

AESTHETICS IN MODERN ARCHITECTURE

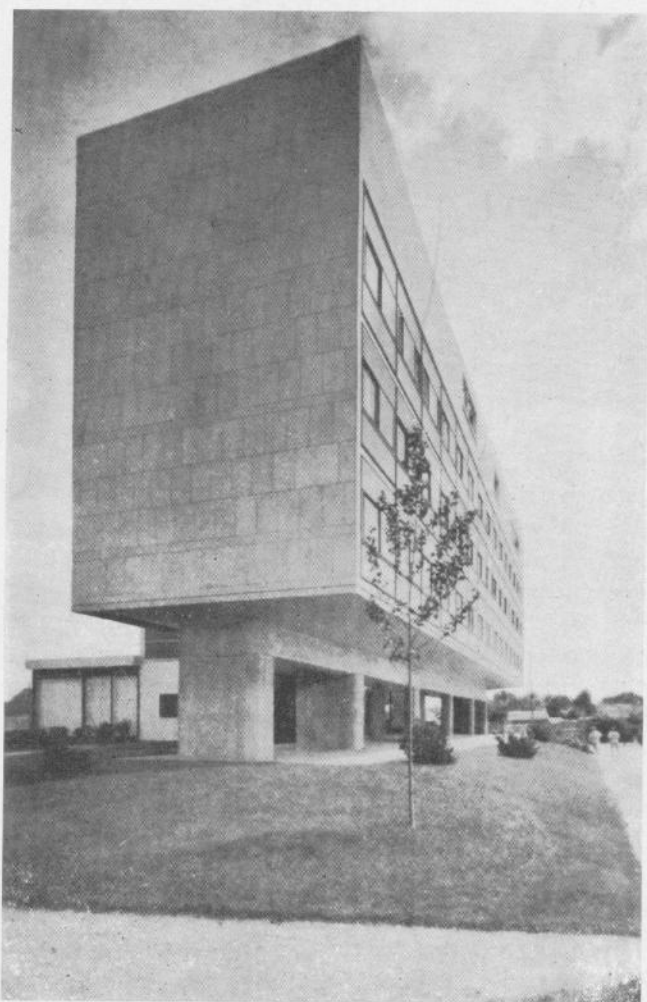
By HARRY SEIDLER

NOTE: The following constitutes a condensation of lectures, delivered at the summer art institute of Black Mountain College, U.S.A., 1946.

THE IMPERATIVE FUSION OF THE ARTS

IT WOULD be quite correct to say that modern architecture is fighting a winning battle. We know it is here to stay and yet our conviction is sometimes marred by the generally known public dislike of what is considered modern. Some will say that we are in a period of change, possibly even in a state of consolidation and that it would be too much to expect unanimity at this time. If we try to analyze the criticism of the cynic, we find that almost invariably the complaints are emotional, or let us say aesthetic. Modern architects, as a rule, have no difficulties justifying their work on a rational basis.

Truly great architecture all through the ages has been a profound expression embodying the essence of the social, cultural and artistic life of the time. It certainly did not only satisfy the physical, but to at least an equal degree the emotional needs. When inquiring into the underlying reason for this, we find, that in all these periods there existed a far greater fusion of the arts than we know to-day. Painting, sculpture and architecture have always profited by and contributed to each other, in fact a great many times, such as in some Gothic examples, it is almost impossible to draw a definite line between them. It is just this kind of fusion or interdependence that is lacking to-day and yet which is so imperative, if modern architecture is to come to its own. Why are the arts not as unified as they used to be? Of course we could ask: why is our culture not as integrated as is essential for the fruitful development of an expression? This tremendous problem has been summed up by one of our art historians as "the split personality of our time". Never in the past have changes, particularly



1. Le Corbusier: An example of unconventional visual effect of skeleton construction. Our eyes must learn to adjust to this picture of new stability.

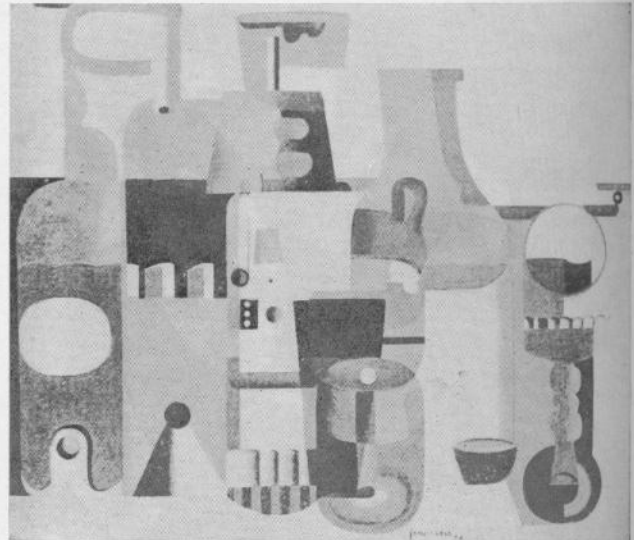
technological, taken place with such rapidity. Our emotions seem to refuse to keep pace with new developments which threaten to change our lives continually. We lack a point of reference, or just simply — security. Is it then surprising that shelter, our most intimate environment, should be the one to suffer, to remain stagnant and be falsely considered secure? An example may serve to illustrate this: Many an industrialist to-day will welcome any radical innovation to better his product. His home however, will be doomed to remain static. It will be to him the embodiment of security — a Tudor castle. Significantly enough, that same person's appreciation of painting will have stood still in the romantic period of the 19th century.

We must attempt to bridge this gap and make people realize that both art and technology change together with time. There are a great many things to-day that are inherently our own, definitely products of our age. The more obvious and generally accepted are technical achievements, but many of us are oblivious to the fact that our eyes have changed also. We have very definitely 20th century eyes, which differ from any other in history. Artists, sensitive translators of the impacts of their environment into visual form, have given proof of it for several decades. I will try to show later how all the arts to-day, including genuine modern architecture are proving that the elements of this "new vision" are manifestations common to all of them.

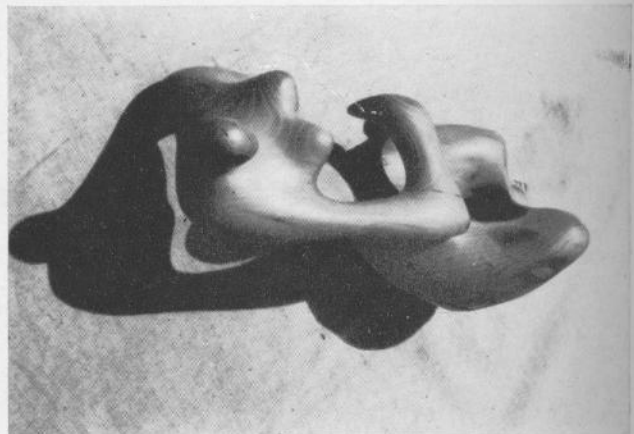
Another rather important aspect is this: the pendulum swinging away from the "art for art's sake" eclecticism of the last century has resulted in an overstressing of the significance of "functionalism". Buildings of great periods of the past served their purpose perfectly. However, the delight at the re-birth of rational thought in building is undoubtedly the reason why logic is commonly considered the new basis for architecture. We would be travelling on a very narrow path, if architecture consisted of only pure reason. Little else, however, has been attributed to modern architecture as its very own — never any aesthetic principles. This undoubtedly for fear of stating dogmas, something of which there has been too much in the past. Therefore, I think it might be well for us to be aware of the position of aesthetics in architecture, refusing of course to say that it must stay so.

NEW AESTHETIC ELEMENTS

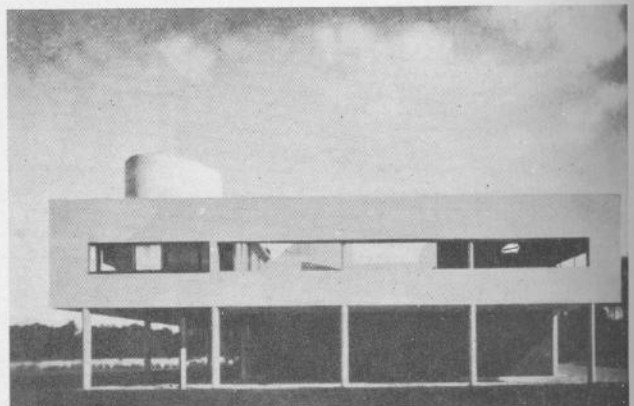
The visual effects in building, obviously of a rational origin, are those which are an outcome of new engineer-



2. Le Corbusier: The overlapping and transparent quality is the keynote in much of our modern painting.



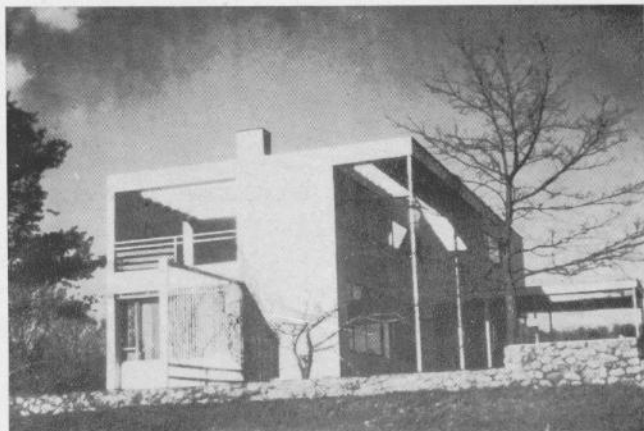
3. Leo Amino: Wood sculpture showing the penetrations and dematerialized appearance, characteristic of recent work.



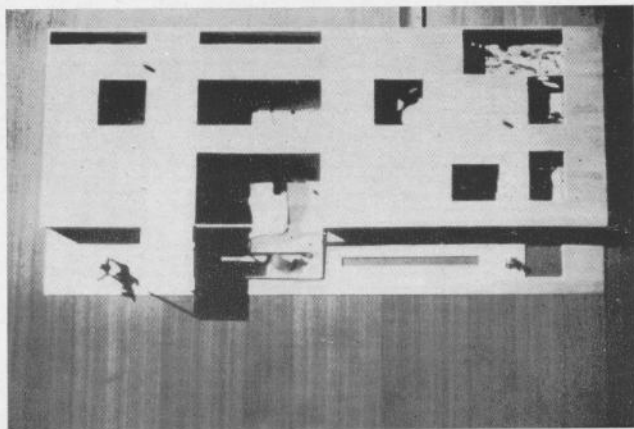
4. Le Corbusier: Architecture comparable to sculpture. The hollow centre opens simultaneous views of in- and outside.

ing practice. Structural engineering, one of the many very progressive branches of modern technology, has been the prime cause for our revolution in building. Responsible above all is the development of materials, which made possible the principle of skeleton constructions with all its implications. Although in our experience seldom fully exploited, the inherent aesthetic potentialities of skeleton construction are strongly opposed to traditional principles of stability. The familiar horizontal modulation of elements basically opposes gravity and the placement of large masses of buildings on visually almost negligible supports violates the traditional eye (1). Cantilevered slabs hovering in mid-air seem to negate the fact that mass is something solid and heavy. These visual characteristics find their exact parallel in some of the elements of modern painting and sculpture. Both of these sister arts have been concerned with the problem of *Dematerialization of Space and Mass*. In painting the use of *Transparency* is the most notable. Objects or colours are rendered immaterial as if swimming in large bodies of water (2). Some of our modern sculpture attains the same end by hollowing out and actually penetrating the conventional solid mass (3). Even the cubists' element of *simultaneity* finds its echo in modern architecture. The traditional body of building has been broken into something purely sculptural, empty, closed or transparent at will, introducing various simultaneous views of solids and voids and with the use of glass removing the conventional barrier between outer and inner space. With this we have created a new volume which is neither solid nor void — *negative space* which in the case of the sculptor and the architect is considered with just as much care as the conventional positive or enclosed space. (4).

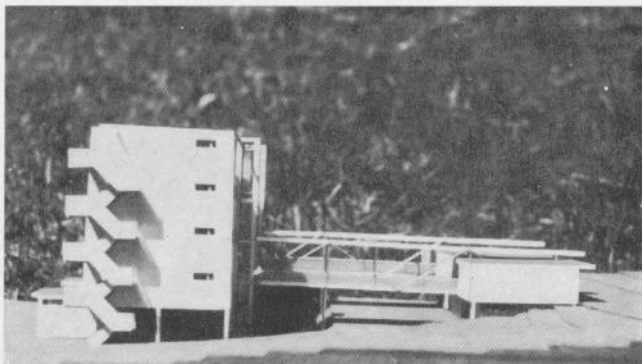
Simplification and clarity of statement are also attributes common to all the visual arts to-day. The ordered sequence of effects is quite an old principle in architecture, but is mostly disregarded. A building is viewed from the successive distances at which an onlooker happens to be away. Our eye to-day asks for simplicity and ease of comprehension. We are able to grasp different things from various positions. The detail at the top of a Gothic skyscraper for instance, will never be seen fully from the ground and will result in a disturbing silhouette, which is hard to grasp from the distance. Simple outlines are desirable. Coming nearer, we are ready to see protruding elements as well as negative space within the simple outline, which at this level can be easily understood and form a new interest. Coming nearer yet we are aware of detail, materials, colour, etc. With a careful balance between these elements, the proper level of appreciation at various distances will be maintained and will add to the effectiveness of the whole, wherever we are in relation to it (5).



5. Walter Gropius: Simple silhouette outline clarifies the sculptural composition and emphasizes interest in recessed and projected elements.



6. I. M. Pei: Top view of a low building situated between skyscrapers. Horizontal roof surface receives new attention.



7. Harry Seidler: Masses arranged in polarity rather than fusion. Connection adds to feeling of tension.

The new perspective is what we can call an interesting new viewpoint in some recent modern buildings. Most traditional work is mainly concerned with surface. Architects of the past went to extremes of care with the single dimensional aspect of a mass. Of secondary importance was the perspective of the mass as seen from eye level above the ground. To-day, however, we are often in a position to see buildings from above, a most unconventional viewpoint. Those who have looked at the disorderly mass below, from a skyscraper window or a plane, will agree that this new aspect is worthy of original thought. There is increasing need for our roof surfaces to receive the amount of study we are used to giving the vertical planes of our buildings. That applies aesthetically as well as in the use of materials (6).

There also exists a new relationship of masses to each other. In the conventional sense, masses literally grew out of each other (partly because of structural limitations of course). In modern architecture we find, apart from a more concise definition of the individual mass, an arrangement of volumes in *Polarity* or *Tension* to each other; that is not visually merging, but in opposition (7). Again almost identical aims can be discerned in the work of many non-objective painters. The principle of tension and lightness, rather than heavy phlegmatic balance (of which symmetry is the extreme) is also seen in surface treatment. Generally, new playful creativeness is allowed to take the place of rigid conventional axioms.

The principle of the counterpoint is seldom considered. The term is used in music mostly and means the re-occurrence of some main motif, even if in a somewhat different form. In architecture, the re-use or carrying through of a certain strong form (such as a curve or a slant) will result in a sensitive unity throughout the whole, similar to a musical composition. In contrast, "modernistic" or imitative modern work collects a variety of violent motives and assembles them indiscriminately. It is deplorable that the public is presented with just this sort of work to judge as "modern".

It has been said that pure colour is an invention of modern art. Never before was colour used with such daring as in painting to-day. Applying this to architecture directly would, of course, be disastrous. People leading complicated lives (and all of us seem to) can not possibly exist in a very colourful atmosphere. However, pure colour can be used most successfully as carefully placed accents in large spaces or surfaces having neutral, quiet tones.

ORGANIC VERSUS CULTURAL

The rivalry between organic and cultural aesthetic philosophies has existed in various epochs of the past. In present day thought this controversy between the two trends, has reached a considerably crystallized form. Let us start from a common basis for both: All of us agree that architecture is a living thing and must change as continuously as our social pattern changes. Again, both, I believe, will agree that any new technological development should be readily absorbed in architecture and contribute to its betterment. However, the opinions diverge on the question of aesthetics. Organic architecture is concerned to a large extent with nature as the source of the aesthetic formulation of architectural form. Nature is considered the most perfect of all creations and architecture must blend, must become part of it. Buildings of this kind are usually hard to distinguish from their surroundings. Where does nature stop and architecture begin and vice versa? Does not such architecture seem rather weak, subservient and not very proud of itself? Followers of this romantic philosophy will go to any extreme to use natural materials, such as wood and stone, preferably grown on or dug out of the building site. Why should we limit ourselves in such a way? Particularly when we consider the immense possibilities of our machine age — of synthetic materials and fast transportation. Let us ask ourselves whether this approach allows for any change, something which we all agree to be desirable. Nature does not change. Would the source of aesthetic inspiration not become exhausted, even if modified by changing technology? No one will question the fact that the physical aspect of the natural environment (topography and climate) will have a definite bearing on an architectural solution. But why should human beings not realize that they have very powerful means of expression of their own? Just the same as painters have grown away from representing and aping nature as it is. They have found delight in the arrangement and division of surface into pleasing forms, which they themselves create. Amazingly enough, one can quote Plato in this connection:

"... I will try to speak of the beauty of shapes and I do not mean, as most people would think, the shapes of living figures or their imitations in painting, but I mean straight lines and curves and the shapes made from them ... These are not beautiful for any particular reason or purpose, but are by their very nature beautiful and give pleasure of their own ... and colours of this kind are beautiful too ..."

Architecture should be just as affirmative as that. It should make us realize the delightfulness of man-made

beauty, conditioned by his cultural environment. Thus, due to their varying backgrounds, different peoples all over the world will produce different architecture. Modern technology, such as the use of steel and concrete skeletons, is part of the creative vocabulary of all civilized nations. With it they will formulate their own expression. The result will not be what cynics have called "the international style" but truly living architecture.

NEW CREATIVE VITALITY THROUGH EDUCATION

In the past and even to-day, the teaching of architecture was concerned mainly with the statement of facts. Education for creativeness consisted largely of the study of art history. This was done, not to give the student an academic background, but was meant as a direct source of "artistic" creation. Aesthetic appreciation was acquired supposedly by drawing nudes in charcoal. Proportions of the human figure were considered so utterly perfect, that the most our creations could hope to do was merely to imitate. The "great" in architecture was considered achieved long ago at the time of Pericles. Architects were just taught to adopt a suitable style with all its ready-made patterns. Then the required functions were fitted (as well as can be expected) behind their preconceived facades. With the advent of new engineering practice, rationality inevitably entered the field of architectural design. The science of planning gained importance, but even to this day little is done to foster individual aesthetic expression. In many of our so-called modern schools, copying, the resorting to architectural magazines for inspiration is encouraged, which of course

results in aesthetic stunts to be mistaken for creative vitality.

Conventional freehand drawing, which at the most can only result in efficient presentation technique, must be replaced by such training that will awaken the almost child-like creative instinct, dormant in all of us. Creative ability can not be taught in the conventional sense, it must come from within through stimulation. Future architects should be encouraged to express themselves in any medium they like. There is a need for instruction in elementary design, involving free composition and experimentation with materials, the scientific study of optical illusions, of colour and space. The two dimensional drawing of exaggerated perspectives and elaborate Beaux Arts renderings must be replaced by an increased stress on three dimensional visualization, the building of architectural models for study and presentation purposes. The conventional breeding of academic aesthetes must give way to this freedom and adjustment in creative education.

I believe firmly that by adding this vital spark at the outset of architectural training, will the results help to eradicate not only stylistic eclecticism, but also the fast spreading imitative modern, which attempts to degrade modern architecture to a style, to a series of cheap clichés.

Thus, if the stimulus of our age is encouraged to be put into visual form and becomes the new aesthetic basis for architecture, let us hope that the results will bridge the existing gap between the creation of modern architecture and its universal acceptance.



CONTRIBUTORS TO THIS ISSUE

Lewis Mumford is an Honorary Associate of the R.I.B.A., and gave the address, which appears on these pages, before the Institute in July of this year. Mr. Mumford was born in 1895, and educated at Columbia University. He has always generously acknowledged the influence on his life and work of the late Sir Patrick Geddes with whom he worked as disciple and colleague. It is perhaps unnecessary to mention to an architectural audience the books written by Lewis Mumford, but "Technics and Civilization", "The Culture of Cities" and "Science and Man", to mention only a few, have enjoyed a world wide

reputation, and, as the R.I.B.A. Journal says, exerted a profound influence on present trends in town planning, housing and the social arts generally.

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