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ARTS & ARCHITECTURE is published monthly by Arts & Architecture, Inc., 3305 Wilshire Boulevard, Los Angeles 5, California. Established 1911. Second class postage paid at Los Angeles, California. Price mailed to any address in the United States, $5.00 a year; to foreign countries, $6.50 a year; single copies 50 cents. Editorial material and subscriptions should be addressed to the Los Angeles office. Return postage should accompany unsolicited manuscripts. One month's notice is required for a change of address or for a new subscription. The complete contents of each issue of ARTS & ARCHITECTURE is available to subscribers in a Microfilm edition.
Lester Johnson has labored in the toils of an idee fixe for some years. Or perhaps it is an idee force. His preoccupation with the human head is obsessive, eccentric, but not static. It is a dynamic stimulus to his imagination.

Johnson is not merely representing the human carcass. He is saturating an image with ruminations, material and immaterial, local and cosmic, temporary and timeless.

The personages in Johnson’s painting are unlike any others. They inhabit a place that is sealed-off. They belong where they are and where they are is a phantasmic place conjured by the brooding artist. Obviously it is a place where the artist can live, where his thoughts and feelings can expand, and where nothing outside this hermetic realm really matters. Like all recluses, Johnson makes of his habitation a cache of secrets. He keeps wandering within its confines, astonished at how much he discovers. For the spectator it may seem a very limited retreat, but for the artist it is a universe. You enter this place on his terms or not at all.

For me it is the closedness, the cryptic darkness that makes Johnson’s painting. Sometimes they are not meant to be “seen” at all, but only to serve as cues to the nature of his reverie. Even at their most explicit, Johnson’s canvases are never sign-posts. He never comments on the figures, never strives to characterize them or set them off from one another. They are Everyman. On his magic slate he sees the same image again and again, altered only by degree of light and nuance of mood.

Like the naturalist who renders a rock formation a thousand times (and in the 18th century the rock was thought to be alive), noting minute variations, Johnson studies posture, profile, disacement of air and light, remarking that the slightest variation in atmosphere affects the whole. In one sense his paintings are abstractions whose content is wonder. In another sense they are animistic invocations.

The reason Johnson is concerned with the head is, as he has said, because he loves the form, rhythm and logic in a face, the aliveness of flesh, the sparkle in man’s eye. His love finds its expression in terms of the dense matter of paint—thick, tactile, organic, reminiscent of its origin in the earth. In a mysterious transference, Johnson expresses the vitality of man by revealing the aliveness of flesh.

Stylistically Johnson belongs to the younger abstract expressionist generation. His first exhibition that I saw in 1951 comprised thickly painted abstractions intended to startle in their harsh juxtapositions of orange and black form, their heavy-handed palette knife technique. In keeping with a moment of audacity in the Western world, when paint itself appeared independently effective, and the hand of the artist, as it gropped and grappled with tacky matter, was considered invaluable for its idiosyncrasy alone, Johnson’s style was rooted in expressionism.

Yet like man creators, Johnson quarreled inwardly with his penchant and eventually modified his style. He sought an equilibrium that could only be established if he focused on something in space—first a potted plant, then a room, then the human inhabitant of this cornered space.

Giacometti probably influenced him, and was probably the only artist to whom Johnson had anything in common. Johnson’s deep commitment, his concern with the human condition is a concern with reflection. So is Giacometti’s. The unreflected life is not worth living, etc. Johnson’s reflection is on relationships,

or the lack of them, and cannot be paraphrased. It sits in his work.

The equilibrium within his compositions derives largely from Johnson’s insistence on unified light. His light—usually cold, piercing gray but sometimes a sulphurous soft yellow or dim green—enfolds man, plant, hat and room. It is used at times as a foil, much as Poe used creeping drifts of artificial light to evoke gloom. Or, it is used as a synonym for space itself—air thickened by breathing, smoke, and life itself—continuous and enveloping.

The bodies held in this air are compact, often painted dark blue, green or black. They usually face the spectator: frontal visions as commanding an Egyptian black granite statues. Their features are generalized, their eyes usually deep-set. In the best of Johnson’s compositions the profile of the head is succinct, unbroken, emphasizing the negative-positive spaces between which become cello and vase shapes and carry the rhythms of the figure beyond their representational function. Johnson often interpolates horizontal stresses both within the figure and behind it in order to close up the chamber-like space and suggest the finality of man's situation—or at any rate, that of Johnson’s man.

The figure alone is relatively unimportant. Johnson’s urge to abstraction is too pressing for that. What he sees from up close and what he renders is the strangeness of man in the light of his special environment. Accordingly the variations in matter itself are significant. Even the most monochromatic of Johnson’s paintings—those in which the Matisse convention of overall environment, e.g., the Red Studio, is given a new twist—the life of the paint is as vital, busy, complex as cells beneath the microscopic lens. He piles on the paint, scores it with the handle of his brush, scrapes and begins again, overpaints orange with green-black, makes deep troughs with a stiff brush, makes a mass of soupy greens or bronzed blacks, melts the edges of some strokes, even writes words with the same swing that he brings to the brush-form. In some instances what appears to be an inert solid black is at second glance a mass of contrasts. Johnson paints heavy surfaces and often allows an almost invisible rain of thin black to trickle down the tough skin. The veins, cells, torrents and cataclysms in the life of his paints are legion.

Johnson’s apparitions are nowhere as spellbinding as they are in recent paintings, particularly one he calls Broadway Crowd Scene. With the intensity of a late 19th-century Symbolist, Johnson paints three figures in asymmetrical relationship, embraced by a singularly cold atmosphere. They are huddled. The eye takes in one hat, then another, then an interval with no hat, then the third. Already there is an uncanny rhythm. Johnson also writes-in, with a looping hand, the word “blue,” and because the word begins in the gray light, rides over the figure and into the light again, blue instantly qualifies the blackness of the image and the silverness of the light. Still another rhythm: above, there is a pattern of walking feet, almost caricatured but not quite, treading out the rhythms of the city day, a Joycean gloom, doomsday day.

Proust said of Rembrandt that the light that bathes his portraits and his pictures is in some way the very light of his thought, the kind of personal light in which we view things when we are thinking for ourselves. The oblique light that is imprisoned in Johnson’s paintings is similarly the very light of his brooding thought.
In her new wall reliefs at the Castelli Gallery, Lee Bontecou makes a significant break with local orthodoxy: She uses rough and “found” materials so that their origin is of no interest, thereby stripping her young contemporaries who are still bound up with a simplistic mystique of the “real” in art. Bontecou has set off in pursuit of a reality expressed entirely in term of imagination. She creates objects that describe explicitly what only she has envisioned. If she uses heavy tent-and-knapsack canvas, wire and steel, it is only to evoke an image that has little to do with the purposes for which these materials are normally used.

It is partly because of her ability to transform indifferent materials that I see Bontecou as an original artist. In each of her better pieces (I exempt one blatant construction with its grand guignol horror emphasized by a great set of gnashing teeth at its center) there are references to many previous images, both hers and those of others, and to many other modes. Yet, just as her constructive gift overcomes the resistance of materials, so does her synthesizing imagination rise to make a synthetic whole of diverse parts.

To define originality is not easy and I readily admit that I would have difficulty justifying what I am about to say. I felt Bontecou’s originality literally. That is, I felt that the reigning image has its origins deep in her imagination and that her passionate quest for its exact form is nothing if not original. It rings true and steadily.

What I called the reigning image is the black tunneled hole which is central to everything Bontecou undertakes. This hole bores deep and is more significant than the obvious Freudian and destructive connotations usually remarked. I’m not saying they are not there—certainly the obsession with the gaping circle alludes to sexual fixations as well as to the symbolic mouth of destruction, the gun. But Bontecou’s obsessions are polyvalent and can just as easily be interpreted in other terms.

For instance, I never felt the “aggressive” quality in her work as keenly as other critics. When I gazed at the black empty centers with their tiers of protective surrounding forms, my associations went to wells, tunnels, sequestered and mysterious places. I saw the circularity of Bontecou’s central forms as inspired evocations of the axis mundi, the central point around which the cosmos moves. Her image sent my thought to Mircea Eliade who has written of the symbolic importance of the center, the consecrated points on which all mythologies are based, what he calls the cosmic regions: heaven, earth and hell.

Naturally I am not suggesting that Bontecou intends to relay some cosmic insight. I am only saying that in the intensity of her expression I was able to sense for a moment the depths and inexpressible sources of her imagery. Their origins, in short.

Ultimately her work is impressive because, divested of all associations it still has a plastic autonomy. Bontecou’s constructive power is apparent not only in the expert way she stretches the ungainly canvas sections, and builds her metal armatures, but in the way she organizes many elements into a firm unit. Even if no thought of allusion existed, the compositions would speak for themselves.

Allusion is not always in terms of metaphor. There are stylistic allusions as well—allusions to previous systems of organization. In the panelled curving sections the effect of “leading” recalls Art Nouveau, with its interest in clousoné. (Also in the spiral recessions.) In the joining of abstract, or quasi-geometric volumes, with an emphasis on the unseen edge, Bontecou has recourse to cubism. In the hard, sometimes symmetrical outlines and accent on large circular shapes, there is a reminiscence of primitive tendril-like forms of the South Seas. Finally, in Bontecou’s illusion of deep space, particularly in one piece where the central tubular cavern tunnels deep and diagonally into the heart of the composition, I was reminded of recent abstract illuminations, those who, like Vasco da Silva, are fascinated by prospects beyond the limits of the composition.

Bontecou’s interest in elaborate recession is curious. By repeating a generally curvilinear movement, but altering each contributing element, she indulges in a fantasy familiar in the history of art. The yearning for a central meeting point is not too different from a similar yearning in Palladio whose stage sets were so excessively foreshortened, and whose illusion of space was so deep that they became curiosities of a most compelling order.

With the exception of the grimming death piece I mentioned before in which the materials and the intentions are so obvious, Bontecou’s reliefs are wide ranging. I found that the play of light and shadow on the shelves of deeply “undercut” forms was a complex system of its own. She accents these variations by tinting her canvases with smoky blacks toward the edges, or, in the case of a central cavity, visible through a kind of oval prosenium.

This piece, incidentally, is very suggestive. The overlapping shapes enclosing the chief image—characteristically shielded—are posed in rhythmic complicated sequences of tan-to-brown. In the deep interior gloom, the white structure, like boat-ribbing, sets a phantasmagoric mood remote from the immediacy of earlier works.

Perhaps the richness of Bontecou’s fantasy is best gauged in her drawings where the black center is sometimes softened, and gentle currents well from it as in a dark pond. Or where the pistol shape transforms into a tree, and a cluster of medieval helmets metamorphoses into a crustacean.

It is certainly a sentimentalism to think of any artist today as peculiarly American. Cosmopolitanism has won the day. But I am always tempted to think of Gabriel Kohn as an artist who could only have articulated his style in this country. His blunt indifference to “finish” and his willingness to dispense with nuances seem the product of a special American rebelliousness.

Like many of his generation (born 1910) Kohn studied traditional art, mastered his academic techniques, went to Europe and submitted to arduous studies only to come back to the United States and throw it all over. Or almost all. He never squandered the lesson in composition and structure, and his work is certainly informed by the past, particularly the cubist past. But when you stop to think of it, his very technique—that of the wood-joiner, the shipwright—is a defiance of centuries-old sculptural canon.

In the cumbersome volumes of laminated wood with their unconcealed pegs and drips of glue, Kohn has found a way to talk back to all the centuries of balance and symmetry without resorting to baroque illusionism. In fact he does cleverly base many of his compositions of elements (and for him each element is an independent entity at the beginning) on the baroque principle of interesting diagonals. But then, just when you think you have him slotted, he turns around and makes his quasi-geometric forms reject baroque recession and assume a position of paradoxical equilibrium.

Essential to Kohn’s vision is the idea that a sculpture can be put together almost as a piece of architecture. But what architecture! His reminiscences of lintels, gables, flying buttresses and arches are weirdly disoriented. They are the fantasy of a sculptor in spite of himself.

(Continued on page 32)
Sol Babitz began his study of performance practice, as I did, under the influence of Wesley Kuhnle. You may ask what Mr. Kuhnle does that is more correct than the usual practice of present-day organists, harpsichordists, and others who play 16th, 17th, and 18th century music. The difference lies mainly in the fact that he has not tried to adapt the later practice to the earlier but began over, as if the later practice had never existed.

If you study, as Beethoven did, the precension of the Bachs, you will detect their influence throughout Beethoven’s music. And if you study Sebastian Bach, if one is ever to appreciate his “of great extension and extreme tenuity,” spangled and radiant with suns, one must know the constellar music of the Couperins. (For those who read French I recommend L’Oeuvre de Clavecin de Francois Couperin le Grand, Etude Stylistique by Shlomo Hofman, a very thorough study of the keyboard compositions, piece by piece, under many headings.) Really to grasp the nature of a rondeau by Francois Couperin is to enter the esthetic domain of French intelligence, into which nothing can be imported backwards from the Bachs, an esthetic domain little comprehensible in any other language. (I was reminded of this by watching the film Last Year at Marienbad, of which the larger rondeau with episodes and composed variations of the theme at each return is the best formal parallel.) The static inexperience, as the form not dramatized but inhabited by a recurrent intellectual exercise of esthetic contemplation, too often entwined in an infinite verbal garland of French criticism, stand quite apart from the dramatic challenges of time and violence demanded by surrounding cultures.*

The static character of 17th century French form seems to have charmed Sebastian Bach not less than the melody for its own sake of the 17th century Italians, imparting to his musical theology an abstract firmness resembling that of Bossuet’s sentences or the globes of an astronomy. We have only begun exploring the nature of music as a phenomenon of many generations among many peoples, peering in blind search of emotional responsiveness through the cosmic dust of our contemporary emotions. We did not invent music; we inherit it.

We can still revive today by direct imitation the externals of New Orleans jazz, which has its own nature apart from anything we mean in speaking of jazz festivals, or popular or dance music; one cannot revive the living thought, the content, of which that music was made. This semi-literate art, poised between Africa and a culture totally alien, became the voice of a soul no longer African. That we cannot recreate. Some part of it, embedded in our culture, can be retained.

In Oriental countries the exact tradition of performance, and some portion of its original content, has been carried forward through centuries by exact imitation of the teacher by his pupil. The method is slow and painstakingly exact. To learn the idiomatic language of the rebab, the long-necked, two-string fiddle without a bridge played by the leader of a Javanese gamelan orchestra in soft music, Mantle Hood, who has inspired the great school of Oriental music at UCLA, when he was studying in Java persuaded a rebab player to demonstrate for him the customary embellishments, while he recorded them on tape. At the end of ten hours the rebab player was still demonstrating, and his admiring auditor had run out of tape. How many years were needed to preserve by the older method this wealth of elaborative detail?

The Oriental teacher controlled by a strict tradition the absolute inflection of each microtonal ornament. The American teacher of the period of Couperin and Bach gave examples by type, leaving to each composer his own individual use of them in the musical context. Indeed, the mark of a good player was the skillful individuality, within appropriate taste, by which he varied, elaborated and embellished the notated music. (I believe that this is true also of the music of Southern India.) There were of course many complaints of excess, when the improvised vines concealed or broke down the musical structure, as there are today complaints of bad interpretation. Who is to say, except by mature taste and judgment, what is a correct interpretation? Yet best judgments do agree and marvel together whenever their expectation is transcended.

*This may be one reason why some French intellectuals, during the last thirty years, have been gobbling the bait of time and violence provided by American authors of the stature of Tiffany Thayer and Erskine Caldwell.
Suppose therefore that one were able to summon by spiritual courtesy the shade of John Sebastian Bach or his son Philipp Emanuel and persuade him to record on tape the varieties of embellishment, of arpeggiation, of melodic variation, of harmonic elaboration upon a figured bass that he expected of his pupils. Would not this seem an entirely different and infinitely richer and more varied language than any we are able to achieve by substituting a few familiar 18th century devices for the standard habits of our later practice?

But we can never know so much about this music as a Bach!

Correct. Yet we can begin like pupils by exploring the problems set by these composers in their keyboard music and learning to solve these problems not out of our modern stock of generally erroneous information but by using only information that the Bachs and their pupils would have had in common. This is the information given by Arnold Dolmetsch in his book *The Interpretation of the Music of the XVII and XVIII Centuries*. Using this book and no other information that is not contemporary with this period or precedent to it, we can set about learning to play Bach’s music as his pupils learned it. This requires of us, whether we are artists or beginners, that we shall put aside, perhaps for years, any expectation of rendering a correct performance. Too long! wails the would-be recitalist, who has had to think out fresh for himself scarcely anything that has to do with music. Who cares, if the audiences like it! And how are we to begin teaching, the musicologist complains, if we are to teach nothing we have not ourselves tried and mastered.

It’s just a question of common honesty. Either you do it right, or you can fake it. So in the hundreds of recorded performances of so-called *baroque* music one hears nearly everything happily and unconscientiously faked.

And then start in and never cease the challenges: How do you know it’s right? What is your authority? Isn’t the literature full of contradictions? The printed music bulges with errors: they must be errors, though the best performer boasts his playing from an *ur-text*. Prove that what we do is wrong. Prove that what you say is right.

To which the student who is going about relearning the older idioms in the correct way can only shrug his shoulders and say: Read the evidence. If you prefer not to read it honestly or to read and not apply it, no persuasion and no proof can touch you. You know in conscience that the lazy way is not right.

No one presumes that any musician should profess to know without specialized study the idiomatic inflection of the *rebab*, the *sho*, the varieties of the psaltery and the lute, the variant embellishments of the international family of the flutes, should pass the ease from the oboe to its cousins, the *hichiriki* and *piri*, or comprehend the several thousand languages of the drums. One should be as humble in learning the inflections, accents, silences, and melodic variants of our own music. That is what SzéCSI tells us playing Bach, what Sol Babitz tells us playing Bach, what Sol Babitz tells us in recreating the idiomatic speech of the violin playing 17th and 18th century music; that is what, in greater depth and expansion, Wesley Kuhnle has prepared means for us to learn, from his all too few examples, about the historical variants of keyboard practice.

In listening to them, in learning from him, we should never forget what he said to me recently, urgently, from his sickbed: “I make one stipulation: nobody should ever imitate what I have done or my solutions.”

What he said pointed to the heart of the matter: the genius of instrumental practice in this great period of Western music was the extreme latitude it allowed for the individual taste and skill of the performer. The good artist played music not always in the same way but always with a difference. This and not a successful repetition of the same notes was the art.

(Of course the proportion of inadequate performance in contemporary music was as high then as it is now.)

Performance, like composition, began with the ability to improvise on a bass, taking into consideration all requirements. For serious performers this is how study of 17th and 18th century music should begin today. We have a very clear description of Bach’s teaching method. For finger-practice he began with exercises, but if the exercises palled he transformed them into little
compositions. From simpler compositions he progressed into four-part chorales, where instead of a bass a line of familiar melody provoked response; and the melody itself was to be digested, translated, recreated. Keyboard practice, composition, and the resources of harmonic construction and coloration were all learned together. So that the performer became at the same time able to improvise and to compose, according to his ability to create musical ideas.

This would be the ideal method, if all teachers could be Bachs. Since they are not, and since composing on a bass is no longer in use, we cannot expect keyboard players to learn the music of that period in so thorough a fashion. But we do have the ability to recreate the substance of the style. To do so we shall have to dispense with the superficial brilliance of note-playing and substitute for this a real knowledge of style in all its varying applications.

What are some of the things that we can do? I would say, first, that we should adapt ourselves to exploring the various rhythmic alternatives. We should learn how to make the rhythmic line flexible, how to make it dance, how to exploit the various positions of a phrase, so that it can be rendered each time with a slightly different inflection. To do this effectively, you should let yourself go with it, do it more rather than less. Let the rhythmic line move freely across the beat. The result will seem stiff at first and arbitrary; but to make sense of it, instead of haphazard, consider whatever rules you find concerning altered rhythm and put them to work. The rule that the left hand should not know what the right hand is doing began long before Mozart; it goes back to the earliest days of keyboard practice and extends at least to the time with a slightly different inflection. To do this effectively, you would have to make sense of it, instead of haphazard, consider whatever rules you find concerning altered rhythm and put them to work. The rule that the left hand should not know what the right hand is doing began long before Mozart; it goes back to the earliest days of keyboard practice and extends at least through Chopin. The “right hand” signifies the moving voice, the “left hand” the fall of the beat. Put the metronome in a closet. You should hear beat melodically, a moving, breathing, flexible

strictness, where the fall of the beat is apt, not merely exact. You will soon hear how few players really do this. A superb example is the playing of the F sharp minor Variations in Landowska’s recorded album of Haydn.

Having the line free and the phrase always a little varied, you will feel the melodic positioning, the lie and shape of the ornaments. Fitting them to the measure you will begin sensing the relation of the embellishment to the overlie of the moving melody across the beat. And that in turn defines the tempo or pace.

We too generally forget that the excitement of a merely rapid performance conceals the inner rhythm and variation of the phrase. To play fast effectively one must first be able to play the same music in great detail slowly. How much more Szegedi discovers in the famous Prelude of Bach’s E major Partita playing it slowly; how much more contrapuntally exciting the Allegro assai of the C major Sonata poised on its speed. Having such skill you can make a fast movement seem to go like the very devil by constantly varying the phrase and a slow movement linger upon its notes like a heavenly beneficence.

Rules—the musical treatises of the period were full of them, and we should learn them all and apply them. Usually several will apply at once, giving a choice. Once we have grasped that in real playing contradictory rules do not cancel but compete, we can make use of the great variety this offers us; we can be free within it. To the limit of our capacity we are constantly being invited, being encouraged to create. Then if our fingers cannot keep up with our ears, we shall know how to demand more of others who perform for us.

I am not going to take up the problems of the appoggiatura, the acciacaturi, the displacement of tones for harmonic reasons, embellishment or emphasis. Rules and examples abound, appealing to the player’s imagination and judgment how to put them to use. All enlarge the scope and richness of the harmony, the melody, the sounding musical structure and its texture. Remember that for each rule there was likely to have been a contradictory idiomatic habit, which that rule corrects. Philipp Emanuel Bach condemns the insertion of the intervening note into a rising major third, but someone wrote this embellishment into the first of Bach’s two-part Inventions, as you can see in the facsimile edition. Perhaps that is one way that Bach suggested playing it. The triplet and the melodic enrichment are charming.

Now give thought to the chord. In music of this period the chord was broken, rolled, arpeggiated, upwards and downwards or in both directions, to the leading note. It was filled out with extra-harmonic acciacaturi or became a cadence: you can improvise upon a chord at a fermata or a pause, at the end of a movement or to enlarge a passage. So doing you release the harmony from tight vertical relationship; the chord too becomes melodic, enhancing the melody of the moving voice or voices. How often have you heard any player make use of these means?

These are all elementary suggestions, well substantiated by historical evidence, yet recondite to performance. To begin you have to begin, and present-day scholars and performers have preferred to rationalize themselves away from the elementary trouble of beginning. The public will not at first follow along easily; its critics will uncover many objections, on incorrect premises; the lag in acceptance will be backed up by scholars who prefer not to venture and by routine musicians who decry any deviation from their routine practice.

No one who begins correctly will wish to copy a style; he will prefer to work out his own style. The styles will agree in principle, but each use will differ.

To complete our rediscovery of the arts, habits, skills, and sounds of European music before the 19th century it will be necessary to reexplore the historic varieties of European temperament or tuning. Here again what we learn will combine with our discoveries in Oriental and recent 20th century music. My ex-

* Though when I played a Leadbelly record for Wesley Kuhnle his first comment was: "His basses are as exact as Chopin’s."

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* The student of Japanese gagaku learned to sing the entire repertoire before taking up an instrument. The student of Indian drumming learns the drumming by singing them to syllables. Thus the idiomatic inflection becomes song-like, melodic, instead of notational and metronomic.
experience in lecturing about the history of tuning, using taped examples realized and performed by Wesley Kuhnle, has shown how dulled the ears of trained listeners have become to any tonal distinctions finer than those of the habitual twelve tones. Listeners who have accustomed themselves to the microtonal colorings of Oriental music and to present-day composition by means of electronic tape can usually grasp, however they at first fail to understand, the distinctions among the historic European tunings.

During the first half of the present century the revival of old instruments was impeded by the common belief that the piano, for example, is a better instrument, technically and musically, than the harpsichord or clavichord, that the modern organ is better than the organ of Bach’s time, that the guitar is a more practical instrument than the lute, that the modern violin and bow have done away with the inefficiencies of the earlier violin and bow. Today these prejudices are vanishing. How much more rapidly they will vanish when musicians have learned to play the instruments correctly! Yet we have given no thought to the correct tuning of these instruments, even though we are well aware that the music written to be played on them was not meant for our tuning.

A famous organist, who has made a profitable business of recording on old organs, in a style to which they were not formerly accustomed, several years ago came to an English church organ at which Handel had once played. It had retained its original meantone tuning. The organist notified his recording company, which invested a sizeable sum to have the organ rebuilt so that it could be played in equal temperament, fortunately leaving the older pipes connected with the keyboard by an equipment that enables the resident organist to continue playing in meantone. Then on his newly installed pipes the famous visitor recorded Handel’s organ concertos, using of the original organ only the console at which Handel had once sat. This is an indication of our professional indifference, our reluctant stubbornness to change our habits to accord with the historic facts.

But, the famous organist would reply, where could I find an orchestra able to accompany me in meantone? True. Instead of acting a sentimental lie, why not perform the concertos on a modern organ?

For the fact is that everything which has to do with the correct performance of any music is in some way related to the correct tuning of the instrument. I need scarcely add that any music will sound better, to an accustomed ear, when played in its original tuning. The coloration is accurate; the harmony makes musical sense and does not clot into false vertical clusters as it does in equal temperament.

In his History of Tuning, with four and a half hours of talk and taped examples, more examples than talk, Wesley Kuhnle has distinguished and clarified the six principal European temperaments, including the possible variants of meantone, so thoroughly that no one who will learn from him should ever be in doubt of the importance of learning how to tune and use them.* This he also teaches. His History of Tuning should be in the library of every school of music, dubbed and adapted for teaching and put thoroughly to use. A few schools already have it. It is available for purchase. The examples provide models of every type of keyboard practice.

In learning a foreign language there is no substitute for learning to speak it correctly. Musicians today are still speaking the language of earlier European music and its instruments with an incorrect grammar, an imperfect intonation, and a clumsy foreign accent.

*Someone will be telling me that Sebastian Bach discovered and composed in equal temperament. This is incorrect. Bach composed a great part of his music in one or another of the several variants of meantone, the common tuning of instruments until the end of the 18th century. He also explored, like other scholars of the period, the possibilities of developing a well-tempered tuning that would overcome the harmonic limitations of meantone (about 8 keys for any one tuning) and at the same time avoid the complete loss of intervallic coloring that would result from composing in equal temperament. Bach’s well tempered tuning is known: it was discovered theoretically by J. Murray Barbour and realized as a practical instrumental tuning by Wesley Kuhnle. Well tempered tuning does not divide the octave into equal intervals; it is not equal temperament. If we wish to play Bach’s Well Tempered Clavier correctly, we shall have to play it on a well tempered instrument.
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Industrialization, or the opportunity for all to partake of its benefits, is essential to economic progress. It is not, however, an end in itself. Schools, hospitals, museums, art galleries, theatres are built not for their own sake, but to serve specific purposes, and factories are no exception. They are indispensable tools in the struggle to raise living standards among the less fortunate of the world's people. This is a fundamental objective and the sole purpose of the technical assistance programmes.

Factories, mines, power stations, transport undertakings and so on are symbols of the economic development by which this raising of living standards can be achieved. Economic development must go hand in hand with the production of more food, the improvement of health, the spread of education and the promotion of social welfare and human rights.

The most striking difference between the developed and the underdeveloped lies in the standard of living attained by the majority of their people—in other words, in the extent to which the national income is distributed through wide strata of the population. It is, however, possible to attempt some more exact definition of the term underdeveloped.

An underdeveloped country might be described as one in which the natural and human resources are used for economic purposes to only a very limited degree. The trained personnel, the capital and the administrative machinery necessary to make proper use of them are partly, or wholly lacking. The word "resource" itself needs clarification. We might say that, in the economic sense, a resource only becomes a resource when it can be put to an appropriate use. Until that time, the richest resources are valueless in themselves.

If we look back over the long history of mankind, we see a period, perhaps lasting up to half a million years or more, during which the food gatherers and hunters of the Palaeolithic, or Old Stone Age, wandered countless times across what was later to be recognized as rich arable land without being able to make the slightest use of it. It was probably not more than ten thousand years ago that the first Neolithic farmers, by sowing and harvesting grain, discovered the possibilities inherent in such land.

The more complex civilization has become, the more intense has been the search for new resources or new uses for old resources. Coal was occasionally used in the Middle Ages, but its real value as a natural resource was discovered only when the factories of the industrial revolution created a demand for fuel which could not be met by the diminishing woodlands of late eighteenth and nineteenth-century England.

Because resources become resources only when a use is found for them, it follows that new discoveries may at any moment reveal value in hitherto neglected materials or new uses for resources already being exploited. Even the most highly developed countries may therefore possess natural resources which still contribute nothing to their economic life.

As long as this is the case and as long as those countries continue the search to improve their techniques and to use the sum total of their natural and human resources to better purpose, even advanced countries are still in the process of development, or are technically underdeveloped. Moreover, as the easily accessible supply of certain minerals begins to fail under the heavy demands of industry, new sources are constantly being turned to account by technological research.

It looks as if two great steps forward will be taken shortly when automation and atomic energy begin to play a leading part in industrial life. Automation, which is merely an extension of the use of machines to replace workers and of electronic equipment to replace brains, is beginning to revolutionize industrial prospects. Perhaps, when the economically advanced countries of today look back, fifty years hence, from the early automation era, they will regard their present condition as having been very "underdeveloped" indeed.

It would be difficult to say how many of the world's inhabitants live in the underdeveloped areas, because we have seen that there is no precise definition of the term underdeveloped. It is obvious, however, that much of Asia, Latin America, Africa and the Middle East would be covered by any normal use of the term "economically underdeveloped area." These regions comprise between them some 75 per cent of the world's population.

Civilizations do not pass through all phases of development in clearly defined historical periods. Human history is an unending process by which the same phenomena are repeated on a different scale. It allows for much disorder and for the existence side by side of processes of varying age and efficiency. The so-called industrial civilization of our time is distinguished by a tremendous emphasis on the third, or machine-dominated stage.

The railroad, the steamship, the internal-combustion engine, flight, atomic power, electronics, all of them Western discoveries or inventions, have vastly broadened the horizon of man's possibilities. Their advantages are now becoming available by degree to countries which have never experienced the preliminary stages of industrial progress.

(Continued on page 30)
THE PEUGEOT BUILDING - BUENOS AIRES

This is the winning project in the international competition for the Peugeot Building to be erected in Buenos Aires. The clear, logical and simple structure is well integrated with the surrounding urban landscape, and its simplicity introduces an element of order in a complex profile.

The building is basically composed of three elements: a tower, an esplanade and a lower structure. The tower is a monolithic element, rising out of the composition as a symbol of modern technology. The
esplanade is a connecting element and functions as a platform for the distribution of horizontal and vertical traffic. The lower structure, behind the esplanade complements the general topography and harmonizes the entire composition.

All general services will be located in the lower levels. All offices will be situated in the tower. The cultural center, theaters, concert halls, auditoriums, will be in the esplanade with direct access to the streets and elevators, thus eliminating interference with the general traffic within the building.

Four groups of double exterior columns constitute the only peripheral supports of the structure. This made it possible to free a vast area on the ground floor and lower levels, allowing the well defined foundation to better distribute the enormous load of the building. The structure is of reinforced concrete which utilizes locally produced materials.
The house is located in a San Francisco suburb, on the edge of a golf course. The site is small, but well isolated from neighboring houses by oaks and redwoods. The floor of the structure is elevated 3 feet above grade. This gives the building the appearance of a pavilion and allows the golf course surface to sweep in and around the structure, creating a feeling of greater site space. Also, freeing the building from the ground makes it obvious that floor fascia beams carry structural loads and emphasizes the role of columns.

The family, which includes four children, lives informally without servants. Members of the family swim almost daily, therefore a large, wind-protected pool was an important part of the program. The pool is located between the "legs" of the "H" plan, and is on grade level. This allows easy hosing of the pool deck and helps to prevent water from splashing on glass walls. A reflection pool at the entry visually ties with the swimming pool so that the interior entry and the kitchen appear to bridge the water. The kitchen is entirely open, designed as cabinet and furniture units within the space which links the living and bedroom wings. This permits informal service for both interior and exterior dining.

(Continued on page 31)
ROBERT MARKS, STRUCTURAL ENGINEER
The critic faces his toughest problems with pictures or sculptures for which his previous experience has not prepared him. Since he knows a great deal about certain kinds of art, he may assume that he knows all there is worth knowing. His very facility in responding to art he understands well may prevent him from seeing an unfamiliar mode of vision with clean eyes if the new work is widely at variance with what he already knows. The critic is in constant danger of falling victim to trained incapacity, an impairment to which all specialists are prone. For example, Baudelaire and the Goncourts considered Daumier’s paintings as little more than transpositions of his lithographs rather than as the bold innovations these works now are seen to be. On the other hand, the critic may proclaim a school of painting as a major departure when it is not. American Scene painting was saluted by Thomas Craven and other critics of the thirties as a renaissance, whereas, viewed from this distance, these same pictures—by Thomas Hart Benton, Grant Wood, John Stuart Curry, and the other regionalists—have all the earmarks of a regressive interlude in the course of twentieth century art.

When a tendency is evolving, no one can be certain where it is headed. Thus no one is in a position to render definitive judgment. Still the critic must ponder the values of each new direction knowing all the while that in the review of history he may have failed. Under the circumstances, the critic relies to a great extent on his personal resources. He needs a keen eye to perceive the precise qualities particular to the new mode of vision. He calls upon his fund of knowledge to relate the new approach to other schools and tendencies. He employs his power of insight to extrapolate (if he can) those aspects of a contemporary movement he finds valid, viable and worthy of encouragement.

The twentieth century critic faces a unique situation in that he must deal with a multitude of movements—one ‘ism’ rushing pell-mell on the heels of another. The rise and decline of these movements seem similar to the inception, blooming, flowering, and decay of civilizations division with clean eyes if the new work is widely at variance with what he already knows. The critic is in constant danger of falling victim to trained incapacity, an impairment to which all specialists are prone. For example, Baudelaire and the Goncourts considered Daumier’s paintings as little more than transpositions of his lithographs rather than as the bold innovations these works now are seen to be. On the other hand, the critic may proclaim a school of painting as a major departure when it is not. American Scene painting was saluted by Thomas Craven and other critics of the thirties as a renaissance, whereas, viewed from this distance, these same pictures—by Thomas Hart Benton, Grant Wood, John Stuart Curry, and the other regionalists—have all the earmarks of a regressive interlude in the course of twentieth century art.

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The innovators who start the movement often do so for the sake of creative pursuit. They tend to reject the spade work necessary to exploit in full the possibilities suggested by their exploratory efforts. (Marcel Duchamp is the classic instance of the innovator in his pure state. Each of the few works he completed was a creative departure from the one before. When he no longer had ideas that challenged him, he stopped painting.) Sometimes an artist finds himself in the ranks of the innovators by the fortunate accident of time and place rather than through natural endowment. It is doubtful if Sisley would have ventured an untested mode of vision had he not been closely associated with the Impressionists at a formative stage of their development.

Next the consolidator seizes on those possibilities only partially explored by the innovator. Juan Gris arrived in Paris after Cubism had been launched but yet not fully exploited. He consolidated certain aspects of the movement that had not yet been clarified, and, such was his personal gift that he refined what he acquired from Braque and Picasso. Yves Tanguy joined the surrealist movement after it was a going concern. He consolidated a number of latent potentialities into a surreal vision personal to himself. While neither Juan Gris nor Yves Tanguy can be considered major innovators, both were creative in their own way as consolidators. It is the consolidators, coming on the second or third wave of a movement, who generally ferret out and develop the varied possibilities inherent in the new approach.

Now the refiner is apt to make his appearance after the territory has been mapped. He tends to remove that which is coarse, tentative, at loose ends in the works of his precursors. His gift is that of the sensibility which distills a mode of vision, oftentimes leading him to stress elegance and niceties of nuance, as in the cubist works of Jacques Villon and the abstractions of Ben Nicholson. Refiners appear on the scene when a tendency enjoys full favor. Or else the refiner’s elegant modernism possesses the right ingredients to become the vague among fashionable collectors. Marini’s mannered archaicism, for example, led the way for acquisition by the smart set of works by such urbane revivalists as Fazzini and Manzu, Armitage and Chadwick. The refiner often is astonished by his celebrity. Dufy made no effort to captivate the socialites who acquired his pictures of racetracks and regattas; his sensibility just happened to coincide with a certain kind of taste. Coincidence of style with prevailing taste in the upper echelon of museum directors, dealers, and collectors accounts for the frequency with which refiners are laureled with prizes at major international exhibitions, those bellwethers of current fashion in the high society of the art world.

Finally, the corruptors round out the cycle. Their works tend to be garish, tricky, showy, likely to catch the fancy of the public and to make good newspaper copy at the peak of the movement’s renown. The corruptor frequently has a virtuoso talent and an instinct for timing that assures him a following among bandwagon collectors who measure worth by popular acclaim. Dali’s uncanny knack for sensational imagery corrupted Surrealism, as more recently Mathieu has corrupted expressive
abstraction by adding a note of theatrical excitement. Both Dali and Mathieu (it should be said) are gifted, ingenious, witty, sophisticated, and they contributed to the tendencies they exploit with an eye to publicity. Not all corruptors are sophisticated and cynical. Some are merely naive artists who duplicate the superficial characteristics of a style which has gained widespread public notice. Works by naive corruptors of Impressionism can be found in museums from one end of Europe to the other. A decade or so ago the naive corruptors tended to favor Surrealism, but many now paint horrendous abstractions in the belief they are keeping step with the times.

The division of artists into innovators, consolidators, refiners, and corruptors ought to be employed with care. Like any such rubric, it can be abused if it is used as a device for putting artists into pigeon-holes. Many artists will not fit categories. Matisse, for one, was variously innovator, consolidator, refiner, sometimes within the same work. As for Picasso, the extraordinary range of his talent has spilled over into each of these stages in the rise and fall of a movement. The value of this approach is not in tagging an artist with a designation. Its merit resides in establishing a relation between a body of work by an artist and the sequence of development within a tendency in art.

After a movement has run its course and declined, the critic is in a favorable position to separate the men from the boys—something not always possible for him to do when the novelty of a new mode of vision obscures the genuine worth of different contributors to a school. Apollinaire, writing in the peak years of Cubism, credited Gleizes and Metzinger with a more significant role in that movement than would be accorded them now.

A tendency usually emerges at a particular time and flourishes in a particular place. This "timing" phenomenon raises certain questions for the critic to consider. He might want to know what circumstances in the milieu precipitated new ways of conceiving the image. Then again, he might seek to determine how a movement was received in its own time. The kind and degree of acceptance accorded a movement has a bearing on the careers of the artists who are its chief protagonists. The German expressionists banded together as Die Brücke formed a cohesive group with common aspirations so long as they remained relatively obscure. They split apart esthetically after achieving a measure of recognition. The response of the age to a tendency tells us something about the period as well. Nietzsche maintained that "...a just posterity judges the collective intellectual state of a time only by those few great and lonely figures of a period, and gives its decision in accordance with the manner in which they are recognized, encouraged, and honored, or, on the contrary, in which they are snubbed, elbowed aside, and kept down."

The critic who concurs with this Nietzschean view carries a burden of guilt, never free of the fear that he may fail to recognize, encourage and honor those artists who one fine day will be considered the creative giants of his own generation, particularly as historians are bound to turn to the critics of the time to see how these colossi were received by their contemporaries. Recognition of the genuinely creative artist therefore is a matter of personal concern to the thoughtful critic inasmuch as he has a prime responsibility to call attention to the significant achievements of his time.

It generally is assumed that recognition for the artist is an unqualified boon. No doubt, recognition boosts his ego and may bolster his income, but what are the effects of recognition on his creative life? Vuillard's contributions to painting were made when, as an impoverished young man, he lived with a devoted mother and sister who kept the household going by taking in sewing. After he became a favorite painter of Parisian society his work never again achieved the distinction of his early efforts. Evidently Vuillard did not have the inner thrust of his friend Pierre Bonnard who continued to function creatively after gaining fame in his mature years even though he, too, struggled in his youth. So many creative giants have been neglected that at least those destined to swim against the currents of the time are supported in their endeavors by an internal sense of purpose independent of the world's acclaim. Ensor is a case in point. He cared nothing for fame during his productive years. Ensor's major achievements went unnoticed by the art world until long after he created the works for which he now is celebrated. There are too many variables in the creative personality to determine with any precision the effects (if any) on the artist's creative potential of acclaim given him during his lifetime. We can be certain, however, that recognition is not a prerequisite of the creative process, a circumstance one hopes the unjustly neglected artist keeps in mind as he pursues his independent course without regard to current fashion.

The fate of the artist at the hands of the critic may rest in the lap of chance. Pictures and sculptures have to be seen before they can be taken seriously. Thus the relatively unknown artist is at a disadvantage if his works are not presented properly in the cities with important concentrations of galleries, museums, critics, and art publications. Such are the conditions of the art world that his work needs endorsement by the "right" people. At this point, sociological factors may have a decisive influence on his career. That is to say, the art community, like other subcultures, contains in-groups with immense influence on the acceptance of the unknown artist's work in the right quarters. Generally speaking, outsiders without bona fide credentials tend to be excluded from such in-groups. This social phenomenon, which has nothing to do with esthetics,

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The building houses the Institute for Theoretical Physics, a division of the Aspen Institute. It contains ten study rooms, each designed to accommodate two physicists, and a seminar room for the 20 participants. One of the program requirements was an atmosphere where physicists will be able to pursue their work with minimal distraction, as the emphasis will be on individual research and informal interchange of ideas.

The corner areas with flat roofs are service rooms—two mechanical rooms, one for the south side and one for the north, toilets and storage. The high walls surrounding each corner room on two sides house the flues, pipes and all plumbing stacks. As the building is a long one, these block walls also act as an architectural ending and confine the study rooms within them and under the pitched roof. Surrounded by gravel, the building is raised off the ground in order to handle snow conditions.

TOWN HOUSES BY YAU CHUN WONG, ARCHITECT

This group of eight town houses is designed for a strip of property which is situated within a large urban renewal area, although the project itself is a private development. The building will have a great influence on the future urban renewal project and, in turn, is influenced by the existing condition of this area. Hence this project is partly credited to the assistance and cooperation of the Urban Renewal Department of the city of Chicago and local citizens' organizations.

Since it is an urban project, the emphasis of the design is on privacy. To provide this, there will be an enclosed garden for each unit. The living rooms are sunken; the master bedrooms on the upper floor are set back from the exterior glass front walls. By doing so, the living rooms and the master bedrooms will have both privacy and openness. Each of these eight units will have 1,870 sq. ft. living space: three or four bedrooms on upper floor, living room, dining and family room, kitchen and utility room on lower floor. There will be two full baths, an outdoor storage and a back yard. The construction will be pre-cast concrete floor and roof slab on masonry bearing walls, spanning 22 ft. on center between houses.
NUCLEAR REACTOR BUILDING

Designed primarily for teaching and research in nuclear engineering, the Reactor Building at the University of Washington, in Seattle, is the key facility in the University's comprehensive nuclear engineering program. Placed between existing buildings on a sloping triangular site and adjoining a wide exhibition plaza, the new structure provides a natural focus for the engineering building group. The broad deck surrounding the upper portion of the structure will be used to dispel some of the mystery of nuclear engineering as students will be able to view the reactor in operation.

The natural slope of the site permits the logical location of the reactor below grade at the level of trucking and service. The campus pedestrian approach is across the exhibition plaza at the upper level. The two-story glass and concrete reactor room is surrounded by related-use spaces at the lower level. Those directly related to its research function open into the reactor room, while others, shops, offices, and graduate classrooms, are grouped outside the control area in order to receive natural light. At the upper level are the control room and lecture room with sliding partition providing access between. The reactor room and the control room may be viewed simultaneously from the lecture and briefing space.

The building structure, in keeping with the nature of the dynamic new energy source, is entirely of reinforced concrete. The principal room is spanned by 4-foot-wide concrete channel slabs resting on 10-inch-thick poured beam-walls which also support the steel rails of a traveling five-ton crane. A heavy transverse haunch beam carries and braces the bulk of the overhead structure. The haunch beam and roof slabs are painted white. The rest of the structure is natural, unpainted concrete.
CASE STUDY HOUSE NO. 26 BY DAVID THORNE, ARCHITECT

FOR THE MAGAZINE, ARTS & ARCHITECTURE, IN ASSOCIATION WITH BETHELHEM STEEL BUILDER: 20TH CENTURY HOMES

The underside of the house presents a clean, uncluttered appearance. The location of the utility room, kitchen and bathrooms against the hillside helped make this possible.

The architect's report:

Since first attempting hillside construction, I have been intrigued with resolving the integration of a space platform to the site without affecting the contours or natural state of the land or the occupants' feeling that they are living on a hillside.

However, on a hillside the level one-floor solution creates many awkward and ugly spaces. The designer of a residence on a steep lot is confronted with no less than six elevations, the hardest one to solve being the underside or fifth elevation. The sixth elevation or roof is easily resolved architecturally to create a pleasing form. But the fifth elevation exposing the underbelly of the house is not as easily tossed into space. This elevation creates not only an awkward, wedge-shaped space but also unnatural, flat shadows on the natural contours of the site. The more houses do where this space is created, the more convinced I am of the necessity to study natural foliage on hillsides. The fifth elevation is more easily solved if natural shadows can be blended with the shadow cast by the underbelly. Reducing column lengths to a minimum creates a favorable shadow effect, but this becomes very difficult without resorting to extensive cantilevers or some form of step-down principle.

I think we reached a happy solution in the Case Study House. The maximum cantilever is ten feet and the maximum column height is nine feet. The site has not been disturbed in stepping down the hillside. Reduction in column height was achieved by setting the floor plane below the carport level.

The structural system is a series of nine identical rigid steel frames which were shop-fabricated by the Solano Steel Corporation. Four other steel bents form the carport roof and floor structure and the clerestory over the living and dining rooms. Field welding consisted of connecting these four bents to the living-dining rigid frames below. The other field welds were made at the juncture of the rigid frames to the foundation modulator beams. All these welding connections were temporarily field bolted to expedite field erection by the crane. Modular spacing was 10'-0" throughout except for both end bays which were increased 1 1/2" to provide identical sliding door openings and allow the end columns to be large enough to handle wind and earthquake shears.

The only earth retaining structure required was the concrete shear wall.
The steel-supported carport at the uphill level creates a good area for a landscaped patio off foyer and breakfast room.

The house at dusk with the clerestory well lighted. All light fixtures throughout the house are Prescolite; carport concrete slab by Permanente Cement Company.

The stepped-down design eliminates the hillside "stilt" appearance; the steel columns are only 9 feet high. The foundation pier forms are "Fibretube" from Fibreboard Paper Products.

The carport roofline extends over the house below creating a natural clerestory.
The 10-foot-wide cantilevered deck, overlooking the golf course and the hills beyond, provides 800 square feet of deck, most of it covered. The finish over the exposed concrete aggregate is "H-litzte" concrete sealer.
Stepping down from the carport, the view through the clerestory gradually expands as one approaches the main entrance.

The breakfast room opens to the clerestory and the secluded landscaped patio beneath the carport. Floor covering is Armstrong sheet vinyl Montina Corlon.

View across the living room, showing main entrance and foyer to the left, fireplace to the right, small sewing table and armchair by Hans Wegner.

Columns to simplify architectural detailing of sliding door frames have been rotated about their axis for the conventional rigid frame action, combining the weak axis (YY) of the column with the stiff axis (XX) of the beams, which required a slight additional weight in each column. The additional cost was easily saved in the simplicity of the connecting details.

The rotated column axis, placing stiff XX axis in the correct position in relation to the glass wall on the view side, added stiffness to this elevation and allowed the clerestory to be cantilevered from these lower columns, thus eliminating shear walls and adding to the openness of this clerestory space. Glazing of the clerestory was accomplished by gluing wood stops to the steel with 3M CTA-11 adhesive.

The house was to contain no more than 2,000 sq. ft. and was to include four bedrooms, two baths, utility room, kitchen, family room, living and...
Master bathroom and dressing room; Formica counter surface; all interior walls are Pabco drywall.

An 8-foot-wide Pella folding door will divide the dining room completely from the family room.

dining area. To give the living area an adequate share of space, I decided on the small bedrooms, setting the minimum bedroom size at 10 x 12 feet.

The breakfast room serves a dual function in that it is in the traffic pattern between the foyer and kitchen. The breakfast ceiling has been pierced for a space-flow visually into the 15-ft. ceiling height of the clerestory. This 5 x 5 hole introduces lighting from the clerestory and balances the natural light level in all these living spaces. The kitchen has been carefully planned and is as near the ideal doughnut-shaped kitchen as is possible. The actual cooking area has its own sink and garbage disposer. Partition cabinets allow space to flow into the breakfast room as well as the family room. The kitchen has a dead-end plan with no through traffic. This is important to families with two or three children.

The family room is closed off from the dining room by two doors — one a conventional swing door, the other an 8-ft.-wide Pella folding door. This device is always a good compromise between the private dining room and the open floor plan. Of course, with a structural steel frame, many or all of the partitions can be removed and we therefore feel the house is quite adaptable to various living requirements. The dining and living rooms have adequate space created by the clerestory, which is an extension of the carport roof. All rooms except the kitchen, two bathrooms and dressing room open onto the view deck or a landscaped service walk.

The carport is 30 x 24 with allowances in the approach driveway for additional guest parking, which is mandatory on a dead-end, hillside site.

The basic color scheme for the house was conceived during preliminary design stages, and the choice of exterior colors was dictated by the climate and the character of the surrounding landscape. The steel was painted dull gold because of the colors prevalent on the site: grays, greens, and browns. The gold color enhances the steel, blends well with the background and gives a warm feeling to the structure. Because the siding is white, medium and dark colors were chosen to emphasize architectural details: window trims, sashes, etc. The entrance, living and dining rooms are white, the kitchen and family room, a light saffron which blends with the gold of the steel. The den is gray-green, the boys’ room, beige and the girls’ room, apricot. All these colors harmonize well with the view outside. A light natural stain gives the wood ceiling a soft, warm look.

Furnishings were selected through S. Christian of Copenhagen, Inc. The rich teak woods of the modern Danish and Swedish pieces contrast most effectively with the exposed steelwork and the predominantly light colors of the interior. The textiles selected are mainly in the browns and golds to complement one another and the steelwork. The carpeting is a very durable yet warm-appearing brown and gold wool tweed.

One design change, other than the major flip in floor plan north to south which was previously reported (see Arts & Architecture, November, 1962), was the opening of the corners at the downhill side. This attempt to take advantage of additional light and spectacular views from the master bedroom and the family room proved very successful in its final form. Another change was the 5-foot-square hole into the clerestory above the breakfast room. This small room which serves as the transition space from the foyer to the kitchen, is, I believe, the most successful area of the house. It achieves the sense of integration into or on the hill hoped for in the preliminary concept. From the breakfast room there is a view under the carport slab to a secluded, landscaped patio and another vista through the clerestory to the space frames of the carport and its foundation piers.

To repeat the piercing square theme which was started by this field design change, we introduced a series of squares at the juncture of the retaining slab and the driveway slab and grouted in glass blocks. The lighting effect, downward in daytime upward at night, is pleasant.
All kitchen appliances, oven, cook top, dishwasher, food disposer, refrigerator, are from Tappan; counter tops are white Formica; cabinet work, walnut; the floor is Armstrong Montina Carlon.

LEGEND:
1. FAMILY ROOM  6. BEDROOM
2. KITCHEN     7. BEDROOM
3. DINING ROOM  8. BEDROOM
4. LIVING ROOM  9. BEDROOM
5. BREAKFAST ROOM 10. MASTER BEDROOM
6. FOYER       11. DRESSING ROOM
7. BEDROOM     12. BATHROOM

PHOTOGRAPHS BY BETHLEHEM STEEL.
PRODUCTS: CASE STUDY HOUSE NO. 26

The following products have been Merit Specified by the architect, David Thorne:

<table>
<thead>
<tr>
<th>PRODUCT</th>
<th>MANUFACTURER</th>
</tr>
</thead>
<tbody>
<tr>
<td>STRUCTURAL</td>
<td>Steel Frame—Bethlehem Steel, 100 California Street, San Francisco 19, California</td>
</tr>
<tr>
<td>FOUNDATION PIERS</td>
<td>Concrete Forms—Fibreboard Paper Products Corporation, 475 Brannan Street, San Francisco, California</td>
</tr>
<tr>
<td>ROOFING</td>
<td>Pioneer-Flintkote, 5500 South Alameda, Los Angeles, California</td>
</tr>
<tr>
<td>WALLS</td>
<td>Interior Walls—Pabco Gypsum Division, Fibreboard Paper Products Corporation, 475 Brannan Street, San Francisco, California</td>
</tr>
<tr>
<td>DOORS AND WINDOWS</td>
<td>Sliding Glass Doors—Frontier Sliding Glass Doors, 1255 Birchwood Drive, P. O. Box 731, Sunnyvale, California</td>
</tr>
<tr>
<td>PLUMBING</td>
<td>Water Heater—American Appliances, 2425 Michigan, Santa Monica, California</td>
</tr>
<tr>
<td>ELECTRICAL</td>
<td>Light Switches—Pass &amp; Seymour, Syracuse, New York</td>
</tr>
<tr>
<td>HEATING</td>
<td>Radiant Heating—A. O. Smith Company, Sycomore and Wells, Newark, California</td>
</tr>
<tr>
<td>APPLIANCES</td>
<td>Kitchen Equipment—Toppan Company, 900 David Road, Burlingame, California</td>
</tr>
<tr>
<td>FINISHES</td>
<td>Floor Covering—Armstrong Montina Carlon, Armstrong Cork Company, Lancaster, Pennsylvania</td>
</tr>
<tr>
<td></td>
<td>Counter Tops—Formica Corporation, 8447 Wilshire Boulevard, Beverly Hills, California</td>
</tr>
<tr>
<td></td>
<td>Paint—Dunne Paint Company, Oakland, California</td>
</tr>
<tr>
<td></td>
<td>Concrete Sealer—A. C. Horn Company, 530 Third Street, San Francisco, California</td>
</tr>
</tbody>
</table>

NOTES IN PASSING

As a result, our contemporary world presents the picture of an economically advanced minority of peoples on the one hand and, on the other, a highly diversified group of peoples who make up the majority of mankind and who, at varying stages of economic underdevelopment, are seeking to narrow the broad gap which separates them from the economic leaders.

A word must be said about the important factor of government intervention. Government intervention has tended to increase markedly in our time. It is particularly noticeable in countries which have recently gained their political independence and which find themselves faced with the great task of raising the living standards of their people with a minimum of delay.

This task requires some degree of central direction. Essential data about natural resources, both natural and human, have to be drawn up for the development of these resources, as part of an overall national programme of economic and social development. Priorities must be centrally established, official encouragement must be given to projects and industries which are likely to promote the welfare of the people as a whole, and technical assistance and foreign loans must be applied for through recognized government channels.

The methods applied to achieve economic development will reflect the prevailing ideology. But it should be borne in mind that the conditions favouring spontaneous economic growth are present only in a small measure in the underdeveloped countries and, without some degree of government action, no substantial progress could be expected in the foreseeable future. —UNESCO
The structure uses 25 tons of steel. Columns are on 14-foot centers in the north-south direction and in the opposite direction are spaced 21 feet on the end bays, 29 feet on the center bay.

Walls are white Pentelic marble, imported from Greece, and gray glass. Exterior wall planes are recessed 7 inches in from the structural frame so that the frame casts shadows on opaque walls, reflections in glass walls. This clearly separates structure from wall panels, thereby emphasizing the function of each. The dark glass functions as a mirror during daylight hours, reflecting sky and trees. At night privacy is provided by full draperies in bedrooms and 14-foot drapery panels in the living/dining area, which slide around perimeter walls to provide privacy and sun control as desired. Local building codes require under-roof areas to be proportionate to site area and this did not allow complete coverage of the pool, as the client desired. However, steel framing for partial coverage with glass or plastic has been provided.

The interiors were designed by the architect. Floors are white terrazzo; carpets, white wool. The upholstery is upholstered in black leather and brightly colored fabrics. Furniture frames are polished stainless steel and chrome.

The landscaping is simple: A “podium” of black Mexican water-worn pebbles surrounds the structure and a walk defines and separates this from the ground cover which flows into the golf course. Landscaping was designed jointly by the architect and by the firm of Armstrong and Sharoffman.

THE ARTIST AND THE CRITIC—JULES LANGSNER
(Continued from page 17)

can be costly. Consider the exclusion of Cezanne. Irascible, paranoiac, out of sight at Aix-en-Provence, Cezanne had no influential intercessors in Paris until near the end of his life. Thus his painting was not to become a vital force until after his first one-man show in 1904 only two years before he died.

Like everyone else, the critic may fall under the spell of fashion even though he may have had a part in creating the fashion in the first place. In any case, certain artists are acclaimed and coveted at any given moment as much from snob appeal as intrinsic worth. The artist whose work has no connection with tendencies favored at a particular time runs the risk of being overlooked. Kandinsky and Mondrian lived through the thirties in Paris without making a dent on the opinion-makers of the day. They were out-of-step with current conventions of School of Paris painting and, so far as the critics were concerned, they might just as well have been working in Timbuktu. Beguiled by the fashions of the day, the critics who ignored Kandinsky and Mondrian were blinded by snobbery, one of the Seven Deadly Sins of the Intellectual Life.

In death as in life, the artist’s fame rests in part in the hands of the critic, upon the kind of attention his work receives from the opinion-makers of a later generation. An artist’s reputation seldom remains stable for even a century after he dies. Many an illustrious career vanished in a generation. Leopold Seyffert was among a handful of artists who commanded the highest prices in the art market at the time of the Armory Show in 1913. Today, except for historians of American art, few persons are familiar with his name. The pendulum of fame may swing in the other direction, from neglect during the artist’s lifetime to celebrity after he dies: witness the esteem now accorded to the sculptor Julio Gonzalez. Sometimes the trajectory of the artist’s renown complements a circle from fame to downgraded esteem to a return of critical approval. After Monet’s death in 1926 his reputation went into a steep decline while his fellow impressionists Degas, Manet and Renoir gained in esteem. Monet now is highly regarded once more, his last works, ignored when he was alive, admired enormously.

External circumstances beyond the periphery of the art community may have decisive bearing on the stature of an artist at some future time. The frontal attack on modern art by political powers in the Soviet Union in 1922 reflected a doctrinal interpretation of Marxism. The prohibition of Modern Art in the Soviet Union has obscured the contributions of many pioneers of the movement from the turn-of-the-century to 1922. Such artists as the Lithuanian Cuirlionis, Popova (the foremost disciple of Malevitch), El Lissitzky, Tatlin, and Rodchenko occupy space in a shadow pantheon of modern art. Very few of their works have been seen in the West. Indeed, to this day, works by these artists are inaccessible to all but a handful of persons in Russia, although (in recent years) they have been restored to history in the Soviet Union as a result of some slight relaxation of the political censorship of art. Until such time as the Soviets release pictures and sculptures that now are political prisoners the full extent of the Russian contribution to twentieth century art will remain obscure, and the artists largely forgotten.

Sometimes posthumous fame is confined to an elite intensely concerned with the visual arts. Paintings by such twentieth century artists as Kupka, Picabia, and Malevitch call upon a sophisticated set of responses, and thus are too arcane for the visually unsophisticated. Arnold Bennett, now a much neglected artist, ironically had the last word on posthumous fame among the elite. In a little known book called Literary Taste and How to Form It, Bennett put his finger on the crux of the matter: “... the fame of classical authors,” he observed, “is entirely independent of the majority. It is made and maintained by the passionate few. . . . It is by the passionate few that the renown of genius is kept alive from one generation to another. . . . The majority can make a reputation, but it is too careless to maintain it.” Bennett’s passionate few with regard to classical authors have their counterpart in the audience receptive to the advance guard pictures and sculpture of the twentieth century.

The existence of an elite in our egalitarian society raises the hackles of many persons for whom the notion of a privileged group is loathsome. It suggests discrimination, exclusiveness, pretensions of superiority, a repudiation of democracy. These same persons are ready to acknowledge that only a small fraction of the populace has competence in the sciences. The arts, however, are another matter. In these domains everyone is entitled to his own opinion, but some opinions are worth more than others. The works of a master as famed as Michelangelo are subtle and complex and require considerable sophistication if the viewer is to realize his achievement in its fullness.

There is nothing invidious about an elite in the arts. It consists of the passionate few, informed, intensely concerned, skilled in their responses. Anyone sufficiently motivated to make the effort may gain admission without regard to sex, race, nationality, education, financial status. The serious artist turns to the elite for confirmation of his achievement, for he knows that esthetic worth cannot be determined by popular approval, any more than the validity of a scientific concept can be established by submitting it to the electorate. In time, of course, the works of an artist restricted to the passionate few may become known and admired by the majority, as in the art of a Renoir, a Gauguin, a Picasso, or a Matisse. But it was an elite to which these artists first addressed themselves, and it was an elite which secured their reputations. Art in a society deprived of an elite audience soon atrophies, for the approval of the majority is insufficient to incite the artist to his finest efforts.

(Continued on page 32)
The serious critic, in turn, addresses a major proportion of his efforts to the passionate few. This is not to say that the serious critic rejects the multitude out of hand. On the contrary, interpretations of art for the majority are vitally important in a day and age in which pictures and sculpture are matters of interest to vast numbers of people. If the critic has a flair for journalism and adult education he has a responsibility to devote some of his time to such activities. But criticism would die on the vine if it was confined to journalism and adult education. In the last analysis, the critic's most important contributions are made in those writings he directs to the passionate few, in that he pushes his own capacities to the limit to engage the subtleties and complexities inherent in many of man's finest expressions. In serving criticism, he serves the artist as well, by keeping ideas in a state of ferment, by acting as gadfly, questioner, dissenter, advocate, elucidator, irritant, catalyst, disturber of intellectual tranquillity.

ART
(Continued from page 5)

As a matter of fact, Kohn copes with strictly sculptural problems as old as sculpture. When he adjusts a square within an ellipse, or when he plays an arching form against a rectilinear plane, he is indulging in an inquiry into the nature of weight and shape as they are deployed in space—the unqualified space of the sculptor, not the delimited space of the architect. In recent work Kohn goes even further in his amusing not-quite-architecture discourse. He exhibits, for instance, one fantasy of towers that is very complicated indeed. Who else but a man who has spent years in Hollywood constructing a wonderland of hollow settings could have invented such a technique of inverted and peculiar values? And who but one nurtured in the land of Americanism I spoke of is possible. Kohn's unorthodox notion of the relationship of volumes is very difficult to explain. The serious critic, in turn, addresses a major proportion of his efforts to the passionate few. Although he has always worked with large simple planes Kohn displays them in unexpected relationships—a long wall tilting against an inverted comma, or two semicircular arches connected by a fantastic arabesque, or traditional curves seeking to clinch, interrupted by a blocky mass.

Kohn's unorthodox notion of the relationship of volumes is abetted by his choice of material. The surface pattern of wood joinery is often irregular, even to the point of appearing the marquetry of a carpenter gone mad. When this crazy-quilt pattern is seen on a large shape heaving itself incongruously into the air while a smaller shape incredibly supports it, the kind of Americanism I spoke of is possible. Kohn exhibits, for instance, one fantasy of towers that is very complicated indeed. Who else but a man who has spent years in Hollywood constructing a wonderland of hollow settings could have invented such a technique of inverted and peculiar values? And who but one nurtured in the land of Americanism I spoke of is possible. Kohn's unorthodox notion of the relationship of volumes is very difficult to explain. The serious critic, in turn, addresses a major proportion of his efforts to the passionate few. Although he has always worked with large simple planes Kohn displays them in unexpected relationships—a long wall tilting against an inverted comma, or two semicircular arches connected by a fantastic arabesque, or traditional curves seeking to clinch, interrupted by a blocky mass.

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FURNITURE
- Catalogs and brochures available on Muitalum and X-Ahum series of contemporary furniture designed by George Kasparian. Experienced contact: Mr. Kurt, working with leading architectural and interior design firms. For further information, please, to Kasparians Inc., 7772 Santa Monica Boulevard, Los Angeles 46, California.

400a Herman Miller Inc. offers a series of coordinated brochures illustrating the Herman Miller Collection. Also available is a Comprehensive Storage System Workbook and A Residential book, Herman Miller, Inc.

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380a Norwegian Furniture: Complete collection of outstanding Norwegian imports. Upholstered furniture, round and rectangular tables, dining groups, specialty chairs, modular seating groups. Teak and walnut; included in the collection is an outstanding selection of fabrics of bold contemporary color and design. Immediate delivery. Peter Wessel, Ltd.

325a Chairs: 10-page illustrated catalog from Charles W. Stendig, Inc., shows complete line of chairs in a variety of materials and finishes. Solid wood constructionArmchair, "Swiss" aluminum stacking chair designed by Hans Coray. "HH" steel and leather chair are a few of the many pictured. Well designed line; data belongs in all files. Charles W. Stendig, Inc.

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355a Interior Design: Crossroads have all the components necessary for the elegant design of any room. Available are the finest designed products of contemporary styling in: furniture, carpets, draperies, upholstery, wall coverings, lights, accessories, oil paintings, china, crystal and flatware. Booklet available. Crossroads Mfg., Inc.

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405a Recessed and Accent Lighting Fixtures: Complete range of contemporary recessed and surface designs for residential, commercial applications. Holiday pendant, press, colorful combinations of hand-blown colored or satined glass or as metal shades. Light fixtures—soft satin thermal glass in glowing geometric shapes for unusual decorative effects. Precise Manufacturing Corporation. 1251 Doolittle Drive, San Leandro, California.

305a Contemporary Fixtures: Catalog, data good line contemporary recessed and surface designs for residential, commercial applications. Holiday pendant, press, colorful combinations of hand-blown colored or satined glass or as metal shades. Light fixtures—soft satin thermal glass in glowing geometric shapes for unusual decorative effects. Precise Manufacturing Corporation. 1251 Doolittle Drive, San Leandro, California.

410a Lighting: A completely new 12-page, 3-color brochure of permanent items in their line of recessed and wall mounted residential lighting fixtures is now available from Marvin Electric Manufacturing Company. The literature includes typical installation photos as well as complete specifications on all items. Marvin Electric Manufacturing Company.

405a Lanterns, a major innovation in lighting designed by George Nelson and manufactured by the Howard Miller Clock Company, are shown in a two-color, four-page brochure just issued. The illustrations show all 21 styles in four models—ceiling, wall, table and floor—and include the large fluorescent wall or ceiling unit designed primarily for contract installation. Each is accompanied by dimensions and price. Distributed by Richards Morgenbachtel, Inc., Howard Miller Clock Company.

360a Decorative Grilles: Sun control, electronic and architectural grilles in all metals and finishes; 12 stock patterns for interior and exterior use. Can be used for ceilings, fluorescent luminaires, overhead louvered, overhead louvered. Illustrated catalog available. Nomad Associates.

380a Grillework: Infinilite Grillework. Infinilite makes possible a variety of architectural emphasis on luminous ceilings. Through the combination of a new and distinctive architectural plastic grillework provides unlimited design possibilities.


310a Sound Conditioning: Altec Lansing Corporation, manufacturers of complete matched and balanced systems for building and commercial use, includes tuners, preamplifiers, power amplifiers, loudspeakers, complete home theater, and shower systems. Complete high-fidelity systems available from $300.00 to $1,500.00. Prices for professional and commercial equipment available upon request. Altec Lansing is the world's largest producer of professional sound equipment, and specified by leading architects the world over for finest reproduction of sound obtainable for homes, offices, studios, theatres, and studios. Engineering consultation available. Altec Lansing Corporation.

350a Decorative Grilles: Sun control, electronic and architectural grilles in all metals and finishes; 12 stock patterns for interior and exterior use. Can be used for ceilings, fluorescent luminaires, overhead louvered, overhead louvered. Illustrated catalog available. Nomad Associates.

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ARTS & ARCHITECTURE

PHOTOGRAPHIC REPRODUCTIONS

(334a) The Averycolor reproduction process uses a new film, douglas, and end-finish of print; all photographic stock; not acetate basis. The process, coupled with twenty years of experience in the photographic field, has resulted in a revolutionary change in making reproductions faster, clearer, cleaner. Other services include black-and-white prints, color transparencies, and custom dry mounting and display transparencies. Avery Color Corp.

SPECIALTIES

(412a) A complete package of information literature on new Armstrong Ventilating Acoustical Ceiling systems has been compiled for architects and engineers by the Building Products Division of the Armstrong Cork Company. Fully illustrated brochure gives complete details on basic operation of the new ceiling system, shows how it reduces air conditioning costs through elimination of air diffusers and a large amount of supply duct work; case histories of actual installations are included. Folder includes sample color brochure, shows how the system is executed. Era Industries.

PHOTOGRAPHIC REPRODUCTIONS


(350a) Davidson Brick Company. Manufacturers of Middletown Steelloyd Brick and other structural clay products, are re­ porting through the Bel Air Flats. The 8" x 12 x 2" nominal dimension of the brick provides an ideal unit for patios, pool decks, window ledges, garden walks, covering and many other uses. Offers 45% savings in construction costs. Sample brick and literature available. Davidson Brick Co.

(309a) “Ideas from Architects' Own Redwood Homes,” a 16-page illustrated brochure, shows how architects design and specify redwood for their own houses. Other free literature available from California Redwood Association. This brochure includes the newly published “Exterior Finish” booklet illustrating in color, bleaches, stains, and other natural finishes, as well as possibilities of painted redwood siding and redwood with no finish whatever: “Garden Redwood,” 16 of the world's leading outdoor ideas; “Redwood Goes to School,” showing latest ideas in wood school design; Architect's File containing the above booklets and a special selection of data sheets; individual data sheets answering hundreds of thousands of questions about redwood, Redwood News, quarterly, discussing newest and most interesting uses of redwood in architecture and industry, California Redwood Association.

(349a) Available from the West Coast Lumbermen's Association is an excellent 44-page catalog entitled: “Douglas Fir lumber—Uses.” This well-illustrated catalog includes detailed descriptions of boards, finish, grade, quality, and panels, and light framing with several full-page examples of each; tables, weights, properties of Douglas fir, West Coast Lumbermen's Association.

SURFACE TREATMENTS

(361a) Completely new full-color 28-page catalog of Mosaic ceramic tile manufactured in California and distributed throughout the area west of the Rockies. First presentation in booklet form of tile used for the Harmonite color families; includes decorated glazed wall tile, new Stucco palette in one inch square tile, and Byzantine. Catalog available upon request. The Mosaic Tile Company.

(369a) Triangle Tile by Hermosa, 8" equilateral glazed ceramic tiles available in all Hermosa colors, in bright glaze, satin glaze, and opaque-frosted Glaze. Triangle Tile brochure shows unlimited possibilities of this medium for light duty wall and ceiling finishes, wainscots or dadoes in any room. Excellent for decorative design effects, or as abstract Ceramic, color and design accents. Triangle Tile has all durable features of Hermosa glazed ceramic tile and has space-saving, accurate setting. Gladding, McBean.

(378a) Celotone Tile: New, incom­ bustible, highly efficient acoustical wall and ceiling finish for acoustical paneling and special binders. Irregular Fis­ sures provide travertine marble ef­ fect plus high degree of sound ab­ sorption. Made in several sizes with washable white coating. Manufactured by The Celotex Corp.

(362a) Ceramic Tile: Brochures, samples and catalogs of Pomona Tile are available to qualified architectural and home improvement professionals. Included are "Tile Photo," full color, exact size, reproductions of Pomona's Distin­ guished Designer Series of Sculpture and Decorator. This series features unique designs by many of America's foremost de­ signs including George Nelson, Paul McCobb, Saul Bas and Dong Kingman. Pomona Tile offers a complete line of glazed floor and wall tile in 42 decorator colors, Pomona Tile Manufacturing Co.

(384a) Surface Treatments: Vitro­ cem glazed cement finishes are being used by more and more archi­ tects. This new, highly imper­ vious surface is essential. Available unlimited colors and multi­ color effects, it is being used for interior and exterior over all types of construction. California Redwood Association, offers a complete line of glazed floor and wall tile in 42 decorator colors, Pomona Tile Manufacturing Co.

(380a) Home Furnishings: A series of brochures illustrating the new line of contemporary home furnishings and decorative accessories is now available from Ray­ mor. Clocks, wall decor, Scandi­ navian and country furniture and many artistic and decorative ac­ cents are among the units newly cataloged. All literature is avail­ able to the trade. Raymor.

(336a) Surface Treatments: La­ verne Originals offer imaginative and practical wall and ceiling treatments—wallpaper hangings, 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 Mar­ bulla Mural—stock sizes 21 x 9 feet on one bolt or to your mea­ surements. All Laverne products available in custom colors. An in­ dividual design service is also offered for special products. Brochure and samples available. Laverne.

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