## BOOKS

THE PUZZLE OF ARCHITECTURE. By Robin Boyd. Published by Cambridge University Press, New York, N.Y. 187 pp. Illustrated. 8 by 9¾ in. \$12.50.

## REVIEWED BY PHILIP JOHNSON

In reading Robin Boyd I cannot help thinking of the time, a generation ago now, when Henry-Russell Hitchcock was similarly engaged in writing contemporary architectural history in his monumental Modern Architecture of 1929 and the picture book, The International Style: Architecture 1922-1932.

Like Robin Boyd, Hitchcock was writing history about buildings barely off the drawing board and, like Boyd, trying to find good and great architecture in the maze of contemporary work. I cannot help but think Hitchcock's task was a simpler one. In the early 30's we could see the triumph of the International Style. The dominance of Le Corbusier (1) was already complete. The Barcelona Pavilion (2) had already established Mies, and the Bauhaus building, Gropius. The continuation of that triumph seemed assured. And indeed it was.

But today, and I wonder if the fact that I am sixty has anything to do with it, the picture does not look as clear, the lines so well drawn. Indeed, my own sense of lack of direction is quoted against me by Boyd. Apparently I said somewhere, "Why can we not wander aimlessly?" I was all for a principle of lack of principles, as it were. Boyd will have none of this, and his description of the situation today in the world of architectural design is completely convincing. At least to me.

Since I must recommend that every architect read every word, it may seem unnecessary for me to paraphrase the main thesis; but since Boyd does dress up his main points with discursions and, especially at the end, with a moral appeal for Realism,

Mr. Johnson hardly requires identification. He is, of course, one of the best known architects and architectural critics in the world today. Although he is too modest to say so himself, he is the coauthor of The International Style: Architecture 1922-1932, to which he refers in the first paragraph of this review.













1. De Beistegui penthouse, Le Corbusier (1930). 2. Barcelona Pavilion, Mies van der Rohe (1929). 3. Kurashiki Town Hall, Tange (1960). 4. N.Y. State Theater, Johnson (1964). 5. TWA Terminal, Saarinen (1962). 6. Married Students' Housing, Harvard, Sert, Jackson & Gourley (1964).

Functionalism, and even Truth (values I find too elusive to be satisfactorily invoked), it might not be out of place to give my impressions of his history.

A word of warning: The following resumé may differ from Boyd's in many ways. He himself is quite accommodatingly liberal, not to say loose, in his terminology. For example, he labels the Kurashiki Town Hall (3) by Tange as Third Phase, when quite obviously it is Second Phase. We can afford in these murky waters to be slightly indistinct.

It seems then there are three phases of modern architecture of the last generation. By using the word "phase," the author reduces the dangers of the brickbats that Hitchcock received for the nasty words International Style. (It is amusing to note, that no matter how much vilification we received for using the words International Style, the term is still used, even by the present author, and still means exactly what we meant it to mean 35 years ago when Alfred Barr first coined it.)

The First Phase then includes the International Style, all the work from the 1920's revolution to the present. This phase is based on the now old ideas: structural honesty; repetitive, modular rhythms; clarity, expressed by oceans of glass; the flat roof; the box as the perfect container; no ornament. Today Mies is the lone giant still sensitively producing works of art of the First Phase. Many fine SOM skyscrapers and much lesser work by lesser architects continue the tradition. Fortunately or unfortunately, the First Phase principles were easily adaptable by commercial and industrial builders, and the rallying cry of the intellectuals of the twenties and thirties became the slogans of the speculative builders of the fifties and sixties.

Came the reaction and the Second Phase. All over the world we were bored. The fifties were groping. On the one hand, decoration came back; on the other, historical reminiscence. We have only to think of Paul Rudolph's Wellesley Gothic, Edward

Stone's Venetian Huntington Hartford, my own Classical Lincoln Center (4), or Yamasaki's Gothic tracery. Although Louis Kahn belongs to a later story, his love of castles and San Gimignano. One of Boyd's words for the main tenets of the Second Phase is the jaw-breaking word "monolithicism." That is, we stuffed our functions in those days into preconceived geometric volumes. The cube, the cylinder, the rectangular solid. Or even into warped shapes or bunch of grape clusters; my Dumbarton Oaks being one example. The shape was primary. We even went in for vaults, hyperbolic paraboloids, gables, even for symbolic shapes (consciously or unconsciously) like the winged bird of Saarinen's TWA (5).

The special story of Kenzo Tange is illustrative. Starting with pure International Style (First Phase) at Hiroshima, Tange quickly went Second Phase with his famous town halls. Two features stand out: his love of Japanese architecture and the fitting of function into shapes, shapes, shapes. The best of these is Kurashiki. The plain rectangular block is made of precast concrete "logs" that lap at the corners like a log cabin. The building is lifted off the ground, clearly recalling the Shosoin at Nara. The windows are cut in at arbitrary but effective spots.

The Third Phase, what is happening out front in architecture in the sixties, is naturally hard to explain. In art, labels are better attached after a long wait. I think of "Gothic" and "Baroque," both pejorative terms when they were invented. So Boyd is in a spot and I am, too, since it is obvious from the book that I am essentially Second Phase.

My description, therefore, of the Third Phase may be (1) prejudiced (age envies youth); (2) sympathetic but inaccurate (papa never understands junior); (3) absurd (old goat pretending to swing); (4) fair (I have seen everything). (A footnote to this talk of "age." It is meant only as between Second and Third Phase architecture. Both Louis Kahn and José Luis Sert are, in years, older than I.)

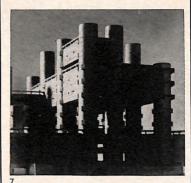
Anyhow, easier than talking principles, let us quote buildings included in the canon of the Third Phase today and deduce a few basic threads of consistency. Boyd lists specifically Kahn's Richards Laboratories, Rudolph's Arts and Architecture Building, Sert's Married Student Housing (6), Tange's Yamanashi Press Building (7), and Johansen's Taylor House.

Why he omits the key English building, Leicester University Engineering Building by Stirling & Gowan, I can't imagine. It beautifully illustrates the Third Phase and is perhaps the strongest of the lot. Consider it included (8).

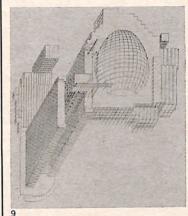
What have these buildings in common that makes them a group? What identifies the Third Phase? Since what something is not is easier to make precise than what that something is, these buildings are not rectangular skin-interesting boxes like the First Phase, they are not arbitrary shapes like the Second. They are not all glass with even bay systems poised on pilotis above the ground like the First Phase, or carefully smooth-materialed monolithic "significant" forms like the Second.

On the contrary, within the general modern movement with its emphasis on functionalism, structuralism, anti-axiality and anti-ornamentation (all these modernisms are scrupulously present), the Third Phase has found a new way toward the synthesis of unity and diversity, clarity and complexity.

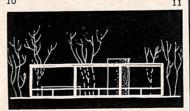
In many cases a functional element has been picked out and exaggerated to make breaks and strength of intent, viz., the exhaust pylons of Kahn's Richards Laboratories, the vertical communications of Tange's Yamanashi Press Building, or the toilets in Paul Rudolph's Government Center. Sometimes a single element is repeated but at various scales, like the sun boxes of Rudolph's Milan House or Johansen's Taylor House. Sometimes great gashes are introduced in tall rectangular masses to emphasize depth and make an impression of strength, viz., Sert's











7. Yamanashi Press Building, Tange (1966). 8. Leicester Engineering Labs, Stirling & Gowan (1964). 9. League of Nations Headquarters Project, Meyer (1927). 10. La Tourette Monastery, Le Corbusier (1957). 11. Boyd-version of elevation of Glass House, Johnson (1949).

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Boston University and Stirling & Gowan's Leicester University. In some buildings like Kahn's and Tange's, even Johansen's and Stirling's, the Second Phase enclosed volumes seem turned inside out. The great spaces are outside the buildings, not in. The change from Kurashiki to the Yamanashi Press Building is a case in point. The Second Phase clothed great rooms with a single significant shape. The Third in a play of external space semienclosed by functional elements strongly expressed.

Often the Third Phase, unlike the First, but like the Second, reaches back into history but is more apt to pick more recent models. Stirling's Leicester reminds me of Hannes Meyer's drawings for his entry in the League of Nations competition of 1927 (9). Haering's Garkau and Tatlin's Utopian schemes are especial favorites. Wright's "looseness" as in the Robie and Kaufmann house designs is analogous to the play of space in the Third Phase.

The Third Phase is contemptuous of careful finishes. Coming from Le Corbusier and his English Brutalist followers, the "toughness" of raw concrete, unpointed brick work is favored. It seems to the sixties more honest (handicraft is gone forever, anyhow), more of our era.

Functionalism has taken a new turn. Every architect realizes that function is not the sole maker of form, but the functional parts are made the basis of form much more than in the Second Phase. "What the building wants to be," in Kahn's phrase. Johansen's proposed library for Clark University expresses separately almost every varying function in the building. Big rooms hang out big, small rooms small.

Perhaps the most "far out" building actually to be realized yet in the Third Phase is Tange's Yamanashi Press Building in Kofu City, Japan, now nearing completion. At first it strikes the observer like an AA student's design made into a big instead of a small model, since so much of the "plug in" quality seems already to be there. It seems



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that seven round towers were casually spaced around the site. Suspended among the towers are the various floors. At one major point three whole floors seem to be left out making a vast, impressive void. The effect is staggering in conception. I hope it will be great in reality.

This caveat is necessary because like much early work of a phase, the ideas are apt to outrun execution. I am reminded of the beauty, clarity and slight unbuildability of early Le Corbusier and Mies sketches. There are many problems ahead for the Third Phase. It can disintegrate or it can become, as Boyd profoundly hopes, the architecture of the 20th century after the "failures" of the First and Second Phases. To a devout Second Phase man like myself, the danger ahead for it seems alarming!

But there can be no doubt the phase exists. There are too many elements in common. There is too much polemic, moralization and mystique simply to say it does not actually have validity. As a clincher to a doubter like me, too many good architects whom I have admired for more than a decade are leaders of the Third Phase today.

Boyd does not speculate too specifically on the why of this Third Phase, whence it arose. Matthew Nowicki once wrote, "Form does not follow function; it follows form." The Third Phase forms must have come from somewhere. The answer seems to be Le Corbusier. Although Ronchamp is certainly shaggy and additive in its elements, Boyd seems to consider it Second Phase. More of a clean ancestor is the design of the Jaoul houses. The British Brutalists derived an entire manner from these two houses. Their powerful vaulting, their crude in- and- out random fenestration seem to have liberated a whole generation.

The key building, however, is Le Corbusier's Dominican Monastery, La Tourette (10), of 1957-60. Although it is a rectangle, the functional or pseudo functional divergencies, the casual treatments of the "facades," the top-heavy treatment of the cells, the total lack of conventional base (one might think the building was designed upside down) are presages of the agglomerative style of the sixties. This group impressed every designer in the world. Most of us could not if we would follow Ronchamp, but La Tourette could speak to all, not translatably, but conceptually. The Third Phase was born.

To repeat, every architect must have this book. To narrow my recommendation, read pages 142 to 155 where the characteristics of the Third Phase are outlined. From page 155 to the end of the book, Boyd moralizes. Perhaps this is most important but not to this reviewer. I believe architecture, even present architecture, just happens. Rationalizations are interesting; Mies (less is more), Kahn (servant spaces) have interesting minds and their theories illuminate their work. But architecture will have immortality for different reasons that are hard for contemporaries to fathom. First, Second, Third Phase, all can be good (or bad). History will tell.

There are a few annoying things about Boyd's book. Being a collection of essays, the point of view shifts uncomfortably from section to section. Sometimes Boyd is writing for the general public, sometimes for the initiated critics, historians, and fellow architects. Sometimes he is analytical, sometimes hortatory. Small price, however, to pay for the insights, the appreciative vignettes, the basic rightness of his story.

The drawings accompanying the text are by the author and are intended only to recall the buildings to the educated reader. Unfortunately, in drawing my glass house he omitted the axially symmetrical entrance door (11), which changes the character of the design. Accidents will happen. In all sketches of this kind the sketcher sees what he wants to see. The axiality of the glass house was not what he wanted. Postage stamp size photographs would surely have done as well.

