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Julien Levy once described Brancusi’s atelier as a distillery of basic forms. To this distillery came the young Noguchi, already prepared by training and inclination to recognize the supreme importance of the ritualistic exploration of materials in search of perfect form.

Why ritualistic? Because the sculptor seems always to begin at the beginning and because the final effect is comparable to the magic that results from ritual acts. To take a brutish chunk of stone and transform it by the long and minute series of procedures of hand and tool can be an inexplicable act of magic. To sustain the will to transform random matter—especially in the extended process of sculpture—is in itself the act of a man obsessed in much the same way as the alchemist.

In the erratic course of 20th century sculpture the accent has been largely on the appropriation of new materials. With the new materials come certain modifications of form. A sculptor shaping transparent Plexiglas instinctively accommodates his material just as the welder tends to evolve spindly, linear forms due to the limitations of his tool and the suggestiveness of the steel pipe and flat metal sheets he utilizes. The excitement of experiment that the fresh materials sponsored often obscured the significance of the shaping imagination, of the sensitized hand and the highly developed intuition of basic forms.

Nothing could be more difficult to describe than what is meant by basic forms. Yet the senses know what is meant. If a splendid ancient amphora is compared with a modern vase, or if an exceptional pre-Columbian pitcher is compared with a common contemporary pitcher, the differences of quality are quickly apparent. The distinguished ancient amphora with its great largesse, its plenitude of outer forms, its gentle sloping walls and its voluminous interior structure strikes us immediately as a superior basic form. Similarly, the measure of the pre-Columbian pitcher’s surface, the proper length and shape of its spout, the audacity of its balance, contrast sharply with the cramped and awkward shapes so often encountered in machine-made crockery of today.

What is sensed in these fundamental shapes is the ideal of fullness, generosity, plenitude. It is at once an ideal and a distillation of the potential perfection within the structure of nature itself. The beachcomber with his shells and the housewife with her gourds incipiently know about perfect form. The artist knows, as his hand gropes its way toward perfection, and he strives to hold onto his immediate primitive sense of tact even after he has sophisticated his mind and imagination.

Isamu Noguchi has arrived at a juncture in which the hand is perfectly co-ordinated with the dreaming imagination. The basic sculptural forms are endowed with tremendous reverberations. Each form is at once the germ and fulfillment of an idea. Each sculpture carries within it imaginative movements, cues to a vast culture of past sculptural achievements, present problems, and a kind of openness to the undetermined, or the future. The ornamental flourish of Noguchi’s early works, and the suave elegance which sometimes overwhelmed his forms in the past are firmly con-
strained, with the result that his recent exhibition at the Cordier Ekstrom Gallery exhibited rare maturity.

The exhibition was in two sections—early works from 1946 to 1959 recently cast in bronze, and a group of what Noguchi calls “studies based upon a concern for gravity and man’s relation to the earth” all done in 1962.

The works of 1959 are nearly all closely related to Noguchi’s recent pieces indicating that he has been ruminating along certain philosophical lines for a number of years. The magnificent piece called Mortality is a premonition of the melancholy essays to follow. A solemn construction of a standing shaft and five swinging vertical elements, Mortality carries with it a host of associations. For one, the pending forms so delicately balanced suggest the ticking of a cosmic clock. Or, they suggest sound, unearthly music. The measures of music, the silences and rhythmic recurrences of abstract sound are often inherent in Noguchi’s conceptions. He has always been interested in jointed forms, and in shapes that swing free, invoking an expectation of a gong sound, or the muted music of Eastern temples.

(It is well to remember that Noguchi was brought up to revere the rich worth of myth and that Swedenborg, that great advocate of cosmic rhyme, was one of his early preoccupations. Musicality was a fixed idea among the late 19th-century acolytes practicing the visual arts in terms of Swedenborgian mysticism, and it has left its fruitful residue in Noguchi’s memory.)

The grave atmosphere generated by Mortality is assured by Noguchi’s use of a very deep patina, almost black, and of the heavy lintel which he clamps onto the summit, and which bears down heavily on the fragile members below.

The contrast between this older sculpture and Solitude of 1962, which is based on the same principle, is instructive. In Solitude, Noguchi has simplified his scheme. Instead of a shaft hidden by a rain of hanging elements, the shaft is exposed—long, slender, its facets meeting in beautiful, softened contours—and its capital this time is not weighty, but rather, in its asymmetrical relationship to the base, proposes still further elaboration of the surrounding space. The swinging elements are reduced to two, of unequal lengths. They hang immobile, though the eye knows they can stir, and very close. The spaces between their slightly curved contours are excitingly narrow, and the interval between them and the supporting vertical is a provocative splinter of light. As weights and balances, the free members of this piece sustain the kind of sculptural paradox dear to Noguchi.

Solitude is a prodigy of basic form, of tactful proportion, of expressiveness. The inner glow of its patina draws light to its surface only to disperse it with a softening action. Noguchi carved the pieces first in balsa wood and the long, slow, steady stroke of his knife on this accommodating wood effected the delicately graded planes, so appropriately translated into tougher bronze. Any edge of Noguchi’s forms is always incredibly vibrant—it is never a cut and dried right-angle, and never a sharp intrusion on the continuity-in-the-round of his form. Yet it always effectively delimits the plane.

What Noguchi calls studies based upon a concern for gravity and man’s relation to the earth are essentially studies in paradox. For he takes weighty bronze and shows its possibility of weightlessness, or he takes the lightest wood known, balsa, and gives it a new density by translating it in bronze, or he suspends bronze elements so that they seem to have no weight, or composes bronze shapes on the ground itself, their weights adhering them to the earth.

In some of these studies, such as Solitude, the slender movable elements combine with a firmly rooted central vertical axis. But others, such as Victim (Dismemberment), are built on a principle of asymmetrical balance. Here, like a pile of firewood, four shafts tilt together precariously, the longest being a diagonal dragged (Continued on page 30)
A LONG ROUND TRIP—3

We are all radical when we are vitaly, however comfortably, attentive to the reaction of the mind in its play with art. It is when attention ceases, when we lend art merely our emotion, as we like to call it, or expect entertainment without effort such as the current theater and concert repertoire generously furnish, that we cease being aware what we have lost. Even then some vital shock of presentness recognized in the artifact of a time where we did not expect it may restore attention with a new sense of purpose.

What do I mean by “purpose”? Do I mean that one resumes going to the theater intuitively reconditioned to respond to converse as by religion or through art. In these days of intercommunication one may go to the theater less often. At times of sacrificial importation attention ceases, when we lend art merely our emotion, as we like to call it, or expect entertainment without effort such as the current theater and concert repertoire generously furnish, that we cease being aware what we have lost. Even then some vital shock of presentness recognized in the artifact of a time where we did not expect it may restore attention with a new sense of purpose.

To do the Iliad conceptually in modern terms the figures would have to be psychological projections in one dimension upwards, because that is the only non-explicatory mode by which the present can approach the Greek pre-classic — or for that matter its survival in the high Greek tragic drama.

Look how we have dragged down the colored stone texture of their temples to lend a spurious white dignity to our public buildings. We cannot, except like the Romans by raw concrete, recreate the weighted texture of the Doric. And when we do so in concrete we do it not in any manner to dignify the material but by using material massively in the right place. The beauty of the weighted texture of Doric is its lightness, its interpenetration by forms of light shaping upwards and outwards into space. That linking and support of massiveness by light we see again at the new Dulles airport building outside Washington, concrete heavier by far than the weighted texture of Doric. And when we do so in concrete we do it not in any manner to dignify the material but by using material massively in the right place. The beauty of the weighted texture of Doric is its lightness, its interpenetration by forms of light shaping upwards and outwards into space. That linking and support of massiveness by light we see again at the new Dulles airport building outside Washington, concrete heavier by far than the weighted texture of Doric. And when we do so in concrete we do it not in any manner to dignify the material but by using material massively in the right place.

It is the discovery of art, as I keep coming back to it, that is important, that makes art signify; and the same is true in religion. A friend of mine, passing the time of a train journey by reading the Acts of the Apostles in the original demotic Greek, wakened to the revelation that this was the written speech of traveling scholars, like himself, and businessmen, like those around him in the coach — not a classic but a contemporaneous document. He visualized them as concrete footings reaching up to steel towers carrying cable lines of electric power, and they are right. Project them on a screen, as I saw one time projected certain of Blake's figures from his Prophetic Books, and the monsters might waken, not only on screen but in the mind. Not Baskin but Lattimore is unimaginatively of our time.

Baskin has drawn his figures vertically in one dimension, unindividualized, with heads of psychological monsters, as beyond scrutiny as the head of Bacon's Dog, as truly as massive concrete in the right place agrees with Doric stone. In the wrong setting, against the verbalized translation of the text among the amenities of polite book manufacturing, we see the illustrations inappropriate; visualize them as concrete footings reaching up to steel towers carrying cable lines of electric power, and they are right. Project them on a screen, as I saw one time projected certain of Blake's figures from his Prophetic Books, and the monsters might waken, not only on screen but in the mind. Not Baskin but Lattimore is unimaginatively of our time.
"(Nationalism) . . . I have described as a retreat to the authority and flavour of our earliest associations, as a defensive-offensive reaction to what seems to us secure. Our loyalty turns to what we associate with our protection and ambitions." Thus wrote Walter Lippmann in "Stakes of Diplomacy" as a preamble to bridging the gap between national and supra-national patriotism. Writing in 1917 Lippmann was appealing to a world gone to war to accept some kind of ultimate international understanding. "How," he asked, "are we going to transfer allegiance from the national to the international state?" Lippmann had yet to hear of Woodrow Wilson's Fourteen Points, the League of Nations, the United Nations, or the Cold War.

Recently a number of publications have studied Lippmann's question, and taken in toto, survey and evaluate the fundamentalist positions which ask that we adhere to the principles of what George Santayana in 1911 referred to as "The Genteel Tradition." "The Radical Right," edited by Daniel Bell (Doubladay & Co., $4.95), originally published in 1955, expanded and updated in 1963, includes a series of essays and studies from McCarthy through Robert Welch. A parallel series of articles—1955 and 1963—by Daniel Bell, the Editor; Richard Hofstadter, Peter Viereck, H. H. Hyman, S. M. Lipset and others, evaluates the serious as well as the lunatic fringe of America's Right, from the shouted platitudes of a Coughlin to the sincere convictions of a Goldwater.

But the Rightism of 1963 is not what has been facetiously called the McCarthywasm of the Forties, and this is one of the salient points of this outstanding treatise on the Radical Right today. The mistaken Administration, as Daniel Bell states in his essay "Dispossessed—1962," frustrated rather than encouraged the Radical Right. It also failed to fulfill the Radical Right's hopes in almost every department. It was the Democratic victory in 1946, which the extreme right felt was a freemasonry to formulate policy and enunciate it within the Republican Party as well as outside of it, and without the strictures of incumbency. In a serious study, Peter Viereck identifies a respectable Right, the "New Conservatism," with Edmund Burke rather than McCarthy or "over-publicized groups like the John Birch Society." The New Conservatism, he states, stands on a "concrete, existing historical base." Eschewing Johnny-come-lately phoniness of the Birchites, Viereck asks true conservatives and Mill-style liberals to unite against the White Radicals of the right and the Red Radicals of the left.

William F. Buckley, Jr., author of "Rumbles Left and Right" (G. P. Putnam's Sons, $4.95), would hardly agree with Viereck's notions of conservatives. His writings suggest he aims for the jugular as did his maestro Senator McCarthy, (whom he characterizes as "considerate"). Not that polemicist Buckley is all wrong, for he scores tellingly time after time in his evaluation of men or liberal pettiness. But his generalizations are sweeping—all liberals are not misty-eyed appeasers; and all conservatives are not upholders of the best traditions of Hamilton, Madison and Jefferson. His total reliance on the Devil Theory of History makes some of his conclusions weak. His patriotism, unlike that which Walter Lippmann proposed as a necessary corollary to world peace, is provincial; the kind which withdraws from region to state to county to city to community, and eventually after rejecting the neighbors next door, to oneself. This reviewer holds the notion that Buckley prefers ideas to people. If he has a message of salvation, he will never get it to the people he ought to want to reach. He shall be, to paraphrase him, dead rather than read.

In "Power, Politics and People" by C. Wright Mills, the collected essays of this wise and perceptive writer, edited by Louis Horowitz (Ballantine Books, $1.45; Oxford University Press, $8.50), the author analyzes the asserted drift toward the right in an essay entitled "The Conservative Mood." Longing for leadership, Mills writes, the Conservative makes "natural distinctions" among men, which, as he states "form a natural order of classes and powers." Mills is concerned not only with the locus of power, but with its use. Essentially a moral man—as moral, for example, as Russell Kirk, author of "The Conservative Mind," or Viereck, or Buckley or Goldwater—Mills was critical of the immorality of a movement which "is bound to be a yearning for the authority of an aristocracy." New Conservatism of whatever school, as Mills emphasizes, has no broad base, has no broad appeal to numbers. And never intends to have.

A backward glance at the American political scene suggests that the "rumbles" (Buckley's term), were as violent in the past as in the present. David Ross Locke, the man Lincoln called a "genius", wrote the illiterate bumblings of Petroleum V. Nasby—V. for Vesuvius—which have been collected with original illustrations by Thomas Nast, edited by Joseph Jones (Beacon Press, $2.45). Locke might be likened as satirist to Al Capp, except that he is rougher. In those days satirists showed more courage and vented more spleen. Locke was a foe of the South's slaveocracy and of the North's hypocrisy, and his essays, illustrated by Nast, lash out at both sides of the Mason-Dixon Line.

The nearest politics in America ever came to a real-life P. V. Nasby rests in the interred bones of State Senator and Tammany Sachem Plunkitt whose political career is retold in "Plunkitt of Tammany Hall" by William L. Riordon, Introduction by Arthur Mann (E. P. Dutton, $1.15). Plunkitt was the apotheosis of the good ward healer. He turned the vote out and more at every election, and this report, a series of interviews with George Washington Plunkitt by New York Post writer Riordon was first collected as a handbook of practical politics in 1905, and is now made available, as Arthur Mann states, for the more sophisticated college courses in American government. Plunkitt's political philosophy was based on what sociologists have called the Christmas Basket Theory of government. He did good for his people, he did good for himself, and to call him corrupt, is to suggest that a ward healer who knows every vote in the precinct by first name, who distributes jobs, largess, advice and gifts is corrupt. Efficient is what Plunkitt would have called himself. And so, too, would have Lincoln Steffens who understood men like Plunkitt as evinced in "The World of Lincoln Steffens," edited by Ella Winter and Herbert Shapiro (Hill and Wang, $2.45), articles and stories with an Introduction by Barrows Dunham. Steffens was a moralist in politics. Political evil constituted good men doing bad things. The present volume is a collection of his views and reflections on everything from corruption in high and low places to the meaning behind the Mexican and Russian Revolutions. What he brought to the then American movement of the left was an insider's report on the meaning of world upheaval.

(Continued on page 35)
The traveler, the patient, the customer and client, whoever waits - these are the people we design for. Architects bring beauty, flexibility and practicality to their space planning when they specify Kasparians Multalum for public seating areas. The sparkling Tulsa International Airport by architects Murray, Jones & Murray, is a case in point.
Rice University has focused attention on a new breed of architect: the hard-nosed pros who have innate and highly developed design talent, who possess deep sensitivity to people's needs, who have a profound feeling of social responsibility, and who have successfully incorporated human values into their buildings. These Twentieth Century architects are not only aware of the fast-moving social changes, but are causing them. Their goal is to give people houses, schools, churches, hospitals, factories, and shopping centers that are beautiful as well as efficient and economical. They desire to make this world a place in which many people, as contrasted to the privileged few, have a pleasant, inspiring environment for living, learning, praying, working, traveling and shopping. Their real clients are the people who use their buildings. They help people—great numbers of people—through their architecture.

Recent population predictions indicate that there will be twice the number of people on this earth within the next forty years. This means twice the problems, or more. Dying, decaying cities now exist. What will happen a few years from now? Who is really trying to do something about it? Developers? Obviously not. Money lenders? Not many. But a few socially conscious architects—the people's architects—are trying to carry the burden. There is a need for more of them. Within the next few years a maximum effort must be made using a fresh approach to solving the great problems caused by the trend toward urbanization. Architects and planners who are sensitive to the needs of a centralized population are the only hope.

Inevitably a large percentage of the world's population must dwell in cities. In this country on the salt water rim of the U.S. there will be three giant cities: one extending from Boston to Washington, D.C., one extending from New Orleans to Houston, and another from Los Angeles to San Diego. A fourth will develop as a giant fresh water city from Detroit to Chicago. Other great centers of population will develop in the plains; for example, a few years of expansion will merge Dallas and Fort Worth into one tremendous city. Expansion of this magnitude brings trouble.

Look what expansion in the last few years has done to areas of the U.S! The colorful forests around Boston, New York, Washington, and Chicago have been scraped clean. Life has been drained out of the rich, green, life-producing swamps around New Orleans. The spacious beauty of the rolling plains around Tulsa and Omaha is permanently marred. The beautiful hills around San Francisco have been scarred. Nature has been replaced with man-made uglies under the guise of progress. This is progress? This is devastation.

When the population of the world doubles in forty years, will the number of cars double? More than likely triple. What about the need for land? Because now the space for cars nearly equals the space for homes? But the problem is not a matter of where to put these things. There is enough space. The problem is how.

Will the number of billboards double? Unless the trend is stopped, no one will be able to see any of the landscape, assuming some is left. On some roads today the only available view is that contrived by hucksters. These beauty-butchers now must have billboards in pairs to carry their message from Madison Avenue.

If the awful signs don't cover the view, giant car racks will. Americans seem to want to stack people and cars as high as possible, and they really don't seem to care where they put these crates—over a famous landmark such as Grand Central Station or in the middle of a beautiful university campus. The precious sky is not only being filled with carbon monoxide and evil smelling gases, but is pock-marked with enormous craters. One talks of air rights: rights to build a college over a railroad yard (might not be a bad idea at that); rights to straddle a church with an office building. To developers there is pie in the sky. In the future there may be no view of the sky, just as now there is little view of the land.

In the past the progress of a country depended largely on its natural resources. In the future the chief products for import will be services instead of goods. This means the so-called impoverished countries, without material things to sell or trade, may some day prosper by selling their services. Since travel now is not a matter of distance but of time, there seems to be no reason why communities whose chief commodities are services can not thrive, whether they be located in the barren plains of West Texas or the lush jungles of Cambodia.

Faster transportation, expanding cities, per-
Nightmarish climatic extremes were the prime consideration in the design of this small-family residence in Ahmedabad, India, where a house must provide protection from the glare of a blinding sun, scorching atmospheric heat, heavy monsoon rains and occasional dust storms. In addition, it must fend off a variety of wandering animals and ubiquitous, disease-carrying insects. The summer heat (115°F during the day, 88°F at night) radiates from enclosing walls, roofs and even from the floors and furnishings. The cost of air-conditioning is prohibitive in the restricted economy of the country, and cool breezes, so carefully eliminated in more temperate climates, must either be naturally obtained or artificially induced.

Inasmuch as adjustments to the changing climatic requirements are minimal in the kitchen, staircase, storage and bathrooms, these static spaces were adopted as the base of the plan. The changing dynamic spaces of varying (Continued on page 30)
HOUSE IN INDIA BY BALKRISHNA V. DOSHI, ARCHITECT
FELLOW OF THE GRAHAM FOUNDATION FOR
ADVANCED STUDIES IN THE FINE ARTS

GROUND FLOOR
1. entrance
2. living room
3. dining room
4. kitchen
5. staircase
6. children's bedroom
7. guest bedroom
8. bathroom
9. veranda
10. garden
11. kitchen yard

MEZZANINE FLOOR
12. master bedroom
13. library

TERRACE FLOOR
14. cabin
15. terrace
Our assignment is to design a building which will house the School of Public and International Affairs for Princeton University. The aspiration of the University for this School is that it shall open significant new avenues of professional education in the fields of public and international affairs and, in so doing, help to raise both the caliber and prestige of government service. It is desired that the building should reflect these aims and contribute to their fulfillment.

The site selected at Washington and Prospect is one on which there exists a smaller building for the School of Public and International Affairs. The importance of the new building made it difficult to attain a proper site solution with the present building at its location. The consulting architect to the University, Mr. Douglas Wm. Orr, suggested moving this building, thereby opening up the total possibility for the site. Since McCosh Walk is a primary pedestrian walkway in Princeton, and since it is desired that it be extended east across Washington to the building and, then, beyond to the engineering buildings which are now being constructed, a major transition point was found desirable. For this reason, we have designed a plaza, moving the old building east to terminate the plaza and the new building on the corner, as shown in the photographs. The existing building was a blank brick wall, which will be a pleasant foil to the new building, and across the plaza is the existing Frick Laboratory, which is a quiet and unobtrusive Gothic structure.

In our design, the main floor consists of a library, a bowl room (auditorium) for 200, and a dining room. The upper floor is all offices for the faculty; and the lower floor, conference, seminar, and smaller bowl rooms, along with the normal service areas.

Our scheme consists of a series of 60 columns which are the primary support for the upper story. The second floor, which has many intervening partitions, was conceived as a concrete truss similar to the principle of a hollow-core door and with its height of 14 feet, enables us to span the 90 feet from outside column to outside column in the width of the building. This scheme then allows us to have non-bearing walls on the first floor, except for those around

(Continued on page 30)
PHOTOGRAPHS BY BALTAZAR KORB

AND ASSOCIATES, ARCHITECTS

[Diagram of a building layout]
OFFICE BUILDING

BY MARTIN PRICE

This head office for a savings and loan association near San Francisco, is an expression of the accommodation of its individual functions. The bearing wall becomes the important articulating and structural element, and provides a solid permanent appearance for this banking type of building. Dimensions between bearing walls are not based on the usual structural module, but rather vary according to the space required for the enclosed function. Ceiling heights are sized in proportion to the importance of the space below. The result is a juxtaposition of volumes, and "the multilevel section becomes the multilevel facade."

Banking functions occupy the main floor and overlook a terrace. The executive suite on the second floor is composed of three levels: the reception area and general offices, three executive offices and conference room, and the president's office. The president has a private entrance to his office by means of a bridge across the main entrance to the building. This low element also serves as a canopy and an introduction to the high ceiling of the banking space. An opening in the floor of the executive suite permits the banking space to interpenetrate this level. General office space and an employee lunch room and terrace occupy the third floor. Service elements are grouped at one side of the building, which will provide a means of expansion on the other side of these elements.

The line of the plane of the glass is always set back from the surface of the building for protection from sun and rain, and the result becomes a strong expression of the vertical and horizontal structural elements. At the periphery of the building, the turned up concrete floor slabs become deep beams and provide lateral stability between the bearing walls.
IN SEARCH OF THEORY

Sam T. Hurst

The most urgent need of the architect today is a comprehensive and systematic theory of architecture by means of which he might bring some order to the chaotic diversity of contemporary philosophy and practice.

Such an order is necessary to identify some main stream in which the average of us might swim and in which the public which looks to the architect for reasonableness as well as creativeness might find some constant flow. At a time when science is discovering the most elemental of truths, including the sources of life itself, and technology has produced capabilities beyond our dreams the architect is seduced by a rampant individualism and our respected "form givers" are driven by compulsive expressionism.

We should not be surprised that it is so, for we have been poorly equipped for the mind stretching tasks we seek to assume. Man has always to struggle with his own limitations as he seeks to relate himself to those forces outside himself and beyond his control. At times they are overwhelming as he tries to find a workable harmony between natural biological processes out of which he is created and the sociological and technological processes which are his own creation.

We may point then to the basic dichotomy with which we live, namely, the tension between nature forces on the one hand and man forces on the other, between the natural ecology of organic process and the intervention of man's designs. The inexorable forces of nature including the relentless process of change are then seen to be pitted against the productive and the destructive works of man. On the one hand we may see man in harmony with nature and using it to enrich his life, and on the other we see man against nature, struggling to survive and systematically destroying its resources and its beauties. In such a struggle the architect is almost a bystander, for the scale of it goes much beyond his influence.

Ecology is "that branch of biological science which deals with the relationships between living things and their environment, the effect of environment upon form, habit and spread."* It is the science of process, plant process, animal process, human process and it draws upon evolution. Its field is as broad as the earth and as narrow as the most elemental organism. Its elements are geography, climate, natural resources, food and the specialized reactions which occur between them. We may say that it should be the basic science of the architect today. In it he may come to recognize the time-scale of process and change which is so significant for every act of contemporary design.

Out of our science and technology we have radically altered the time-scale of man forces and the interactions between them. At the same time our philosophy and our politics have radically altered the institutions which govern the interactions between peoples.

Today we must live in a kind of forced draft society in which the certainty of rapid change and our inability to cope with it are distinctive characteristics. The increase of populations, the growth of cities, the modernization of primitive cultures, "growth-rate" economics, instantaneous and universal communication, and one-world politics are but a few of its realities. Abundance replaces scarcity and leisure becomes a problem equal to work in some of the world while the interdependence of men and nations is fully apparent.

Understanding the nature of our time we cannot be surprised nor dismayed by the diversity and confusion of directions in architecture. Despite substantial efforts to grow our formal systems of education are still training architects to function in a kind of practice which is rapidly disappearing and which has not yet succeeded in controlling environment on even the smallest scale. Nor should we let ourselves expect any return to classic unity, if indeed it ever existed. The good old days are in fact gone forever and Main Street has become a parking lot.

What we might hope for is the ability to create the kinds of management mechanisms geared to the new time-scale which are necessary to cope with change, to arrest its demonic effects and more adequately direct it to useful ends. Further, and as individuals, we might hope to be sufficiently fortified by the knowledge of history and the understanding of self to preserve our peace of mind and do useful work.

Earthbound man today badly needs a pressurized suit to protect his body and mind against the surface acceleration-of-gravity as surely as the astronaut needs such protection to survive in space. We must conclude that the study of human factors so essential to life in space is also essential for the architect and designer of earth spaces and structures. Such study is not a part of the normal processes by which we design today except in the most superficial way. The pursuit of architectural research is an essential accompaniment to architectural theory and the means for such research are now in view. The theory of the 1900-1930 period had great force in technology, in planning and in social concern and is still relevant though not sufficient for today, much less the last quarter of the century in which today's students will practice.

Cannot we bring the good minds of the world in which we work to focus on the pursuit of adequate theory, out of which might come some affirmation of architectural direction which can give thrust to work and some greater assurance to those we serve that ours is indeed a reasonable art?

Let us not confuse the search for theory with the development of style. One implies the construction of a common language, a system of principles and methods for their employment; the other denotes the results of such application in specific site and form. Nor should we confuse theory with rules. Theory is the springboard from which we may leap to creative work on a higher plane. Was it not so with the personal work of Wright and Le Corbusier and with the Bauhaus group many years ago? And it is not clear that the thrust of theory which made their early work significant is spent in the late years as arbitrary self-expression and comes to overreach reason?

There is widespread effort in the schools of architecture to reconstruct the formal process of architectural education and redistribute its content. Further there is pressure to elongate the total period of training. Such efforts, as important as they are, show more concern with the structure of curricula and the peripheral matters of admissions, loads and requirements than with pedagogy or the questions of what is to be taught. This is an evident reflection of the lack of scholarship among us and the inadequacy of our philosophical tools. The first burden of the pursuit of theory must fall upon those who presume to teach and neither funds nor sacred academic structures nor the opportunities for concurrent practice should deflect us from assuming that burden.

Needed is a collaborative assault on the intellectual front of our profession by teachers, by practitioners, by the journalists who select and premiate work. Such an effort should look 20 to 50 years forward and speculate on the nature of our life and practice in that time. It should draw upon the disciplines of the sciences and humanities more advanced in research than we. In our universities may be found the resources of mind, of space and equipment to mount such an effort, to make what Eric Pawley has called, "advances to salients well beyond the frontiers of current application." Unless our schools of architecture undertake such tasks it is unreasonable to expect the profession to do it. The schools must initiate the necessary dialogue, provide the climate where speculation may occur, where the risks of failure may be run, where the tough questions may be asked and the answers relentlessly pursued. The offices may then provide the laboratory in which experiments may proceed at full scale and under live conditions. A new working relationship between school and office is now possible and indeed necessary. Research, instruction and practice may achieve a new integration and the depth of resulting experience contribute much to all.

*World Book
COLLEGE LIBRARY
This steel frame library for Cerritos (Calif.) College was designed basically square in shape to provide closer inner circulation. The indented court at the entrance has been repeated at all elevations permitting a relationship and view to the outdoors and providing easily accessible locations for emergency exits. The building consists of two 56’ x 88’ rooms—for reading and reference—with adjacent conference facilities for students and faculty; an audio-visual department; and a sunken browsing circle in the center of the 64’ x 64’ display concourse which is opened to the sky by four barrel vaults perpendicular to each other.

The stack room capacity is 40,000 volumes and is equipped with carrels and typing room open to students. The librarian, catalog and administrative areas are adjacent.

The library is totally air-conditioned and its ceiling is primarily of luminous, translucent, double-face plastic panels for even distribution of light. Principal interior walls are of off-white plaster to reflect light, with strong blue and orange accents. Browsing circle and restroom walls are of terrazzo and flooring throughout is asbestos vinyl tile. Exterior walls are of gray thermopane and glazed ceramic mosaic tiling.
PROJECT FOR CASE STUDY HOUSE NO. 27 BY CAMPBELL AND WONG AND ASSOCIATES
This project for Case Study House No. 27 represents an expansion of the CSH Program in two directions—one spatial, the other conceptual. The first is an extension of the program, heretofore self-restricted to California, to the Atlantic Coast. Conceived in 1945, the program is now 18 years old and, hopefully, mature enough to leave its native state and travel east. Barring acts of God, governmental fiat and faint hearts, this house will be built in Smoke Rise, New Jersey—a hamlet near Butler which we were unable to locate in our 1942 atlas but which we have been assured is more substantial than its name would indicate.

The second departure is perhaps the more important one. Down to date, the CSH Program has sponsored only one-of-a-kind houses, having found it more feasible to encourage practical experimentation and research in the realm of contemporary domestic architecture—the stated purpose of the program—in projects of limited scope. The designers of this project, however, were asked to create a house that could be pre-fabricated for mass production. Following successful completion of the prototype at Smoke Rise, it is the intention of the Richard S. Robbins Company to package the house for assembly in some 30 or more areas of the country.

If these venturesome departures strike the reader who is aware of the difficulties involved in a project of this kind as reckless, we can only point blushingly to the past successes of the CSH Program which prompted The Architectural Review to call it "one of the most influential architectural research programs ever inaugurated." The reader can now accuse us of immodesty as well.

The precast concrete frame house is to be placed on the wooded, hilly site in New Jersey so as to preserve the trees and relate to the existing pond. It is designed for a family with four children. The block-unit scheme has been adopted to give maximum privacy and openness. Each unit relates directly to the outdoors and yet a balance of interest in the interiors is maintained by means of spaces and structural details. The four units are linked by flat-roofed passages.

The kitchen and dining area is planned as a large, informal living space, similar in function to a family room, and most of the family gathering will be here. The children will have in their unit a large area for active play in addition to the bedrooms, while the parents are to have a quiet study area to retreat to in their unit. The master bedroom unit can be expanded to a second story, if desired, or another block unit may be added if a guest wing is needed. The living room is to serve as a large, comfortable pavilion for entertaining and the remaining family activities.

An attempt has been made in utilizing the repetitious character of precast-prestressed concrete construction to provide a single system for both the structure and enclosing of the five identical block units. The roof structural system shown consists of four-sided, 24-foot-square, pyramid roof domes, supported at the corner columns. As a result, all interior areas are free of bearing columns and walls. The floors are to be precast concrete channel-shaped panels to span precast perimeter beams. Both roof and floor perimeter beams will act together with corner columns to form rigid frames in each direction.

The segmented, triangular precast concrete roof panels are to join structurally only at the apex and at the common corner columns to pro-
vide a tension tie around the building for the dome. Two of the units will have skylights through separation of the panels. The shop-fabricated precast concrete elements will allow control of dimensions and quality, permitting concrete surfaces to be used for final interior and exterior finishes. Many decisions are yet to be made concerning colors and finishes, which will be the subject of a later study.
OFFICES AND WAREHOUSE BY KEA, SHAW, GRIMM AND CRICHTON, ARCHITECTS

ROBERT B. RILEY, ASSOCIATE ARCHITECT

The main determinant of the design of this van line warehouse at Edmonston, Maryland, was the site which fronts on a heavily traveled highway in a light industrial area. The program called for a building to house the company's administrative offices, communications, a small warehouse and drivers' lounge. Outside, a large paved parking and servicing area was required.

The solution was an attempt to produce a building easily comprehended by fast-moving traffic and at the same time to furnish a private, smaller scale visual environment for the occupants. To achieve this, the offices have been grouped around simply landscaped court spaces and the exterior shape of the building kept to a deceptively simple rectangle, raised on a pedestal of exposed aggregate concrete. The three sides visible from the highway are of alternating planes of gray-brown brick and vertical 2" x 10" white wood louvers. The latter were employed to screen the courtyards. The glass exposures to the south are shaded by overhead wood louvers. The exterior screening and shading extend the basic 16-square-foot module into the court spaces.

Interior finishes are natural brick, painted block and metal and glass, movable office partitions in the executive office area. Floors are vinyl-asbestos tile and ceilings mineral fiber acoustic tile.
A careful balancing of space was necessary in the design of this Art Center which is to serve as a combined museum, school, library, gallery and forum for the Kalamazoo (Mich.) Institute of Arts. As museum and gallery, the Art Center provides a number of exhibition areas and supplemental facilities for display of art works. The skylighted main gallery, containing about 2500 of the total 45,000 square feet, is the focal point for exhibitions. Its walls are faced with removable panels 4' wide by 6'6" high, behind which are built-in cases for the display of small works or objects under glass. The wall panels, in such event, are replaced by glass panels that seal the cases.

A second and third gallery are connected to the main gallery, and front and rear lobbies provide additional exhibition space at street level. There is a fourth gallery on the lower level. All the display areas are lighted by a fixed, wall-washing system with trolley ducts and interchangeable ceiling panels with lights.

To supplement its collections, the Center has an art library of some 1,000 volumes on the ground level with stacks for reference works and other non-circulating books on the lower level. Also located on the lower level is a meeting room seating 225, with slide and movie projection equipment, and a room containing 6,000 feet of uncommitted space for future expansion. Studios and facilities for classes in the plastic and visual arts are located on both levels.
HOUSE IN SWITZERLAND BY ATELIER 5

ARCHITECTS: ERWIN FRITZ, SAMUEL GERBER, ROLF HESTERBERG, HANS HOSTETTLER, NIKLAUS MORGENTHALER, ALFREDO PINI AND FRITZ THORMANN.
Situated on the shore of a small lake (Morat) between Berne and Neuchâtel, this long and narrow house was raised on pilotis to take advantage of the extremely pleasant view to the south beyond the reeds and shrubs. To this same end, the southern elevation is primarily of glass, and the house extended the full width of the site. The northern facade, in contrast, has only two windows for additional light orientation.

Aluminum sliding glass doors open the living room onto a covered terrace from which lead open stairways to the garden below and roof garden above. A balcony along the south facade links the covered terrace to an open terrace off the master bedroom. Two additional bedrooms and bath are on the roof garden level; a workroom, garage and heating plant are on the ground floor.

The lightness of volume of the house is emphasized by the very white concrete for which Belgian cement was specified by the architects.
Office Furniture

Conference wall incorporating chalkboard, tackboard, a grill cloth panel, and storage space; lighting is behind valance. Shelves, valance and chalk tray in oiled walnut or teak; designed by George Nelson for Herman Miller, Inc.

Desk of walnut with rosewood drawers fronts and walnut and rosewood legs. Sections on either side of the writing surface are rosewood tambour-covered, one containing black leather-covered boxes, the other a small cabinet arrangement with drawers; gate at the back of the writing surface may be dropped, creating a table effect. Dunbar Furniture Corporation.

Teak reception desk from Finland with three pedestals and legs of black metal; height, width and depth are 28", 743/4" and 35" respectively; Stendig, Inc.

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Office chair of Danish design with wool-covered 2" foam rubber on a shaped laminated seat which rotates on a ballbearing; the base is chrome plated on Shepherd casters of chromium with nylon wheels; imported by Frank Brothers.

Sofa designed for Kasparians, Inc., by Harold Richards; approximately 100" long, anodized aluminum base; available in a variety of Koll fabrics.
Executive office credenza of wild-heart and black walnut with black oil finish; legs and drawer pulls of extruded, mirror-polished aluminum. Designed by Mel Bogart for Hiebert, Inc.

Suspension bench by Laverne with foam rubber seat upholstered in black or tan calfskin; solid stainless steel frame in lengths of 6, 8, 10 and 11 feet.

Solid, oiled walnut armchair by Folke Ohlsson for Dux, Inc.; available also in teak with Scandinavian or domestic fabric.

Office wardrobe 24" x 66" x 9" with 17" door and brass, aluminum or black pull, designed in oiled walnut by Werner Hueman; distributed by C. J. Welch & Associates.

Small conference table-desk combination designed by John Follis and Elisha Dubin for Brown-Saltman; in black walnut or teak the table is divided by a ribbed modesty panel that permits chairs to be drawn up on both sides. The chair, by the same designers for Condi Company, has a shell of oiled walnut plywood with extruded vinyl molding; swivel pedestal is of cast aluminum.

Two storage cabinets in rosewood with Italian Cremo Marble top, optional total lock system. The base is polished chrome; designed by Florence Knoll for Knoll Associates, Inc.
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HOUSE IN INDIA — BALKRISHNA V. DOSHI
(Continued from page 12)

volume in the living, sleeping and eating areas therefore became the peripheral spaces, which can be converted into one. Service areas are on two floors—each two-thirds the height of the main floor—the upper level containing a studio, guest room and storage.

Building materials were obtained locally in the interest of economy. Red brick was used in bearing walls and in the peripheral cavity panel walls which provide a measure of insulation. Deeply recessed wood doors of teak and fly mesh when opened in the evening transform the house into a pavilion in a garden setting. The thin concrete panel overhangs protect the peripheral spaces from sun and rain and act as wind-catchers and sun-shields, providing the only source of natural light when the house is closed against dust, rain or midday heat.

The varying volumes and double heights of the interior spaces induce air movement, and living outdoors after sunset has been made possible by the concrete slab roof. Overlaid with a garden (or a layer of water), it acts as insulator during the day and as an outdoor sleeping area at night. Window framing is of teak; inside walls are painted plaster. Floors are black slate and terrazzo tile.

UNIVERSITY BUILDING — MINORU YAMASAKI
(Continued from page 14)

stair and elevator cores, etc., which we use for lateral stiffness. I believe that this is the first time that this kind of structural scheme has been used.

With the 28-foot-high first floor and its exposed and orderly columns, we are able to gain a rich quality for the building with complete structural validity. The central hall which shows on the photographs will be topped by a skylight and will become the lounge-reception area for the School. This lobby can be entered both from the plaza or the school side, or from Prospect Street by automobile.

The materials envisioned are white columns 28 feet high by 10 feet square, precast in one piece, with a kind of mushroom head; the second floor window wall, which is curved to give sun shade to the glass areas will also be precast. The walls behind will be travertine, with the windows framed with a bronze-colored aluminum.

ART
(Continued from page 7)

down by a rock-like shape at its base. Everything about this piece suggests Noguchi’s “concern” in the larger sense with the shaky tenets on which human existence depends. A kind of black humor, often present in Noguchi’s more ironic pieces, underlies the patent reality of anxiety.

Yet, as if to sustain a worldly dialectic, Noguchi presents the opposite of precariousness in Mitosis, two elongated oval forms terminating in rounded points that seem not quite to touch, but are in reality joined invisibly. They lie full and heavy on the ground, pregnant with fulfillment, timeless, immediately conjuring the aura of mystery . The photographs will be toppled by a skylight and will become the lounge-reception area for the School. This lobby can be entered both from the plaza or the school side, or from Prospect Street by automobile.

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Man’s relation to the earth is equivocal in Noguchi’s terms. He is at once a part of it, identifying himself with the accidental shapes and rises and falls in topography, and he is apart, a thinking animal endowing each phenomenal experience with meanings beyond the senses. Certainly This Earth, This Passage, a roughly circular bronze that lies inert on the floor, suggests the ancient mandala with all its associations of a centered existence. There is more than a hint of Noguchi’s oriental heritage in this piece, and some of the others that lie at ground level. Beside the spiritual interpretation,

there is the simple image of the crust of the earth seen from above with its elaborately varied topography—an image that gives the feel of itself to any wanderer who, step by step, makes his way over its unpredictable surface: an allegory of existence as much as a tangible emblem.

Certainly one of the joys of the exhibition is to observe how Noguchi can make the same material—weighty bronze—when shaped differently, assume different characters. The attraction of the earth, though, is immutable. Even the lump-like stone suspended on a wooden bar like an inverted trapeze or temple gates, seems to long for its rest on earth.

Complete repose, complete capitulation to the law of gravity is spelled out in the pieces that Noguchi thinks of as garden elements. They are of course the closest in allusion to Oriental notions. They lie underfoot, serene, totally self-sufficient—shapes that are never far from their natural prototypes, and yet are never imitative. In these mound, hill and plateau shapes, skillfully graduated to meet the earth as though there were no separation between them, Noguchi comes closest to the basic forms he first encountered in Brancusi’s distillery.

MUSIC
(Continued from page 9)

play of light on it; or the photograph of himself chiseling a stone sculpture that exists not for a museum but because he is working on it that my elder friend Ralph Stackpole sent me from his home in the Auvergne.

... Each idol bears its bruit, each saint a saintly fruit: man’s passion is renewed.

That Mary did conceive for each his fashion myth, no one need disbelieve: to each his passion’s truth: God’s miracle in both.

(Hymn of the Virgin Birth)

Some sections of the Art Museum at Toledo have been admirably adapted to their purpose, in particular the room devoted to manuscripts and printing. The well hung, uncrowded galleries of painting are wastefully high, as if for sculpture, and opulent with floor area, which might be good for dancing but could well be partitioned to the benefit of the exhibition. A proud portrait, meant to dominate a manor hall, shows at its best in that place; after several of these accumulate, it may be carried away to a less prominent meeting-place, called a gallery. And now the gallery, separated from the home, has grown public, democratic, and too often somewhat vulgar and common, either drab or overburdened.

For the multitude of smaller objects, particularly the strong glass and ceramic collections, there is a profusion of rectangular glass cases with perpendicular sides, ugly and outmoded in shape and the glass all reflections. Showcases in museums can be as well designed as those in grocery stores to display the contents to maximum advantage. An architect who designs a room less than adequate for its purpose or a museum director who permits the installation of showcases which any store would reject for the display of merchandise convicts himself of failure on the job. Forget the pillars, porticoes, bronze doors, interior fountains, and other evidences of unnecessary false elegance and put the expenditure where it counts most, to display each work of art with the utmost convenience for the public.

When my wife and I decided to build a new kitchen in our home, we went to a man who specializes in designing kitchens. Together we argued out, with exact specifications, to exhausting detail, the utility and purpose of each small area. Not we but the designer speaks with the trees.

We let ourselves be deceived about esthetic matters by the self-serving pomposities which dominate our cultural life. Those who think in these terms have established their habits of laziness and
MAY 1963

...To a theatregoer, repelled by the seedy grandeur of the production at the Metropolitan Opera House, the vibrant, lean style of 'The Rake's Progress' neutralizes the archaic form of opera and dramatizes it with a vivid sharpness,' Brooks Atkinson wrote in The New York Times, reporting Ingmar Bergman's production of Stravinsky's opera at the Royal Opera House, Stockholm. Compare the New York reviewers, writing several years ago, who blamed the composer for the Metropolitan Opera House failure of this opera.

We wallow in a literature and drama of deliberately shocking filth, amid visual art of an appalling ugliness (I am not referring particularly to abstract or 'action' painting); these are true and not to be avoided, because they are of ourselves. Appalling not because they are ugly but because we accept them as the only meaningful alternative to the lazy, unimaginative cultural normality they growl against but do not radically reject.

As I travel about among the universities I hear the music faculties discussing their proposed new music buildings and auditoriums, wondering whether by some quirk of fortune the acoustics will have been remembered — or, if thought of, well thought through. I raised this question with an eminent architect, of titular distinction among architects, who had just returned from visiting the new Philharmonic Hall at Lincoln Center in New York. He replied that he knew nothing at all about acoustics, that in his opinion the acoustical success of any hall is a matter of luck.

Everywhere I go I hold up for an example the work of Gerald Strang, who has designed acoustically correct music buildings at Long Beach City College and San Fernando State College in Southern California, as well as an acoustically perfect auditorium at the former school. Acoustical tests of these buildings are made regularly, and the tabulated results are of record. Dr. Strang is now consultant to the State of California in the acoustical design of State College music buildings. He has proved that the best acoustical conditions result from painstaking care for every detail of the insulation, from an exactly determined relationship among all factors of walls, ceiling, and enclosed space, and a minimum reliance on damping materials to sop up unwanted wrong effects. All planning begins with a precise determination of the exact quality of sound to be achieved.

To speak of 'tuning' a concert hall by moving about impedimenta inside it is a public relations dodge to cover up failure of acoustical design. I am told that the Aeolian-Skinner Company, which installed the organ at the Philharmonic Hall at Lincoln Center, was not deceived by the publicity. Having tried the acoustics they equipped the hall with an oversize bellows. At the dedication recital, played by Virgil Fox, many in the audience agreed that, for the first time, they were hearing the new hall properly "tuned."*

My round trip across the country which has already brought forth these many pages of commentary began with an invitation from the Department of Architecture of the University of Michigan asking me to attend a meeting of the Advisory Council of a proposed Performance Arts Research Laboratory (hereinafter called PARL) to discuss what such a laboratory should be and suggest projects for it.

For several years the Department of Architecture has been encouraging a study in light projection. One member of the group, Milton Cohen, was awarded a Graham Foundation fellowship for his experimental work with multiple lenses on a complex of rotary mounts projecting shapes of light on canvas forms. The first evening of the conference he demonstrated his work for us in his studio. We lay on the floor watching the play of lights on the canvas as it moves above us, while Gordon Mumma, a composer of the ONCE group, improvised on the strings of an opened-up piano to the accompaniment of electronic sound on tape.

The ONCE group is made up of Ann Arbor composers, not members of the University Department of Music, who present concerts of their own compositions and by such guests as John Cage and LaMont Young from New York. They are, to establish them in contemporaneity, the next generation after Cage. To read their programs or, even more, a critical report of them might suggest both musical preciosity and a deliberate floating of the audience. But they are a determined group. I learn that their latest series of four concerts, which took place three weeks after I left them, was a total sell-out. I found them calm, thoughtful, companionable, well-informed, technically capable, and not bemused by the notion that anything goes. At least two of them have built their own equipment to produce electronic music. Robert Ashley, their present leader, is one of the three originators of the PARL conference. Through him I was invited to attend as a member of the Advisory Council.

In company with the light-projection group they had presented to the Department of Architecture a project for a laboratory designed to investigate every aspect and feature of the performance arts. The Department sold the idea to the University, and money for the first conference was provided. The University is now enabling continuation of the study, but the grant of a larger sum from another source will be needed to carry through the several proposed projects.

I must say that I admired the way they went about the conference. Besides representatives of the several theaters at Ann Arbor and interested departments of the university, including composer Ross Lee Finney — whom I found most cordial — for the Department of Music, there were spokesmen of theater architecture and stage techniques, design specific and environmental, experimental dance. L. A. Hiller, Director of the Electronic Studio at the University of Illinois, was there, and the drama critic of the Saturday Review.

At the first meeting we were encouraged to set to and fire questions or proposals at the conference directors, who returned us on all points negative answers, exasperatingly evasive. So we turned our polite fury on themselves and their intentions. By noon we had emptied ourselves, and when we resumed following lunch I remarked that we had reached the condition of Zen neophytes, who after repeated vain attempts to answer the ridiculous question, the Koan, put to us by our Abbot, have realized our emptiness and attained Satori. We were now ready to understand what before we could not have been told.

That was true. The PARL plan begins in a state of nothingness. Everything is to be tried; nothing is to be presumed, nothing taken (Continued on page 34).
Alternates in steel
Structural steel, on the basis of firm competitive bids, won out over laminated wood arches and prestressed concrete beams, and saved $37,000 in the construction of a $3 million field house and gymnasium for the University of Vermont. Another important factor: the speed with which steel can be erected in severe winter weather.

The T-shaped structure is being built on the campus in Burlington. Housed in the cross of the T are a hockey rink, baseball diamond, and running track. Other facilities include a swimming pool and courts for basketball, handball, and squash.

$7,000 saved on field house

This arch-roofed building is 486 feet long, 153 feet wide, and 51 feet, 6 inches high at the center of the roof arch. Here, the final alternate in steel—based on a composite of A7 and A36 for higher strength and lower weight—proved $7,000 cheaper than the design using laminated wood trusses.

Twenty-eight arches weld-fabricated

Each of the 28 arches, 198 ft, 2½ in. long and weighing 24,423 pounds, was weld-fabricated in four sections. Flanges of the arches are curved to conform to the roof line radius. Overall depth is 27 inches. The web plates are 26 inches deep by ¾ inches thick, and flange plates are 1½ inches wide by ¾ inches thick. Designed snow loading varies from 10 down to 10 pounds per square foot, depending on location in the slope.

A roof of 4-inch tongue and groove planks is laid on 4 x 10-inch nailers attached to the arches in the fabricating shop. Built-up roofing material covers the planking.

Erection of the arches was begun January 23 and completed March 16. Two truck-mounted cranes handled the job. Each arch was shipped to the site in four sections, assembled on the ground into two halves and pin connected to the foundations. Then the two halves were raised together, and pinned at the top. High-strength bolts were used in all field connections.

$30,000 saved on gymnasium

For the gymnasium, in the center part of the leg of the T, the alternate in steel proved $30,000 cheaper than using concrete roof beams. The building is 234 feet, 4 inches long and 122 feet, 10 inches wide.

There are 12 welded plate girders in the gymnasium roof construction. They measure 122 feet, 2½ inches long and vary in depth from 4 feet, 8½ inches to 5 feet, 6½ inches. They have half-inch web plates and 18 x 1-inch flange plates. Each weighs 29,825 pounds.

The A7 steel girders are designed for a combined dead and live loading of 60 pounds per square foot.

for granted, not the building or its shape, or the location of the audience, or the presence or absence of a stage, or the type of performance to be studied; it might be music, dance, theater, or some new venture.

During the next two years some eight or ten projects will be accepted for study and experiment. We overrode the idea that these projects should be entrusted for completion to invited artists of repute. Such an admitted expert, though not excluded, is the sort of person we wished to get away from. He has his ideas, he knows his business, he makes his decisions; these might resolve, they would not solve our projects. We would start with the people at hand. Our job was to set up projects, define the scope of inquiry and ask questions. Answering the questions we might redefine the projects but not in terms of standard theatrical solutions. If needful, we would shape the building to the project but not, at the start, any project to any building.

We had been thinking in terms of realization in performance. That was the first misunderstanding, and the most difficult to get rid of. What might eventuate in performance was incidental to the project. It was about here that I, and I believe most of the others, began independently thinking. I set about doodling on my conference pad a project in “vertical theater,” which I have since then completed and submitted.

The vital shock of presentness in the figures on the Greek pots at the Toledo Museum spoke in me: a scene out of the Iliad, with suspended mobiles in the form of puppets, shaped in silhouette like those Greek painted figures. Here are the heroes, and the art will be to get them into space. But there is more to it than that. And I may end with figures more resembling those by Baskin.

Conferences can be deadly when they are not at the same time controlled and seemingly impromptu. This time there were no formal lectures or presentations, no important young men called in to rush to us from somewhere and speak to us and leave. Except that was the first misunderstanding, and the most difficult to get the preliminary session, when we released ourselves of our too routine ideas, no time was wasted—and that time, I am convinced, will be to get them into space. But there is more to it than that. Where are we to find competent new dramatists? somebody asked. You seek them by giving opportunity for them to find you and afterwards trying their work out on the stage. A dramatist is not a literary man; he needs a theater to work in.

Each American theater has its staff, paid or voluntary; its technical assistants; the Actors Workshop in San Francisco is attached to it, learning to know the theater as he writes. Theaters in France, Germany, England, and I suppose in Scandinavia and the Balkans, have won reputation by discovering and encouraging new dramatists. We borrow and reproduce the plays that they discover.

America must contain a dozen potential dramatists as good as Albee, and we may have hidden away one as good as Brecht. We should commence actively to seek them

NOTES IN PASSING
(Continued from page 11)

affected communications and saleable services are the forces which will shape things to come. It will be a builder’s world. It could be a beautiful one. Or, if the trend continues, it could be one big junk heap. A nuclear war is not needed; just let the current merciless landscapers continue their destruction. Who is to save the world from being aesthetically butchered? To answer, one must ascertain who the builders are, because they are so often the wreckers—some wreck the old to build the new, some do their wrecking in building the new. Wreckers or builders, they are the developers, loan agencies, insurance companies, contractors, material manufacturers, architects, engineers, and city planners. Take a close look at each one.

Most developers (thank God for the exceptions) are out for the “quick buck.” “Bulldoze the trees in the interest of expediency,” they say. Loan companies operate for profit. There is nothing wrong with that provided it is not at the expense of good design. But just try to get a loan for a home that represents the most advanced design and technology! Money still speaks louder than aesthetics with insurance companies, too. The business of a good contractor is to build and build well, regardless of looks. The materials people have great influence on the appearance of buildings. Today these manufacturers seem to have a greater influence than most architects, and for the most part, are a bad influence. Super salesmanship sold acres of schoolhouse walls of glassblock, millions of tons of enameled metal for skyscrapers, but the result was not better architecture. There are hundreds of glassblock schools—ugly inside and out—and nearly as many “tin can” office buildings to prove it. As for the engineers, bless their souls, they have technology to make these big uglys last forever! Distinguishing the city planner from the architect is difficult. Both are concerned with the total environment. One looks at the situation with field glasses, the other with a microscope. So for the time being, consider the two as one. The architect, therefore, wrecker or builder, is about the only one of the group who sponsors beauty. Admittedly he is not much of a warrior, but he is supposed to have been trained to fight. To
have a better world—beautiful as well as efficient—the architect-planner must be the champion of the people.

Although the architect has done a very poor job till now in building good environment, he represents hope. The people's architects give this hope. They represent the exceptions, but it is hoped that some day they will be the rule. Some day there should be enough good architects to make the market place a stimulating place, to plan dwellings in which the majority receive aesthetic pleasure from their every day environment, to produce low cost, beautiful churches that help each worshipper reach his God, to plan factories with the workers in mind as well as those on the board of directors, and to plan schools that help the millions of youngsters grow and develop in pleasant surroundings.

Contrary to what many think, architects are not here to please other architects. Unquestionably last architects receive extreme satisfaction from having other architects recognize their work, give them medals, certificates of excellence, and publish pretty pictures of their buildings. In the case of the latter, so many architects prefer pictures sans people. They don't want too many "scale figures" to distract from the architecture. They want architect-friends to see the work in its pure form—free of people. This same attitude prevails in the planning of their buildings. They seem to have greater interest in form than in people. Form-makers are important. The latter that the profession has bestowed upon the great should not in any way be tarnished. But this other group, the people's architects, should be recognized, too. These deserving architects have contributed to the achievement of humanistic architecture for the many.

Today, the opportunities for helping people through architecture are tremendous; they occur in every community. An example proving one building can help a lot of people is the case of a slum area near a great city. The neighborhood was sick. A form of sociological epilepsy existed. Without warning or obvious reason, school children became involved in sieges of violence. Parents advised their children to carry knives for self-protection. A new school was needed—a good one. It had a potent therapeutic effect. The community disturbances began to disappear. The people's confidence began to reappear. Neighbor began to trust neighbor. The kids put away their knives. The school became a symbol of better life. Here is architecture for the people, even by the people, because the architect encouraged teachers and parents to participate in the planning of their new school. Function takes on more significance when the planners are also the users. Architecture, too, becomes more meaningful when it has social implications.

It takes a special architect to lead and direct community participation. A certain receptiveness on the part of the architect was one reason for the sociological progress. He could never have convinced the users of the building that it was their building had he displayed the extreme egotism that seems to characterize some of the self-proclaimed prima donnas. He was willing to give credit to the teachers and parents who participated in the planning of this school, and wisely he was deliberate in convincing the users that the building belonged to them. This is a difficult procedure, but if the design-talented architect has the leadership ability to stimulate and guide group action, and if he is able to place the welfare of his client at the level of his own tastes and prejudices, he can achieve great architecture. Moreover, he can derive great satisfaction from this achievement. In this way he is a people's architect. His architecture is a social art.

To this caliber of architect, architecture is not so much the expression of his personal tastes and favorite forms as it is a service to people. It is a human interest and altruistic sense that makes the difference between this practitioner and others. The architect is a conscientious leader and a designer. He is people-conscious—so is his architecture.

There are not very many people's architects, but certainly more than the eight recognized by Rice University. Rice's selection will be questioned by historians and practitioners alike, but all great architects and architecture are controversial. Many thoughtful professionals were involved in the selection. These eight are representatives of the new type of architect. Each is especially sensitive to the needs of people, and, with a willingness to help people solve their problems within the means of their own pocketbooks, each helps public-spirited men and women of building committees build handsome buildings, and successfully communicates with civic clubs, school boards and corporation building committees, and persuades public officials to build better towns and cities. To this breed of architect, architecture is a way of life.—WILLIAM W. CAUDILL, Chairman of the Rice University Department of Architecture, from a program honoring eight American architects; John Lyon Reid, O'Neil Ford, Victor Gruen, I. M. Pei, Vernon DeMars, Pietro Belluschi, Charles M. Goodman and Marshall Shaffer.

BOOKS

(Continued from page 9)

"Eisenhower as President" is an assessment of the Eisenhower Administration in a series of articles by Sherman Adams, Samuel Lubell, Michael Straight and others, edited and with an introduction by Dean Albertson (Hill and Wang, $1.65). The salient fact about the Eisenhower era, as it emerges from this series of incisive essays and articles, is that the problems simply did not go away under the impact of the Great Crusade. Ike departmentalized government, and hewed close to the laissez faire theory of the presidency, Dean Albertson writes in the Introduction, and then finds himself in the U-2 or Sherman Adams frying pans, and history must decide which of the two was worse. The most intriguing of the reports are those by Eric F. Goldman on Eisenhower, the McCarthy putsch, and the Geneva Conference when Ike played poker with Molotov and Bulganin with world peace as the stakes. "Heart Attack" by Robert J. Donovan, the chronology of the President's Denver illness is a masterpiece of reporting, a cliffhanger.

The thread in "Eisenhower as President" as, indeed, the thread in Emmet John Hughes' "The Ordeal of Power" (Atheneum, $5.95), suggests that President Eisenhower never fully used the power and majesty of his office to the fullest. Determined to departmentalize rather than lead—it was Harry Truman's desk which bore the plaque legend: "The buck stops here."—Ike missed opportunities is the weight of Hughes' report. Hughes, once a speechwriter for Ike, disenchanted with 20 years of Democrats in office.
threw himself into the Crusade only to find that it was a Crusade at rest.

What we saw was what Lippmann had described so long ago as "a retreat to authority," a neo-isolationism, a refusal, as Adlai Stevenson once put it, to be dragged into the Twentieth century. And the refusal was supported by a majority of America's citizens. In a comprehensive survey of our foreign policy, Alexander DeConde, professor of history at the University of California, Santa Barbara, writes in A History of American Foreign Policy:

"Americans, more than at any time in their history, must make foreign policy a central concern, for basically problems of survival can only be solved in the minds of men. . . . Real peace, not a peace secured at the price of enslavement, can be gained only gradually, through a foreign policy of tears, frustration, humanism and patience."

In this classic survey of American policy from Hispaniola, 1492, to Vienna, 1961, the writer states that we have been forced to look outward, even as Lippmann said we must. Prof. DeConde has written a definitive text on the subject (Scribners, $12.00).

BOOKS TO WATCH FOR

One must go back three hundred years to the Thirty Years War—the Battles of Lutzen or Augustsburg—to find a military exercise as gross, as ghastly, as pointless as the Battle of Berlin. Warsaw and Stalingrad, which need bow to no other battles in point of bloodshed, might have fought at a distance, but both sides were convinced they could win. But Berlin was the insane immolation of a city, and it is this which news reporter Andrew Tully describes in Berlin: Story of a Battle (Simon & Schuster, $5.95). This is a magnificently documented record of human depravity, stupidity, degradation and futility; lies some of the tragedy of our time. Tully, one of the first Americans to see Berlin in the waning days of April when the Russians were still mopping up, now reports in detail: citizens carving up a still-living horse for food, tearful fourteen-year-olds holding Tempelhof Airfield with a handful of grenades and rifles against Stalin tanks; depravity and kindness; unpredictability and burning hate; and over and over again the madness of Hitler and his lickspittles who never had the courage to tell him that the war was over. The individual stories of Germans as they picked their way through rubble, death and destruction makes for the most vivid, terrible reading of the season. The Battle of Berlin, as Tully tells it, is stands as a raging monument to human madness.

Yet, lest we congratulate ourselves for having cleaner hands than those Europeans, there is always The Cherokee by Grace Steele Woodward (U. of Oklahoma Press, $5.95), one of that University Press' outstanding Civilization of the American Indian Series, which reminds us of the story of that outstanding tribe of aborigines, moved by duress from the Carolinas to Oklahoma and beyond under the civilizing ministrations of our early 19th century War Department. The Cherokees were the most advanced of all the North American Tribes—they were to develop their own alphabet, their own newspapers, their own administration, and were to seek—futilely to our historic shame—to take a proper place as American citizens. The passage of the so-called Echota Treaty of 1836 set the pattern for United States Government treatment of Indians for the rest of the century. The "Trail of Tears," the removal of the Cherokee from a habitat they had known for centuries to the Great Plains, was the greatest mass-migration between the Flight from Egypt and the Chinese Route Armies of the 20th century. Based on new sources, this is a monumental piece of research and enduring Americana.

The Civil War before Gettysburg is still another chronicle of military futility—on both sides. And no one tells this story of cautionary, leather-lunged politicians and bumbling bureaucrats better than Bruce Catton in Terrible Swift Sword (Double- day, $7.50), second volume in the Centennial History of the Civil War. ("Coming Fury" was Vol. 1.) In the beginning a handful of secesh thought they could burn a railroad bridge or two, cut off Washington, kill Lincoln and declare the South free even before March 4, 1861. General Winfield Scott, crusty and getting cruster, on the other hand thought a parade, or perhaps two, of force might bring the southern hotheads to their senses. Both underestimated by more than 100 years. How much more is still to be determined.
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