CRA MEMBER MILLS:

Georgia-Pacific Corporation
(Hammond California Redwood Division)
Holmes Eureka Lumber Company
Redwood Sales Co., Eastern Distributor
The Pacific Lumber Company
The Pacific Coast Company
Simpson Redwood Company
Union Lumber Company
Willits Redwood Products Company
Hobby Wall Lumber Co., Sales Agent
Arcata Redwood Company

THE REDWOOD MOTEL invites the passing motorist...

Its warmth of color and texture promises a restful home away from home.
Motel's of redwood from coast to coast beckon the traveler... motels built
with CRA Certified Kiln Dried redwood... graded, milled
and seasoned by the member mills of the

CALIFORNIA REDWOOD ASSOCIATION • 576 SACRAMENTO STREET • SAN FRANCISCO 11, CALIF.
CONTENTS FOR APRIL 1958

ARTICLE
Tradition and Modern Design by Ernesto N. Rogers 12

ARCHITECTURE
Office Building by Welton Becket & Associates, and George M. Ewing Company, architects 10
Shell-Truss Space Frames by Jeffrey Lindsay 14
Project for a Student Center by Douglas Honnold and John Rex, architects 16
An Airman's Chapel by Richard J. Neutra and Robert E. Alexander, architects 18
Project for a Small House by West and Waters, architects 20
Small House by Ashok M. Bhavnani 21
Builder's House by Marquis and Stoller, architects 22
Hillside House by Ray Escudero 24
Bay Area House by Frederic S. Coolidge, architect 25
House by Nevara and Nevara 26
House by Louis H. Huebner, architect 27

SPECIAL FEATURES
Music 4
Art 8
Notes in Passing 9
Books 30
Currently Available Product Literature and Information 34

ARTS & ARCHITECTURE is published monthly by John D. Entenza, 3305 Wilshire Boulevard, Los Angeles 5, California. Established 1911. Entered as second class matter January 29, 1935, at the Post Office, Los Angeles, California, under the Act of March 3, 1879. Price mailed to any address in the United States, $5.00 a year; to foreign countries, $6.50 a year; single copies 50 cents. Printed by Wayside Press. Editorial material and subscriptions should be addressed to the Los Angeles office. Return postage should accompany unsolicited manuscripts. One month's notice is required for a change of address or for a new subscription.
POETRY AND JAZZ-II

American art begins in urgency; it is something to be done. That is why in art we have either borrowed the European forms, which provide tradition, contemplation, and interpretation in a package, or have tried to do without them, substituting immediately, action, the absolute in the provisional, by an assertion of personal revelation closely related to the inner light of the evangelistic sects. (Critical habit has cheapened the word “epiphany” to include all such insights; the intent is correct.) We have a feeling that form may be good for others but that it is in some way dishonest, a betrayal of the self, the inner light; that, if we use it, we are not speaking for ourselves. The fundamental American attitude rejects disciplines; it requires a setting out on one’s own. (For which we compensate by a ridiculous conformity to group patterns. “Actually,” we say, meaning, This is what anybody who thinks like me thinks like.)

Realization, the technical relationship between the artist and his object which goes beyond representation, does not concern the individual in-family but not with the intricate in-play of society: not that many do not try but that scarce any succeed. American social fiction is an inventory of the second-rate. (George W. Cable’s The Grandissimes may be thought an exception, yet, for all its formalism and repetition. Ives did not wish his music to sound well but to be, to impose itself as a substantial medium, like a Rembrandt etching, a conversation, a quarrel, a landscape, an unprecedented experience rather than communication. In his last works Ives was composing in dimensions of independently voiced, non-thematic polyphonic sound so large these have not yet been realized in performance. By the same means Carl Ruggles, with an immense labor, has sought emancipation in a music so little known only a small amount of an eighty-year lifework has been published and that almost never played. (The New York Public Library has been trying to redress the imbalance of recognition by featuring successive displays of scores and manuscripts by Ruggles, Varese, and Ives. A copy of an early Ives article from this column has been requested.)

The esthetic manifestoes of John Cage, each beginning with a new invention in the means of music, are a progressive record of intransigence against any rule, any tradition. Harry Partch has invented his own scale, his own instruments to play it, his own polyphony of sound. Lou Harrison has done major work in a half-dozen mutually exclusive traditions and contemporary styles, seeking his own polyphony. One could list others perhaps less extreme, no less rebellious, the work of Varese, the fist and elbow music of Henry Cowell, the more cautious adventures of Roger Sessions and...
Elliott Carter, but these are exemplary. These are the composers out of whom will come a new music, continentally based in our own awareness, antagonistic to the European. To say so is to be in no sense chauvinistic; the necessity is that such music should emerge. The American composer requires of his medium an expansive, liberated art, not of rule and discipline but sound. In search of it he will formulate his own rule, his own discipline. The academic training of the schools, the custom and habit of the public concert, the business instincts of the musical entrepreneur oppose to this indigenous creative conception their dying inheritance of propaganda and arbitrary principle, of dead aesthetic morality and "what the public wants."

In such circumstances it is natural that indigenous musicians and devotees of music are turning, forced by sheer excess of the traditional supply to break through the sophistication of a borrowed inheritance, in spite of every resistance against an evident vulgarity, towards the rediscovered art of jazz, the jazz that is not sophisticated by European means and modes, the deep jazz of the South and of the earlier white imitations which bridged the gap between races and helped to make this music known; and that in the wake of this rediscovery a new jazz is emerging, not to be received collaterally in dance-halls but to be listened to, to be accepted not as art-form but as art, substantial. The great names of early jazz have been revived; records of their playing are heard almost with reverence. (And deserve to be. After hearing a Walkways recording of early discs I listened to a new Boston Symphony issue and was startled by the scamped notes, the imperfectly conceived instrumental sound: not interpretation, instruments. Szigeti's new recording (Columbia) of Ravel and Hindemith sonatas, with the late and little-known Prokofief for violin alone, is a marvel of shaped sound from the violin. By contrast, any note in a performance by Gilels is shapeless as the next.) Survivors of the early jazz have been sent abroad as representatives of our nation, received as such by many of the earth's peoples, as apostles of our native will. Even behind the iron curtain jazz speaks for America; prohibited there it becomes an art of freedom. These are not "goodwill embassies:" these peoples do not want our goodwill, rather ourselves, our representative, expansive substance. We do not receive a visiting gamelan orchestra as expressive of the "goodwill" of Java; such a thought would not occur to us. (European or Asiatic readers of a like sophistication will understand, better perhaps than the American, what I am saying.)

Thus there is, in these circumstances, a reshaping of our interest in music as a living art. Just as painting at its most abstract, its most non-representative, in the work of the drippers, has made us see art fresh as paint, not to like it, not necessarily to like it now; just as the cage work in wire has knotted our brains to grasp spatial tanglings not easily to be conceived as form; as the mobile and stabile have taken the work out from the wall, off the floor, away from any customary background, relating it freshly as motion or lack of motion in the midst of space; so through jazz we are making a fresh, vital acquaintance with sound as a source of art in music. And in these complex adjustments, new and invaded by improvisers, no standard exists, except the individual taste and judgment, to distinguish the accomplished from the negation or from nothing.

Mencken used to drop jokes over his beer about American communities, cities, entire states, where the nine Beethoven symphonies never had been played. Now RCA-Victor, sturdiest of the recording reactionaries, the company that has never taken a chance on music since Caruso, is sending out the nine symphonies recorded by Toscanini for only $3.98 and your choice of six records this year. Don't think that I complain: I ordered the records, and maybe out of the six choices I'll get another Landowsko ploys Mozart or Horowitz plays Clementi—or some things to hear once and send away for Christmas. Now anyone who wants to can hear all he wishes of the nine Beethoven symphonies. Few sizeable American communities lack an orchestra able to play them "live".

So long as the majority of classical musicians who disposed of the classical or European repertory in this country were themselves imported Europeans, a clear division existed between the so-called classical music and jazz, which was the field of self-trained American instrumentalists. Since the second World War this division in practice and dichotomy in thought has been breaking down. An ever larger proportion of the musicians who deal with the classical repertory is now purely American in birth and musical education; and, for
new approaches to structural design with fir plywood

Engineering tests by Douglas Fir Plywood Association showed vault resists three-times-normal roof load. Deflection at midspan was negligible. Note how door-high roof line saves wall area.

FIR PLYWOOD

Robert C. Wing, Consulting Engineer

IN THIS graceful stressed-skin fir plywood domical roof, Architect Price has developed a simple and precisely engineered unit that combines beams, purlins and roof sheathing.

The first application of this new semi-spherical roof system is in the four-room satellite school shown at right. In its design, Price sought to create "an exciting and stimulating space with a high degree of flexibility and substantial construction economies."

Adaptable to other types of buildings, the Price roof system is a logical design evolution in which lightweight fir plywood replaces heavier and costlier materials. It provides a long, post-free span, pleasing mass and profile, has excellent lighting, insulation and acoustical properties.

ONE OF A SERIES FROM "SCHOOLS OF THE FUTURE"

... a portfolio collection of outstanding designs by six leading architectural firms. Includes details on domical roof shown above. For your free copy, write (USA only) Douglas Fir Plywood Association, Tacoma, Wa.

Also write for information about fir plywood design and engineering consultation services.
Plastic skylight
Finish roof: sprayed on plastic membrane
Laminated plywood skylight curb
Support at wall is by 24"-deep plywood box beam, at corners by 4 x 4 posts.

DOMICAL ROOF

Shop-fabricated, glue-laminated vault is made of two thicknesses of ½" long-length fir plywood.
Horizontal joints staggered.

This four classroom satellite school in Tacoma, Wash., is the first to use Price's fir plywood domical roof system. Model shows dome-roofed classrooms opposite a general purpose room which has a fir plywood folded plate roof. A flat fir plywood canopy unites both areas and provides shelter in bad weather.
Mark Rothko’s image has found its mute way with increasing ease during the past three years, impressing itself not only on the American art scene but on the European as well. Of all the temperaments which together make up the American vanguard acknowledged as such abroad, Rothko’s is perhaps the most pondered, the most constructively disturbing. Although he obviously shares certain attitudes with other New York painters, Rothko, in a sense, stands alone. He is the transcendentalist of the group. He, more than the others, has minimized reference to the daily minutiae of experience in his work in his effort to reach exalted summary.

This is not to say that he is not speaking of “la condition humaine.” On the contrary, he is speaking through his humanity, through his amplitude of emotions, of the highest point of human experience. He is speaking in the various voices of pain, joy, perplexity and exaltation, familiar to us all. But he is speaking metaphorically. Just as the good poet who writes of the sea, or who gives a tongue to stone, is writing of his own humanity. By calling Rothko a transcendentalist, I mean to say that he tends to go beyond phenomena, beyond the effect of many small sense impressions in order to find universals.

But if he is a transcendentalist in tendency, Rothko is no absolutist. Like the poets, he understands that an absolute cannot be a human life-giving expression. No matter how vast the figure of speech in a good poet, no matter how abstract, he will always find a finite measure. He will use a simple concrete noun or a familiar verb to show us how we can partake of the vastness, to lead us into the greater reality of the poem. Shakespeare in his Sonnet LXV, for instance, gave us both the concrete and the abstract:

Since brass, nor stone, nor earth, nor boundless sea,
But sad mortality o’er-sways their power,
How with this rage shall beauty hold a plea
Whose action is no stronger than a flower? . . .

Vastness (boundless sea) is made conceivable through the solidity of marble. And beauty, a transcending abstraction, is made conceivable through the familiar image of the flower.

Rothko, in painter’s terms, does the same. It is through his zones of ambiguity—those shivering bars of light between the major forms—that Rothko can move us. Through those tremulous passages creep our finite but infinitely nuanced emotions, finding their expression. There are few clues to Rothko’s philosophy, and the effects of the paintings themselves are almost beyond the reach of the word. Rothko himself has become increasingly silent concerning his work. It seems that artists retreat from the word the nearer they come to the truths they feel sure of. Yet, something Rothko wrote, together with Adolph Gottlieb, fifteen years ago is probably valid still. He said: “There is no such thing as a good painting about nothing. We assert that the subject is crucial and only that subject-matter is valid which is tragic and timeless . . .”

This statement, which speaks for the whole New York group of that period, is important in that it reverses a tendency, since Maurice Denis, Roger Fry, Clive Bell, to regard the canvas as a field for the play of form and color and little more. Rothko, though revered as a colorist, still endows his paintings with subjects. True, the subjects are not readily catalogued, but their validity is unquestionable. These paintings are the emblems as well as being, in a mysterious transference, the emotions themselves.

The subjects for the paintings in his recent show at the Sidney Janis Gallery range far, but they are in a different mood from the paintings before them. With what can only be called an overwhelming prescience, these large, resounding paintings embody Rothko’s deeply developed sense of the tragic. I suspect that in part, Rothko struck out with exasperation at the general misinterpretation of his earlier work—especially the effusive yellow, orange and pinks of three years back. He seems to be saying in these new foreboding works that he was never painting nude, calm and volupté if we had only known it! Most of these paintings are in the great tragic voice (though one borders on irritable despair.) They are, in their own way, equivalents to the “machine” paintings of earlier periods, those large scale, ambitious canvases in which great painters tried to give form to great truths. I can’t avoid thinking of these paintings in concert. The gradations of feeling, pressed one above the other in tissue-thin layers, are different in each painting, but yet seem related to feeling in other paintings much as the parts of a Mozart mass are inseparable, yet can stand alone, esthetically complete.

I cannot tell you the names of the subjects painted. (“There are no names for things among which one is quite alone.”—Valery) At best, I can suggest that color, for Rothko, is in one sense symbolic. His black, which is never black but a seething mass of deep, rich hues, is almost certainly intended to be an expression of a forbidding

Esteban Vicente
1957. Collage
Photograph: John D. Schiff
Courtesy Rose Fried Gallery

Mark Rothko
White Over Red
Photographs: Oliver Baker
Courtesy Sidney Janis Gallery

and wracking emotion. His purples the same. When, through the interstices a glimpse of pale light is seen, it is color-light, holding the mood.

The paintings are in no sense two-dimensional. It is true that they are plotted in similar divisions: often, the long rectangle, the brief bar, then the somewhat mdré squared form below and sometimes the frametike border. But what Rothko has done with these basic shapes is—well, there is no other word for it—magical. He has, by laying on one unspeakably thin plane above another, created an uncanny effect of recession. The surface, in fact, is scarcely important. It is what happens behind each successive scrim, so closely matched. In the night-like center of several paintings here, the eye strains to penetrate behind, and finally it can. Behind—the shadowy world, the whispers, the sobs, the restlessness indicated through the most subtle brushing, through actual strokes. Never before has Rothko so clearly warned us that his paintings are not what Hubert Crehan once called “walls of light.” For from being walls, they are stages for an internal drama that must be seen, must absolutely be seen through the eye and mind which must expend a consuming effort of attention to “see” the image.

There are those who will say that Rothko had no place to go with his simplified schema; that the shadows which play behind these newer works are the beginning of a return to figuration. To my eye, these new paintings are simply more accented. The shadows were always the paradoxical substance of his work. Parenthetically, I would like to suggest that the paling edges, the quavering areas of light, the completely ambiguous extremities of Rothko’s forms—present for the past five years at least—are the crucial carriers of Rothko’s complex expression. Think of a painting by, say, Albers, in which the form superficially can be said to resemble Rothko’s. There really, opaqueiy arranged are the rectangles. But between them, nothing but hard colored surface. There is no area of ambiguity or of the bold geometry remains just that. There is a greater difference between Rothko and Albers (or any

(Continued on Page 29)
There was a time when scientists looked askance at attempts to make their work widely intelligible. But, in the world of the present day, such an attitude is no longer possible. The discoveries of modern science have put into the hands of governments unprecedented powers both for good and for evil. Unless the statesmen who wield these powers have at least an elementary understanding of their nature, it is scarcely likely that they will use them wisely. And, in democratic countries, it is not only statesmen, but the general public, to whom some degree of scientific understanding is necessary. To ensure wide diffusion of such understanding, is by no means easy. Those who can act effectively as liaison officers between technical scientists and the public perform a work which is necessary, not only for human welfare, but even for bare survival of the human race.

I think that a great deal more ought to be done in this direction in the education of those who do not intend to become scientific specialists. In my own country, and to a lesser degree in other countries of the West, "culture" is viewed mainly, by an unfortunate impoverishment of the Renaissance tradition, as something concerned primarily with literature, history and art. A man is not considered uneducated if he knows nothing of the contributions of Galileo, Descartes and their successors. I am convinced that all higher education should involve a course in the history of science from the seventeenth century to the present day and a survey of modern scientific knowledge in so far as this can be conveyed without technicalities. While such knowledge remains confined to specialists, it is scarcely possible nowadays for nations to conduct their affairs with wisdom.

There are two very different ways of estimating any human achievement: you may estimate it by what you consider its intrinsic excellence; or you may estimate it by its causal efficiency in transforming human life and human institutions. I am not suggesting that one of these ways of estimating is preferable to the other. I am only concerned to point out that they give very different scales of importance. If Homer and Aeschylus had not existed, if Dante and Shakespeare had not written a line, if Bach and Beethoven had been silent, the daily life of most people in the present day would have been much what it is. But if Pythagoras and Galileo and James Watt had not existed, the daily life, not only of Western Europeans and Americans, but of Indian, Russian and Chinese peasants, would be profoundly different from what it is. And these profound changes are still only beginning. They must affect the future even more than they have already affected the present. At present, scientific technique advances like an army of tanks that have lost their drivers, blindly, ruthlessly, without goal or purpose. This is largely because the men who are concerned with human values and with making life worthy to be lived, are still living in imagination in the old pre-industrial world, the world that has been made familiar and comfortable by the literature of Greece and the pre-industrial achievements of the poets and artists and composers whose work we rightly admire.

The separation of science from "culture" is a modern phenomenon. Plato and Aristotle had a profound respect for what was known of science in their day. The Renaissance was as much concerned with the revival of science as with art and literature. Leonardo da Vinci devoted more of his energies to science than to painting. The Renaissance architects developed the geometrical theory of perspective. Throughout the eighteenth century a very great deal was done to diffuse understanding of the work of Newton and his contemporaries. But, from the early nineteenth century onwards, scientific concepts and scientific methods became increasingly abstruse and the attempt to make them generally intelligible came more and more to be regarded as hopeless. The modern theory and practice of nuclear physicists has made evident with dramatic suddenness that complete ignorance of the world of science is no longer compatible with survival.

BERTRAND RUSSELL—UNESCO
This split T-shaped structure, erected on a five-acre tract for the Sales Division of a large oil company, stands on an elevated promontory, overlooking a river and a portion of a large park area. The structure, designed to "wrap around" the sloping site is of flat slab waffle type and reinforced concrete construction. All office areas, except executive offices, have movable partitions which insure modular flexibility, permitting efficient expansion or contraction of the work areas. The building is air conditioned throughout and has fluorescent lighting set in recessed fixtures. The ground level, which extends from the base of the site's slope, has a covered garden area, the cover being created by the extension of the three levels in the T-shaped building set on stilts. This level also houses the employees' cafeteria, lounge and entrance, utility rooms and storage space.

The main entrance is at the second level while the executive and general offices are located on the third and fourth floors. Sheer glass walls extend from the penthouse to the ground, closing in the stair well which connects the two units of the project. A multi-colored effect will be achieved on the building's facade by a series of porcelain enamel panels set on the building's spandrels. The west side of the structure itself will be faced with movable vertical louvers painted off-white. All end walls are finished in white glazed masonry panels in stacked courses with raked joints 6' x 14'6".

The interior design of the building is based upon horizontal work-flow patterns. The primary consideration in the selection of the site was that it provide space for a horizontal-type operation.
A few years ago I happened to be giving a course at the University of Tucuman, a city lying at the foot of the Andes in northern Argentina. There, a remarkable group of architects, inspired by preconceptions, had been trying to set up a school of architecture which, owing to the cultural environment, proved to be one of the most intriguing human laboratories that I have ever seen in my numerous travels. Many of the students, who came from the local area, had never had any direct experience with a three-dimensional work of art (which, of course, could not be sufficiently perceived in reproductions), had never seen any work of sculpture or architecture of any value. Even on the matter of pure information, they were unaware of most of the events in the history of architecture; they know almost nothing about Michelangelo, Raphael, Leonard da Vinci or those of any other past epoch; and yet, on the subject of modern architecture—particularly Le Corbusier—they had gathered enough information to win, had there been one, a difficult telephone conversation with some person who had skipped infancy and had suddenly grown up. But they were grown-up without maturity. Their lack of tradition made it extremely difficult to discuss values with them, for they were neither deep enough to be able to grasp the root meaning of any object, considering it in itself and for itself, nor were they vast enough to be able to express a comparative judgement between the object in question and other objects.

The most gifted of them instinctively felt their cultural insufficiency and anxiously sought to fill their lacunae by strengthening their intellectual capacity, hoping to give agility—through knowledge—to their intuition and critical reflection. At length they developed a kind of centrifugal force which, as it could not be expanded by a real journey (during which they could have checked their intuitions against reality and widened the terms of their knowledge through direct experience) took the form of dangerous evasions, evasions which, depending on the psychological make-up of each individual, became an inferiority complex, pessimism, or—as was most frequent—a tremendous literary delusion of belonging to the superhuman elect.

The danger for these students was that they might generalize the few notions that they had and thus make it impossible for them to escape that kind of typological thinking which leads, nominalistically, to the identification of the formal and purely technical aspect of a given problem with the numerous solutions it really has, if one knows how to express it freely and profoundly.

I was able to observe the very opposite phenomenon at the Architectural Association of London, where I also had the good fortune to teach. Here, the leadership of the student body was entrusted to highly cultured and intelligent persons (especially in the historical and moral disciplines) not equally endowed, however, with creative talent: problems were faced, for the most part, from the point of view of content, with a persistent critical sense of acute dissatisfaction with every idea acquired; but all without being able to coagulate thought into form, that is, into the concrete expression of art, which is the sine qua non for the designer who is fulfilling the role which is proper to him.

The two cases I have described to you represent two extremes and show that both a primitive culture fascinates by novelty without comprehending its deeper meaning, and a relined or at any rate more valid culture of men there developed subsequently (and this without the pre-existing environment was merely one of stylistic derivation, one particular culture.

The most gifted of them instinctively felt their cultural insufficiency and anxiously sought to fill their lacunae by strengthening their intellectual capacity, hoping to give agility—through knowledge—to their intuition and critical reflection. At length they developed a kind of centrifugal force which, as it could not be expanded by a real journey (during which they could have checked their intuitions against reality and widened the terms of their knowledge through direct experience) took the form of dangerous evasions, evasions which, depending on the psychological make-up of each individual, became an inferiority complex, pessimism, or—as was most frequent—a tremendous literary delusion of belonging to the superhuman elect.

I might say that even beyond pedagogy, in the much vaster area of productive activity, the Tucuman school on the one hand and the A.A. of London on the other, might be said to represent the limits (the external limits, of course) beyond which the culture of applied arts tends to overflow (and by applied arts I mean everything from a teaspoon to a city). But every coin has its other side, and we see that while the defect of one lies in its lack of a tradition, that of the other lies in its interpretation of reality, the product of a particular aspect of tradition (which, for Englishmen from Runkin to the young men of our time, very often emphasizes the moral essence on an artistic object rather than its concrete plastic expression).

The quality of the former lies in a kind of freshness and greater freedom from the preconceptions of the cultural environment, while the quality of the latter lies in a greater awareness and interior richness which, while it sometimes weighs down and checks creative impulse, is nevertheless a guarantee that when the data of the senses fuse with those of creative activity the result will rest on a much more solid and experienced base.

It could be said that the character of American countries tends to the limit shown by the students of Tucuman, while in European countries it tends towards the limit shown by the students of the A.A. in London. But it is always somewhat arbitrary to standardize, for we must take into consideration the marked shades of difference between one country and another in each group. In fact, it can be said that at the present moment architecture is particularly characterized by the achievement of a more and more precise awareness of just such shades, that is, of the data peculiar to each national culture.

The step which is being taken is a perfectly logical development of the theoretical premises of the modern movement; in fact functionalism, rather than a style in the sense of a coherent taste for the definition of a formal aspect, is essentially a method for establishing more and more subtle relationships between necessity and aesthetics (beauty is the greatest extrinsic manifestation of necessity). Therefore, at first, functionalism strove to re-introduce particularly the practical and technical meaning of the architectonic composition so that it would honestly reflect fundamental necessities common to all men; but then, it deepened its content and extended the notion of necessity so as to cover not only practical but also psychological needs; from a phase of the equality of men there developed subsequently (and this without denying the achievements of a rational approach) that process of distinguishing individual from individual which had already been introduced by the Art Nouveau, etc. But while the Art Nouveau developed the theme of freedom of form and, except for Van de Velde, very few tried then to give it any interior meaning because their main concern was to free the individual from academic schemes rather than to create an art which suited every condition; the second and present phase of functionalism gives attention to content and, in exploring it, draws forth the forms best suited to interpret and exalt it.

Functionalism tries to give to every man the objects which he most needs, and among these objects the house, which is the most important of all, is being styled less 'everybody's house' and more 'your' house. If, in dialectical and contradictory movements of history, they at first limited themselves to a few selected works (though they intended to face the problem of quantity), they later tried hard to face the problem of producing in quantity the quality objects which gave to the modern movement the proof of its profound possibilities.

From a movement which made sneer belonged to an elite, we now see the development of a cultural opera­tion which retaces problems to their roots, where lies the nourishing lymph from which they draw their vitality.

Closer approaches the data suggested by different circumstances, design becomes less and less general and tends to interpret the values inherent in the personality of the physical and cultural environments in which the work is to take its place; thus, while it does not overlook the psychological characters of individuals, it adapts itself to the pre-existing environment.

The abstract ideology of a diffuse humanitarianism is reflected in an ideal art which, though it may take the form of a few more or less harmonic schemes, can never interpret the real aspects of existence, for these are as changeable and multiple as they are a priori indefinable in such cases in which that existence takes historical form.

The roots of any individual being an essential part of his personality, it becomes more than ever necessary that one in society consider that personality not only in space but also in its historical continuity in time. In other words we must learn how to go beyond its tangible presence and penetrate into the character of the people, in the sense of a historical environment to which it is bound, an environment which determines a single reality (where the parameters of time and space meet). Individuals and things, the subjects and objects of artistic activity, may be considered in the light of the same critical process, inasmuch as the notion that we have of them, besides helping to evaluate them with greater precision than we are in themselves and for themselves, creates a more subtle order of relationships both between individuals and objects and among themselves.

For traditionalist designers of the period preceding the modern movement the problem of fitting one's work into the pre-existing environment was merely one of stylistic imitation; thus they deluded themselves that they were carrying on a tradition without realizing that theirs was a mere formalism utterly lacking in energetic content. For the first designers of the modern movement the sense of rebellion against this state of things was inevitably to change into a bitter quarrel with the past; this went so far that every new work became an act of violence against the pre-existing environment or at best took the form of an harmonic contrast between the various aspects of beauty, each autonomously valid. Today we are carrying on the very same premises as our predecessors. In the modern movement, who, owing to the different conditions under which they worked were not able to develop these premises any further; thus, we are beginning to give much more thought to the problem of pre-existing environments and we are not satisfied with a work which expresses our age but fails to assert the fullness of contemporary values in the context of society and space nourished by the deep roots of tradition. The modern meaning of the concept on tradition approaches that of historicism, that is, it is understood as the continuous flow of the experience of one generation into the experience of subsequent generations within the framework of one particular culture.

Tradition for us is the strain of opinions, feelings and experiences shared by a society, a group, a strain to which every individual refers his thought and action. Thus, for the very reason that this notion is not the formulation of an abstract theory but is deduced from the pragmatic examination of facts, it acquires different meanings from country to country, and for every single problem that takes concrete form in given circumstances and is a well-defined spatial reality. Clearly an outlook throws on us a responsibility which becomes more and more grave in proportion to the value of the places into which we must fit our products; for while it is quite difficult to build where pre-existing
environment is charged with evidence of an ancient but still living culture, it is equally trying to have to work with the primordial and particularly significant landscape; but it is well to remember that just as there is no such thing as an absolute vacuum or nothingness in the order of natural phenomena (except in theory which goes beyond normal practical considerations), so there is no such thing as a break in the complex phenomenology of history or in that of the symbols it has produced in three dimensions; therefore exceptional monuments and landscapes must be considered only as manifestations of the temporal and spatial vision of reality, which offers no solution of continuity. The problem of adapting new buildings to pre-existent environments may, in consequence, be more or less pressing, depending on the circumstances; but once we have put the problem—as we have done—to be examined by our conscience, it becomes an integral part of artistic interpretation at all times and in all places.

As we might expect, in Italy the problem of working contemporary activities into the texture of history is acutely felt and arouses controversy. It must be realized that ours is one of those countries in which beauty reaches the greatest of heights with respect to density, intensity and variety because of both its extraordinary natural endowments and the heritage left to it by men during the course of its particularly dramatic history.

The great question is to strike a balance between those who are in danger of transforming the country into a museum, enshrining nature and monuments, and those others who—falling into the opposite error—would make a clean slate of everything, incredibly over-simplifying the very real difficulties before them, so as to find immediate solutions.

In my opinion, both of them should be opposed, because both reason—perhaps unconsciously—from superficial divisions of experience. Both believe that there is a break between the past and the present, or an unbridgeable gulf between the practical needs of our age and the values of culture, while it is actually a matter of creating a unity between culture and life in a fruitful cycle, a cycle that new harmonious metaphors are continually developed among dialectic oppositions.

It will be understood that while I defend the inalienable rights of life against any form of conservatism, I wish to make clear that these rights can only be fully understood if we regard them in the light of a thorough examination of our entire cultural heritage: this comprises both the riches we were born to and the additions to those riches which we ourselves must make with our own products, so that the society of which we are the interpreters may with dignity take its place in the great chorus of humankind.

Conservatives can to some extent be excused if we realize that their love for the beauties of our heritage is sincere and that they dread seeing that heritage ruined our own products, so that the society of which we are incapable of any constructive gesture. Those who feel the urge to immediate action (and from this group, I wish to make it clear that this urge can only be fully realized if we accept the principle of tradition and modernity we are discussing) strongly draw to the study of popular artistic expression (folklore) and that they should seek to deepen their comprehension and uncover the inner sanctum of the art, which means that it belongs to our age only in the chronological sense, without having sensed and expressed its deepest content.

To avoid misunderstanding, I should add that since the Masters of the modern movement are very great artists they have implicitly achieved the value of a tradition because they were against its academic aspects only but later generations have felt with greater awareness the concept of continuity both because they recognize these fathers whose unexplored problems they are dealing with directly, and because they are seeking to know better the ancestry of these same fathers in the long, tortuous and dramatic process of history; we know that our statements are not the result of a denial of the pre-existing statements, but rather acquire much greater force as the more they corroborate the numerous positive values inherent in tradition; we know too that they can still be transformed into present energy. Although it is altogether logical, it is curious to note (and here I should like to return to the example of the students I described in the beginning) how certain flashy and apparently more "modern" aspects of design (especially in architecture) are seen in those countries where, though there is great economic activity, culture conditions are less evolved (or are only the interest of small groups of elites), while the great artists and the great harmonious metaphors are we are strong tendency of losing one's bearings and even of relapsing into action may be noted in more cultured and, often, more socially developed countries.

In these same countries where they are deepening the content particular to specific cultures, the physisognomy of design is taking shape because they are rightly persuaded that the need for a communicable language cannot be satisfied by a cosmopolitan idiom; this kind of Esperanto (which actually never was a real success except as a theoretical postulate) is no longer considered a distant Utopian goal to aim at, because—owing to its very intrinsically dialectical origins, justifiable in a certain historical climate—it could have, at any cost, been imposed by some authority, but could not have been useful for expressing, as we try to do today, the sincere feelings of different cultural groups sprung from very different environmental conditions. The confusion and reactionary relapses to which I referred above, are due to a false criticism of cosmopolitanism, or at any rate, they are an erroneous interpretation of the principle (in itself quite coherent) of deepening the needs of specific cultures. I shall not mention those—of whom there are luckily very few—who have disintegrated traditional styles (confusing the letter with the spirit of tradition), nor those who believe that modern artists and might simply be defined "contemporary", which means that it belongs to our age only in the chronological sense, without having sensed and expressed its deepest content. But an attempt of such cultural importance cannot seek its own goal with the creativity of misunderstanding and crises in immature minds. But, as always, the value of a cultural and artistic movement is not invalidated by the marginal works of the mediocre whose example is useful only to point the way to possible errors or to the most difficult questions remaining to be solved.

What really looms as the question at the very heart of the problem of tradition and modernity we are discussing, is undoubtedly that which arises from the necessity of uniting the contrasting forces of specification and standardization; this problem thus derives to a much greater degree than it had been necessary to face before now, from the proposal to examine the relationship between tradition and modernity: for it is obvious that the more the cultural terms are specified the more the problem becomes complicated.

Our concept of design as method eliminates any a priori formulation of solutions, because it is based on pragmatic research and controls.

Therefore it is by perfecting our methodology and examining data case by case with greater severity that we shall discover the best ways of expressing form: universality of method means a common conception of desirable forms which overlooks different traditions; the forms which we shall determine—though it may seem paradoxical—will be so much more suited to individual circumstances the more the common method of under-standing the specific quality of single circumstances reveals its typical and inessential mistake.

This undoubtedly does not exclude the standardized repetition of objects or of elements suited to the composition of a more complex object whenever conditions are such that they are required.

Cultural forces (awareness of tradition) influence the design only for the model of an object and for the composition of various standard elements; apart from the limits set by consideration of the consumer, repetition is a technical act which does not involve the cultural responsibility of the designer; the designer must face this cultural problem again when a given object must be put into a relationship with other objects, that is, with an environment.

From the spoon to the town, the degree of variety in design depends on the complexity of each composition: in the design of a spoon there is a tendency towards an archetype, because between one spoon and another—considering the elementary function and the
The cover story of the July issue of Arts and Architecture reported a Research Seminar on Space Frames and Structural Physics at UCLA by Jeffrey Lindsay.

One of the features of this article was a proposal for a 3,500 sq. ft. space frame building. The original program did not materialize, but last month a far larger pair of space frame enclosures was delivered to the city of Sarasota, Florida. City officials say they are well pleased with the installation, which was purchased in connection with their air pollution control program. The space frames, a Pyramid, and a GEODESIC Dome, are constructed of identical components and cap a trickling filter installation.

Specifications were drawn up by Smith & Gillespie, Engineers, of Jacksonville. Design limitations were left open in line with the trend to employ advanced technical resources through firms underwriting these specialized services. The contract was awarded to Jeffrey Lindsay and Associates, of Montreal and Los Angeles. They were substantially the low bidder.

Both Dome and Pyramid are space frames of the "Shell Truss" type. This versatile system by Jeffrey Lindsay is especially suitable for framing large GEODESIC

(Continued on Page 28)
1. Geodesic Pipe Frame (3" o.d. x .083" 6061T6 aluminum alloy) installed over tank. Weight: 1800 lbs. “Shell Truss” panels ready for installation can be seen in the foreground. Components entirely aluminum alloy and stainless steel.


4. Locating “Shell Truss” Panels (300 lbs.) in pipe frame (1,800 lbs.). Components entirely aluminum alloy and stainless steel.


6. Aerial View of “Shell Truss” Space Frames. DOME: 112’ diameter x 27’ high, covering 10,000 sq. ft. with 12,000 sq. ft. of space frame. Weight: 13,000 lbs. or 1.1 lbs. per sq. ft. Volume: 335,000 cu. ft. PYRAMID: 34’ x 34’ x 12’ high, covering 500 sq. ft. with 800 sq. ft. of space frame. Weight: 960 lbs. or 1.3 lbs. per sq. ft. Volume: 2,000 cu. ft. Components entirely aluminum alloy and stainless steel.

BY JEFFREY LINDSAY
This competition was the result of a need to create a complete and integrated community center for the students, a focal point for all social, recreational, cultural and organizational activities of student life, hitherto housed in widely scattered and makeshift facilities.

The site chosen for the new center lies on the south side of the campus and west of the Administration Building. It is bordered by a quiet stream flowing between densely wooded banks, and possessing a charm all too rare on the present-day campus, which has been taken over by an uncontrolled growth of new buildings, roads and parking areas. The site slopes gently with the creek and is approximately 15 feet higher than the west boundary of the property.

An analysis of the program made it evident that the new Student Center was to be a series of four building entities:

1. A Restaurant-Cafeteria to seat 800 people.
2. The Student Union, a complex of social and recreational facilities including a retail store, lounges and meeting rooms, a ballroom and banquet hall, 16 bowling alleys, other game facilities and a coffee shop.
3. The Student Office Building to house the Associated Students of the University of California, Berkeley, and their activities, their officers, administrative staff, publications and athletic departments.
4. The University Theatre, including a main auditorium to seat 2,000 and a "Little Theatre" to seat 500. Both theatres to have fully equipped stages with gridirons.

The program was very explicit in outlining the various functions to be fulfilled and defining mandatory planning and spatial relationships and areas. Square foot allocation for even secondary areas was to be adhered to within 5%.

The first premise of this scheme is that there are two basic levels in relating the buildings to the site: the main access level and the lower street level. In addition there is an upper level containing the Ballroom Complex and an underground service and parking level under the whole project.

A wide plaza flows into the Student Union. The only building elements at this level are the Restaurant-Cafeteria and its dining terrace projecting at tree-top level over Strawberry Creek, an entrance to the Student Union and its information center, all elements of immediate functional necessity related to a busy thoroughfare. The elimination of other quieter and more self-contained facilities from this noisy street level allows an inviting visual comprehension of the whole center while retaining privacy and repose for its social or more formal aspects. The merging of this plaza level into the

(Continued on Page 28)
AN AIRMAN'S CHAPEL

MIRAMAR CHAPEL FOR THE UNITED STATE
RICHARD J. NEUTRA AND ROBERT E

COLLABORATING STAFF:

The concept of this chapel attempts to create a vibrant and sensory experience in space that is directional, a "forward" and "something left behind and overcome." Beginning with the exterior, there is a symbolic bell as has been used for convocation through many centuries. The bell is silhouetted against an interesting translucent opening which is illuminated at night. This opening is seen over the valley formed by the inverted "V", an expressive shape, of the ceiling as extended to the exterior of the building. From one side of this ridge a unique hanging stair is suspended. A glass screen is all that separates here the interior and the exterior. The main nave entrance is approached through an open archway below the balcony into a covered porch or vestibule. From here one can choose either to ascend the stair to the gallery or enter the nave.

Immediately upon entering, the power of the structure is felt through the shape of the massive concrete frames on both sides which tend to arch over but disappear behind the ceiling high above. The only natural light sources occur, con-

(Continued on Page 29)
NAVY, LA JOLLA, CALIFORNIA
ALEXANDER, ARCHITECTS

DION NEUTRA
ROBERT PIERCE
HOWARD MILLER
BENNO FISCHER
SERGEI KOSSHIN
JOHN BLANTON
TOBY SCHMIDBAUER

PHOTOGRAPHS BY JULIUS SHULMAN
The house will be located on an acre jungle site on an island southwest of Sarasota, Florida. The platform and floor of the house will be of buff-colored concrete brick made with a native limestone aggregate.

The curved steel columns (no longer stainless steel for reasons of economy) support steel beams, which in turn support pre-cast, pre-stressed double-tee concrete second-floor and roof slabs. The second floor will be carpeted.

The two storage walls which extend through two stories are to be panelled with teak plywood. While each room may be completely isolated with folding doors, when opened up all rooms become part of a large two-story room.

The study will house books, television and records. With its full bath it will not only double as a guest room, but also might convert to a master bedroom. Luminous ceilings will be carried through every room, and three package air-source heat pumps will be housed on the roof under low plastic domes. A garage-shop-storage building will be a future addition.
The site is a grassy and half-wooded rolling plot and the house was to be designed to command the fullest possible view of the mountains. It was required that the house have a large living room and fireplace, a generous kitchen, large children’s bedroom and master bedroom with baths for each, and a separate guest house. From the beginning, it was clear that new interpretations had to be found in both the approach to its solution and the values which constituted good living environment.

Recognizing that the roof structure of a house is the single most expensive item, the house is designed as a parasol shell formed by a 50’ x 50’ quadruply warped roof which extends vertically down beyond the limits of its perimeter to form the northwest and southeast exterior walls. In following this concept to a conclusion it was found that the undulating roof whose soffit forms the entire ceiling of the house and terrace areas was the governing factor of the entire design. This overall parasol shell determines the nature of the space arrangement, and in its shelter are 2,500 square feet of area.

(Continued on Page 29)
This builder's house is one of several models developed for A. P. Bates Builders Inc. Difficulties were added to the problem because of the uphill lot and houses across the street that obscured the view.

The main floor was elevated high enough to capture an unimpaired view of San Francisco Bay. The carport was incorporated on the lower level and the adjacent indoor space utilized for a large all-purpose laundry room. Stairs near the carport lead up to the front door which opens to a hallway running from the living to the sleeping area. The living room stretches the full length of the house and sliding glass window walls lead to decks, front and rear. An open dining alcove shares a corner space by the front windows. A serving counter separates the kitchen from it. This arrangement makes a focal point of the view from any part of the house as well as through the house from the rear garden.

On the lower level the grade was retained beyond the carport and the slab was extended. This made a light well for the lower room, allowed space for stairs up to the garden and deck, and created a lower level outdoor play space with the adjacent carport for shelter.

BUILDER'S HOUSE BY MARQUIS AND STOLLER, ARCHITECTS

LAWRENCE HALPRIN, LANDSCAPE ARCHITECT
The site is a canyon in a heavily wooded mountainous area rising from the street to a shelf on which the building will be erected. The rear portion of the lot rises abruptly at a 45° angle and is covered with natural California wild growth. The structural system will be a combination of wood and steel. Modular frames of steel at 10 ft. o.c. will be welded to a corrugated steel deck. The floor is wood joists construction cantilevered over a retaining wall at the street side. All partitions either interior or exterior will be prefinished eliminating the labor of painting and finishing at the site. All cabinet work will be prefabricated and brought to the site, including the kitchen cabinets. The heating system will be forced air. The rear of the house faces the hill providing a semi-enclosed private terrace.
This house, designed to fulfill the needs of a growing family, was oriented to take full advantage of views to the mountains and to the San Francisco bay area. The site originally sloping up to 45° from the south was very long compared with its width in the center. It was necessary to design the house in an attenuated form, stretching approximately 100 feet parallel to the contours. The living area terrace is accessible both from the living room and kitchen-playroom and turns into a balcony which runs along the south side to the master bedroom. To the west, the terrace is connected by a wide walkway to the children’s play space.

The house has concrete floors, some of which are covered with cork. A post and beam system supports a built-up roof with plaster ceiling. The solid walls have stained redwood inside and out. Heating is radiant in the floor, gas fired.
The clients required a house with two bedrooms, two baths, a den, a living-dining room, kitchen, and a utility room. A zone-type plan for privacy was preferred, with a patio onto which the master bedroom would open. They also desired large quantities of glass which would be controlled for privacy and would permit views into the patio and reflecting pool and the hills which can be seen from the living-dining room.

The angled frontage of 65'-0'' gives an effective width of 59'-0''. This instructively presented a nearly minimum width for a zone plan, and influenced the dimensions of the house. Topography of the site plus the presence of filled soil dictated the location of the garage and heating room under the living-dining room. The narrow street demanded parking space for two additional guest cars by the garage.

While the entire house has exposed beams and 2''x6'' wood ceiling, the bedroom wing is of standard stud construction, with the activity wing of post and beam construction, all on a 6'-0'' module.

(Continued on Page 29)
This house is divided into three zones in order to fit the family’s living pattern. It has been designed within the requirements of 2,400 square feet as a workable family arrangement for parents and children. The living room, guest room and kitchen form the social zone. Sliding glass doors open from the living room to a hard-surface porch. The guest bedroom is located away from the family bedrooms for privacy. Between the social zone and the sleeping wing the open family room lies in the middle of the house with a children’s outdoor play yard on the kitchen side and an adult’s outdoor court immediately adjacent. The two children’s bedrooms open directly on the play area. The plan is such that children can use their own rooms, the family room and the kitchen without entering any other part of the house. The three bedrooms, two bathrooms, laundry, mudroom, and the master bedroom make up the third wing.

Deep maroon quarry tile flooring extends through the entry hall, guest room, kitchen, family room, dressing room, mudroom and bathrooms. Other indoor areas will be carpeted. A wood fence gives privacy to the small sun court off the master bedroom. Columns are laminated wood stained black. Exterior walls are common brick. The roof is built of 3 x 6 cedar decking, with built-up tar and gravel as its surface. Heating is forced warm air with air-conditioning using the same ducts. There is a partial basement. The fireplace is prefabricated.
domes. Materials employed are aluminum and stainless steel and were processed in Los Angeles to aircraft tolerances. The prefabricated package was trucked to Sarasota, weighed 15,300 lbs. and occupied 750 cu. ft. Erected, the space frames enclosed 333,000 cu. ft. The Dome is 112' in diameter x 27' high, covers 10,000 sq. ft. of space frame, weighing 13,000 lbs. or 1.1 lbs. per sq. ft. Volume: 333,000 cu. ft. The Pyramid is 24' x 24' x 12' high, covers 500 sq. ft. with 800 sq. ft. of space frame and weighs 960 lbs. or 1.2 lbs. per sq. ft. Volume: 2,000 cu. ft.

Total cost for both space frames in place was $39,500 or $3.08 per sq. ft. of space frame complete.

Esthetics apart . . . the unique characteristics of the "Shell Truss" System, composed of one set of standard pieces, are:

- Panels of various shapes can be expanded laterally by adding cells.
- Panels of various shapes can also be expanded sectionally by stacking of trusses.
- Structures of many sizes and shapes can be formed from the panels as dictated by architectural consideration.
- Materials employed throughout are corrosion-resistant (90% aluminum alloy).
- Contract procedure is tailored to meet all purchasing requirements.
- Price is competitive with any alternate system.

Concept is such that it may well prove to be the first versatile space frame kit for architects.

"Shell Truss" space frames are weather-proofed by either enveloping the structure with a plastic, or by stretching a condensation-proof liner to the underside of the framework. Buildings can be either opaque or highly translucent (by using perforated aluminum sheeting). In the case of the Sarasota installation, a Type 1 "Osmoticloth" (silicone water-proofed porous Dacron fabric) was used. This liner keeps rain out, eliminates condensation by osmotic neutralization of vapor pressures and contains poisonous and corrosive hydrogen sulfide fumes to which Dacron is highly resistant. These fumes are drawn down through the filter bed by which they are mollified and then released through a 100' stack.

Potential applications for the system are in the construction of public swimming pools, gymnasiums, bulk storage warehouses for chemicals, foodstuffs, etc.; and in fact all buildings for which large clear volume and span are mandatory.

*PATENT RIGHTS JEFFREY LINDSAYS.

STUDENT CENTER — HONNOLD AND REX
(Continued from Page 16)

Center also helps create a decompression chamber for the crowds at campus rush hours.

Directly accessible from this plaza is the completely open second floor of the Student Office Building and its entrance lobby. The Little Theatre is directly across, reached by a bridge over the park-like street level. Above are the roof gardens and bridges of the Ballroom Complex.

The lower street level is an exterior space contained by the Student Union and Cafeteria on the east, the Student Office Building on the north. In complete contrast to the bustling urban character of Sather Plaza, the groves and meandering paths of Strawberry Creek are deliberately continued right up to the buildings in an effort to create a park-like feeling and a complete change of pace from the automobile-filled streets and paved courtyards much too characteristic of the overgrown campus. Here every attempt was made to free the land and devote it to sky and trees. The Little Theatre is thus planned over the main Auditorium; this also helps to simplify the massing of this bulky building and its two gridiron towers. Circulation and services are vertical whenever possible. The complex service requirements of the restaurants, stages, retail store, etc. are underground with the 125-car parking area so that no cars or trucks need be visible or interfere with pedestrian traffic.

Generally, every possible means is used to create open spaces and vistas in this tight site, in the tradition of the exemplary planning of the original Campus.
The basic structural system consists of a light steel frame composed of small angles forming two double scissor trusses. These double scissor trusses form the northwest and southeast exterior walls. Five valleys running in the same direction. Footings and foundation walls are reinforced concrete and interior walls are mostly wood stud walls.

The horizontal limits of all floor areas are determined by the vertical height restrictions set up by the convolutions of the roof and indeed all the heights of walls are determined by where they meet it. This roof design abetted the concept which aimed at cutting the cost to a minimum and giving a sense of spaciousness by forcing the architect to discard the conventional monastic system of cubicle-like rooms created by horizontally located walls and partitions. In their stead, in the main house there is only one major separating unit formed by the floor of the uppermost level which is the master living and sleeping area. The rest of the separating elements are formed by stairs, fireplaces, cabinets and toilet rooms. These elements are placed on different personalities, will start from the street curb, extend through the house, and continue up the hillside.

Other features include an inter-com system to link the two wings, a hi-fi center in the living-dining room, over-sized ducts for future air-conditioning, and a skylight over the fireplace.

When landscaped, one single garden of approximately seven different personalities, will start from the street curb, extend through the house, and continue up the hillside. A dynamic, graded division of the plastered rear wall of the east is filled with downward strokes, the last filtering out of melancholy. It is in the subtly built-up, greatly nuanced paintings that Rothko plays about by silver grays and blackish wood.

There is precision, too, in the postulation of mood. One of the paintings most penetratingly melancholy, called I think "Purple and Brown", pends heavily on its horizontal axes and pulls against any upward thrust of feeling. The somber purple-browns above resting heavily on a bar of mulberry are brought to a depressive climax at the very bottom of the canvas. There, the brownish rectangle shines with it. The same is felt in the mournful brown painting where a dead tan center is played about by silver grays and blackish shadows. There are shadows in all the paintings, sometimes in an echoing edge, darkened and pushing over the plane, sometimes behind the picture plane.

Several red and black impressions burn and quicken the senses and bespeak, possibly, anger. One enormous essay in exasperation is a red border painting in which a great, deliberately endless and blank white field is a rude expression of intense anxiety. I found this to be more polemic in value, less rich in imaginative innuendo. It is in the subtly built-up, greatly nuanced paintings that Rothko

Fine Pottery
GIV'S. REASONABLE AND UNREASONABLE
DECORATIVE BOWLS - LUSTRE - TILES
Beatrice Wood
McAndrews Road, Ojai, California
Telephone: 2430
The long-awaited first issue of Zodiac, the twice-a-year review of contemporary architecture in the world today, turns out to be more than it promised. The ambitious bi-annual published by a committee headed by Adriano Olivetti, with editors in seven countries, to this country) which is permanent in character rather than passing of the Goethe Prize; Arthur Drexler's critical appraisal of seven wider range of human relationships, and, to a certain degree, even has all the style one has grown to expect from the Italians, and in addition is solid critical fare.

As editor for the United States section, John Entenza has selected material for this issue (almost a quarter of the magazine is devoted to this country) which is permanent in character rather than passing—a critique of architecture in the U. S. at mid-century; Gropius’ "Apollo in Democracy" speech delivered in Hamburg on acceptance of the Goethe Prize; Arthur Drexler’s critical appraisal of seven new buildings for industry and government; Victor Gruen’s evaluation of planned shopping centers; and Peter Blake’s thoughtful article, “The Vanishing American House.”

Zodiac points a new direction, away from the picture story, toward a field of the well-considered long critical article. A dozen appear in the 175 editorial pages, and are drawn from Italy, Holland, England, Germany, the U. S. In their combined substance they do more than reflect the present state of architecture, they turn lights of small and great intensity on the present, and the doubts and hopes expressed illuminate the community of the future.

The points of departure for these hopes and doubts are widely separated.

Gropius: “We have not yet found the tie that will bind us together in our endeavor to set up a cultural common denominator strong enough to help us find a form of spiritual expression comprehensible to all.”

Giedion: “There hovers in the background the demand for a new feeling for place.”

The lyricism of his work is nowhere more evident than in the photographs of his prefabricated elements in the roofing system of the Turin Exhibition Building. There are a number of drawings of sections of the new UNESCO Secretariat and Assembly Hall, and also construction photographs.

Speaking of art in the field of construction, the great Italian master of concrete says that art must manifestly conceal in its works a state of mind to be transmitted through time and space to other men. He asks, “Doesn’t art require a freedom of form and of expression denied to all human products governed by physical laws? And how are we to establish how much freedom is necessary and sufficient to art?”

THE WORKS OF PIER LUIGI NERVI by Ernesto N. Rogers (Frederick A. Praeger, $10.)

A collection of Nervi’s past, present and projected work in plans, sections and photographs, from his 1930 Florence Stadium to drawings for an exhibition center in Caracas and a central station for Naples. There are many valuable construction photographs of the UNESCO Building, on which Nervi collaborated with Breuer and Zehrfuss. Minor work shown in drawings is his 1932 design for a revolving house and a 1946 prefabricated house.

In a preface by Nervi, he describes his approach to design as a search for the most suitable structural solution, technically and economically, without any esthetic preconceptions. But Rogers in his text finds Nervi, “an artist against his will, sometimes even against his theoretical convictions . . .” Nervi’s special gift, says Rogers, is “an expression, through mathematical severity, of a perfect structure which, although the result of complicated formulas, appears so simple that it could have been observed from the laws of nature rather than arrived at through human thought.”

FORME NUOVE IN ITALIA. Introduction by Ivan Matteo Lombardo. Text by Agnoldomenico Pica. (Carlo Bestetti, $15.)

This large format 218-page book is, except for a few pages of text, given over completely to plates, 65 of which are in color. Brought out on the occasion of the 11th Triennale, it amounts to a precise history of how the Italians are up to today. It presents new Italian work in glass, ceramics, metals, wood, textiles, furniture and industrial design, and demonstrates the extraordinary creative vigor of a renascent Italy.

Color is handled with great control by the middle Twentieth Century Italians, as it has always been, but in the forms are found a new gusto: the biography of the new Italian artist-craftsmen. A notable exception to the rule is Flavia Poll’s valve-shaped vases, where strong color reigns over quiet form.

In the industrial design section is included a photograph of the lounge of Italy’s handsome new train, the Belvedere. A dozen rooms designed by architects indicate the willingness of the architect to use the talents of the artist-craftsman. Indeed many of the architects have designed for glass and ceramics, as well as furniture.
TRADITION AND MODERN DESIGN — ROGERS

A valuable series on the Japanese arts, with three more books in preparation: Sculpture; Ceramics and Metalwork; Textiles and Lacquer.

"Architecture and Gardens" has 50 plates and 73 illustrations of the eight periods of Japanese architecture, as well as drawings of imaginary restorations of the primitive house. As in the case of the Maya temples, the 7th Century Shinto shrines were modeled on the village house, which leads one to believe that man once fashioned his gods in his own scale and out of human virtues rather than composite esoteric ones. The gods grew taller and so did the roofs. With the beginning of the Buddhist influences on Japanese architecture, curved lines appeared in roofs and gables which had once been straight, and the scale owed more to emperor's palace architecture than the village house.

But village work was again to have its influence on official architecture with the rise of the chashitsu (tea house), particularly in the Katsura Detached Palace, built in 1620. Natural and artless appearing, the Detached Palace represents two aesthetic tendencies: "the love for the delicate but strong" structural members, and "the love and respect for nature," which are intrinsic Japanese sentiments. There are a number of photographs of gardens designed by the masters of landscape architecture of various periods, from the "warrior style" gardens, in which all the elements were reduced in scale, through the tea house "wet gardens" to the large scale tour gardens.

KARL KNATHS by Paul Mocsanyi (George Wittenborn, $5.)

From canvas to nature, Karl Knaths describes his approach to painting in the Commentary included in the book. Shapes or measures of color "take on the character or meaning of a natural object," and although remaining abstract, "they take direction, they travel."

Knaths has not discarded objects but, transmuted, "they have remained the dramatic personae of his sovereign dream," writes Mocsanyi.

Long a resident of Provincetown, the seafaring life of the Cape is the subject of a large portion of the 99 plates, 8 in color. A master of understatement and subtle color, Knaths found an early collector in Duncan Phillips, who wrote an introduction for the book.

There is an Appreciation by Emanuel Benson.

HOUSING: A FACTUAL ANALYSIS by Glenn H. Beyer (Macmillan, $8.95)

A book which had its beginning in a seminar at Cornell University, constitutes an objective survey of every phase of housing, with statistics on the home building industry, financing, home ownership, future need for houses, the characteristics of housing supply, urban renewal. House design is treated from the point of view of typical family needs, ranging from the young couple, the aged couple.

The book does not pretend to deal with technological or esthetic aspects of housing, but rather to bring together all the known facts on the subject of housing in the United States.

Mr. Beyer is director of Cornell University's Housing Research Center, and Professor of Housing and Design.

TRADITION AND MODERN DESIGN — ROGERS

(Continued from Page 13)

elements which determine it—variety is essentially a matter of taste, in which the problem of tradition is, more than anything else, psychological.

The design of a house or a city may tend towards an archetype in the conception of the elements which make it up, but their combination must be left open to all possibilities; it would be foolish to think of the archetype of such a unity—obviously, the complexity of its form corresponds to the complexity of content, so that variety must satisfy the changing syntheses of the terms liberty and equality which characterize a society in its historical processes.

Thus, though the relationship between quality and quantity is becoming more complex, it will find its equilibrium if we succeed in infusing design with the sense that modernity not only does not deny tradition but represents the most advanced degree of tradition itself. We shall have taken a step ahead in our purpose of giving quality to quantity.
That he has given us perfection and beauty in these collages must baroque excess—a position leading to classicism—places him apart. Forms occasionally only by their two upper corners, allowing a height of their potential. A shadow to be cast from the lower edges. All the things which tone slip roughly close-toned papers, one above the other, but lets a single darker germaine to the collage. The same is true when he attaches his specific quality of his medium—its emphatic plane—sparingly, but image exactly as he would with paint. He takes advantage of the restraint which reads throughout the show. Though these could hardly be called landscapes, they are carefully heightened colors are at once dramatic and moderate. The o i l medium. He builds from a base, and works image upon image exactly as he would with paint. He takes advantage of the vertical-horizontal principle of equilibrium. But it is a symbol, as well, for man in his stance in life. The mood is one of calm detachment. It is a removal from the vicissitudes, the petty impulse of everyday. It is strong but polite, delicate but explicit. It is tapered off into ethereal poetry at times and keyed up to resounding Bach-dominant themes. It is as if it had a rugged motility permitting it to carve in chunky, deliberate steps the metal within its realm. Sheared, bent, beaten, welded, the material under Lipton's hand never loses its essentially tensile quality. The great curves are slow and stubborn; the angles abrupt, intransigent. Surfaces are brazed often with nickel-silver on bronze or mazel, to keep a grainy equality of surface. Lipton never lets the little knobs or accidental drips of the coating interrupt the larger movements of his forms.

In these newer pieces, he has established a wider range of form. Several of them are ingeniously asymmetrical and have complex interplays of sharp driving contours and spiralling curves. Within them, he has learned to work with several axes with one form counter-balancing the next in ascending order. This increasing complexity in conception is matched by increasing simplicity in execution. The largest contour is always dominant. Collateral detail next diminishes the grandeur of the whole. The solidity of Lipton’s new work and its homogeneity—the homogeneity not of “style” but of maturity—is undeniable.

MUSIC
(Continued from Page 5)
all the conservatism of the schools, a growing number of these classically trained native American musicians appreciates, understands, and is able to play in some degree to create jazz. And the reverse is happening. Jimmy Giuffre, who grew up playing and arranging jazz, went to USC for a while and came away so filled with new ideas that his new pieces, some of the best composed jazz in the country, range over ideas from Bartok back to the medieval which never deflect from but only enrich his jazz idiom. He is the one I wrote about a few months ago who has recorded jazz on a solo clarinet using breath sounds as on a Japanese shakuhachi. Is this betraying the jazz idiom? I don’t believe it—less so, anyhow, than Brubeck modulating back and forth from Rachmaninoff to Shostakovich, or Andre Previn arpeggiating Hummel against a background of pale, pastel harmony out of Nevin. Instead of playing with harmony (old style), Giuffre plays with sound (new style), and that is in one way what jazz is.

Why worry whether Giuffre plays jazz or whether jazz is the legitimate ancestor of his music? It is a new music. In assorting American composers the comparison should not be with Beethoven, where sanctimony clouds the prospect, but with Hudy Ledbetter (Leadbelly), among the most fruitful and original of American creators and certainly one of the most naturally gifted musicians America has put before an audience. Any record of his performances is an American stylistic landmark. Hundreds of yards of tapes were taken of his singing and playing, folk music, popular music, and his own bardic inventions. Afterwords the recording companies lost their nerve and only a little of all that was recorded has been issued. To hear Leadbelly recite and sing should be a more useful introduction to Homer than anything you can learn by reading in the Greek classics. Everything he does and says and sings is rhythm, part of the music, part of the story, supported by the pluck and beat of his guitar, an heroic instrument, the basses as accurate, the patterns as carefully designed as Chopin knew his art. Instead of Bach, his model was Blind Lemon. If Gesualdo, the murderer, was among the most extraordinary

Announcing . . .

TONY HILL

CERAMICS

lamps, vases, etc.

Wholesale Showroom

721½ North La Cienega Boulevard
Los Angeles 46, California
Olympia 2-0479

ART
(Continued from page 29)
is at his best, and in these last paintings, he has provided an orchestra on a heroic scale.

Esteban Vicente, who last year announced, via his show of paintings, his withdrawal from the informal esthetic of abstract expressionism has gone one step further in his recent collages. He has come forward frankly and masterfully with a classic body of work. That is, he has shown us a closed, perfectly harmonious, stately, cadenced world. Like an expert choreographer, Vicente has trained his performing agents to hold their places and submit to the master-plan of the whole. The collages, like the paintings, are total entities. But more than that, they express an attitude and a mood. The attitude is one of moral rectitude, of emotional containment and subordination to principle. (These abstract equivalents of abstract visual expression are lame but inevitable. The “principle” in visual art terms is the vertical-horizontal principle of equilibrium. But it is a symbol, as well, for man in his stance in life.) The mood is one of calm detachment. It is a removal from the vicissitudes, the petty impulse of everyday. It is strong but polite, delicate but explicit. It is tapered off into ethereal poetry at times and keyed up to resounding Bach—like climaxes at times, but it is an all-prevaling general mood of restraint which reads throughout the show.

Although Vicente’s means are deliberately held to a minimum—tinted papers generally cut or torn in roughly rectilinear shapes—he has given them an impressive range of expression. He can take brown wrapping paper and tan mailing tape and make a sequence of tonal juxtapositions which suggest a removed island of harmony. He can make a thousand shades of warm gray, diminished to the palest of pale hues, suggest a total atmosphere in which a few ences with the experience of man in his environment.

He can make a thousand shades of warm gray, diminished to the palest of pale hues, suggest a total atmosphere in which a few ences with the experience of man in his environment.
of creative talents, so is Leadbelly, the double murderer, the man
who rode the petition once under Carbon County twice by simi­lar
question, that butt of fashionable malaise, in which the professional
of favor of the music will soon drown. Bunk had enough. I shall not
elaborate the oracular "enough" to explain it to anyone for whom
that amount is not sufficient.

Stravinsky said to me, we were speaking of jazz improvising:
Improvisation is interesting but without continuity; it is interesting
for five minutes; it can fix nothing that continues. So far have we
gone from remembering that common art out of which sprang the
modern Western instrumental forms. And I should point out, as an historical
curiosity, that when the more independent twentieth century European
composers began exploring the art of composing for groups of solo
instruments, Webern found his way by German logic, which is some-
times hard to come up with, but Stravinsky came up with The Soldier's
Tale through a practical application of modified jazz. Now the record
is fairly complete, we can admit that the distinctive musical medium
of the twentieth century, first half, is the composition for chamber
group of mixed solo instruments, of which the original New Orleans-
Chicago jazz quintet or septet is the archetype. Fact has a bad way
disturbing the musicological evolution of history. We can credit
jazz as much as Strauss, Mahler, and Stravinsky for the revival of
solo brass.

With its good, jazz has brought much that is not necessary, the
false "heating" elementos, liquor, drugs, crammed space, artificially
provoked excitement. Angrily the apologists of sensibility will defend
these extras. If you have never been drunk, he exclaims fiercely
of favor; and can none will understand what being drunk means." Oh
yes, I retort, I have gone high on my briar pipe. It was an accident—
unpleasant. I do not need. . . . But the argument is wasted on the

...And so—Malraux: Voices of Silence.) Leadbelly was a
creator in a degree that Aaron Copland is not; and it is time the
American listener learned about it, as a few more years will
demonstrate. (I do not say this to depreciate the work of Copland,
which is not less because we see it here like a house under a
small mountain. In passing I might say, the all-too-extended
Fantasy for piano in one movement, that reminds me of Strauss'
Alpine Symphony, does not give a good report of the way Copland
has been spending his time.)

Paris has produced the supreme cult of today's art sensibility but
not its supremely independent masters, Henry Moore has restored
sculpture to its place in outdoor nature, as Jacob Epstein has made
it familiar to the modern building and street. Orozco recreated the
secular public church of fresco, Mondrian the modern concept of
architecturally ordered space.

Malraux flings off apercu like Arnold Toynbee so long as his
subject is the past. The author of Man's Fate and Man's Hope looks at
"This modern world which, in a mere hundred years, has been
stripped of the dreams Europe had cherished since the age of the
cave man"; and, looking, he sees only the art of Paris. So then he
goes on, "it is high time for us to recognize that for three hundred
years, the world has not produced a single work of art comparable
with the supreme works of the West." Nearer the point but still
vague as a theorist, he writes: "Akin to all styles that express the
transcendental and unlike all others, our style seems to belong to
some religion of which it is unaware." Let him look, let us all look
again at Orozco's revolutionary drawings and paintings, his denun-
ciation of war that is more absolute than

Bunk! What had he to blow? And how much knowledge did he
have to blow with! Here it is, the exclamation in form of a question
intended by the professional student to invalidate the non-conformist
creative intelligence that will truckle to no gift not its own, that
of a drunken surgeon, the product is nightmare, not vision. Then the artist tries to assume a peculiarity, to incorporate into his art that which first aroused it to exaggerated sensibility, the nightmare sniffs and swanks in style. Whether the result appears popular, in the meaning of so many thousand quick sales of so many hundred precariously inflamed pages, or unpopular, in the sense of to hell with your society, your world! nothing has been accomplished but a fashion—and forgetfulness. Strausinsky is quite right: the improvised in art is the careless, the intransitive, indifferent. It appeals to intelligences of a like improvised content, which will rest happy in any reassurance, grow mock-like the echo of any overheard complaint. When jazz takes on the atmosphere of the nightclub, of the congregation of the homeless, it accepts also their emptiness, mimics the mental state of the unrooted. Wherever this aspect of jazz permeates art, mannerism replaces style, self-satisfaction and grievance in nearly equal amounts empty the bowl of content.

To recreate in art as the state of mind of these unrooted, one does not partake with them of what they lack, rather one creates, out of a controlled knowledge, however destroying, an image, like Van Gogh's billiard table, of what it is to be unrooted. Here the esthetically used mind parts from raw sensibility. All artists, and these we have with us aplenty. When I speak of the new formlessness I do not speak of them, though the atmosphere is dense with their faces, and dignity, and hear joy in their sound. Leadbelly, when I saw him in person, impressed me first by his natural, his innate dignity. That is what we turn to in the jazz we would preserve. Art is always the beginning, at the beginning of the rise of humankind. Art is human skill reaching out beyond the human, uttering its religion in the face of this or that or any defeat. If art reproach us, and our art does continually reproach us, for what we are, for being what we are, let us deserve better and let our art guide us to it.

(The to be concluded in the May issue)

Note: In my March column, the story concerning Scott Fitzgerald and Ring Lardner, credited to "Michener," is, instead, from Arthur Mitzen's "The Far Side of Paradise." P. Y.
Vornado® PRESENTS
The Exciting New
COMMERCIAL
AND
RESIDENTIAL
COMBINED ELECTRONIC
(REVERSE-CYCLE)
HEATING & COOLING SYSTEM

Heating and Air Conditioning from one Compact Unit

“MERIT SPECIFIED” FOR ARTS & ARCHITECTURE CASE STUDY HOUSE #20
BY BUFF, STRAUB & HENSMAN, ARCHITECTS

CHECK THESE FEATURES:

• MOST ECONOMICAL
  USES NO FUEL . . . NO WATER

• INSTANT REVERSING VALVES
  JUST SWITCH FROM COOL TO HEAT

• SINGLE UNIT CONTROL
  ALLOWS FOUR COMFORT POSITIONS

• PROPER AIR DELIVERY
  QUIET DRAFT-FREE COOL OR HEAT

• INSTALLS ANYWHERE
  ATTIC, BASEMENT, OR CENTRAL HALL

• FILTER CLEAN AIR
  NO SMOG, DUST, SOOT, OR POLLEN

• POWERFUL TWIN COMPRESSORS
  PROVIDE SUPERIOR HEATING & COOLING

• AUTOMATIC THERMOSTAT

• PROPER MOISTURE CONTROL

SUES, YOUNG & BROWN, INC.
EXCLUSIVE DISTRIBUTORS FOR VORNADO PRODUCTS
AIR CONDITIONING FOR HOMES, OFFICES, STORES, AUTOS, AND CIRCULATING FANS
3636 S. BRONSON AVE., LOS ANGELES 8, CALIFORNIA, AXminster 3-5195
PRODUCTS OF THE O. A. SUTTON CORP., WICHITA, KANSAS
WORLD'S LEADING MANUFACTURERS OF COMFORT COOLING APPLIANCES
How do you measure the growth of a city?


John M. Stahl

Industrial development

Facilities for every aspect of industrial development: planning, architecture, engineering, construction, financing

321 S. San Vicente Blvd., Los Angeles

Brodysh 2-3131