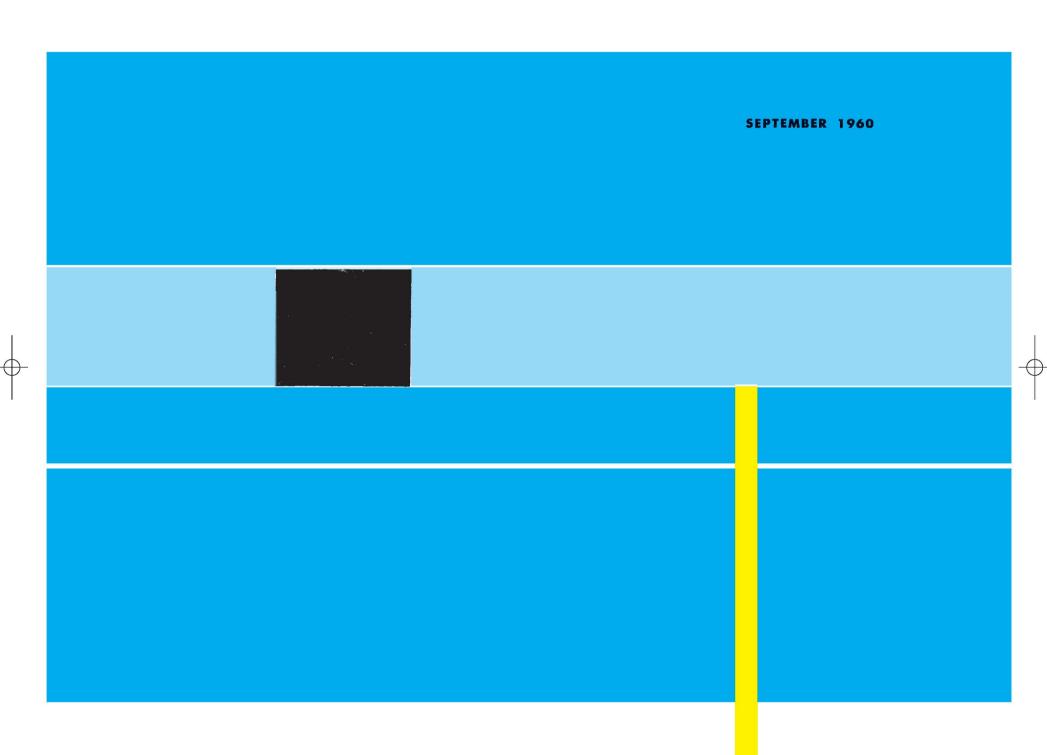
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### MUSIC

PETER YATES

A FESTIVAL OF ORIENTAL MUSIC - PART II

In my opinion the first Festival of Oriental Music and the Related Arts at the University of California, Los Angeles, may have been the most important esthetic event that will happen anywhere in the world this year. It was the first time that a substantial quantity of Oriental music from several distinct areas and cultures has been performed by student musicians not belonging to those cultures, the first time it has been adequately demonstrated that students can be trained by objective methods to perform adequately the music of more than one Oriental culture, the first time that students from Asia have been able to learn in one place some of the other principal musics of their

There is the possibility that this Festival and the preceding educational work that created it may have set in motion a permanent project, drawing numbers of students from every part of the world. A plan to this effect is now under consideration, asking to be assisted by a major Foundation. American givers of money are just waking to the thought that, beyond engineering and science, a true educational mingling of cultures requires an exchange not merely of artists but of arts. As Reinhold Niebuhr has written in a commentary on Walter Lippmann: The slogan of 'raising living standards' is not enough as a source of wisdom for our representatives. It makes the important economic component in the life of the new nations into the sole objective. But the problem in all the new nations is how to relate technical competence to the resources of their old history that make for political stability and communal unity."

For Asia this can scarcely happen soon enough, because the Asiatic cultures, not only in music, are in danger of being swept from traditional moorings by a flood of second-hand, derivative, emotionally attractive but technically obsolete political and cul-

tural notions from the West.

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We must help Asia to protect itself not only from the American juke-box but from the superficial techniques of the immediate European past. A culturally disorientated people soon sprouts the toadstools of Huey Long democracy and the appeal to mob freedom.

In Japan the cultural damage, measured by the extent of damage to the traditional music, is already far advanced, in Persia and India somewhat less so; in Java and Bali the threat is present. Each of these peoples is making an effort to preserve its indigenous culture and its music, but no more than the change in time-scale caused by the rise of technological education may destroy these great cultures through leaving no time for the ancient method of training by patient mnemonic repetition.

One purpose of the UCLA project will be to prepare students

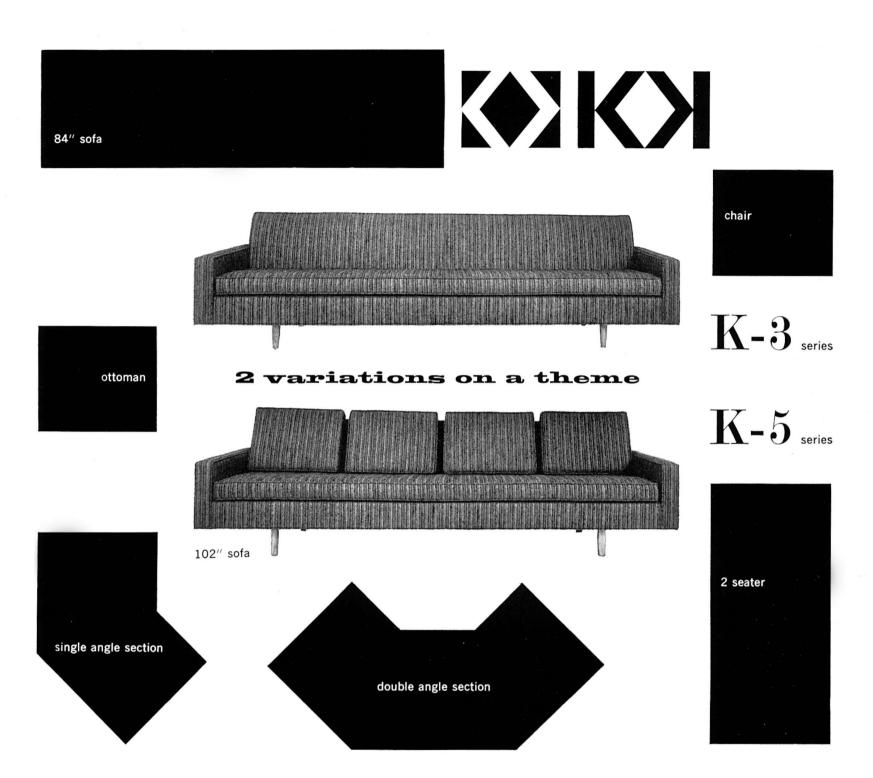
from Asia to return to their own countries thoroughly equipped with objective educational techniques that will enable them to translate traditional skills into advanced musical studies. We create pride in the native musical culture by honoring it here. We give it an equal pride of place among the great musical cultures of the world by enabling these first trained missionaries of esthetic objectivity to return to their own universities and peoples and establish there the groundwork of a musical education common to all their variant musical sensibilities. To carry out such a project is to forward freedom, in the best sense of that politically abused word: freedom from a nationalistic provincialism, freedom from subservience to the exotic attraction of any other provincialism.

The ultimate purpose of this freedom, both within and beyond the arts, will be not simply to preserve the cultural tradition in esoteric purity. To do so may be desirable, as revival of our earlier European musical tradition now seems desirable, if only as offset to the narrowness of prevailing esthetic criteria that have kept us from measuring the full span of our tradition. Beyond that we must look, almost eagerly, to the more fundamental revival of that creativeness which makes possible diverse traditions. If we have cut ourselves off from the pre-harmonic idioms of European musical culture, too many of the Asiatic peoples have never left a similar period. Its musical expression has become petrified in them. By freeing them from the traditional techniques of musical education we may release in them something comparable to the creativeness of our own three hundred year counter-tradition which I have called Modern Music (1600-1900). But creativeness should be in them no imitation of our experience; it should proceed independently in freedom out of the reappraisal of their own culture and tradition.

And our own music can gain immeasurably by the same process. Already, as I shall hope to show in resuming my discussion of American music through future articles, we are drawing new vitality from the Orient and from that pre-harmonic past of European music that is so much more closely linked than our 300 year period of Modern Music to the other musical cultures of the world. The rediscovery of melodic tone instead of harmonic intonation, of free and controlled embellishment and the microtonal elaboration of the note, of the vast possibilities of scales other than equal temperament, of the interval as an acoustical instead of a mathematical relationship, the questioning of sound itself apart from preconceived musical relation-ships, of noise and the unrationalized dissonance and the varieties of consonances, the recognition of additive and melodic and contra-mathematical rhythms, of methods of counting and varying the time-relationship quite unlike those to which we have been accustomed: from all of these a revolution of musical understanding is deeply in process that will outlast our time and exceed any present anticipation.

Certainly we shall learn to appreciate the true values of Western pre-harmonic music and of Asiatic and African music to a degree we can now scarcely imagine. Out of all these experiences and questionings new means and comprehensions of music should appear, which are likely to make our present involvement with 12 tones seem as obsolete as the narrowly conceived rules of formal harmony which preceded Schoenberg's emancipation of the dissonance.

Unlike some musicological projects, the study of Oriental music at the University of California began and continues by a practical study of the instruments. When Mantle Hood, founder of the project, went to Holland for postgraduate work in musicology, his approach to the ill-named field of ethno-musicology



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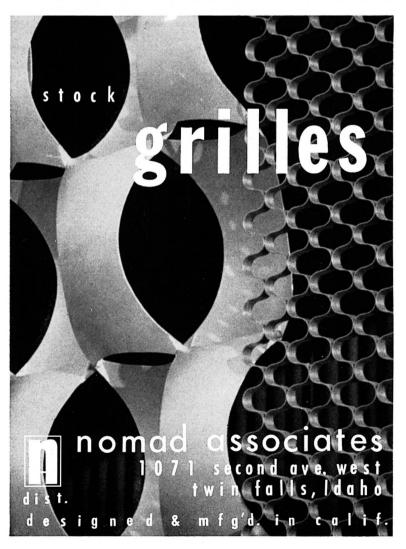
was confined to theory. Meeting in Holland a group of Dutch students who had already formed their own Javanese Gamelan, he joined with them in the playing of this music. Under the guidance of Jaap Kunst, principal Dutch authority on Indonesian music, he mastered its theory, notation, and tradition. Returning to the United States he brought with him a small Gamelan and continued learning and practicing the techniques

of the component instruments.

During this period he was sent for two years to Java and Bali to consolidate his knowledge, where having wisely learned the language, a feat few of our diplomatic representatives in that area had accomplished, he was able to mingle with the musicians, play with them and correct false assumptions. He took his place among the instrumentalists of the court and temple orchestras; he went out among the villages to sit in with the village Gamelans and learn the divergent voices of their local music. In this way he was able to demonstrate that the tuning of the Gamelan varies among orchestras and the intervals are never equally measured. One rebab player, in Javanese music the leader of the Gamelan, played for him at great length with astonishing accuracy the different divisions of these scales. Invited to record on tape some of the principal melodies and their variations, he insisted on continuing to play for thirteen hours, drawing upon and varying a repertoire of more than a hundred melodies.

While in Java and Bali, Mantle Hood completed his study of the Gamelan by learning to play gender (a bamboo resonated metallophone with thin bronze keys that is used as an ornamenting instrument), suling (flute), spiblon (dance drum), rebab (the two-stringed bowed lute of the orchestral leader), and, perhaps the most difficult accomplishment, to sing. His wife also learned to perform well on a number of the instruments, so that, when they had returned to the University of California, they were able to begin training students to play on their own small Gamelan.

At the University another student, Robert Garfias, now in Japan on a study grant for two years, was founding a small group for the playing of the ancient Japanese Court Music (Gagaku).



With active University support these two groups provided the nucleus of an unprecedented beginning in the study of Oriental music by Western students.

In Java, Mantle Hood met and was able later to bring to the University a thoroughly trained young Javanese musician; afterwards another student, no less gifted, was brought from India. Other young musicians are to be brought to the University from various parts of the Orient and Africa, as funds are made available.

I was able to attend only four of the 22 concerts, recitals, and lectures that made up the first Festival of Oriental Music and related Arts. I am unhappy to have missed the program of Persian music, given by the UCLA performance group with the Iranian Association of Southern California, under the direction of Hormoz Farhat; the program of Indian music, with the UCLA performance group under the direction of Robert Brown, featuring the exchange student Tanjore Viswanathan as solo flutist; and the program of Japanese Naga-uta, last of the Japanese traditional musics, originating in the xvii century and identified with the Kabuki Theatre, which was performed by a group directed by William Malm. In the previous article I have spoken of the recital by a visiting Chinese virtuoso of the pipa and the chin, I wi Tsun-Yuen

I attended with great interest the concert of the *Gagaku* group, directed in the absence of Robert Garfias by the Music Librarian of the University, Gordon Stone. Since I first heard them in a private concert the *Gagaku* group has been outfitted with the high imitation helmets and impressive traditional garments of the Japanese Imperial Court Orchestra, a formidably medieval costume as severe as it is beautiful. In spite of the astonishing transformation of American students into feudal retainers, their dignity enhanced by a well-painted backdrop in Japanese style, I cannot convince myself that the addition of costume has been a move in the right direction. The two *Gamelan* orchestras have been outfitted in the same way, the Javanese orchestra with jackets and other appurtenances obtained through the cooperation of the Royal Orchestra of Jokjakarta, the Balinese in traditional Balinese costume. I might make here the distinction that Javanese music begins with the native court and reaches out to the people, whereas the Balinese music is communal, indigenous to village and temple and reaching into the towns.

It seems to me that the wearing of native dress, however beautiful and dramatic, indirectly and perhaps unconsciously emphasizes imitation and display, at the cost of the real purpose of the project, which is to teach the music to students from a variety of cultures. Assuredly the magnificent stage presence of these orchestras would have been less without the costumes; yet I would rather see a group of players in their own habitual clothes devoting themselves to public playing of these instruments than that the players should put on the show of appearing to be what they are not. My feeling may seem a quibble, but the criticism

or question raised by it is serious.

One unintentional consequence may illustrate my meaning. When Mantle Hood, in batik skirt and Royal Court Orchestra jacket, his feet bare and his head kerchiefed, came before the orchestra to introduce us to the music, his small son among the audience called out, "That's my daddy!", and the audience laughed. The illusion had been broken through, and I think the relation between players and audience was the better for it.

I hold to be no less mistaken our own habit of dressing pianists, violinists, singers, conductors, and quartet players in an obsolete and uncomfortable costume that serves only as an impediment to their musicianship. Nothing is gained by a pretentious esotericism of costume. The dress should be as simple as possible, and our attention should be entirely directed to the music.<sup>1</sup>

Having made this righteous objection, I must confess that I was as thrilled as anyone by the appearance of these orchestras.

The players of the three orchestras all sat cross-legged on the floor, whereas Mr. Lui, a genuine Oriental musician, preferred to sit in a chair. Among Los Angeles players of Japanese ancestry whom I have heard in concerts of their own music the habit is divided. As one young player of the *koto* said to me: "My teacher prefers us to sit on the floor, but I assure you that doing so is as uncomfortable for me as for anybody else. I practice sitting in a chair with my instrument raised, and when I am allowed to I prefer performing the same way."

As I listened to the three orchestras I reflected how much

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self-discipline must be needed to restrain the players from wriggling and stretching during the two hours they sat in what was surely for most of them a still uncomfortable posture. Yet the beauty of the orchestras would have been dissipated, if the players had been seated in chairs and the instruments set on high tables.<sup>2</sup> I mention these seemingly small matters to show that the transplanting of a cultural tradition involves more than technical learning.

The Gagaku orchestra consists of three sections. The small hichiriki or oboe, of strident and penetrating tone, and the more mellow ryuteki or transverse flute sustain and embellish the melody, their contrasting voices providing what may be described as a polyphony or heterophony of pitch. The sho, a mouth organ of seventeen vertical bamboo pipes fitted into a wooden wind box, enriches the lowest tones of the melody by tone-clusters of higher consecutive fifths. Each new phrase of the melody begins with the sounding of the sho. The thirteenstring koto and the four-string biwa or large flute mediate between the winds and the percussion, at once accentuating and diffusing the main melody tones with a simple melodic accompanying rhythm.

- <sup>1</sup> Mr. Hood tells me he feels the same way, but his experience in Java and Bali convinced him that Oriental peoples are complimented when their native costume is worn for the performance of their music. In the same way my Los Angeles Japanese friends always dress in Japanese formal style to play their music. But a picture I saw lately of the Meiji court dressed in full Victorian fig presents the other side of the argument.
- <sup>2</sup> After the Indonesian revolution one Javanese orchestra did try setting its instruments on tables and sat in chairs to play them, but the experiment was soon abandoned.

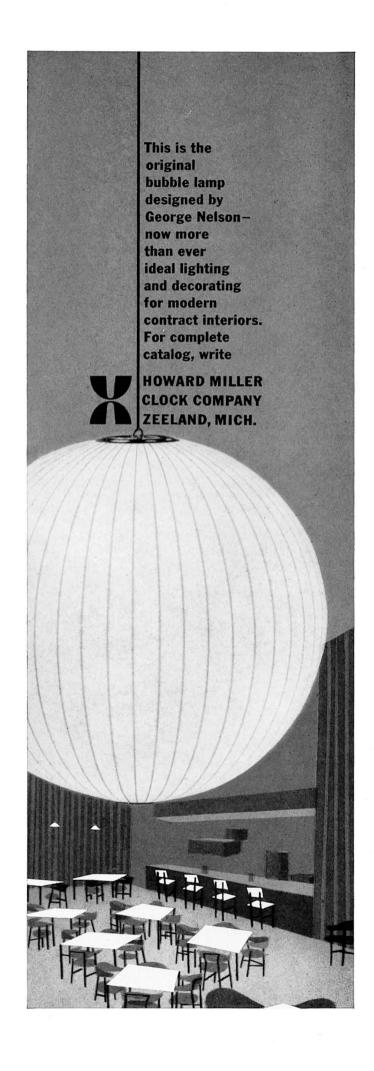
The *sho* and the two plucked instruments together do the work of what was called in xviii century European music the continuo, the *sho* providing an upward enrichment by consecutive fifths and each stroke of the *biwa* a downward chord below the principal melody note. This non-European harmony enriches both the consonances and the dissonances of the melody, so that the two melody instruments move through rather than upon the broad tonal field of their enrichment, an effect of gorgeous subtlety, which we hear first as barbaric and, with experience, as an intensely cultivated art of music.

The *taiko*, a large hanging drum, plays the main accent of each percussion pattern as well as the final accent of the composition. The *shoko*, a small hanging bronze gong struck by metal-tipped sticks, usually supplements the drum but is occasionally heard alone. The leader of the orchestra plays the *kakko*, a small double-headed side-drum, making use of combined patterns of rolls and single strokes which sharply accent and highlight the percussion pattern. Thus the sustained heterophony of the winds is set off by the percussive tones and accents of the plucked instruments and percussion.

While the percussion phrase is always regular and repeated, the melody can, in accordance with the style of the composition, have phrases of constantly changing length and with displacement of the strong melodic accent. There are compositions in which the melodic phrase accent coincides each time with the strong point in the percussion pattern, and others in which the synchronization of the melodic emphasis and the percussion emphasis is delayed until the final phrase of the composition. (This and the preceding paragraph have been condensed from an article by Robert Garfias.)

After listening to the Japanese Imperial Court Orchestra when it played at the University of California last year, I am able to say that the University Gagaku group does not suffer by comparison. Gordon Stone provided a helpful introduction to the performance, besides performing more than adequately on the sho. My particular compliments go to William Malm, who played the hichiriki, and Max Harrell, who played the ryuteki, for their superlative exposition of the microtonally embellished melodies. Both, I believe, learned their instruments as members of the group, the original teachers being members of the Gagaku orchestra of the Tenriki Buddhist Temple of Los Angeles. Mr. Harrell distinguished himself by performing as a member of four different groups.

The two Gamelan orchestras, one Javanese, the other Balinese, are quite distinct in appearance and in style, though they have several instruments in common. We think of an orchestra as a group of players who perform on a certain set of instruments. A Gamelan is by contrast a set of instruments, consisting prin-

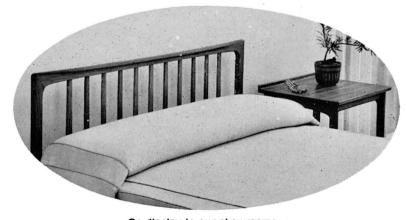




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cipally of bronze pots, flat bronze slabs or keys over bamboo resonators, and gongs of several sizes, plus plucked zithers, the bowed *rebab*, the *suling* flute, hand drums, and on occasion voice. The large *Gamelan* recently purchased in Java for the University, on which this concert was played, is about 120 years old, though I suspect that this antiquity applies only to the bronze instruments. The bronze pots, the keyed resonating instruments, and the xylophones are set into elaborately carved low wooden tables. They are played with a variety of shorthandled hammers, so that the first effect of watching and listening to a Gamelan is rather like attending upon a group of industrious old-style cobblers performing with their hammers a surprisingly mellifluous anvil chorus.

A full Javanese Gamelan, comprising some 75 instruments, with its glowing bronze pots, carved tables, and magnificent hanging gongs is very probably the handsomest means of music-making ever devised by man.

Javanese musicians distinguish two styles of playing, loud and soft, each having its own instruments. In loud playing the soft embellishing instruments are not used, and the rebab player delegates his authority as orchestral leader to the drum. In soft playing all or part of the instruments may be used, and the rebab player assumes full responsibility for tempo and dynamics, besides guiding the manner of improvisation. The Gamelan contains two tuning systems, their distinctive character created more by the relative size of the large and small intervals than by the fact that one system has five tones and the other seven. Microtones are used for embellishment only on rebab, flute, and

for singing.

Whereas the effect of the Gagaku orchestra is of a sustained melody, heterophonically elaborated and rhythmically marked by the rather dry sounding of the percussion, the effect of the Gamelan orchestra is primarily percussive, the melody enriched by stratification, fifteen to twenty-five different strata of tone being distinguishable when the full orchestra is playing. The great gongs form the lowest stratum, smaller gongs the next, and so upwards through the pot and slab instruments, which give out the melody, to the softer *panerusan* or elaborating instruments of the soft music. The extreme fluidity, particularly of the soft music, varies with the details of melodic invention guided by the rebab. The rich partials of the bronze instruments combine in a predominating homogeneity of color, softly penetrated by the microtonal dissonances of the flute and rebab. The rhythm is also homogeneous, divided in faster or slower plateaus, one feature of a good orchestra being its ability to accelerate or retard the pace of the music between these plateaus so evenly that the change of tempo never intrudes as a dramatic effect. Only when accompanying the Javanese shadow plays, at the point known as "the raging of the elements" when the forces of good and evil stand in balance, does the Gamelan become descriptively dramatic.

In addition to the soft and loud music, which express the prevailing Hindu and Buddhist levels of the culture, the orchestra performed one example of the Javanese Mohammedan religious music, which is in comparison very loud and is intended to continue without ceasing, one orchestra replacing another, during the Mohammedan Holy Week. These three layers of religious culture exist together in Java by inclusion rather than exclusion.

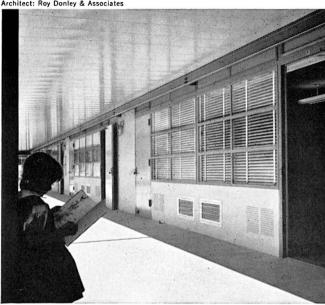
The Balinese Gamelan is somewhat less brilliant in appearance than the Javanese, having fewer pots and gongs, and more continuously loud. While a single Javanese musician may remember as many as 200 melodies, the repertoire of an individual Balinese Gamelan seldom extends beyond fifteen at one time. The Balinese music, though no less religious than the Javanese, is used almost entirely to accompany dancing; what the Javanese call soft music, and its elaborating instrument (Gender), having almost entirely disappeared from the Balinese orchestra. There is seldom a rebab, the orchestra being led by a pair of hand drums. Gender is retained for the small chamber music ensemble which accompanies the shadow plays.

The performance, on a new Gamelan only just arrived from Bali again included examples of each type of music, the small chamber group being, to my ears, the most interesting. In comparison with the Javanese, the Balinese music seems confined to a narrower range of sound and expressiveness, though I am assured that the Balinese musician beats out his limited repertoire with no less enthusiasm than the Javanese

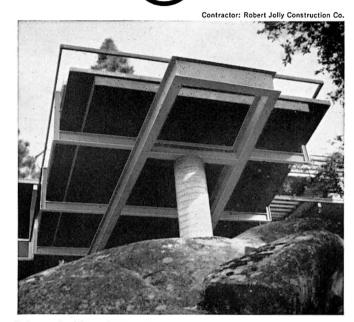
In concluding these two articles about the Festival of Oriental (Continued on page 30)

### New Western ideas in (USS) steel

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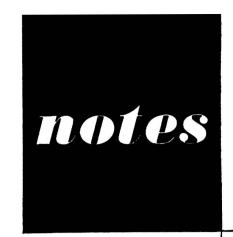


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### in passing

For anyone who does not have frequent contact with works of art, abstract art—like so-called pure poetry and music—does not reflect human interests or conflicts. It is an impenetrable phenomenon, gratuitous and incomprehensible. Basically, this criticism is founded on the debatable premise of the antagonism between form and content, the old belief that the aesthetic value of a work lies in its meaning, in something anecdotal, logical and discursive. But in reality a work of art is an autonomous universe, a world in itself.

It is difficult to reproach abstract art with being completely estranged from life. What could be more expressive of human feeling than the intimate landscapes and the secret perspectives of the soul of an artist? Of course, abstract painting is not a definitive style, nor an example for all time. But it is an undeniable fact that it represents one of man's artistic expressions through the ages, and that it reappears with a strangely cyclical regularity.

Nor is it necessary to take a stand and say, categorically, that abstract art is the only valid art form of our time. It is better to adopt a long view and to consider it as a very generalized expression of this century's culture. Artistic phenomena do not spring up like mushrooms. It is a historical fact that abstract art forms have appeared simultaneously in the United States and in France, in Brazil and Greece, in Peru and India.

In the case of abstract or non-figurative art, the first thing that strikes us is that wherever it appears, it seems as if it were emerging from deep historical strata and not simply from the whim of an isolated group of artists. A second look will show that the tendency towards the purely abstract is not new and that it has a special significance. And lastly, it does not indicate the absence or decadence of a technical ability to reproduce reality in its precise details. On the contrary it responds to an express will of art, or *Kunstwollen*, as the Germans say.

One of the principal characteristics of abstract art (as of all art) lies in the free and autonomous use of artistic elements: lines and colors in the case of painting; sounds in certain classical musical compositions, as for example in a Bach fugue, and the pleasures produced by them do not have a pathetic relationship with the private feelings of one person or another, as Ortega y Gasset once pointed out

A factor which has played an important

part in the evolution of abstract art is the development of photography. The faithful eye of the camera has liberated the arts from their servitude to concrete reality. For deep down in human consciousness there is always the desire to perpetuate one's memory on earth. The custom of erecting monuments and painting pictures to record the profiles and acts of men—whether it be a Caesar or just an ordinary man—arises from this psychological need.

There is another factor to be taken into account when considering abstract art. Art historians have pointed out that the existence of naturalistic and antinaturalistic styles through the centuries are an echo of different spiritual realities. Naturalistic tendencies generally appear in times of stability, when man is content with his lot and when violent antagonisms do not exist. The trend toward abstractionism, on the other hand, generally appears in times when this happy relationship between man and his environment does not exist. In this case, since the artist reflects his time, it often happens that he creates abstract forms because he can introduce in them a harmony that responds to a basic human desire for balance and concord.

We live in a time of vital change, when men are wrestling with vast problems to which they cannot yet find the answers. This may explain the retreat of the artist from reality. Then there is also the impact of science. The world is full of mathematical formulas and abstract forms of scientific discoveries charted in laboratories. It may be that the artist, influenced by these factors, is trying to translate such mathematical images into the algebra of an artistic style.

All this goes to show that, after all, abstract art does mean something. In fact, each form of art has its own particular language and those who study it must know or at least understand this language. It is by no means certain that all classical forms are understood at first glance, for the work of art speaks only to sympathetic ears.

to sympathetic ears.

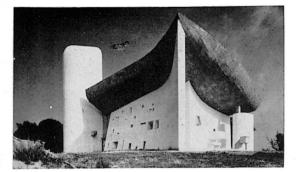
The saying: "I do not propose anything, I do not impose anything, I expose" would be a very apt motto.

The rest is a debate for tomorrow. Time will show whether these works are Horace's "eternal monument" or Malraux's "scar on the earth." But they are the products of our time, and as such they may have many meanings and bring further proof that the twentieth century is striving for unity and order among the diversity and chaos of our time.

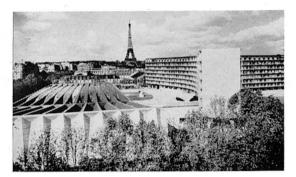
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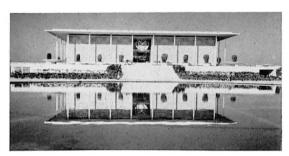
12



LE CORBUSIER



MARCEL BREUER, BERNARD ZEHRFUSS, PIER LUIGI NERVI



EDWARD DURELL STONE



RICHARD J. NEUTRA



R. BUCKMINSTER FULLER



SKIDMORE, OWINGS AND MERRILL

### FORM GIVERS







EERO SAARINEN AND ASSOCIATES

This architectural exhibit is more than a proclamation of excellence; it presents the work of men who have been in large measure responsible for the New Architecture of our age. The full meaning and importance of their ideas are just now beginning to be widely understood. In looking at the photographs and models of their work, one is struck by the great variety of these ideas, which reveal the many and, at times, contradictory aspects of a vital esthetic growth.

The intellectual theories which have served as springboards of creative action in this century can be observed here in their formal expressions; among them, forms born of the neo-humanistic philosophies in their many romantic variations, crisp and naked structures built on rational-functionalist beliefs, and those erected in the faith that our technological era needs poetic transfiguration. Rather than assess creativity by narrow labels, it may be proper and more important to say that these men all have in common a deep commitment to express the reality of our time. Their forms are less the obvious signs of renewal than the efforts to express the symbols of our contemporary life, which is demanding in its awareness and is of infinite richness and variety.

These gifted men have searched for truth and have given it form. But truth is enormously complex and elusive; it is more than function or structure or emotional fulfillment. It is all of them, plus the imaginative spark of artistic conception. Architecture is many things, but above all it is an Art, and only as such will it produce significant forms. Modern forms are born through the experience of our own time—a fleeting moment in human history, a coming together, so to speak, of certain elements to form a crystal.

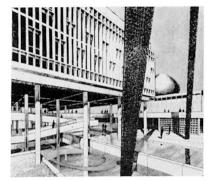
From the very dawn of civilization the search for symbolic expression has been an instinctive and universal urge of mankind; thus Architecture has expressed the circumstances of its culture and the social events of its time, a true mirror of human evolution. Our own century has witnessed deeper changes than in any previous age. The search for meaningful forms has been in a context of swift scientific advances, of wars and social upheavals. Thus we have needed greater understanding and perhaps greater courage.

It has been a very difficult task to restore that subtle relationship between form and matter which the spirit of poetry requires; archi-

### BY PIETRO BELLUSCHI, DEAN, SCHOOL OF ARCHITECTURE AND PLANNING, MASSACHUSETTS INSTITUTE OF TECHNOLOGY

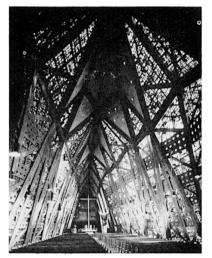
INTRODUCTION TO AN EXHIBITION ORGANIZED AND SPONSORED BY TIME MAGAZINE FOR THE AMERICAN FEDERATION OF ARTS





LUDWIG MIES VAN DER ROHE, PHILIP JOHNSON

**WALTER GROPIUS AND ASSOCIATES** 







LOUIS SULLIVAN

tecture, like poetry, continually needs fresh new language to express itself. Thus the creative struggle never comes to an end, because the human mind is nourished not only by what it sees but more so by what it understands; and as understanding grows, so does the scope of its creative powers.

Perhaps this response of architecture to life is the great unifying attitude of these men as well as of all creative men in all the Arts. It is an attitude which automatically excludes the inferior, the cheap and the bizarre, while it exalts the subtle, the significant and the appropriate. We may even believe that only by such a philosophy will order emerge from the chaos of our urban complexes, that esthetic guidance may be given to our technological efforts, and salvation wrought from the dangers of our materialistic age.

It must be clear then that the mere invention of forms is not the whole of architecture; even as an art it must satisfy many restrictive conditions. Above all, it must submit to an underlying discipline of logic and order; arbitrary or merely fashionable forms would only add to the visual chaos which already tends to engulf us everywhere. We find that in nature itself what is created can be of infinite variety and still obey certain universal laws of life as well as more limited laws dictated by climate, function and adaptability; chaos does not exist in nature, only in the man-made world.

The truly creative man then, the great Form Giver, searches instinctively for this sense of logic and order and even restraint (not to be confused with the concern for the merely practical or the commonsensical), which is a condition of "Beauty" in all the Arts. Many believe that the artist alone possesses the intuitive feeling for this condition and the self-discipline to submit to it. But in our age, artists have had a hard time. They too have been separated from the roots of life. Also there are too few of them; and more importantly, there is no way to bestow the laurel wreath nor to prevent the mediocre man from assuming the role of Form Giver.

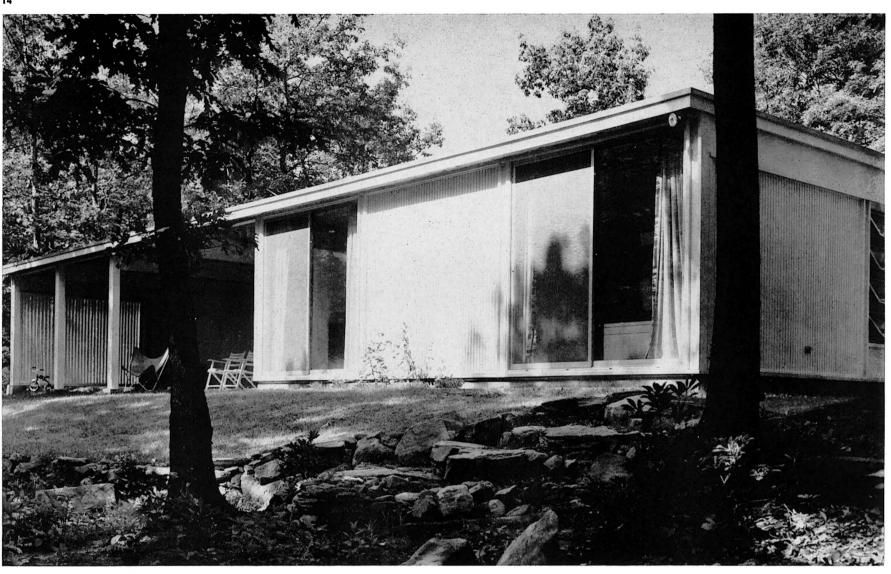
Therefore, while this exhibition emphasizes the enormous contribution of these artists as Form Givers, it would be wise to be aware of the dangers of the purely formalistic approach to architecture. The profession is not always as alert as it should be to the fact that life never stands still, that its very freedom brings constantly new elements to the framework of our intellectual theories, and that only the understanding of life will keep architecture rich and vital and able to express what has validity in relation to time, mood and function.

Some critics may not accept as definite this list of architects as "Form Givers," which was prepared by Time for The American Federation of Arts, and it is true that some great foreign names have not been included nor have the names of many younger men. But no one will deny that the list contains the names of the great originators, the philosophers of the revolution, as well as the names of younger men who consolidated the gains and brought widespread public recognition and acceptance of the New Forms.

If this group is predominantly American, it is because the opportunity for architectural advancement has been greater in America than in other countries because of our greater industrial expansion and the freedom and vitality of our institutions. Yet we may be reminded that about half of these men are not American born. It is also fair to say that there were other great men before, who prepared the ground for the enactment of this century's architectural drama.

Architecture is a complex of Art and Science. To flower in our modern climate, it needs many minds and many talents working together. In our day, the artist-architect is learning to accept technology as a great liberating tool to enhance and enrich rather than to demean man's way of life; he recognizes the importance of Man as a measure and inspiration for his Form Giving. He realizes that even as our society is undergoing enormous changes, particularly in the enlarged scale of space and time within which mankind must operate, he never forgets that the individual remains physiologically unchanged, that his basic emotions cannot be denied, that love of color and texture and play of light have a real meaning to him, and that merely intellectual rationalizations will not satisfy him for long. We may feel that ornament and richness of space may again return as a part of man's long heritage. The architect is in effect the humanizer of society, the artist with the will to make the earth a fitting place on which to live.

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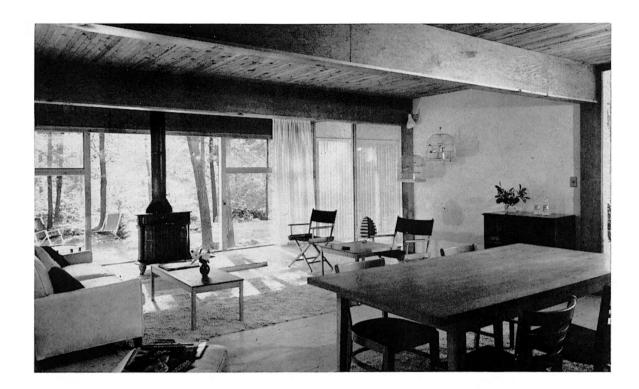


HOUSE BY PETER BLAKE AND JULIAN NESKI, ARCHITECTS







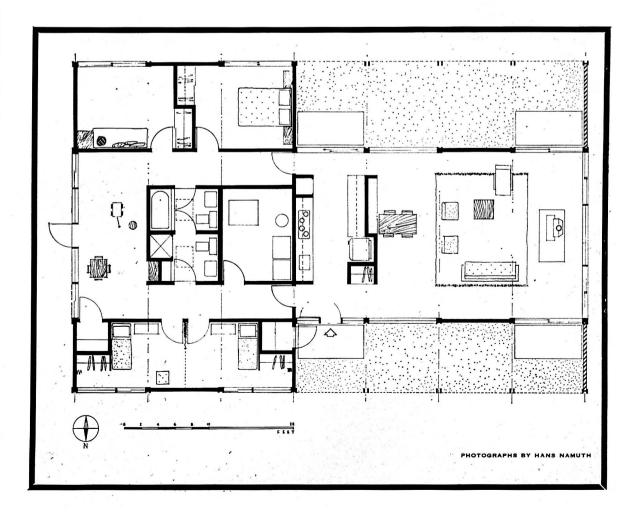


The owners are a young couple with two small children. In addition to minimum bedrooms for themselves, they wanted a guestroom and a play area for the children. The house was designed to be added to toward the east, in multiples of the 8-ft.-wide bay, so as to provide more bedrooms and a larger family room in the future.

The plan is centered on a compact utility core, lit from above through plastic skylights. This core forms a sound-baffle between the children's area and the adults' living room. Almost all rooms can be reached directly from the garden and terraces around the house. The kitchen controls all major entrances and spaces. The main living area is largely glass-walled, with deep overhangs along two sides to provide sun-protection. The terraces under these deep overhangs allow for a degree of outdoor living during inclement weather.

The post-and-beam frame was based on 8 ft. module, determined by the width of standard, aluminum-framed glass sliding doors. The module results in a pattern of 8 ft. wide, 8 ft. high structural bays which are filled either with glass or with siding of narrow-width Douglas fir "Texture One-Eleven." The post-and-beam system is carefully expressed on all facades. All posts consist of H-shapes made up of "flanges" of 2" by 8"s, and a "web" of two 2" by 4"s. The roof deck is of 2" by 4"s set on edge and spiked together to form a structural "slab" of wood with great insulating qualities. The handsome texture of this deck is apparent where it forms the exposed ceiling. The floor structure is a concrete slab, with warm air perimeter heating in the slab.

The landscape surrounding the house is extremely romantic—great rocks and cliffs, wild laurel bushes, a small stream and many tall trees. The house is treated as a very formal pavilion, set upon a kind of pedestal in this informal setting. The house was painted white to emphasize this contrast still further.

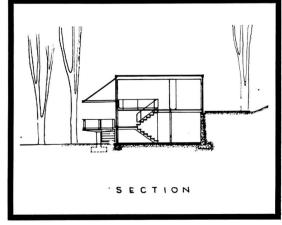




HOUSE BY DONALD OLSEN, ARCHITECT









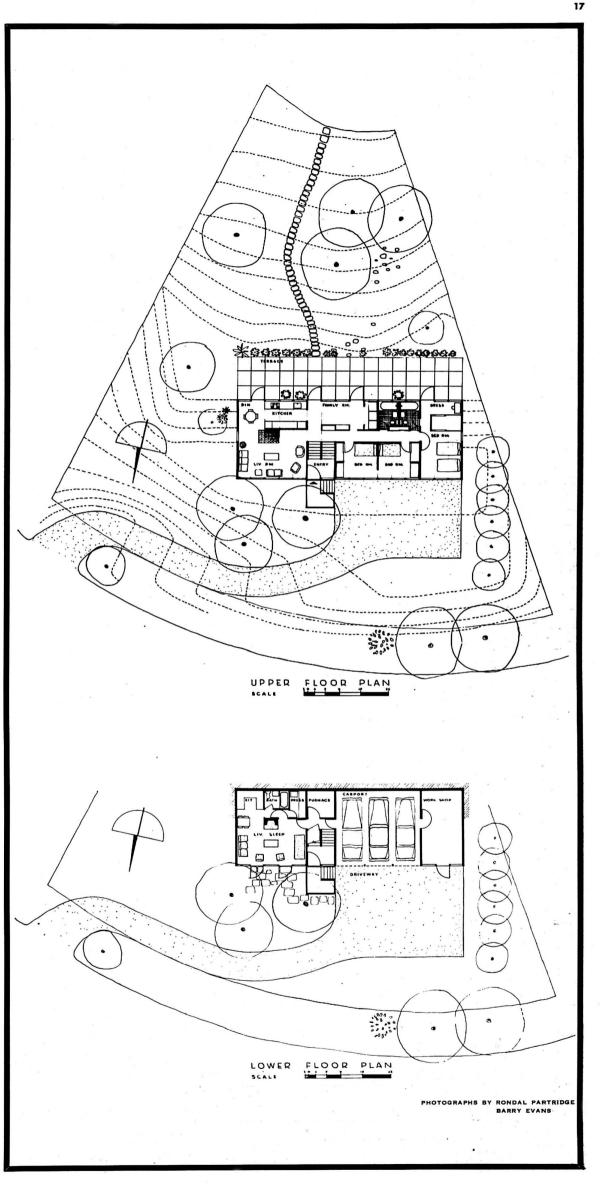


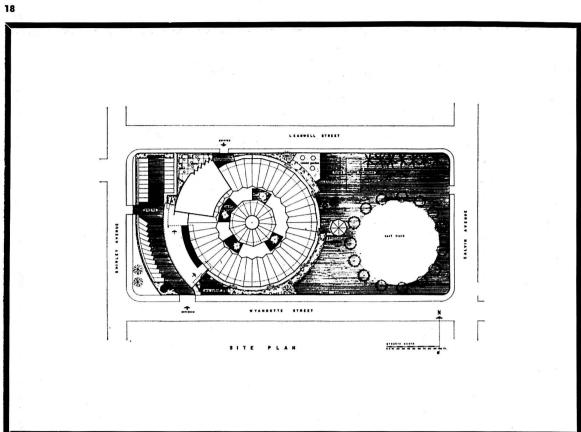
In this project the requirements were organized, as indicated on the plans, to account for the steep slope of the land, to secure the sweeping view to the north, and to receive sun from the south. Also it was necessary to gain access to the grade at the south from the main living rooms while maintaining grade access from the lower level spaces.

The upper level contains the conventional living spaces; the lower, a complete separate apartment with private entrance, furnace, and utility space, car storage for three cars, and a studio workshop. A limited budget required a simple construction system. The four-foot modular arrangement articulates and organizes the spaces; the structural mullions, placed in accordance with the module (4'-0" o.c.) support the roof structure while they form the north and south window systems. The uniform and economical structure afforded the possibility of such refinements as the free-standing concrete entrance porch and the hanging canopy. The house is white with gray trim; the interior, beams and mullions are enameled glossy white; the ceiling boards painted warm blue. In general the interior walls are painted white with the exception of selected areas which are black or gray.

A small portion of the land, immediately adja-

cent to the north and south sides of the house, is developed for use as recreation, terrace, entrance and drive; the remainder is left essentially natural dominated by large eucalyptus trees.

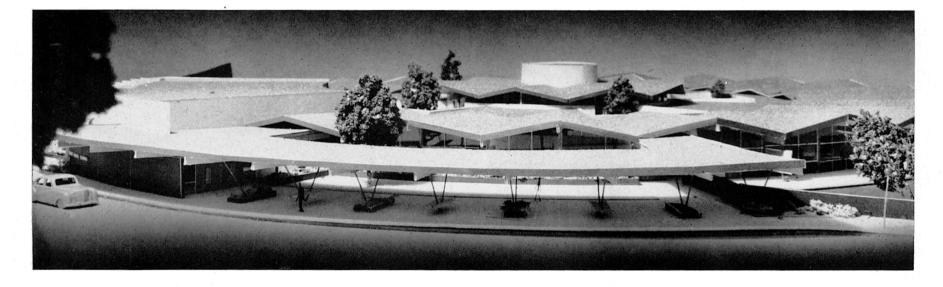


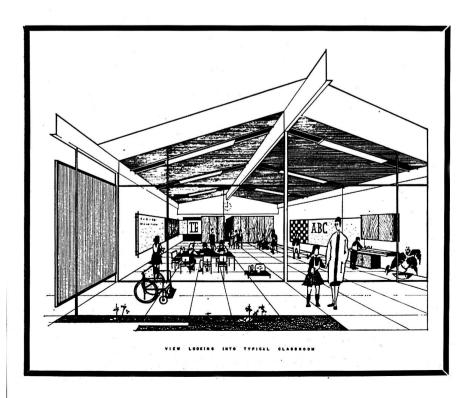


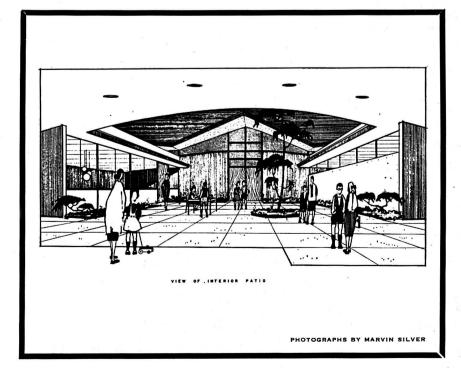
This school is designed specifically for physically handicapped children. The purpose of the school is to equip the children to lead as normal a life as may be possible for them: first, by providing them with a normal education; second, by providing those who require it with physical and occupational therapy. The parent-teacher association sponsors a hydrotherapy wing, and provision is made in the plan for such a future addition. The school also provides outpatient facilities for children who are either outside the pupil age group, or whose handicap prevents them from attending classes.

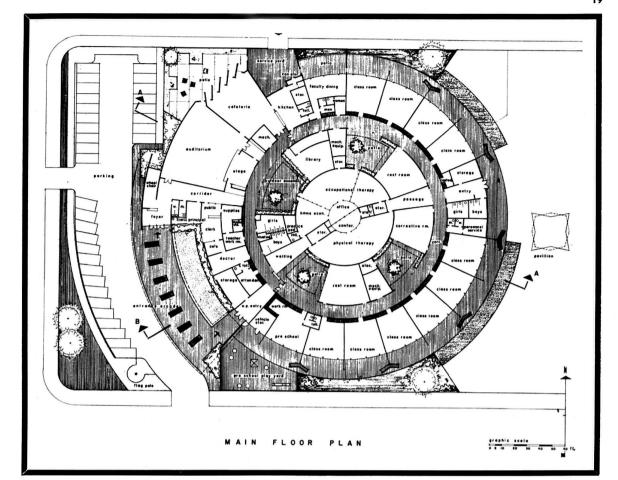
The pit-fall of institutionality seemed a real danger, and a conscious effort was made to avoid it. The design approach is one of informality; the roof lines, the curving corridors, the alternating areas of open and closed spaces, are designed to intrigue childish imaginations and to provide a variety of experiences. Further, a sense of shelter is sought through closed vistas, deep overhangs, and intimate scale. The circular corridors cut corners to a minimum, eliminating "traffic intersections." The radial plan separates the therapy areas completely from the classrooms, yet makes them immediately accessible to all parts of the school. The therapy rooms are customarily used by small groups functioning simultaneously in each of the areas. Access and supervision are facilitated by the central therapists' (Continued on page 30)

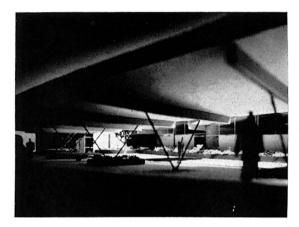
### SCHOOL FOR HANDICAPPED CHILDREN BY SIDNEY EISENSHTAT, ARCHITECT, AND ASSOCIATES

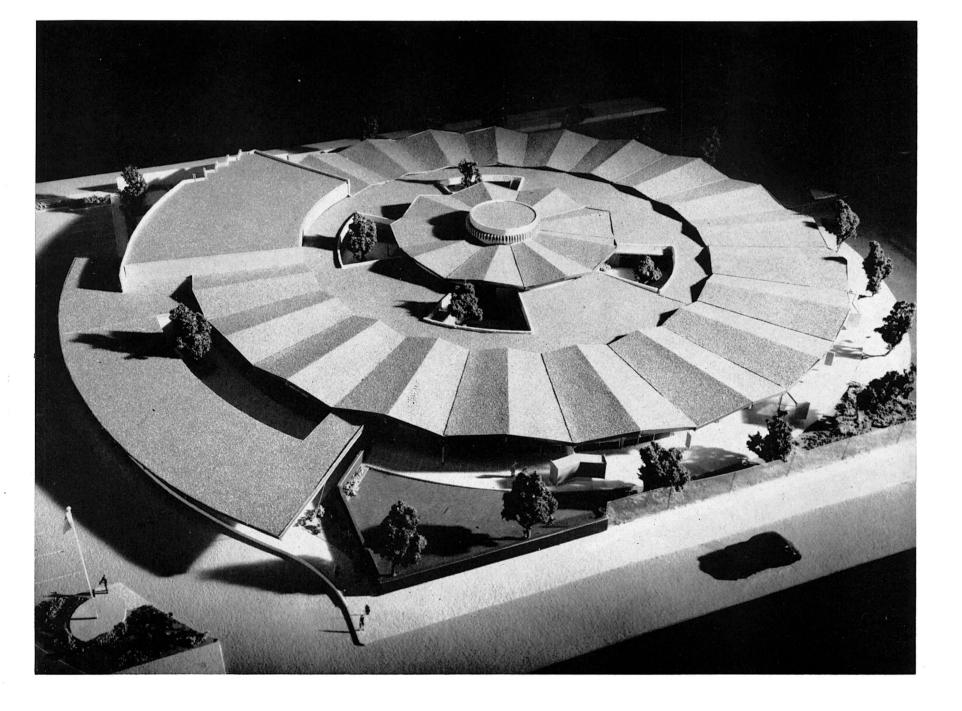


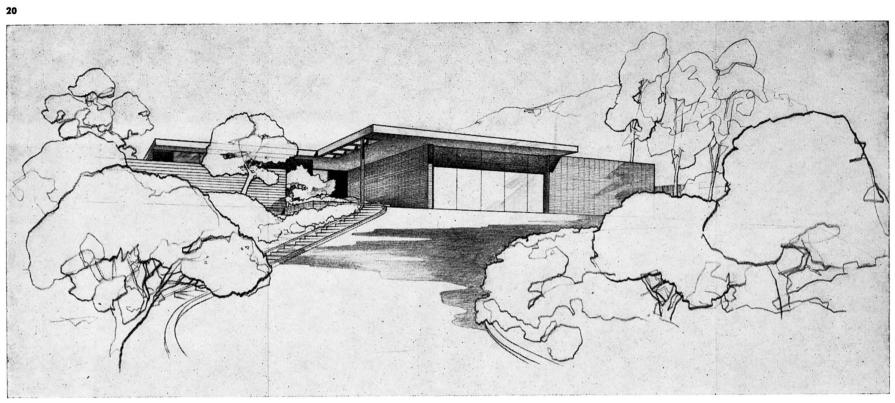




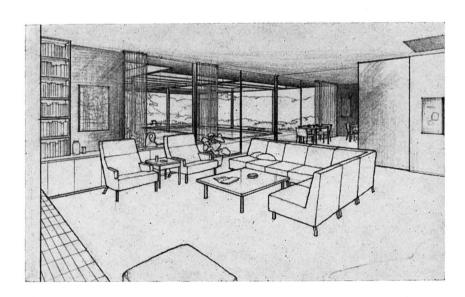


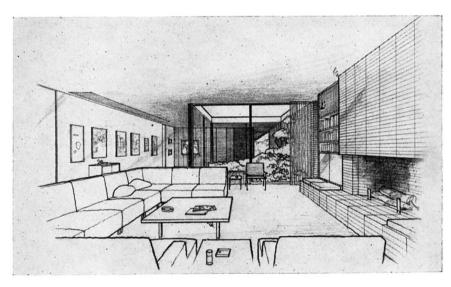


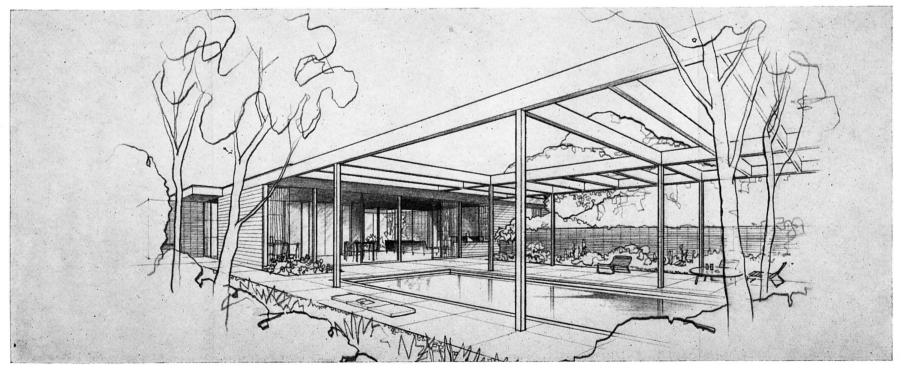




HOUSE BY THORNTON M. ABELL, ARCHITECT



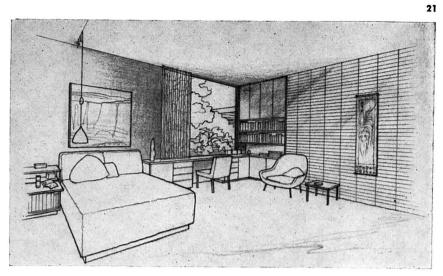


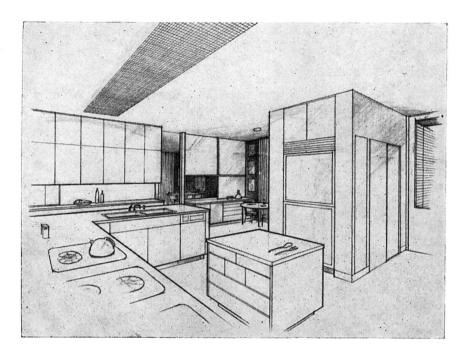


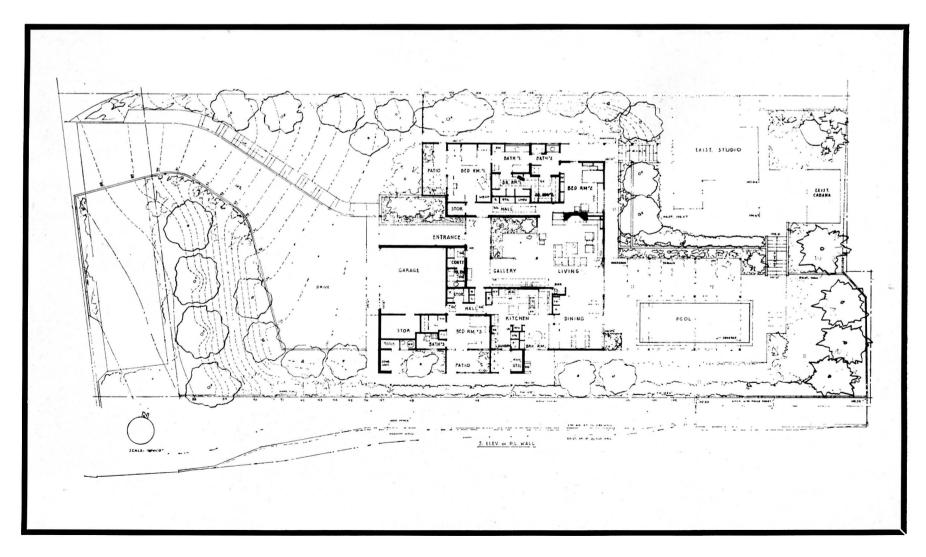
The site had once been an orchard of an estate in an old residential neighborhood. There is no particular view except a pleasant surrounding of trees. The house is designed to provide very spacious living areas, including a gallery for a collection of paintings, living space to seat at least eight, a small concealed bar, and a formal dining space separated from the living space by sliding plastic panels. This living area opens toward a partially covered terrace with a small swimming pool. The kitchen is skylighted; adjoining are a room, bath and patio for the housekeeper. Off the entry are a coat room and a powder room. The owners' suite includes two bed-sitting rooms with generous storage facilities, and two baths and dressing rooms. An old existing guest cottage will be used as a painting studio for the owner.

Skylights are used extensively in the house, as a source of both natural and artificial lighting. The lighting of paintings both in the gallery and elsewhere was a very important factor in the design. The patio will further integrate the house with the garden, and will provide a place for unusual plants and perhaps sculpture.

The construction is wood frame, with stained rough cedar bevel siding exterior, and drywall with wall covering interior. Certain masonry walls, inside and out, including garden walls, are of white brick. Stained exterior concrete will have white brick dividers at intervals. Wood joist floor construction is used, with plywood sub-floor and vinyl or carpet finish. Counters are Formica, tile and Carrara glass. Sliding doors are steel. Fixed and louver windows have aluminum frames, with louvers of white obscure glass. Colors generally will be warm, with cooler accents, and will be closely integrated, to provide a proper background for painting accessories, and relation to the site.







### PRIME DESIGN BY R. BUCKMINSTER FULLER



"To many of his listeners, Fullerese is an engineer's version of Finnegan's Wake . . . [but] his basic aim is simple: 'I propose,' he once said, 'to devote all my energy to finding ways of doing more with less to the end that all people—everywhere—can have more and more of everything.'" Buckminster Fuller's energy is tremendous, and today three research companies working full time developing engineering data, are hard put to it to keep up with his ideas and designs.

Energetic-synergetic geometry discloses nature's own system of coordination. Possessing this knowledge and taking the design initiative, man can enjoy nature's exquisite economy and effectiveness.

We must be concerned with nature's employment of energetic and synergetic geometry principles at the nuclear, atomic, molecular, microbiological and crystalographic levels of structural patterning. We are reminded that at the "everyday" level of reality men do not build houses with materials—they organize visible-module structures comprised of sub-visible module structures. The principles governing structure operate independently of man-tunable spectrum range. Associative chem-1 istry is structure.

For all time man has subconsciously coordinated himself with universal evolution. He does not consciously push each of his millions of hairs out through his scalp at man-preferred rates or selected patterns and colors.

Man now enters the phase of meager yet conscious participation in the anticipatory design undertakings of nature. This conscious participation itself is changing from an awkward, arbitrary, trial and error ignorance to an intuitively conceived, yet rigorously serviced, disciplined elegance.

Man has been flying blindly into his future on scientific instruments and formulas. The great news on the artist-scientist-intellectual frontier is that as the fog and black shadow of ignorance and misconception recede there looms a sublimely comprehensible conceptual patterning, which characterizes all the mathematical principles heretofore only formulatively employed by the scientist, yet intuitively pursued by the artist as potentially modelable. Experimental science has validated the artist's intuitions but not his disciplines.

The frontiers of physical experimentation have found no basic "building blocks" structuring nature. There are no *thing*-particles. Only pattern transactions in pure principle have been discovered. Man has therefore been forced to abandon the misconception of a "smallest fundamental particle" upon which the age of materialism was axiomatically predicated.

Where do we go from here? We are dealing with a complex integrity of complementary patterning transformations. Realization is objective integrity. Science, in its disciplined preoccupation with myriad subjective differentiations, serviced by an inbreeding specialization, has unwittingly eluded comprehensive social responsibility for objective potentials or the consequences of its findings and acts.

Engineering and architecture, though objective and integrative, have no economic initiative. When men design professionally only when employed by a patron, the patron becomes the prime designer. The patron initiates that which is to be detailed within the patron-conceived limits of undertaking and responsibility.

Ivory towerism in the scientist and professional-securityism in the architect-engineer have left social initiative to political man, who in

turn has passed the buck to the military. The hired military service man has done his best within his limits as prime design initiator. His design authority is limited, however, to the augmentation of his tools. His tools—weaponry; their physical objective—killingry, the negative of livingry.

The historic pattern of weaponry is epitomized in the TV Western. The bad man draws first; the good man starts late but finishes first. The bad man is finished. Now comes the surprise. The range has been so increased, and the dueling has become so sophisticated, that both sides can get their effective shots in, and nobody wins.

Today's warhead travels at 15,000 miles per hour. With 5,000 miles to go, it takes twenty minutes to reach its target. Man's eyes, augmented by radar, penetrate around the world at a velocity of 600,000,000 miles per hour. As he spots the warhead's takeoff in his direction, he has more than nineteen minutes in which to get his own warhead under way. There is ample time for each side to obliterate the other. Both good and bad man lose. Even the world political leaders realize that the pursuit of weaponry has reached "absurdity."

When Sputnik was launched, it made the airplane obsolete as the number one weapon. In the half century of the airplane's weapon supremacy, two and one-half trillion capital dollars invested by the world nations, converted the highest scientific and technical capabilities of man into the historically most advanced phase of integrated mass production industry.

No private individuals, nor the massed credit potential of any group of private individuals, could have underwritten so astronomical an acceleration in the comprehensive industrial technology, as was underwritten by the negative mandate articulated by the military. So vast was the production facility thus developed that in this short fifty-year span, all that had been technically scarce, and therefore on highest priority, became plentitudinous.

All the future jet plane production requirements for the swifty developing world transport system, and all the future military rocket production, together can utilize less than ten percent of the industrial mass-production facility created to implement the airplane as the premier weapon.

History's amalgam of total experience, its derived knowledge and wisdom as altogether converted to highest industrial mass productability and omni-distribution, has boiled over. Wealth, as the organized physical ability to deal successfully with forward evolutionary events, has attained almost infinite magnitude.

The "organized physical ability" means entire automation of world industry. This eventuality was always inherent in the intellectual pacing of industry. Its complete attainment is suddenly imminent. Marx's worker—the automaton—the muscle and reflex machine—is replaced by automation. Man, losing all significance as physical producer, becomes utterly essential to the industrial equation only as the regenerative consumer. The industrial wealth potential of automated production

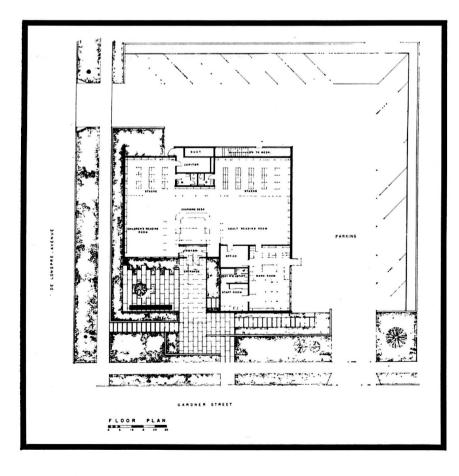
capability may only be realized by an anticipatorily designed, systematically established and credit accounted matching consumer capacity. The efficiency of the industrial equation is directly proportional to the numbers consuming.

The political economy, winning and holding the largest proportion of the world's consumer population, can operate at the highest efficiency ergo: at the lowest cost, while attaining the fastest rate of realized wealth augmentation.

The world's political leadership will now undertake the exploitation of the abundance of the "bestest" to win for its respective political camps the heretofore unserviced world customers of the industrial equation. But they will discover also that total world resources invested at the performance per pound level of presently designed livingry will serve only forty percent of the world's population. To serve one hundred percent will involve a world design revolution—not just design of end-products, but design of the comprehensive industrial network equations including world around livingry-service systems, at regenerative occupancy rentals, mutably installed in anticipatory facilitation of total world enjoyment of individually respected total man-a comprehensive design including not only the network means of production, distribution, maintenance, search, research and continual improvement of service, but also the continual, methodical withdrawal of progressively obsolete facilities tonnage, its reprocessing and recirculation at ever higher performance ratios per pounds of physical resource investment-together with design of the economic implementation of ever greater numbers of consumers to match the ever increasing tooled-up production capabilities-together with designed consumer traffic patterning controls permitting ever higher frequencies and velocities of electively enjoyed services devoid of individual interference incidents. Such designing has brilliant prototype precedent in the telephone system's anticipatorily successful and inherently regenerative physical network instrumentation evolution. The contact instruments of the world around livingry services must be anticipatorily net-worked and its consumer-contact instruments and facilities must be installed at consumer request (not sold) for nominal service fee and the network services utilized by the consumer through his contact equipment to be billed only "after the month" and after the provision of the accruing regenerative advantage realizations by the consumer whereby the wealth may be established to refund the services in the accounting system designed into the comprehensive undertaking. The prime design must also provide for the orderly transfer of the world consumer population from the obsoleting "worker" payrolls over to the world educational system's advanced search, research and vital regeneration functioning. Einstein's norm of constantly transforming evolutionary patterning must designedly replace Newton's now invalidated static norm.

Only the free-wheeling artist-explorer, non-academic, scientist philosopher, mechanic, economist poet who has never waited for patron-startering and accrediting of his coordinate capabilities holds the prime initiative today. If man is to continue as a successful pattern-complex function in universal evolution, it will be because the next decades will have witnessed the artist-scientist's spontaneous seizure of the prime design responsibility and his successful conversion of the total capability of tool-augmented man from killingry to livingry.

# STANSIES PURIS LINEARY STANSI

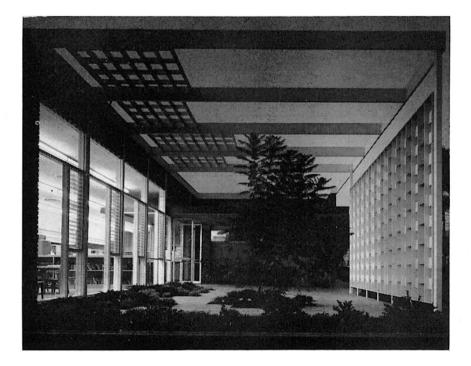


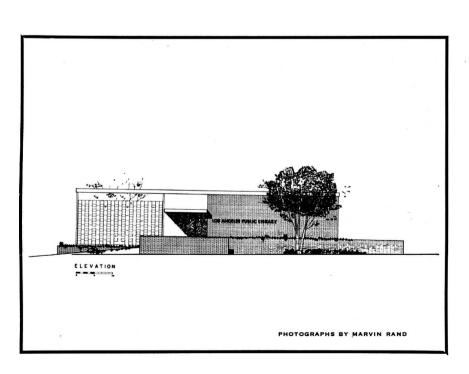
### **BRANCH LIBRARY BY**

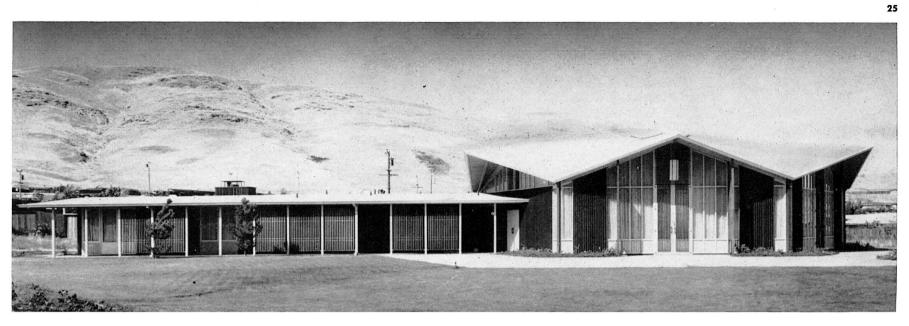
### DOUGLAS HONNOLD AND JOHN REX, ARCHITECTS AND ASSOCIATES

This 4000-square-foot project is part of a city-wide program of expansion and improvement of library facilities. Located on a residential street, an effort has been made to keep the building quiet and inviting and to avoid the institutional look. The landscaped entrance court defined by a metal screen separates the reading room from the street and its noises, thus a light open feeling is achieved in the children's reading-room through extensive use of glass without sacrificing quiet and privacy. In addition, the trees and planting and an overhead metal trellis which echoes the design of the front screen protect the glass wall from sun and glare.

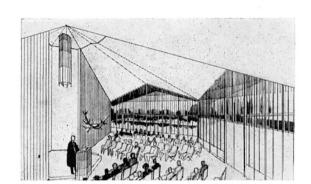
As a tight budget did not allow air-conditioning at the present time, cross-ventilation in the reading room was essential and was achieved by a continuous high strip of louvered windows across the rear wall. The traffic flow has been directed to a centralized desk in order to control incoming and outgoing public. The basic building materials used were brick, plaster and steel, and exterior materials were expressed inside wherever possible. Louvered windows were used extensively to provide a maximum ratio of ventilation to window area. A forced-air heating system was provided, with provisions made to receive a future "add-on" air-conditioning system using the same fans and ducts.

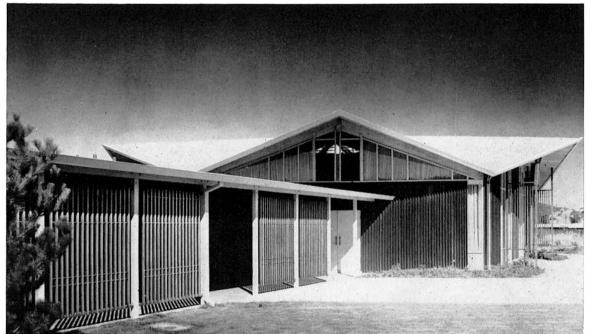






### CHURCH PROJECT DESIGNED BY CAMPBELL AND WONG

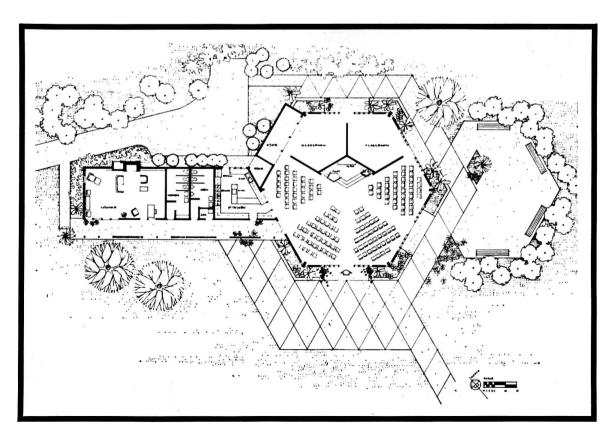




The master plan for a Presbyterian facility provides for three structures with appurtenances for activities of the church within, and entrances, walkways, parking facilities and a completely landscaped site. The first-planned construction is a distinctive hexagonal all-purpose building with adjoining wing and covered walkways. For present needs, partitions can be utilized to provide four large Sunday School rooms. The seating capacity can be varied to a maximum of 270 by rearrangement and removal of partitions.

The building is also to serve as an auditorium for pagagnts and theatricals. The varieties structure.

for pageants and theatricals. The versatile structure is planned with three glass-paneled walls and three wood-sided walls. Adjacent to it, and protected by the covered walkway, is an area for outside activities.



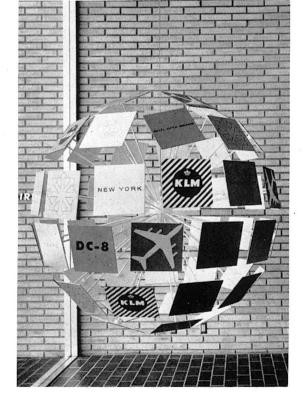
This project was one of several offices designed by Craig Ellwood Associates for the KLM Royal Dutch Airlines. Originally the space was planned as part of a new block-long office building project and was to be one of a half-dozen ground floor shops; and since this was to be the end shop on the corner opposite the office-tower unit, the owners of the project permitted the tenant to alter the exterior design with, however, certain restrictions: the floor slab and roof structure as originally planned had to be used, and since adjacent shops were to have canopies with nine-foot high vertical faces at canopy ends, the designers were requested to do likewise. Since the client desired to use a much larger sign than that allowed by the city code on canopies projecting over city property, the glass-walled entry was placed five feet back from the property line with the canopy face placed on it.

The canopy is constructed of aluminum-framed blue wireglass (face and roof) and is illuminated at night with a continuous outdoor luminaire placed over the glass roof. Since adjacent shop canopies are of plaster and cantilevered ten feet beyond the property line, the effect, as was the design objective, is that this space is an entity in itself

To achieve this, and to gain height for the sign, the building height was increased five feet through the use of parapet walls. The glass-faced canopy conceals the parapet on the main facade and serves as a softly illuminated translucent background for the sign. A change in details and materials from the adjacent shops further accomplishes the separateness: the structure is exposed; the facade is framed in white-painted steel; exterior walls "Dutch white" Norman brick both faces; interior walls are white plaster; flooring is 4" x 4" terra cotta quarry tile; the acoustical luminous ceiling is gold ½" x ½" aluminum egg-crating. The designers controlled all interiors, including color, furnishings and display graphics.



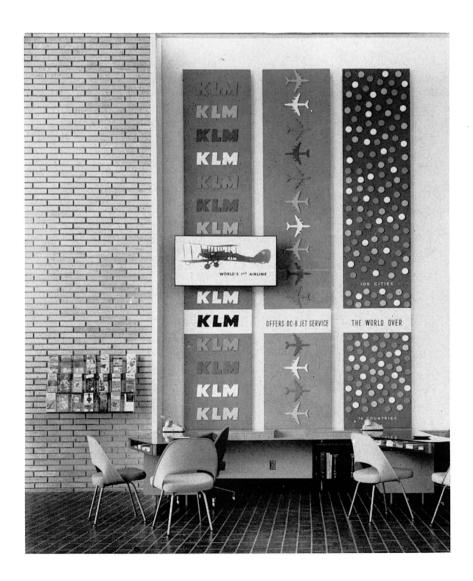




PHOTOGRAPHS BY MARVIN RAND



AIRLINE OFFICE DESIGNED BY CRAIG ELLWOOD



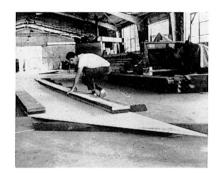


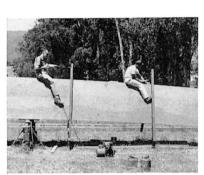
J. LOMAX, ASSOCIATE WALTER HART, CONSULTING STAFF ARCHITECT FOR KLM RALPH BENNETT, GRAPHICS

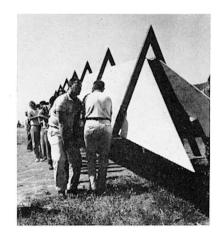


### STUDENT PROJECT—CALIFORNIA STATE POLYTECHNIC COLLEGE

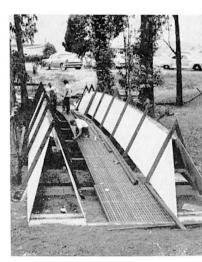










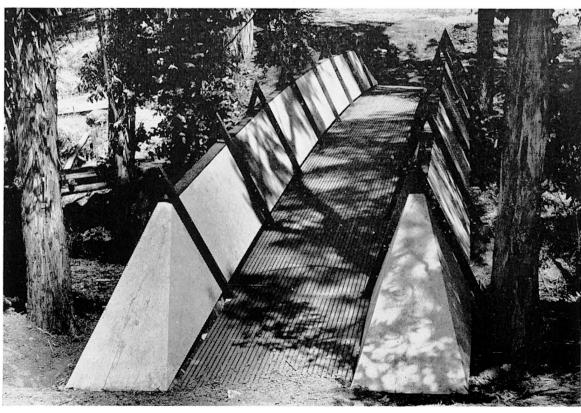




The need for a foot bridge crossing a creek adjacent to an elementary school suggested a group assignment to the project as a curricular activity. It was a project that would go beyond the design and theory phases, would be constructed and tested in full scale; the results not only to serve as a working assignment but one which would fulfill the need in use.

The site presented several problems. The structure was to span a creek and provide a passage between the school and a new city park. Care was taken in locating the exact crossing so that no trees need be removed. A careful study was made in terms of materials and construction problems. The use of concrete and steel was considered, but wood was finally decided upon because of the many favorable factors involved: simpler connections requiring fewer tools, easier cutting and handling.

After studying the problem through a series of phases, the final bridge design is a modification of the principle of the box beam. It was felt that a proper and full use of the plywood material was made. Not only do the triangular beams perform the structural requirements, but they also serve as a protective railing. Full 4' x 8' sheets of Douglas Fir plywood, cut only slightly at the ends to facilitate a camber, were used to resist shear. Continuous 2" x 10" top and bottom chords were adequate to resist the imposed moments. Fabrication was relatively simple since there are only six different members making up the structure, and of these six only the hand railing required special nailing.



In a heavily populated resort area with very high land costs, this house was designed for a bay front lot. The designer used an all-steel rigid frame, and built vertically in order to contain approximately 2,000 square feet of floor area. Despite land limitations and codes prohibiting dwellings over two stories, the designer has met the requirements of the owners by turning the roof level into a penthouse-patio. The stair penthouse encloses mechanical equipment and a barbecue and bar facilities. The lower level opens onto a bayfront terrace and yacht slip. The living room has a terrazzo floor. A steel stairway with carpeted wood treads connects the three levels.

Bethlehem Steel 6" and 4" H columns and 10" I beams were used as primary members of the structural frame for floor supports and wall columns. The steelwork was erected over a poured steel reinforced slab and foundation. The designer used curtain walls of wood, lathe and plaster construction and panels of clear and translucent glass for exterior walls. Interior panels are of tongue and groove clear cedar.

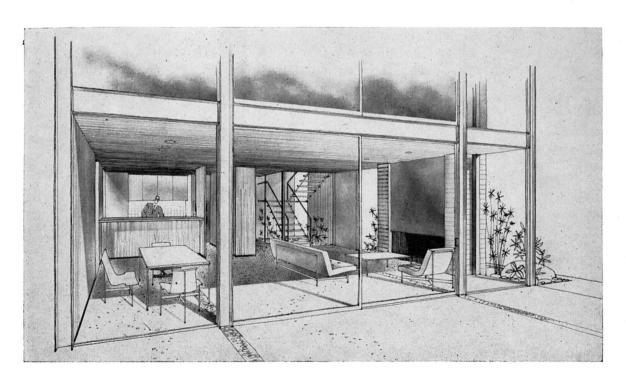
The interior of the house has been planned for the informal living of the resort community. The use of steel made for extremely close tolerances and permitted the designer to repeat on both levels of the house the glass expanses that were needed for the dramatic open front facing the water.

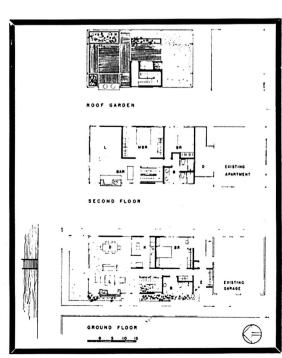






### **BAYSIDE HOUSE BY RICHARD JAY SMITH**





### PRODUCTS



### merit specified

### For Case Study House Triad

### Designed by Killingsworth, Brady and Smith, architects

The following are specifications developed by the architects for the Case Study House Triad and represent a selection of products on the basis of quality and general usefulness that have been chosen as being best suited to the purposes of the project and are, within the meaning of the Case Study House Program, "Merit Specified."

### STRUCTURAL

Douglas Fir Framing and Glue-Laminated Beams—West Coast Lumbermen's Association, 1410 S. W. Morrison Street, Portland 5, Oregon.

Roofing and Insulation—Owens-Corning Fiberglas Corp., Toledo 1, Ohio.

### Wall Surfaces-

Resawn Redwood 1x4 Butt-Joint, California Redwood Association, House A 576 Sacramento Street, San Francisco 11, California

Philippine Lauan Siding, Jones Veneer and Plywood Company, House B P.O. Box 252, Eugene, Oregon

Philippine Lauan Siding, Jones Veneer and Plywood Company, Eugene, Oregon House C

### Ceramic Tile

Pomona Tile Manufacturing Company, 621-33 North La Brea Avenue, House A

Los Angeles 36, California
The Mosaic Tile Company, 131 North Robertson Boulevard, Beverly
Hills, California; Zanesville, Ohio House B

Gladding-McBean and Company, 2901 Los Feliz Blvd., Los Angeles 39, House C California

Acoustical Tile-Owens-Corning Fiberglas Corp., Toledo 1, Ohio Pavina Surfaces

House A White Precast Concrete, Custom Casting, Inc., 21236 So. Figueroa, Torrance, California

House B Quarry Tile, The Mosaic Tile Company, 131 North Robertson Boulevard, Beverly Hills, California; Zanesville, Ohio

House C Brick, Davidson Brick Company, 4701 Floral Drive, Los Angeles 22,

Paint—Pittsburgh Paints, Pittsburgh Plate Glass Company, Paint Division, Torrance,

Pool Coating—Poly-Form Manufacturing Company, 1960 Del Dios Highway, Escondido, California

### DOORS AND WINDOWS

Sliding Glass—Arcadia Metal Products, 801 South Acacia Avenue, Fullerton, California

Glide-All Sliding Wardrobe Doors-Woodall, Inc., 801 Valley Blvd., El Monte,

Jalousie Windows-Louvre-Leader, Inc., 1045 Richmond Street, Los Angeles 33, California

### **FIXTURES**

Plumbing Fixtures—Briggs Manufacturing Company, 6600 E. Fifteen Mile Road, Warren, Michigan

Fans and Hoods—Trade-Wind, Division of Robbins & Myers, Inc., 7755 Paramount Place, Pico Rivera, California

Electric Fixtures-Lightolier, Jersey City 5, New Jersey

Luminous Ceiling—Integrated Ceilings, Inc., 11766 West Pico Boulevard, Los Angeles, California

Switches—Bryant Electric Company, Bridgeport 2, Connecticut

### **APPLIANCES**

Ovens, Ranges, Refrigerators—Thermador Electrical Manufacturing Company, 5119 District Boulevard, Los Angeles 22, California

Waste Disposals and Dishwashers—Waste King Corporation, 3300 East 50th Street, Los Angeles 58, California

Electric Can Opener—Trade-Wind, 7755 Paramount Place, Pico Rivera, California

### CABINETS

Carrier Cabinet Company, San Diego, California

### **FURNISHINGS**

Frank Brothers, 2400 Long Beach Blvd., Long Beach, California

### SKYLIGHT

Construction Plastics, 7926 West 3rd Street, Los Angeles 48, California

### STEEL COLUMNS

Custom Bronze and Iron Works, Chula Vista, California

Perma-Wall, Inc., San Diego, California

### SCHOOL FOR HANDICAPPED CHILDREN—SIDNEY EISENSHTAT

(Continued from page 18)

Because the handicapped child's world is a limited one, contact with the out-of-doors is made immediate and easy. Each classroom has its separate patio, accessible through ten feet of opening. The curve of the outside wall isolates each outside area and each patio has storage space for outdoor equipment. Within the building the interior courts provide splashes of light along the corridor and afford sheltered open-air areas for class activities. The stage has a two-way function, serving both the auditorium and a large assembly patio which, in the warm, dry climate of the area, will be intensively used.

While the playing field is small, it is considered adequate for the limited outdoor activity permitted by the children's physical handicaps. An adjunct to the playing field is a small area of raised garden plots. They are designed so that the child in a wheel chair may enjoy the gardening activity with the other children.

### MUSIC

(Continued from page 8)

Music and the Related Arts at the University of California, Los Angeles, I should like to extend unreserved compliments to all who helped make possible this unique occasion, to the student and faculty musicians who devoted countless hours of preparation and rehearsal to mastering their unusual instruments, to Gordon Stone, director of the Gagaku orchestra, and in particular to Mantle Hood, whose untiring, devoted, remorseless, and affectionate energy overcame all obstacles. His great musical capacity reaches beyond the formal chat of musicology, with its narrow pedantry and cautious reservations, to the living language of the world's musical instruments, speaking for them not only as scholar but as leader, and beyond these again to a world-view comprehending the needs of living musicians and the preservation of their cultures.

### CURRENTLY AVAILABLE PRODUCT LITERATURE AND INFORMATION

Editor's Note: This is a classified review of currently available manufacturers' literature and product information. To obtain a copy of any piece of literature or information regarding any product, list the number which precedes it on the coupon which appears below, giving your name, address, and occupation. Return the coupon to Arts & Architecture and your requests will be filled as rapidly as possible. Listings preceded by a check () include products which have been merit specified for the Case Study Houses 18, 20, 21, The Triad.

NEW THIS MONTH

(360a) Target Lighting: For home (360a) Target Lighting: For home, library, museum there is a small, handsome Art Beam-Lite to provide concentrated lighting on large or small paintings, objets d'art, and sculpture. This compact light can project a round, rectangular or oblong beam up to 25 feet. Also from France comes the Art Beam-Lite 100, 102 comes the Art Beam-Lite 100, 102 and 105 which have detachable bases and interchangeable lenses. For complete information write to: Morda Distributing Company, P.O. Box 24036, 12041 Wilshire Boulevard, Los An-

NEW THIS MONTH
(359a) Interior Design: Crossroads have all the components necessary for the elegant contemporary interior. Available are the finest designed products of contemporary styling in: furniture, carpets, draperies, upholstery, wall coverings, lights, accessories, oil paintings, china, crystal and flatware. For booklet write to: Crossroads, 15250 East Whittier Boulevard, Whittier, California.

(360a) Target Lighting: For home, library murgum there is a small. 14.2 cubic-foot Refrigerator-Freezer are detailed. For these attractive brochures write to: Thermador Electrical Manufacturing Company, 5119 District Boulevard, Los Angeles 22, California.

(292a) Built-in Ranges and Ovens: Latest developments in built-in ovens with Glide-out Broiler, also motorized Rotisserie. Table top cook top ranges (4 or 6 burners) ready for smart built-in installation. Available in colors or stainless steel to provide sparkling 12041 Wilshire Boulevard, Los Angeles 24, California.

APPLIANCES

✓ (350a) Appliances: Thermador presents two new brochures. The Street, Culver City, California.



America's largest manufacturer of ceramic tile. Member: Tile Council of America, Inc. and The Producers' Council, Inc.

OFFICE & SHOWROOM: Beverly Hills. SHOWROOMS & WAREHOUSES: EI Monte, Fresno, Portland, Salt Lake City, San Bernardino, San Diego, San Francisco, Santa Clara, Seattle, Van Nuys. REPRESENTATIVE: Spokane. DISTRIBUTORS: Albuquerque, Honolulu. PLANTS: Corona, El Segundo.

### ARCHITECTURAL POTTERY

(303a) Architectural Pottery: Information, brochures, scale drawings of more than 50 models of large-scale planting pottery, sand urns, garden lights, and sculpture for indoor and outdoor use. Received numerous Good Design Awards. In permanent display at Museum of Modern Art. Winner of 1956 Trail Blazer Award by National Home Fashions League. Has been specified by leading architects for commercial and residential projects. Groupings of models create injects. Groupings of models create in-door gardens. Pottery in patios creates movable planted areas. Totem sculp-tures available to any desired height. Able to do some custom work. Architectural Pottery, 2020 South Robertson Boulevard, Los Angeles 34, Cali-

### ARCHITECTURAL WOODWORK

ARCHITECTURAL WOODWORK (295a) Manufacturers of architectural woodwork, specializing in all types of fixtures for stores, offices, churches and banks. Large and complete shop facilities offer a complete range of work from small specialty shops to complete departments in large stores. Experienced staff to discuss technical or structural problems, and to render information. Laurel Line Products, 1864 West Washington Boulevard, Los Angeles 7, California.

### ARCHITECTURAL METAL WORK

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### **DECORATIVE ACCESSORIES**

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### DOORS AND WINDOWS

(332a) Jaylis Traversing Window Covering—Room Dividers: Constructed from DuPont Lucite and DuPont Zyetel Nylon; reflects 86% infrared rays and absorbs 99% ultra-violet rays; low maintenance cost; lasts 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.

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✓ (244a) Sliding Doors & Windows: The full product line of Arcadia Metal Products entails a standard aluminum door used for residential purposes, heavy duty aluminum door for comheavy duty aluminum door for commercial work and finer homes, standard steel door for commercial and residential buildings and the standard aluminum window designed for architecturally planned commercial buildings and residences. For a 16-page informative catalog write to: Arcadia Metal Products, Dept. AA, 801 S. Acacia Avenue, Fullerton, California. California

(356a) WOOLSUEDE a sumptuous all-wool-woven fabric. A new medium for decorators, interior designers and architects in 35 dimensional colors by Everett Brown. WOOLSUEDE performance includes acoustical and insulating properties, soil and flame resistance, moth proofing, strength and dimensional stability. Catalog and price list available on request by writing to WOOLSUEDE Division, The Felters Company, 350 Fifth Avenue, (356a) WOOLSUEDE a sumptuto WOOLSUEDE Division, The Felters Company, 350 Fifth Avenue, New York 1, New York. Ask for Sweet's Catalog Insert File No. 13k/WO.

(322a) Fabrics: Prize-winning design source, Laverne Originals, offers a complete group of architectural and interior drapery fabrics — handprints on cottons, sheers, all synthetic fibers and extra strong Fiberglas in stock and custom colors. Suitable casement cloths for institutional requirements. and custom colors. Suitable casement cloths for institutional requirements. An individual designing service is offered for special projects. Coordinated wall coverings and surface treatments are available for immediate delivery, moderately priced. Write for complete illustrated brochures and samples. Laverne, 160 East 57th Street, New York 22; Phone PLaza 9-5545.

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• Catalogs and brochure available on leading line of fine contemporary furniture by George Kasparian. Experienced custom/contract dept. working with leading architects. Wholesale showrooms: Carroll Sagar & Assoc., 8833 Beverly Blvd., Los Angeles 48, Calif.; Bacon & Perry, Inc., 170 Decorative Center, Dallas 7, Texas; Executive Office Interiors, 528 Washington St., San Francisco 11, Calif.; Castle/West, 2360 East 3rd, Denver 6, Colo, Frank B. Ladd, 122 West Kinzie Street, Chicago, Illinois. For further information, write on your letterhead, please, directly to any of the above showrooms. Kasparians, 7772 Santa Monica Blvd., Los Angeles 46, California. Catalogs and brochure available on

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Street, Berkeley 10, California.

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(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, 919 North Michigan Avenue, Chicago 11, Illinois.

Pools introduces easy-to-operate rustproof filter system with highly effective bacteria elimination. 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.

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(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 Corporation, 1529 North Cahuenga Boulevard, Hollywood 28, California.

### ROOFING

(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 life, low maintenance and resists 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.

(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.

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Please send me a copy of each piece of Manufacturer's Literature listed:

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CITY

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ZONE

### 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 Lansing Corporation, manufacturers of 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.

(122a) Contemporary Ceramics: Information prices, catalog on contemporary ceramics by Tony Hill, includes full range table pieces, vases, ash trays, lamps, specialties; colorful, full fired, original; among best glazes in industry; merit specified several times. CSHOVED Programs programs Arts. 8. CSHouse Program magazine Arts & Architecture; data belong in all contemporary files. — Tony Hill, 3121 West Jefferson Boulevard, Los Angeles, California.

(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 to Roger Darricarrere, Dept. AA, 3716 Fletcher Drive, Los Angeles 65, Cali-

(357a) Decorative Grilles: Suncontrol and decorative grilles in all metals and finishes; 12 stock patterns for interior and exterior use. Can be used for ceilings, fluorescent louvers, overhead lattice work. Write for illustrated catalog. Nomad Associates, 1071 2nd Avenue West, Twin Falls, Idaho. (357a) Decorative Grilles: Sun-

### STRUCTURAL MATERIALS

STATE

(326a) Construction Plywood: A new fir plywood catalog for 1958 has 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-

(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 includes "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 mation 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, Cali-fornia Redwood Association, 576 Sac-ramento St., San Francisco 11, Calif.

(349a) Available from the West Coast Lumbermen's Association is an excellent 44-page catalog entitled: "Douglas Fir Lumber — Grades and Uses." This well illustrated catalog includes detailed descriptions of boards, finish, joists and panels, and light framing with several full-page examples of each; conversion tables, stresses, weights, properties of Douglas fir. For a copy write to: West Coast Lumbermen's Association, 1410 S.W. Morrison Street, Portland 5, Oregon.

Masonite Siding: Four page bulletin describing in detail approved methods application of tempered hardmethods application of tempered hard-board product especially manufac-tured for use as lap siding. Sketches and tabulated data provide full infor-mation on preparation, shadow strips, nails, corner treatments and finishing. Masonite Corporation, 111 W. Wash-ington Street, Chicago 2, Illinois.

✓ (309a) Structural Material: New construction data now available on Hans Sumpf adobe brick. This waterproof masonry is fire-, sound-, and termite-proof, an excellent insulator ideal 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.

✓ (355a) Philippine Mahogany Ex-(355a) Philippine Mahogany Exterior Siding: Developed, engineered and manufactured by Jones Veneer and Plywood Co., Eugene, Oregon. Write for brochures and literature describing America's newest siding. Easy to handle, labor-saving mahogany plywood panels. Illustrated folder shows five available vertical grooved and the properties of the same laboratory. patterns. Jones also offers a complete line of genuine Philippine mahogany interior pre-finished paneling. Merit specified for Case Study House 1960. Jones Veneer and Plywood Company, Eugene, Oregon.

✓ (340a) Davidson Brick Company manufacturers of Modular Steeltyd Common Brick and other structural 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.

(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, ceiling, counters. For detailed information, write Dept. AA, Douglas Fir Plywood Association, Tacoma 2, Washington. Washington.

(218a) Permalite-Alexite Plaster Ag-(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 prelite placets five processor. Alexite for perlite plaster fireproofing. Many charts and detailed drawings give fire-ratings, descriptions and authorities and describe plaster as lightweight, economical and crack-resist-ant, withstanding up to 42% greater strain than comparable sanded plas-ters. Write to Permalite, Perlite Div., Dept. AA, Great Lakes Carbon Corp., 612 South Flower Street, Los Angeles 17. California.

(291a) Decorative Natural Stone: For residential and commercial application. Quarried in Palos Verdes Peninsula of Southern California. Palos Verdes Stone offers wide range of naverdes Stone oriers wide range or 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 breakers and information. plete color brochure and information. Palos Verdes Stone Dept. Great Lakes Carbon Corporation, 612 South Flower Street, Los Angeles 17, Cali-

### SURFACE TREATMENTS

(354a) Western architect and tile contractors in a hurry find a new full color booklet put out by The Mosaic Tile Company a big help on rush jobs. The Mosaic Tile Pacific Coast Service Plan for 1959, (form No. 239) shows the tile types, sizes, and colors available in all their Pacific Coast warehouses. The in-stock for fast service items shown, all manufactured or stocked locally, include glazed wall patterns, Jordan-Carlyle quarry tile, all-tile accessories and trim shapes. Mosaic offers another full color folder on Carlyle Quarry Tile (form No. 216) showing the eight colors of quarry tile manufactured from California clays by The Mosaic Tile Company's plant at Corona, California. Write to: The Mosaic Tile Company, 131 North Robertson Boulevard, Beverly Hills, California. ✓ (354a) Western architect and tile

(283a) Ceramic Tile: Write for information on new Pomona Tile line. Available in 42 decorator colors, four 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. California.

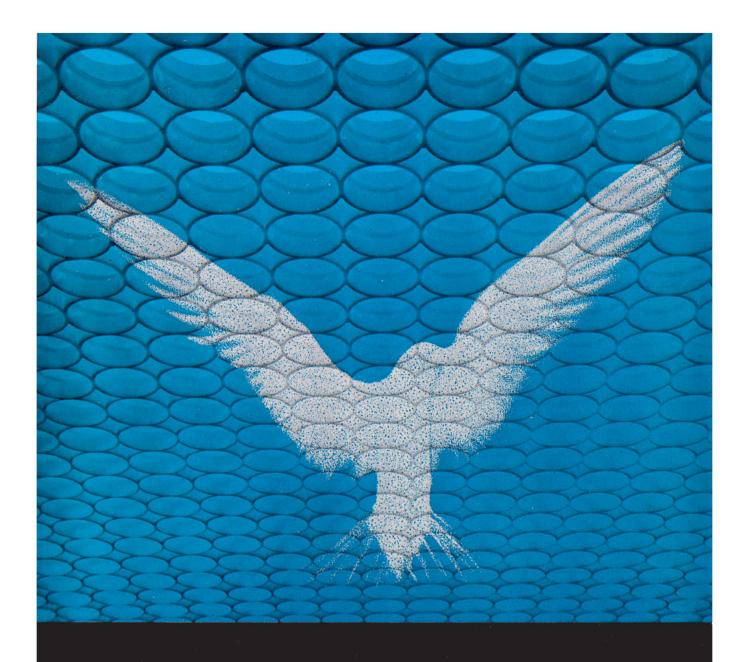
(336a) Surface Treatments: Vitro-(336a) Surface Treatments: Vitrocem glazed cement finishes are being used by more and more architects where a hard, durable impervious surface is essential. Available in unlimited colors and multi-color effects, it is being used for interior and exterior over all types 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.

EDgewood 4-4383.

(346a) Triangle Tile by Hermosa, 6" equilateral glazed ceramic triangles available in all Hermosa colors, in bright glaze, satin glaze, and Dura-Glaze. Triangle Tile brochure shows unlimited possibilities of this medium for light duty floors, walls, wainscots or entryways in any room. Excellent for bold design effects or abstract murals. Triangle Tile has all durable features of Hermosa glazed ceramic tile and has spacers for accurate setting. Write for complete brochure to Gladding, McBean & Co., 2901 Los Feliz Boulevard, Los Angeles 39, 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. This is the only source in the world for The Marbalia Mural—stock sizes 21 x 9 feet on one bolt or to 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.

(194a) Celotone Tile: New, incombustible, highly efficient acoustical tide molded from mineral fibres and special binders. Irregular fisures proride 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.



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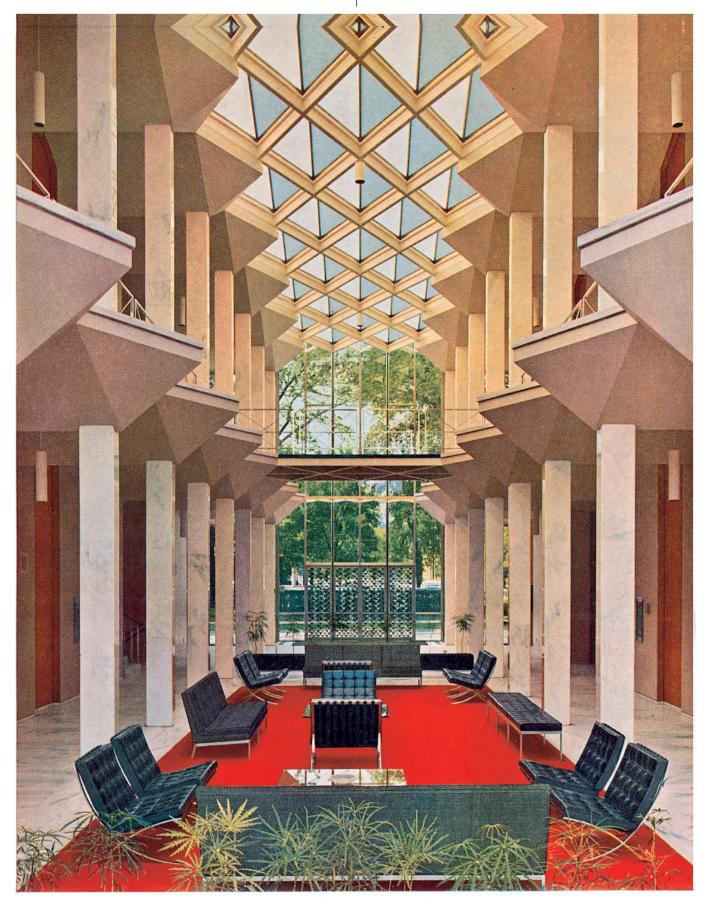






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