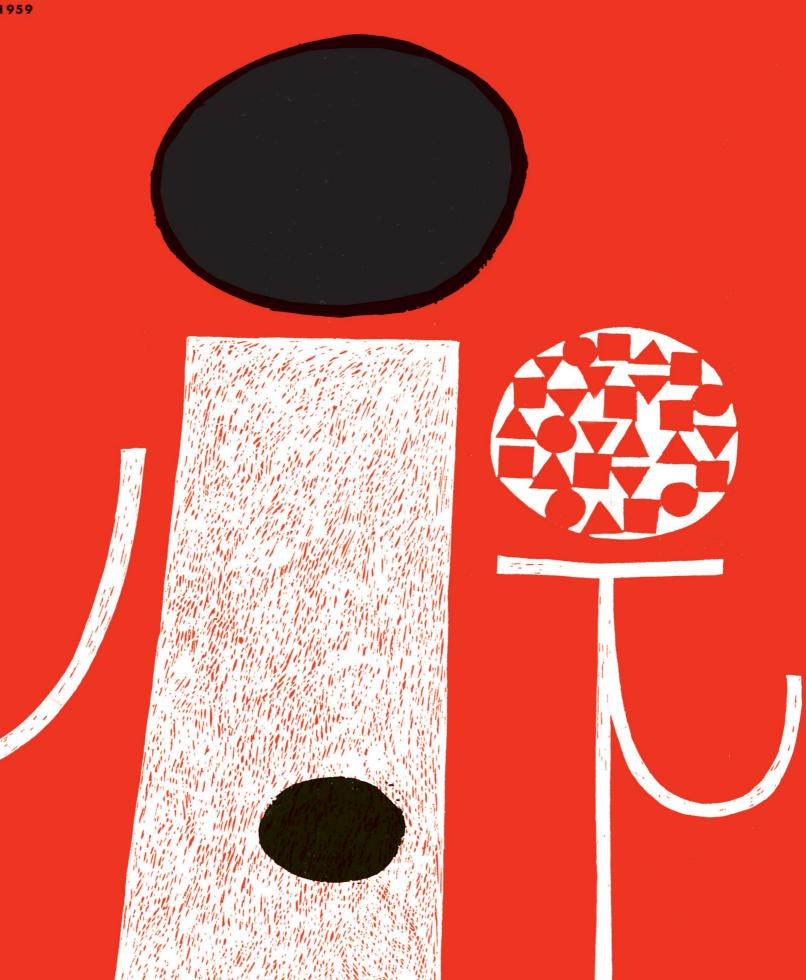
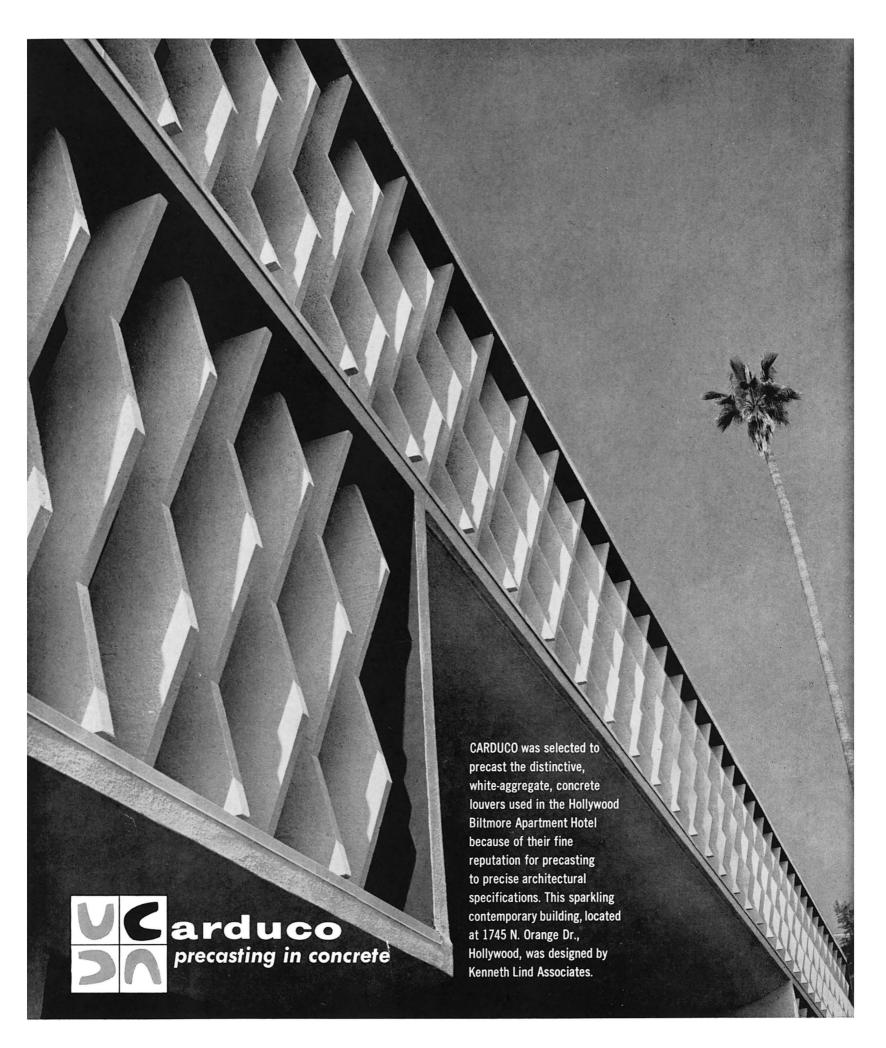
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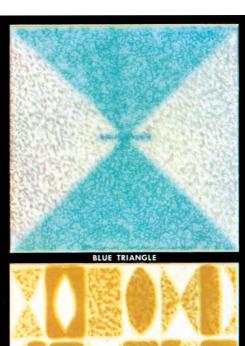
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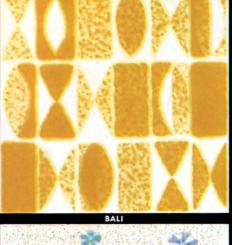
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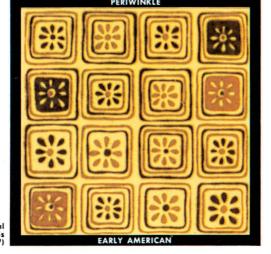
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MUSIC

PETER YATES

A COLLAGE OF AMERICAN COMPOSERS-Part 5

"Harmony, a doctrine dealing with chords and chord relations, has had a brilliant but short history. . . . Today harmonic novelty is at an end. As a means of musical instruction, harmony offers no further resources in which to inquire and from which to seek profit. The contemporary ear and brain require a completely different approach to music. It is one of nature's ways that we often feel closer to distant generations than to the generation immediately preceding us. Therefore, the present generation's interests are directed toward music before the 'harmonic age.' Rhythm, rhythmic polyphony, melodic or intervallic construction are the elements of musical building to be explored today." Igor Stravinsky: Composing; The Atlantic Monthly. June 1957.

In our notational system there are only 12 notes. For approximately the last 150 years these 12 notes of the octave have been ranked in a sequence of equal steps, with occasional half-steps, called Equal Temperament. During the previous 200 or more years, with an overlap at each end not yet clarified by scholarship, the same notes were ranked in the same sequence but the steps, the intervals between notes, were not all equal. This was called Meantone, because it was tuned to serve as a mean between Equal Temperament, which the majority of composers thought too discordant in its intervals, and the acoustical scale of pure intervals called Just Intonation, which is not adaptable to key modulation.

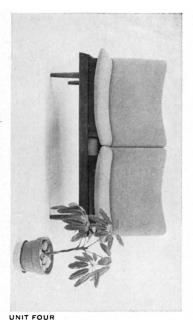
The modern scholar will hasten to explain that the equal intervals of Equal Temperament are obtained by dividing the octave into units which are mathematically equal, though each is a little out of tune. He will explain that by this means it is possible, if one follows the rules, to pile the notes together acceptably in various ways to produce composite sounds (harmony) which avoid too great a degree of that notational discord which is called dissonance. When Schoenberg emancipated the dissonance he did not do away with the rules of harmony. He simply recognized the fact that harmony had been stretched too far beyond the rules to be governed any longer by its consonant relationships. The entire 12 notes of Equal Temperament had become the only surviving system to which the individual notes and intervals could be related.

The well-tempered reader will ask what happened to the keys. (Modern musical training has learned to look facts squarely in the eye without seeing some of them.) In Meantone the intervals of the octave were not all equally divided. Thus in Meantone each key had a slightly different pattern of intervals from every other, and the affects of these patterns (each key having an unlike component of dissonance which was supposed to influence the emotional response) were known as the Affections. With Meantone, only about eight keys were acceptable for any one tuning; beyond these the interjections of dissonance were felt to be too intense for comfortable listening. Nearly all music before Schubert, with some notable exceptions, was composed in the few Meantone keys. With Equal Temperament the distinction between keys lost any acoustical reality or emotional significance and survived, though composers and musicians generally did not recognize the fact, as no more than a convenience, a referrant of notation. The emancipation of the dissonance translated this fact into practice.

I must apologize to my readers for holding to this tough line and explain that only by understanding these distinctions can one comprehend the volcanic upheaval which has been occurring in 20th century music. Historically it can be compared only with that New Art, involving tuning, harmony, and dramatic dissonance, which began with the 17th century.

Schoenberg by emancipating the dissonance gave reality to the fact that in Equal Temperament, since all keys are acoustically the same, a single key or row of the 12 equal notes would suffice for composition. By retaining Equal Temperament, instead of reverting to the mathematically pure intervals of Just Intonation, he set free the dissonance, the mathematical surd or interval of false relationship, as the necessary means or mode of music. Therefore all 12-tone music, by whatever system or whether or not it embraces the 12-tone method, concerns itself with composition in dissonance. And this is scarcely less true of compositions which, accepting the freedom of

(Continued on page 6)

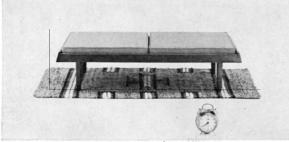






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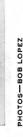
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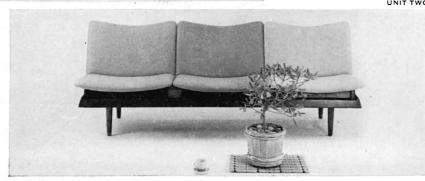


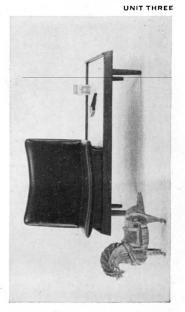
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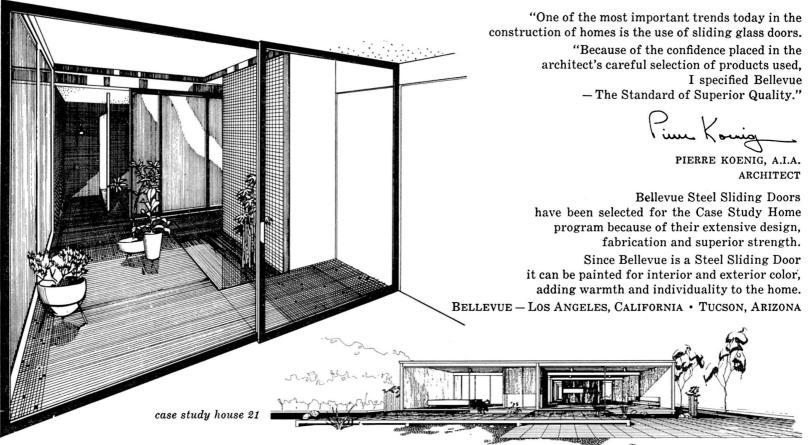
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the emancipated dissonance, retain the formal methods of tonality. In Webern's music the contiguous relationships deceive the ear and lead it forward by seeming to imply a formal resolution, and this in turn another attitude of balance, the finality of each ending an implied concordance that is never stated. Schoenberg's smaller designs during the so-called "atonal" period, before the formulation of the 12-tone method, followed the same plan. Ezra Pound in The Cantos progresses in similar manner, dispensing with the verbs. Thus Webern, and Schoenberg for example in Pierrot Lunaire, composed entirely in dissonance given direction and validity by an implied concordance. This concordance, though difficult for the ear to find in any single piece, because of the brief length, becomes rather evident as one listens to Pierrot Lunaire or to the Webern pieces in succession as they have been recorded. (I believe this explains the amazing ease with which, in my experience, unaccustomed listeners adapt themselves to Webern's music in its recorded sequence.) By a similar method but using artificially altered intervals, John Cage sustained his Sonatas and Interludes for Prepared Piano with the graceful ease of a Scarlatti.

The growth of Schoenberg's larger forms, from the First Chamber Symphony into the tone-row compositions, asserted a contrary method by which the intervallic degrees of the theme, in various row positions, governed the degrees of concordance. In this way Schoenberg retained the continuity of dramatic conflict among greater and lesser degrees of harmoniousness to follow the German tradition of drama in absolute music. With adaptation we hear his later music as consistent among its own referrents as late Beethoven—or even Franck (Organ Variations)—and no less powerful in dramatic departing from this consistency. He was able to slip in and out of key harmony when he wished to, because the row rather than the key had become the dominating referrent. Schoenberg did not ever abandon the so-called "atonal" method of concordant dissonance with silence preferred by Webern, while Webern enlarged the works of his last period by incorporating a 12-tone polyphony.

The emancipation of the dissonance worked a revolution in tonal thinking, some of the effects of which I have discussed in previous articles. John Cage, for example, once growled at me, while demonstrating his pieces for prepared piano, that he could see no reason why Schoenberg, having freed music from tonality, should not have gone the entire way and freed music from its 12 notes. If every tone is equal to every other, then any controllable sound is equal to any other or to any tone. Cage demonstrated that by emphasizing the top of a non-harmonic chord of prepared sound he produced a satisfyingly directive dominant and by emphasizing the bottom of the same chord a quite adequate tonic. In Western harmonic music it has always been recognized, though the implications were often theoretically avoided, that pitch could be raised and a tone intensified (as on string instruments or clavichord) or the interval narrowed to produce a more agreeable blending (as in the playing of string auartets).¹

Homophony did not ever completely capture European music, but the rules of homophonic harmony governed its thinking for nearly 300 years. One might venture the comment that the greatness of composers during this period was determined largely by their ability to break through or away from the rules of homophony towards the possibilities of chromatic polyphony and sustain their melodies in chromatic independence. As Robert Craft writes of Stockhausen and Boulez: "... the music is all melodic, basically..."

The course of musical development during recent years may be distinguished by the effort of composers, consciously in some instances but rather more unconsciously, to catch up with the successive periods of Schoenberg. The time-lag may be measured by reflecting that nearly the entire career of Stravinsky has occurred between the composing of *Pierrot Lunaire* in 1912 and its eventual acceptance. The stages of this time-lag have been marked by the effort of criticism to set up first one and then another composer as

^{1&}quot;Arnold considered that one reason for the phenomenal success of the Flonzaley Quartet was the supreme purity of their concordance. They played in the untempered scale with true intonation and extraordinary sensitivity, which effect formed a pleasing contrast to the more robust style of the German players, as represented by the Kneisel Quartet. . . ." Mabel Dolmetsch: Personal Recollections of Arnold Dolmetsch.

 $^{^2}$ Here and subsequently all quotations by Robert Craft are from his article Boulez and Stockhausen in The Score, 1958.

the antidote to Schoenberg: a dialectical progression in which Berg is now being succeeded by Webern. At the other side of the battle Stravinsky has played the role of the protagonist of conservatism, consolidating his gains with every surrounding change of style, his growth marking the exact position conservative music has practically reached, a leader rather than prophet. The leader has now consolidated in his music, according to his own radically individual means, the practicalities of the tone-row. (In Threni he uses for the first time a complete 12-tone row.) He continues to preserve his independence of the German absolute drama, which remained central to the larger expressiveness of Schoenberg's art.

Two young composers, Pierre Boulez and Karlheinz Stockhausen, have come to the front of European music, professing a schematic art which avowedly puts aside what Boulez speaks of as "the background": scale, harmony, the European tradition. Their claimed antecedents are the very late work by Debussy; the work of Schoenberg's "atonal" period, especially Pierrot Lunaire; the early Stravinsky of Le Sacre, the late Stravinsky who has rationalized the tone-row away from German dramatic expressionism; and what Robert Craft calls "the dialectic of the form" in Webern. They recognize Varese as an influence and admit, with reservations against his present ideas, the persuasive authority of John Cage. They accept all types of percussion, jazz and its instruments, sound effects, and electronic sound. Conspicuously they ride the wave of the advancing fashion. The liberties they exploit have been won for them by older men whose work they compliment or disdain.

Both are personalities of the utmost musical gift and charm. They profess an attitude of the post-World War II generation—John Cage may be said to have invented its musical application and induced his younger colleagues to adopt some of them—that art should not be directed to its audience, that music should disregard the convenience of performers, that the composer should put out of mind the authority of tradition and create art directly, as it were by formulating the circumstances of its existence. Unlike Cage, the two younger men have addressed themselves to elaborating the rules of circumstance.

All three have shown themselves adept at winning attention by the public they flout. But whereas Cage has carried his intransigence to the extreme of pure chance (within selected areas of choice), Boulez has been sweetening the arbitrary shock of his sound as if to woo the public. His composition for voice and assorted instruments Le marteau sans maitre has astonished its many audiences by seeming not at all unacceptable, if odd, and satisfied its many performers by what they admit to be, after their first reluctance, its instrumental reasonableness. Writing of Le marteau and Stockhausen's Zeitmasse (meaning Tempi), which he has recorded on one record (Columbia), Robert Craft reports: "The performers now feel that these two pieces are perfectly imagined for their instruments. In fact, the instruments have been used so well and to such effect as to cause every player to regret not having more to play." Subsequent experience and response have indicated that Zeitmasse is not so acceptable either to the performers or by the audience as Le marteau.

In defense of the rule-makers Craft writes: "The possibilities of choice are sidereal, when one thinks of the permutation systems used by Stockhausen and Boulez. . . . We are at a point where theories of nature as justifications have ceased to exist, or at any rate do not explain what happens. The composer is therefore obliged to invent rules just to have rules and because he must work according to something. In practice this is apt to lead to a new system for each work.'

An enormous variety of technical inventions, good and bad, forwarding some gains or merely filling in the gaps left by earlier composers, presently clutters the musical workshop. Against this creative chaos Schoenberg warned all who might wish to let his method take over theoretical primacy in composition. Invention and retention of rules to compose by has been a game of professional estheticism in nearly all periods, furnishing out the knowledgeability of the Conservatoire composer, puffing the theoretical daydream of the technical philosopher who "explains" form as a definable absolute to be achieved by prescribed means.

At the age of 20 Donald Tovey wrote, preliminary to his unequalled discussion of Bach's Goldberg Variations: "It sometimes seems as if the surest way to damage the reputation of a work is to show that its structure is ingenious beyond the reach of amateurish plodding." Twenty-eight years later he was ending an historical discussion of chamber music with these words: "One can only ascribe to pure formalism the way in which composers with atonal styles (like Ravel's) and perpetually modulating styles (like Reger's) cling to a set of forms and a group of four movements of which the sole meaning lies in propositions of classical key-relation and classical rapidity of action." (Essays in Musical Analysis: Chamber Music.)

The ingenuity of Bach drew together the accumulated tradition (Continued on page 29)



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ART

DORE ASHTON

The contemporary art critic is a chastened fellow. So much has been published, so many historical "mistakes" have been recorded that he justifiably backs away from categorical commitment. Nobody wants to be a dupe of history.

To replace traditional art historical, closed systems with a flexible modus operandi, the modern critic has seized on the idea of being a sympathetic "witness" of his time. Being a witness implies detachment and being sympathetic incurs limited participation or "engagement." This fulfills the day to day responsibility of the critic. He observes, tries not to censure, and he evaluates primarily within the temporal standards of taste. Since temporal values are as important in their way as ultimate values, the sympathetic witness of his time is an indispensable agent.

But the memory of the "mistakes" of critics in the past has perhaps been too sweeping a corrective, for with the ascendance of the sympathetic witness, the polemicist has all but vanished, and with him, the speculative genre of criticism.

The theses of the speculative critics, it is true, often leave the work of art far behind. But since we are well endowed with witnesses — and passionately sympathetic witnesses at that — a few sharply speculative minds and a few disquieting questions would be all to the good. Unquestioned enthusiasm, unfortunately, has a tendency to compound itself into fatuous adulation and all sympathetic witnesses (which I consider myself) are subject to the perils.

Even retrospective speculation has its virtues. I am thinking of Malraux's equivocal but suggestive remarks about the art of ancient Rome. Malraux isolates Rome in the stream of art history and drapes a number of pet theories on the body of its obviously mediocre visual arts. His conclusion is that the Roman—as opposed to the Christian—art historical era was concerned with "production" rather than "creation." He suggests that a materialistic society always sponsors an art of production. "The client, it is well known, always wishes that art serve him; creation, it is less well known, never serves anything but the object of its own pursuit. Art which gains the client loses the universe."

Though he never says it directly, Malraux sharply questions our own period, an "age of individualism," and equates it with ancient Rome. Art in our time certainly has its clients, and production meets



Franz Kline
Delaware Gap
Collection Mr. Joseph
Hirschorn
Courtesy Sidney Janis
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Photograph by Oliver

their needs. Furthermore, ours is a pagan era, like the Roman, and Malraux implies that the absence of religion is usually accompanied by an absence of creation.

The idea of "production" with its connotation of repetition, is alarming, and other critics have discussed it. Another French speculative thinker, Julien Alvard, has referred to contemporary art as an "art in series," and has underlined the paradox of a society that thinks of itself as individualistic and yet produces repetitive, stylized art. The sympathetic witness naturally abets serial thinking and its products since he records what he witnesses and stops there. He accumulates data.

The on-the-scene witness occurs in other fields as well. An American sociologist recently criticized his confreres for "keeping busy with the perfection of survey techniques, statistical refinement, measurement scales for attitudes, personalities, audience reactions and market research." The "theoretical legacy" and "larger questions" which had intrigued such thinkers as Marx and Comte, he said, have been cast into limbo.

The uncritical witness appears to be a defensive by-product of an

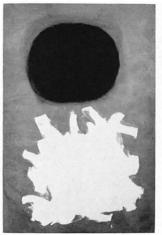
industrial, materialistic society. He is the first to cast the larger ideas into limbo. Our zealous accumulation of documents, artificial creation of "culture heroes," and unquestioning faith in the immediate: these activities all operate happily without the benefit of speculative theory.

If, as Malraux suggests, our period is more productive than creative, we may assume that the predominating abstract art which often manifests itself in series and which is avowedly based on the principle of reduction is the proper subject for inquiry.

In this connection I recommend Sidney Tillim's article in the Autumn issue of the Kenyon Review, 1958. Though I think Tillim pinned his theories on the wrong artist (Brancusi) he nevertheless examined a number of awkward questions with unflinching probity. Among other



William deKooning
Suburb in Havana
Courtesy Sidney Janis Gallery
Photograph by Oliver Baker



Adolph Gottlieb
Magnetic
Courtesy Andre Emmerich
Gallery
Photograph by Rudolph
Burckhardt

things, he touches on the question of reduction when he says: "In brief, what we have in Brancusi are the repressions and compressions peculiar to a concept of taste rather than style. Taste, involving mannerism rather than abstraction is an intensifying process rather than a selective one. . . . Through taste materialism seeks a union with piety, and piety, where nature is central, is in search of an authoritarian pattern to compensate for the formlessness of its naturalism."

Tillim objects to romantic neo-primitivism which he defines as follows: "The neo-primitive is compelled to simplify and his attraction to 'purity' and 'freedom' is an attempt to turn sensibility into principle. Sensibility, however, withers upon so self-conscious an application, and, in turn, the area of feeling must shrink to accommodate increasing simplification."

It must be apparent to everyone familiar with contemporary art that the dominating convention of our time demands reduction. The tendency of painters both in Europe and the United States is cer-

Philip Guston
The Return
Collection Mr. and Mrs. David
Solinger
Courtesy Sidney Janis Gallery
Photograph by Oliver Baker



tainly toward what Tillim calls neo-primitivism: there is a need to intensify, to find purity, to exercise freedom. But it must be obvious to us by now that reduction is a puritanical and often tyrannical tenet which carried to its extreme leads to all sorts of abuses. It leads above all to self-impelled repetition, to obsessive signature-making.

Writing from Paris in "Arts," Annette Michelson pointed to this in reviewing a recent large exhibition of drawings by Hans Hartung. "They are all utterly minimal in scope and ambition," she writes. "... their strength does actually lie in the reduction to an utter minimum of existence, in the fact that each configuration is literally

(Continued on page 28)

notes

in passing

People often hear "the East" spoken of as an infinitely complex enigma which only specialists can attempt to decipher. It seems to be made up of vast continents, unknown seas and enormous nations which used to be little heard of, especially as they were often considered merely vague and picturesque provinces of empires whose capitals lay in the West. In it live an incredible number of extremely varied peoples, speaking a multitude of languages (which are printed in incomprehensible characters). These strange inhabitants are steeped in philosophic, religious and literary traditions which are at the same time quite ancient, and yet curiously alive.

When Westerners were at school, all they were taught about these religions and cultures was the fact of their existence, and even this was usually brought in merely as a footnote to a chapter of ancient history or elementary philosophy. Monuments had been photographed. Statues and paintings had been brought to Western museums and shops. These objects might be regarded as curious or moving; they might even be admired. But they were considered part of the past, and of a rather abstract past at that.

The history of these peoples? Western school-books rarely mentioned it except in relation to the West. The Arabs, for instance, appeared just in time to invade Spain and fight the Crusaders in the Holy Land, after which they left the stage and went back into the void. India emerged from a long, legendary, fairy-tale night to be exploited from the sixteenth to the eighteenth centuries by a number of trading companies. China escaped from its dreary isolation to welcome the "civilizers" of the Opium War; and Japan, symbolized for two centuries as an armoured Samurai killer of Portuguese monks, was given two paragraphs under the date 1853.

Thus our ignorance can often be explained or excused. But it can no longer be tolerated. It appears dangerous at a time when real politics are planetary, when the words "fate of humanity" are no longer used exclusively by moralists but are common in the newspapers in which the conscience and the anxiety of our time are expressed to a greater or lesser degree.

Everyone knows, everyone senses, that peace, general progress and world prosperity may depend to a large extent on the development, the decisions and the accomplishments of certain countries that many of us still locate rather vaguely "in Asia", or "in Africa", but that no one any longer dares call exotic. The profound solidarity of all peoples has become a truism; and even if one thinks chiefly of economic solidarity one feels the need to know more about

one's neighbours, near or far, than just their industrial and commercial status. Many are wondering: "What are they really like, these nations with whom we are henceforth linked for better or for worse? What may be expected of them? How do they look at the world?"

But this last question implies a far deeper curiosity than that aroused now and then by casual newspaper reading or concern for the future. To wonder about the views and opinions of a people is to want to know the broad lines of its history, its living conditions, its social structures, its religious attitudes, its aspirations.

It would be an exaggeration to say that the varied peoples who make up the West know one another really well. Their misunderstandings have often been deplored, and, when it comes to culture, they are likely to show a provincialism which leads them to be rather neglectful of their neighbours' values. Yet these peoples never consider themselves very distant from one another; within Europe or the Americas they see no cultural barrier difficult to cross if they will take a little trouble.

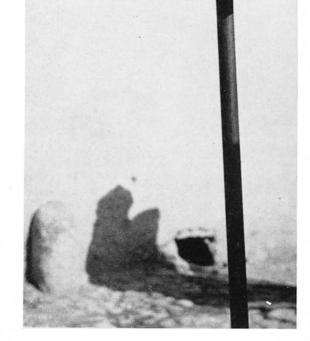
But when these Westerners who so strongly sense their own basic unity turn toward one or another of the peoples of the East, they are completely at a loss. All the keys they have to open doors inside their own West seem useless where the lands of Africa or Asia are concerned. Over there, as they see it, the languages, beliefs, customs and races have the peculiarity of being 'Oriental''-which must mean that they have nothing in common with the West, that they stem from absolutely different human themes. To learn anything about them one would have to start from zero, to set out on a long road of hard study. To these Westerners, the East is another world. It is another bloc—not hostile, certainly, but radically different, closed, mysterious. They know that it is possible to stay there for a long time without understanding anything; certain travellers have furnished the living proof of this. The realization that more than half of all human beings are Asiatic, Oriental, is not always an encouragement to pierce the mystery; on the contrary, it may have the opposite effect.

East and West are vague terms. Where does one end and the other begin? Yet the words must have some reality, at least in people's minds, since they have been used for so long without being worn out, since the "East-West problem" has existed. But if we admit that they evoke basic differences, and that very often we can say, "This is Oriental, that is not," then we must name the criteria for our judgments. At least five criteria come to mind: geography, races, languages, religions and social forms.

(Continued on page 28)

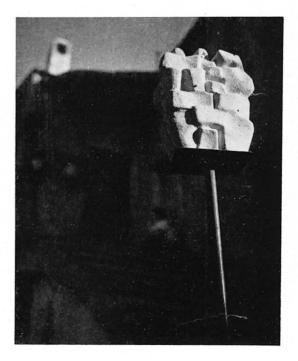
Constantino Nivola











Many sculptors have dreamed of adorning an entire town with the work of their hands, but in recent times very few have realized their dreams.

Constantino Nivola, however, has managed it. A short time ago, Nivola returned to Orani, the small mountain town in Sardinia where he was born, to create a monument for his mother.

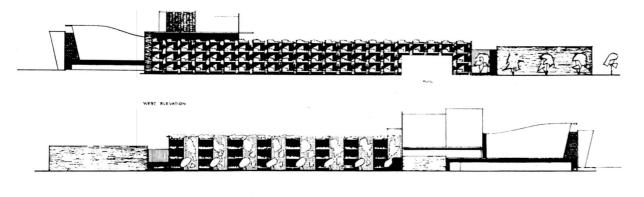
In the open, sheltered by the mountains, Nivola built the low-lying concrete sculptures, placing two bronze portraits on poles (as in the ancient Sardinian nuraghe figures) beside them.



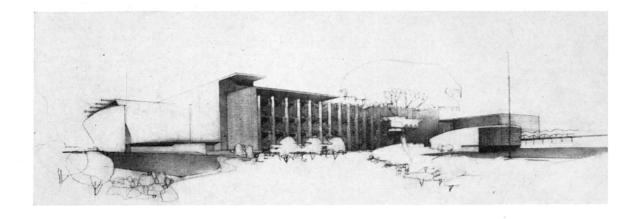
He then planted grain seeds which will soon be a long, flowing tide nearly concealing the monument. This poetic way of animating his sculpture was inspired by Nivola's memory of his mother. "My mother never accepted being married to an artisan. She was from farmer stock and she always wanted a corner to hide things in, like grain for the winter. Here, she gets the grain."

Nivola next got himself assistants—his brothers who, like him, are trained stone masons—and decorated the front of the Orani church with grafitti. Finally, he staged an exhibition of

his sand and concrete sculptures in the streets of Orani. As in the monument, the sculptures were mounted on long poles, like lanterns, and were placed between the cobbles of the streets, standing against the warm, pale walls of the houses like sentinels. His people were puzzled but respectful. They brought wine and made a feast and milled about the streets of Orani examining the "work" of Nivola's hand. A few ventured to ask what the sculptures represented and, Nivola reports, they were satisfied when he asked, in return, if they could explain the mystery of the Trinity.—DORE ASHTON.



A COMMUNICATION CENTER FOR ADELPHI COLLEGE, NEW YORK
BY RICHARD J. NEUTRA AND ROBERT E. ALEXANDER, ARCHITECTS



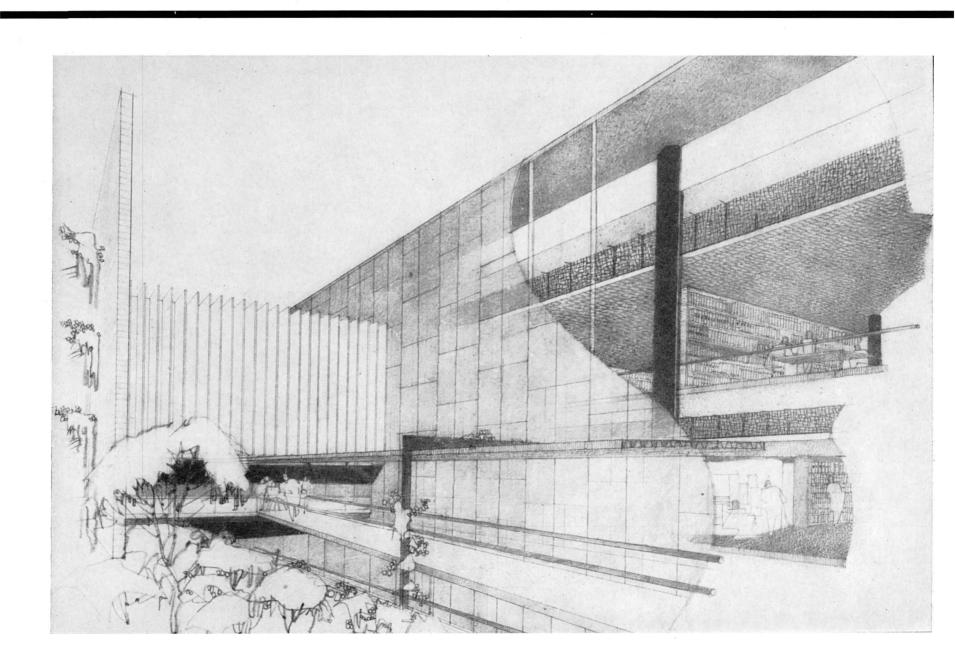
The project was to provide a library which would offer a constantly changing stimulus in the form of special displays related to current events, a news room and a social center for music and drama. Special provision has been made for a closed circuit television to be connected with a New York hotel where pertinent interviews could be transmitted to student groups connected by telephonic communication to facilitate discussions.

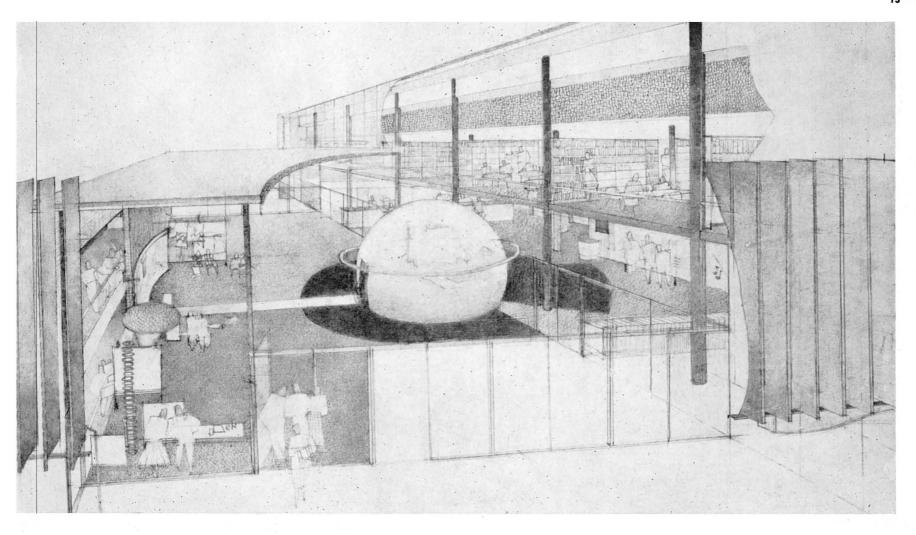
Emphasis in the project has been upon mechanical means of communication, micro filing, film and tape recording, and so forth; forms of communication which the student will learn to use freely and naturally. While he is being instructed in the full force of communication methods, his own activities will be subject to study in terms of the use he makes of the facilities.

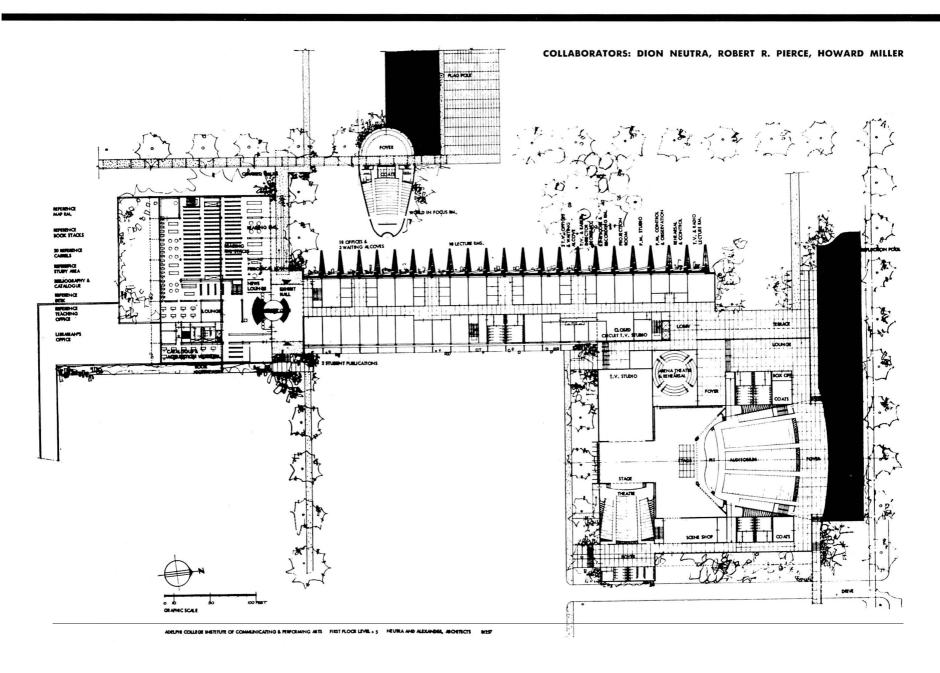
In explaining their objectives, the architects said of the project: "We have been interested in the development of ideas concerning a center of teaching and research of communicative means and methods. Our ideas have been approaching the subject in all its phases from the physiology of various sensorial reception and from anthropology to the practical commercial and engineering aspects of communicative devices.

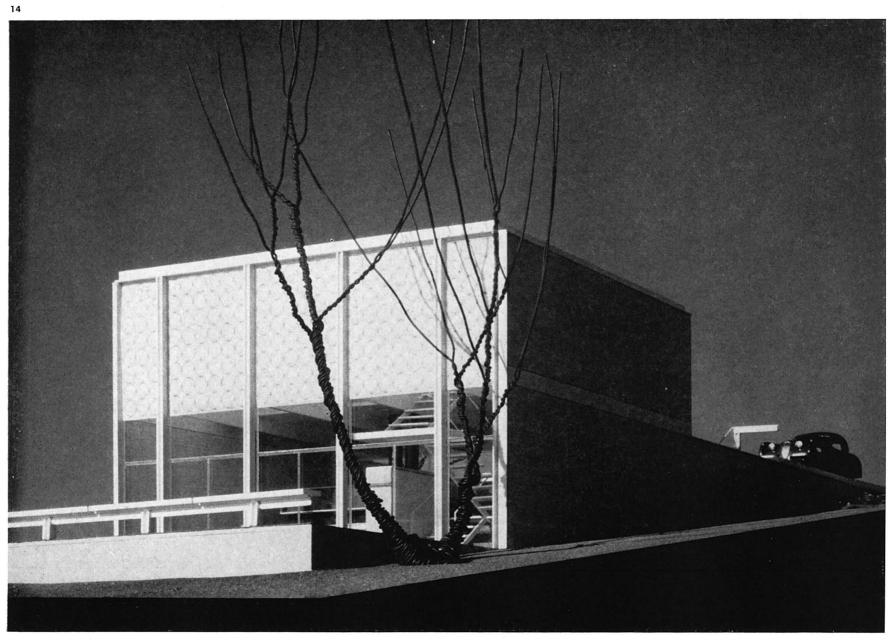
"We also have concerned ourselves, for example, with problems of communication in the daily practice of the various professions: lawyers, engineers, architects, ministers, social workers, doctors. The professionals would be observed by sound cameras in their own offices, in conversation with their clients or in the court room, on the pulpit, in the surgical operating room with

(Continued on page 28)

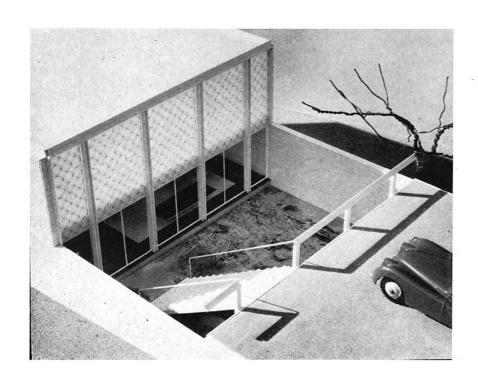








SMALL HOUSE BY GERALD E. HENNIGER



CITATION IN PROGRESSIVE ARCHITECTURE'S DESIGN AWARD PROGRAM—1959



PHOTOGRAPHS BY KARL H. RIEK

MATERIALS

M A T E R I A L S

STRUCTURE: STEEL FRAME. POREX DECK ON BULB TEES FOR ROOFS AND BALCONY.

EAST & WEST WALLS: RE-USED BRICK PAINTED OFF-WHITE. NORTH & SOUTH WALLS: (LOWER LEVEL) FIXED GLASS AND SLIDING GLASS DOORS.

NORTH & SOUTH WALLS: (UPPER LEVEL) FIXED TRANSLUCENT PLASTIC SCREENS—PLASTIC DISKS PLACED ALTERNATELY ON EACH SIDE OF A 3-5/8 INCH SQUARE GRID (PATENT APPLIED FOR).

FINISH FLOOR: (LOWER LEVEL) FIRE FLASHED QUARRY TILE. FINISH FLOOR: (UPPER LEVEL BEDROOMS) CARPET. CLOSETS & CABINETS: STAINED WOOD.

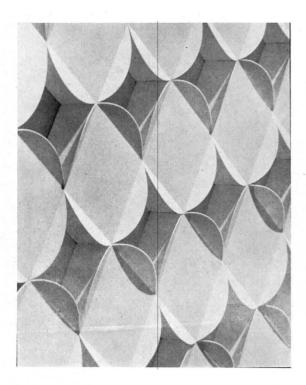
FINISH CEILINGS: EXPOSED POREX ROOF DECK.

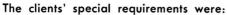
KEY TO DRAWINGS

- OFF STREET PARKING. ENTRANCE COURT. LIVING ROOM. COOKING & DINING.

- TERRACE
- BEDROOMS.

- BEDROOMS,
 BATHROOM.
 GUEST BEDROOM STUDIO.
 HEATER ROOM.
 LINEN CLOSET.
 CLOSET & STORAGE.
 KITCHEN CABINETS. LAUNDRY, STORAGE,
 ETC., BETWEEN FLOOR LEVELS FROM WALL
 TO WALL.
 KITCHEN CABINETS ON KITCHEN SIDE—BOOKCASE & FIREPLACE ON LIVING ROOM SIDE.



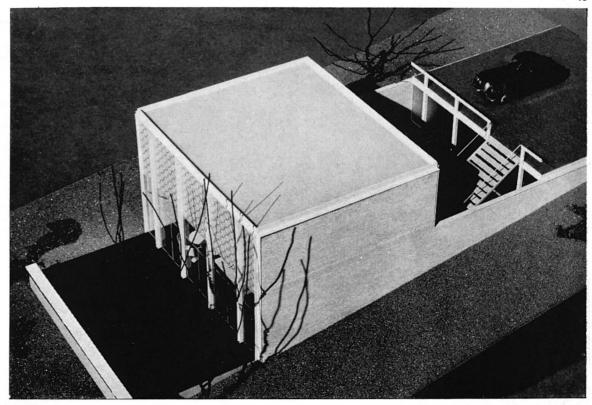


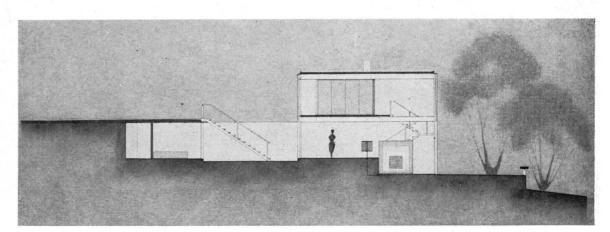
- 1. two bedrooms
- 2. separate facilities for overnight guests and visiting relatives
- an area divorced from the general living area for hobbies

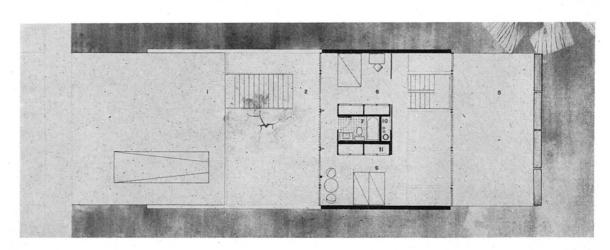
The site is a 60' wide x 250' deep urban lot which drops away from the street at the approximate slope indicated on the west elevation. To the south overlooking the houses on the street below is a view of the Ohio River and distant hills.

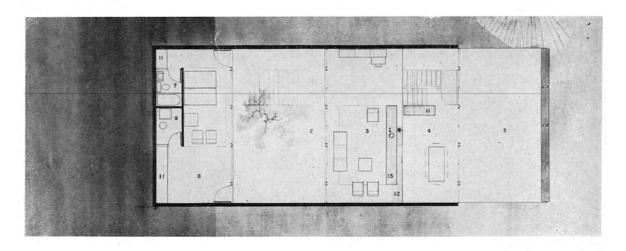
The designer's intent was to create in a small house experience of movement through space, and an atmosphere of dignity within the discipline of structural logic and simplicity of detail. The house is set into existing contours. Walls to east and west boundaries are without openings. Changes of ceiling height and floor level are used to contribute to the architectural experience. Whereas the lower level living area is open yet defined and separated by change of level, the upper level bedrooms are secluded and intimate.

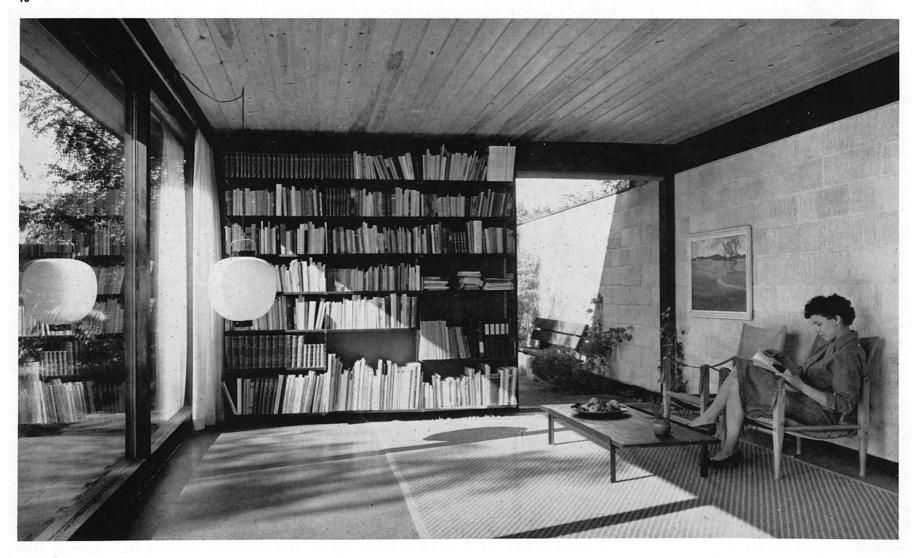
The plastic screen was devised particularly for its changing play of patterns with light varying from a soft translucent backdrop for sleeping to a transition of non-geometric patterns from sunlight. At night, light from the bedrooms will illuminate the terrace and entry court. The floor area is 1189 square feet in the house proper and 406 square feet in guest bedroom and studio.







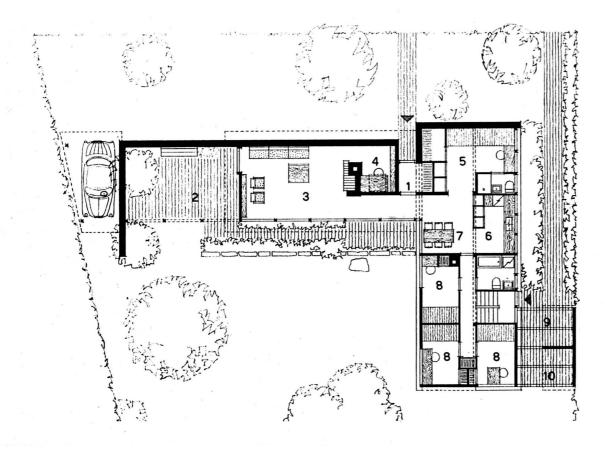




1. ENTRY

- SUN-TERRACE
- LIVING SPACE WORKROOM
- PARENTS' BEDROOM (WITH BATHROOM)
- KITCHEN
- DINING SPACE
- 8. CHILDREN'S ROOMS
- BICYCLES
- 10. GARDEN TOOLS

DANISH HOUSE BY GUNNAR JENSEN AND FINN MONIES, ARCHITECTS



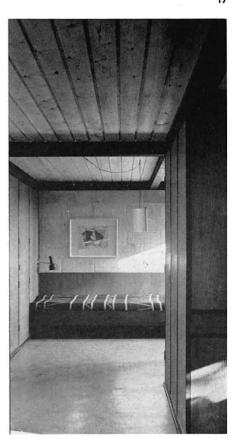
The house was designed for a family of five and in such a way that privacy could be obtained for the parents and the three children, with relatively spacious common areas for living as well as for work activities. In plan it is divided into two areas; one belonging to the children, with a separate room for each and a combined bath and laundry room. The children's entrance has direct access to a large hobby room in the basement. In the other section of the house the spaces were arranged so that the actual common rooms—living room and dining area—form an open plan.

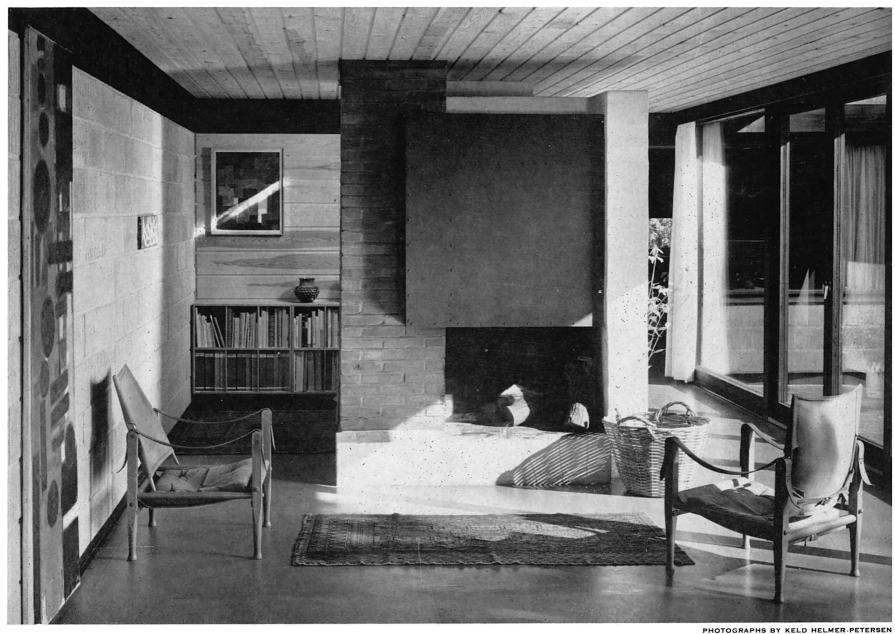
The house has been oriented in such a way that from the living room there is a deep view down in the garden, over a lower field, towards the woods in the background. The sloping site made possible the big, well lighted hobby room in the basement, and the orientation to the north made it natural to close the house completely on the north side and, at the same time, open it towards the south and west to the garden, the sun, and a beautiful view.

The house is radiant heated with plastic tubing cast into the slab. The structure is untreated concrete blocks with woodwork stained brown-black. The inside walls and the ceilings are untreated pinewood.









PHOTOGRAPHS BY KELD HELMER-PETERSEN

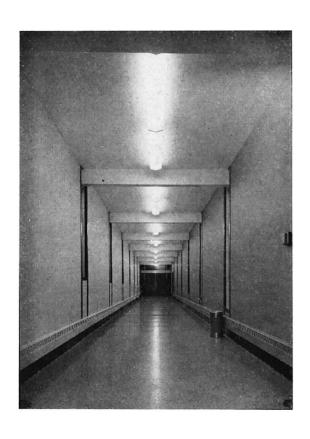




ENGINEERING CAMPUS BY HARRIS ARMSTRONG, ARCHITECT

FOR MCDONNELL AIRCRAFT CORPORATION

LANDSCAPE CONSULTANT: THOMAS D. CHURCH
LANDSCAPE ARCHITECT: HARRIET ROADES
MECHANICAL ENGINEER: DELT AND GIVENS
STRUCTURAL ENGINEER: LESLIE G. BERGMEIER
SOLAR ORIENTATION CONSULTANT: ASGER AAVOE





PHOTOGRAPHS BY BALTAZAR KORAB

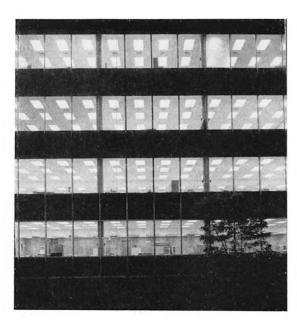
The site is a flat $16 \frac{1}{2}$ acres near the St. Louis airport, fifteen miles from downtown St. Louis. The buildings are oriented to face north and south with east and west walls blank, for reasons of sun control, and this takes precedent over the property lines orientation. This diagonal placement of the buildings together with free-form spray ponds, flowing curves on driveway and planting beds has produced a spirited landscape design which is in contrast to the crisp severity of the basic curtain wall buildings.

The central lobby, the focal center of the group, has its west side protected from the glare with rolling stained glass screens inside the windows. These screens slide back when not required. The opposite side of the lobby opens to the roof garden which is over an auditorium-lunch room seating 750 people.

The basic structural system is reinforced concrete and the basements of all buildings contain large bomb shelters complete with atomic filters, bomb doors and necessary facilities to maintain life for one week, when shelters are occupied and sealed.

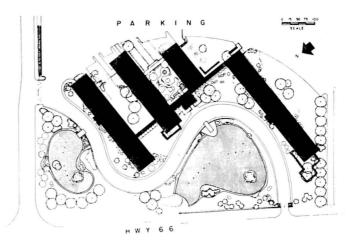
The curtain wall system was developed in the architect's office with special aluminum extrusions, a 2" insulated porcelain on steel panel and dual insulating glass (Thermopane), all designed on a 5'-0" module. The larger module was used for two reasons. It had better scale and could be subdivided into offices of proper dimensions (10'-15', etc.) instead of 8' (too small), 12' (neither small nor medium), etc. All lighting, heating and cooling is arranged modularly so that subdividing spaces on the module lines presents no problem and already many changes have been made. All interior partitions are, of course, prefabricated steel and movable.

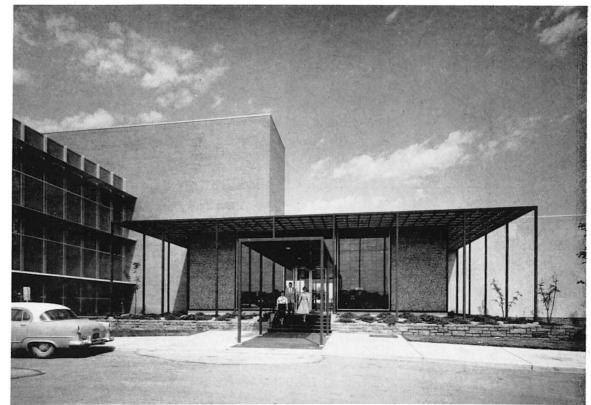
Solar orientation was worked out with such precision that no direct sunlight enters the north window wall at 8 A.M. Central Daylight Time on June 21st (longest day in year) and will only enter from the west at 4:50 after the normal work day is over. South windows are protected by plastic sunshades from March to September and must use simple draw curtains for winter glare control.



THE PANELS DEVELOPED IN THE ARCHITECT'S OFFICES AND IN THE PLANT OF ATLAS ENAMELING HAVE PRODUCED A COMPARATIVELY LOW-COST RIGID 2-INCH UNIT FACED INSIDE AND OUT WITH PORCELAIN ON STEEL. THE SKIN OF WHICH IS THERMALLY BONDED INTO RIGID INSULATION.

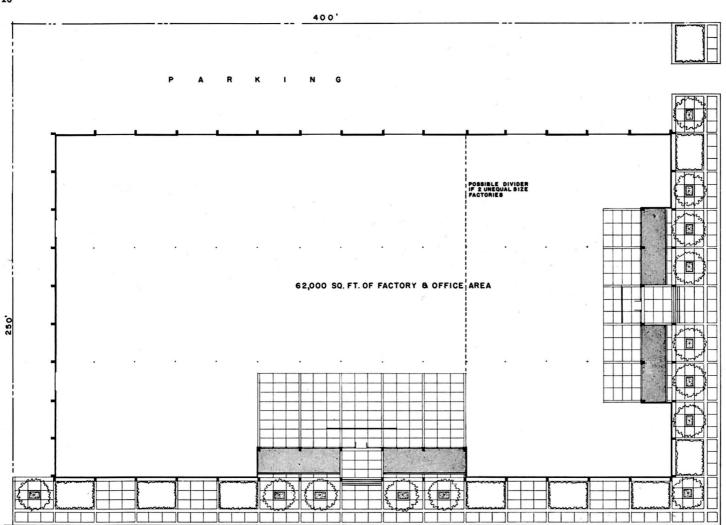
COOPERATION WITH THE MANUFACTURER, THE DAY-BRITE LIGHTING COMPANY, HAS PRODUCED A VERY SATISFACTORY MODULARLY COORDINATED SYSTEM OF ILLUMINATION AND AIR DISTRIBUTION WHICH PERMITS VARYING INTENSITY BY THE SIMPLE EXPEDIENT OF ALTERNATE SWITCHES OF FIXTURES AS PLANT REQUIREMENTS CHANGE ROOM SIZES.





PANELS ON EITHER SIDE OF ENTRANCE WINDOWS: MURANITE GLASS TILE DISTRIBUTED BY MURALS, INC.





A factory of 62,000 square feet to be constructed on a 250' x 400' level corner site for speculative rental.

The structure is exterior concrete columns, interior steel columns with 36" deep steel plate girders on a 22' x 62' grid. Walls are 20'-6" wide pre-cast tilt-up panels.

The floor slab cantilevers 30" beyond the foundation to visually lift the structure above grade. Wall panels are framed with columns and the concrete fascia which "flushes" with column faces.

This building is designed so that space may be divided should the building be leased to two tenants. In this case each would have its own separate streetside entry.

Each entry deck is designed as a flat-slab bridge spanning a reflection pool. Glass walls are recessed 20'-6" and these recessed areas are covered with steel-framed canopies of blue heat-absorbing wire glass.

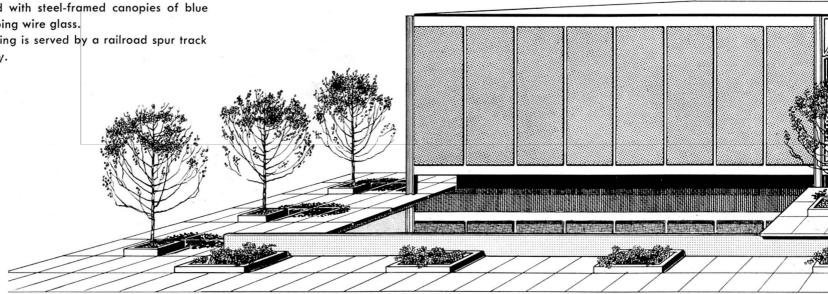
The building is served by a railroad spur track and freeway.

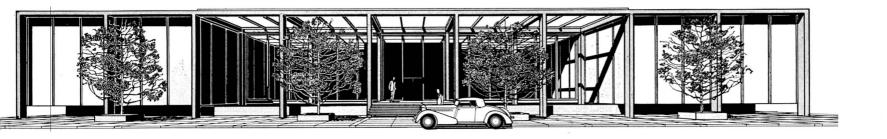


TWO FACTORY PROJECTS BY CRAIG ELLWOOD ASSOCIATES

CAMPBELL AND FARRELL, STRUCTURAL ENGINEERS

DEVELOPER: JOHN M. STAHL





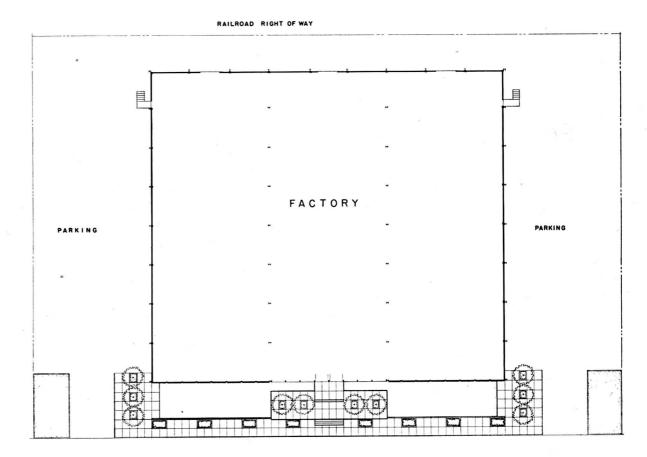
A factory of 30,000 square feet to be built for speculative lease in the southeastern Los Angeles industrial area served by both railroad and freeway.

Walls are 20 - foot wide "tilt-up" panels, formed and poured over the concrete floor slab, then crane-lifted into position.

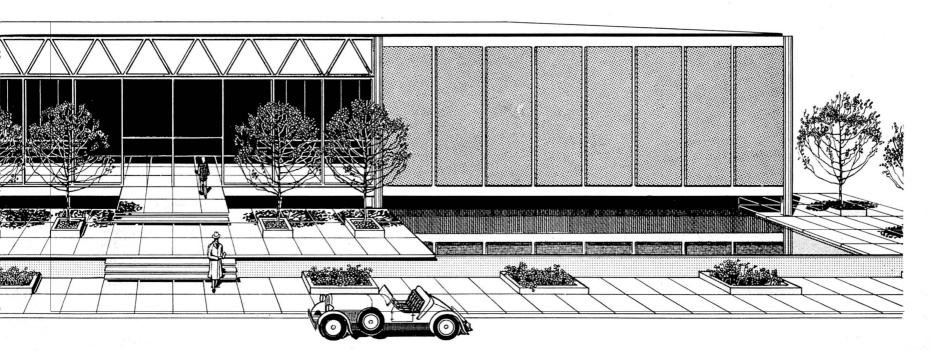
The structural frame is steel wide-flange columns, steel plate girders. Steel columns in the exterior walls are exposed outside the panels. Fascias at roof and slab are steel channels.

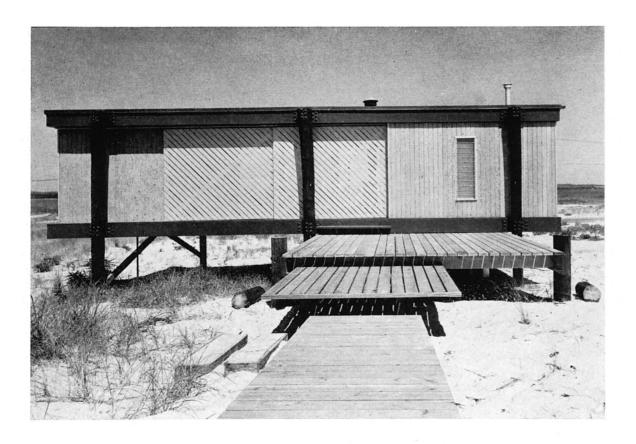
An exposed steel truss spans glass walls and the triangular panels between truss members will be constructed of concrete-asbestos sheet.

The entry slab is designed to effect a bridge spanning a reflection pool which extends the full width of the building.



SITE PLAN



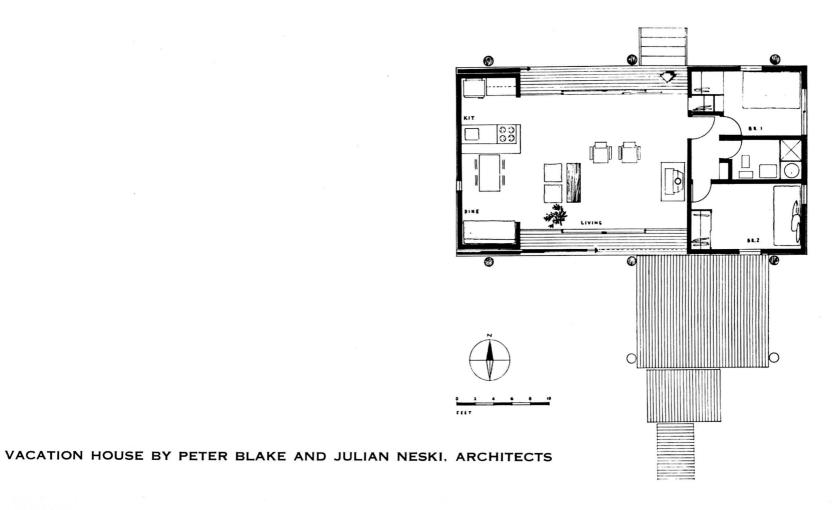


The house is actually a breezeway between 18'-wide sliding glass doors, with a set of wooden shutters to protect the glass in the winter and during hurricanes. The bedrooms are very small, which makes the house virtually guest proof. The architects have tried to make the house as hurricane resistant as possible (it is on a very exposed dune-site) by setting it between creosoted piles, driven some 15' into the sand.

The natural wood finishes (Texture 1-11) are preserved with Cabot's bleaching oil. The fascias are charcoal gray, the sliding shutters pale pastel blue. The only really new idea in this refreshingly simple structure is the use of creosoted telephone poles as structural columns. The architects felt that the design called for a structural system that would suggest strength in a sometimes harsh environment. Rough concrete seemed rather too farfetched for the area, and the system finally settled upon was taken straight out of pierand wharf-building which seemed to offer practical and interesting possibilities.



PHOTOGRAPHS BY MARC NEUHOF





WIESENFELD, HAYWARD, AND LEON: CONSULTING ENGINEERS



OPEN AIR MUSEUM BY WERNER MULLER

AND LISBETH SACHS, ARCHITECTS

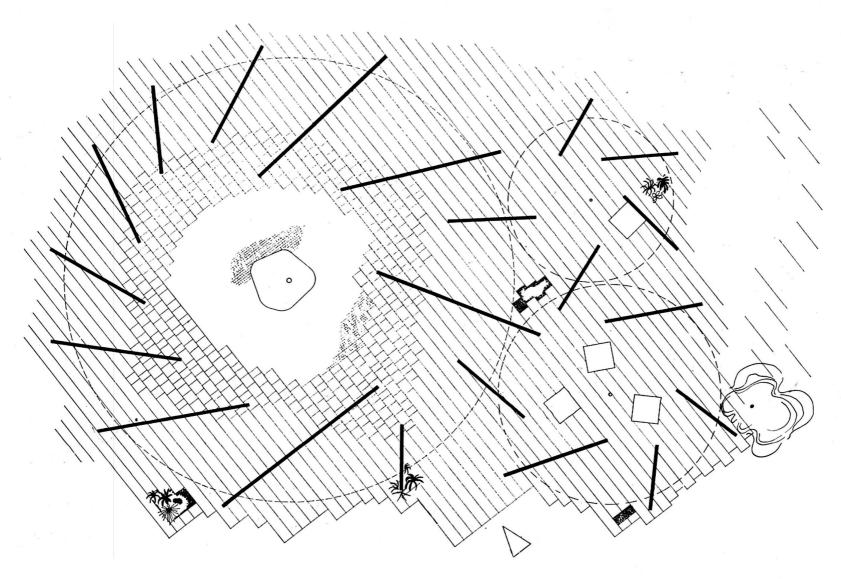


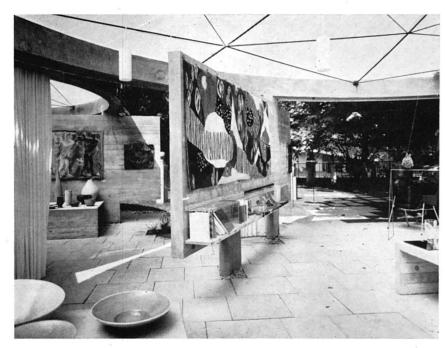


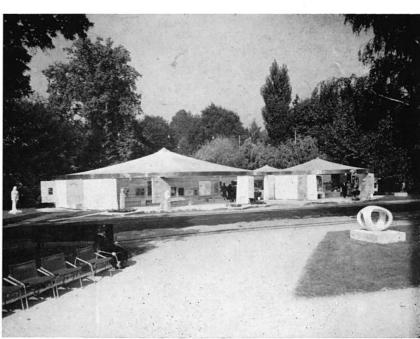


This small open air museum was designed and built for a Swiss exhibition in Zurich. The purpose was for the display of arts and crafts material. The project consists of one large and two smaller adjacent circular pavilions with the space disciplined by concrete panels used as display surfaces.

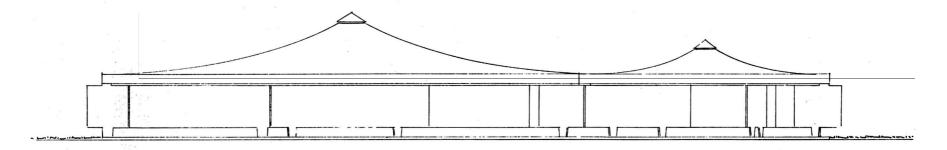
The overall materials used were concrete, steel and plastic. The flooring is brick and tile; the roof structure is supported by a central mast from which radiates an umbrella-like supporting structure for the plastic material which is used in the winter for showings. The structure is easily adaptable for multi-use purposes by way of exhibitions, dances, open-air public gatherings.

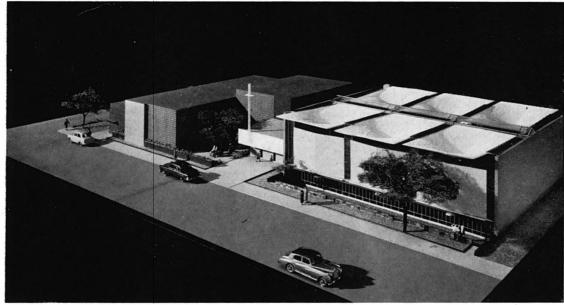




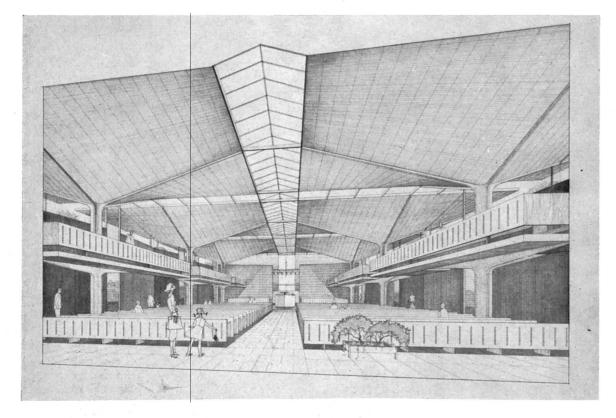


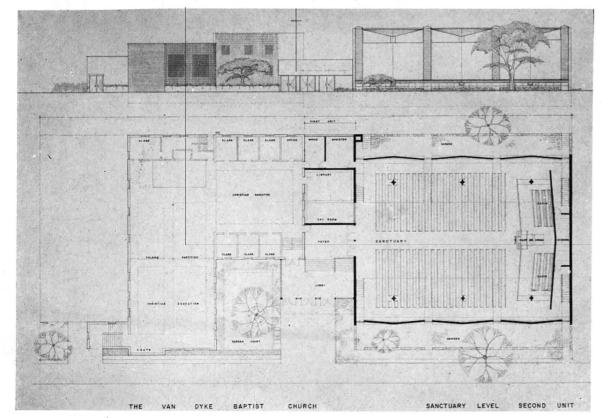
PHOTOGRAPHS BY FRED WALDVOGEL E. MULLER-RIEDER

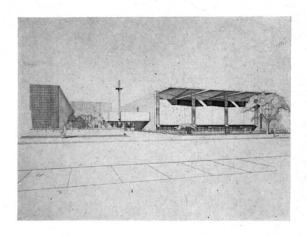




PHOTOGRAPH BY BALTAZAR KORAB







CHURCH

BY BEGROW AND BROWN, ARCHITECTS

As an addition to a present church building, it was desired to build a sanctuary seating 800, with overflow seating of another 300, a multiuse room for banquets, meetings and athletics, and additional classroom space. Furthermore, it was requested that architectural coherence be given to the whole group. Because the area of the site was extremely limited, it was absolutely necessary to use two levels. Therefore, the fellowship hall and classrooms were located half a story below grade, with the sanctuary above it. A lobby at grade level provides access to both areas. Overflow seating was provided in balconies as an economy and so that there would be no apparent empty spaces when not in use.

Six columns support the roof which consists of six concrete hyperbolic paraboloid umbrellas. Since these structures stand completely independent, one from the other, the space between them is filled with skylight. Inside the sanctuary, the columns and the tree-like roof structure create a sense of vertical movement. On the exterior, the outward thrusting of the umbrellas symbolize the proclamation of the Baptist program.

Since the present building is completely nondescript, it will be painted umber and covered with a vertical wood screen.



GEORGE NELSON

1. New adjustable-back plastic chair designed by George Nelson for the Herman Miller Furniture Company. The separated back and seat units are connected by polished steel tubing attached to soft rubber shock mounts.

The swaged legs form a pedestal-like base. Shell colors are black, gray and white and can be selected in monotone or two-tone combinations. Other versions will include cushioned up-



POUL KJAERHOLM

holstery of all-plastic construction, swivel mechanism, optional casters.

2. Modular radio-phonograph units designed by Harry Seidler, architect.

These units are designed for mass production of a self-contained radio-phonograph cabinet and two accessory cabinets of identical size and shape, one to accommodate an additional large loud speaker unit and the second a record stor-

age cabinet.

The basic unit accommodates all equipment in its top section with horizontal glass sliding panels. Below are a small speaker and a record storage shelf. The other two units have Formica tops, expanded aluminum speaker front and black glass sliding doors.

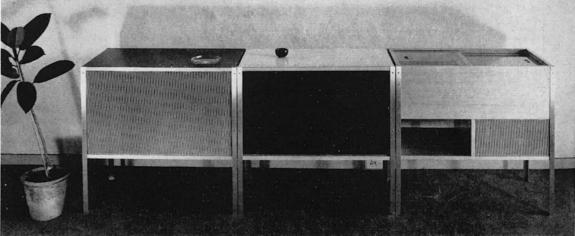
All units are made of solid core timber with veneers to suit individual tastes. The units shown

(Continued on page 29)

FURNITURE



DONALD DESKEY



HARRY SEIDLER



POUL KJAERHOLM

DANIEL, MANN, JOHNSON & MENDENHALL, Architects, Engineers







ADRIAN WILSON & ASSOCIATES, Architects - Engineers

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COMMUNICATION CENTER - RICHARD NEUTRA

(Continued from page 12)

assisting personnel, in the meeting of a political candidate, etc. Of course, musicians and artists, whether they engage in pure or commercial design, are deeply involved in communication. Singers, soloists on any instrument, dramatic actors and dancers deserve visual as well as auditive observation, and such observation should be preserved for study. We think that this also may become a pilot project in vocational counseling, interesting to colleges all over the country. A most useful library of kinescopes could gradually be built up, both for group instruction and individual viewing.

"Methods of testing the abilities and the effectiveness of communicative means may extend this project in a fascinating way. Physiological measurements could be taken in certain rooms and laboratories set up to gauge the impact of stimulations offered. We thought especially about using the large control groups of student readers in the library for developing some insight into the factors that make reading, as well as producing readable texts, successful or obliterated by fatigue phenomena or cumulative irritations.

"To our knowledge no such center of research concerning the efficacy of transmitting ideas, images and producing mental reactions exists anywhere. An exploration of this kind may become a specialty of Adelphi College, while helping a student body in day to day practice."

NOTES IN PASSING

(Continued from page 9)

All in all, the criteria on which we presume to found so many judgments seem somewhat confused. There remains one, however, which is sometimes presented as surer or more tangible: that of social progress, generally linked with industrial progress. If this yardstick were applied, the East would be a vast realm of underindustrialized nations in which agrarian civilizations and feudal or patriarchal societies still prevail. And this, incidentally, is why we see so many generous persons, in Europe and still more in America, explaining to Easterners the advantages of modern techniques and

the virtues of democracy. It would seem, however, that these lessons are addressed to a global, abstract audience, and never to one particular people or another. For if there still exists a very small number (among the weakest) whose system of government does not correspond to accepted popular norms, there is almost no country that has not been touched or permeated by an industrial revolution which in some cases, took place a long time ago.

Nobody is entirely unaware of the production of the Japanese or Chinese steel works, or of the textile factories of Egypt or Pakistan. But in the imaginary portraits most Westerners have of Eastern nations, these industrial realities seem to count for less than the relics of legend and the survivals of the past. On the road to Trombay, the Indian centre for nuclear research, a tourist will photograph buffalo carts. On his return he will describe the buffalo carts, going into ecstasies over their poetic antiquity. He will forget the atomic reactors; he has reason to suspect that it is not feudal obeisance and caste taboos that make them work. In a word, they do not fit in with his picture of "eternal India."

Thus the economic lag of certain Asian countries (and not of all) takes on enormous proportions in the picture we habitually paint for ourselves of the East. This exaggeration flatters the good conscience of a West proud of its technical advances, and likewise flatters certain of its sentimental tastes which are also nourished by novels and films.

A great many Westerners have an avowed or secret hankering for a peaceful rural society, for human contacts without clashes or surprises within the reassuring framework of village harmony and family hierarchies—for a simple life, slow and regular, with deeprooted customs and unchangeable beliefs. Not finding this idyllic existence at home, they are prone to look for it in a legendary East; and the contradictions that a real East would oppose to them might only disturb their dreams—those dreams that are also called prejudices. So in their nostalgia for some kind of antique purity, quite honest travellers, even men of science, cannot always resist the temptation to identify the East with a patriarchal handicraft system. If the latter has disappeared from a country, the whole nation seems to have betrayed them to wallow in mercantile regimentation.

GEORGES FRADIER-UNESCO

ART

(Continued from page 8)

just this side of vacuousness and represents the very slightest possible variation upon the preceding one."

No doubt Hartung's "sign" began as a sign of something. In the beginning it was certainly a reduction to a principle deliberately applied with esthetic consciousness. No doubt the sign symbolized an origin, an experience. But by virtue of the self-propulsion of the sign, Hartung, as the writer points out, barely stays this side of vacuousness.

And there are many gifted painters like Hartung. It seems to me that unpleasant as they are, the questions raised by speculative critics must be faced when we examine the work of our own painters. They too work within the convention of the time, and within that convention, better artists can be eloquent and lesser artists boring. But they are all susceptible to the demands of the convention.

Those demands became overweening in a recent exhibition of Adolph Gottlieb's paintings at the Andre Emmerich Gallery. For some time Gottlieb has been concerned with one motif generally interpreted as symbolic of atomic explosion, but in another sense, a pictorialization of the general "cosmic" theme many artists now pursue. In this single image, Gottlieb has faithfully reduced himself to the following: an abstract background for a composition divided by two forms against that background. Above, a flattened sphere, below a ragged, mildly explosive form. In earlier essays on this motif, there were occasionally two spheres or three—an elaboration of the fatal boum-bouming aspect of explosion. But in the recent paintings, Gottlieb contented himself with the single ominous sun (moon, planet?) above, and the single spreading eruption below.

Now, although these are purist reductions, Gottlieb—a user of signs from way back—does invest them with literal associations. There is an inevitable earth-sky relationship in each painting and a naturalistic balance between them. The scale of the "cosmic" reverie is immediately cut down by the easily reconciled balance.

Furthermore, the self-imposed limitations of scope seem to have

pushed Gottlieb into dangerous territory. Not satisfied with the stark simplicity he wrought before and the immediacy of connotation, Gottlieb in these recent paintings has taken to coaxing the eye with color. The rude explosive quality is mitigated by the comfortable luxury of suave color. Chocolate, pastel green, velvety black, sumptuous sienna and red—all seductive.

Of course color can be the expressive agent within the most severely limited schema. But in Gottlieb's case it now appears gratuitous. Perhaps the repetition of the image became tedious for Gottlieb and he attempted to extend his range with variations in color. But the compression of his image cannot bear the strain of the gratuitous.

By repeating his signs, Gottlieb has forfeited the one virtue of the emphatic sign: its visual impact. Even such large themes as he seems to be dealing with become trivial when reduced to alphabetic regularity. Here are the A, B, C, in their pure form. But each is equal and each is sequent. No summary sentence is ever formed but the letters drone on interminably.

I've heard it said that art is always divesting itself, reducing itself to the zero point and then devoting itself to filling up the voids it created. This process seems to be reflected in the new work of one of the leading "reducers" of the time, Franz Kline. In his "Delaware Water Gap" recently shown at the Sidney Janis Gallery, Kline gathers new force by taking back an element he had formerly repressed—the half-tone. While he still paints heavily charged black masses, they are thrown into a different context by a scatter of graded grays. Far from blunting the impact of the streaking blacks, these purple or ochre grays reinforce them.

The picture carries within it a sense of origin, a physical rather than intellectual experience. It is specific. Perhaps the impression of scope is aided by certain naturalistic associations: there are definite recessions, light seems to cut through a landscape, and the towering blacks are like bluffs and mountains. It may be that these associations are precisely what give this painting its singularity. It could never be considered a product, or a point within a series.

DeKooning's painting in the same show also carries a landscape reference with its lake blue void above, its horizon, and diagonal strokes to suggest receding plains. For deKooning, this painting is a formal shift from calligraphic detail which filled his former paintings, to broad mass. While I thought that the V-shaped repoussoir cut the scale of the painting, deKooning's image, like Kline's, had the strength of singularity.

If any painter is exempt from criticism for the reduction fallacy it is Philip Guston. He moves rapidly from experience to experience and in the same show, exhibits a complex painting with paradoxical aspects. The shapes suggest weighty mass but the painting technique is so light, so certain that at moments, the forms appear to be filmy, billowing, membranous things of nature touched by winds and sun, and vibrating to the touch. Hundreds of reflections—rose red, pearly gray, ash gray, water blue—add to the sense of the ephemeral. Even the deliberately awkward leaning forms of orange and green seem detached and freely responsive to the gentle elements around them.

Motherwell's painting in the Janis show is in an idiom he has used before: the silhouetted form against a single-plane, abstract ground. Though Motherwell has eliminated everything but the two dominating forms, they gain an emotional dimension because the two figures—for they are undisguisedly figures—have strange and particular contingency of shape. The quavering lines binding their profiles are all complemented by echoing lines. Each dipping slope is qualified by an upsurging movement and the consequent rocking balance is very effective.

In the double register of criticism, where the witnesses' obligato accompanies the painter on his journey, and the theorists' somber chords anticipate that journey, the paintings of these men have the right to double judgment. Taken within our temporal compass, the recent works by these major painters do not fall into pattern. On the contrary, the paintings I mention are all rather markedly differentiated from those before them. Taken from the detached speculative point of view, even these obviously specially endowed painters are vulnerable to the conventions of the time—which they helped to establish—and have, at times, surrendered to the lures of serial painting. But I sense a turning in attitude, a more focused awareness among the painters of the hazards implicit in the mode of reduction.

FURNITURE

(Continued from page 27)

are silver ash, with black, red and white Formica surfaces, with an alternative of a walnut unit with white and blue Formica surfaces.

3. Armchairs by Poul Kjaerholm, architect, with frames of chromium plated steel, the coverings are leather, and the cushions 100% down, the ferrules are nylon.

A table of chromium plated steel, the top is oak, ash, or pine; the armchair is oak with a steel frame and leather seat; by Poul Kjaerholm.

4. Chair with a cast aluminum cradle from the new Charak Modern collection designed by Donald Deskey. The chairside table combines Micarta and aluminum, its top a rounded square. The new line is distinguished by the sculptured cast-aluminum base and the polychromatic Micarta surfaces.

MUSIC

(Continued from page 7)

of France, Germany, and Italy, which became revolutionary in the working out. In the same way Schoenberg's ingenuity drew from deep tradition new requirements of that knowledge. In neither case did the ingenious composer throw away the tradition and start over. One is surprised by the incomprehension of the matured Tovey in believing that one should. The event has shown that Reger was working in the wrong direction and Ravel in the right.

Stockhausen and Boulez outspokenly deny the authority of Schoenberg. In point of fact, the two composers have accepted the emancipation of the dissonance, have carried the tone-row method to "sidereal" extremes; and, as Craft remarks, "these . . . controls guarantee the subjection of the material to constant variation." Thus the three principles enunciated by Schoenberg are fully accepted by these reluctant disciples.

That Craft is not utterly convinced of the infallibility of these

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rule-makers one may gather from some other comments: "... It is my belief that the listener should not have any awareness of the serial material and should not attempt to approach the piece from that side." I myself wrote the same of Webern. When music is conceived by continuous invention, with a minimum of repetition or signals, its length has usually been short. Webern knew this, as did the composers of madrigals. Away from the seduction of the stage full of unexpected instruments, one hears with what grace and also with what effort the music of Le Marteau continues and even more of the trouble it has to make an end. The same is no less true of the earlier compositions by Boulez that I have heard. Stockhausen's Zeitmasse makes its points almost note by note, a dynamic without movement or direction.

I might add that I shall not be convinced of the futility of large composition by continuous invention merely because of the failure of these two composers adequately to manage it. The final movement of lves's Fourth Symphony is made up by overlapping planes of continuously evolving sound without thematic repetition. Elliot Carter told me he believes it must fail in performance, but it has never been tried.

Craft says again: "... in music that is virtually without repetition, connexions stand out miles..." They may or they may not, but by experience or Craft's description it is hard to grasp what they audibly connect. So we have Craft's comment: "Boulez is a composer in harmonic depth, who alternates chordal music with a music of lines, which you are meant to hear one line at a time or however you can manage." Such are the arbitrary consequences of arbitrary rule-making using arbitrary sound.

In the current state of music one fact stands out: the intervals of the 12-tone scale are the only surviving referrant of concordant music. The system of keys has broken down, but the equal tuning of intervals by which this system was made acceptable theoretically, if no longer acoustically, remains. Our ears are so adapted to these acoustically false intervals that we accept their equal component of dissonance as if it were essential to the continuity of musical creation. Composing by increasing degrees of dissonance has been assumed to be the only way forward, if music is to progress.

The alternative is quite clear, though it contradicts Robert Craft's assertion that "theories of nature as justifications have ceased to exist. . . ." The alternative is to retune the intervals according to the natural acoustical relationships discovered by the Greeks. These interval relationships, expressible by simple whole numbers, are the actual basis of all our theory of sound as music.

Equal temperament has not been accepted so peaceably as Western musical theorists would have us believe. Zarlino, Mersenne, Bach, Rameau, Helmholtz, Harry Partch have devised alternatives. Great Western composers, aware of the acoustical fallacy, have put this harmonic false relationship to use as a means of chiaroscuro and perspective and a method of drama in their compositions. The possibility of these means has not been exhausted; we have simply pushed the means too far in the only direction they can go. As painting is reverting to line and color, preferring the archaic and Byzantine to the great era of representation, so music is reverting to pure linear melody.

Lou Harrison is the one composer who, to my knowledge, has

recognized these facts clearly and seen the way beyond, as Schoenberg recognized the inevitability of the emancipated dissonance and its consequence in a single referrant of the 12 tones. Harrison has accepted the challenge to restore the 12 tones to their pure intervals. To do this he has given up the use of those instruments which cannot be readily retuned to the pure intervals (though they could be easily modified in building) and composes for strings, trombones, and keyboard, which are adjustable to any pitch, with percussion and voice. His Four Strict Songs, recorded by the Louisville Orchestra, shows as a preliminary study how these things may be done.

Many connoisseurs believe that European music reached its highest and purest development during the 15th and 16th centuries, the Golden Age of vocal polyphony. This was the period when Just Intonation was practiced, when singers adjusted their voices to the singing of pure intervals, and instruments played vocal lines. Composition was by formal melodies, called *modes*, erected on each note of the single key-scale.

Merely to revive and continue the modal writing of this period, as tried by modern composers who adapted the modes to the tuning of Equal Temperament, will not direct the art of music forward from its present conflicts. Negatively, the reinstatement of the pure intervals will do away with vertical harmony, the dramatic modulating procedures of Equal Temperament. It will dispense with the primacy of dissonance.3 Positively, the retuning of the scale to its acoustically pure intervals will enrich the sonority of the intervals in melody. A keyboard tuned to Just Intonation builds up sonorities like a bronze bell. By choosing thematic rows according to the acoustical requirements of this untempered scale, by adapting the pitch of conflicting tones, as was done during the polyphonic age, and by building with this euphony a new music of enriched melodic color and design, the composer of the future may carry forward the present-day revival of rhythm, color, and melody in directions we can scarcely anticipate.

Lou Harrison is now working on a large composition, Lou Harrison's Political Primer, for chorus and orchestra with solo recitatives. The flexible expressiveness of these recitatives, changing color and character with every inflection of the text, which he has sung for me in Just Intonation, convinces me that he has found the one right outcome for the presently disturbed, chaotic art of music, a direction that puts aside the arbitrary inventions, the game of rules, which now passes for that art.

What he has done subverts absolutely the art of music as we have learned to know it, replacing it by an art of pure intervals and sonorous melodies, freeing rhythm not only from the dominance of vertical harmony but also from that tendency towards extramusical and non-acoustical extremity, of which Robert Craft remarks:

³Devout listeners may well ask, horrified, what then will happen to Mozart, Beethoven, Brahms. The answer is: nothing we haven't already learned well to put up with. Nothing that hasn't been done to Palestrina, Monteverdi, Couperin, and in some extreme to Bach, Haydn, Mozart, Gluck: performances in an alien style, tied to the metronome and Equal Temperament, on instruments and with voices of different pitch and register (women contraltos singing in low register parts intended for high male voices, unsuitable as a Carmen singing the Narrator of the Matthewpassion). Oh, we can get used to anything and defend each falsehood lustily in the name of intuition, musicianship, taste, and scholarship!

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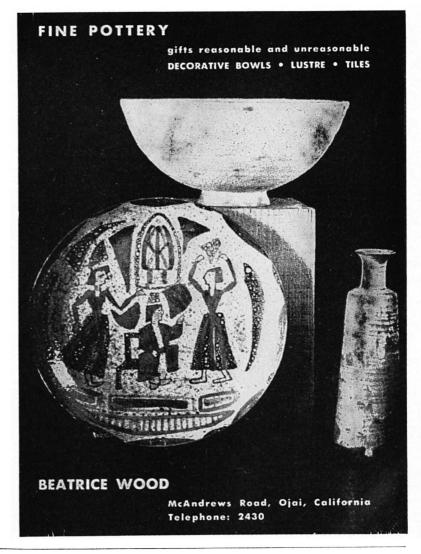
"Perhaps if the tendency continues we will be able in the future to hear the motor of the humming-bird."

Wesley Kuhnle has made for me a tape on which, using two registers of harpsichord and a virginal, he compares in extensive detail the three tunings of Equal Temperament, Meantone, and Just Intonation. By the time one has finished listening to the tape one's ears have accepted Just Intonation as the correct tuning and rejected Equal Temperament as out-of-tune, an unjustifiable discordance. Harrison's experience has shown that it is not difficult to adjust a string player or singer to Just Intonation; the problem is to get back to the artificiality of equal intervals.

Lou Harrison's long growth and experience as a composer of music for percussion groups, his study with Schoenberg and extensive development of tone-row procedures, and his more recent work, in Equal Temperament, with non-modulating melodies and euphonious sound-relationships have equipped him for this new adventure. With such compositions as the Suite for Violin and Piano with Small Orchestra (Composers Recordings) and his Mass (Epic) he began the reversion from complex row counterpoint into a simpler, more euphonious polyphony, rejecting the primacy of dissonance. In so doing he was influenced by the example of Erik Satie, the first modern composer to put aside technical elaboration and reassert the eloquence of simple line.

Lou Harrison may not see the outcome of his subversive but unavoidable decision, or like Schoenberg he may live to know the start of his acceptance. The choice he has made will not ease his path as a composer. This article has been written to explain what he has done and why to do so is necessary. Retuning the 12 tones will eliminate the need of the tone-row method and in doing so satisfy Schoenberg's doubts about the too fervent application of that method as a theory of composition.

 $^4\mathrm{The}$ tempo of Le marteau goes to 208. Boulez conducts with a relaxed melodic ease, allowing the parts an old-fashioned independence between fixed nodes. Craft conducts the same music with a pointillistic minuteness, more suitable to the composer's theory than to his style. The contrast exposes the essentially 19th century character of the music. Le marteau is a Schumannesque Pierrot Lunaire, as Polyphony X is very evidently a sophisticated inheritance from Delibes.



CURRENTLY AVAILABLE PRODUCT LITERATURE AND INFORMATION

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(296a) Contemporary Danish Furniture: New line featuring the "Bramin" convertible sofa designed by Hans Olsen, awarded first prize at the annual Danish Furniture Exhibition; other noted architects and designers include Gunni Omann, Carl Jensen, Jens Hjorth, Bjerrum, Joho. Andersen, Hovmand Olsen and N. M. Koefoed. For further information, catalog and price lists write on your letterhead to: Selected Designs, Inc., 9276 Santa Monica Boulevard, Beverly Hills, California.

(325a) Chairs: 10-page illustrated catalog from Charles W. Stendig, Inc., shows complete line of chairs in a variety of materials and finishes. The "Bentwood Armchair," "Swiss" aluminum stacking chair designed by Hans Coray, "H-H" steel and leather chair are a few of the many pictured. Well designed line; data belongs in all files. Write to: Charles W. Stendig, Inc., 600 Madison Avenue, New York 22, New York.

(180a) Furniture: A complete line of imported upholstered furniture and related tables, warehoused in San Francisco and New York for immediate delivery; handicrafted quality furniture moderately priced; ideally suited for residential or commercial use; write for catalog.—The Dux Company, 390 Ninth Street, San Francisco 2, California.

latest brochure contains accurate descriptions and handsome photographs of pieces most representative of the McCobb collections of furniture. Write for his reference guide to Directional, Inc., Dept. AA, 850 Beverly Boulevard, Los Angeles 48, California.

(321a) Furniture: Laverne Furniture, test-proven by leading architects and business organizations, has attained the status of a classic. A unique and distinctive group-finest calfskin and saddle leathers, precision steel work and carefully selected imported marbles. Write for complete illustrated brochure. Laverne, 160 East 57th Street, New York 22, New York.

(312a) 4-unit tabaret: Designed specifically to fulfill the needs of designers and artists for a work cabinet which combines good appearance with practical utility. Four modular units provide storage for every design tool and material including type catalogs and other reference books. Also available: a single-unit tabaret. For further information write: M. Flax, 10846 Lindbrook Drive, Los Angeles 24, California.

(304a) Furniture: The Thomas desk is a complete work center in one unit. Sturdy wood construction. Desk top durable Desk-lino, perfect drawing surface, stain resistant with simple, fool-proof, tilt-lift mechanism. Desk body available in blue gray or teal green. Special colors and finishes at extra cost. Dimensions: 30" deep, 60" long, 291/2" high. Write to M. Flax, 10846 Lindbrook Drive, Los Angeles 24, California.

(297a) Furniture: Brochure of photographs of John Stuart chairs, sofas and tables, designed by Danish architects of international renown. These pieces demonstrate the best in current concepts of good design. Included are approximate retail prices, dimensions and woods. Send 25c to John Stuart, Inc., Dept. AA, Fourth Avenue at 32nd Street, New York 16, New York.

(330a) Furniture: Herman Miller, Knoll and Moduform contemporary furniture for executive and general office areas in steel-all steel equipment (A S E) showroom and display facilities available to architects and their clients. Write to The Hart-Cobb-Carley Company, 2439 South Yates Avenue, Los Angeles 22, California.

(270a) Furniture (wholesale only): Send for new brochure on furniture and lamp designs by such artists as Finn Juhl, Karl Ekselius, Jacob Kajaer, Ib Kofod-Larsen, Eske Kristensen, Pontoppidan. Five dining tables are shown as well as many Finn Juhl designs, all made in Scandinavian workshops. Write Frederik

(248a) Furniture: Paul McCobb's | Jensen, Inc., 315 Pacific Avenue, San | Francisco 11, California.

> (338a) Brown - Saltman / California, Brochures illustrating all elements and groupings of VARIATIONS modular furniture for living-room, dining room, bedroom. Please send 15¢ to: Brown-Saltman, 2570 Tweedy Boulevard, South Gate, California.

> (169a) Contemporary Furniture: New 28-page illustrated color brochure gives detailed information Dunbar new modern furniture designed by Edward Wormley; describes upholstered pieces, furniture for living room, dining room, bedroom, case goods; woods include walnut, hickory, birch, cherry; good design; quality hardware, careful workmanship; data belongs in all files; send 25 cents to cover cost: Dunbar Furniture Company of Indiana, Berne, Ind.

(301a) Furniture: Jack Sherman Inc., announces a complete new service. Upholstered furniture manufactured and custom-made to your design and specifications. Original design service available by Jack Sherman on both residential and commercial furniture. Excellent production facilities. Finest workmanship and 10 day service are featured. Jack Sherman Inc., 831 East 31st Street, Los Angeles 11, California. Phone: ADams 4-0164.

(323) Furniture, Custom and Standard: Information one of best known lines contemporary metal (indoor-outdoor) and wood (upholstered) furniture; designed by Hendrick Van Keppel, and Taylor Green-Van Keppel-Green, Inc., 116 South Lasky Drive, Beverly Hills, California.

• Contemporary Furniture; Catalog available on a leading line of fine furniture featuring designs by MacDougall and Stewart, Paul Tuttle, Henry Webber, George Simon, George Kasparian. Wholesale showrooms: Carroll Sagar & Associates, 8833 Beverly Boulevard, Los Angeles 48; Bacon & Perry, 170 Decorative Center, Dallas, Texas: Kenneth Donathin, 4020 North 34th Street, Phoenix, Ariz. Sales representatives: Scan, Inc., 102 South Robertson Boulevard, Los Angeles 48; Casa Goldtree Liebes & Cia., San Salvador, El Salvador, C. A. Experienced contract department at Kasparians, 7772 Santa Monica Boulevard, Los Angeles 46, California. For further information write on your letterhead directly to the above address.

HEATING AND COOLING

✓ (323a) Heating and Cooling Systems: Racon Heating Systems are the result of over ten years of research and application in thousands of California homes, and in commercial, industrial, and institutional structures. FILL Z COUPON TO OBTAIN **MANUFACTURERS'** 3305 WILSHIRE BOULEVARD LOS ANGELES 5, CALIFORNI

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BTU. Racon Radiant Cooling in ceilings is a recent development with a promising potential. Racon Swimming Pool Boilers are used in direct fire and radiant heat installations of pool heating. For detail booklet write to: Racon Heating & Cooling Corporation, 795 Kifer Road, Santa Clara, California.

(233a) Pryne Blo-Fan - Ceiling "Spot" ventilator: Newly available information describes in detail the principles and mechanics of Blo-Fan, an effective combination of the breeze fan and the power of a blower in which best features of both are utilized. Includes many two-color illustrations, helpful, clearly drawn diagrams, specifications and examples of fans of various types and uses. Blo-Fan comes in three sizes for use in various parts of the house and can also be combined with a recessed light unit, amply illuminating range below. For this full and attractive brochure, write to Pryne & Co., Dept. AA, 140 North Towne Avenue, Pomona, California.

(143a) Combination Ceiling Heater, Light: Comprehensively illustrated information, data on specifications new NuTone Heat-a-lite combination heater, light; remarkably good design, engineering: prismatic lens over standard 100-watt bulb casts diffused lighting over entire room; heater forces warmed air gently downward from Chromalox heating element; utilizes all heat from bulb, fan motor, heating element; uses line voltage; no transformer or relays required: automatic thermostatic controls optional; ideal for bathrooms, children's rooms, bedrooms, recreation rooms; UL-listed; this product definitely worth close appraisal. Nutone, Inc., Madison & Red Bank Roads, Cincinnati 27, Ohio.

LIGHTING EQUIPMENT

(782) Sunbeam fluorescent and incandescent "Visionaire" lighting fix-Lunning, Inc., Distributor for Georg | The Racon Boiler is made in four tures for all types of commercial areas | line recessed lighting fixtures, includ-

sizes—from 90,000 BTU to 260,000 such as offices, stores, markets, schools, public buildings and various industrial and specialized installations. A guide to better lighting, Sunbeam's catalog shows a complete line of engineered fixtures including recessed and surface mounted, "large area" light sources with various, modern diffusing mediums. The catalog is divided into basic sections for easy reference.-Sunbeam Lighting Company, 777 East 14th Place, Los Angeles 21, California.

> (965) Contemporary Fixtures: Catalog, data good line contemporary fixtures, including complete 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. Selected units merit specified for CSHouse 1950. Harry Gitlin, 917 3rd Avenue, New York 22, New York.

> (119a) Recessed and Accent Lighting Fixtures: Specification data and engineering drawings of Prescolite Fixtures: complete range contemporary designs for residential, commercial applications; exclusive Re-lamp-a-lite hinge; 30 seconds to fasten trim, install glass or re-lamp; exceptional builder and owner acceptance, well worth considering.-Prescolite Manufacturing Corporation, 2229 4th Street, Berkeley 10, California.

> (339a) Lighting: New Lighting Dynamics catalog featuring dozens of new architectural ideas for lighting, cost-range indicators for quick indication of cost. Complete photometric data done by the Interflectance method. Write to Lighting Dynamics, 802 West Whittier Boulevard, Whittier, Californa.

> (375) Lighting Fixtures: Brochures, bulletins Prylites, complete

room lights, automatic closet lights; adjustable spots; full technical data, charts, prices.-Pryne & Company, Inc., 140 North Towne Avenue, Pomona, California.

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► (255a) Lighting Equipment: Skydome, basic Wasco toplighting unit. The acrylic plastic dome floats between extended aluminum frames. The unit, factory assembled and shipped ready to install, is used in several Case Study Houses. For complete details write Wasco Products, Inc., 93P Fawcett St., Cambridge 38, Massachusetts.

(259a) Lighting Equipment: Booklet available on the "C-I Board," (Century-Izenour Board) first all electronic system for stage lighting control. Main elements are Preset Panel, Console Desk, and Tube Bank. Advantages include adaptability, easy and efficient operation, low maintenance. Write to Century Lighting, Inc., 521 W. 43rd St., New York 36, New York.

(253a) Television Lighting: Catalog No. 4 is a result of research and development to meet television's lighting needs. Contents include base lights, spotlights, striplights, beamlights, control equipment, accessories and special effects. Request your copy from Century Lighting, Dept. AA, 521 West 43rd Street, New York 36, New York.

(277a) Lighting Fixtures: Complete information on contemporary lighting fixtures by Chiarello-Frantz. Feature is "Light Puff" design: pleated, washable, Fiberglas-in-plastic shades with anodized aluminum fittings. Also in brass. Acessories include wall brackets, floor and table standards, and multiple canopy fixtures for clusters of lights. Write to: Damron-Kaufmann Inc., 440 Jackson Square, San Francisco 11, California.

(170a) Architectural Lighting: Full information new Lightolier Calculite fixtures; provide maximum light output evenly diffused; simple, clean functional form: square, round, or recessed with lens, louvres, pinhole, albalite or formed glass; exclusive "torsiontite" spring fastener with no exposed screws, bolts, or hinges; builtin Fiberglas gasket eliminates light leaks, snug self-leveling frame can be pulled down from any side with fingertip pressure, completely removable for cleaning; definitely worth investigating. - Lightolier, 11 East Thirty-sixth Street, New York, New York.

(231a) Aluminum Honeycomb Lighting: Complete information now available on this new approach to full ceiling lighting-Honeylite. Made from fornia.

ing specialties; multi-colored dining high purity aluminum foil by special "Hexcel" process. Honeylite is now available in various cell sizes. Information describes acoustical value, excellent light transmission efficiency. Its adaptability to any lighting fixture now using glass plastic or louvers is noted and its fireproof and concealing qualities listed. For complete illustrated information, write to M. J. Connelly, Hexcel Products, Inc., Dept. AA, 951 61st Street, Oakland 8, Cali-

> (319a) Ceiling and Wall Fixtures: Complete line of contemporary ceiling and wall fixtures, residential and commercial, created by Denmark's leading architects and form designers. Materials featured are spun-metal with glass or teakwood. Also combinations of glass and teakwood, and other variations. Excellent choice of colors available in most fixtures. This exciting new line is of particular interest to architects and designers, and inquiries are invited. Nordic Imports, Inc., 7853 Seville Avenue, Huntington Park, Calif. Cable address: Nordicimp. Phone: LUdlow 7-2977.

MISCELLANEOUS

(542) Furnaces: Brochures, folders, data Payne forced air heating units, including Panelair Forced Air Wall heater, occupying floor area of only 293/8" x 93/8"; latter draws air from ceiling, cischarges near floor to one or more rooms; two speed fan.—Payne Furnace Company, Monrovia, Calif.

(331a) Industrial Equipment: For shop and plant areas-Borroughs adjustable steel shelving and shop equipment, Lyon lockers, Royal industrial and cafeteria seating, GR Soundex partitioning, steel or wood floor-toceiling walls. Large warehouse stocks. Display facilities available to architects and their clients. Write to The Hart-Cobb-Carley Company, 2439 South Yates Avenue, Los Angeles 22, California.

(184a) Masonite Siding: Four page bulletin describing in detail approved methods application of tempered hardboard product especially manufactured for use as lap siding. Sketches and tabulated data provide full information on preparation, shadow strips, nails, corner treatments and finishing. Masonite Corporation, 111 W. Washington Street, Chicago 2, Illinois.

(175a) Etchwood and Etchwall: textured wood paneling for homes, furniture, offices, doors, etc. Etchwood is plywood; Etchwall is redwood lumber T & G preassembled for fast, easy installation; difficult to describe, easy to appreciate.—Davidson Plywood & Lumber Company, 3136 East Washington Boulevard, Los Angeles, Cali(335a) A new exterior body and trim finish which gives up to two years additional life is available from W. P. Fuller & Company. This new paint, called "Fuller House Paint," gives a longer life of freshness and brilliance which lengthens the repaint cycle. Color card and data sheets may be obtained from W. P. Fuller & Company, 222 North Avenue 23, Los Angeles 54, California.

(956) Indoor Incinerator: Information Incinor unit for convenient disposal combustible refuse, wrappings, papers, garbage, trash; gas fired, unit is 35" high, 22" in diameter, weighs 130 pounds, has capacity of two bushels; heavy steel plate combustion chamber; AGC approved; excellent product, merit specified CS-House 1952.—Incineration Division, Bowser, Inc., Cairo, Illinois.

(225a) Kaiser Aluminum, for Product Design & Manufacture: A new 24-page booklet containing up-to-date information on Kaiser Aluminum mill products and services is now available. Includes data on aluminum alloys, forms, properties, applications and availability. An abundance of tables and charts throughout provides convenient reference material. Booklet may be obtained from Kaiser Aluminum & Chemical Sales, Inc., Industrial Service Div., Dept. AA, 1924 Broadway, Oakland 12, California.

✓ (240a) Swimming Pools: Anthony Pools introduces easy-to-operate rustproof filter system with highly effective bacteria elmiination. Nighttime illumination by underwater light. Special ladder a unique feature. Will design and build pool of any size. Terms can be arranged to customer's satisfaction. Write for brochure: Anthony Pools, Dept. AA, 5871 East Firestone Boulevard, South Gate, California.

(977) Electric Barbecue Spit: Folder Rotir electric barbecue spit with seven 28" stainless steel Kabob skewers which revolve simultaneously over charcoal fire; has drawer action so unit slides in and out for easy handling; heavy angle-iron, gear head motor, gears run in oil; other models available; full information barbecue equipment including prints on how to build in kitchen or den. Merit specified CSHouse No. 17.-The Rotir Company, 8470 Garfield Avenue, Bell Gardens, California.

► (286a) Built-In Vacuum Cleaning System: Highly efficient built-in central cleaning system for residences, institutions, and light commercial buildings. System features inlets in each room on wall or floor to allow easy reach with the hose and its attachments. From the inlets, tubing leads to the power unit which can be placed on service porch, garage or

any spot handy for infrequent emptying of the large dust receptacle. System is dustless, quiet, convenient and practical for all rooms, furniture, fabrics, rugs, home workshops, cars and carports. Vacuums wet or dry surfaces. Write for information and brochure: Central Vacuum Corporation, 3667 West 6th St., Los Angeles 5. California. Phone DUnkirk 7-8131.

(360) Telephones: Information for architects, builders on telephone installations, including built-in data. -A. F. DuFault, Pacific Telephone & Telegraph Company, 416 West 8th Street, Room 812A, Los Angeles 14, California.

(585) Etchwood Panels: Literature Etchwood, a "3-dimensional plywood" for paneling, furniture, display backgrounds; soft grain burnished away leaving hardwood surface in natural grain-textured surface; costs less than decorative hardwood plywood; entirely new product, merits close consideration.—Davidson Plywood & Lumber Company, 3136 East Washington Boulevard, Los Angeles, California.

PHOTOGRAPHIC REPRODUCTIONS

(334a) The Averycolor reproduction is a color-fast, non-glare, satin-finish print of durable photographic stock, not acetate base material. Two years of research coupled with twenty years of experience in the photographic field have resulted in a revolutionary change in making reproductions from architectural renderings. Other services include black-and-white prints, color transparencies, custom dry mounting and display transparencies. For further information write: Avery Color Laboratories, 1529 North Cahuenga Boulevard, Hollywood 28, California.

ROOFING

✓ (333a) Plywood Roof Systems: Berkeley Plywood Company Panelized Roofs are described in a brochure available to Architects, Engineers and General Contractors. The roof systems are engineered, fabricated and installed by Berkeley Plywood Company, who has pioneered development in plywood roof, wall and floor diaphragms and many other plywood building components. Write to Berkeley Plywood Company, 1401 Middle Harbor Rd., Oakland 20, Calif., or 4085 Sheila St., Los Angeles 23, Calif.

(223a) Built-up Roofs: Newest brochure of Owens-Corning Fiberglas Corp. outlining and illustrating advantages of a Fiberglas-reinforced built-up roof. A built-up roof of Fiberglas is a monolithic layer of waterproofing asphalt, reinforced in all directions with strong fibers of glass. The porous sheet of glass fibers allows asphalt to flow freely, assures long

cracking and "alligatoring." The easy application is explained and illustrated in detail with other roofing products. Owens-Corning Fiberglas Corp., Pacific Coast Division, Dept. AA, Santa Clara, California.

SOUND CONDITIONING

 ✓ (310a) Sound Conditioning: Altex Lansing Corporation, manufacturers of complete matched and balanced quality home high fidelity systems. (Merit Specified for Case Study House #18). Altec Lansing equipment includes tuners, preamplifiers, power amplifiers, loud speakers, loud speaker systems, and loud speaker enclosures. Complete home high-fidelity systems available from \$300.00 to \$1,600.00. Prices for professional and commercial equipment available upon request. Altec Lansing is the world's largest producer of professional sound equipment, and specified by leading architects the world over for finest reproduction of sound obtainable for homes, offices, stadiums, theatres, and studios. Engineering consultation available. For complete information write to: Altec Lansing Corp., Dept. AA, 1515 South Manchester Avenue, Anaheim, California.

SPECIALTIES

(152) Door Chimes: Color folder NuTone door chimes; wide range styles, including clock chimes; merit specified for several Case Study Houses.-NuTone, Inc., Madison and Red Bank Roads, Cincinnati 27, Ohio.

(289a) Sound systems: HI-FI and Inter-communication. All types of sound systems for residential, office, industrial, churches, schools, etc. Complete design and installation service. Complete stock of quality component parts. Visit our showrooms. Free consultation service. Write for information. California Sound Products, Inc., 8264 Melrose Avenue, Hollywood 4, California. Phone: WEbster 1-1557.

(337a) Contemporary Serving Accessories: A running catalog on a comprehensive collection of dinnerware and serving components which can be combined in unlimited ways. Excellent for designers in working with clients. A continuing creative program within a nucleus of basic vessels in porcelain, ironstone, rockingham, earthenware, etc. Design directed by La Gardo Tackett, Imported by Schmid International, Distributed by Richards Morgenthau, 225 Fifth Avenue, New York, New York.

✓ (328a) Home Radio Intercom: Guardian MK-II provides entertainment, protection, convenience. Exclusive squelch feature automatically

life, low maintenance and resists | unusual noise interrupts, transmits cry or noise, then radio resumes playing. Set also features fire warning system. When temperatures reach burning point, a loud electronic signal is sent through every station, including front door speaker so neighbors are alerted if you are away. Available in all colors; up to nine stations installed. Merit Specified for Case Study Houses No. 18 and No. 20. For brochure write to G & M Equipment Company, Inc., 7315 Varna Ave., North Hollywood, Calif. Phone: STanley 7-1624.

> (183a) New Recessed Chime: The K-15 is completely protected against dirt and grease by simply designed grille. Ideal for multiple installation, provides a uniformly mild tone throughout house, eliminating a single chime too loud in one room. The unusual double resonator system results in a great improvement in tone. The seven-inch square grille is adaptable to installations in ceiling, wall and baseboards of any room.-NuTone, Inc., Madison and Red Bank Roads, Cincinnati 27, Ohio.

> (252a) 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. For brochure write to Roger Darricarrere, Dept. AA, 3716 Fletcher Drive, Los Angeles 65, Cali-

> (267a) Fireplace: Write for free folder and specifications of "Fire-hood," the conical fireplace, designed by Wendell Loyett, This metal open hearth is available in four models, black, russet, flame red and white, stippled or solid finish. The Condon-King Company, 1247 Rainier Avenue, Seattle 44, Washington. Southern California Representative: Scan, Inc., 102 South Robertson Boulevard, Los Angeles 48, California.

STRUCTURAL MATERIALS

✓ (326a) Construction Plywood: A new fir plywood catalog for 1958 has been announced by the Douglas Fir Plywood Association. Indexed for A.I.A. filing systems, the three-part, 20-page catalog presents basic information on fir plywood standard grades and specialty products for architects, engineers, builders, product design engineers, and building code officials. Sample copies may be obtained without charge from: Douglas Fir Plywood Association, Tacoma 2, Wash-

(179a) Filon-Fiberglas and nylon reinforced sheet: Folder illustrating uses of corrugated or flat Filon sheets in inshuts off radio when baby's cry or dustry, interior and outdoor home de-

sign and interior office design. Technical data on Filon together with illustrated breakdown of standard types and stock sizes; chart of strength data and static load. Additional information on Filon accessories for easy installation.—Filon Plastics Corporation. 2051 East Maple Avenue, El Segundo, California.

(318a) Concrete Structural Wall Units: Design information and construction data available concerning Carduco, the most unusual building material made. Carduco is structural; approved by building codes; practically impervious to water without surface treatment. It is manufactured in patterned design components as well as textured and plain. Integral color is supplied to specifications. Where required Carduco can be fur nished with a five-hour fire rating and built-in insulation with a K factor of 2; U factor of 0.31. Write Carduco, P. O. Box H. Stanton (Orange County), California.

✓ (340a) Davidson Brick Company manufacturers of Modular Steeltyd Common Brick and other structural clay products, are now exclusively manufacturing the Bel Air Flat. The 6" x 12" x 2" nominal dimension of the brick provides an ideal unit for patios, pool decks, window ledges, garden walks, wall-capping and many other uses. Offers 45% savings in construction costs. Sample brick and literature available from Davidson Brick Company, 4701 East Floral Drive, Los Angeles 22, California.

(185a) Plymolite: Translucent Fiberglas reinforced building panels. A new lightweight, shatterproof material with a thousand uses; for home, office, farm or factory. Lets light in but keeps weather out. Plymolite is permanent, beautiful, weatherproof, shatterproof, and easy to use. Plymolite may be worked with common hand or power tools and may be fastened with ordinary nails and screws. Available in a variety of flat and corrugated sizes and shapes, also a selection of colors. Both structural and technical information available. Plymold Company, 2707 Tulare Avenue, Burbank, California.

(146a) Fiberglas (T.M.Reg. U. S. Pat. Off.) Building insulations: Application data, specifications for insulating walls, top floor ceilings, floors over unheated space. Compression-packed, long continuous rolls, self-contained vapor barrier. Goes up quickly, less cutting and fitting. High thermal efficiency. Non-settling, durable, made of ageless glass fibers. Owens-Corning Fiberglas Corp., Toledo 1, Ohio.

(113a) Structural Building Materials: Free literature available from the California Redwood Association in- deen, Washington.

Modern design film strip prepared in color by George Nelson for the Herman Miller Furniture Company is now available to students of design, architects, interior decorators, furniture dealers, and schools. An invaluable teaching aid, this informative film offers a thorough presentation of the uses of new and traditional materials in furniture design. The color photos of design classics alone make this a worthwhile addition to any library. Cost for film strip and script is \$17.50. Order from the Herman Miller Furniture Company, Zeeland, Michigan. Dep't. NFS. Preview prints available.

cludes "Redwood Goes to School," a 16-page brochure showing how architects provide better school design today; Architect's File containing special selection of data sheets with information most in demand by architects; Redwood News, quarterly publication showing latest designs; individual data sheets on Yard Grades, Interior Specifications, Exterior and Interior Finishes, Write Service Library, California Redwood Association, 576 Sacramento St., San Francisco 11, Calif.

(306a) Acrylite: New catalog available on Acrylite, an important new material for interior and exterior design. Acrylic sheets in which a variety of designs and textures have been embedded provide new design technique for separate living, dining kitchen, and other areas in a way that room dividers and panels become a central decorative feature in the room. May be coordinated with drapery and upholstery designs, as well as colors. Wasco Acrylite is sold as a panel or by the square foot, with varying thickness, size and design embedments. Send for complete information, Wasco Products, Inc., 93P Fawcett St., Cambridge 38, Mass

(275a) Harborite Plywood: The miracle overlaid fir plywood-superresistant to wear, weather and water, now available in unlimited quantities to the building industry. These large, lightweight panels are easy to handle, easy to work; cut labor and paint costs. Only select Douglas Fir veneers are used, and machine-edged and butted tight. All solid wood-no core voids - no flaws. Waterproof glue makes permanent weld. Resin-impregnated overlay makes perfect paintholding surface. Write for brochure and information on local dealers: Harbor Plywood Corporation, Aber-

(208a) Texture One-Eleven Exterior Fir Plywood: This new grooved panel material of industry quality, is in perfect harmony with trend toward using natural wood textures. Packaged in two lengths and widths; has shiplap edges; applied quickly, easily; immune to water, weather, heat, cold. Uses include: vertical siding for homes; screening walls for garden areas; spandrels on small apt., commercial buildings; inexpensive store front remodeling; interior walls, ceilings, counters. For detailed information, write Dept. AA, Douglas Fir Plywood Association, Tacoma 2, Washington.

✓ (309a) Structural Material: New construction data now available on Hans Sumpf adobe brick. This waterproof masonry is fire-, sound-, and termite-proof, an excellent insulatorideal for construction of garden walls, lawn borders and walks. The bricks come in 7 sizes ranging from 4 x 3½ x 16 to 4 x 12 x 16. For further information write for free booklet to: Hans Sumpf Company, Route No. 1, Box 570, Fresno, California.

(219a) Permalite-Alexite Concrete Aggregate: Information on extremely lightweight insulating concrete for floor slabs and floor fills. For your copy, write to Permalite Perlite Div.. Dept. AA Great Lake Carbon Corporation, 612 So. Flower Street, Los Angeles 17, Calif.

For residential and commercial appliction. Ouarried in Palos Verdes Peninsula of Southern California. Palos Verdes Stone offers wide range of natural stone is most popular types, distinctive character, simple beauty with great richness. Soft color tones blend on all types construction to create spacious beauty and appeal. For interior and exterior use. Send for complete color brochure and information. Palos Verdes Stone Dept. Great Lakes Carbon Corporation, 612 South Flower Street, Los Angeles 17, California.

(211a) New Soule Steel Stud: Major improvement in metal lath studs, Soule's new steel studs were developed to give architects, builders stronger, lighter, more compact stud than previously available. Advantages: compact open-webb design, notched for fast field-cutting; continuous flanges; five widths; simplifies installation of plumbing, wiring, channel. For steel stud data write George Cobb, Dept. AA, Soule Steel Company, 1750 Army Street, San Francisco, California.

(207a) Unusual Masonry Products: Complete brochure with illustra-

line of concrete masonry products. These include: Flagcrete-a solid concrete veneer stone with an irregular lip and small projections on one face -reverse face smooth: Romancretesolid concrete veneer resembling Roman brick but more pebbled surface on the exposed face; Slumpstone Veneer-four-inch wide concrete veneer stone, softly irregular surface of uneven, rounded projections;-all well suited for interior or exterior architectural veneer on buildings, houses, fire places, effectively used in contemporary design. Many other products and variations now offered. These products may be ordered in many interesting new colors. Brochure available by writing to Department AA, General Concrete Products, 15025 Oxnard Street, Van Nuys, California.

(218a) Permalite-Alexite Plaster Aggregate: Latest information on this highly efficient fireproofing plaster presented in detail in completely illustrated brochure. Brochure contains enough data and authority on authentic fire resistance to warrant complete immediate acceptance of Permalite-Alexite for perlite plaster fireproofing. Many charts and detailed drawings give fire-ratings, descriptions and authorities and describe plaster as lightweight, economical and crack-resistant, withstanding up to 42% greater strain than comparable sanded plasters. Write to Permalite, Perlite Div., Dept. AA, Great Lakes Carbon Corp., 612 South Flower Street, Los Angeles 17, California.

SURFACE TREATMENTS

(324a) Surface Treatments: "Byzantile-by Mosaic." This new illustrated booklet describes the brilliant new ceramic mosaic patterns for floors and walls, indoors and out. Byzantile offers great latitude in color, scale and decorative effect. For full details ask for form #219. For information about the use of Mosaio Ceramic Tile in institutional and commercial buildings write for-"Mosaic Ceramic Tile; basic floor and wall material in buildings of today"-form #208. "The Mosaic Tile Book of Beautiful Homes" (form #195-WCR) is a 16-page booklet especially designed for homemakers. Write to: The Mosaic Tile Company, 829 North Highland, Hollywood 38, California.

(320a) Surface Treatments: Laverne Originals offer imaginative and practical wall and ceiling treatments - wallpaper handprints, fabric - supported wall coverings and a new group of 3-dimensional deep-textured vinyl plastics now being introduced. tions and specifications on distinctive | This is the only source in the world |

sizes 21 x 9 feet on one bolt or to your measurements. All Laverne products available in custom colors. An individual design service is offered for special products. Write for complete brochure and samples. Laverne, 160 East 57th Street, New York 22, New York. Phone PLaza 9-5545.

(314a) Mosaics: Architectural murals and bas-relief mosaics personally designed, executed and installed. Color consultation on specifications and installations. Facilities to handle everything from straight footage to complex commissions anywhere in the country. Studios open to architects and their clients by appointment; brochure, 16mm Kodachrome film and sample kit presentations available. Phone or write: Joseph Young Mosaic Workshop, 8426 Melrose Avenue, Los Angeles 46, California.

(336a) Surface Treatments: Vitrocem glazed cement finishes are being used by more and more architects where a hard, durable impervious surface is essential. Available in unlimited colors and multi-color effects, it is being used for interior and exterior over all types of masonry and plaster surfaces and over asbestos panels for spandrel and window - wall construction. For information and samples, please write to Vitrocem, P.O. Box 421, Azusa, California. EDgewood 4-4383.

(283a) Ceramic Tile: Write for information on new Pomona Tile line. Available in 42 decorator colors, four different surfaces, 26 different sizes and shapes. Ideal for kitchen and bathroom installations. Pomona Tile is practical; lifelong durability, resists acids, scratches and abrasions, easy to keep clean. No wax or polish necessary, exclusive "Space-Rite" feature assures even spacing. Top quality at competitive prices. Pomona Tile Manufacturing Company, 629 North La Brea Avenue, Los Angeles 36, California.

(227a) Mikro-Sized Tile: Newly perfected, precision ground tile described as most important development in 20 years of tile making. Reduces setting time, insures perfect alignment of joints, even on adjacent walls and integral corners. Spacing lugs on two edges only-twice the size of regular lugs-providing standard 3/64 inch joints. Time saved by elimination of shimming, sanding, juggling as tiles are uniform in size. For detailed information, write to Mr. Allan Paul, Adv. Mgr., Gladding, McBean Company, Dept. AA, 2901 Los Feliz Blvd., Los Angeles, California.

for The Marbalia Mural - stock | (194a) Celotone Tile: New, incombustible, highly efficient acoustical tide molded from mineral fibres and special binders. Irregular fissures provide travertine marble effect plus high degree sound absorption. Made in several sizes with washable white finish. Manufactured by The Celotex Corporation, 120 So. La Salle St., Chicago 3, Illinois.

> (302a) Decorative Building Tile: Italian marble spheroids are machine pressed into channeled cement units. to make Fulget mosaic tiles. Available in three forms, Wall tiles, Rizzada and Pavimento. Wall tiles 43/4" x 91/2" come in 20 basic marbles, polished or natural, colored glass or mother of pearl. Rizzada 8" x 16" comes in 8 marbles, natural finish. Pavimento 16" x 16" is flush finish, suitable for flooring. The tiles are frost and heat resistant, stones will not crack or loosen even under extreme conditions. Imported and distributed solely by the Fred Dean Company, 916 La Cienega Boulevard, Los Angeles, California.

WINDOW DECOR

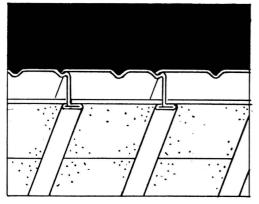
(222a) Architectural Window Decor: LouverDrape Vertical Blind's colorful new catalog describes Louver-Drape as the most flexible, up-to-date architectural window covering on today's market. Designed on a 21/2 inch module, these vertical blinds fit any window or skylight-any size, any shape and feature washable, flame-resistant, colorfast fabric by DuPont. Specification details are clearly presented and organized and the catalog is profusely illustrated. Write to Vertical Blinds Corp. of America, Dept. AA, 1936 Pontius Avenue, Los Angeles 25, California.

(332a) Jaylis Traversing Window Covering - Room Dividers: Constructed from DuPont Lucite and Du-Pont Zyetel Nylon; reflects 86% infrared rays and absorbs 99% ultra-violet rays; low maintenance cost; lasts a lifetime; may be used indoors or out; stacks one inch to the foot. For complete details write to: Jaylis Sales Corporation, Dept. A., 514 West Olympic Boulevard, Los Angeles 15, California.

(290a) Indoor Movable Shutters: Illustrated brochure shows many features and installations of Paul Heinley Indoor Movable Shutters - with details on newest shutter treatment, Shoji Shutters. Specifications include construction details, methods for installing and information for ordering or requesting bids. Paul Heinley, 2225 Michigan Avenue, Santa Monica, California.

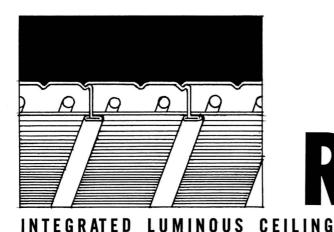
STEEL ROOF DECK

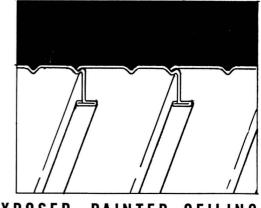
THE ORIGINAL T STEEL ROOF DECK STRUCTURAL ECONOMY EASY ACOUSTICAL TREATMENT GALVANIZED FOR PERMANENCE DIAPHRAGM ACTION — FOR WIND & SEISMIC LONG SPANS — UP TO 32 FEET LOW COST RECESSED LIGHTING FLUSH CEILING CONCEALS WIRING



FLUSH CEILING WITH ACOUSTICAL TREATMENT

TSTEEL





EXPOSED, PAINTED CEILING

ROOF DECK

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