

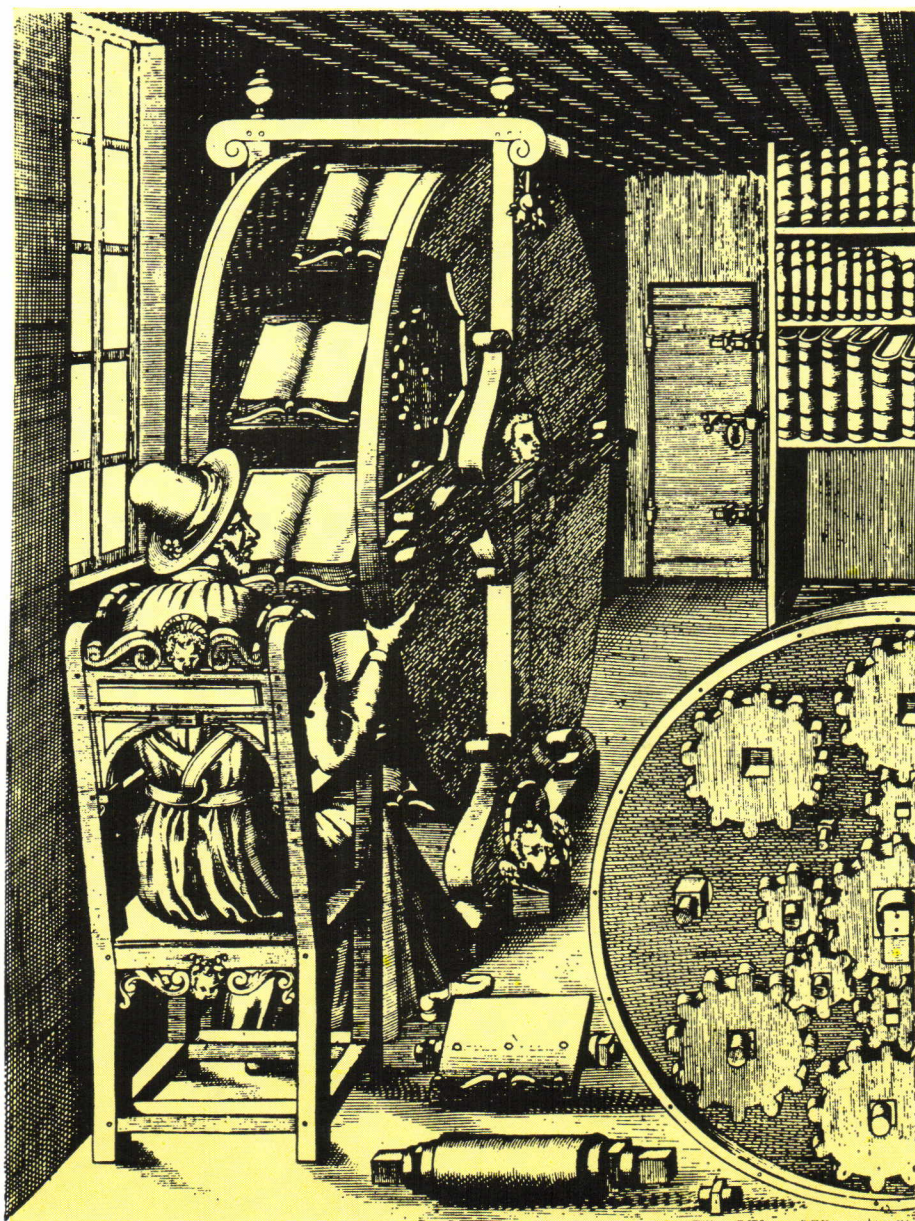


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November 1961

Journal

OF THE AMERICAN INSTITUTE OF ARCHITECTS



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Journal

VOLUME XXXVI, NO. 5 NOVEMBER 1961

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THE COVER

A reading machine for lazy book lovers. The device was invented in 1588 and kept books at a proper reading angle. It was to do away with the necessity of getting up to reach for books. Photo courtesy Bettmann Archive, New York City.

The Journal of The American Institute of Architects, official organ of the Institute, is published monthly at The Octagon, 1735 New York Avenue, N.W., Washington 6, D.C. Editor: Joseph Watterson. Subscription in the United States, its possessions, and Canada, \$4 a year in advance; elsewhere, \$5.50 a year. Chapter Associate members, \$2.00; Students, \$2.00, Members of Art Museums, Associations, etc., \$2.00 (by special group arrangement). Single copies 50¢. Copyright, 1961 by The American Institute of Architects. Second class postage paid at Washington, D.C. Change of Address: Notify The Octagon, giving both old and new addresses. Allow four weeks for change • The official address of the Institute as a N.Y. Corporation: 115 E. 40th Street, New York, N.Y. • The Producers' Council affiliated with AIA, 2029 K Street, N.W., Washington 6, D.C. • Opinions expressed by contributors are not necessarily those of the AIA.





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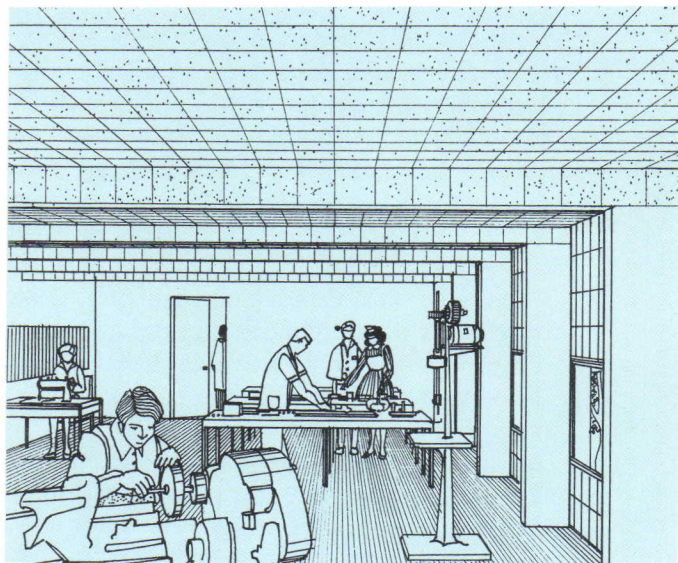
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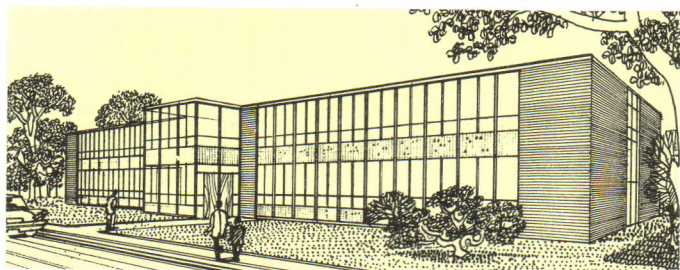
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Entrance lobby at left.

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Renderings by Helmut Jacoby

Letters

Culture of the City

EDITOR, *Journal of the AIA*:

I have read with much interest in the June issue of the *Journal* the record of the Philadelphia Convention sessions dealing with its main subject entitled "Culture of the City." This includes the initial papers presented by Bruno Zevi and Lewis Mumford, and the following pages dealing with the question and answer periods which followed the papers, including the student question periods.

Various statements by the two principal speakers, in their original papers as well as in their answers to questions, leave me confused as to their objectives. Mr Zevi urges the profession to take the initiative and solve the urban problem. He suggests that:

"The City is still there, strong and alive, maintaining its social and cultural functions, but *it is looking for a new urban form which has nothing to do with the old one*, because the new urban form is dynamic, sizeless and continuous."

Apparently he is asking us in the architectural profession to invent this "new urban form." However, a little later he says:

"The best cities—where the town plans had been applied—are the ones where you find a dictator over them. That is why I am so against Brasilia—all static and just artificially imposed."

In Brasilia the authorities, including presumably the assistance of the local planning and design professions, started from scratch with a vacant site and built a complete city according to such basic principles as were agreed upon. That seems to be an ultimate action which Mr Zevi asks our professions to perform. But when it is done, by a strange combination of circumstances, he says he is against it, "all static and just artificially imposed."

At one point Mr Zevi said, however:

"... because the structure of the new town, no matter how big, is so far away from the character and the structure of the old town that we have to find *a new form*. If we found a new form for it this probably will be good also for a town of 5 million inhabitants."

This indicates he is conceiving a completely new form suitable for a city of any dimension, but brushes off Brasilia, a modest attempt at such an objective.

I am opposed to city planning on any such basis. I also believe there is no such thing as the final "best city plan." No two cities are alike. Cities of any substantial size are all suffering from the

same long list of problems and the best solution will be different in each case.

Cities are much like individuals in that they have grown up during their youth and adult years and the result is due to their environment, physical and human. Many, probably most, were originally settled in relation to a sea coast or a river, even in the agricultural open spaces. They grew as a result of the complex of human activities and needs as they developed over the years. Decisions were instinctive in the early years in the efforts of the citizens to solve new problems they had never before met.

Out of those early efforts, whether we are talking about Ferrara in Italy or New Orleans, many cities developed community values and architectural charm of acknowledged merit. They also, in practically every case, developed, in varying degrees, their slums and depreciated areas and as an accumulated result we have gradually, in recent years, developed a national effort aiming at Urban Rehabilitation with varying degrees of intensity.

There is no such thing, within the range of my imagination, as "a new urban form." No city ever built could see at its start what it would need to look like a hundred years later. At one point Mr Mumford referred to:

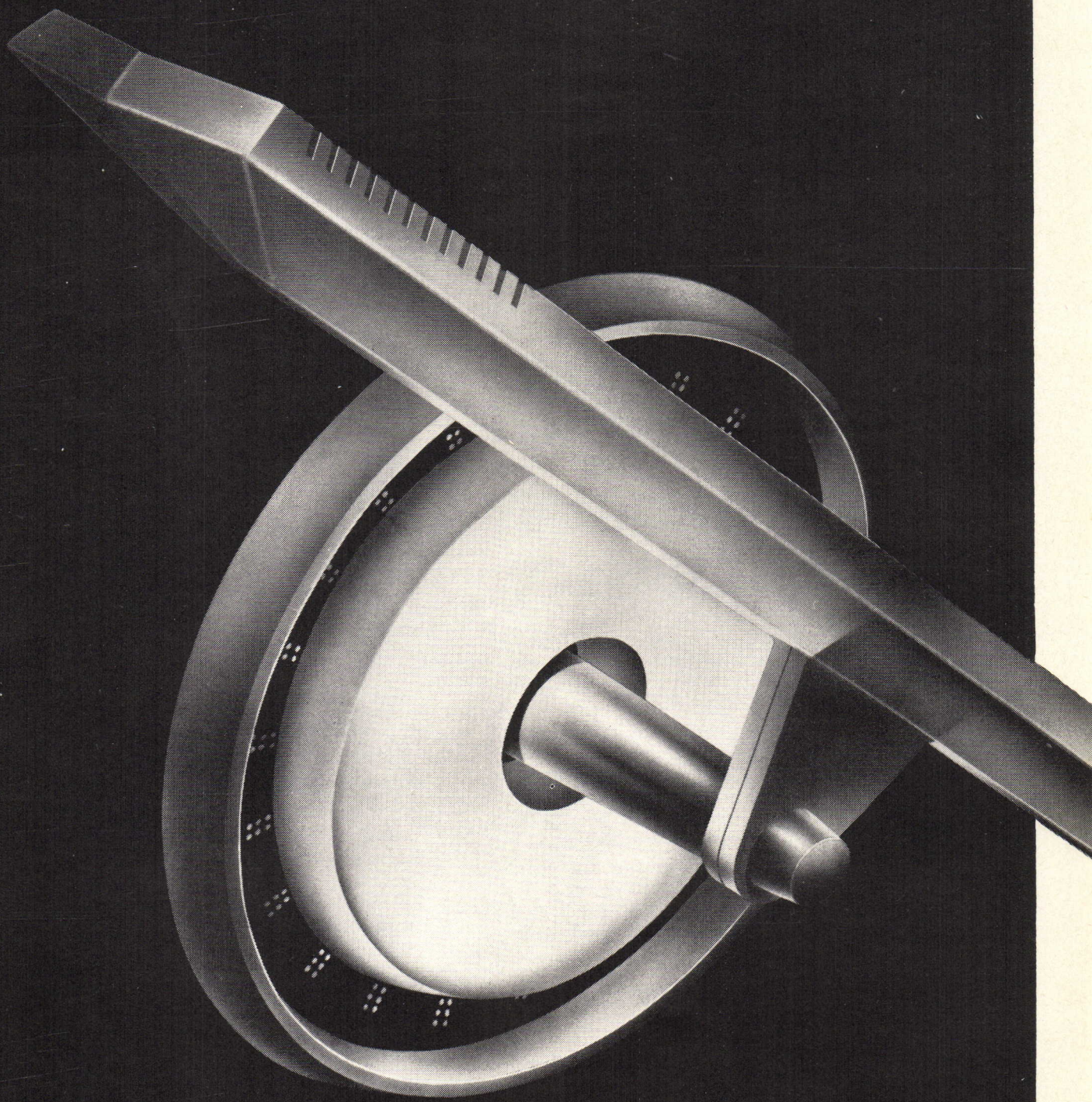
". . . the importance of small, coherent identifiable units which will not change very rapidly, which will be in their place today and will be in the same place ten years hence."

No change of significance ever took place in such a short period of time.

The development of cities in all countries has been affected by international relations, wars, economic competitions, migrations of populations for many different reasons, natural catastrophies such as floods and earthquakes, and economic conditions have often been controlling factors in the slowing up or the speeding up of community activity and growth; and as our cities continue to increase in population these economic factors increase in their potentialities for "boom or bust."

It seems to me, therefore, that sound community planning for the future is a vital element in any city administration, and there is ample evidence that the planning professions have given it a vast amount of free as well as remunerated service. That is where the decisions need to be made, in each community, on the basis of its own special needs, with very little hope that benefit will result from the special decisions arrived at in other communities, or in the development of any "new urban form" invented by some distant genius.

(Continued on p. 10)



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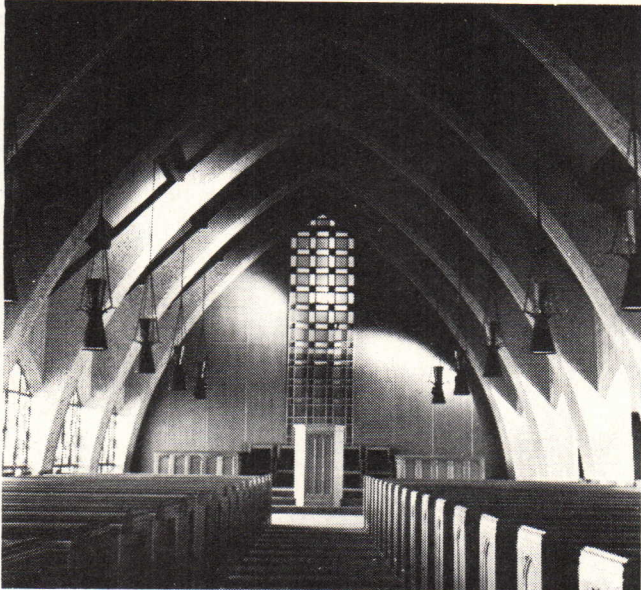
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(*) Masonic Home Chapel, Fort Worth

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And if the architectural genius of 1630 had been given a map of the terrain as it then existed he would have wasted his time trying to determine a conception of what Boston should look like in 1800 when it had acquired a population of 25,000, or in 1900 with a population of 560,000.

Cities grow, they are not designed at the start.

I don't agree with Mr Mumford when he says:

"... As soon as you spread people out in endless suburbs the reality of the City disappears."

Families with young children growing up need open space, trees, grass and the amenities that suburbs, if well laid out, can provide. A home doesn't need to be in sight of the City Hall for the family to be conscious of the "reality of the City." I do agree with Mr Mumford's objection to putting families into "enormous high-rise buildings," and any one who interprets that as a criticism of the buildings being built in the West End development, in Boston is quite correct in doing so.

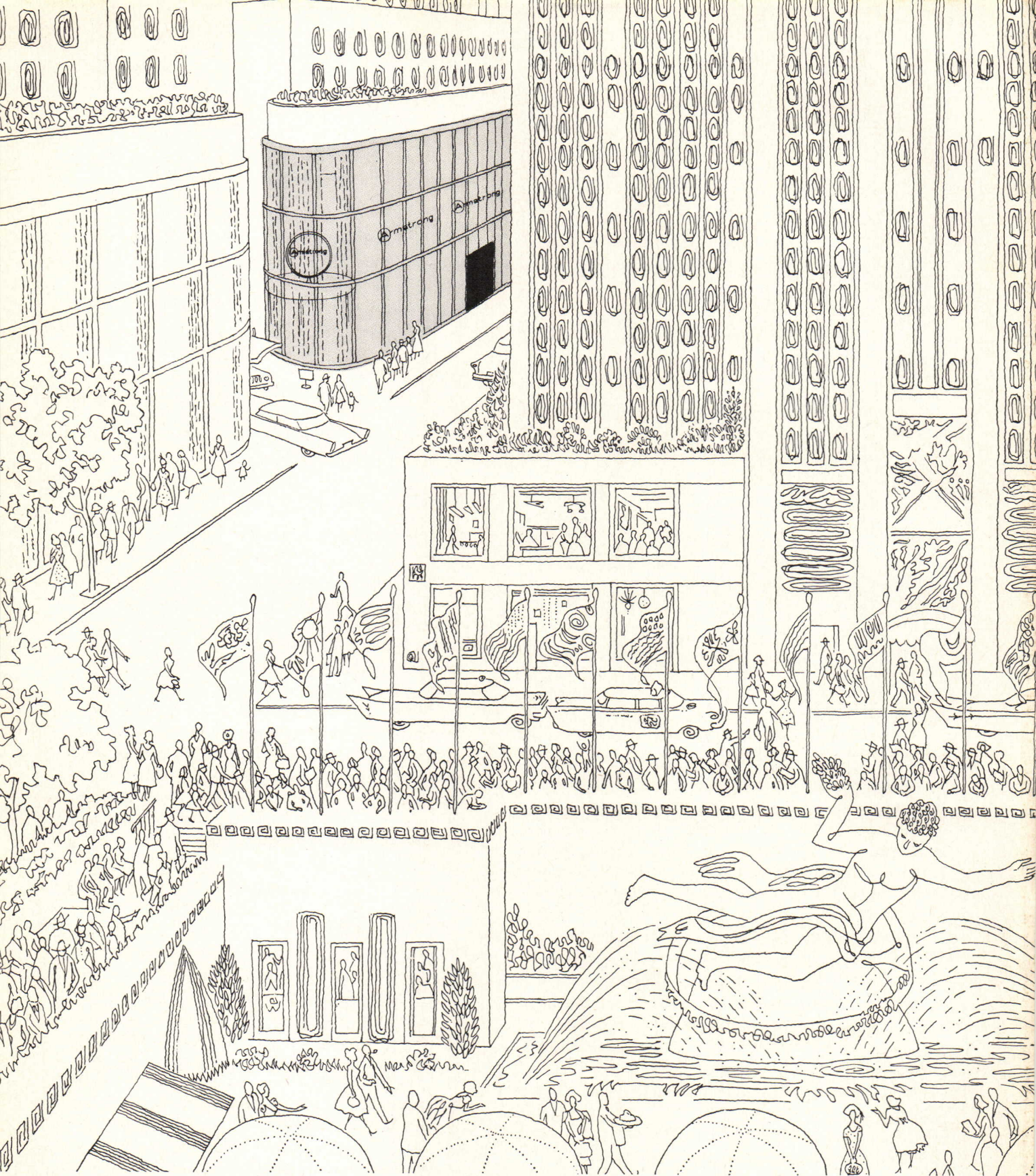
I don't think Mr Mumford really intends to "forget about the damn motor cars," at least not when studying the transportation needs of a community. When, however, these have been reasonably laid out and the more intimate elements of the various areas in between them are being planned, then Mr Mumford's thought about the intimate human relationship that should be nourished are of great value. I echo his feelings expressed as follows:

"Who among us would boast, looking at one of our high-rise projects anywhere—and pretend for a moment that it is an esthetic experience?"

His reference to "the little green walkways" that he hopes will begin to thread through the older quarters of Philadelphia, "and finally, I hope, through every quarter," indicates his emphasis on the need of consideration for these intimate human relationships in the midst of areas devoted to industry or business routines as well as in residential areas. These cannot be invented in "a new urban form," they have to be planned as intimate elements of a developing city, by its residents in an affectionate service of its community life.

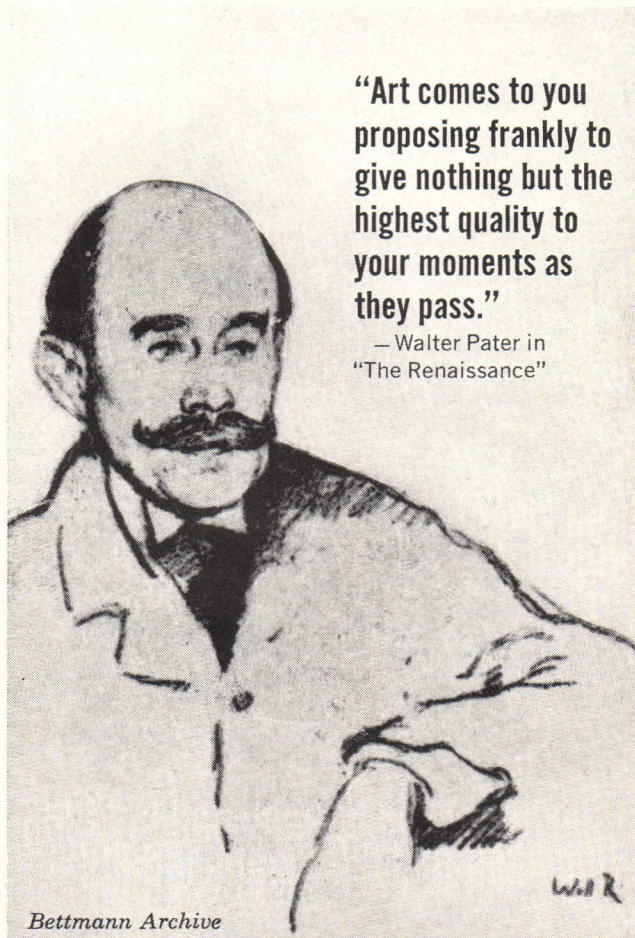
Mr Zevi's comments on the Guggenheim Museum as suggesting the concept of the new urban plan are completely unintelligible to me. Why a completely strange curved structure should suggest the future city while a normal rectangular struc-

(Continued on p. 12)



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Bettmann Archive

Art in architecture is a complex endeavor. Many ideas and many practical considerations must be combined to achieve the *quality* of conception and execution necessary to the fulfillment of this art. Each material component must meet the standards of quality established by the architect, and must maintain that quality as the years pass—or another opportunity for true art in architecture will have been lost.

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Letters *(Continued)*

ture does not, is something that can be explained only in terms of the individual imagination. To me, the Guggenheim Museum suggests almost everything that a museum and a city plan should not be.

Herein, it seems to me, lies the essential difference in the philosophies of our two speakers. Mr Zevi seems to conceive of a theoretical city. Mr Mumford thinks of a city in its human terms.

WILLIAM STANLEY PARKER, FAIA
Boston, Mass

The Piccadilly Affair

EDITOR, *Journal of the AIA*:

The August issue of the *Journal* performed a valuable service in publishing Carl Barefoot's interesting and important account, “The Piccadilly Affair.” My only regret was that it was not longer and even more fully documented. To this I add your own useful comments on the Grand Central bowling alley project, no doubt because I share your opinion of the concourse space. But the Pan-American disaster gets off perhaps a little too lightly. Why don't you publish a candid documentary account of this sequence of events, like the one you have done for remote piccadilly? In London the cause was won, in New York it was lost, but the lessons might be equally useful.

JOHN E. BURCHARD, Dean
School of Humanities and
Social Science, MIT

EDITOR, *Journal of the AIA*:

Concerning the Piccadilly affair, I do not see why they got so excited about it. Perhaps the illuminated revolving crane was too much, even for them. English cities are like ours in their mediocre architecture and lack of overall planning, but they are much uglier than American cities, due to abuse of illuminated signs. Apparently they have no laws to control this, though most American cities do. I have not been in England for many years, but I remember how the ugliness of their cities shocked me, due to this cause. Apparently there has been no improvement, witness the picture on page twenty-eight of the August *Journal*, than which nothing could be much worse. This is the next block to the Monico site, as is shown by the picture on page twenty-nine. Apparently Sir William Holford is trying to clean up both of these eyesores. More power to him.

JOHN J. KLABER
Huntington, NY

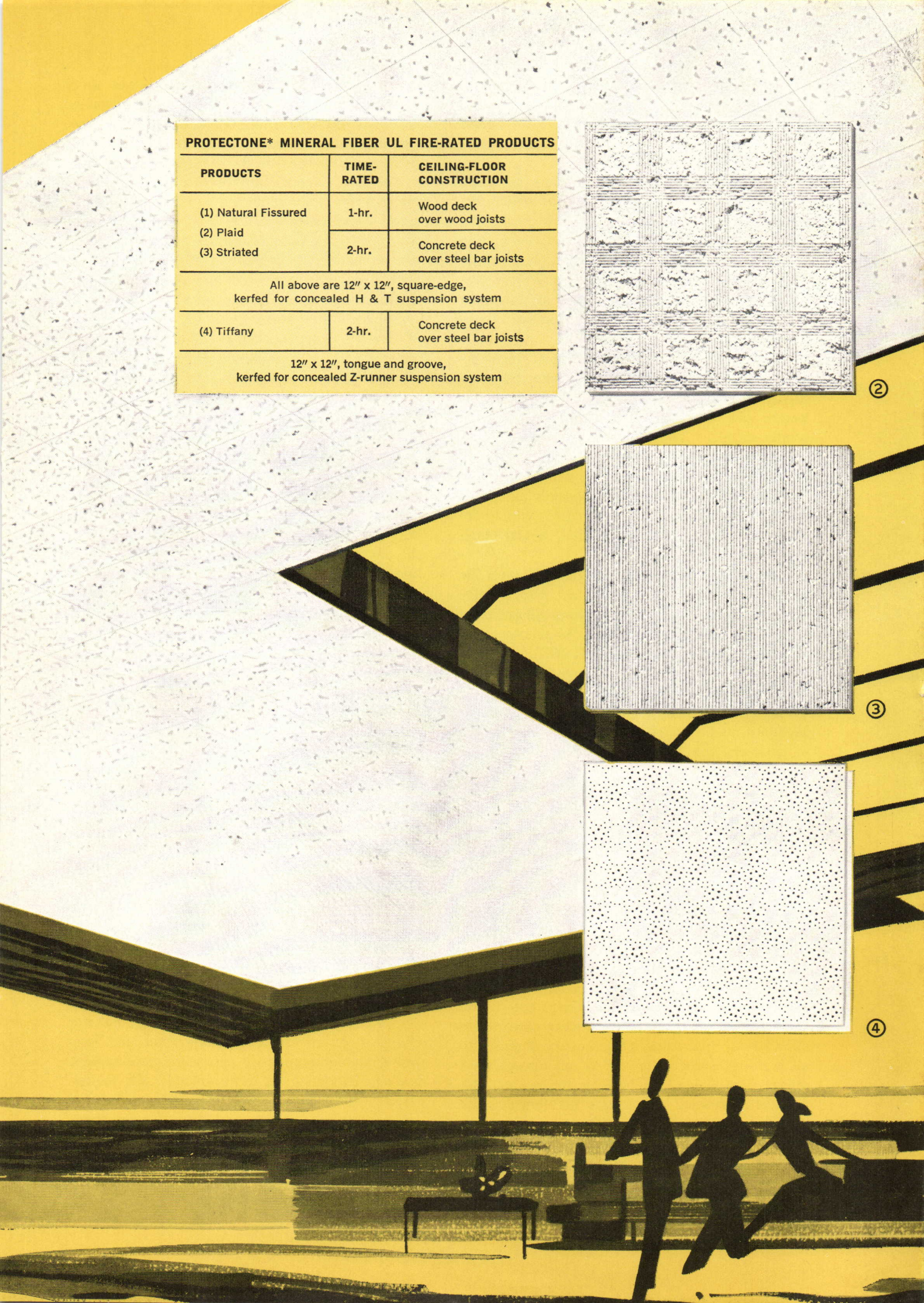
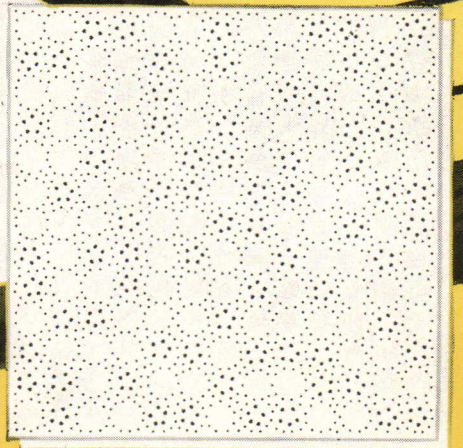
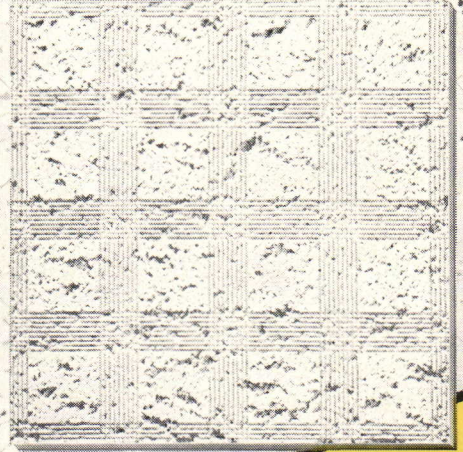
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Copper and Brass Awards

The fourth annual awards program to honor outstanding architectural applications of copper, brass or bronze has been announced by the Copper and Brass Research Association, trade association of the US copper mill industry. First prize winner will receive \$500 and a bronze trophy to be presented at the Association's annual meeting next May. A similar award also is given in a non-architectural category.

Entries can be architectural designs (commercial, residential or other), new engineering concepts, or other creative developments in architecture and construction that involve use of the copper metals.

In previous years, CABRA awards have been given for Mies van der Rohe's bronze-sheathed Seagram Building, Minoru Yamasaki's air terminal in St Louis, and two distinctive church designs of architects Arthur G. Odell, Jr and Hugh Moore Jr.

Entries for the current competition must be submitted no later than March 31, 1962. Entry forms providing full details are now available from the Copper and Brass Research Association, 420 Lexington Avenue, New York 17, NY.

1962 Building Products Register

An increase of forty per cent in content and usefulness and a decrease of forty per cent in price to members will mark the 1962 Edition of the AIA Building Products Register, to be published by the AIA on January 1.

Samuel E. Lunden, FAIA, Committee Chairman, disclosed that product categories have been expanded from eighteen to twenty-four, and approximately 1,000 abstracts of pertinent ASA, ASTM, Federal Specifications, Department of Commerce, Underwriters' Laboratories, and other standards will be included in the 1962 Register.

"We are extremely pleased to announce, at the same time, that the original subscription price of \$25 for the 1960 Register will be reduced to \$15 for members for the 1962 reference book," Mr Lunden said. "More than this, we are now able to offer 30-day trial subscriptions of the Register to all previous subscribers and to all known AIA offices. The Committee believes that every AIA member is entitled to examine the Register and purchase it at a popular price."

The prime value of the Register to architects, Mr Lunden pointed out, is that its use increases staff productivity and substantially reduces the time spent in gathering factual data to make prod-

uct analyses and selections. It also serves as a valuable reference in settling "or equal" disputes and selecting equal products, he said. Many new products and products being readied for the market will be listed in the 1962 Register.

The Register does not compete with or substitute for any other reference work. It is the only single source of information from which comparative analysis of product criteria and performance can be made. The contents of the 1962 Register have been greatly revised and many important improvements made in the interests of the user.

Copies of the 1962 Edition will be mailed on a 30-day trial offer to all first-edition (1960) subscribers shortly after publication. All architects' offices may take advantage of this same offer. To be certain your office receives its copy, please notify the Building Products Registry Service, American Institute of Architects, 1735 New York Avenue, NW, Washington 6, DC.

RPI Has Adjustable Classroom

An experimental classroom seating 100 is being built by Rensselaer Polytechnic Institute under the direction of the School of Architecture to find and demonstrate the maximum use of instructional aids and media in college teaching. It is expected to have a national influence in the design of such facilities.

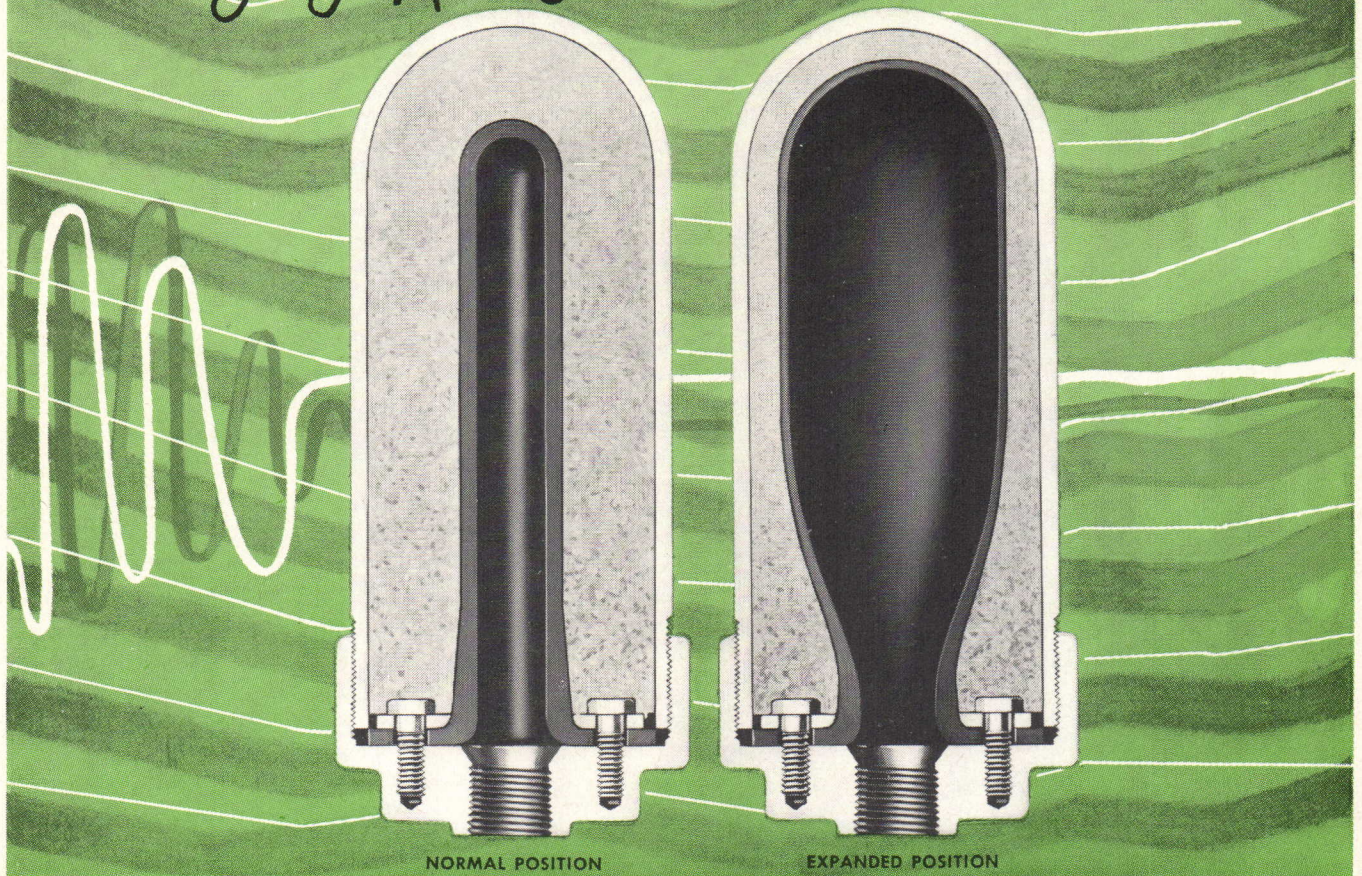
With ceilings and walls adjustable in height and shape, the classroom will permit the experimenters to test the whole range of form, shape, character of materials, equipment and fixtures, air conditioning and other environmental conditions. It will be complete by February and ready for thorough evaluation by actual classes in selected subjects.

The experimental classroom is being built in the transept of a large chapel building acquired by RPI in extending the campus. It is being constructed of non-permanent materials so that revisions of the interior space may be readily effected during the three or four years in which the experiment will be carried on. The panelized ceiling, suspended from two large trusses, can be raised or lowered to find the configuration most conducive to proper acoustics and lighting. The walls, which are non-bearing, can be relocated and changed as found desirable. The seating, on stepped platforms, is so framed as to permit the changing of arrangement. Both front and rear projection equipment will permit the development and evaluation of the most effective aids for instruction in each particular subject.

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(Continued on p. 18)

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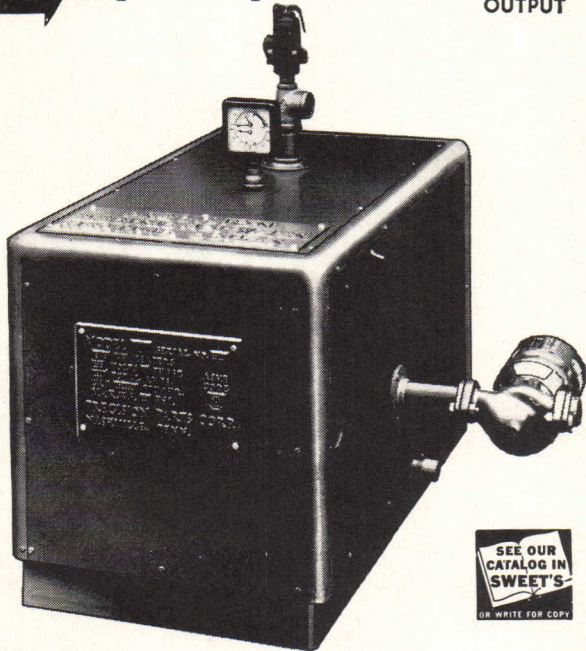
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News *(Continued)*

projector, audio recording and playback equipment and movable demonstration tables. Much of the equipment will be under the teacher's remote control and may be set up in advance for use at the desired time. Lighting will be under his control to afford the exact level of illumination required at any specific time. Students will be seated in fixed pedestal swivel chairs behind continuous writing surfaces.

The original concept for the classroom was developed in a national study undertaken by Rensselaer's School of Architecture through a grant of \$50,000 from the Educational Facilities Laboratories, Inc, New York City. With advice of authorities from five other universities and colleges, basic design data was developed and used as a guide in building the experimental classroom. Its effectiveness will be subject to continuing evaluation by those using it, by RPI's Educational Research Council and by the project staff, including Wayne F. Koppes, AIA, Alan C. Green and Morton C. Gassman of the architecture faculty.

Information Sought

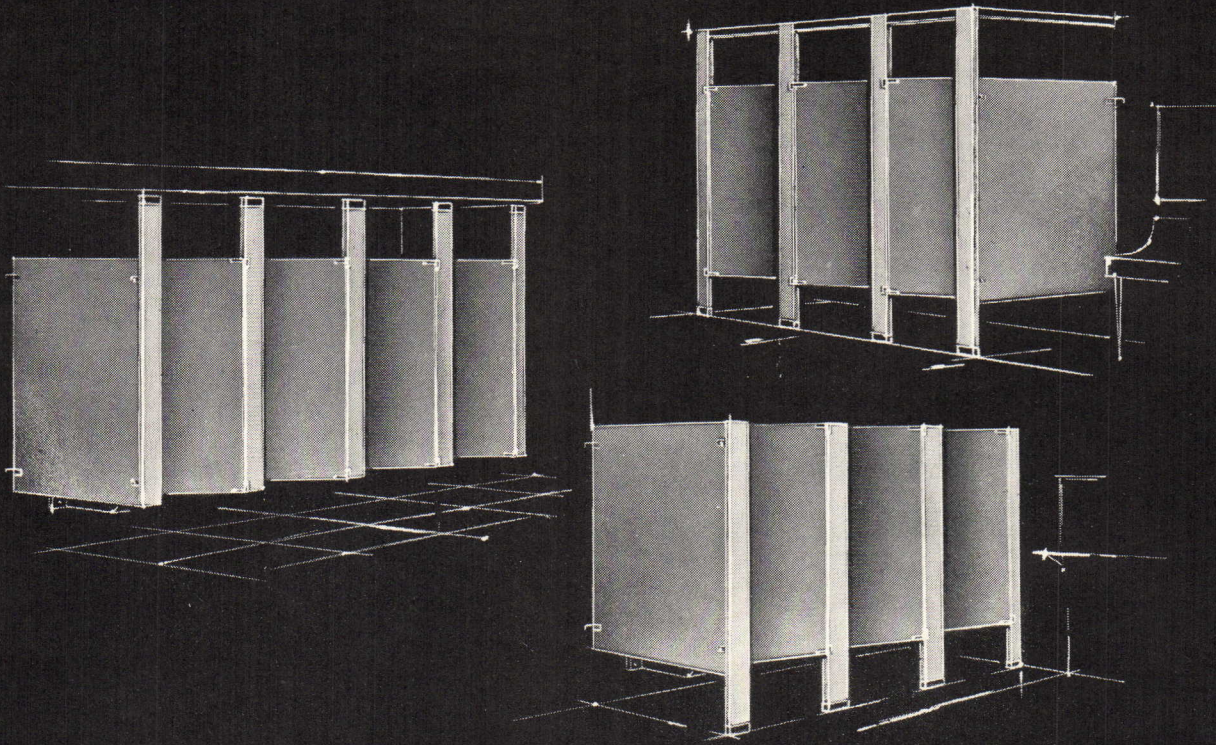
The AIA Research Department, in collaboration with the American Association of Instructors of the Blind, is beginning a study of residential schools for the blind to be published in the technical section of the *Journal* early in 1962. Good examples of recent work in this field by members, including plans, building programs and photos are needed. Such information may be sent directly to the AIA Research Department, 1735 New York Avenue, NW, Washington 6.

From the President

"Many of you have heard me say that the architect must broaden his horizons if we are to continue to occupy the place of influence in the building of our country and world that we now enjoy. I have said that we must grasp the total purposes for which the structure is intended, and surely the climate within the building is of major importance in how well our solutions fulfill the needs.

"Airconditioning is not well-understood by many architects, and as a result we tend to shy away from it leaving it to the engineer. At our request, our affiliate, Producers' Council, has come up with a new seminar program, designed specifi-

(Continued on p. 20)



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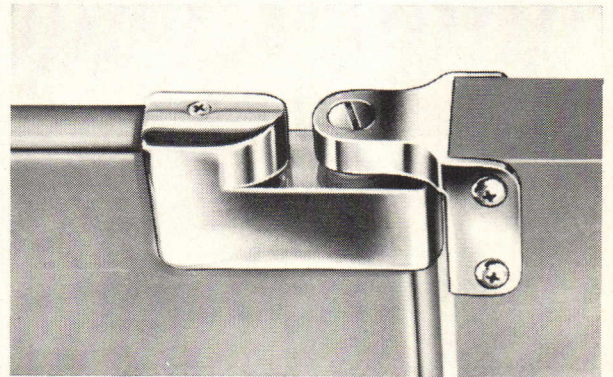
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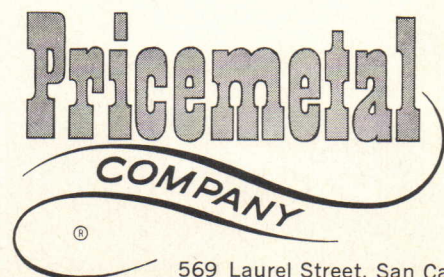
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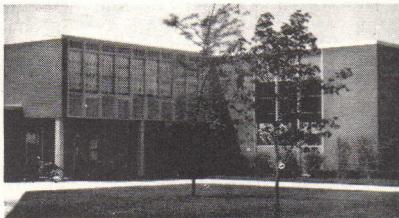
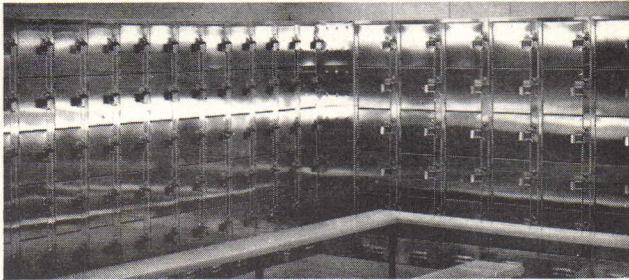
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News (Continued)

cally for architects, to show some of the problems of less than satisfactory airconditioning installation, how these could have been avoided many times by our consideration of the causes as shown, and to show some of the fundamental principles of airconditioning. It is neither overly technical, nor commercial. It is highly educational and well within the grasp of the architect. You can't see this program and not make a more intelligent approach to the design problems you face daily."

More than 2000 architects and their mechanical engineers have participated in the Producers' Council Air Conditioning Seminar to date.

Since many who were unable to attend the first showing in their city now wish to participate, Producers' Council, Inc is making the materials and personnel available for additional programs. Consult your AIA-PC Committee or write: The Producers' Council, Inc, 2029 K Street NW, Washington 6, DC.

Fellowship Announced

For the sixth consecutive year, The Sears-Roebuck Foundation will award two-year graduate fellowships in the field of city planning and urban renewal.

James T. Griffin, president of the Foundation, has announced that applications for fellowships for the 1962 Fall term now are being accepted.

Each fellowship includes a grant of up to \$3,000 a year to the student and an unrestricted grant of \$1,000 a year to the school where the Foundation fellow studies.

A minimum of ten fellowships — including renewals — will be awarded for the 1962-63 academic year.

Prospective fellows must submit applications, available from the Foundation at 3333 W. Arthington St., Chicago, Illinois, to the schools of their choice by February 1, 1962. Announcement of the winners will be made by the Foundation in March.

Robert D. Calkins, President of the Brookings Institution; Martin Meyerson, Vice President of the American Council to Improve Our Neighborhoods, and Dennis O'Harrow, Executive Director of the American Society of Planning Officials, form the committee which will select the 1962 Foundation fellows.

Designed to increase the flow of trained personnel into urban renewal and city planning, the Sears Foundation fellowship program is administered by the Foundation in cooperation with ACTION and the American Society of Planning Officials.



A · I · A

Journal

REVERBERATIONS:

Landscape Interpretation and the Planning Arts

by **Patrick Horsbrugh**

EDITOR'S NOTE: *The Editor attended the ASLA convention, and was struck with the strength and the clarity of Professor Horsbrugh's challenge. Although addressed to landscape architects, it should be read by all the planning professions. Directly provocative to architects, and critical of recent statements made by President Will, it is never unfair and always good-humored. Second Vice President Hunter was present, and made a good reply for the AIA—and the next day the two gentlemen went off sight-seeing together!*

Professor Horsbrugh is a British-trained architect-planner, and has done work on London Town Planning, the Federal capitals of Pakistan and Burma, and has traveled as a lecturer, critic and writer. He is also a ubiquitous and engaging personality.

► The conflicting demands for space to accommodate all that must now be carried on have shown the urgent need for a vastly greater comprehensiveness of thought and knowledge of landscape. Something in the nature of a crusade is now necessary to galvanize the attention and to direct the efforts of individuals and of governments alike to a state of religious fervor in regard for the earth, the waters, and the atmosphere.

The visual confusion of our enviri-um can fairly be described as tumultuous, and in our ever-desperate search for peace, we seek relief from things seen no less than from uproar. Because of the essential continuity of landscape, our answer must lie in an appreciation of the entire earth as one continuous or united ecology.

The explosive expansion of populations, together with scientific developments, have quite naturally brought about specializations which

Since Professor Horsbrugh's address, as delivered, was much too long for full-length presentation in the *AIA Journal*, we regretfully, although with due gratitude, reprint the above condensation, approved by the author, from the October issue of *Landscape Architecture*, the Journal of the ASLA.

Adapted from an address delivered to the 62nd Annual Meeting of the American Society of Landscape Architects, at Boulder, Colorado, on July 10th. Mr Horsbrugh is Associate Professor of Architecture at the University of Nebraska

have, in turn, become more intense and more diverse. But the professional role which we, as landscape architects, should be seeking to establish is nothing less than that of *land-use co-ordination in totality*.

Who, other than the landscape interpreter, can be expected to assess the relative merits of diverse and multiple claims for every habitable acre, for every gallon of sweet water? Can a planner perform such a task? Can the economist comprehend unseen values? Can the politician placate the natural forces? Can the sociologist assimilate the issues and construe conclusions satisfying to the spirit as well as to the service of society?

We who ponder on such matters must surely agree that those trained to practice in the various aspects of land usage are woefully equipped to comprehend the effects of what they do. Yet when I call for the landscape architect to become a land-use co-ordinator in totality, it is with full knowledge that he is neither sufficiently trained nor prepared to shoulder such responsibilities today.

The scale of his present operations accords with the demands society lays upon him, and his technical training is sufficient for such conditions. My recommendation, then, is made upon the basis of potentiality.

Characteristics of a Land-Conscious Designer

It must be recognized at once, and with humility, that landscape architects are a small band of devotees, neither holding political power nor having financial influence. Nor are we continually claiming public attention by dispute and demonstration.

Today the landscape architect is called upon to sustain the architect and the planner, at their behest providing remedial measures for situations he did not contrive and in conditions that he would have advised against had his opinion been sought at the beginning. It is clear that the landscape interpreter cannot work to the best effect in such circumstances. The decision must be made as to whether the profession is to be contented with the minor role of *decorator* or whether the pressing urgencies will beckon us forward to assume the control that technically is ours by logic and right.

In timely realization that more is required of the architect, Mr Will declared:

"I hold that the architectural profession should assume responsibility for nothing less than the

nation's man-made environment, including the use of land, water and air, an environment in harmony with the aspirations of man."

We can applaud the breadth and power of this expression, for as champions of landscape, we are well able to appreciate the magnitude of the problem and also the extent of the claim. Assistance from the other professions is enlisted with the proposal for the establishment of an Academy of Environmental Arts, but the inverted arrangement of planning and landscape under the patronage of architecture seems to be implied.

If we elect to follow the latter course, and I believe we must, then we are confronted at once with the need for re-adjustments in the concepts of what a landscape architect is, what he can do, and above all, what the need for his services is.

The basis of professional regard is established in the schools, and is continued by the interrelationships with other specialist fields of learning and practice. The current system of landscape education is trifling in scale, struggling in effect, and so out of accord with the demands of the moment that there is justification for the greatest possible effort, combined with the allied professions, to readjust the whole concept of territorial planning education.

Professional Vacuum

There is, today, a growing professional awareness that with specialization, justified and unavoidable, there comes also diversification, and the interrelationships of the allied design professions is inevitably weakened. It is imperative that these divisive conditions be countered by the deliberate cultivation of broader intellects which could exercise influence and control more in proportion to the scale of developments.

Philip Will, the President of The American Institute of Architects, recently raised this very issue in the *AIA Journal*: He pleaded for the cultivation of architectural statesmanship, for the creation of grand strategy, and for more assured co-ordination between the participants, technical, professional and political.*

In my own exploration of the subject, I have pleaded, since 1957, the urgent need for statesmanship under the name of *omnitecture*. An *omnitect* may be an architect, an entrepreneur, or someone otherwise cultivated in creative planning. But first and foremost, he must have the instincts

*"State Of The Profession," *AIA Journal*, January, February, April, 1961

for and be trained in landscape comprehension. I maintain, with respect, that the architect, as presently trained, without a basic course in landscape comprehension, is not equipped for the responsibilities of statesmanship. Those architects who do possess such prowess have received it as a natural gift. Such men of exceptional ability are too rare to include in generalizations.

Revision of Curriculum

Schools of architecture have nearly always provided the atmosphere and the accommodation for instruction in landscape, first by incidental lectures, then by regular courses, and sometimes even by the establishment of small departments. It is inevitable, therefore, that the "subsidiary" character of landscape design should have become accepted as proper and the subject be maintained in minor status.

In brief, the impression prevails that those who are insufficiently adroit to calculate stresses and moments in structural members may find scope for their lesser talents in the assessment of population densities, while those who are too frail to contend with the political implications of planning may be better employed in the disposition of shrubs.

Thus, the descending scale from architecture, the "mother art," through planning, regional, urban, and economic, all so delightfully vague, to landscape, that process of "make do and mend," of "filling in the gaps between," has grown and has come to be accepted as normal.

I can speak with feeling in respect of these steps for I sought to proceed in the opposite direction. Having taken a course in architectural design, I wanted to know wherein all this might fit and undertook a shorter course in planning. The effect of this was merely to extend my curiosity concerning the character, siting and geography of the embracing scene.

Each time a change of course was made, I found that the prestige became less, even though the numbers engaged were fewer and the importance of the subject itself was undoubtedly greater.

Inverted Values

Is it not clear that our sense of proportion has become seriously distorted? However great items of architecture may be in themselves, they cannot be anything other than details of a scene, whether it be urban, rural or marine. No matter how important a city may become, its vitality depends upon the geography in which it grows.

If the architects' claim to professional leadership is supported by those concerned with landscape, the present subsidiary position of the profession will be acknowledged and maintained.

I would point out here that Mr Will's claim for responsibility is limited to the "nation's man-made environment" only. What of the larger scene, those areas not yet intensively occupied? Surely there exists no sound basis for the subdivision of the landscape into man-made environment and that which has yet to be occupied and exploited. *Landscape, like time, is indivisible. It can be measured; it cannot be divided.*

It is not my intention to stir professional animosities, but since we are all in a state of change amounting to turmoil, I would suggest that we emerge from the shadows and attempt to redress the malbalance whereby the specialization of architecture predominates.

No composition can be effective if it consists of an assembly of details, no matter how nearly perfect the individual details may be. Flora and fauna accord with the region; the alternative is artificiality. In the redemption of environment, we are concerned with grand strategy. Quality in minutiae will avail us nothing if comprehension of the whole is lacking.

Mr Will has taken the lead in raising the subject of the deplorable state of the man-made environment. His alarm is justified, but his scale is less than full measure. We should respond to his challenge with speed, with good humor, and with ideas of our own. Mr Will presses his challenge by asking, "To whom can the public look for help, for guidance, for vision: to the realtor? the developer? the politician?" When Mr Will then declares, "The answer must be: the architect," he is, by implication, provoking those of us who consider that the training now available for intending architects, planners, and for landscape interpreters, to be distinctly deficient, to make recommendations. It is in response to this challenge that I submit the sketch of a program of landscape training that I am proposing for consideration in Canada.

Reversal of Scholastic Emphasis

A bid may be made, I believe, to reverse the prevailing emphasis in the academic training of architects, planners and landscape designers from design fashion to siting and ensemble. It must surely be recognized that anyone whose career will be concerned with land-usage and construction should be imbued with the fullest sense of landscape values compatible with the instincts of the individual, and within the time available.

The following cardinal points illustrate the reversal of emphasis I consider to be so necessary:

- 1 The full course is to be seven years long.
- 2 The first eighteen months would be devoted wholly to landscape comprehension. It would not be possible to proceed to other "specialized"

courses unless this course, fundamental to all forms of territorial planning, were undertaken. ("Completed" would be a wholly misleading word in this context.) I plead that all land-using specialties should share in common a basic course in landscape concerned with the fundamentals of land-form and its interpretation, whereby some understanding of water, of vegetation and of climatic conditions may be gained.

3 This introductory course in landscape comprehension would be followed by eight complementary courses of major specializations dealing with various aspects of land occupation and usage. These courses are arranged in pairs for reasons which should be self-evident, and they depend on the sciences shown in brackets:

Landscape design and Hydrography (climatology and Geomorphology)

Regional Planning and Urban Renewal (Economic Geography)

Political Economy and Planning Law (Sociology)

Architecture and Transportation (Engineering)

It is intended that each of these individual courses should follow a curriculum which may be familiar already. It is essential that they should be concurrent, since interchange between these parallel courses would clearly be advantageous.

4 It is taken for granted that the element of *time* would be included in all these concurrent courses, and that the teaching of the ever-presence of history would provide the binding threads between the related subjects, in complement to the common basis of each in the nature of landscape.

It will be seen at once that architecture is not the rallying point, as hitherto, but is based where foundations may be reasonably expected, upon landscape understanding, and is bracketed by the regional and urban conditions of which this specialization forms a detail.

Further, like the landscape itself, regional and urban conditions are in constant change, and possess vitality in a rather different degree than architecture, which, as a form of containment, is essentially passive in that the adaptability of buildings is limited and the effects of age are restricting. A city outlives its structures, having a self-sustaining and recreating capacity, if it remains effective economically; structures outlive their cities only rarely and for exceptional reasons. The relative passivity of buildings must therefore be recognized and allowances made; hence the deliberate juxtaposition of architecture with transportation.

Transportation is used here to mean both physical movement and the routes of movement, not

only of people and commodities but of lines of power, pipelines of supplies, and communications as well.

It seems strange indeed that the form and effect of transport systems, which are such extensive land-users and dividers, which exert such a visual influence upon the enviroium, and upon which all economies are now sustained, have received so little attention at professional and academic levels. The study of systems of transport in respect of landscape and land use, and especially the problems of co-ordination between these changing systems, is now indispensable to any effective review of regional and urban planning, and especially of architecture.

Landscape the Common Basis

In making these four proposals for revising the established form of architectural training, and in placing architecture among departments of planning, I am pleading that training in landscape should become the basis of all these interrelated and specialist disciplines, and that landscape no longer be regarded as an ultimate adjunct, taken or not as individual time and convenience allow. Instead, I pray that the order be reversed and that landscape comprehension be recognized as fundamental to all territorial planning disciplines.

It may seem to some that any call of landscape architects to advance themselves as the logical co-ordinators of the elements of the inhabited scene, and as arbitors of what shall-be-done in the regions yet to be occupied, is quite preposterous and wholly self-indulgent. This may be so, for we are few, our works are relatively little known, our potentialities are virtually unsought, and we would have much prejudice to overcome from kindred professions.

Wearied Laymen

Yet I do not feel that I am raising a fruitless appeal. In recent "reverberations" with laymen, I find that they are wearied with the subject of architecture, which, in general, fails to inspire and hold respect; they are utterly perplexed upon the matter of transportation; and they are plain overwhelmed by the problems of planning.

They do respond, however, and immediately, to any reference to landscape. This is something which is instinctively felt to be important, something which is lacking, something restorative.

I believe, therefore, that we have at least public sympathy and yearning at our disposal if we can fire imagination by some demonstration of our concern and of our capacity. Educational refurbishment is our next step. ◀

**Excerpts from the Reply to Professor Horsbrugh
Made by AIA 2nd Vice President James M.
Hunter, FAIA at the ASLA Convention**

► I am deeply moved by what Professor Horsbrugh said yesterday.

First of all, I find myself in agreement as well as in disagreement with his statements, but when I try to analyze my points of disagreement, I find them largely to be semantic and find myself persuaded by his ideas but not his words.

Since the professor challenged my "Boss," I feel obliged to defend him, for he implies that the President of The American Institute of Architects is encouraging his profession to "trespass into yours." Believe me, I know Phil Will well and this is farthest from his thoughts. My profession has no intention of gobbling up yours or any other profession. We are, however, deeply concerned with the condition of our total human environment, the interplay of the design professions charged with the creation of that environment, and the results we of the design professions are attaining or rather failing to attain.

This needs leadership and neither Phil Will, nor I, nor the Board of Directors of The American Institute of Architects are stupid enough to believe that leadership can be assigned. Leadership must be earned and it matters little whether it is exercised by an architect, by a landscape architect, by a planner, or by whomever in the design professions is capable of attaining the respect, goodwill and cooperation of his fellow professionals.

As long as we operate independently and almost competitively with one another, the total environment will remain segmented and catch-as-catch-can.

Perhaps it's time we kicked down all the little white fences between the design professions and began again to think in terms of what we can contribute to this total environment, instead of what we will be paid for our contribution.

With the fences gone perhaps we will then become unified as is the medical profession.

They, too, faced just such a problem. I submit that your own personal doctor is probably a general practitioner, a diagnostician. I can see no loss of stature, no loss of professionalism for the surgeon as a member of your doctor's team, nor the heart specialist, the gynecologist, nor any of the other specializations of medicine, to cooperate with and perhaps through the generalist.

Conceive of the design professions in just such a clinical association. Perhaps the architect is the generalist—the diagnostician—the doctor, who cooperates with and brings together the team of all professionals where needed.

The American Institute of Architects is demonstrating leadership and we intend to continue; intend to do it in the spirit of goodwill, cooperation, and thoughtful, knowledgeable strategy.

Your Board of Directors granted me an hour of their time during their pre-convention Board Meeting. I brought to them a proposal whereby The American Institute of Architects might create a professional affiliate membership category open to landscape architects so that those of you who wished might take advantage of that membership, take part in our programs and become a part of a forum for the discussion and solution of our mutual problems; and hoped that you, also will create a professional affiliate membership so that we architects may benefit by your activity.

I also brought to your Board's attention the need for more joint efforts in influencing our educational system so that all of the design professions could have a common educational base, be trained together, and have an opportunity during our university careers to learn of the potential, capacity and the abilities of the sister professions.

I also brought to your Board a proposal which we are seriously considering in terms of the construction of a center for the environmental arts in Washington in which our own national secretariat would be housed, with office space available for rental for your secretariat and the secretariat of any and all of the design professions who are involved with this human environment.

Obviously, your Board was in no position to act immediately on these three items but I was given to understand that they were seriously considering them and I am persuaded that they are from the penetrating, thoughtful questions which were asked of me in regard to them.

It is my understanding that you have or are appointing a committee for your profession which will parallel the work of our Committee on the Profession. Since I was privileged to chair that committee, I offer to you any and all of our findings and any assistance we can offer you along this line.

As professions are bound together, your profession and my profession, there are far stronger ties in the interest of total environment than when we are separated by the fences which we ourselves create. I feel them to be imaginative and I am sure that any of you who have worked with architects on a team contributing to the total picture will recall that it was one of the most exciting experiences you could have and that when the conferences were through and the job completed, no one could really tell what his own contribution was, what the contribution of the other profession was, or who made it. It was the answer—the total solution that was important and far bigger than any of us or our personal contributions to it. ◀





Brasilia

Symbol
in
the Mud

by Wolf Von Eckardt

The head of the Department of Public Information of the Institute, and Art Director of the Journal, is an alert critic of the architectural scene. He visited Brasilia when attending the Pan American Congress of Architects

► For a two-hour flight there was nothing but an angry horizon and green and purple gloom below. When, at last, the plane made its bouncy descent, I longed for solid ground, for civilization, for people huddled together for warmth and comfort—for a city.

But Brasília, the wondrous new capital of Brazil, is not that kind of a place and won't be for a long time to come. It is not a city where, in Lewis Mumford's words, lovers can meet, friends can walk and talk, parents and children can occasionally come together on common ground and where anything can happen.

Such cities we know and love are the ripening consummation of their civilization. Brasília is the willful beginning of a new one. Like a flag it was posted in the wastelands six hundred miles inland from Rio de Janeiro on a three thousand-foot high plateau, a symbol waving the sacrifice and

promise of Brazil's determination to break with the past of her colonial seashore settlements—which hold ninety-two per cent of her population — and to pioneer the future of her almost untouched interior wealth.

The dramatic, cloud-filtered photos we all have seen had predisposed me to share the enthusiasm Brasília's architecture is supposed to—and usually does—inspire. This, most architectural writers say, is more than a modern frontier town. One of them has hailed it as an "authentic manifestation of the new civilization which is Western in its essence, technical and scientific in its basis and universal in its range." Here for the first time (save for the far more modest Chandigarh in India and Canberra in Australia), our age has created a totally modern city, the epitome of modern planning and architecture. And this just when even the young cities of the Americas are becoming hopelessly obsolete—struggling for life and liveability, choked by the automobile, dissipating in urban sprawl.

An Old Vision Realized

The gay bustle of Brasília's temporary air terminal had quickened by anticipation. Here people *did* huddle together and, undoubtedly, lovers do meet amidst the noisy, very hectic, very Latin crowd. It seems in Brasília people hang around the airport as islanders gather on the dock, or, more aptly perhaps, our own pioneers of earlier days loitered with greedy, suspicious curiosity around arriving and departing stage coaches. Too busy, too poor, or both, to dress like travelers, airline employees, guides or porters, those who belong blend indistinguishably with the shirt-sleeved loiterers who don't.

Twenty-four hours later I was glad to join this bustle again. I felt let down. It seemed to me I hadn't seen people for a long time. They seem lost in this Kafka-City, this brave, new world which planner Lucio Costa and architect Oscar Niemeyer have engineered and styled like a machine —*une machine à habiter*, to use Le Corbusier's phrase. Its scale and its aseptic serenity supersedes humans. Only at the airport does humanity burst the sleek glass building, which although temporary, is nevertheless also designed in the high modern style of Brasília's architecture.

This architecture is at once more refined and less imaginative than that of Le Corbusier who, directly, had nothing to do with it, except that he launched the world fame of both Costa and Niemeyer when he assisted them in 1938 with their magnificent Ministry of Education building in Rio. Yet, exploring Brasília, I found his influence as ubiquitous as the whirling red sand—the sketches he made in 1922 for an imaginary city of three million, his *ville contemporaine*, incarnate. His is the "monumental artery" with the thinly spaced slabs of the government building standing like huge filing cabinets on either side. His are the side lanes sunken into the ground, obstructing neither the traffic nor the grand vista. And Corbu's invention are the high-rise apartment blocks which hover on stilts over flat lawns lined in the distance by walls of row-houses.

This forty-year old design is, of course, a highway engineer's paradise. And you can crowd a lot of people into these apartment skyscrapers and still give them fresh air above and green parks below in exchange for the stimulation, variety and excitement of urban life. Following the lead of Lewis Mumford and Bruno Zevi, critics, planners and architects frequently attack this approach to housing people in the city as sterile and inhuman. But it still predominates modern city planning from Aalsmeer to Zulueta. Only rare respect for unusual terrain (as in the proposed plan for San Francisco's Golden Gateway Project) or for historic buildings (as on Philadelphia's Society Hill) has here and there resulted in more liveable and lively solutions. As a rule, the bare and square housing blocks rise in deadly monotony on their little green carpets wherever the bulldozers level the land-or cityscape. In Brasília they are rising on an unprecedented scale with unprecedented speed, a marvel of technology and organization.

"We have to finish in five years or the forest will come back," Costa stated in 1957, his mind, undoubtedly, on the political thickets as well. For once committed, Brasília's founder, ex-President Juscelino Kubitschek, had to raise his flag fast, lest the heroism it was to inspire vacillate under the impact of second-thought reasoning. His "instant city," as one commentator has called it, was ordered and actually delivered within his five-year term of office, after having been half-heartedly

and intermittently projected ever since 1789. On January 31, 1961, his successor, Janio Quadros, was inaugurated in this audacious *fait accompli*. He has joined a population now variously estimated at 120,000 to 180,000 people.

Buildings, Not A City

No political regime can any longer halt, let alone slow the momentum of the new capital's growth. With Parliament, the Supreme Court, and the majority of the executive departments already there, the rest of the government together with embassies, banks and a host of other services, must soon follow if this capital of an expanding country of 65 million people is to function efficiently. Nor would the people of Brazil allow any slackening of the round-the-clock, superhuman effort of completing Brasília. It has, indeed, become a symbol of their newly aroused aspiration, a symbol made visual by Niemeyer's architectural sculpture. On news stands and in tourist shops everywhere in Brazil, you find the trapezium shape of his Alvorada Palace columns on books, pamphlets, tourist trinkets and even lapel pins. The planes and advertising of Aerovias Brasil display the pineapple crown of his cathedral. "You will visit Brasília, of course?" the hotel clerk in Rio asked me when I checked in. And the taxi driver who took me sightseeing in the old capital spoke enthusiastically of the new, which he considered a modern-day miracle far more important to him than sputniks.

Invariably, however, we see the pictures of what one architectural writer has called Niemeyer's "innocent, lyrical and dance-like" edifices in splendid isolation. Only for a moment was I able to see how these buildings relate and add up to a city. It was from a distance of almost ten miles, as my taxi turned from the airport across one arm of the artificial lake that embraces the plateau on which Brasília is spread. There, beyond the sea of stunted trees, ran a somewhat broken string of diminutive white shapes along the horizon. It seemed a mirage—distant and unreal under a Texas-sized sky. The lake was but a thin gleam of light.

Then the road turned to follow the lakeshore. The panorama was lost in the muddy detail of bulldozed lots which bear crude signs reading "France," "Italy" and so forth, to denote the em-

bassies to come. We were still on embassy row when the storm broke and shrouded the utopist vision, wild shrubbery, mud and all, in a curtain of red sand. By the time the rain turned into more mud, I was too close to see the city for the buildings.

This is not to say that an assertive skyline, such as New York's, is necessarily a prerequisite of good city design. But a visual and perceptible relationship between buildings is. It is essential. And it is this comprehensive design, in turn, which gives definition and meaning to the individual building.

The first one I saw was, of course, the Brasília Palace Hotel. It is a seemingly endless (900 feet long) slab on *pilotis*, or stilts, whose uninviting front facade consists only of pegboard-like, pierced cement blocks. The fact of the matter is that you aren't invited. The entrance is somewhere under the stilts amidst a lot of parked cars. It consists of a narrow, darkish flight of stairs leading down into a basement reception room. Once you have checked in—and, in my case, discovered that the laboriously made reservation was never received—you climb right up another flight of stairs into the somewhat confusing lobby.

This lobby has any number of levels which drop without much warning and any number of stairs without railings. One of these leads down and—why, I shall never know—smack against a tiled wall which continues outdoors beyond the glass. The décor of the hotel is, however, most attractive and urbane and I enjoyed its crisp simplicity, the terrace, and the view of the lake and the wilderness beyond. I wondered, though, as did Emily Hahn in the *New Yorker*, just how long children will last playing tag in its public spaces and how people in wheelchairs could get around.

Enter At Your Own Risk

This business of crawling down into Niemeyer's buildings, or, at any rate, never being told just where he wants you to enter them, haunted me all over his city. True, there is a break in the inverted arches which surround the Alvorada Palace to denote the entrance to the glass box behind them. (The people should see how their President lives, is the rationalization for the square goldfish

bowl. When he is at home, however, the guards keep you well beyond shooting range and, to my regret, even that of a long camera lense.)

The Executive Palace has a wide, perilously unrailed ramp leading to the second-floor porch. Fortunately, only soldiers are exposed to its danger when they march up to stand guard. Everyone else gets into the building, as into well-nigh all others in Brasília, at some unobtrusive place somewhere under the inevitable stilts. The ramp on the parliament building splits. One part also leads to a second-floor porch, the other to the roof. These ramps, too, are for the guards, one of whom politely pointed his tommy-gun at me when I ventured up. I didn't miss anything by being chased down, though: The flat roof of this building, from which the famous dome and bowl rise, is level with the mall and its speedway and there is no view anyway. You enter and leave this building by being driven down into a tunnel at the end of one of those sunken local roads. If you have no chauffeur and are forced to walk, you face a danger almost equal to a tommy gun. The one narrow sidewalk, squeezed against the wall, barely accommodates a timid cat. I never did find the entrance to the twin-towered legislative office. It, too, must be underground somewhere.

Creative Lust

And so is the entrance to the subterranean Cathedral, which, at the time of my visit, had not been dug. Only the open, crown-like ribs of the spire, which will eventually be filled with stained glass, rose over a cement circle on the ground. Presumably, like the other equally sculptural concrete forms of Brasília's public buildings, these ribs will also be sheathed in perfectly fitted white marble.

This elegant refinement further enhances the undeniable charm and grace of Niemeyer's work and distinguishes it from that of Le Corbusier. But while, with all their bold brutality, Corbu's buildings are total creations, Niemeyer's stunning originality is more or less confined to the surface, to exterior decoration. That is, perhaps, why I found the architecture of Brasília more attractive in photographs than in the concrete, appealing as pictures rather than buildings. Once I penetrated

their singing facades, I found it hardly more different from run-of-the-mill "international style" architecture than were the run-of-the-mill engines of Detroit cars the year they added the fins. And hardly more appropriate to their function.

Yet, doesn't every new turn of style begin with a tour de-force? We wanted to progress from the monotony of the glass-box architecture of revolt to freer forms, delight and poetic expression. All right, here it is: A modern baroque—born of an uninhibited creative lust which is, for that matter, more restrained, more disciplined than much that is being designed in this country as a result of our belated acceptance of the free forms possible with reinforced concrete, our ostentatious affluence, and the decorative potentials of gilded grillwork. So let us leave these palaces "resting lightly on the ground," as Niemeyer wanted them, until we gain perspective. And let us hope that this particular iconoclasm is the beginning of a searching development rather than of a fashion. For few imitators will be able to muster Niemeyer's sure sense of scale and proportion.

Lack of human scale and of liveable proportions, on the other hand, seem to me to make Costa's plan so questionable. He has proclaimed that Brasília should have "the virtues and attributes appropriate to a true capital city." He set out, in other words, to create deliberately monumental spaces. To meet this ambition a perceptible relationship between the various buildings is as essential as wings and proscenium are to a stage or as the proximity of trees to a forest. True, an effulgent actor may be able to hold an audience on an empty set. But I dare him to command attention under Brasília's expansive sky. A widely dispersed group of trees, like so many lighthouses beyond the sea, offer little promise of shelter. Each attracts only to itself, diffuses the promise and confuses the emotional response a closer and more related group would evoke. It is the same, or seems so to me, with Niemeyer's effulgent architectural statues in Costa's vast gallery. His central mall with the all-important, triangular Three Power Plaza on one end, a not-yet-designed City Hall on the other, and a projected Television Tower as a focal point about two-thirds along, is no less than four miles long (a mile-and-a-half longer than Washington's Mall or the Champs

Elysee) and, I would judge, almost a half-mile wide.

The Plaza derives its name from the fact that Parliament, the Executive Palace and Supreme Court stand at the three vertices of its paved expanse. Although located at the very end of the ceremonial speedway, it is, I suppose, the real center of Brasília, which its geographic center, the crossing point of the two arteries, is not. There Costa placed a more or less invisible underground bus terminal.

No Melting Watches

There is a grove of palms, but it is not on the Plaza or where people walk. The lake below the flat plateau cannot be seen from the mall. Only the skyscraping "H" of the Legislative Offices stands out, two thin, parallel 25-story slabs bridged in the middle. The Senate dome and the Assembly bowl timidly hug its base. The other buildings are also relatively low and diminish in the long perspective. The Cathedral spire pushes insignificantly out of the ground, like asparagus in spring, arbitrarily placed on the side of the mall on which the speeding cars assume the size of ants somewhere far along the perspective line before one is aware of them.

When the grass is made to grow over the red mud of the wide center strip—there seems to be some difficulty—it will only change the color of this Dali-esque desert. There are, to be sure, no melting watches. But neither are there people. There is nothing to induce them to walk these forbidding distances. They will have to drive even to the Cathedral which is miles from the residential areas. And unless Niemeyer can persuade the worshipers to take a healthy Sunday morning drive, he will, like most architects of our time, see his noble structure rise on a parking lot.

A perhaps more serious and already clearly discernible flaw in the plan is the location of the air terminal. It is off to one side of town across one arm of the lake, very close to the projected villa area and quite far from one of the two residential districts. Its road will soon create the usual traffic pressures in the closer residential area. What is more, the present jet plane approach covers a good half of the city which is hazardous

and uncomfortably noisy for the inhabitants. While Brasília's planners have prepared themselves for the onslaught of the motor car (which will surely come, once the highways from Rio and Sao Paulo are completed), they have no defense against the airplane (which is already upon them; Brasília was largely built by air-lift).

Ives, Turano & Gardner, a New York planning firm, has volunteered a proposal which would place the air terminal at the very end of the central traffic artery, where its approach radius is beyond the city and where it would be near the projected railroad station, the bus terminal, and the government and business districts, and equidistant from both residential areas. Important visitors, certain to arrive by jet, would then be driven down the ceremonial mall straight to the Presidential Palace and get the full benefit of Costa's monumental treatment. This unsolicited advice was never considered.

Niemeyer's superblocks, which Costa has placed along the wings of his airplane-shaped plan, consists of clusters of four-story apartment buildings of identical size and shape arranged in a pleasing Cubist composition. Each cluster houses 3,000 people and includes a school, a community center and a chapel. The sun screens and color of the apartment slabs vary and they have more gaiety and vitality, I thought, than Brasília's rather self-conscious public monuments. What is wrong here, it seems, is only that a sophisticated treatment is squandered on the same, trite, forty-year-old solution to housing a lot of people in a limited space. Yet space is the one thing abundantly available in Brasília.

Status Conscious Housing

According to Costa's plan the superblocks are designated by a letter-number combination; the buildings in each by a letter; and the apartments in the usual manner. You may find Big Brother at Q3-L-201. What an Orwellian nightmare! I am glad the planners apparently forgot to specify the lettering on the shops, rows of small, uniform boxes which line the streets between superblocks. Their inscriptions offer the only variety and interest in these pits of boredom. Their monotony is surpassed only by the straight lines of row

"A time of plenty and true brotherhood" . . .



. . . begins with makeshift "temporary" shanties

houses which form square after identical square of second-class—or is it third-class?—housing. For residential Brasília is strictly segregated by income groups. No chance for the chap at Q3-L-201 to escape to one of those postage-stamp-sized garden plots (where nothing grows as yet) unless he makes the next rung on the civil service ladder.

What chance the construction workers will have to escape their "free town" ghetto remains to be seen. It is, like most man-made social evils, the product of utopist idealism which denies today's human needs for the sake of tomorrow's fancied perfection. Brasília's planners wanted to be sure that the accommodations for the workmen are strictly temporary so as not to spoil their vision of the new capital which Kubitschek said will bring with it "a time of plenty and of true brotherhood" for all Brazilians. The labor camp was placed some ten miles out of sight and, to attract workers, levies no taxes and is virtually unpoliced and uncontrolled—makeshift shanties, rats and all. Almost needless to say, as a tourist attraction it rivals the Three Power Plaza, although as in Rio's equally dismal slums, it is not safe to venture far from the car. All sorts of riffraff and fugitives populate this wide-open shanty-town. Since my visit—the day after a jealous lover burned down a number of huts—they are paving some of its streets. With such improvements, I'm afraid, the "free town" will remain in all its squalor to remind future generations that brotherhood scarcely begins with marble monuments.

It is easy, of course, to find fault with Brasília and easier still to ridicule this brave symbol in the wilderness. People laughed about that "crazy Frenchman's highfalutin' ideas" when L'Enfant presented his plans for Washington, D. C. And travelers sneered, as did one John Cotton Smith in 1800, about "the deep morass covered with elder brushes which were cut through the width of [our capital's] intended avenues."

Washington grew and is still growing and rejuvenating as any living organism must. And so will Brasília. Those of us who believe that a liveable city, like a good garden, must, however well-planned, grow in its own time, can but wait. If there is lasting fault with Brasília, it is not that of its planner and architect alone. Niemeyer and Costa have realized not just their own dream but that of Le Corbusier and a generation of planners and architects who followed him. They have realized it because it has only today become technically possible. Perhaps, as some suspect, they have demolished the dream by this achievement.

It seems that if the city is to have a future, we must first overcome the sterile image of the "future city" put forward when our technology was but a promise. Now that this promise has been amazingly fulfilled, our architecture, as Cloethiel Woodward Smith, FAIA, has said in a recent *AIA Journal* article requires far more than discipline and restraint. "It will require a broad cultural change. It must select and refine those forms that are humanly meaningful and significant and discard much of the merely possible." ◀

Urban Renewal from the Bottom Up

by C. M. Deasy, AIA

► For several decades the architectural profession and others have discussed the question of what to do about our ailing cities. No other subject has consumed more time on the programs of architectural conventions and space in the architectural press. While the prescriptions of various experts differ in detail they uniformly conjure an enticing vision of a clean, airy, park-like city that just has to be better than the dismal reality we know.

In spite of this concern and attention nothing much seems to happen; our metropolitan areas continue to grow and for the most part they get no better. Regardless of the care, thought, and study lavished on the problems of cities, no important American community has yet been reformed in the image of the planner's vision. It is not even possible to predict with assurance that any will be. Whatever the reasons, it is apparent that our cities are going to be as they are, rather than as they ought to be, for a long time to come.

This puts us in the position of the family longing for a new house. Should we grit our teeth and endure what we have until we can make the jump to what we really want or try to tidy up the old place and make it as pleasant as possible while we are waiting? Since the radiant city we hope for hardly seems to be just around the corner let us give some thought to what we can do with what we have.

An appealing aspect of the various "Beautiful Cities" proposed is their sense of order, the appeal of an integrated orderly urban scene conceived as a whole in which all of the parts are related. The most exasperating aspect of city life as it is is the lack of order, the unrelated results of many different people serving their own purposes without common aims. The problem, then, is to get many different people doing many different things in many different ways to realize that what they do affects the whole and that the whole is important to each of them.

A well-known member of the Southern California Chapter AIA tells of another approach to urban renewal, a first step which requires no government money nor political string-pulling. All it needs is enthusiasm

If anyone knows how this is to be done he has said very little about it. There is one group, however, that has not waited to be told how it is done; the indomitable ladies of "Los Angeles Beautiful" are proceeding to do it.

Many communities have organizations that are earnestly trying to make the city a more attractive and humane place in which to live so that the Los Angeles Beautiful is not unique. Its particular importance lies in the extent of its program and the degree to which it is succeeding. The planning professions have not paid any particular attention to this kind of effort, yet they must agree that there is little hope for improving the urban scene unless the people who live there want something better and actively participate in making it that way. In that sense a look at the Los Angeles Beautiful is well worth while.

In little more than a decade it has developed a strong organization and a strong program, gained the confidence and support of the business community, earned the respect and cooperation of local government and posted a record of solid achievement. Its aim is to make Los Angeles a more attractive and wholesome city to live in by the only means possible: making the people aware that this worthy end can be accomplished only by themselves.

Since the city is the house in which all city dwellers live, it is not surprising that the organization was founded by housewives. The first program was just what could be expected of a good housewife, cleaning the place up.

The term, housewives, hardly describes the executive talents and political skills possessed by the organization's founders. Deriving from the Womens' Division of the Los Angeles Chamber of Commerce it gained a great deal from the prestige of that organization and was particularly blessed by a most dynamic permanent chairman, Mrs Valley Knudsen.

Many cities have conducted successful clean-up

campaigns; other organizations have successfully eliminated billboard advertising from the major streets as Los Angeles Beautiful has done on the local freeways. The exceptional fact about this organization is the pervasiveness of its program. Operating with thirty-eight active committees there is hardly any phase of the physical appearance of the community with which it is not concerned.

Dwellings are not included in this program because most residential areas are clean and attractive already. Neighborhood pride and neighborhood pressures seem to take care of such things. Our commercial and industrial streets would be immensely improved if they reflected this same neighborly concern and that is exactly what the Community Awards Program hopes to accomplish.

One of the most satisfying efforts of this organization occurred when Los Angeles, in a momentary mental lapse, abandoned its meager rapid transit system. These weed-grown rights-of-way could have been used for several purposes: sold off at auction, converted into parking lots and so on. The actual use, conversion into park strips, is a real asset in this community's effort to make itself presentable.

Its program in the local schools embraces not only litter control but also an award program for planting projects carried out by students to improve their neighborhoods. It is in the thick of every discussion on ordinances concerning signs, display advertising, and rubbish with enough earned prestige that its views are never ignored.

From what seemed to be a hopeless beginning it has succeeded in coaxing business men and property owners to plant some 220 trees on the streets of Downtown Los Angeles. While this number may not seem impressive, the trees represent an expenditure of something over \$200,000 which is impressive. Planting a tree in a downtown sidewalk, where all the electrical and mechanical viscera of the City are close to the surface, comes high: as much as \$1,500 in some cases.

Starting such a program was an uphill fight and each new tree represented a considerable sales effort. Now the idea seems to have gained enough acceptance that it is in some degree self-sustaining.

While the success of the tree-planting program can be largely attributed to the efforts of a chairman with considerable drive and standing in the business community, there is no doubt that once under way, "Keeping up with the Jones'" played a part in accelerating its growth.

Keeping up with the neighbors may not be considered a wholesome trait but it can be useful and must be considered as having contributed substantially to the success of another Los Angeles Beautiful program, Community Awards.

The purpose of this program is to call attention to organizations and individuals who have made a contribution to their neighborhood by landscaping or otherwise improving the appearance of their property by granting awards. These awards are limited to commercial, industrial and institutional properties. The selections, made by a lay jury, are sometimes such as would cause an architect's hair to stand straight up on end, but architectural excellence is not the primary criteria. The new twenty-two million dollar headquarters of a giant petroleum concern receives the Award with as much appreciation as a bookshop owner who has planted a solitary tree in the sidewalk of a somewhat bedraggled beach community. The gleaming glass and steel tower of another oil company is passed over because it did a lot for itself but nothing for the neighborhood.

Projects listed here hardly indicate the scope of Los Angeles Beautiful activities and they are constantly expanding. The fact that such an organization exists, is active and effective, makes it increasingly a clearing house for programs that affect the appearance of the community. Instead of pleading for a hearing on such programs after they have been formulated, public agencies and private organizations now tend to include Los Angeles Beautiful in the formulative process, turn to it for coordination and advice.

Because of the experience it has gained in fighting the good fight it has become the obvious source of guidance for other organizations wishing to carry out similar programs in their own communities. There are some fifty-odd political entities within this Metropolitan area as well as scores of "communities" that are actually a part of the city proper. A growing number of these now have organizations devoted to local improvement, a development which Los Angeles Beautiful strongly supports.

It has been my pleasure to participate in the Los Angeles Beautiful program as Co-Chairman of the Community Awards Committee and a member of the Board of Directors. This experience has been revealing in several ways.

One disappointment is the profound lack of enthusiasm the architectural profession has shown for this program. This is not hard to understand. Selecting color for the city's rubbish trucks and harassing parking lot operators to provide screen planting around their property has none of the dramatic appeal of the big redevelopment program. Nevertheless, if the profession of architecture feels that it should have a hand in the shaping of our cities, it will have to participate in the day-to-day decisions that actually do shape them. Fighting for the survival of a city park about to be swallowed up in the expansion of the freeway

system is at best a rearguard action, but it is in scores of skirmishes like this that the nature of our cities is determined. It would be hard to imagine a better vehicle for participation than an organization like Los Angeles Beautiful.

A revelation has been the effectiveness of community leadership when it is marshalled for this kind of cause. Architects are often urged to assume leadership in remaking our cities by convention speakers and the architectural press. Such urgings show a lack of understanding of the nature of leadership. Some architects do possess this rare quality but it is certainly not implicit in an architectural diploma.

In considering anything so important to so many people as the nature of the city, it is reasonable to expect the community to turn to its natural leaders, the same group who assume the direction of most community programs.

Seeing these people in action, their ability to marshal public support, the ready access they have to public officials and the respectful hearing

they get is a refreshing and thought-provoking experience. In comparison, the efforts of our local AIA Chapter directed to similar ends seem to be an uphill fight against polite indifference.

It is true that the program of an organization like Los Angeles Beautiful is not capable of solving the organic problems of the city, but it is also true that they can hardly be solved without it. In the sense that it is dedicated to a decent, liveable, urban environment it has opened the eyes of a lot of people to the fact that our cities are a long way from being adequate, that something can be done about it and that it is nobody-else's problem.

Surely this is the basic need for real urban renewal: a people who understand what it means, want it and are willing to work for it. It follows then that organizations such as these ought to be of more than passing interest to the architectural profession. They should, in fact, be cherished as the best possible vehicle for accomplishing the end we are seeking. ◀

Paestum—photo by Herbert A. Lattes



Primitive Shelter

by C. Ross Anderson, RAIC

The second and final installment of Mr Anderson's study of shelter around the world. At the time the study was made, the author was visiting Assistant Professor of Architecture at the University of Kansas

Physical Limitations

In any location there is a limit in the extent to which building forms are controlled by custom. This limit is generally imposed by surrounding physical conditions. The snow house will not stand in the tropics and the hut of palm leaves is impractical in the Arctic. Between these extremes, there are many situations where a building type has grown out of the need for shelter in a certain geographic locality and the necessity of building with locally obtainable materials.

Thatch, apparently the most common roofing material of warm and temperate climates, presents the advantage of being readily available in the form of fronds or reeds or fibrous stalks, of resisting the penetration of moisture when properly sloped and lapped, and of permitting the passage of air which cools and ventilates the enclosure.

As a corollary, the use of thatch leads to a certain consistency of covering structure among primitive huts of any region since the attachment of bundles of material demands the use of a purlin spanning major ribs and rafters and the spacing of purlins is determined by the convenient length to which a specific type of thatch may be cut and attached.

Climate

Environment will also dictate to some extent the form which a building may take. In extreme situations, such as the treeless, stoneless winter arctic, the presence of one readily available material, hard-packed snow, and the severity of the weather dictate an almost monolithic structure with few openings and simple continuous shape—the igloo. In warm, humid climates, where forest materials are plentiful and the ground wet or dangerous, a stilt house such as that used by the Seminole Indians of Florida, or the Nanzoa tribe of central Africa, may be found. And in one location at least,

the Admiralty Islands, stilt houses are built entirely surrounded by water. All these structures permit the occupants to remain high and dry, relatively cool and in some position of advantage over a person or animal on the ground.

Contemporary Problems

In the present age of controlled interior environment and of extreme mobility or portability of both people and building materials, the restrictions imposed by geographical location are alleviated. But it is only with some danger that they can be completely ignored. Solar heat will penetrate glass, wind will blow through a concrete wall and materials will be cheaper and more appropriate near the site from which they come. The sun-shade, the composite wall and the harmonious, homogeneous character of certain building groups, such as the American farmstead, to cite a simple but common example, are the direct results of tailoring architectural considerations to meet the demands of location and environment. These elemental factors affecting the design of buildings have changed little in the written history of mankind.

Technology and Progress

Contrasts

At this point one cannot fail to contrast the shelter of the savage and the complex structure which houses the member of a highly mechanized and sophisticated society. Man is not unique among other living organisms in his use of shelter as a means toward survival. Animals, birds and even insects share this characteristic. Where man does differ from other creatures is in his use of tools and here also lies the key to the difference between the house in its most rudimentary form, the hut, the igloo or the tepee, and the house as we know it today, a complex combination of elements which in themselves are beyond the capacity of an individual alone to produce.

Customs, Environment and—

The difference, as was pointed out earlier, resides in quality rather than kind since the function of a house, whether it be ancient or modern, has varied but little. But the relationship of the structures themselves is almost unrecognizable. The reason for this is to be found neither in changes of habit or tradition, nor in the adaptation to vary-

ing climates or materials; it is to be found rather in the increasing ability of man to control his circumstances, principally through the use of tools. So to understand fully the infinite variety found among the answers to the basically similar question of how to build a house one must add technology to the influences of custom and environment.

Technology

Technology affected the building types developed by even the most primitive societies. The presence or absence of metals, of stone or of certain elementary tools and techniques placed limitations on what could be done in any locality regardless of the materials available or the aspirations of the people themselves. Technological innovation provides the principal key to the difference between buildings of simple cultures at an early state of evolution and those of a culture with a background of recorded experiment and relative civilization.

Highly refined materials and extensive processing, ready accessibility and simple transportation, rapid communication and documented knowledge were all unavailable to the builder of a primitive hut although they are commonplace enough to most builders of today. Even now, relieved of his secure and substantial technology, man would return, temporarily at least, to a primitive sort of habitation in much the same way as the prairie pioneers of the eighteenth century, although hailing from well-developed communities, were constrained through lack of tools and the materials which tools will produce to live in sod houses dug literally from the earth.

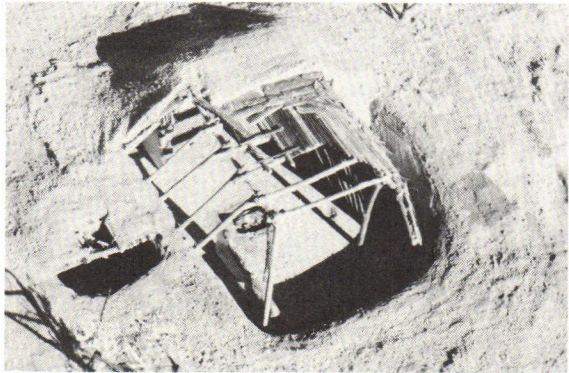
Strength, Grace and Refinement

Ingenuity and skill in the building of a house are displayed by men of any age and any race. Here lies much of the fascination we feel in discovering and exploring the shapes and structures used by other people in another time or place to shelter their families and protect their belongings. We do not need to look far to find examples of simple habitations which rival modern structures, if not in size and complexity, at least in strength, grace and refinement.

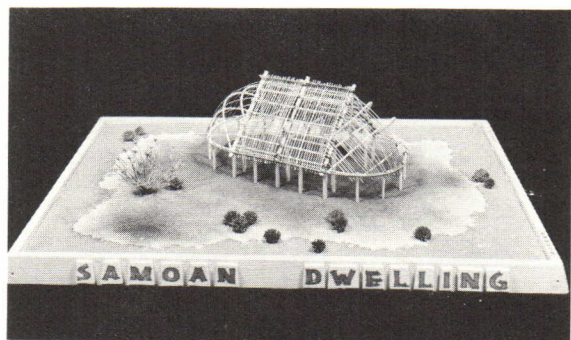
A most striking example is the demountable, timber-frame dwelling of the Ifugaw tribe in the Philippine Islands which may be disassembled and rebuilt within the space of a day entirely without the use of fastenings other than wood-pins and ties. In refinement of form this structure is comparable to the expressive joinery found in modern Scandinavian furniture, or the eloquent carpentry of contemporary Japanese houses. Yet, the Philippine hut is built with the simplest of tools, entirely by hand.



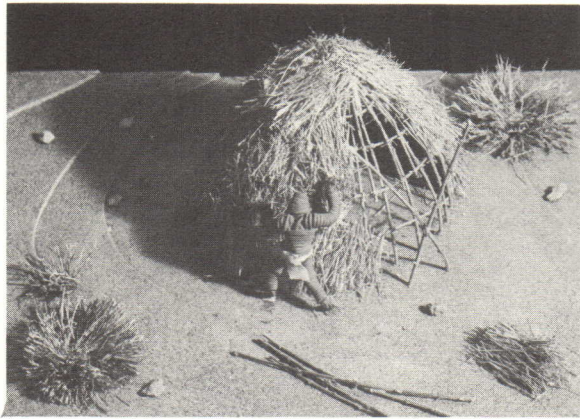
The Goatte, portable shelter of the nomadic Laplander, built of twelve to sixteen slender poles set around a curved frame of birch. A covering of reindeer hide or cloth is attached, leaving a four-foot smoke hole in the center above a ring of stones which forms the hearth



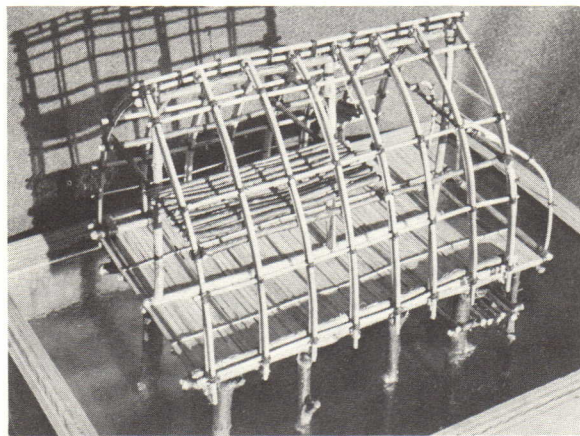
The Proto-Kiva pit house belongs to an era marking the close of the Mesa Verde basketmaker period and the beginning of the developmental Pueblo period. Forked posts supported a roof frame covered with small poles and a layer of juniper plastered to the exterior with thick clay



The roof of the Samoan "long house" covered but one room through which the wind blows uninterrupted. The building is framed with hardwood timbers felled and trimmed in place. It consists of an oval ring of outer posts to which a plate is vertical purlins sprung between the wall plate and the ridge-pole and covered with thatch



The Xhosa beehive dwellings of south-central Africa are occupied by a Hamitic people who rely on cattle and wild vegetation for their subsistence and have adapted their lives to a search for pasture. Their nomadic life requires portable huts erected by placing saplings in a circle ten to fifteen feet in diameter and tying them together at the top. Hoops are secured to these, and thatching is sewn on the top with a covering of rope which produces the shape which gives the "beehive" its name.



The Manus Lake dwelling of the Admiralty Islands is built today as it has been built for centuries, of driftwood and water grasses. It perches high over the water on hand-driven piles. Structures are connected by catwalks



The log cabin was used as a dwelling in Europe but adopted by settlers in America. This model is a copy of a cabin used at Valley Forge during the Revolutionary War. Photo at right: The huts of the Nanzoa tribe of Southern Rhodesia are built for protection against wild animals or enemies. They consist of a rectangular platform penetrated by a ring of posts supporting a conical roof of thatch and are enclosed with wattle. Access is by ladder

Variations of Structure and Form

Ingenuity and Variety

The ingenuity displayed by primitive people in the design of even the simplest shelters is remarkable. The variety discovered by a small number of students with limited facilities for study substantiates this observation. Among the fifty-odd projects produced, only a few are duplications of location or structure and the remainder concern dwellings as diverse as the pit-house of Neolithic culture in Japan and the early log-house of the American colonist. Most countries appear to share equally in this wealth of human history and there seems little doubt that if such a study were to be undertaken elsewhere an even greater fund of information would come to light.

Five Building Types

Meanwhile, limited though our resources may be, it is quite possible to draw certain conclusions regarding the structure and form of primitive habitations which are more likely to be substantiated by further study than denied. In general five basic building types may be distinguished: The circular plan; the oval plan; the rectangular plan; the stilt structure; and the masonry, monolithic or mound-like structure. These building types are shown here with four variations of developed framework or enclosure which represent the most salient of the features distinguishing one from another.

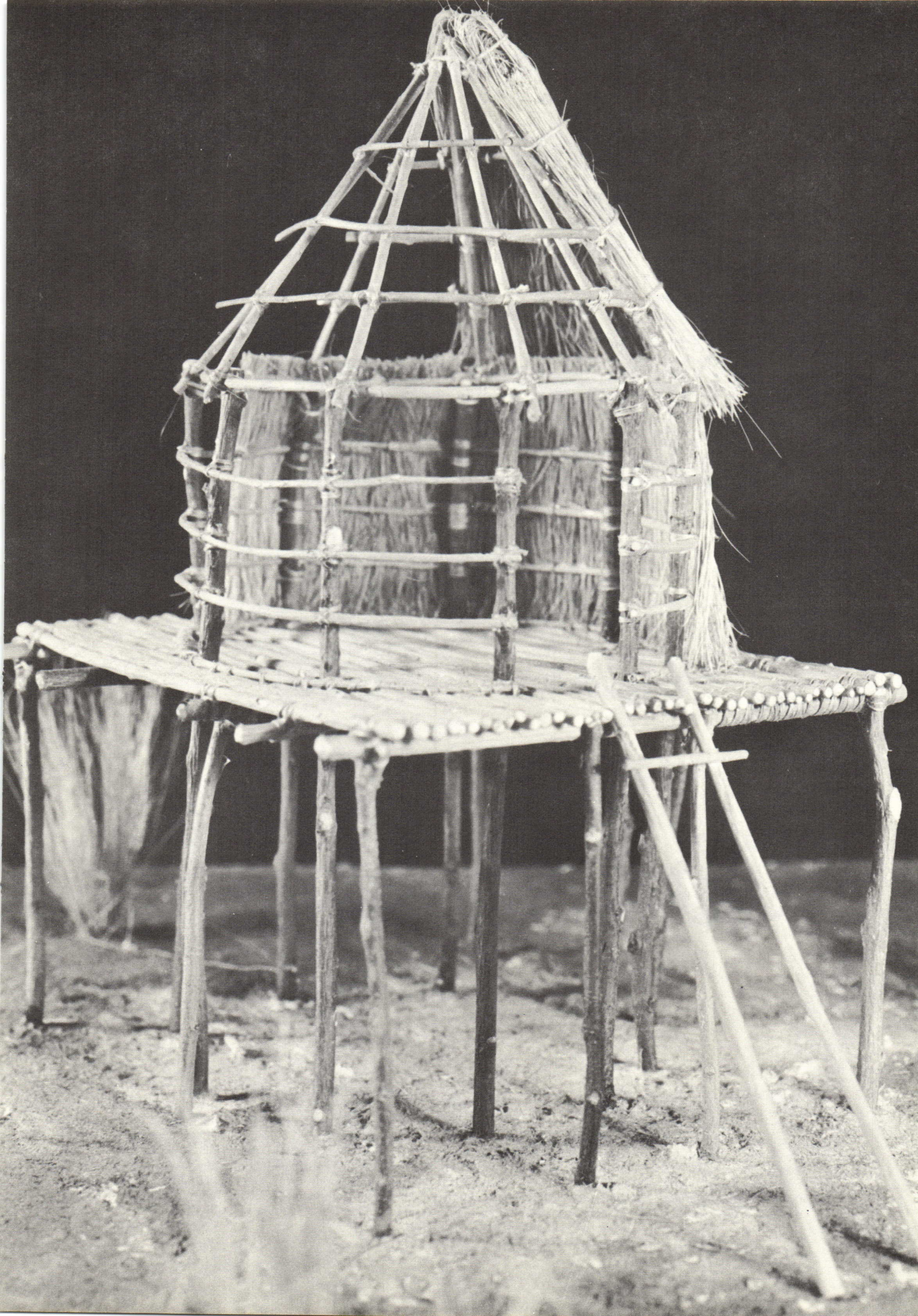
Further distinctions could be made among the shapes and structures of man's habitations at different times and different ages. Yet it seems unlikely that the basic list presented here will vary substantially. Variations are likely to occur on the side of complexity and the list might be expanded but the fundamental components will remain. The physical aspects of man's early history as a builder may be written within these terms.

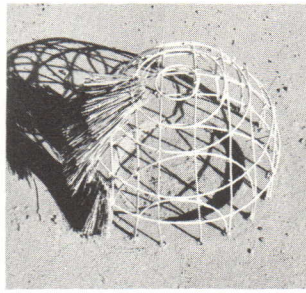
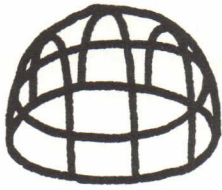
The Lesson of History

The Problem of Shelter

The story of the past and the simple origin of things is both fascinating and instructive. The problem of shelter is not new nor has its unfolding been entirely a tale of progress. We differ from the inhabitant of the kiva or the tent only by the sum of knowledge, experience and technical proficiency commonly available to any given community at a given time. This distinction is small and precarious. The lapse of learning in a single generation would be sufficient to wipe out the entire gain and for the world to lapse into barbarism.

Our ancestors, whoever they may be, inhabited structures similar to some of those we show here, and the houses we ourselves live in are unquestionably the culmination of an extended series of ex-





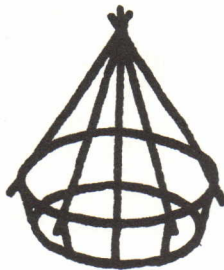
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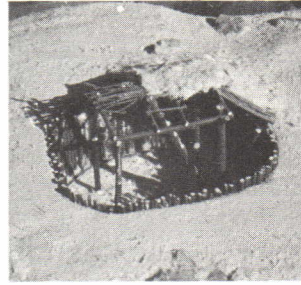
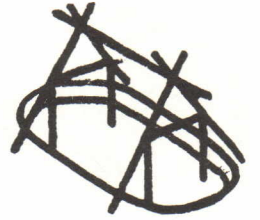
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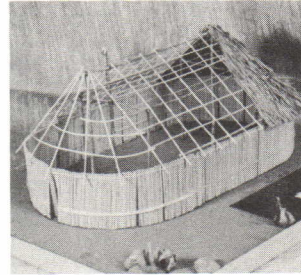
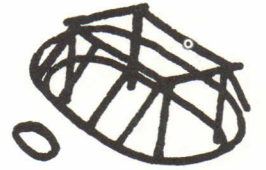
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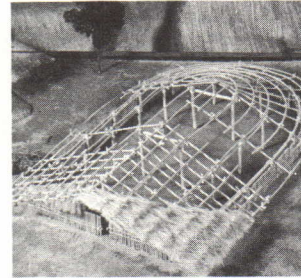
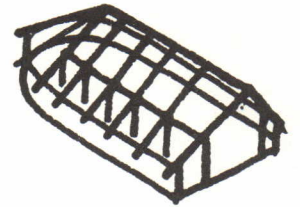
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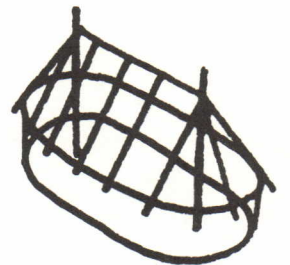
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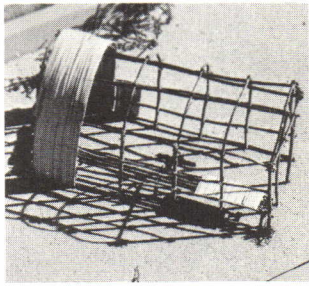
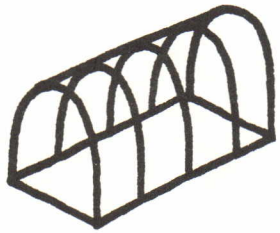


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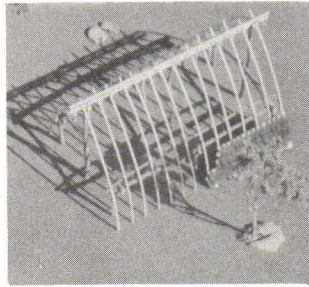
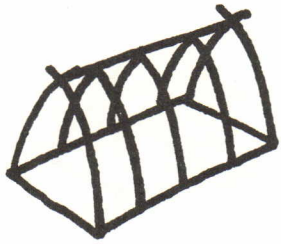


The Circular Plan: The simplest of primitive plan forms is the circle, and commonly used with this plan is the dome. The circular plan occurs with a conical or cylindrical enclosure above. 1 Lodge of the Shinnecock Indians, Long Island. 2 Lodge of the Wichita Indians, American Plains. 3 Tipi of the Penobscot Indians, Maine. 4 Lodge of the Wai Wai Indians, British Guiana. The tepee form of the Laplanders' Goatte is an example, although the best known is the tepee of the American Indian

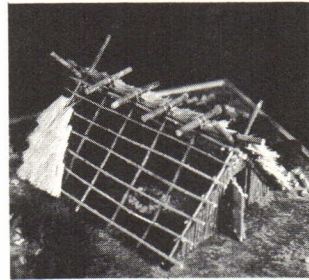
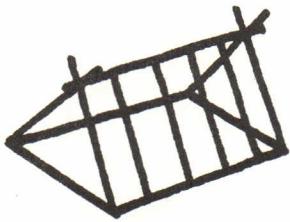
The Oval Plan: A variation of the circular plan, but not necessarily derived from it. The most elaborate use of the oval plan occurs in the Pacific Islands, principally in Samoa, and in Venezuela or Brazil, where shelters of very complex structure often exceed sixty feet in overall length. 1 V-shaped roof, Joman Culture, Japan. 2 Flat roof. Proto-Kiva, American Plains. 3 Vertical walls and round-hipped roof. Jibaru Jivaria, Ecuador. 4 Hipped and gabled roof. Maloka tribe, Brazil



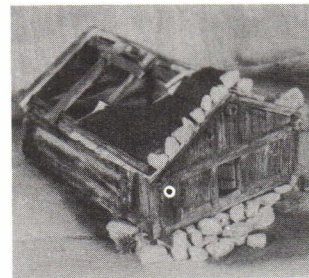
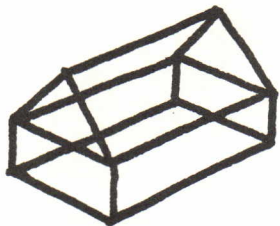
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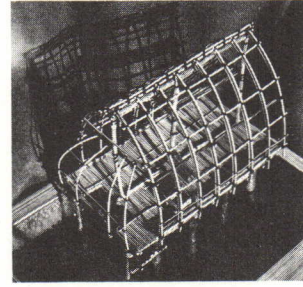
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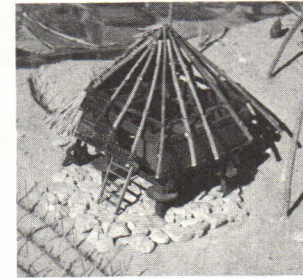
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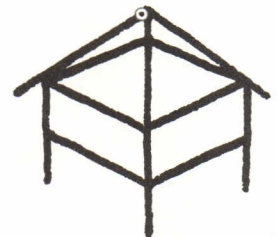
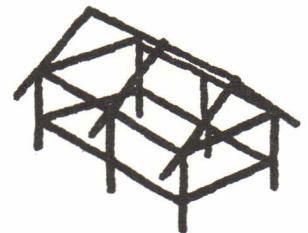
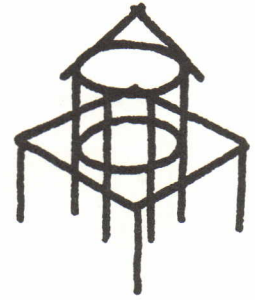
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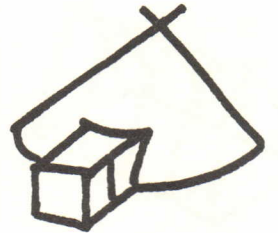
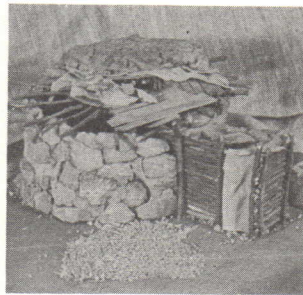
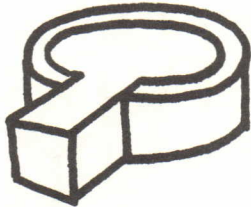
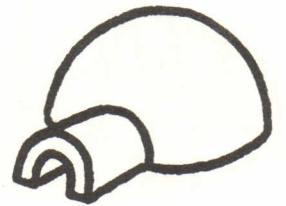
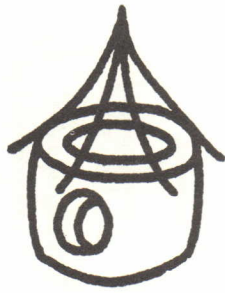


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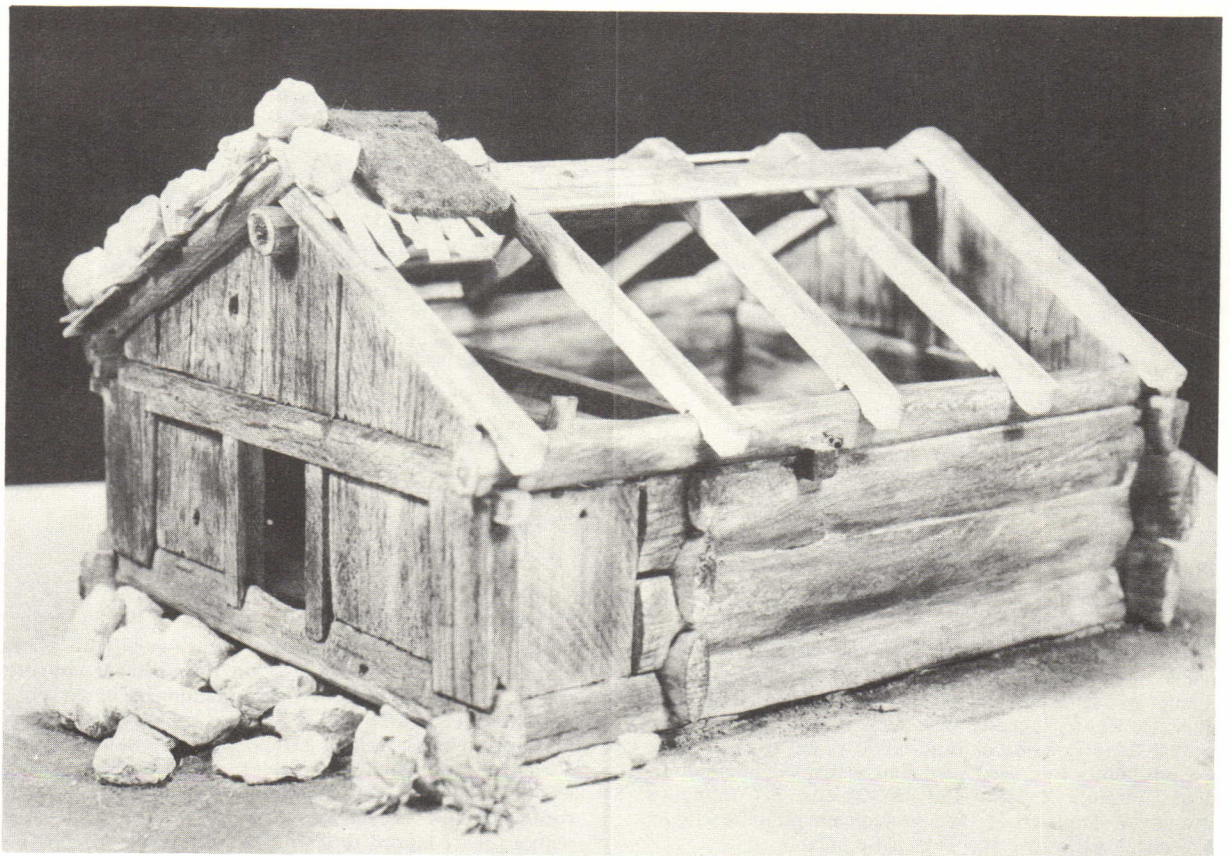


The Rectangular Plan: Although the circular or curvilinear plan appears to be the simplest form used by nomadic or semi-nomadic peoples, evidence from pre-dynastic Egypt suggests that rectangular structures appeared there in stone or mud 6,000 years ago or before. 1 Continuous U-shaped roof and walls. Algonquian Indians, Virginia. 2 Carib Indians, Guiana. 3 Continuous, straight V-shaped roof. Tenchi Gongen pithouse, Japan. 4 Vertical walls. The Norwegian Log Cabin

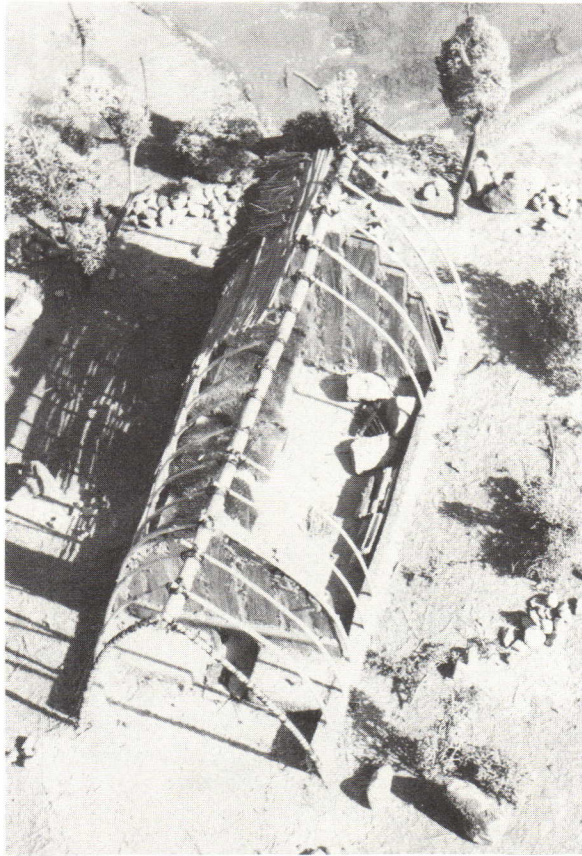
Stilt Structures: Stilt structures occur usually in warm climates. The shapes imposed on the posts or supports are in general similar to those mentioned based on a round or rectangular plan. 1 A raised cylinder on a square platform. Nazoa Tribe, Africa. 2 Continuous rounded V-shaped roof on a rectangular platform. Manus, Admiralty Islands. 3 Vertical walls with a straight V-shaped roof. Seminole Indian Lodge, Florida. 4 Vertical walls, with a square hipped roof. Ifugaw, Philippines



Structures of Monolithic Appearance: The final category of structures included in this study is based on procedure or appearance and shares the characteristic shapes of the round or rectangular plan. **1** A solid mud cylindrical with conical roof. Mesakin tribe, N. Africa. **2** A round dome of stones or snow. Eskimo Igloo Buffin Island. **3** A round plan with vertical stone walls. Round House, Yiut Eskimo. **4** A V-shaped mound on a Round Plan. Navajo Lodge, American Plains. Photo below: During the eleventh century in the mountainous exterior of southern Norway the settlements consisted of small groups of families living in villages of single family cabins. This model shows a single cabin with a small ante-room and a loft above which serves as a sleeping quarter. In this example, since there are no windows, smoke from the open hearth escaped through a hatch in the roof. Photo at right: The Ifugaw house of the Philippine Islands is constructed of wood and covered with a roof of thatch. Its structural members are completely hand-shaped and joined without nails in a manner which permits it to be dismantled, moved and reassembled on a new site—all in one day







The Todas, believed to be among the earliest inhabitants of the Indian peninsula, built their huts with a long ridge-pole supported at each end by wood planks. Bamboo ribs supported the side walls of bamboo and thatch. All fastenings were made with cord, and cracks were plastered with cow dung

periments which began somewhere years ago in the deserts, the forests or the plains of the ancient world.

Shelter Today

People still do inhabit one type or another of primitive shelter over large parts of the earth, as primitive in fact as those used by the earliest men who have left any record at all of how they lived. And even the most sophisticated individual when he builds is subject to the dictates of weather, the limitations or potential beauties of materials and the social concepts or prejudices of the community in which he lives. To belong anywhere a building must satisfy the conditions for which it was designed. The best building presumably includes conditions which extend beyond mere physical requirements to include esthetic or spiritual values as well.

Common Criteria

A common assumption, often tacitly accepted without being stated, is that man's destiny follows a halting but inevitable progression toward material perfection. It is more likely, however, that attainable perfection is relative and that its



The model of the Takayuka, an early Japanese stilt house, was built from reproductions of a bronze engraving of the first century AD. The structural members of the Takayuka were of wood tied together with wisteria or wild vines. The walls were probably enclosed with mats of reed or bamboo, and the roof thatched with grass

achievement subsists not in the future, but in the continuum of the present. From this point of view, the achievements of any age may be judged for their realization of the opportunities available to man at that particular time and not for their degree of failure or success in fulfilling the physical or esthetic requirements of another culture or place.

That is, each of these simple habitations grouped here in the study of Primitive Shelter may be judged on its own merit, and it is on this basis they should be compared, both among themselves and among the buildings which succeeded them.

Conclusion

Regardless of their place in the scheme of things today, the simple habitations of even the most primitive peoples have much to offer as harmonious, direct and ingenious answers to the problem of man's survival among hostile or indifferent elements. The structures illustrated here represent a scattering of myriad variations on a single theme, the house, man's constructive effort to remain superior to his natural environment, to shelter his family and gather his belongings. ◀

A Quest for Emotion in Architecture

by **Morris Lapidus, AIA**

The well-known New York and Miami Beach architect tells of his personal search for a way out—a direction which would lead away from sterility in architecture

► I have long felt that somewhere we missed the mainstream of architectural design and strayed off instead into a shallow tributary which certainly must run dry. I feel that it is necessary for us to re-examine our architectural heritage, in order to draw from the classics of our tradition. In this way, I feel we can eventually find our way back into the mainstream. Otherwise it seems to me that we will flounder and go down under our burden of rectilinear, geometrical design, the heritage of our half-century search for new forms to express the world we live in.

I have felt that contemporary architecture, in the forms in which it matured during the 'forties and the 'fifties, was unacceptable to the lay public, although it was warmly received by the initiates. I have felt that our modern architecture left the layman cold, that the average man felt no visual emotional impact when he looked at, lived and worked in the architecture of his day. I am glad to say that recently I have observed a definite change, a swing toward what has been called "the new sensualism," toward motion and emotion in architecture.

When I speak of visual emotional impact in architecture, I am taking for granted the fact that all good architecture must contain the basic concept of structure, modified by the many improvements added over the years in structural systems, materials and mechanical equipment. Planning, the true basis of all architecture, has undergone radical changes from the day of the classic plan. But structure and planning, the bedrock of our profession, are not what the public sees. Today we can assume that the architect will create the soundest structure and devise the most efficient

plan. What I wish to talk about solely is appearance—in short, the visual impact a building has on people who see it and use it.

At the outset, let me make clear that I am by no means a classicist, seeking to return to the classic form of architecture, even though classicism comprised my entire education some thirty or more years ago. Modern, or contemporary, architecture is something I acquired, as my colleagues did; our training was in pure classic and Renaissance architecture. Although at first I could not help but be attracted by the fresh, clean simplicity of the Bauhaus and Mies, the years brought gradual disenchantment and, finally, rejection on my part.

Recently, however, I have come to realize the importance of study and appreciation of the works of Gropius, Corbusier and Mies Van der Rohe, as a result of following the career of my son who, at present, is half-way through his studies in architecture. At the outset, I admittedly regarded as a complete waste of time his instructors' insistence on adoption of the Miesian approach to all his work. But I soon recognized that this approach is fundamentally sound to the aspiring architect, as it gives him a background of rigid discipline, from which he can find a point of departure into the newer architecture evolving today. I feel that a thorough grounding in, and love of, architectural epochs of the past—together with the discipline learned from Miesian architecture—provides an excellent springboard into the future.

But this is not what I wish to discuss here. I have spent five soul-searching years seeking the answer to why I designed certain buildings in the past ten years, hoping at the same time to find some clue or directional arrow leading to the future. My quest led me to study sociology, psychology—even anthropology. Somewhere, I felt, there must be the elusive answer that would be a clue to the architecture which would satisfy the architect himself, the critics and, ultimately, the public—in short, the architecture acceptable to everyone. And more, this architecture would not only be acceptable, it would also be emotionally exciting to all who looked at it. I repeat, my quest was not for new structural or planning forms, admittedly the most important factors, but for that element which Vitruvius and, later, Sir Henry Wotton called "delight"—or the emotional impact of architecture on man.

Delving into psychology, I went back to the earliest primitive emotions. But I did not find my answer there. I next ventured into the field of anthropology, asking this question: "What were the earliest emotions—or acts—which distinguish man from beast? When was the exact moment that the beast ceased to exist and primitive man was born?"

Re-examination of human emotions brought some interesting conclusions. As an architect, I naturally reasoned that man was born at the moment he began to build his first shelter or home. This, I soon discovered, was wrong. The beaver too builds homes. He also builds dams which are marvels of engineering dexterity, considering his primitive tools—his teeth and paws. The nest of a bird also shows a remarkable ability for construction. When we examine the beehive we find another marvelous edifice. And if we compare the size of the bee to that of man, we can fully appreciate what a remarkable example of planning, structure and comfort the hive is.

Finally we come to the world of ants. Here we stand in true awe of the planning, structural dexterity and brilliant, over-all concept of the anthill. When we consider the minute size and equipment of an ant in relation to man's, we're forced to conclude that the ant is a far more ingenious and daring builder than man has yet proven to be.

The Quest Continues

These few examples indicate that the factor distinguishing beast from man does not lie in an ability to build a shelter or home. Nor did I find the answer in the realm of love. Here too I discovered several remarkable examples in the animal kingdom. Among certain animals, the mother instinct is so strong that it surpasses anything to be found in the human race. As for the love of one mate for another, there are examples in the animal world to teach man unforgettable lessons in devotion and compatibility. Even the herd instinct in animals sometimes goes beyond the clan instinct of early man.

So my quest continued and I was able to make many similar revealing discoveries about human and animal nature until, at long last, I found what I believe is the definitive answer to my question.

The answer came slowly but it has survived every test and seems to offer the most illuminating and satisfactory solution to my problems. It also supports the argument on behalf of visual emotional acceptance, not only in architecture but in all art forms. My long-sought answer can be simply stated: *There isn't a single example in the animal kingdom where an animal adorns itself or its abode.* When the first creature looked at

itself and decided it needed some form of adornment, *purely for the sake of adornment*, and when that adornment was created by him, this was no longer an animal—this was a man. When the first cave dweller scratched and colored the walls of his cave, whether for religious or artistic reasons, he was truly a man, not a beast.

This, then, I believe is the most elementary human emotion: the desire, the love, the need for adornment. And if this primitive emotion is indeed the first requisite of a human being, the basic emotion (which I am positive can never be excised) must be satisfied, in order to inspire visual emotional acceptance of everything we create. This, then, is my theory, my basic belief as to what architecture must fulfill, whether we speak of the earliest architecture of Assyria or the modern architecture of today.

Let us test this theory, not only as it applies to architecture but to other fields, too. In the history of book publishing, for example, we find that even the earliest manuscripts were illuminated, decorated, or in some way embellished. Today it is a rare book that is published and sold without some form of dust jacket. Before the introduction of jackets, book bindings were carefully designed and beautifully ornamented. Nowadays almost as much thought seems to go into the design of the jacket as into the author's writing. Apparently it's as necessary to the sale of the book as is the author's name. Ridiculous as it may seem, publishers have discovered this basic truth—an attractive jacket helps sell the book.

Another example is to be found in the field of phonograph records. People love music and annually buy millions of dollars worth of records. Certainly a Brahms concerto should sell well even in a simple manila envelope. But does the manufacturer offer Brahms in a simple manila envelope? The answer is obvious—of course not. Quite the contrary—the finest artistry and care goes into the design of the envelope into which the record is slipped. And although not a single note of the immortal music has been changed, it is a fact that more Brahms records will be sold if they are packaged in an attractive album cover. Record manufacturers know this from experience—just as do music makers and all of us who are beginning to understand that we can gain visual emotional acceptance if we appeal to what I have labeled our basic human emotion—the love of adornment.

And now let us return to architecture. Let us re-examine those great classic periods which mark the zenith of each epoch in the history of architecture. We will begin with the earliest—Assyrian architecture. Here was a great architecture of brick and post and lintel. The Assyrians were certainly expert brick makers—but were they satisfied with

the simple functional brick? By no means. Their walls, brick by brick, form beautiful façades, ornaments in dimension and color. Today, the Assyrians stand as giants in the history of architecture—artisans who learned to take common brick, mold it, glaze it and create masterpieces with it. In the same way, they used the simple wooden post, carved it, colored it, adorned it until the post itself became something beautiful and emotionally appealing.

More Examples

We can apply the same test to Egyptian architecture, an architecture of stone. Were the Egyptians satisfied with simple, smooth, well-cut, well-fitted stones? Of course not. Their stones were carved and colored until they created columns of unsurpassed beauty and walls of infinite richness.

Here are two earliest known schools of architecture which prove that, once mastery of structure and plan had been achieved, love of adornment was a most vital element in its creation and survival.

Jumping ahead to the architecture of Greece, we find an architecture of post and lintel. The post soon became one of the most beautiful art forms in man's history—consider the delicate loveliness of the Doric column, the exquisite richness of the Ionic column. One cannot sit on the Acropolis without experiencing the strongest compulsion to run a finger over the delicate, beautiful tracery decorating many of the column bases found there. The fluting of a column represents the highest degree of artistry. Finally, the cap of a column is the sublime expression of a sculptor's genius. The same is true of the cornice and the architrave, the frame around the door—what beauty, what loveliness! This is pure adornment, soul-satisfying adornment that man has craved down through the ages, from the moment the first creature stopped being an animal and became a human being.

The Romans made great strides forward in structure. Their arches, their domes, are phenomenal tributes to the ingenuity of the human mind. But was the Roman architect satisfied with the wonderful forms he devised? The answer, again, is obvious. He was not. As proof, one need only look at Roman architecture. See its embellishment, its enrichment, its beauty of form adorned to the point where the heart of man still sings out today in praise of its great ruins. Again, form and plan alone were not enough. Not until enrichment, adornment was achieved did the architect of that epoch feel he had created the most beautiful structure possible.

So it goes through the ages. Each epoch had to find its own special form of adornment. In the

Gothic style, the arch, the abutments, soaring wonders of engineering accomplishment, are certainly examples of marvelous structure and planning. Yet no Gothic architect was satisfied with just these two elements. Not until he had introduced the traceries, the leaded glass, the rich carvings, did he feel the design was a faithful expression of his intentions. In short, not until enrichment and adornment found their way into the structures was the architecture truly complete.

Once more let us examine modern architecture. There is no denying it has left Mr Homo Sapiens completely cold. True, our architects defend this cold, clinical unadorned architecture as a way of life. Mies Van der Rohe says in effect,—Never mind what the man on the street thinks. You, the architect, must think for him. I do not agree.

I maintain that no architecture has ever been accepted, nor will it ever be accepted, unless it satisfies that early, ineradicable, primitive emotional craving for enrichment and adornment. Mies Van der Rohe cannot change human nature. No architect will ever be able to root out that primitive emotion, that first love of adornment. And furthermore, unless and until we can accept it and satisfy it we, as architects, will never produce a true architecture of our epoch.

Now I have come to the end of my quest—and perhaps to the beginning of something new in architecture. Where this beginning will lead, or who will be in the vanguard as we approach the zenith of our own architectural epoch, it is still too early to say. I am merely one architect, trying to imbue my work with a certain quality that will make our architecture visually and emotionally exciting to the man on the street. Other architects, knowingly and unknowingly, are seeking this same visual acceptance. I do not know what form that love of adornment and enrichment will take—whether it will be finally exemplified by folded roof plates, or hyperbolic paraboloid domes or Yamasaki's neo-Gothic arches.

Unless We Adorn

Of one thing I am certain; we must accept the basic fact that until and unless we adorn and enrich our Twentieth Century architecture, we will never reach our goal.

Whether or not you accept Frank Lloyd Wright as a genius, he was quite singleminded in one respect, namely: Despite his many innovations in plan and structure, he never lost sight of the fact that his buildings needed adornment. His early works attest to this. It was only later that some of his work began to lose that quality—and its lack is keenly felt today in the Guggenheim Museum. Had he adhered to his earlier love of adornment when designing the Guggenheim Museum,

Eero Saarinen

AUGUST 20, 1960 — SEPTEMBER 1, 1961

The word that from the scene of American and even international architecture there has passed so brilliant a person as Eero Saarinen brings not only shock but a sense of deep sadness even of discouragement.

Taken at the very time when both he and we could begin to appreciate the fulfillment of his great promise not only sharpens the shock but enhances the realization that the loss is overwhelming.

We are grateful, however, that within his short span on this earth, Eero Saarinen was permitted to enrich the lives of those of us who knew him and to enrich our country and our profession with the tangible proofs of his genius. But he went even farther than that for through the expressions of his tenets and philosophies he gave all of us new and greater strength and new and more profound wisdom.

In extending our sympathy to Eero Saarinen's family, we can rightfully join with them and share their loss. However, we cannot regard it only as a loss for the benefits of his genius remain with us. E.R.P.



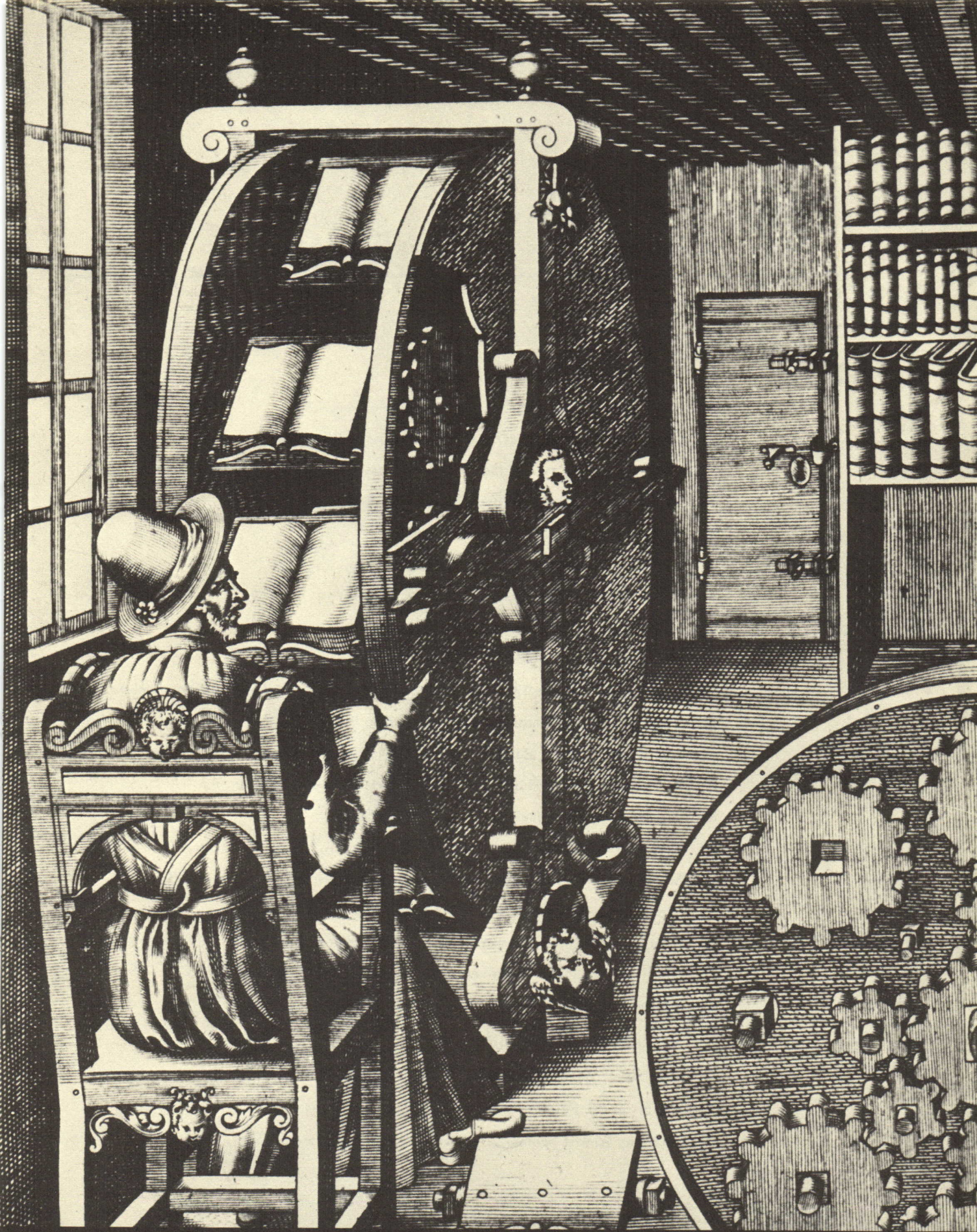
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perhaps the structure would not be as controversial as it now is.

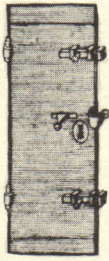
In my lifetime I have several times seen this early primitive love of adornment crop up unexpectedly, in the least likely circumstances and in defiance of all logic. For example, some years ago our architectural press suddenly re-discovered Gaudi, the genius of Barcelona. Certainly Gaudi's style has nothing of the clean concept of Gropius or Mies Van der Rohe, both at that time at the height of their careers. On the contrary, Gaudi

is flamboyant, exuberant, his love of adornment so apparent that even a child can feel the exciting enrichment of his structures.

It seems we are all simultaneously beginning to discover that enrichment and adornment will provide the only path to the final phases of our architecture today. Let us not be ashamed of these basic and primitive human emotions. Let us accept them, let us learn to understand them, love and embody them in our structures. Then will we be able to achieve not, as some have said, the end of an epoch, but the beginning of a true Twentieth Century architecture. ◀

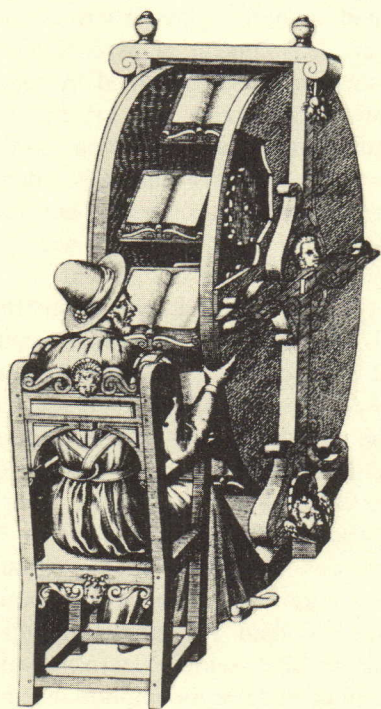


Third Annual **BOOK SUPPLEMENT**



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The Wonder of Wonders

BY LUDWIG LEWISOHN

We fly through the stratosphere and prattle about the atom; we take wonder drugs and turn on television. We are, nevertheless, dull and bored. These things do not go very deep into us because we do not go very deep into them. Blank wonder is evidently sterile; it cannot be allied to the heart, to the soul, to the sensibilities by which we live.

Let me try to lead you to contemplate a wonder of quite another fashion, a wonder and a mystery with which we can establish a close and true relation because it is part of the ever inscrutable answer to that question which concerns us more than any other—the question, namely, “What is man that Thou art mindful of him and the son of man that Thou visitest him?” The wonder and the mystery which I ask you to contemplate is the wonder and the mystery of the book. Yes, the book.

As a physical object the book has assumed many forms. It was once in the ancient Orient a group of clay tablets on which, when they were soft, the cuneiform signs were scratched. It has been a bundle of palm leaves in ancient Ceylon on which were scratched the discourses of the Buddha. In

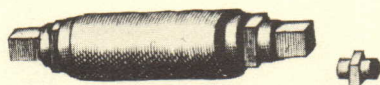
At the time of his death in 1955, Mr Lewisohn was Professor of Comparative Literature at Brandeis University, Waltham, Massachusetts. He had been on that faculty since its founding in 1948. The list of his published books is extensive and ranges from novels to biographies and critical essays. The *Journal* is grateful to Mrs Lewisohn for allowing us to publish this speech her husband delivered at the last Commencement exercise he ever attended.

Egypt mural paintings probably preceded the use of the papyrus plant, and all over the antique world lapidary inscriptions—incisions in stone—served some of the purposes of the book. Next—and for many ages—the signs or symbols which constitute a book were inscribed on parchment, on the cured skins of sheep and other animals. The lengths of this material were then pasted together and rolled into scrolls. The Sifrei Torah and Megilloth in contemporary synagogues still represent the antique book in its shape of a scroll. Gradually the lengths of parchment were juxtaposed into bundles and bound. Thus the book assumed

more or less its present form even before the invention in the West of movable type and the introduction from the Orient of the art of paper-making. Other materials had been used. As our word "book" and the German word *Buch* prove, the ancient Germanic peoples scratched their runes on tablets of beechwood. But it is clear that the fundamental character of the book was always the same: signs or symbols inscribed or pressed (imprinted) upon some more or less convenient, some more or less permanent material.

So much is simple and mechanical enough. We leave the world of the mechanical when we approach the signs scratched, inscribed, impressed everywhere and always on some material surface. For these signs were always symbolic; they were never, even in the earliest picture-writing, things; they stood for things and were symbolic of them. No, not even that, they stood for names; for the symbols of things or ideas. They were thus the symbols of symbols.

When we enter the realm of speech and of recorded speech, when we read a book, we enter a



world of pure symbolism; we enter a purely and miraculously human world, of which nature knows nothing, can know nothing, that world of man's divine character which Pascal meant when he called him, though but a reed, feeble and easily crushed, yet a *thinking* reed, which thus transcends the insentient forces which surround him.

From Darwin to Kinsey

For about a century an attempt has been made—from Darwin to Kinsey—to reduce man to a merely biological level. Man must be an animal according to this malicious method, and all his qualities must seem to be derivable from his biological character. The social scientists have largely joined in this conspiracy of reduction. Silence has reigned concerning the fact that each group of human beings, as it has appeared on the scene of history, has brought with it its own language, its own set of creative symbols as the mark and the image of the spiritual character which differentiates it from its biologically identical fellows. Thus the historic peoples or speech groups or culture groups are the true and ultimate historic realities. Their biological character is uniform; environment plays a relatively feeble part in their shaping. They arise speaking and praying, each in its

inimitable fashion, creative and unique. There, in that circumstance and in no other, lies the secret of history and of human life. There is the ultimate. Human development is psychological, not biological; societies are determined by inner and creative traits. Speech, writing, art are the supremely significant phenomena. Man speaking is man. The word and the word alone is redemptive. Books are redemptive. And libraries are the highest symbols, the truest expression of such a being as man in such a world as the present.

The great library of Vilna, which contained the mss. of the Gaon Elijah, was attached to the famous old synagogue. In 1924 a famous and wealthy American university offered the community of Vilna a price that ran into the millions for that library. Despite the extreme poverty of that community, the letter from America, at least according to what the librarian told me in August of that year, was not answered. The library was sacred. It was core and symbol of the community. If you could not read and study—if you could not, in that specific sense, "learn"—you were empty, lost, incapable of redemption. Man with a book in his hand was there, as von Hofmannsthal said, the characteristic gesture of human beings.

How real that is, how true to the innermost reality of human life! We all know unhappy, empty human beings who never assume this immortal gesture, who are never seen with a book in their hands.

He who does not read does not communicate with his own humanity. He has no contact with the spirit of man. He is, as it were, in some outer darkness or limbo, cut off from any communication with history, art, philosophy—cut off from himself and his kind, not knowing what mankind is like and what he himself is like or could be like.

In the course of time learned men and powerful men began to take an interest in collecting books and even making them available to others. Pisistratus is said to have been the first of the Greeks to have collected many books. Plato himself is known to have gathered a library. It was in the reign of Ptolemy Philadelphus that the famous library of Alexandria was established, and such Romans as Pliny and the emperors Hadrian and Constantine founded libraries. These examples were emulated at the end of the medieval period and private collections as well as government generosity finally built up those state libraries which culminated in the British Museum, the Bibliothèque Nationale and the Congressional Library. In very recent times these state libraries were further increased by being made the official depositories of all books published in the country.

To temple libraries and the libraries of states there was added a third kind of library, the kind

with which we are specifically concerned—the libraries of the universities.

Growth of Libraries

The growth of the university libraries was natural and inevitable. And even when the printed book appeared and the famous publishers, the Aldines in Venice, the Elzivirs in Holland, arose, the books did not come in that spate or flood which so alarmed Anatole France. Books in the modern tongues were few and slow to come. The classics, especially the Latin classics and, primarily from Elzivir, little Latin manuals of history and general knowledge, predominated. So, until at least the 17th century, one can imagine the growth of the university libraries to have been without haste or urgency, a matter of leisurely accretion; one can equally imagine a scholar in one of those libraries, consulting two or three books: the beautiful Scaliger edition of Catullus with its witty notes or, if he were one of those mighty linguists who were not too uncommon, Adrian Reland's two tomes on the geography and demography of ancient Palestine, composed in Latin but illustrated by whole pages in Greek, Arabic, Hebrew and Aramaic.

All this may seem a little remote and even dreamlike to us. Less so the well-known circumstances that as early as 1636 the General Court of Massachusetts established and endowed that College to which two years later John Harvard left his library and one half of his fortune in the sum of £ 800.

What We Cannot Do

I have given you this brief background in order that we may share more vividly than we could otherwise have done, an adequate sense of the strange and immense adventure in which we are engaged.

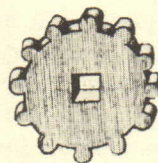
We cannot let our library grow at leisure; we cannot trust printers and publishers—themselves learned—to supply us with a few precious and necessary books. We, too, are concerned with that *studium generale* which has been for 800 years the mark of a university. But that adjective *generale* has grown to monstrous proportions.

What shall we choose? What shall we buy? How shall we define our needs? Thousands of treatises are published in three or four or even five languages a year. Each pretends to some addition to the sum of human knowledge or to some reinterpretation of existing knowledge. How many will last beyond the year that brought them forth?

The reprinting of scholarly works has been stagnating in Europe. The two World Wars caused that. Now and only now a faint beginning

is being made. And this beginning confronts us with new dilemmas. A recent book-importer's list opens with the following item: *Du Cange, Charles du Fresne Sieur. Glossarium Mediae et Infimae Latinitatis*. In other words, a dictionary of Middle and Low Latin. Reprint of the Paris edition of 1887. 5686P, 10 Parts in 5 vols. 3 vols. published. Balance Fall 1955, \$190.

Shall we order a copy? What would you say? Well, I shall be sorely tempted. I have been a dabbler in medieval Latin literature—especially in Middle Latin poetry—for many years. It is to me a realm of enchantment, especially the secular verse, and also, the solution of certain problems, such as the emergence of rhyme in poetry, seems to me to lie there. But is that a valid reason for spending \$190? With the decay of the study of the classical languages, when are we likely to have a student or else another scholar on this campus who would want even to consult this work? Ought we not rather to spend the \$190 on books of more immediate usefulness? Assuredly, assuredly.



Only, you see, the problem is not as simple as all that. This work has not been reprinted in sixty-eight years. I'm sure the edition is not large. I'm equally sure that all European universities of the West will buy it, as well as many Universities in the Americas—especially in Latin America. At Harvard, for instance, there is a very gifted and accomplished professor of English who shares my passion for medieval Latin poetry. But Harvard probably owns a copy of the 1887 edition. At all events, if we do not buy a copy now, we may not be able to buy a copy for the next sixty-eight years.

Sixty-eight years is a long time for an individual to contemplate. It is but a moment in history. If bombs do not destroy us and if what Matthew Arnold calls man's instinct of self-preservation prevails, there may be, tomorrow, or some early tomorrow, a great up-surge of humanistic studies and the delightful Latin literature of the Middle Ages may be, among other things, the subject of courses, theses, dissertations and even some general interest. Even the perverse and stupid abandonment of the phonetic alphabet for the ideogram in our schools may be reversed. A clever pedagogue has written a book on this subject: *Why Johnnie Can't Read*. Well, Johnnie

may be taught to read again—in sixty-eight years. Reading may come into fashion again. Books may come into their own again—books, not the merchandise of the book clubs. At all events, our library policy must be guided by hope, not wholly by the fashion of the immediate present.

We must operate, in other words, at some given and, I'm afraid, not wholly stable point between the long view and the short, between the permanent and the ephemeral, between what is truly worthy of a university, great in quality if not in size, and the immediate needs of what, I hope and believe, is not and cannot be, a representative day.

The immediate present would hardly justify the purchase of the dictionary of Middle and Low Latin, of which I have made an example. For consider this very matter of the reprinting of scholarly works. Why is it left to poverty-stricken Europe? We have more and richer libraries in our country than anywhere else. We have foundations of unrivaled wealth. Nothing is done; nothing attempted. On the contrary, certain university presses demand subsidies from authors for the publication of a learned work or a belletristic one. The costs of production have become fantastic. That is not the symptom, I submit, of an altogether healthy society. But what is worse, much worse, is the circumstance that the demand for books has become infinitesimal.

Heaven forbid that I should go into various implications. Doubtless every member of the Typographical Union has a motorcar and a TV set and a washing machine; without any doubt no high school teacher can afford to buy the books he wants or needs. Moreover those high school teachers who come from the pedagogical factories where subject matter is neglected and despised—who, in brief, know how to teach French but know no French—they probably want and need no books, but also save their pennies for a car, a TV set and a washing machine. The wave of anti-intellectualism which has for years engulfed us is composed of many elements. I have indicated what might be called external elements. There are other, inner, more organic ones: Fiction on the level of art is nihilistic in temper; poetry has withdrawn itself into private mumble and murmur; criticism has become rhetorical analysis. And the exercise of these various kinds, the practice of these arts, is controlled by cabals and conspiracies. It is difficult for any opposing voice to be heard.

Fortunately, we still have libraries, and the great fundamental notions of democracy, now so often misinterpreted, debased and deflected from their original meaning and purpose, are still operative among us, so that these libraries, especially

the municipal ones, are still supported, are still maintained, so that anyone among the populace who needs to live the life of the spirit can still do so.

It was, I think, two years ago that our director of administration services came to ask me whether we should pay a certain price for a fundamental and already classical work of historical scholarship which is not likely to be reprinted in our time: Jean Juster's *Les Juifs dans l'Empire Romain*. I said: "Pay what we have to."

The late Paul Valery, the French poet and critic, was fond of asserting that the quality of a culture, a civilization, a society, could be estimated by the value it attached to what was in the gross sense, useless, purposeless, wholly in the realm of unpragmatic. We, in a university library, even in one as young as ours, we can still take this view. We can still buy books that will serve merely to fortify and illuminate the spirit of man. We can still say that *that* is the purpose, the quite ultimate purpose, of a university and its library—that, and not the accomplishment of any immediate act. The accursed machines which have already so deeply befooled us, may yet destroy us, though I am not among the pessimists in this matter. I am far more frightened of the warping of the mind than of the bombing of cities. Against that warping we stand—we guardians of the human spirit, guardians of the book, of the word.

You will recall that I had the temerity to tell you at the beginning of this talk about the character of language as symbol and about the character of recorded language, of books, as symbols of symbols—as the very proof and witness of man's humanity, of his being torn out of the context of mere nature. The machine may serve us; the word, the word alone can redeem us. Dark and evil things, Thomas Mann has said, can be redeemed by being uttered, by being incarnated in speech, in the word. That is one of the profoundest of all human sayings. It does not, you observe, point to the didactic, to art with a purpose. It points to the redemptive character of creative speech in its own nature and according to its own inherent quality. A library is and should be a repository of human knowledge, of all that man has learned and of all that, in consequence, he has learned to do. But at the core and center of a library should be the record and proof of what man *is*, of the possession of that creative and redeeming word which has enabled him to learn and do. And from a library thus considered and thus thought upon and thus built, there should go forth an influence and an illumination that will make men more aware of their true nature, and the true nature of a significant and fruitful existence.



Italian Villas and Palaces

Georgina Masson. New York, Harry N. Abrams, Inc, 1959, 244 pp 193 plates. 10¾" x 12½". \$17.50

One of the most beautiful books of recent years, "Italian Villas and Palaces" is an enchanting journey from Piedmont and Venetia in the north to Sicily in the south, stopping at a selection of the loveliest villas in the land where the word "villa" originally acquired its current meaning, as well as at some of the finest town houses, or palaces.

Nowhere, at least in Western civilization, have architecture, sculpture, garden, water and space been so beautifully blended as in the villas of Italy. Our current efforts at "indoor-outdoor living" are feeble compared to the perfect integration of house and garden achieved by the architects of Italian Renaissance. And the astonishing thing is

the incredible number of them. A list of the villas of Florence includes 700, and the official catalog of the villas of Venice includes 1,800. There is 2,500 right there; thus a total of those in all Italy would indeed be a staggering figure. Some are still the homes of their original families; many are the homes of wealthy Italians and foreigners—including a great many Americans; still others have become schools, museums, hospitals or embassies. Few have been neglected—although some suffered severe damage during World War II. Altogether, they constitute one of Italy's most unique and alluring attractions.

Miss Masson's photographs, taken by herself, are both beautiful and original in point of view. Their photogravure reproduction is well-nigh perfect, with rich textures and deep, velvety shadows. Her ample text is richly informative and free from too personal observations. Each section of text is printed with wide margins on differently-colored rough-textured paper, making the book a thing of beauty in itself. Whether as a conversation piece to lie on the coffee-table, or as a companion and guide to the student and lover of Italy, this book is one to buy and to cherish.

J. W.

Modern Sacred Art and the Church of Assy

William S. Rubin. New York, Columbia University Press, 1961. 256 pp illus. \$7.50

The first half of this book is devoted to a detailed account of the furor within the Roman Catholic Church caused by the "modernistic" decorations in the church of Assy. This Protestant reviewer found the account of great interest—of greater interest, in fact, than the second part of the book, which is a description of each of the controversial art works and the circumstances of their creation and installation.

The author discusses the decline of sacred art since the Renaissance, and the growth of *Kitsch*, or "sulpician" art—the cheap, gaudy and sentimental claptrap which is mass-produced and sold by the carload. The Vatican has banned its use in churches—not, however, because it is bad art, but because it is machine-made. Official Catholic art had become sentimental and commonplace by the 1930's, the descendant of Bouguereau. A group of energetic and imaginative Dominicans in France set out to do something about it, forming the nucleus of the Sacred Art Movement.

In the foothills of the Alps, near Mont Blanc, a new church was started just before World War II by Father Jean Devémy, to minister to the hundreds of patients in the many sanatoriums that had recently been built in the area. In 1939 he asked his old friend Father Couturier, one of the leaders in the Sacred Art Movement and editor of *L'Art sacré*, to help him with his new church. This led to the first Rouault window. Work on the church was halted by the outbreak of the war, but was resumed in 1940 during the German occupation of France. Highly pleased with his Rouault window, Canon Devémy ". . . decided to make the rest of the decoration match this standard. Proceeding courageously, if naively, he selected artists largely on the basis of reputation. . . ." Since Couturier was in the United States for the duration of the war, Devémy decided he wanted Dufy to paint a panel of St. Francis of Sales, but could not get in touch with him, so he compromised on Bonnard. After being turned down by André Derain for another painting, Devémy thought he'd try Picasso. The good Father was so shocked by what he saw in Picasso's studio that he made a hasty retreat. That particular panel

waited until 1948, when Matisse was persuaded to undertake it.

After the war Father Couturier returned to France and the two priests drew up an orderly program for the decoration of the church. Eight windows were commissioned to half-a-dozen different modern artists, chosen more for their orthodox Catholicism than for their originality and creativeness. These turned out to be out of character with the art that was to follow. In 1945 Léger was engaged to do a huge mosaic mural for the facade of the church, under the great overhanging roof, and Lurçat was commissioned to design the tapestry for the sanctuary. Five more windows adapted from paintings by Rouault followed; Jacques Lipchitz did a baptismal font with a figure of the Virgin and Marc Chagall decorated the baptistery with a ceramic mural. In 1948 Braque offered a small relief for the door of the tabernacle, and the decorative program was completed the following year when Germaine Richier was commissioned to do a bronze crucifix.

Note the array of artists: Roman Catholics, Jews, Communists, non-believers and atheists. No Protestants, and all but the Jews had been born and baptized in the Roman church, no matter what their later beliefs were. Only Rouault was a devout Catholic. There is little relation between the art works, the most they have in common is that they are "modern." There is no narrative imagery, as is customary in Roman churches—not even the Stations of the Cross. The figures represented are not shown in action, but as simple standing figures, like the medieval icons.

Meanwhile, trouble had been brewing within the Roman Catholic hierarchy and in conservative circles. The church of Assy was dedicated in 1950—the Jubilee Year of the Church. In connection with the Jubilee there were two exhibitions of sacred art, one in Paris and one in Rome. The Paris show was in the Museum of Modern Art; the Rome show was arranged by the Vatican authorities—the contrast between the two can readily be imagined. At the First International Congress of Catholic Artists the conservatives tried to force through a resolution that the Church formulate rules to guide artists. Question from the floor: "Then you would have the Church place manacles on the artists?" "Exactly," retorted Bardet, the conservative leader. That the measure was defeated was due largely to the efforts of the chairman of the U. S. delegation, Maurice Lavanoux. The liberal point of view was expressed in a document prepared by Lavanoux, which is worth presenting here:

"1 We deny the necessity for a set of rules concerning sacred art. The difficulty in this case would be to state rules that would be applicable



in a universal sense, and we feel that any such rules would be merely the expression of one particular school of thought. . . .

"2 The attack on the use of reinforced concrete and on modern techniques and construction is like Don Quixote tilting at windmills. The world is too large and the various needs of people in the world will [have to] be met in a normal and intelligent manner, based on liturgical requirements and a sense of tradition and that is all.

"3 Fanaticism in matters of sacred art is an attitude that can lead to a decadence more sterile than the one we are now endeavoring to overcome. . . ."

The attack on modern art within the Church and upon the church of Assy in particular continued to grow. At Assy the storm centered around the "deformed" crucifix by Germaine Richier, and by April of 1951, under pressure from the Vatican and a "flood" of mail, the Bishop of Annecy ordered the removal of the work which André Malraux had called "the only modern Christ before which one can pray." Reaction was quick and violent, especially from the Dominicans, who had been backing the Sacred Art Movement. One of them stated that "modern art will have three enemies, Hitler, Stalin, and the Pope." It is interesting to note that none of the objections to the art in the church came from the parishoners of Assy; in fact, many wrote letters of protest to the Bishop and to the newspapers—they loved their "suffering and pitiful" Christ.

A review is no place to detail the heightening controversy that continued. Finally, at Christmas

1955, the Pope gave the *coup de grâce* to the Sacred Art Movement by specifically condemning the participation of non-Roman Catholic artists in church decoration. "Since the Reformation . . . the Church has been increasingly suspicious of artists. . . . Advanced contemporary artists being for the most part indifferent, if not antagonistic, to all forms of dogmatic religion, the Church has had to deal with them with great circumspection. The Church at Assy represented a calculated risk. Would the result contain expressions incompatible with the religion? To the Vatican and the most conservative Catholic critics it does—thus the cries of heresy."

The church building itself, designed by Maurice Novarina, is of no architectural significance. It is neither good contemporary nor good Romanesque; the best that can be said for it is that it is in complete harmony with its environment. Its materials are indigenous, its great sweeping roof sheds the winter snows and diverts the winter winds. Its interior is dark and stony, but warm in winter. It is apparently completely successful functionally—a mixed success artistically.

As mentioned above, the second half of the book deals in detail with each work of art, and should be of interest to amateurs of the subject. Reading the book in galleys, the illustrations are not available to this reviewer, but they apparently include all the major works. The author has approached the "hot" topic with objectivity. The book is neither a Catholic tract nor a piece of anti-Catholicism. It is a detailed and skilled account and description; judgments are left to the reader. J. W.



History of Surrealist Painting

Marcel Jean (tr by S. W. Taylor). New York, Grove Press, 1960. 384 pp illus. 8¾" x 9½". \$17.50

A conscientious bookreviewer is at a disadvantage in reviewing certain books which are essentially comprehensive references or textbooks

for administration of doses of information. This book falls someplace in between. The text is well-written, although a few parts are notebooky, and the translation quite good. It is well illustrated, as such a volume must be—with nearly 400 plates, 36 in color. It can be read as a book.

After immersion in it for the time required to write a suitable review, however, this particular subject-matter—which someone before me must have called "avant-garde painting"—seems to have a curious analogy with skin-diving. It is an *immersion* in another medium than air—with a strange index of refraction so that every image suffers a sea-change. Perhaps Shakespeare was a precursor too—certainly Ariel's song in "The Tempest" was not a little surrealist:

"Full fathom five thy father lies;
 Of his bones are coral made;
 Those are pearls that were his eyes:
 Nothing of him that doth fade
 But doth suffer a sea-change
 Into something rich and strange . . ."

To follow a moment more this sense of the submarine it is perhaps of psychological significance to note that designers of surrealist exhibitions have most often felt the need to do something about the ceiling—interlacings of twine, drooping fabric, burlap bags. In addition to the more obvious Freudian reference to uterine nostalgia this might symbolize a barrier/surface through which we might rise to another medium. In this private submarine world too, there are sharp and unknown dangers lurking, watching, perhaps dangers to our way of thought. This lower medium, however, rarely provides buoyancy, or weightlessness! The comments of witty observers may provide this lift—like Audiberti's *bon mot*: ". . . surrealism is a roll of thunder in the form of a bridge!"

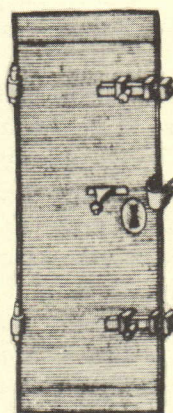
Other critics, with the tag or taunt of "Freudo-Marxism" for this kind of art, have recognized the similarity of its all-too-apparent claim that everything in human experience is motivated or explained by the off-beat, or the psychopathic, with the Marxist claim of dialectical materialism that everything can be explained in terms of economic interests or economic behavior. This obsession with the off-beat, the negative aspects of all traditions (in Jean's term, conscious "disorientation")—is a minor tradition in itself—the behavior frequently found in the psychology of revolt—revolt against poverty, the insanity of war, or against "systems" imposed on the individual. It seems also the elementary urge to invert the normal often found in adolescence. A recent definition is apropos.* Is surrealist art then *frozen adolescence*? It has engaged some serious and subtle minds but many of them outgrew it into a still imaginative and productive maturity.

Marcel Jean, author of this book, takes us on illustrated visits to all the important artists who had any relation to surrealism and notes, among others, Picasso for whom it was a passing way of thought, Dali for whom he has little respect, and Marcel Duchamp whom he almost venerates. Jean is convinced that more current schools than surrealism (which seems to be dated roughly within the first half of the twentieth century) have left this realm of eerie ideas for simple sensual experience, an elementary sensation level of color,

*". . . adolescence is the period in which the individual is likely to become conscious, sometimes acutely so, of the inadequacy and untrustworthiness of some of his classifications and principles and standards of behavior—particularly of those which he has accepted on the authority of others . . ." Dean Marten ten Hoor, in an article "The View from Olympus" in *Michigan Quarterly Review* (Summer 1961)

texture, line and form. Of course there were precursors here too—we think of the rather eccentric American collector Albert C. Barnes who claimed he couldn't remember the subject-matter of his world-famous Renoirs, etc, but appreciated them only as abstractions (?).*

What does this art period, with its sexession and dissexion of genitalia, its soft and bending watches, its monsters, decadence and distortions, mean for architecture? If we take it on Jean's basis—as an art of the suggestion of ideas rather than mere visual sensation—the question narrows to "what sort of ideas?" The answer—*Anything never praised before!* means nothing to us. Each of us must insist on his right to evaluate based on his own experience. Perhaps we learn.



The gay jokers of the movement too often trip over something obscene and fall in the mud. The vision-trickers intrigue us. Perhaps some architecture can play up the *Trompe-l'oeil*. The baroque did. One of the final illustrations is Max Ernst: "Surrealism and Painting"—an ambiguous several-headed, many-membered monstrous creature amorously interlocked with itself. This would seem to give small promise of offspring—perhaps just as well.

We cannot bring ourselves to dismiss a half-century of artistic effort as completely psychopathic and there are names of honor among those present. Jean Arp in particular. Active in Dada and Surrealism, he has maintained his own path of expressive line and pure form (and color). We cannot help feeling as we read of his life and see his work, a perhaps unexpected reaction—what a rare capacity for happiness his beloved Sophie Taeuber must have had! This is what shines through. No powerless bent watches. E. P.

* "Art in Painting": Albert C. Barnes 2nd ed Harcourt, Brace & Co, New York 1926

Zodiac

ZODIAC 7—INTERNATIONAL
MAGAZINE FOR CONTEMPORARY
ARCHITECTURE

Bruno Alfieri, editor. New York, George Wittenborn distributor, 1961. 219 pp text and illus. 8¼" x 10¾". \$9.00

The cover of this publication fills the reader with expectations of precise technical writing coupled with an artistic flair. Thumbing through the fifty-odd pages of advertising which precede the first article, this expectation is enhanced. Then come:

Two pictures of Henry-Russell Hitchcock, one in which he seems to be catching flies on the lawn, in the other he imitates Orson Welles. The low quality of these pictures would be forgiven but for the even slighter stature of the so-called "Notes of a Traveller: III" which appears under the Hitchcock name. Here we are treated to five tightly-packed pages of bad syntax, illogical construction, and the most atrocious sort of non-proofreading. Where the fault lies for this extremely bad piece, the reviewer cannot say, but it is surprising that one with Mr Hitchcock's reputation could allow it to be printed anywhere. It almost seems that Mr Hitchcock translated this piece into bad Italian and that someone on the *Zodiac* staff re-rendered it in worse English.

Next comes a rather lengthy piece by Paolo Portoghesi "Architettura e Ambiente Technico" (Architecture and Technical Environment). To anyone who has read Georges Freedman or Friedrich Juenger, there is nothing new in this piece. Portoghesi harks back to the pioneers Taylor and Mayo. A return to original sources is refreshing in this day of swollen bibliographies and unnecessary footnotes, but when we find that the result of this return is no more than a weak echo which fails to answer apologies and criticisms already offered for these explorers, we can only regret that Portoghesi did not investigate his field more thoroughly. Criticisms of unidentified works, general statements damning the "spirit of the times" and unending adjectives do not make up a piece worthy of serious attention.

Allon T. Schoener's "Art without Pedestals" is refreshing. While not completely original, it makes the idea of usable art a theme worthy of reiteration.

The heart of this issue is given over to a series of Le Corbusier's answers to questions posed by *Zodiac* accompanied by sketches, doodlings and photos of paintings and tapestries in production. Those who admire Corbu will welcome these 35 pages, others may have doubts.

Leonardo Mosso contributes a rather interesting article on Alvar Aalto's use of light—both text and photos are rewarding. The translated summary leaves much to be desired.

Heinrich Erdsieck contributes the most original and seminal piece in this issue. While not a model of writing in German, it exceeds the other pieces in clarity and interest. One might predict from the title "The Face of the City—a Concise Grammar," that a German was responsible. There is nothing pedantic or labored about the text or the drawings. This article would reward (and one hopes influence) anyone concerned with city planning. Very worthwhile.

Robert Creswell's article on housing concepts in non-industrial societies is interesting. It is disappointing that no translation is given.

In such a publication which for format and illustration can only be described as handsome, it is irritating to find such sloppy translating, poor editing, non-existent proofreading. When one considers what is available for \$9.00 even in the inflated US market, and then reconsiders *Zodiac 7*, the thought emerges that one must be a fanatic aficionado of Le Corbusier to invest that sum. While Olivetti is to be encouraged and congratulated for a new approach to advertising, we can only urge that they apply the same scrupulous principles to the next issue of *Zodiac*. Much as we dislike discouraging the new in architecture or publication, this issue must be rated a bad job.

GUDRUN HUDEN

ZODIAC 8—AMERICA

Bruno Alfieri, editor. Ivrea, Italy, Olivetti. New York, George Wittenborn, American distributor, 1961. 197 pp text and illus. 8¼" x 10¾". \$9.00

Zodiac, according to the introduction, "interrupts the regular cycle of its issues to present a kind of monograph on the complex panorama of American architecture." The overall quality of *Zodiac 8* is so much higher than that of the preceding issue that it is difficult to consider them as part of the same series. A link is provided by the consistently high quality of layout and illustration. To some American readers *Zodiac 8* may

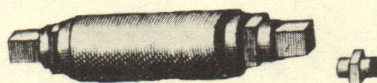
not provide very much new information. Most notable for originality are Henry-Russell Hitchcock's article on the current work of Philip Johnson, Walter Gropius' statement on the architect, citizen and professional, George Nelson's biting answer to a question posed by *Zodiac*, and Esther McCoy's analytical survey of young architects in the United States. Add to these such highlights as Vincent Scully's resume of his recent short book on Wright, Victor Gruen's survey of urban development and Jane McCullough's thoughts about aims, and one has a volume worthy of serious attention.

A question arises, however, whether a European critic might not object to issue # 8 for some of the reasons which this writer objected to *Zodiac* 7. Directed as it is primarily to a European audience, it must come as a disappointment to those whose native tongue is not English to find that *Zodiac* 8 provides but cursory and not especially able French and Italian summaries of most of the articles.

The only article appearing in full in three languages, Guido Piovene's "The Multiple Future of American Architecture," which, while interesting, is not the most significant piece in the issue.

The issue is ably introduced by Mr Hitchcock in an historical survey "The Rise to World Prominence of American Architecture." This is followed by sections on homegrown and émigré masters. Among these the already mentioned pieces on Frank Lloyd Wright and Philip Johnson are most noteworthy. Then comes a section including a group of between-the-wars figures: the late Eero Saarinen, Victor Gruen, George Nelson and the Eames. A group of articles on divergent figures: Yamasaki, Stone and Rudolph, and Esther McCoy's profiles of young architects.

Again, the illustrations and the layout work are outstanding. It should be noted, however, that someone's sense of graphic presentation frequently interferes with intelligible transmission of information. Not only are the illustrations grouped and apart from pertinent text, the identification of illustrations seems to follow only the pattern dictated by the layout artist's sense of visual impact. It is not impossible to find out which picture goes with which caption, but it is certainly inconvenient and makes the issue a less useful guide to the work of the men discussed. Proofreading in general still is inadequate. GUDRUN HUDEN



Art in Nigeria, 1960

Ulli Beier. New York City, Cambridge University Press, 1961. 78 pp illus. \$3.75 cloth, \$1.95 paperback

With the emergence of the states of Africa into the light of world affairs and opinions, there is also emerging a wealth of books on the "dark continent" ranging from political dissertations to novels to books on mores and culture. This one deals with art in Nigeria today rather than, as most books tend to do, reviewing the past traditions in that country.

The Nigerian artist, of course, has depended upon the European influence in the past to guide his artistic endeavors in addition to his tribal art which has consisted mostly of woodcarvings and bronzes. Now, Ulli Beier tells us, there is the beginning of a new Christian art in Nigeria. She tells

us so in an excellent text that would be much improved by the use of larger type, and in over fifty photographs that, because of the lack of color, lose most of their excitement.

One chapter and seven plates deal with European architecture in Nigeria which, the author says, is built "in a style and technique foreign to the country." She goes on to let us know that "Traditional architecture, while esthetically very pleasing, cannot solve the technical problems involved in erecting ten-story bank buildings" and further that "... most Nigerians probably prefer the modern, twentieth-century look of Maxwell Fry's buildings." This look, she further states, makes the Nigerian feel he is catching up with the rest of the world. After sweltering in a US metropolis with its many-storied buildings one can't help but wonder why Nigeria wants to "catch up," but then the grass always looks greener, etc.

Explored in black-and-white photographs is the world of commercial art, the sign painter, school art, the modern woodcarver, cement sculpture, murals and other forms of art necessary in the culture of a people. N.C.B.



Roma Amor

Jean Marcadé. Geneva, Switzerland, Les Guides Nagel, 1961. 130 pp illus. 10" x 13". Approx. \$38.00

Throughout countless centuries the people of the countries bordering on the Mediterranean have unknowingly kept alive many ancient pagan beliefs in "magic"—protection against the evil eye, assurances of prosperity and longevity, promises of fertility and success in love.

The present-day Italian who makes the gesture of the *fica*, or "fig," before he crosses himself when a funeral passes by; the peasant who spits in a newborn child's cradle; the taxi driver who extends an open palm toward someone who has almost caused an accident—all these are survivals through two thousand years of Christianity

of beliefs, now called "superstitions," dating back through Roman and Etruscan times to the religion of the ancient Greeks.

Visitors to southern Italy today are sometimes "shocked," sometimes amused, by the frankness of the ancient paintings and sculptures they see in the museum in Naples or are led to in Pompeii by a lewdly winking guide. Such a visitor with a knowledge of history can not only take them in his stride, but understand and enjoy them as faded survivals of a time when representations of the act of sexual fulfillment were not taboo but openly and joyously expressed, when the phallus over the door of a house was not the sign of a brothel but the symbol of protection against evil for the entire household.

"Roma Amor" (note the palindrome) might be called "a book which belongs in every gentleman's library," but it is much more than that; it is a book for the lover of ancient art and the student of Etruscan and Roman painting and sculpture. A big, handsome, well-made book—a work of art in itself, printed in Switzerland, it contains

about 130 plates, mostly in color, tipped in, reproducing paintings, and some sculpture, amulets, etc, which are not ordinarily reproduced in conventional books on Graeco-Roman art.

Roman painting, which we know was really a continuation of the great lost tradition of Greek painting, has left us few examples, according to popular belief. Actually, the museums and ancient buildings of southern Italy are full of them. This book contains reproductions of many of the finest.

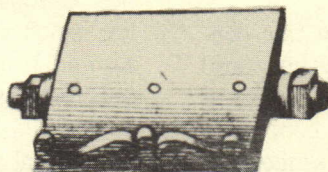
"Erotica"? Only if that is what you are looking for. Graeco-Roman painting was an art which reached great heights, as all students of the subject know, but which, outside of a few wall decorations from Pompeii, is little known to the public. "Roma Amor" is a rich introduction to it.

The book is by no means all pictures. The text written by a professor of archeology at the University of Bordeaux, is knowledgeable and urbane, with many quotations from contemporary writers and observers such as Petronius and Apuleius. He tells of the religion and beliefs of the Greeks and

the Etruscans, and their reliance upon the representation of erotic forms as charms and symbols. He rather sheepishly admits that by the time of the luxurious Roman empire these representations were more for the sensual pleasure they afforded, retaining their magic potency only for the unsophisticated poor.

The sub-title of the book is "Essay on Erotic Elements in Etruscan and Roman Art." This reviewer will venture to say that it is more than that. It is an exploration into the impulses and mysteries which underly the cultures of all civilized peoples. For 30,000 years the great life-giving forces of nature were both revered and openly enjoyed by our ancestors. It has been only during the past two or three hundred years that modern prudery has tried to conceal them with fig leaves and veils. This book will be both valuable and amusing to those scholars and readers who have an interest in that ancient art which has no inhibitions in representing man in all his vigor and gusto.

J.W.



Jean Arp

Carola Giedion-Welcker. New York, Harry N. Abrams, Inc, 1958. 165 pp illus. 9¼" x 11¾". \$12.50

About one-fourth of this large and splendid monograph on a many-sided master, now 74, who has been a leader in the arts for fifty years, is devoted to an introductory essay with marginal and full-page black-and-whites. Then come a hundred pages of photographs, a few in charming, surprising color, finally twenty pages of back-of-the-book documentation: index, bibliography and partial, annotated catalog (to 1957—147 items of sculpture).

Few sculptors and graphic artists have had the pervasive influence of Arp upon other media. The unique authority of his handling of free form

has affected textile design, furniture, typography, advertising art, garden plans, jewelry and countless other applications of design as well as other sculptors, painters and graphic artists.

Not so well-known in America is the quality and extent of his poetry. Only a few poems are quoted here—they are scattered in many out-of-print small editions in German and French. Arp has complete bipolarity in this respect, having been born in Strasbourg and having lived much in Switzerland—actually shifting his given name from Jean to Hans depending upon which language he uses. The world needs a complete edition of his writings, particularly the poems.* Some of these are among the best expressions of Dada—that much-misunderstood rebellion—and with all their playfulness and rather magical skill with words make significant allusions to the polygonal and simultaneous nature of sensory experience. This verbal synesthesia through which certain ex-

* *On My Way* (Wittenborn, NY 1948 148 pp) is only a tantalizing beginning



"Owl's Dream"—Jean Arp, Sculptor

periences are often caught "out of the corner of the mind" can be seen as a model of the newly-emerging idea of an architecture designed as total sensory experience. This is becoming fashionable for everyone now to approach through the concept of "environmental design."

The needs of today's architecture in this connection lead us to suggest that architectural schools consider making two important additions to faculty: a poet-in-residence and a composer-in-residence, easily shared with other schools on the campus, perhaps short-term appointments. The glib reaction—"Oh Frozen Music . . ." is perhaps sophomoric.

In Arp's sculpture we often find a successful merging of two plastic modes—the geometric and the organic. His titles hint at this in various ways: "Shell-crystal," "Interregnum," "From two realms," "Daphne." Often the effect is subordinate—an angular or sharp-edged base for a curvaceous form. Often too, the titles (in translation at least) seem purposely anti-anthropoid, lovely "sub-torsos" being called "Owl's Dream" or "Garland Buds."

There are a few annoying features of the book. The text is nicely printed on matt paper but its separation from photo-illustrations grouped together on coated paper causes constant flipping back and forth. The black-and-whites in the text have as captions only a reference to the bibliography: "Bibl. No. 100," etc—the *excellent* photographs have title, date, material and dimensions noted. The page of numbered notes at the end of the text contains brief items many of which might better have been woven into the text. These are surely minor defects of an important, handsome book.

E.P.

Architecture and the Esthetics of Plenty

James Marston Fitch. New York, Columbia University Press, 1961. 288 pp. \$6.00

Reviewed by Alfred Browning Parker, FAIA of Miami for the *AIA Journal*.

Mr Fitch has written a worthy study of American architecture and civilization. He follows in the tradition established by Lewis Mumford nearly forty years ago with his well-known volume "Sticks and Stones." While this book will enrich any reader's knowledge of architecture, it will be particularly appreciated by architects. The author, Associate Professor at the School of Architecture, Columbia University, is well known as a lecturer and magazine writer, and as the author of "American Building."

Mr Fitch selects three dominant qualities of our national architecture, as he feels that these are much more definite than the forms it may assume at any given moment. They are: (1) Acquisitiveness—its tendency to rely upon imported forms; (2) Plasticity—its ability to react quickly to external stimuli in adapting itself to rapid rates of change; and (3) Productivity—its ability to adapt to mass production processes. He makes clear the point that the architectural process in America has always been conditioned by the fact that labor has been scarce and hence expensive, while materials have always been plentiful and relatively cheap. I enjoyed his point that statistical eminence does not lead to qualitative superiority. In our country we have had an overwhelming passion to rely upon statistics of size and number to indicate superiority.

The author states that the implications of technology for the last hundred years can be traced in theory, in practice and in the completed product of the architect. Yet, today the effect of technology for architecture is more obscure than ever. With few exceptions, architects have stood outside the scientific tradition. They have insisted that beauty is more important than creature comfort, and that mechanical means can cure any and all blunders in design. Here would have been a good place to emphasize the duality of architecture (beauty and use). I am sorry that Mr Fitch did not pursue this further.

An unusual but convincing parallel is drawn between Thomas Jefferson and Frank Lloyd

Wright. He links them by their common determination to use the potentials of their civilization for enriching the lives of their countrymen at the level of the house.

I thought the chapter on Greenough was rather wordy, however this second-rate sculptor is again confirmed as a first-rate theorist and writer concerning the form and function of architecture. It is suggested that had the Nineteenth Century followed his advice our sorry record of tormented design might well have been bypassed or at least telescoped.

Louis Henri Sullivan was not always able to solve the problems he proposed to our society. This does not detract from the central issue that he did propose them. Indeed, as Fitch properly points out, we should pay more heed to the advice of men of Sullivan's stature. In an attempt to explain Sullivan's genius, Fitch splits him into two men: one, the rationalist master of technique and esthetic, the other a mystical poet frequently unclear and unresolved with the analytical side of his nature. The heroism of Sullivan's effort and the correctness of his vision has been well described.

Naturally, any serious work on American architecture must continually refer to Frank Lloyd Wright. Throughout the book reference is made to Mr Wright. Mr Fitch writes first of the relationship between Wright and the fine art of his day. The author is convincing in his reasons why Wright rejected the fine art of his time and goes to some length to explain why the paintings and sculpture available to him were not suited to his architectural concepts. In the chapter "Homage to a Hero," the life of Frank Lloyd Wright and the meaning of his work is brilliantly delineated. Mr Wright was always considerably larger than life-size when he was alive, and since his passing his dimensions will rightfully and continually increase.

Certainly any series of essays on American architecture must have reference to Walter Gropius and Mies van der Rohe. Both of these men have influenced building in this country, both indirectly before they came to America and directly through their work accomplished while living here. Since I am no great admirer of the buildings produced by these men, I was fascinated to read that one of Mies van der Rohe's buildings of "ravishing grace and elegance" was virtually uninhabitable until certain modifications could be made. This embarrassing dilemma of the Fox River House has been well authenticated and documented.

Three contiguous chapters in the book deal with American gardens, skyscrapers and a church. The chapter on landscaping is primarily a his-

torical analysis of the development of our American pleasure gardens. It would be wonderful if all designers and all would-be owners of picture windows observed the two postulates to their use proposed by Mr Fitch. One, that there be a picture to look at from inside the house; and two, that it be a private irreversible view, i.e., that under no circumstance could strangers look in.

In his discussion of the skin which encloses the skeleton structure of the skyscraper, Mr Fitch imagines a wall which behaves like the epidermis of the animal body, that is one which responds actively and automatically to changes in its internal environment. He suggests a capillary heating and cooling system built into it, much like the skin of a warm-blooded mammal. A building with such a system might have its sunny walls being cooled even on the coldest winter day, while the solar heat absorbed would be used by the system to heat the much colder wall of the shaded side of the building. It is also suggested that solar energy could be trapped and stored by a building against the hour of its need. These solar batteries might form the outer membranes of sunny walls. They would pick up the sunlight and convert it directly into electrical energy to power the building. If the same enterprise and financing that has gone into bombs and satellites were directed to building research, then this flight into science fiction could become reality.

The story of the Cathedral of St John the Divine is told as a means of discussing whether contemporary architects propose to come to terms with their own past. The justifiable position is argued that while we must not be slaves to tradition, to historic precedents, at the same time there must be produced work that is consistent and congruent with the old. We should have, in the middle of the twentieth century, a new perspective of the past and a new ability to live with tradition on terms of equality and respect.

In this book will be found a very sound defense of the city. The city is indeed a great generator in our culture. The architects must ponder this task which, as Mr Fitch writes, "demands considered policy and planned and resolute action."

The engineer comes in for his share of attention. Here is one of the statements concerning the engineer: "Left to his own devices, he threatens the whole race with disaster." Because of the great energies directed by the engineers, it has become imperative for the architect, along with the city planner and the landscape architect, to consider most carefully our living environments. We, the architects, have been catapulted into a new and higher order of responsibility.

Mr Fitch deals with both the historian and the critic. His discussion of the uses of history is

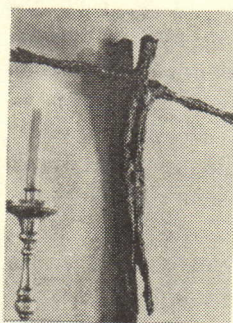
Two priceless books for architects



The "American" in American Architecture

ARCHITECTURE AND THE ESTHETICS OF PLENTY

By James Marston Fitch. "Does American Architecture display qualities that we can safely describe as characteristic, irrespective of whether or not we are proud of them?" The author answers the question in fascinating detail, exploring the problems, past and present, that make our architecture what it is today. A vivid analysis is presented of the paradox of plenty, the conflict between quantity and quality in American design. He concludes that our professionals are producing buildings that are "neither economical to build, comfortable to live in, nor simple to keep in operating order." 288 pages. More than 100 illustrations. \$7.50



Can church art be both reverent—and revolutionary?

MODERN SACRED ART AND THE CHURCH OF ASSY

By William S. Rubin. On January 4, 1951, in the town of Angers in France, a Canon of the Catholic Church was giving an illustrated lecture. As a slide of a crucifix (above) flashed upon the screen, suddenly the hall exploded in tumult. Voices cried, "Sacrilege!" The Church of Notre-Dame-de-Toute-Grace in Assy, France is a veritable museum of modern art — and, as a result, a storm center of controversy. Important as this controversy was to the world of art in general, this book is the first serious examination to be made of these unusual works. The author takes the reader step by step through the church itself, describing the architecture, the plan, and each controversial work of art. 256 pages, and 45 pages of illustrations — many in full color. \$8.75

worth reading. In large measure it can be summed up by a statement attributed to the designer, John Yeon, who said, "the past is not for burning." The author shows a considerable respect for the power of critics to influence the course of architecture. He believes that it was the critics who eventually convinced the public of the validity of contemporary architecture, both here and abroad.

The final chapter in the book, entitled "The Esthetics of Plenty," sums up some of the quandaries of modern life. The specialization necessary to modern science and technology demands precocious knowledge in the chosen fields and permits sheer illiteracy in other fields of knowledge. Planned obsolescence is discussed and declared hostile to the quality of the product produced. Our American leap into industrial plenty certainly has its opposite side of the coin. This other face is well defined in the concluding chapter. Mr Fitch concludes his book with the possibility that since the technical means of subsistence have been largely perfected that human society will require a complete reconstruction on psychological, rather than merely political or economic lines.

No question about Mr Fitch being an architectural scholar. His erudition is formidable. I must confess to scrambling for the dictionary on a number of occasions, sometimes to ferret out the exact meaning of words such as paradigms, and historiography; or to reinforce my shaky knowledge of foreign phrases, such as "pompe funebre," or "succés d'estime," or "jeunesse dore." Perhaps because of such minor matters and partially because of the very fluency of his style at times, I found the author keeping me from his thoughts by his sentences.

I was confused as to whom this book is directed. At various places it seems to me that he is writing for critics, other places for architects, and others for architectural historians and authors. I hope the general reading public "discovers" this volume, however it may be above their collective head. This was said about Adlai Stevenson's speeches and yet he collected a lot of votes. Indeed I hope I am wrong in this matter of reader acceptance.

As in any book, with a large flow of ideas and opinions, it is easy to find areas of disagreement. This is one of the virtues of the book, for in the very process of disagreeing one is forced into thinking seriously concerning these matters of special consequence to architects, but important to all. I enjoyed this work, and I heartily recommend it. Every commendation to James Marston Fitch for a stimulating, entertaining and informative book.



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COLUMBIA UNIVERSITY PRESS
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Form in Art and Nature

Edited by George Schmidt and Robert Schenck
with introduction by Adolf Portmann. Basel,
Switzerland, Basilius Presse AG 1960. 132 pp
illus slipcase. 9½" x 11½"

This is essentially a pictorial demonstration in black-and-white and handsome color of remarkable parallels between contemporary art and the world of nature as seen under extreme magnification. The concept is by no means new—Blossfeldt's "Urformen der Kunst" (1929) introduced this reader at least to the marvels of macro-photography of nature's designs. The present volume extends the idea into modes of color and far greater magnification.

The first fifty pages are tri-lingual text: German-English-French—with an excellent brief introduction by the noted bio-scientist Portmann and essays by Schmidt on the parallelism mentioned and by Schenck on distinctions between pictures as art and as scientific illustration. Origin of this particular selection lies in a 1958 bicentennial exhibition for the Swiss chemical firm of J. R. Geigy.

Portmann sees two streams of endeavor. He writes that the biologist "... turns away from the visible, and armed with a thousand instruments carries the attack back—or forward—into the world of molecular structures and events ...". In the work of artists of the last fifty years "... we have witnessed the momentous transition from the familiar world of visible forms into a more elemental world where forms are created by forces that are hidden from view ...". He notes that in the weird world of the superior microscopes of today "... the mechanisms are of a chemical nature ...". and carries on to a helpful insight that the real meeting point of art and science is the discovery that visual elements have a life of their own.

Schmidt describes the idea of the original exhibition and tells how its planners found that as soon as art became non-representational it "... came curiously near realities hidden from the eye ...". The arrangements developed along progressive comparisons of pairs: geometrical paintings with photographs of inorganic substances—non-representational paintings with the organic (animate). He warns against a too-easy



Surface structure of aluminum electronmicrograph
39,000:1. Photo: Dr Wegmann, Zurich

assumption that the artists knew of these microforms, finding instead that the similarities were simultaneous parallel developments—a result of intellectual climate.

Schenck, in the final essay, discusses the different attitudes and objectives of artist and scientist, and their conjunction in scientific illustration. He describes the tools of such vision and the characteristics of some microstructures. He too has a warning—against "... the continuing trend toward specialization ... where each separate discipline is straitjacketed by its own highly specialized technique ...". He makes knowing, brief characterizations of recent art movements and finally draws the distinction between the artist's expression of subjective emotion and the scientific illustrator's criterion of objective information.

The thirty-two pairs of plates are well-organized in categories and extremely well printed, with tri-lingual captions, enlargement data, sources and dates.

E.P.



The Life and the Work of Michelangelo

The Agony and the Ecstasy

THE BIOGRAPHICAL NOVEL

OF MICHELANGELO

Irving Stone. Garden City, NY, Doubleday & Co, Inc. 1961. 664 pp 6" x 9¼". \$5.95

One comes away from reading this long book bemused and spellbound, full of the sights and sounds and smells of sixteenth century Florence and Rome, with the tingle of the hammer and chisel in one's fingers and the white powder of marble dust in one's eyes and ears. The average reader will never know—and never care—how much of the story is fact and how much is fiction, but does it really matter? Through this book (and the movie which will undoubtedly follow) hundreds of thousands of people, who doubtless never would have known it otherwise, will have been introduced to that greatest of all periods of artistic productivity, the Cinquecento in Italy, and to scores of its personalities from painters to popes, but most of all, to its crowning genius, Michelangelo Buonarroti.

Mr Stone, whose first great success years ago was the biographical novel "Lust for Life," based

on the life of Vincent Van Gogh, has again recreated the life and times of a great artist. The story opens with the ugly little Buonarroti, aged ten, apprenticed to the painter Ghirlandaio, and follows him in great detail through his formative years in the Medici household, his early successes and disappointments as a sculptor, his ghoulish but highly successful efforts to learn human anatomy at first hand by dissection, his first public commissions, his involvement in the political factionalism of Florence, his flight from his native city and his ultimate summons to Rome. As his years progress they are presented in less detail, but by then the reader well knows his heart and his desires, his frustrations and his disappointments. None of his projects were ever accomplished simply and easily and without anguish—many were never completed at all. This, of course, was due as much to the instability of the times and the short tenures of patrons and popes, as to the inner conflicts of the artist.

It is naturally as a sculptor that Michelangelo is presented primarily—for such he always considered himself. But the story of his frescoes is here, from the lost cartoons for the wall of the Great Hall of the Signoria to the Sistine ceiling and the Last Judgment. And the story of his architecture is here, from the never-built facade for San Lorenzo through to the success of the Campidoglio and the heartaches of St Peter's.

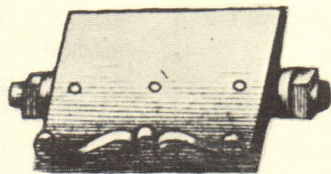
But most fully presented is the strange wondrous, inscrutable, unfathomable, proud and supremely sensitive character of the master himself.

Perhaps it is not really a true picture of him, at least as he appeared to the world, for he was certainly known to be brusque, rude, rugged and impossible for other artists to collaborate with. Yet even if Mr Stone has sweetened him a little too much, one wonders if the rather lovable, though difficult, man who emerges from these pages is not closer to the true character of Michelangelo, which he hid under his ugly, crusty exterior and revealed to only a few intimates. Why else would gay and worldly men like Tommaso Cavalieri and Giuliano da Sangallo have been his life-long friends?

As a book obviously written for widespread family consumption and undoubted ultimate Hollywood distribution, there is no hint here of alleged deeper personal relationships with some of his close friends among men, but there is a new love-life with women, both real and imaginary, which enriches the master's life in a manner which he doubtless never experienced. According to the best of scholars, there is no reason to believe that Michelangelo ever really had the chaste love affair with Contessina di Medici which Mr Stone traces through the story—although the author's researches may have turned up some hint of it; and as for the delicious Clarissa of Bologna, it is highly doubtful if she ever existed at all. But she *could*

have, and such flights of fancy are the novelist's prerogative. Vittoria Colonna, however, appears in her true role in Michelangelo's life, and his mature and idealistic love for her released new forces within him and new expressions—in poetry.

But this is a wonderful book and an important book, and in spite of minor deviations, basically a truthful book. Mr Stone and his family lived in Florence and Rome for several years to absorb the atmosphere as well as to complete the research. Stone had Michelangelo's 495 known letters, as well as his records and contracts, translated into English so as to make them available for minute study; he worked as a stone-cutter in the quarries, cutting out pure white marble from Carrara, green-gray *pietra serena* from Settignano; he learned to carve in marble, so as to be able to convey to his readers the "feel" of carving stone. All this, plus the constant procession through the pages of real-life characters—Lorenzo di Medici, Ghirlandaio, Botticelli, Leonardo da Vinci, Savonarola, Perugino, the Sangallos, Raphael, Bramante, and the many popes from Leo X to Pius IV—give the book a ring of veracity and a sensation of high reality. And for anyone, architect or lover of art, who has ever trod the cobblestones of Florence or the paving blocks of Rome, reading this story will be a vivid and lasting experience. J. W.



The Architecture of Michelangelo

James S. Ackerman. NY, The Viking Press Inc, 1961. 156 pp plus 83 plates. 7¼" x 9¾". \$12.50

Michelangelo was forty before he turned to architecture, and his first design, a facade for the Medici church of San Lorenzo in Florence, was never executed. But from then on until he unwillingly took over in his seventies the work Bramante and Raphael had begun on St Peter's, he was seldom free of architectural commissions—free, that is, to work as a sculptor as he chose.

"The Architecture of Michelangelo" is the first book in English in which all of the brusque mas-

ter's architecture is illustrated, discussed and analyzed, both historically and critically. The author is now Professor of Fine Arts at Harvard University, and from 1949 to 1952 was a Research Fellow at the American Academy in Rome.

Each of Michelangelo's projects is treated in a separate chapter with scholarly yet highly readable thoroughness, including his unbuilt projects such as his designs for the fortifications of Florence. The 153 half-tones not only reproduce excellent photographs of the buildings, but also many of Michelangelo's sketches and other contemporary drawings and engravings. There is a complete bibliography at the end of the book.

Mr Ackerman finds, by his analyses of Michelangelo's drawings, that his studies for buildings reveal his search for sculptural form, even before the structural system was determined. "By contrast to contemporaries trained in fifteenth-century



proportions, Michelangelo rarely indicated measurements or scale on his drawings, never worked to a module, and avoided the ruler and compass until the design was finally determined. From the start he dealt with qualities rather than quantities. . . . Michelangelo rarely made perspective sketches, because he thought of the observer being in motion and hesitated to visualize buildings from a fixed point. To study three-dimensional effects he made clay models."

Michelangelo's indifference to purely classical canons shocked his contemporaries. Bramante, whose death was the immediate cause of Michelangelo's introduction into the field of architecture, had just perfected a truly "Roman renaissance" which was widely admired—such as the Tempietto in San Pietro in Montorio. While other architects spoke of "emulating and rivalling ancient Rome, he [Michelangelo] took from it only what suited

his taste, rarely adopting a motif without giving it new form or a new meaning. Yet he invariably retained essential features from ancient models in order to force the observer to recollect the source while enjoying the innovations."

The author seems to have penetrated deeply into Michelangelo's thinking, as expressed in all his work. He ascribes motives and objectives to him purely on the evidences of his designs. While he remains purely objective and makes no attempt to recreate Michelangelo as an individual, a personality comes through just the same, and it is quite a different Michelangelo from the one recreated by Irving Stone, yet both are based on the same source material. Stone's, of course, is presented in colorful fiction; Ackerman's in a restrained and scholarly study. The reader will find it interesting to compare the two pictures of the mind of the master.

J. W.

The Visual Arts Today

Gyorgy Kepes. Wesleyan University Press, Middletown, Conn., 1961, 272 pp illus. 10¼" x 7". \$6.00

Reviewed by Henri Dorra for the *AIA Journal*. Mr Dorra is Assistant Director, Pennsylvania Museum of Fine Arts.

In his foreword to this anthology, Professor Kepes postulates that there is a universal language of the visual arts, that "the created visual image . . ." is the link between ". . . the outer vision that explores the external world with the inner vision that shapes our felt experiences into symbols. These . . . pictures . . . are basic to communication . . . They provide a foundation for the arts and sciences and make social and intellectual growth possible."

To what extent is this language of the visual arts universal? To what extent is it regulated by rational rules—a grammar of the visual arts—and to what extent are these rules evolving to meet the new requirements that might be made on them? Are the creative artists of today contributing new elements to this language?

For Margaret Meade, in the opening essay, the gap between artist and critic on the one hand, and the common man on the other, is widening. According to the anthropologist, the proliferation of mechanical reproductions in the modern world and the constant exposure to over-expressive images to which we are subjected are cheapening the significance of the message of visual elements.

This is a view shared by the artists themselves. Professor Kepes complains of "the corruption of our visual surroundings by cultural forces divorced from art." Advertising artists, according to Paul and Ann Rand, are ". . . screamed at . . . from all sides in a crazy cacophony" by their own art forms.

Some of the artists are even more pessimistic on the subject of a language of the visual arts. For I. Rice Pereira, ". . . the visual arts show a dissolution of thought and the disintegration of the object and consciousness." Other modern artists make it quite clear that their art is a mysterious alchemy that is purely personal, and that communication is the lesser of their concerns. For Dubuffet, the act of painting is almost unconscious; creation is a magic phenomenon beyond the con-

trol of the artist: ". . . I add and take away, I change, I revise . . . until a certain extraordinary release occurs in the picture . . . as if by magic I had evoked a warmth, a throbbing, a breathing so compelling as to strike fear, as if I had hit on a dangerous mechanism for creating life, without knowing how or when."

Alone among the artists quoted, Kandinsky seems to have accepted the possibility of an art form based on rational organization: ". . . the final abstract expression of any art is numbers." But then, Kandinsky belonged to an older generation that did not spurn "systems."

And yet, some modern artists *are* understood and admired by their fellow men, and therefore must be presumed to use a language that is intelligible and effective. But the artists themselves, it appears, would be the last ones to admit it.

Paradoxically, the most constructive statements on the potentialities of a language of the visual arts are made by scientists. In a brilliant essay, Paul Weiss, a biologist, discusses the esthetic significance of a number of simple rules obtaining in certain natural shapes—the logarithmic curve of shells, the patterns created by rhythmic excitation such as waves, the even density of the distribution of coral branches, etc. In all these cases, ". . . we have been dealing with the ordered reactions of orderly elements to an ordered set of conditions, and the result is order. It is this rule of order that we perceive as beauty." A mathematician, Andreas Speiser, mentions some of the rules of harmony that have been used by artists through the ages from ancient Egyptians and Pythagoras to our time, and indicates that mathematicians can develop new systems based on different types of harmony, and that these can be selected to suit specific needs.

Rudolf Wittkower, an art historian, gives a masterly review of traditional and modern systems of proportions, warns against the unimaginative use of any system, and concludes that ". . . today's organic chaos is a passing phase, and . . . the search for systems of proportions in the arts will continue as long as art remains an endeavor of man." Another art historian E. H. Gombrich, cautions the most enthusiastic expressionists against the pitfalls of a purely physiognomic language: ". . . without some framework against which to test and modify our first impressions, we are left to the tender mercies of our initial projections." Nevertheless, Professor Gombrich is also of the opinion that "we must help the artist to find a valid theory of articulation that does justice not only to the expressive character of his elements but also to the mystery of ordered form."

The overall impression, then, is that an organized language of the visual arts, to be used con-

sciously by artists and designers, is not only a possibility but a necessity. That language can be based on rules of harmony that have been known since times immemorial, but can also be based on new rules to be evolved by esthetically inclined mathematicians, and mathematically inclined artists. What is more, the rules can be adapted to the requirements of a particular period, and even of a particular job.

Professor Kepes should be congratulated for having assembled such lively and stimulating texts on such an abstruse subject. He has selected most successfully previously published passages by some of the authors, while asking others to write expressly for this book (it is unfortunate, however, that he did not reveal what specific questions he has asked the latter).

Some of the participants, regrettably, do not have the same literary facility as others, and one occasionally comes across such gems as: "But there is no creativity in the sure thing of a beaten track."



Created Pawns or Creative Partners

Emiel J. Christensen, AIA. Columbus, Nebraska,
Emiel J. Christensen, 1961. 142 pp. \$3.25

Within the covers of this book are the accumulated lectures of Mr Christensen, a part-time Professor of Architecture and Coordinator of Community Services for the University of Nebraska, a supervisor of planning for the Division of Nebraska Resources and a senior member of an architecture and community planning firm

in Columbus, Nebraska. The book grew out of forty years of study and observation of the creative process as it operates in community life.

The reader will find no community plans here, no examples of well-planned communities, no discussions of open spaces, high-rise apartments and the like. Instead, he will find one man's unique approach to the elements or creative factors of the creative process and his theories on the relation between physical plant elements of the habitat and development of individual capabilities for organized endeavors.

The author's thesis, simply stated, is that our physical technology is far outstripping our social technology; that daily we are promised more powerful weapons, but are offered no assurance of better interpersonal, intergroup or international relations. This course of lectures seeks to explore ethical concepts that can be integrated with personal choice and voluntary participation by the citizen in group achievements.

This approach suggests that effective group effort or action is closely linked with the operation and observance of basic functional forces that have high ethical potentials. Mr Christensen also suggests that these forces with their ethical potential originate and develop at the community level but tend to break down or weaken this potential when extended over wide areas or embrace great numbers. For instance: Political activities become more opportunism than citizen convictions; economic activities become more craft protection than product improvement; education becomes more the promotion of techniques of learning than stimulating intellectual integrity; religion becomes more a jointly observed ritual than a shared faith.

In order to assure a continuing cooperative effort, Mr Christensen says that citizens must understand six criteria: Acquaintance with community problems; communication to promote mutual understanding; encouragement of individuals and groups to understand and evaluate their allegiance so that the community and its varied segments may experience stabilized achievement; promotion of the study of the relation between effective authority and unified allegiance; full study of ownership and its recognition as private and public experience; recognition of personal and group skills or specialization as fundamental to collective growth and stability.

There are some excellent thoughts in this little book, and some over-whelming thoughts. Here is an author that seems to have an answer to man's question, "Why can't we?" One of the faults in this sort of thing is that most of the premises must—because of human nature—start out with the little word "if."
N.C.B.



Wilhelm Lehmbruck.
Kneeling Woman (1911)
Museum of Modern Art,
NYC

Sculpture of This Century

Michel Seuphor. New York, Braziller, 1960. 372 pp illus. 8" x 9½" \$15.00

Somewhat more than half of this book is composed of brief illustrated essays on individual sculptors and their work, on sculpture in Western Europe and America, and on sculpture and architecture. The remainder consists of biographical

notes on an amazing total of more than 400 sculptors. Some 400 photo illustrations form a two-dimensional summary of the sculpture of the last sixty years—with a few notable omissions.

Certain aspects of the original French text bleed through in this translation by Haakon Chevalier. Stylistically it is rather pretentious and Seuphor seems self-designated (if quite well prepared) to lead a determined three-dimensional crusade against the superficial, literary, possibly perfidious sister, the two-dimensional art of painting.

Parts of this book are anecdotal, filled with name-dropping. In other places, pat oversimplifications may pall as much as they illuminate. He finds, for instance, Rodin, for sculpture, the equivalent of Van Gogh, Gauguin and Cézanne for painting . . . There is a frank acknowledgement, however, that at the turn of the century it was the painters-turned-sculptors (even briefly) who did some of the best work. Characteristically, the author attributes this to need for relief from their usual flat medium.

The temptation to start naming names we'll resist—to each his own favorites, most of them are here. The author frustrates his readers somewhat by listing many works not illustrated but a generous selection are shown in large clear photographs. The informational data could have been organized better in tables of works and dates with an indication of which ones are illustrated. The paper is too shiny but the type is large and clear with not too many errors.

The paragraph in praise of the lovely pair of Lehmbruck's in the Museum of Modern Art in New York City (Kneeling Woman and Standing Man) does evoke a memory. Years ago a woman visitor led a bright-eyed moppet through that gallery. The charming Kneeler was admired and then they turned to the Man—the little girl exclaimed in delighted recognition: "Well, Abraham Lincoln!" What else are patterns for, Amy Lowell?

E.P.

The City in History

Lewis Mumford. New York, Harcourt, Brace & World, Inc, 1961. 657 pp illus. 6¼" x 9¼". \$11.50

This important book has been on the bookshelves since April, so it is now far too late for a conventional review. It has been extensively reviewed, and by good men. So this writer's effort will be to emphasize its importance to our generation of architects and to all those involved in the planning or arrangement of cities.

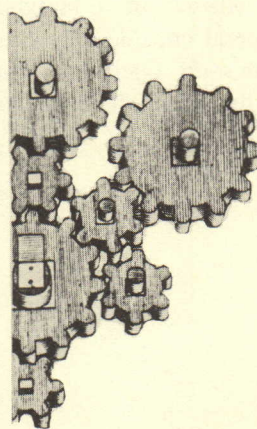
Most American architects do not fully appreciate the true stature of Lewis Mumford. A generation ago they read his "Sticks and Stones" (1924), and ever since they have read his columns of architectural criticism in the *New Yorker* and occasional articles in other magazines. They have condescendingly accepted him as an architectural critic, and let him go at that level. A few—and bless them—may have read "The Culture of Cities" (1938), and consequently got a better picture of the man. But few architects, through their own lack of awareness, appreciate his position in the world of letters.

Gentlemen, Lewis Mumford is one of the foremost men of American letters, and perhaps the foremost American philosopher of our time. The architectural profession is exceedingly fortunate that such a man has chosen the field of architecture and planning as his special interest, the specific focus of his widely-ranging thought. He has been too close to the architectural profession all these years to be appreciated by those who owe him the most.

In forty years, Mr Mumford has published twenty books, to say nothing of essays, critiques, magazine articles and reviews. Only seven of them deal directly with architecture. The others may be placed under the headings of literature, philosophy and even sociology. He has covered the entire range of American thought. Yet architecture and planning and the culture (in the biological sense) of cities has always been his major interest. This writer remembers him from his own days as a young draftsman in the office of Frederick L. Ackerman in New York, during the planning of Sunnyside and Radburn, when young Lewis Mumford used to come into the office with Clarence Stein and Henry Wright. Mumford went to live in Sunnyside—so did the writer.

During the 1950s Mr Mumford was for five years Professor of City Planning at the University of Pennsylvania, and for three more years Visiting Bemis Professor there, commuting weekly from his rural home in Amenia, New York. He is currently lecturing at the University of California—presumably still commuting from the amenities of Amenia. This year, as we should know, the Royal Institute of British Architects awarded him its Royal Gold Medal for Architecture, in recognition of his services to architecture and town planning through his lectures and writings.

"The City in History" is by no means Lewis Mumford's last word, for Mr M. is fortunately an exceedingly vigorous man in his early sixties—as



those who saw and heard him at the recent AIA convention well know. But the book is certainly a magnificent summing up of his observations and wisdom to date. As is characteristic of the man, the book is rich in human understanding, the earthly knowledge of what makes man tick, what makes us as we are. Its detailed information is fabulous, its interpretations and explanations of causes and effects are absorbing, its illustrations are complete from primitive shelter to the Golden Triangle. It can, and should, be read, not as a history of the organic growth of the community and the city, but as a history of civilization. It should be read not only by all thoughtful architects and planners, but by all sociologists and students of social history—and it probably will be. It should be read by all whose work or interests bring them in touch with *people* and *places*. And who isn't in the most constant and closest touch with people and places.

J. W.

Interiors Book of Restaurants

William Wilson Atkin and Joan Adler. New York, Whitney Library of Design, 1960. 215 pp illus. 9" x 12".

Leafing through the Portfolio of Examples in this book is like making a hasty inspection trip. Even though the excellent illustrations have been published in the *Interiors* magazine, their assembly in this book not only makes them convenient for reference, but the impact resulting from study of the samples is greater than is experienced from looking at the separate examples as they are published in the magazine.

The text is written in a sprightly style and covers such general considerations as reasons for failures in restaurant operation, choice of site, financing, and the effect of design on success of

operation. The problems of urban eating places are considered separately from those of roadside establishments. Types of restaurants are classified as festive, luncheonette, and cafeteria.

In the section on Design Decisions there are discussions on the preparation of program; and on the design of the dining room and bar, lobbies and their appurtenances, the kitchen and the exterior. Architects may object to the following statement: ". . . industrial design firms, and increasing numbers of interior design firms have as members of their staffs registered architects. Such firms are able to handle an entire building just as an architectural firm would."

Books on building types are seldom up-to-date long after publication; as in indicated by the fact that the November issue of *Interiors* features illustrations of restaurants not in the book. As seems to be unavoidable, there are a few typographical errors.

The format of the book is excellent. It should be in the library of every architect who is interested in restaurant design.

C. H. C.



The World of Great Architecture

FROM THE GREEKS TO THE NINETEENTH CENTURY

R. Furneaux Jordan. New York, Viking 1961. 460 pp illus. \$22.50

Color is an inherent element of architecture. And the 112 beautifully, subtly and faithfully photographed and reproduced full-page color plates of this book bring the great treasures of "The Art of Building in Europe" (the far more to the point original German title) to exhilarating, sparkling life. From Doric Paestum to Garnier's revival baroque Paris Opera, the 112 full-page color plates illustrate in chronological order just about all the buildings of western culture which

make architecture the mother of the arts. You have to see San Vitale in Ravenna, Hagia Sophia in Constantinople, the Orvieto Cathedral, or Die Wies in the Swabian Alps in color photos as good as these to appreciate what sensory impact the integration of art and architecture has reached in the past and what we are still missing with our contemporary, monochrome austerity. The illustrations on white coated stock are bound between pages of very attractive grey antique paper on which, in handsome typography, only a few lines of Mr Jordan's text and Dr Cichy's extensive and most informative picture captions are printed. This makes for striking book design. But it is irritating that the excellent text—perhaps the most concise and absorbing brief survey of architectural history I have seen—is so scattered throughout the book and that the annotations are so far removed from the illustrations they describe. Nor does the pedestrian binding and jacket do justice to this masterpiece of book making. Nevertheless, this volume is well worth its high price and, whether layman or scholar, he must be callous, indeed, who is not delighted by it.

W.V.E.

Indonesia—

THE ART OF AN ISLAND GROUP

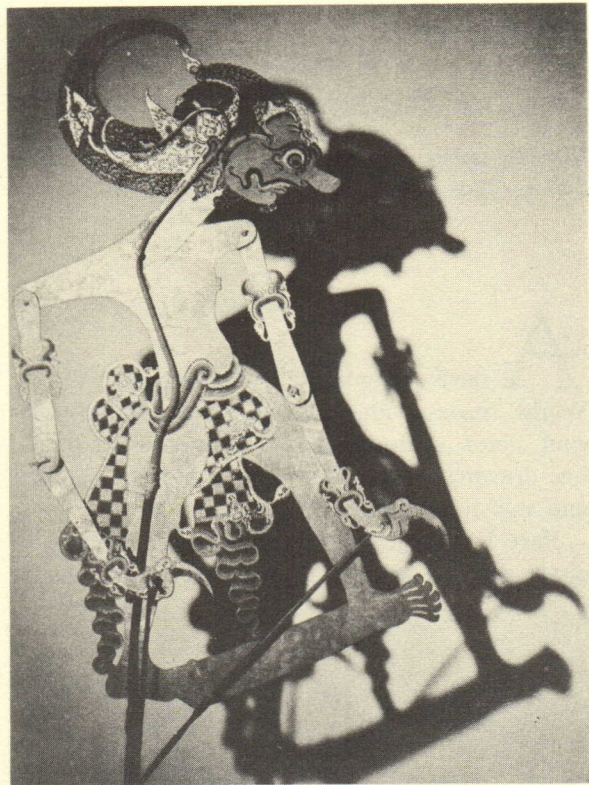
Frits A. Wagner. New York, McGraw-Hill, 1959.
257 pp illus slipcase 7¼" x 9½" \$7.95

Another volume in the "Art of the World" series, this one keeps up the standard of good German printing on soft paper with sixty excellent color reproductions tipped-in. The text, by a Dutch authority, lays emphasis on non-Buddhist periods—that era will be treated more fully in another volume. Although much has been published on separate Indonesian arts and crafts (there are three pages of selected references in fine print) this is perhaps a first attempt to present a comprehensive summary of them in all their diversity. Some 4000 years have elapsed since the first emigrations from southeast China and in these forty centuries, due no doubt to the penetrations of sea-routes, perhaps no part of the world has been subject to so many changing cultural and religious influences. The nature of these islands and the societies which developed in them led as well to differing relationships and isolations. Some neolithic groups were practically unknown for 2000 years. Now they know about bulldozers and outboard motors.

After brief discussion of prehistoric periods, the author describes and illustrates typical decorative and applied arts, the influence of Indian culture, the development of Hindu-Javanese literature, architecture, sculpture and the unique *Wayang* (shadow-puppet) plays. Next comes a chapter on the Islamic period—beginning AD 1450. The sister arts of music and dance are not neglected and their piquant exoticism are a delight to the sophisticated ear and eye. The islanders' best-known craft of course is textile design and dyeing.

The rich culture of Bali is handled separately, followed by a final chapter on nineteenth and twentieth century Indonesia and its search for its own expression in an area with 250 languages!

Magic, myth and tradition governed much early and isolated work. Primitive ancestor-worship was often fundamental, with overlays of later belief forced by conquest. Dr Wagner makes a clear point that Indian culture can hardly be divided into separate categories of religion, science, art and social systems. In the same way the various Indonesian cultural expressions overlap and complement each other. Certain dances for instance, and even textiles, have an essentially religious significance.



Wayang puppet figure (Java) 24" high. Photo: Royal Tropical Institute, Amsterdam

This tremendously rich culture of the masked dance, the Gamelan orchestra, the colorful, laborious batik, the metallurgical mastery of the armorer's craft for kris and lance, was cast adrift by the cultural ignorance of early Western governments, missionaries and meretricious trade-goods. A notable exception was the brief rule by Thomas Stamford Raffles as a British vice-governor (1812-1816). Anchored in the harbor of a continuous tradition in which each design motif had meaning, the artist for centuries had had a social and economic place in every community and princeling's court. In the transition to a centralized, money-economy he was soon in rough water. Indonesian artists today are struggling with the problems of artists elsewhere in the world who work within the traditions of individual expression.

Many fine things are being done belatedly to preserve some of this heritage, to encourage again each of these expressions. Pressures of an indiscriminating tourist trade are always a great danger. A Gamelan orchestra was even taken on a tour of the western world—and steps are being taken toward a common language (probably Malay)—but this is a new world without the old communal meanings, almost as different as the solar system we are beginning to explore. Perhaps our planetary neighbors will refer to us as neo-atomic. E.P.

Africa—

THE ART OF NEGRO PEOPLE

Elsy Leuzinger. New York, McGraw-Hill, 1960. 247 pp illus slipcase. 7¼" x 9½". \$7.95

A third volume in this fine "Art of the World" series with a wealth of particularly elegant color reproductions.* Numerous marginal line-drawings serve to illustrate minor examples and stylistic variations.

Part I is a general introduction dealing concisely with Africa and its bewildering fragmenta-



Bacham dance—mask, Bamenda, Cameroons. Rietberg Museum, Zurich. Photo: W. Bruggmann, Winterthur

tion in geography, climate, religion, race and society—as well as with material, technique and form in art.

Part II systematically covers in brief outlines the art characteristics of Black Africa: The Sudan, West and East sectors of the Atlantic coast, the Cameroons and French Equatorial Africa, "Belgian" Congo, East and SE Africa—no North Africa, Sahara, Egypt, Ethiopia or South Africa. Since the book was in the making in an original German edition before current upsets, these group-

ings are already changing politically, almost daily, with no effect on the importance or validity of the record in this book.

Useful appendices include maps, a table of cultures, references and a brief glossary.

Although limited by the approaches of ethnology rather than the fuller treatment of cultural anthropology, this book attempts to answer such questions as: Who are the people who created such works? Whence do they obtain their artistic power? What are the spiritual sources of their tremendous, vital creativity? What is the message of this art? These are important areas for us to know about today as this continent challenges colonialism.

Inevitable conclusions are found here in ancient religious traditions of ancestor-worship, etc, which for years have been yielding to Islam and Christianity with their differing denials of "idolatry." The ages old mysteries of the supernatural, of human and other fertility, sex, growth, seasonal change, disease, are generally subsumed under the cultural instruments of myth, magic, fetish and taboo. For these controls the white man has exchanged an equally terrifying catalog of vitamins, viruses, neuroses and allergies which are at least as narrowly verifiable on a short-term basis as a presidential election. As we view some of our industrial merger cannibalism, we might even doubt the theme of Flanders' and Swan's catchy tune "Eating People is Wrong!"

Sociological conclusions are found in this book also in tribal customs such as matriarchy, or the many different secret societies (some inter-tribal?) with their tradition-conserving function of marking the life-stages of the individual by what the French call so well "*rites de passage*"—each of which has lent powerful impulses to artistic expression. In these traditions are the roots of such art—when they weaken, this tremendously vital work becomes the decadent output of a souvenir factory with no relation to the life of the people.

This study is within other limits. It is concerned with the visual arts alone—no music, dance, poetry or drama. It is silent about written languages and even the famous drums. Architectural references are slight, a few notes on materials and exterior form—"cone-shaped huts," etc, are illustrated in some variety but without explanation of social and domestic patterns which are expressed in village and family dwelling plans. Even textiles are treated rather superficially—but then this is not an encyclopedia and it is generous in what it does cover.

There is some confusion about the influence of African art on the beginnings of Cubism or Post-Impressionist art. Picasso has denied its influence upon his work before 1910 despite certain 1907 paintings. It has been conjectured that this might

* others previously reviewed: INDIA *AIA Journal*, INDONESIA

have been an influence, concealed from him, via primitive Iberian art. There is no doubt that several African masks were the decor for the famous artists' "banquet" in honor of Rousseau in 1908—and later, Guillaume Apollinaire nicknamed Picasso "The Bird of Benin" in reference to the unmistakable influences of Africa upon the Picasso of 1913 which ended what was called Analytic Cubism.

Of the work illustrated in this book, probably the most appealing objects to western peoples are these same magnificent masks. The lovely sophisticated bronzes and other sculptures are perhaps more localized and impressive technically but the masks seem to be everywhere. Some of these powerfully evocative abstract arrangements become essays in pure pattern and form, valuable to us as experiences in design, whatever their significance may have been to initiates. They communicate something non-literal—beyond language—which might be thought of as a criterion of great art.

E.P.

Rembrandt As a Draftsman

Otto Benesch. New York, Doubleday (Phaidon), 1960. 164 pp illus. 7½" x 10¾". \$5.95

This fine, inexpensive study of Rembrandt's drawings begins with a thirty-page essay illustrated with reproductions of sources and some of the artist's own major paintings for which drawings have been found. This is followed by 105 drawings in various media, four in color, reproduced in photogravure at original size on slightly yellow paper. Finally, a twenty-page annotated catalog of the drawings shown—in the following meticulous style:

"2. OLD MAN WITH A BOOK, SEATED IN PROFILE TO RIGHT, FULL-LENGTH

Red and black chalk, heightened with white
295 x 210 mm

Berlin, Kupferstichkabinett
HdG 112; Benesch 7.

"Careful drawing after the model, embodying the thorough study of nature, as practised by the followers of Caravaggio in Utrecht and Amster-

dam, Used for the figure of one of the 'Two Philosophers in Discussion' (fig 3), a painting of 1628 in the National Gallery of Victoria, Melbourne (Bredius 423)."

This is a work of devoted scholarship, based upon long immersion in the period and the work of the great Dutch painter. Professor Benesch is author of several publications on Rembrandt, including the six-volume critical catalog of 1384 drawings from which these were selected (with a few additions).

The introductory essay places the artist in history and conveys his unique artistic character for which drawing is the key, drawing which is magical in its economical grasp of likeness, light and space. It was only in the late Renaissance that drawings began to be recognized as complete works of art in themselves—"not intermediate steps to a higher form . . ." While many of these



Rembrandt self-portrait (1655). Rembrandt—Huis, Amsterdam

were studies of details for paintings, others in this selection were signed and dated as final statements of the artist's intention. It really does not matter that the subjects are often "mere storytelling." They have their popular appeal but the quality of these drawings speaks for itself.

It has long been this reviewer's conviction that the act of drawing is a deep mystery, the dynamic integration of many elements of expression at the end of a little, moving stick. Benesch, toward the end of his essay, puts it memorably: ". . . the immediateness and spontaneity of the diagram of mind that drawing means . . ."

E.P.

Drums in the Forest

Alfred Proctor James and Charles Morse Stotz. Pittsburgh, Pa., The Historical Society of Western Pennsylvania, 1958. 227 pp illus. 6" x 9".

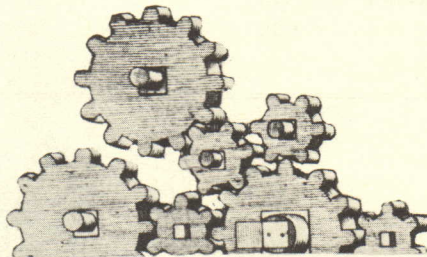
Mr James is Professor Emeritus of History at the University of Pittsburgh and the author of several historical works dealing with western Pennsylvania. "Charley" Stotz, FAIA, is well-known to the members of the profession throughout the state, and has spent many years in research on the

origins and development of pre-Revolutionary forts in America.

The first fifty-odd pages, "Decision at the Forks," are Dr James'; the following 130 pages, "Defense in the Wilderness," are Mr Stotz'. The story of the development of the fort is told in detail, perhaps more fully here than anywhere else, and is amply illustrated by reproductions of old engravings, photographs, and—best of all—by many careful line drawings by Mr Stotz. To those who know the "Golden Triangle" today, the story of Fort Pitt will be of special interest.

Not too localized nor too specialized to be of general interest, this book, primarily by one of our own FAIAs, should find a wide readership among all those interested in any way in their country's history.

J. W.



Songs by Robert Schmertz

Robert Schmertz, FAIA. Recorded on Corona Records, George Heid Productions, Penn-Sheraton Hotel, Pittsburgh, Pa.

The sub-title of this 33 1/3 album of songs is "Songs for Architects and the Girl Friends." It is likely that this group, plus others who like off-beat and "fun" recordings will go for this fourth album of our friend Bob.

All of the songs are written by Bob and sung by Bob, with banjo accompaniment by Bob. His son, Jack, does get in on one of them with a flute obligato. No Perry Como, of course, but the spirit and twinkle in his voice makes each of the thirteen songs a stand-out.

The titles of the songs are almost as interesting as the lyrics. Consider these: "When the Architect Comes to Jordan (Will He Cross?)"

The thesis here is that he won't cross, particularly when the Angel sees fee-cutting, job stealing and old stock plans. "The Doric Column is Coming Back," "Walter and Mies and Corbu," "The Old White Bones of Christopher Wren," and ten laughing others are included.

Perhaps one of the funniest songs is "The Queen Anne Front." A sample of the lyric goes: "When Great Grandfather was a gay young blade and Great Grandmother was his bride—they found a lot, a very pretty spot over on the old North Side. It sloped down to the river from River Avenue—Great Grandma said it would give her such a lovely view. So they took a look in Godey's Ladies Book to see what they could find. And they found a house, a jolly little house with a Queen Anne front and a Mary Ann behind." The lyrics then trace the house from its honeymoon quality to its use as a seminary, to a rooming house, to a house with "several very pretty ladies" who were subsequently hauled away by a paddy wagon.

Hearing this album is almost as good as hearing Bob in person at an AIA Convention, plucking his banjo and singing his songs about architects.

N.C.B.

Big — Small Specialized — General



► Big office; small office; specialized practice, general practice: These adjectives represent a puzzle in the affairs of the AIA which I prefer to believe can be solved.

Two major areas of planning are progressing at committee level which may have a profound effect upon practice. They have one objective in common: Namely, to enable architects to compete more successfully in today's market for design services against other organizations which would sell "architectural services" on a non-professional basis as a part of a business package.

Throughout the committee discussions there runs a current of concern as to the relative value of new developments for the big office as compared with the small one; for the general practitioner as compared with the office that specializes in certain fields. The AIA membership spans all types of practice. Can we benefit them all with every new activity? Or, if a new program benefits one group of members, will it have beneficial side effects for others?

To become specific: The Committee on the Profession is rapidly advancing its concept of "expanded services of the architect," first proposed in its report in the *Journal* in June, 1960. This concept would enable the architect to perform for the owner, as the latter's professional agent, certain services which the package dealer performs with impunity but which are as yet inadequately recognized as ethical practice in the Mandatory Standards. Under the new concept, the architect could perform services for his client in such areas as economic analyses, building finance, land assembly or entrepreneurial promotion—and do it professionally and ethically.

From every segment of our membership we hear that the profession must change and expand its services to meet the demands of today's clients. It is practically certain that the proposals of the Committee on the Profession will reach a stage of approval and promulgation within the coming year. In fact, the 1962 Convention program is shaping up on the theme, of "new dimensions in architectural practice" because of the universal

interest of the membership in the problems related to this subject.

Now, as soon as ethical sanction is given to new services, many of the larger offices will be equipped to provide them at once. Does this mean the smaller offices will not benefit? Could this help the larger offices to grow bigger at the expense of the smaller ones? We don't think so. As we hear it, *all* architectural practice is threatened by package competition.

With the small office in mind, the Committee is planning a companion program of educational services to tell the practitioner what he needs to know in new fields beyond his present experience.

Two other committees are studying a proposal for AIA affiliated "councils" of architects who specialize in a major type or class of buildings. The field of industrial facilities is under specific study because this is a focal point for "package" competition. A council of industrial architects could advance its collective technical knowledge, could engage in institutional advertising to industry on behalf of architects.

A few years ago church architects formed the Church Architectural Guild; specifications experts formed the Construction Specifications Institute. There was a need for these organizations or they would have died, not grown. The AIA did not fulfill that need. Now the idea of "councils" has arisen and some of us believe there should be no further splintering of the AIA. Any "council" should be able to attain its objectives *within* the framework of AIA ethics as an affiliate. The pattern of affiliated specialty groups is well established in large professional societies like the AMA. Architecture is getting that big as a profession.

The most careful study is being given to the Council idea. If it gains Board approval, it will be with the conviction that it will strengthen the whole Institute and the whole profession.

Specialized-general-big-small. If the Institute is to move vigorously, each move cannot take care of *every* need of *each* type of member like a gentle snowfall. But the total result can be good for all. ◀

W.H.S.



A. Reinhold Melander, President, Duluth, Minnesota; Chandler C. Cohagen, 1st Vice President, Billings, Montana; Paul W. Drake, 2nd Vice President, Summit, New Jersey; A. John Brenner, Secretary, Phoenix, Arizona; C. J. Paderewski, Treasurer, San Diego, California; Earl L. Mathes, Director, New Orleans, Louisiana; John E. Ramsay, Director, Salisbury, North Carolina; George F. Schatz, Director, Cincinnati, Ohio; Walter F. Martens, Past President, Charleston, West Virginia

Why NCARB?

by **Earl L. Mathes, AIA**

► During the growth of the profession in the United States, architectural organizations have been established in an effort to promote certain standards that would be of mutual benefit to the practicing architects as a group and, above all, to safeguard life, health, and property and promote the public welfare, reserving this position to those persons who have proper qualifications.

One of these organizations is The National Council of Architectural Registration Boards that was founded over forty years ago in an effort, as stated in its constitution, to

... promote high standards of preparation for architectural practice; to foster the enactment of laws pertaining to the practice of architecture; to equalize and improve the standards for the examination of applicants for State registration or license; and to compile and transfer records to facilitate architectural registration and/or licensing between States.

Since the creation of this organization, much thought and effort went into this undertaking and many specific requirements have been set up so that their ideals could be adequately accomplished.

From its infancy this organization has been quite fortunate in having qualified architects, men of vision, who unceasingly gave of their time in promoting the ideals set forth as the goal for their group.

In reviewing the NCARB Constitution it will be noted that its membership comprises the legally constituted State Architectural Registration and/or licensing Boards who are charged through law with the task of regulating examinations, li-

censes, and architectural practice in their respective states. At present the NCARB has advanced to the point where all fifty State Boards are represented along with the District of Columbia, Puerto Rico and the Canal Zone. With an organization such as this the various experiences and problems encountered within the States can be discussed and evaluated jointly until a more workable solution is found.

The Council desires to promote and to help establish the best available preparation for the education of future architects. To accomplish this end it cooperates fully with The American Institute of Architects and with the Association of Collegiate Schools of Architecture in assisting the National Architectural Accrediting Board.

It performs many services to individual members of the architectural profession. One such service is the Council Record. This provides a permanent depository of detailed authenticated personal records of the membership of the architectural profession, and with this information facilitates the process of reciprocal recognition of registration between the States. The Council, if requested, shall obtain, authenticate, and record any factual data of an applicant's training, practice, and character, and shall compile the results into the Council Record. This document will then be forwarded to any State Board or any desired agency upon request of the applicant and upon payment of a stipulated fee.

In some instances, however, the Boards themselves request that if the applicant seeks reciprocal registration through the NCARB that his application to his state be only on the basis of an NCARB Certificate. Those State Boards cannot take the type of action desired by an applicant

unless he has an NCARB Certificate. For an Agency there are some limitations on just who could receive a complete copy of the Council Record. Since these reference replies are confidential, only State Boards can normally receive them. There have been times in the past when the Record has been sent to schools where an architect is applying for a teaching position or some agency of that nature. The Council Record contains confidential reference replies concerning an applicant including some data on his examination for registration in his own state. The Certificate contains a detailed NCARB examination report and the Council's approval of those examinations. This is why many State Boards prefer the Certificate to the Record.

The Council Certification is given to an applicant who holds a Council Record which verifies that the applicant has complied with the Council standards of education and experience required for admission to examination; and furthermore that the applicant has passed an examination which conformed to the Council standards of content, extent and length of time. In addition to this verification, the certification shall carry the recommendation of the Council that registration and/or licensing be granted without further written examination.

Another service is the periodic review of the before-said certification. New requirements are that this certification shall be kept up-to-date each year from the date of issue. Further use of the certification is predicated upon the submission of an annual fee and the submission of an annual affidavit containing such information as the Council deems necessary. This affidavit is used to obtain responses from employes, clients, fellow architects and a statement from the State Board of the state in which the holder resides, certifying that the holder is currently registered.

The Council will also cancel its certification upon receipt of knowledge that a state has revoked either the license or registration of an architect.

This group also maintains a Board of Review which shall review and decide on all cases referring to any application for admission to examination which does not show full compliance with the rules and regulations pertaining to education and experience; to questions that may be referred to it by the Executive Director; or to candidates who appeal the decision of the Executive Director.

The Council prepares and publishes periodically a Syllabus which gives a statement of examination content sufficiently comprehensive and explicit that it may serve as a standard for reference in terms of examination duration, con-

tent, and basic grading values. All member boards now take the necessary steps to assure that an applicant in their state has completed all requirements of the NCARB examination Syllabus when he applies through the Council to the State Board to complete the procedures to acquire an NCARB Certificate. However, for their state examinations some of the Boards do have variations in the manner in which the examination content is set up and the grading values for a passing score. Where an NCARB Certificate is based on state examination and credit is extended for earlier examinations in many cases the applicant may have to take some additional examinations and in some cases the Board does have to interpolate between their grading system and the NCARB suggested grading scale. In cooperating with an applicant for an NCARB Certificate all member Boards would make certain that the overall examination record of the applicant conformed to NCARB standards but at the same time the ap-



The author,
Earl L. Mathes

plicant takes a state examination, and particularly those that took examinations several years ago, the state requirements are not always fully equivalent or there is need for some interpolation from state requirements to NCARB requirements.

Periodically the Council correlates and publishes a selection of typical examination questions in each of the examination divisions. This publication is available only to authorized personnel of State Registration Boards and under certain conditions to libraries, usually libraries of architectural schools.

Also, the Council collects, develops, prepares and publishes manuals of instruction and suggestions for the benefit of State Boards of Examiners on the proper scope, content, procedure, form and grading of examinations. With the aid of accredited institutions the Council develops examinations which will establish the competence of an applicant for registration.

With all of these developments the activities and services of the National Council of Architectural Registration Boards always remain up-to-date with the steady growth of the profession. ◀

Convention Business Session

Some members and a chapter of the Institute have expressed themselves to the Editor as feeling that the Journal did not adequately cover the discussion at the last convention on the proposed new membership classification of Professional Affiliate, item V in the "Notice Concerning Proposed Bylaw Changes." We present here excerpts from the floor discussion, which took place at the Friday morning session, April 28th

SECRETARY CARROLL: The members of the Convention have received the supplement to the Board's Annual Report, a one-page mimeograph document, that the Board of Directors has withdrawn its recommendation regarding the National Associate category of membership. For this reason, there have been some changes and I will read the revised change.

Under V, New Class of Membership—Professional Affiliate.

The Board has recommended that it be authorized to open up a new classification of membership—Professional Affiliate Membership.

Professional Affiliate would include consulting engineers, planners, landscape architects and professional artists who, in addition to character qualifications, have legally established their right to practice their profession, or, where no such legal requirements exist (such as artists), have established worthy reputations.

The category of Professional Affiliate would give to those practicing other related professions and arts an opportunity to affiliate with the architects with whom they work. They have much to gain from this close association, and the architects can learn much from them. Each will be stronger because of increased understanding and support of the other.

The Board does not intend either of these two membership categories to have the same privileges or responsibilities as corporate members.

The proposed action is as follows:

Resolved, That the following Article 2 be added to Chapter II of the Bylaws:

"Article 2.

"Professional Affiliate membership.

"The Board of Directors may, in the best interests of the Institute, establish the class of Professional Affiliate membership in the Institute.

"The qualifications, rights, privileges, duties, and dues of this class shall be as established by the Board of Directors.

"The Board shall require that Professional Affiliate members of the Institute hold concurrent membership in a chapter of the Institute, and in the state organization (where such exists), as in the case of corporate members. Application for membership or transfers must be approved by the chapters concerned, and by the Institute, as in the case of corporate members.

"The Board may delegate disciplinary powers to chapters or a committee for the purpose of adjudging charges of unprofessional conduct against associates and Professional Affiliate members."

There should be added in that part of the bylaws relating to dues a conforming paragraph. Proposed action:

Resolved, That there be added to Chapter I, Article 2, Section 3, a new sub-paragraph, a-4, to read: "Dues of Professional Affiliate

members, when and for as long as such membership category is established by the Board, shall be set by the Board."

I so move you, Mr President.

PRESIDENT WILL: You have heard the motion. Is there a second? (Seconded by Mr Hunter.)

PRESIDENT WILL: The floor is open for discussion.

GLENN STANTON, FAIA (Oregon Chapter): Last year in San Francisco there was quite a discussion about this. If the *Journal* is correct, the subject of the membership classification was referred back to the Board of Directors with an assignment to the committee for further study in which advice of all regions was to be sought; the report of the committee be made available prior to the 1961 Convention, at which time the matter should be resolved.

Mr President, who are the committee?

PRESIDENT WILL: Mr Stanton, in the opinion of the Chair, that referred to structure and not to membership.

MR STANTON: Speaking to the motion, Mr Chairman, and the resolution that was adopted in San Francisco that called for the Board to appoint a committee. I am asking for the names of the committee.

PRESIDENT WILL: You may be correct, Mr Stanton. It was my impression, was it not referred to the Structure Committee of which you were a part?

MR STANTON: No. No, it was not. It was not any of our concern. You must have a committee. Don't you remember who the committee was?

PRESIDENT WILL: We have a committee representing each region, of which you are a part.

MR STANTON: Do the delegates from the regions remember that? I think you are in error, Mr President. I think it has been reported that this was not referred to the region, and I believe—you can correct me if I am wrong—that the Executive Committee made the consideration and made certain recommendations. Will you tell me what those recommendations were at the time?

PRESIDENT WILL: The Executive

Committee recommended to the Board that this be not brought up at this convention, and it was overruled by the Board, which is the superior body.

MR STANTON: For that reason, and for the reasons stated by Mr Russell yesterday, and last year in San Francisco—and I repeat his words—'I am against enlarging the Institute; I am against this organizational elephantitis. I prefer to be aloof.'

I should hope that you will vote against this irregular recommendation of the Board.

PRESIDENT WILL: The Chair will only point out that this matter has been brought to the attention of the full membership, and that there has been a substantial period of time in which it can, and I trust be discussed in the various chapters and regions.

LEVON SERON (Chicago): Mr President, when this was brought up to the Chicago Chapter delegates' meeting, due to the fact that it was indicated that there was to be a further study on it, at least that the Executive Committee . . . was recommending further investigation, this matter was not discussed at all in our delegates' meeting with the idea that we would have time when there was a re-analysis made of this.

Therefore, there was not this thorough discussion of such a very important matter.

Secondly, I would like to say, as an individual member of The American Institute of Architects that I am wholeheartedly against this.

Now, ladies and gentlemen, to have this thing happen where we are opening up four affiliates and having engineers, planners, landscape architects, professional artists be members of the AIA—now, regardless of whether you term them affiliates—to the public the fact that a man or woman says I am an affiliate of the AIA means that they are a member.

They do not take these legal differences in words and we are therefore then not having what we would be known as an Institute of Architects. I am proud of the Institute. I can belong to these other organizations and so can anyone else if they are qualified. So to belong to them, rather than do this, it would be my hope that we would set up a council of these organizations, a central council of which The American Institute of Architects could have delegates to that, in which common problems could be dis-

cussed, and returned to our respective bodies.

But I certainly urge you to vote against this, and keep The American Institute of Architects for architects.

PRESIDENT WILL: Thank you, Mr Seron.

The Chair recognizes Mr Hunter.

JAMES M. HUNTER, FAIA (Colorado): I don't wish to become involved with parliamentary procedures as to whether or not this is a procedural matter to come to the convention, but I would like to draw to the attention of this group, that this problem has been thoroughly studied by the Committee on the Profession, and the Committee on Education over the last eight years.

If we are to have and conceive of architecture as being accomplished by a team, then certainly every member of that team is entitled to a locker in the locker-room.

We have encouraged the teachers of architecture to train these specialties of practice, the mechanical engineering, and the electrical engineering under the brace of architecture, and under the aegis of architects.

When we had an educational meeting in which we invited all the educational committees of the component parts of our industry, we discovered in electrical engineering less than five per cent of the products of the electrical engineering schools were coming into the field of architectural consultation.

Further, that we were getting their barrel scrapings, rather than the bright young boys in electrical engineering, who were much more concerned with electronics and automation than they were in consulting work for architects.

We complained bitterly why they didn't train better electrical engineers who knew something about illumination. They said that is the job for the architectural profession to do.

In other words, if the schools of architecture are asked by us and by the engineering components to train this man, who will be properly trained to do the electrical and lighting work in our buildings, then we cannot hold him at arm's length, I submit. We must take him into the fold.

Another point I think should go into our consideration, and that is throughout the country there is a springing up of a number of groups of consulting groups in large cities—probably that has happened in

your community as in our community. They are not the normal engineering, electrical engineering, or mechanical engineering or structural engineering professional societies. They are a group calling themselves professional engineering. They have become literally a trade union. All they are concerned with are the fees they are to charge architects.

Might it not be better to avoid these little clusters of unionism springing up in the profession, by inviting these very people whom we use every day, on a very intimate basis, into the AIA as Professional Affiliates?

Further, when we go on the Hill in Washington, hopeful that we can make some kind of political impact on the Hill, is it not more beneficial to us to say we represent the design professions than it is to say we belong to The American Institute of Architects, which is a segment of this total shell?

In other words, if we cannot lick them, let them join us, but do not let them run us, do not let them put AIA after their names.

I draw to your attention both of those are firmly in what is proposed. They are not Corporate Members. They come to our meetings, mutual problems can be discussed in our living room, not theirs.

In the light of those considerations, I ask your favorable consideration of the problem.

JEFFREY E. ARONIN (New York Chapter): Mr President and gentlemen: I cannot see why The American Institute of Architects is concerning itself with professional affiliates at this time while we still have so many in our profession to get into our organization.

Our strength is not necessarily going to be increased by members. I think in a way we have an inferiority complex. If those interested in our profession as engineers, landscape architects and artists, want to be uplifted by associating themselves with us, we should certainly invite them to our meetings, and I know in many chapters at present we do invite them, but do not give them the privileges of membership.

And, as already pointed out, there is a danger that they would pass themselves off as having qualifications endorsed by our profession, and our Institute.

CHARLES D. WOODFORD (Southern California Chapter): We have in our national organization and in many state organizations liaison

committees which have sat down together and discussed problems that are brought up for this type of membership. This, in my way of thinking, is a lot better than having this type of person come into the organization, an organization such as ours.

If we want a Kawanis Club, let us join the Kawanis. Let us not make our professional organization one.

I think, too, that the membership has been given a false impression by the information sent out in that this was to be withdrawn and on this basis alone this amendment to the By-laws should be defeated.

ROBERT F. HASTINGS (Detroit Chapter): Gentlemen of the AIA: This particular resolution, or what it implies, touches on a very, very basic problem that we in the architectural design profession should thoroughly examine. If we are to be the creators, the designers of today and tomorrow's environment, and if we are to be the leaders in the design of the environmental structures, somehow, some way, whether it be by a resolution of this nature, or some subsequent action, are going to have to find a way to be leaders in the development of this total design, and I think everyone in this room will recognize and thoroughly be in accord with the fact that the design of an environmental structure includes a great many disciplines—our function, technology, and all the varied skills that go with the creation of this design.

Now, the schools of engineering have taken a step generally toward the training of men in the basic science of engineering, and are moving away from the specialization of civil engineering, mechanical engineering, as we used to know them.

If you would visit with the schools of engineering around the country, you would rapidly learn that the schools of engineering are no longer interested in the building industry as such.

The National Society of Professional Engineers has told your Committee on Education at one of its conferences in Washington, that the engineering profession as such was not, and would not, be able to attract capable young men to the building design industry.

Now, we are the leaders of this building design industry, and therefore we have got to find some way of establishing a climate in the building design profession that

makes it possible for us to do outstanding design work.

Now, if the engineering societies tell us that their membership is not particularly interested in the building design industry, where will we get such people?

They have told us that the reason they are not interested is because they have no real part in this total design, no important part in this total design.

I think that this is something that we, as a profession, will have to look at very, very carefully, because more and more a large proportion of our work, our design work, requires the skills of these people.

So wouldn't it be better for us to take the lead instead of letting them take the lead?

I would urge that you seriously consider the adoption of this resolution.

PRESIDENT WILL: There is a call for the question. Unless someone has something really new to add to this discussion, I suggest that we come to a vote.

ARTHUR G. ODELL, JR, FAIA (North Carolina Chapter): I hope I have something new to add to it.

I am increasingly concerned with the number of architectural firms that feel it is necessary in order to get business, that they call themselves architect-engineers. I think we ought to think of that. Are we architects? Or are we trying to pose as engineers?

The engineers outnumber us fifteen to one in any state. All we have is our good name—the word "architect." The registration boards do very little in enforcing that. There are not probably over three states in the country that insist that the word "architect" modify only the name of a registered architect.

This recommendation is not something that was thought of yesterday morning or last year one morning in San Francisco. It has been given a lot of thought.

Now, we feel that if the architect is really the leader, the captain of the building team, we have to recognize the members. They are not going to vote as members, not even as observers. They will not be admitted unless their qualifications are screened, not merely by the individual chapter, but by the board.

If we are going to speak with authority for this building team, we have to recognize that these other people are part of this team. We can better handle them inside than we can outside.

I have noticed in the State of New Jersey where there is a very important case on where an engineer designed a country club—that is still in the courts in New Jersey. The architect might lose that thing.

Now, as expert witnesses, they had a number of engineers, engineers such as Fred Severn, of New York, who went before the Court, and said absolutely it was an architect's job, and not an engineer's.

On the other hand, you have the package dealers, the sales engineers, these guys that hold themselves out to the public as architects, due to the lack of backbone on the part of our registration boards, they are the ones giving us trouble.

I say if we are selective, and we pick the consulting engineers who work with us, who realize and appreciate the total building picture, the role of the architect as the captain of the team, if we take them in as affiliate members, they are not voting, they are not taking part in our educational programs, we have everything to gain, and nothing to lose.

PRESIDENT WILL: One more speaker and we will call for the question.

JOHN MOORE MORSE (Seattle Chapter): I think it is important to say this: It is a matter of an issue here bigger than the resolution. I am against the resolution. The matter has not been properly studied by chapters or regions. As a result of the Northwest Region Conference, the last conference in San Francisco, it was resolved to ask the Board that any matters of major concern such as structure of the membership be referred to the regions and the chapter for study with the recommendations of the Board and committees, before any action at convention, and that any matter such as this be referred to the 1962 Convention rather than the 1961 Convention, to give us time to study.

There may be certain good points in this resolution. I think that they need a lot more study, and I think the strength of our Institute is in the support of all chapters and regions, rather than a board or a committee telling us what is good for us, and what is going to be good for our future. That is not the way we are going to have a good organization, and that is why I am against the resolution at this time.

PRESIDENT WILL: Thank you. We will now call for the question.

ACTION: The Resolution was not passed. ◀

Library Notes

Desiderata

Last month we presented as our Library Notes the regular six months list of gifts of books, etc. to the Library. This month it seemed that it might be interesting to turn the tables, as it were, and list some of the items that we would be glad to receive for our collections.

This is not offered as a complete list of what we would like, nor is it intended to be limited only to rarities, but rather it aims to be suggestive of the kinds of things that we could use, and many of which should be in some member's library.

One of the most important items we need for our collection on historical American architecture is "Thomas Jefferson, Architect; Original Designs in the Collection of Thomas Jefferson Coolidge" by Sidney Fiske Kimball. Boston, 1916. This is a fairly expensive item and evidently seldom comes on the market.

Another book, which apparently should not be too hard to find, but which so far has eluded us, is "The Log Cabin Myth" by Harold R. Shurtleff. Cambridge, 1939.

Turning again to rare items, we would like very much to have copies of the two privately printed editions of Henry Adams' "Mont Saint Michel and Chartres." Published in Washington in 1904 and 1912 respectively, these would seem to logically belong in the library in view of the long association of the Institute with the publication of the trade editions of this work. The Library has a copy of the first edition published under Institute auspices signed by the editor, Ralph Adams Cram; by the President of the Institute, Walter Cook; and by the representative of the publisher, Ferris Greenslet. Most of the later editions are also present. What more fitting than a copy inscribed by Adams of one or both of these first printings to round out the collection.

Turning again to more common items, the various editions of the Institute's own "Handbook of Architectural Practice" do not always seem to have been deposited in the

Library. We have received some as gifts so far, including the first of 1920, but we would still like an original printing of the 1927 edition, the 1946 printing and the 1949 edition.

We could mention the American edition of Abraham Swan "The British Architect" published in Philadelphia in 1775, as well as other of the early American architectural publications, which served such an important role as guides to the early carpenter-builder. Then there are various publications by Norman Isham, such as "Glossary of Colonial Architecture," 1939 "Early Rhode Island Houses," 1895 "Early Connecticut Houses," 1900, etc that we do not have.

Other titles which have not yet found their way to the Library are "Colonial Architecture of the Pennsylvania Germans" by G. Edwin Brumbaugh, Lancaster, Pa., 1933; "Early Philadelphia Architects and Engineers" by Joseph Jackson, Philadelphia, 1923; "Early Modern Architecture in Chicago, 1870-1910," issued by the Museum of Modern Art in New York 1940. Samuel Chamberlain's "Beaumont at Gloucester" NY 1951, represents another type of book which has usefulness because of its pictures. In view of our large holdings of material pertaining to Richard Morris Hunt we would like to have Barr Ferree's "Richard Morris Hunt: His Art and Work." New York 1895, as well as various other publications by Mr Ferree presently lacking in our collections. We also need the Proceedings of the Second and Fourth Congresses of the Pan American Union of Architects.

The Institute Library has been endeavoring to get together as complete a collection as possible of the various bulletins and magazines issued by Institute components. Very few of these files are complete as yet, although we have already received much cooperation from those to whom we have addressed requests for assistance. Anyone having files of back chapter publications, or even single issues, (and they do not have to be old) and who is willing to donate them to the Library is asked to drop us

a note of what you have. We will be glad to let you know if we can use them. For instance we might note that we need "Ohio Architect" volume 7, nos 2 and 3, Feb. and March 1949. Of the "Weekly Bulletin" of the Michigan Society of Architects, we need many issues before October 1950 and all issues prior to October 1933. For the Southern California Chapter Bulletin we need scattered issues before August 1950 and practically everything before January 1944.

Similarly we have been endeavoring to complete files of the annual reports and rosters of the various State Boards of Architectural Registration. These have already proven their value for historical research and we would be grateful to anyone who is in a position to supply us with back copies. We are noting a few instances of what we need but again it should be emphasized that this is not a complete list. Arizona. Report 19, 1940. Wisconsin. Report 1-4, 1933-36; Virginia. Roster prior to 1945, 1946-1953, 1955-57.

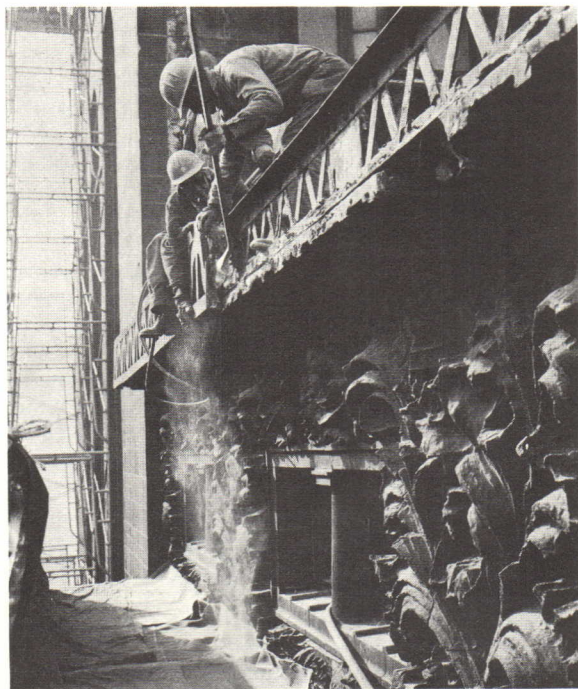
We could mention magazines such as "Western Architect and Engineer" the issues for April, May, June, August 1960, May 1961 as well as most of the issues of its predecessor "Architect and Engineer" before 1947 including July 1949. The issues of the "Architect's Journal" for Jan 26, April 27, May 25 1961 were lost in transit and are now unavailable from publisher so that we would be grateful to anyone who no longer needs their issues of these. "California Arts and Architecture" still has many gaps although we were most fortunate in donations several years ago that helped very much in completing this. And even the "Architectural Forum," is not complete for the years 1931-1934. Although it is not possible for the Library to house great collections of architectural drawings and manuscripts, examples of a prominent architect's works or even small collections of significance will be welcomed. Also one should not neglect to mention our interest in receiving others of the great European classics on architecture to add to the nucleus that we already have of these works.

But whether or not you have anything to give in the way of materials, we do hope that you will give us an opportunity of serving you from *your* library. GEP

Editor's Page

Cities Are Funny

This phrase, coined, as far as I know, by Ken Brooks, AIA, of Spokane, has occurred to me again and again on recent trips. Cities have so much local pride, yet ninety per cent of their area is an eyesore, a dump, not fit to live in or to work in. The proud citizens see only the handsome ten per cent; they are so accustomed to the ugly, dirty, blighted ninety per cent they are blind to it—even though they *live* in it, *work* in it. The design professions have got to undertake the job of snatching the blinders off these folks, to make them *see*. When enough people have the vision of what clean, bright places they could live in, then mayors and city councils will appropriate funds for planning, institute clean-up campaigns, promote smoke-control and other anti-nuisance legislation, and have the courage to condemn property to carry out long-range plans.



Chicago's Garrick Theatre comes down, but some of Sullivan's iron grillwork is saved.

All cities need more parking spaces, of course. But random-placed privately-owned parking lots are not always the best solution. Many owners of old buildings are eager to demolish their buildings to create a "sure-fire" income-producing parking lot—only to sell the property in a few years for the erection of another new building, thus worsening the situation—*more* office space, *less* parking space. These matters *must* follow a long-range plan, and the plan must be adhered

to. They should not be left to the speculative whims of individual owners. Even Housing Authorities err in this regard. Thus many a fine old building is destroyed needlessly—when modernization is all that is really necessary.

Take the case of the old Metropolitan Life Building in Minneapolis. It is a fine, massive, old four-square building with a glassed-over central court. There are open galleries all around the court at all floors, and the two elevators rise in open cages, one on each side. It is a very handsome representative of its period. According to information I have received, for the past fifteen years it has been ninety per cent occupied. It has been estimated that a complete "modernization" would cost about \$500,000, which the owner is willing to spend. (A new building of equivalent rental area would cost at least ten times that). Yet the Housing Authority wants to tear it down to create a parking lot. With some creative imagination, a reasonable amount of money, and a well-promoted public relations effort, the old Metropolitan Building could be transformed into a "prestige" location, for it stands on the edge of an area presently being redeveloped by the city, the future heart of downtown Minneapolis. *Must* we destroy everything that is old, just because it *is* old? Independence Hall is "old" too.

My Third Love Affair

Two years ago we introduced our "First Annual Book Supplement." It seemed to make quite a hit, so the next year we brought out the second. Again we received favorable comments. So here is our "Third Annual Book Supplement." As an experiment, we're featuring more books and fewer articles this time—trying to find out what our readers like.

In the first Book Supplement I wrote about my life-long "love affair" with books. I wrote myself out, I told it all—I haven't been able to write anything on the subject since. However, books don't have to be written about—they speak for themselves—if you read them.

If you read books you are a member of a world-wide fraternal group; not secret; but with no badges, signs or handclasps; not organized, yet it doesn't take many words of a conversation for brother to recognize brother—and then the conversation warms up, so much to talk about.

I met a man yesterday morning who said in the course of our conversation, "I am a compulsive reader." That's an interesting phrase; I like it. I think I must be one too. I think it's a good kind of "queer" to be.

Civil Defense Shelters

by Lyndon Welch, AIA*

A National Shelter Program

Our national policy has placed major emphasis on retaliatory power as a deterrent to nuclear attack against the United States, in the same sense that capital punishment is intended to be a deterrent to murder. Murders still occur, however. Can we, in the case of our well-armed enemies, rule out the possibility of accident, miscalculation or insane impulse?

A national shelter program has been advanced as the best way to meet this danger.

Shelter from What?

In historical perspective it seems incredible that such a frail organism as man could survive and proliferate in a hostile environment. His unique endowment, a searching mind, first gave him mastery over his world and, ultimately the ability to destroy his kind as no famine, fire or plague has ever been able to do.

Trinitrotoluene (TNT) is a high explosive of the conventional chemical variety. One ton of it has enormous explosive yield. The smallest unit of explosive yield for a nuclear explosive is the "kiloton," equivalent in energy to the energy released by the detonation of 1000 tons of TNT. A "megaton" is 1 million tons.

Following description of effects predicted for a 20-megaton weapon exploded at or near the surface of the ground has been taken from Civil Effects Study CEX-58.8. *Comparative Nuclear Effects of Biomedical Interest*, U. S. Atomic Energy Commission.

Blast effects: The shock wave and accompanying blast wind would destroy conventional residences within a radius of 7.74 miles and cause serious damage within a radius of 23.5 miles.

Thermal effects: Most structures located within the fireball radius (2.3 miles) would be vaporized or otherwise destroyed, excepting closed, deep underground structures. Exposed skin would acquire blistering burns within a radius of 31.9 miles. Temporary loss of vision and retinal burns could occur at even greater distances, though permanent impairment of vision would be rare. Fires would be ignited over a large area, range and intensity depending on amount of combustible materials present.

Radiation effects: At time of explosion there is an almost instantaneous emission of neutrons followed by an emission of gamma rays over a period of up to one minute after the explosion. Alpha and beta particles are also emitted but are comparatively harmless. Beyond a range of 2.88 miles, exposure to this initial radiation might produce some injury but probably no disability.

Surface or near-surface explosions carry tons of material up into the stem and mushroom cloud where it mixes and condenses with fission products. Larger particles fall back to earth over a period ranging from minutes to days, depending on their size, and in a pattern dictated by the winds. These particles are the source of residual "fallout" radiation which, in the case of a 20-megaton weapon, can cover a region of perhaps 20,000 square miles within which the total accumulated dose would amount to at least 400 roentgens. A 400-roentgen total dose is generally sufficient to cause disability and many deaths.

Ideally, shelter should be provided against blast, thermal and radiation effects. Closed, deep underground shelters are appropriate in target areas. Because of variations in wind patterns and possible attack strategies, virtually all parts

of the country require protection from fallout radiation. Fallout shelter is simpler and cheaper than blast-thermal-radiation shelter and offers the best value in lives saved per dollar spent. For this reason, the first objective of a national shelter program will be to provide adequate fallout shelter everywhere.

Basis for a Community Program

A shelter program for any community could be developed in three phases, as follows:

Phase 1: Determining shelter possibilities of all existing structures in the community in terms of number of people that could be sheltered, and degree of protection that shelter would provide.

Phase 2: "Improving" available shelter by increasing capacity—degree of protection—providing for emergency food, water, power, medical supplies, etc

Phase 3: Providing additional shelter in new construction as required to supplement existing shelter

These three phases require a knowledge of construction, a talent for organizing space, and an understanding of techniques of protection.

Shelter Techniques

Procedures and standards required to evaluate and improve the fallout shelter potential of existing structures and to incorporate fallout shelter in new structures have been compiled in the 52-page Office of Civil and Defense Mobilization Publication NP-10-2 *Fallout Shelter Surveys: Guide for Architects and Engineers*.⁽¹²⁾ This booklet outlines shelter habitability requirements and simplified shielding calculations.*

Technical

More precise shielding calculations are discussed in the OCDM Engineering Manual *Design and Review of Structures for Protection from Fallout Gamma Radiation*.⁽¹⁰⁾

Workshops to train architects and engineers in use of these publications have been conducted on a nationwide basis by specially trained teams from various schools of

(Continued on page 103)

*member AIA Committee on Safety in Buildings

*distributed to all members of AIA—additional copies available from Office of Civil & Defense Mobilization, Washington 25, DC

TABLE 1*—RELATION BETWEEN OVERPRESSURE AND PHYSICAL DAMAGE

| Type of structural material | Over-pressure, psi | Physical effects | Type of structural material | Over-pressure, psi | Physical effects |
|-----------------------------|--------------------|------------------------------|--------------------------------|--------------------|--------------------------------|
| Glass: Window Plate | 0.1 | Damage | Reinforced concrete | 4-6 | Moderate damage |
| | 0.02 | Damage to large glazed areas | Frame buildings | 6-8 | Severe damage |
| Houses: Wooden | 1-2 | 50 per cent damaged | Wall-bearing massive buildings | 6-8 | Moderate damage |
| | 4-5 | Destroyed | Motor vehicles | 8-10 | Severe damage |
| | 5 | Destroyed | | 2-3 | Light damage |
| Brick Apartments, brick | 4-5 | Moderate damage | Parked aircraft | 10-15 | Severe damage |
| | 5-7 | Severe damage | | 1-3 | Minor to major repair required |
| | | | | 4-6 | Unusable to destroyed |

TABLE 2—WEAPONS-EFFECTS DATA FOR SELECTED PARAMETERS

In this Table are tabulated the approximate ranges from Ground Zero (GZ) and the circular areas over which the indicated selected weapons effects may occur as a function of explosive yield. It was assumed that slant ranges for initial ionizing radiation and thermal data are a reasonable approximation of the ground range and that atmospheric conditions were clear. (Data are from **Effects of Nuclear Weapons**.)

| Selected parameters | Explosive yield | | | | | |
|----------------------------------|--|--------|--------|-------|-------|-------|
| | 1 kt | 20 kt | 100 kt | 1 Mt | 10 Mt | 20 Mt |
| | Range from GZ for Various Parameter, Miles | | | | | |
| 700 rem (initial) | 0.42 | 0.70 | 0.96 | 1.44 | 2.04 | 2.27 |
| 100 rem (initial) | 0.62 | 0.99 | 1.29 | 1.81 | 2.55 | 2.88 |
| 30 rem (initial) | 0.74 | 1.18 | 1.51 | 2.07 | 2.91 | 3.30 |
| 5 psi (typical air burst) | 0.39 | 1.06 | 1.81 | 3.90 | 8.40 | 10.6 |
| 5 psi (surface burst) | 0.28 | 0.77 | 1.32 | 2.85 | 6.14 | 7.74 |
| 1 psi (typical air burst) | 1.00 | 2.71 | 4.64 | 10.0 | 21.5 | 27.1 |
| 1 psi (surface burst) | 0.86 | 2.35 | 4.02 | 8.65 | 18.6 | 23.5 |
| Second-degree burns | 0.48 | 1.72 | 3.40 | 9.00 | 23.8 | 31.9 |
| First-degree burns | 0.69 | 2.47 | 4.97 | 13.3 | 36.0 | 49.2 |
| Fireball | 0.044 | 0.14 | 0.28 | 0.69 | 1.7 | 2.3 |
| Crater (surface burst, dry soil) | 0.012 | 0.031 | 0.058 | 0.12 | 0.26 | 0.32 |
| | Area Corresponding to Above Ranges, Square Miles | | | | | |
| 700 rem (initial) | 0.55 | 1.54 | 2.90 | 6.51 | 13.1 | 16.2 |
| 100 rem (initial) | 1.21 | 3.08 | 5.23 | 10.3 | 20.4 | 26.1 |
| 30 rem (initial) | 1.72 | 4.37 | 7.16 | 13.5 | 26.6 | 34.2 |
| 5 psi (typical air burst) | 0.48 | 3.53 | 10.3 | 47.8 | 222 | 353 |
| 5 psi (surface burst) | 0.25 | 1.86 | 5.47 | 25.5 | 119 | 189 |
| 1 psi (typical air burst) | 3.14 | 23.1 | 67.6 | 314 | 1450 | 2310 |
| 1 psi (surface burst) | 2.32 | 17.4 | 50.8 | 235 | 1090 | 1730 |
| Second-degree burns | 0.73 | 9.29 | 36.3 | 254 | 1780 | 3200 |
| First-degree burns | 1.50 | 19.2 | 77.6 | 556 | 4070 | 7600 |
| Fireball | 0.006 | 0.062 | 0.25 | 1.50 | 9.08 | 16.6 |
| Crater (surface burst, dry soil) | 0.0004 | 0.0012 | 0.0096 | 0.045 | 0.21 | 0.32 |

TABLE 3—SHIELDING FACTORS FOR TYPICAL LIGHT RESIDENTIAL STRUCTURES AGAINST GAMMA RAYS SIMULATING PENETRATING RESIDUAL RADIATION

| structure | location | reduction factors* | | | protection factor† |
|---|--------------------------|--------------------|---------------------|-------|--------------------|
| | | roof contribution | ground contribution | total | |
| Two-story wood-frame house | 2nd floor, center | 0.076 | 0.50 | 0.58 | 1.7 |
| | 1st floor, center | 0.034 | 0.57 | 0.60 | 1.7 |
| | Basement, center | 0.015 | 0.028 | 0.043 | 23§ |
| | Basement, corner | | | | 40 |
| | Basement, corner shelter | | | | 100 |
| One-story wood rambler | 1st floor, center | 0.10 | 0.54 | 0.64 | 1.6 |
| Two-story brick veneer | 1st floor, center | 0.034 | 0.14 | 0.171 | 6** |
| | Basement, center | 0.015 | 0.021 | 0.036 | 28§ |
| Shelter (earth covered) 3 ft below grade | | | | | 1000 or more |

* Reduction factor represents the dose rate at a specified location divided by the dose rate outside at 3 ft above ground.

† Protection factor represents the outside dose rate at 3 ft above ground divided by the dose rate inside at the specified location.

§ Applies to basement with no exposed walls.

** Applies only for detector locations below window sill.

TABLE 4—SEVEN-TENTHS RULE FOR APPROXIMATING DECAY OF RESIDUAL GAMMA RADIATION

| time after burst hr | days | time factor | dose rate r/hr | dose rate factor |
|------------------------|------|----------------|-------------------|---------------------|
| 1 | 0.04 | 1 | 1000 | 1 |
| 7 | 0.29 | 7 | 100 | 1/10 |
| 49 | 2.04 | 7 ² | 10 | 1/100 |
| 343 | 14.3 | 7 ³ | 1 | 1/1000 |
| 2401 | 100 | 7 ⁴ | 0.1 | 1/10,000 |

NOTE: These data are based upon the formula generally used; i.e., $R_t = R_0 t^{-1.2}$, where R_0 is the dose rate at some instant and R_t is a later dose rate after an interval of time, t has passed. This relationship is not strictly applicable to very early or very late times after a burst, nor does it apply to a given location on the earth's surface until fallout is complete.

TABLE 5—APPROXIMATE SHIELDING CHARACTERISTICS OF MATERIAL AGAINST INITIAL GAMMA RADIATION SHOWING THE RELATION BETWEEN SHIELD DENSITY AND THE THICKNESS THAT WILL REDUCE THE RADIATION BY ONE-HALF

| materials | density lb/cu ft | half-value thickness, in. | product |
|-----------|---------------------|------------------------------|---------|
| Lead | 707 | 0.6 | |
| Steel | 490 | 1.5 | 735 |
| Concrete | 144 | 6.0 | 864 |
| Earth | 100 | 7.5 | 750 |
| Water | 62.4 | 13.0 | 811 |
| Wood | 34 | 23.0 | 782 |

NOTE: Assumes 4.0 Mev is an adequate representation of the energy of initial gamma radiation and incorporates build-up factors correcting for thick shields and broad radiation beams (see pages 353 to 360 and 374 to 380, *The Effects of Nuclear Weapons*).⁽⁷⁾

TABLE 6—APPROXIMATE ATTENUATION FACTORS FOR GAMMA RAYS FROM FISSION PRODUCTS AS A FUNCTION OF SHIELD THICKNESS FOR INDICATED MATERIALS

| attenuation factor | Shield thickness for indicated materials, in. | | | | | |
|-----------------------|---|----------------------------------|----------------------------|-------------------------|--------------------------|------------------------------|
| | lead (710 lb/cu ft) | iron and steel (490 lb/cu ft) | concrete (144 lb/cu ft) | earth (100 lb/cu ft) | water (62.4 lb/cu ft) | wood (Fir) (3.4 lb/cu ft) |
| 2 | 0.28 | 0.7 | 2.5 | 3.5 | 4.8 | 9.2 |
| 4 | 0.64 | 1.8 | 6.6 | 8.9 | 13 | 25 |
| 10 | 1.0 | 2.7 | 9.7 | 13 | 19 | 36 |
| 50 | 1.6 | 4.2 | 14 | 20 | 29 | 55 |
| 100 | 1.9 | 4.8 | 16 | 23 | 33 | 62 |
| 1,000 | 2.7 | 6.8 | 22 | 32 | 45 | 88 |
| 10,000 | 3.5 | 8.8 | 27 | 39 | 56 | 110 |
| 100,000 | 4.3 | 11 | 32 | 46 | 70 | 140 |

TABLE 7—ESTIMATED CLINICAL COURSE AND HOSPITALIZATION REQUIREMENTS FOR HUMANS EXPOSED TO VARIOUS ACUTE DOSES OF PENETRATING RADIATION

| dose, R | Individuals following indicated clinical symptoms, % | | | | | | Individuals needing hospitalization | Maximal time of hospitalization |
|------------|---|-------|----------|---------|-------|-------|---|---------------------------------------|
| | trivial | light | moderate | serious | grave | fatal | % | weeks |
| 0-200 | 98 | 2 | | | | | None | 0 |
| 200-300 | 1 | 33 | 64 | 2 | | | 2 | 6 |
| 300-400 | | | 6 | 68 | 26 | | 94 | 7 |
| 400-500 | | | | 3 | 58 | 39 | 100 | 9 |
| 500-600 | | | | | 6 | 94 | 100 | 11 |
| Above 600 | | | | | | 100 | 100 | 11 |

TABLE 8—EXAMPLES OF EXISTING SHELTERS

| Location | Type | Capacity | Total Cost | Approx. Cost Per Occupant |
|---|----------------------|----------|---------------|------------------------------|
| City Hall—Montgomery, Ala. | Basement | 200 | \$26,000 | \$130 |
| Training School—Menifee, Ark. | Underground Concrete | 500 | 86,825 | 174 |
| Elem. School—San Diego, Calif. | Basement | 480 | 80,000 | 167 |
| Juvenile Hall—Martinez, Calif. | Basement | 120 | 9,200 | 77 |
| Santa Rosa, Calif. | Underground Metal | 130 | 14,470 | 112 |
| Moose Lodge—Maywood, Calif. | Basement | 800 | 69,000 | 86 |
| City Parking Lot—Burbank, Calif. | Underground Metal | 130 | 20,000 | 154 |
| Jr. High School—Arvada, Colo. | Basement | 750 | 35,000 | 47 |
| City-County Bldg.—Denver, Colo. | Basement | 600 | 25,000 | 42 |
| Denver, Colo. | Underground Metal | 130 | 14,470 | 112 |
| American Legion Building—Washington, D.C. | Basement | 100 | 10,500 | 105 |
| Dade County—Miami, Fla. | Aboveground | 100 | 26,000 | 260 |
| Office Bldg.—Jacksonville, Fla. | Basement | 50 | 10,000 | 200 |
| Thomasville, Ga. | Underground Metal | 130 | 13,945 | 107 |

Continued on p. 102

Table 8 (Continued)

| | | | | |
|--|----------------------|------|----------|------|
| Office Bldg.—Cedar Rapids, Ia. | Basement | 200 | \$12,000 | \$60 |
| Veterans Memorial Auditorium—Des Moines, Ia. | Basement | 100 | 14,950 | 150 |
| Office Bldg., Topeka, Kans. | Basement | 100 | 7,680 | 77 |
| City Memorial Hall—Salina, Kansas | Basement | 300 | 15,000 | 50 |
| Mid-America Fairgrounds—Topeka, Kansas | Basement | 160 | 14,253 | 89 |
| State Capitol Building—Frankfort, Ky. | Basement | 200 | 24,000 | 120 |
| City Hall—New Orleans, La. | Basement | 592 | 90,000 | 152 |
| Elementary School—Rockville, Md. | Underground | 430 | 90,000 | 209 |
| OCDM Headquarters—Olney, Md. | Underground | 130 | 14,470 | 112 |
| Harvard, Massachusetts | Underground | 130 | 14,470 | 112 |
| High School—Jackson, Mich. | Basement | 600 | 70,000 | 117 |
| High School—Battle Creek, Mich. | Basement | 1200 | 150,000 | 125 |
| Clinic—Rochester, Minn. | Basement | 2720 | 25,000 | 9 |
| School For Blind—Minneapolis, Minn. | Basement | 150 | 25,000 | 167 |
| CD Training Center—Minneapolis, Minn. | Basement | 520 | \$25,858 | 50 |
| Clinic—Vicksburg, Miss. | Basement | 150 | 11,000 | 73 |
| Sports Arena—St. Louis, Mo. | Basement | 50 | 8,200 | 164 |
| State CD—Lincoln, Neb. | Basement | 15 | 2,300 | 153 |
| Abandoned Reservoir—Lincoln, Neb. | Underground | 1500 | 88,500 | 59 |
| Bank—Lincoln, Neb. | Basement | 81 | 12,100 | 150 |
| Las Vegas, Nev. | Underground Metal | 130 | 23,000 | 177 |
| Henderson, Nev. | Underground Metal | 130 | 23,000 | 177 |
| Medical Center—Livingston, N.J. | Underground | 2000 | 407,000 | 203 |
| Lyons, N.Y. | Underground Metal | 130 | 15,000 | 115 |
| Albany, N.Y. | Basement | 3700 | 100,000 | 27 |
| Filtration Plant—Greensboro, N.C. | Basement | 50 | 10,000 | 200 |
| Court House—Wilmington, N.C. | Basement | 50 | 9,000 | 180 |
| Highway Rest Area—Cleveland Co., N.C. | Underground Concrete | 100 | 30,000 | 300 |
| Lodge Bldg.—Grafton, N. Dak. | Basement | 200 | 21,387 | 106 |
| Memorial Bldg.—Bismark, N. Dak. | Basement | 100 | 2,500 | 25 |
| Abandoned Subway—Cincinnati, Ohio | | 500 | 30,000 | 60 |
| Court House—Toledo, Ohio | Basement | 350 | 17,800 | 48 |
| School—Tulsa, Okla. | Basement | 500 | 65,000 | 130 |
| City Hall—Reading, Pa. | Basement | 50 | 14,100 | 282 |
| Bank—Lancaster, Pa. | Basement | 60 | 6,428 | 107 |
| Court House—Wilkes-Barre, Pa. | Basement | 50 | 11,500 | 230 |
| State Office Bldg.—Pittsburgh, Pa. | Basement | 50 | 9,250 | 185 |
| State Capitol—Providence, R.I. | Basement | 300 | 11,600 | 39 |
| Charleston, S.C. | Underground Metal | 130 | 15,000 | 116 |
| Office Bldg.—Memphis, Tenn. | Basement | 100 | 8,000 | 80 |
| State Bldg.—Nashville, Tenn. | Basement | 800 | 20,000 | 25 |
| Hospital—San Antonio, Texas | Basement-2 Levels | 2500 | 400,000 | 160 |
| Court Bldg.—Houston, Texas | Basement | 55 | 10,000 | 182 |
| Power Plant—Salt Lake City, Utah | Basement | 150 | 10,000 | 67 |
| Park Maintenance Bldg.—Norfolk, Va. | Partly Below Ground | 50 | 15,356 | 307 |
| Underground Hwy.—Seattle, Wash. | | 200 | 60,000 | 300 |
| City Hall—Charleston, W. Va. | Basement | 50 | 7,700 | 154 |
| College—Huntington, W. Va. | Underground | 1000 | 250,000 | 250 |
| Public Museum—Milwaukee, Wis. | Basement | 2550 | 200,000 | 78 |

Architecture and Engineering. These workshops have been sponsored by OCDM and by local professional organizations. More are planned if federal funds become available.

In addition, OCDM has compiled design and cost data for fallout shelter in a number of specific building types including hospitals, schools, churches, multi-story office and apartment buildings and underground parking structures. Most of this material is available on request through local civil defense offices.

Structures designed for protection from fallout radiation usually have a certain amount of intrinsic blast resistance. Additional blast resistance may be obtained through the use of design procedures outlined in the U. S. Army Corps of Engineers Manuals EM 110-345-413 through 420 or the US Navy Bureau of Yards and Docks publication, Navdocks TP-PL-8 *Personnel Shelters and Protective Construction*.

Criteria for Group Shelters

While current recommendations are for stocking the shelter with two-weeks' supply of food and water, present study indicates a continuous in-shelter time of two to four days except for a very few areas, and a day or less in many areas since the radiation decays so rapidly (see table 4 page 101).

Shielding: Shelter walls and roof should have sufficient mass to provide a protection factor of at least 100 (in simplified terms, a person inside the shelter receives 1/100 as much radiation as a person outside).^{*} Concrete is a relatively inexpensive shielding material and earth is probably the cheapest available. Underground shelters can easily be designed with a protection factor of 1000 or more, which is considered adequate for areas of very heavy fallout.

Access: There should be at least one 22-inch unit of access width per 200 occupants. There should be at least two means of egress, widely separated, located where they are least likely to be blocked by falling debris. Precautions should be taken against accidental flooding of shelter or shelter access.

Space: Recommended minimum allowances are: 10 square feet net area and 65 cubic feet net volume per occupant, with additional space as required for mechanical installation and storage of two-weeks' sup-

plies. Simulated shelter experiments conducted by the American Institute of Research, sponsored by OCDM, suggest that allowances as low as 8 square feet and 58 cubic feet per occupant (including storage, lavatory and service area) are feasible in a well-ventilated shelter.

Air Supply: Recommended minimum is 3 cfm per person of fresh air and 12 cfm of recirculated air per person. Fresh air supply should make provision for filters (if air intakes are properly designed, filters may not be necessary to remove fallout particles). Ordinary filters are adequate to remove radioactive particles of early fallout, which are generally larger than 5 microns mean diameter, but sufficient space should be provided to permit installation of combined chemical, biological and radiological filters in the event that the enemy is prepared to use such weapons against civilians. Recirculated air preferably should be filtered to remove cigarette smoke and odors. Air intakes should be located where they will be protected from falling debris or fire, and should incorporate weatherproof gravity separating devices to prevent entrainment of coarse particles in fresh air stream. Automatic closures are required for intake and exhaust openings of blast shelters. The preferred type is activated by the flash and seal the shelter before the blast front arrives.

Water Supply: If no protected well is available, one gallon per person per day of potable water should be stored in shelter.

Temperature: Effective temperature should not exceed 85° F— in hot, humid weather some means of cooling or dehumidifying air supply will be necessary.

Emergency Power: Unless normal power sources are invulnerable to attack, an emergency power source will be necessary to provide essential mechanical services and some lighting.

Sanitation: Means must be provided to remove rubbish, dirt and human waste from occupied area of shelter. At least one toilet per 70 occupants is recommended. Where conventional sewage facilities are disrupted, sewage may be sealed in plastic bags or other easily stored containers and periodically placed outside shelter.

Sleeping: Good results were obtained with demountable 3-tier bunks in the American Institute for Research experiments previously

mentioned. Unless shelter is designed to provide a secluded sleeping area, it is preferable to provide a bunk for every occupant, and not attempt a staggered sleeping schedule.

Food handling: Food should be chosen for good storage characteristics and ease of preparation. It should not require refrigeration. Hot plates may be used to heat some foods and beverages. Food distribution can be managed by a small group of "waiters" where conditions are too crowded for a cafeteria system.

Recreation: Crowding, heat and humidity preclude active recreation in most shelters. "Pocket" books, playing cards, board games, pencils, pens, paper, crayons, modeling clay and other arts and crafts materials will be useful.

Administration: Shelter management will be concerned with maintaining order and morale within the shelter, keeping track of supplies, proper maintenance of essential equipment, care of sick, safety from fire or accident, monitoring radio communications from civil defense authorities, sustaining religious values, and training for post-shelter survival.

Cost of Shelter

Cost of shelter varies with following factors:

- type and degree of shelter provided
- emergency water supply
- emergency power supply
- requirements for shelter cooling
- size of shelter
- local building costs
- nature of excavation
- relationship of shelter space to existing structures

No uniform standard of reporting characteristics of shelter has been established, examples on the previous pages, taken from the OCDM Information Office Listing of Fallout Shelters as of 31 May 1961, are intended to show range and variety of approaches to the shelter problem throughout the nation. Fully as many examples of equal interest have been omitted because they were reported on a confidential basis or in insufficient detail. Figures for the few very large shelters included (over 1000 capacity) demonstrate economies in mechanical plant that go with increased size. ◀

^{*}this figure leaves a margin of safety—freakish winds may produce "hot spots" in locations which under average conditions might not require such a large protection factor

Fallout Protection for a New School

by **Caudill-Rowlett-Scott, AIA**
and **Convair—Fort Worth**

► The purpose of this investigation was simply to find out what it takes to provide an effective degree of fallout protection for a school building.

At the time of this writing there is at least one school being built underground to fulfill the requirements of protecting children and teachers from atomic radiation. Obviously such requirements can be met. What is not so obvious is what will be the psychological and physiological effects on the occupants, when schools go underground. Will it be good for the children?

Today throughout the United States there are hundreds of fine schools that are good for children and for learning. This question arises: what can we do to give them the necessary degree of fallout protection. We decided to take one as a case study—a new school near Fort Worth, Texas.

We wish to express our appreciation to George Stott, Superintendent of Schools, Eagle Mountain-Saginaw Independent School District, Saginaw, Texas, for allowing the authors to use the new Boswell Senior High School in his district as the subject of this report.

This school, scheduled for occupancy September, 1961, was selected because it is an example of conventional construction with the potential of being an efficient and child-centered high school.

It should be emphasized that the Boswell Senior High School does not contain provisions for protection from atomic radiation and has not been remodeled to incorporate fallout design. It was used only to help find the answer to these questions: what changes are necessary

and how much money is involved to provide fallout protection without losing educational effectiveness?

Background

The immense hazard of radioactive fallout in the event of a nuclear war and the consequent need for shelters has been widely publicized since 1955. To date the result is only a minute amount of actual shelter construction.⁽²²⁾

This absence of protection is even more evident in the nation's schools, although no other building unit of local government is so well dispersed among the people. The schoolhouse has, in addition to its neighborhood location, other major assets that would complement shelter planning:

- a staff trained to handle groups of people
- food service facilities
- an administrative link to other schools
- a potential shelter-group, the student body, which is assembled daily at the school

The Case Study

The academic unit (Figure 1) of Boswell Senior High School is one-story, light steel-frame structure, aluminum windows in brick cavity walls, and concrete slab foundation on grade. It is circular in plan to provide maximum space with minimum walls. To facilitate year-round use, Boswell is airconditioned.

We have made two assumptions:

- major nearby target area will be Carswell Air Force Base and aircraft complex located eight miles

south of school and just west of Fort Worth

- a 1 megaton weapon * will be used on this target

In our opinion, shelters should be designed for the probable attack situation. This approach would avoid the extremes of costly overbuilding or doing nothing in the ill-advised belief that it won't happen here.

Probable attack situation can be determined by locating targets affecting the shelter area to a distance of 250 miles, and estimating number and sizes of nuclear weapons that would be used to destroy these targets.

Weapon Effects

After probable target and weapon assumptions are made, effects of blast and intensities of fallout can be estimated. Figure 2 shows blast damage to be expected from our assumed one megaton weapon plotted against distance. Our case-study school would receive only moderate damage. Persons inside the school might, however, be wounded by secondary blast effects such as flying glass and other debris. Persons outside and unprotected would possibly suffer third-degree flash burns from thermal radiation.

Figure 3 shows extent of radioactive fallout from detonation of this weapon. Curves represent lines of equal radiation doses in roentgens ** that would accumulate in the first two weeks after blast.

The area around Boswell School would receive approximately 7,000 roentgens in two weeks after blast, and killing doses would very likely extend more than 150 miles downwind.

This is based upon probable effects of radiation exposure, published by the Office of Civil & Defense Mobilization in its fallout shelter survey guide⁽¹²⁾ as follows:

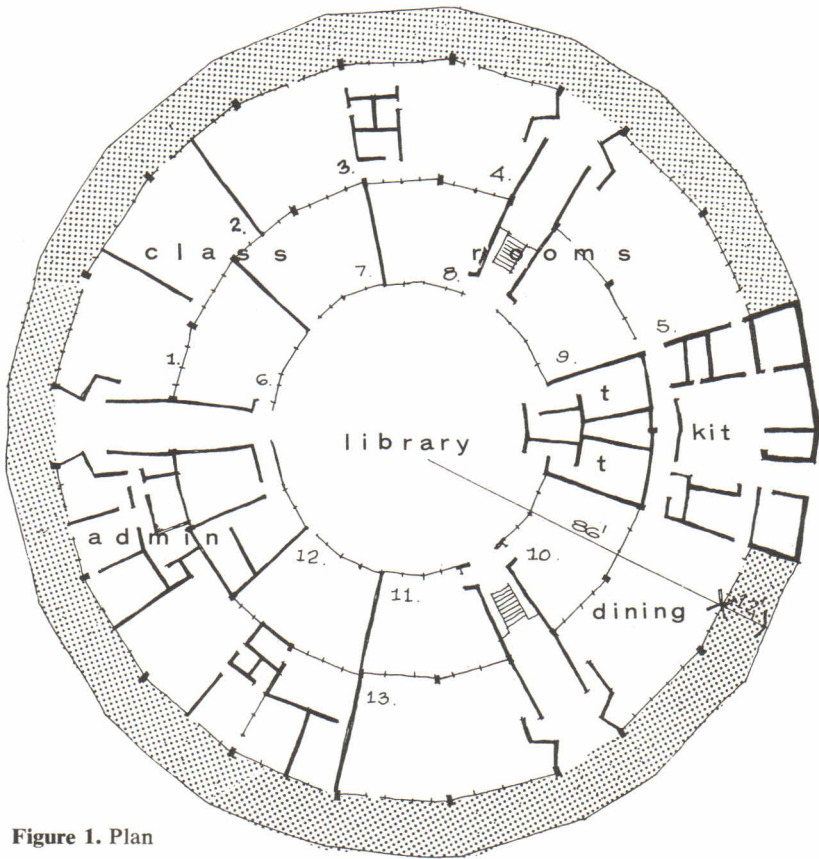
Short term (36 hours or less)

| whole body exposure | probable effect |
|---------------------|--------------------------|
| 0-100 roentgens | no obvious effects |
| 100-200 " | minor incapacitation |
| 200-600 " | sickness and some deaths |
| Over 600 " | few survivors |

* equivalent of 1 million tons of TNT

** Roentgen: A unit of radiation dose; 2 roentgens are received during a normal chest x-ray

(22) numbers refer to Selected References at end of article



"In addition to assumptions listed, the report has evidently assumed a characteristic wind direction and velocity, a surface burst (which produces maximum fallout), and a single weapon (although possibility of multi-weapon attack is mentioned under 'decontamination' on page 109)."*

Figure 1. Plan

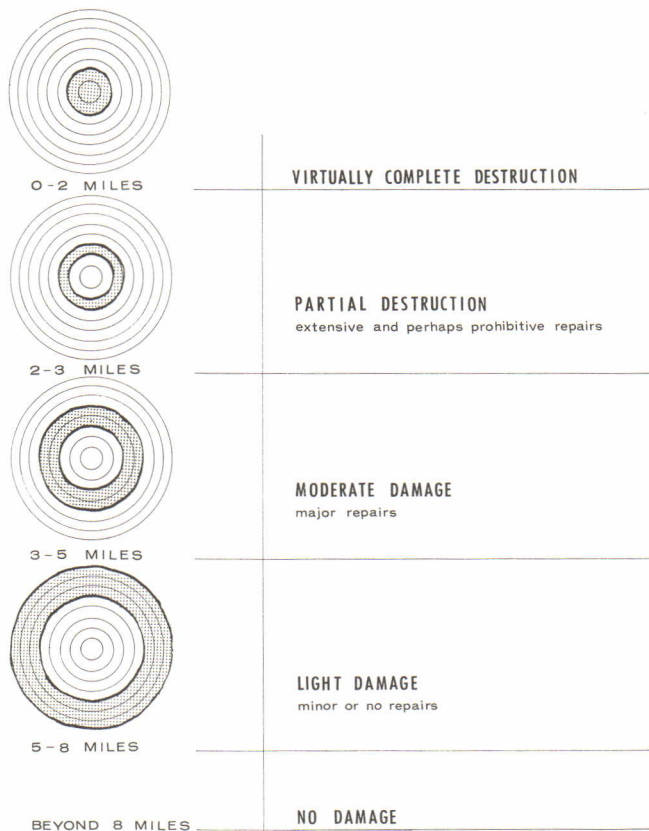


Figure 2. Blast damage (1 megaton surface burst)

"Since 20-megaton weapons or larger are quite feasible it should be made clear that shelter design based on a one-megaton weapon will not be realistic in many areas. In the present report this assumption is balanced by provision of a shelter protection factor of 1000 which would protect from larger weapons (see table on p 100). The table on p 106 may be misleading if it implies a mandatory design limitation of not more than 10 R accumulated dose in 14 days within shelters. Better criteria are given in Table 1, page 3 of OCDM publication NP-10-2 'Fallout Shelter Surveys: Guide for Architects and Engineers'¹²"

* Comments by Lyndon Welch, AIA

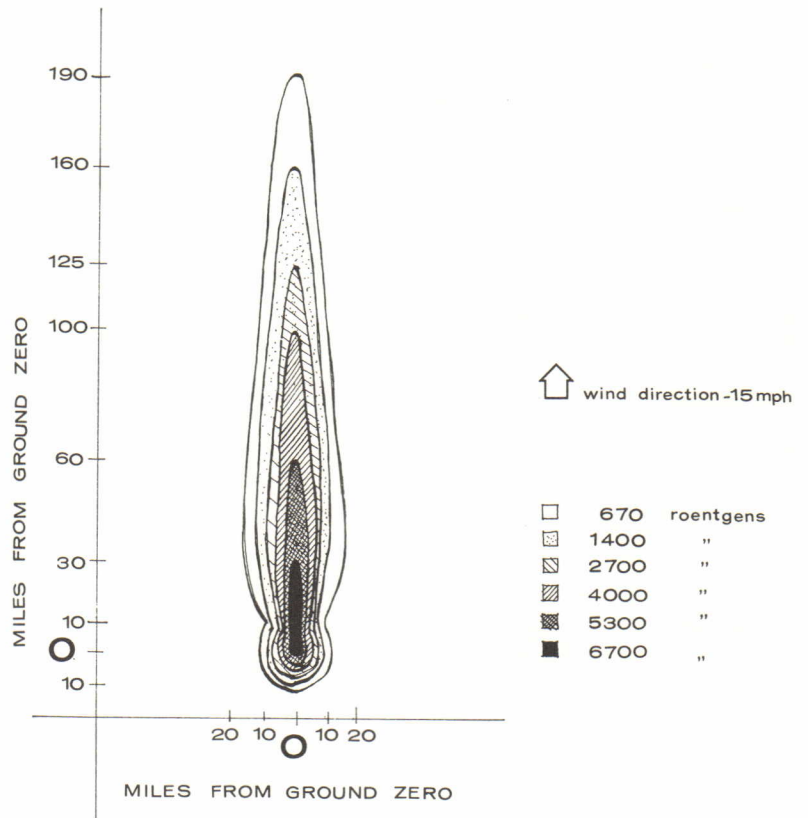


Figure 3. Fourteen day accumulated dose (roentgens) Pattern shows idealized dose contours for fallout after 1-megaton surface burst

“Statements on confinement are misleading in that continuous confinement for two weeks is probable only in areas of very heavy contamination. Studies have confirmed the ability of human body to withstand repeated exposure providing recuperative time is available and no massive lethal short-time dose is acquired.”

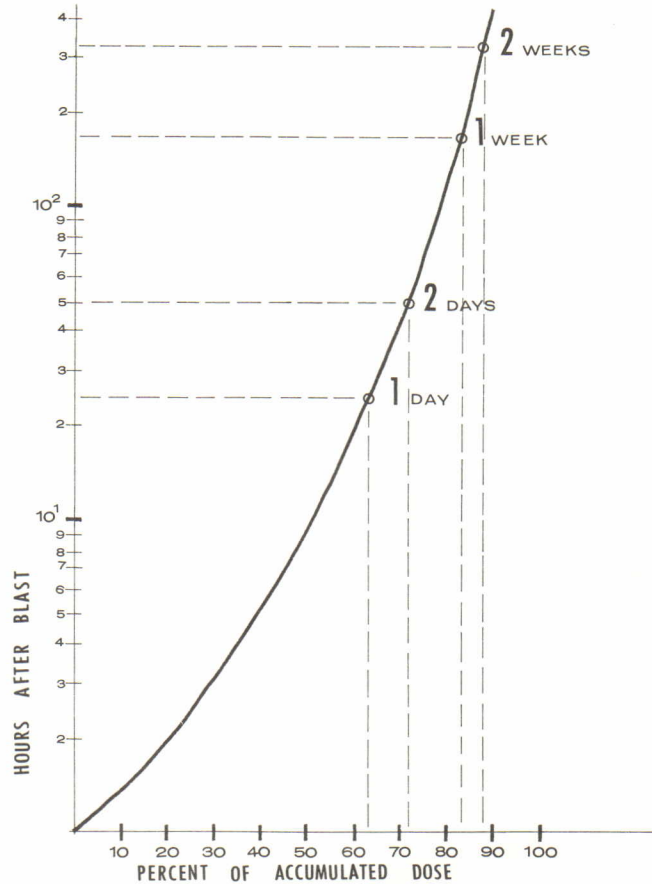


Figure 4. Accumulated dose vs time

Shelter Design

Attenuation

In general, any kind of shelter may be said to increase probability of survival. However, unless site involved is at a distance greater than fifty miles from any major target, it is highly doubtful that shelters built with attenuation factors of less than several hundred* would do anything less than produce a very dangerous sense of false security.

Within a 50-mile radius of a one megaton surface burst, it appears that a gamma ray attenuation factor of 1,000 (amount of shielding necessary to reduce inside dose to 1/1000 of outside dose) is needed to provide a reasonable chance of survival.

Confinement

Figure 4 gives percent of accumulated dose as a function of time after blast. Note that almost half of total dose is received within 10 hours after arrival of first fallout. *The first few hours in the shelter are the most important ones*, because radioactive fallout intensity decreases rapidly with time. Two weeks after blast 90% of total dose will have been received.

In general, it is felt that after two weeks of continuous confinement to shelter, occupants may go outside for a few minutes each day. Varying degrees of confinement will probably be required for several months to a year, unless effective clean-up measures are taken or survivors are evacuated to an area of lesser fallout.

Shielding

Best location for a fallout shelter in the Boswell School is in the area just below library floor in academic unit. Figure 5 shows plan and section of shelter. This space has a gross area of 10,500 sf, and a shelter capacity of 700 people.

Figure 6 indicates concrete shielding required for this shelter at varying distances from blast.

Condition 1: School-shelter at actual location, eight miles from blast

Condition 2: School shelter at 30 miles from blast

Condition 3: School-shelter at 100 miles from blast

Condition 4: School-shelter at 190 miles from blast

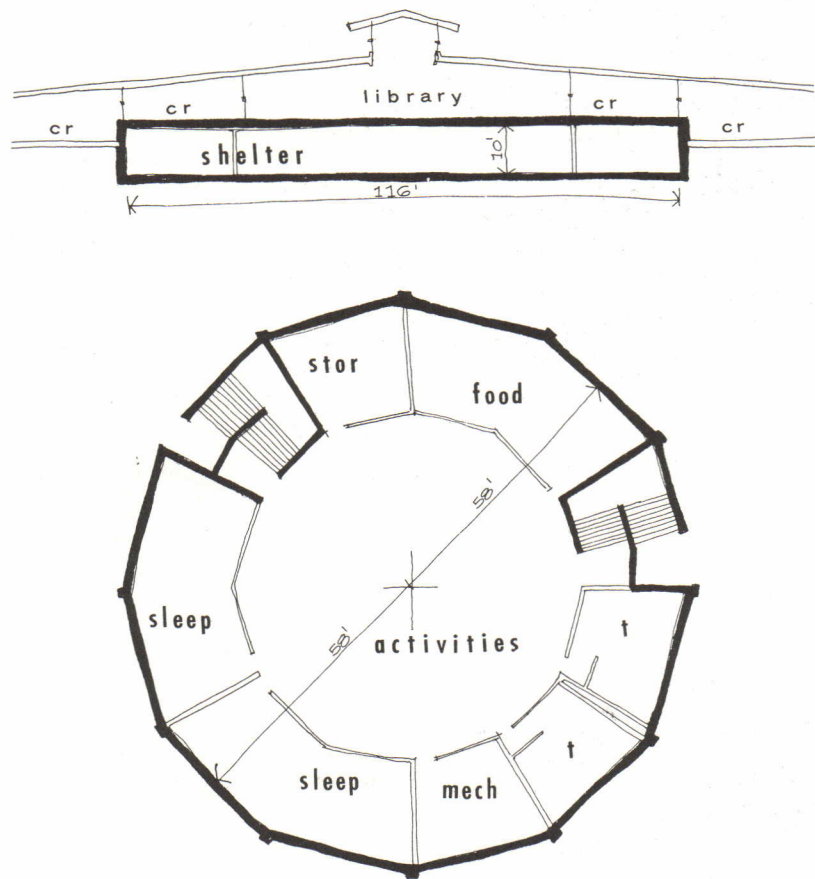
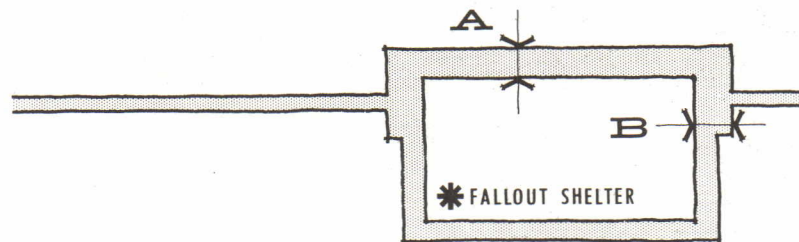


Figure 5. Section and Plan—Location of Fallout Shelter



| CASE STUDY * | CONCRETE REQ TO LIMIT 14 DAY ACCUMULATED DOSE TO 10 RTGNS | |
|--------------|---|-------|
| | A | B |
| 1 AT 8 MILES | 16" | 25" |
| 2 " 30 " | 15" | 24" |
| 3 " 100 " | 13" | 22" |
| 4 " 190 " | 7" | 14.5" |

Figure 6. Concrete shielding

* A one-story house without a basement has an attenuation factor of about 2.

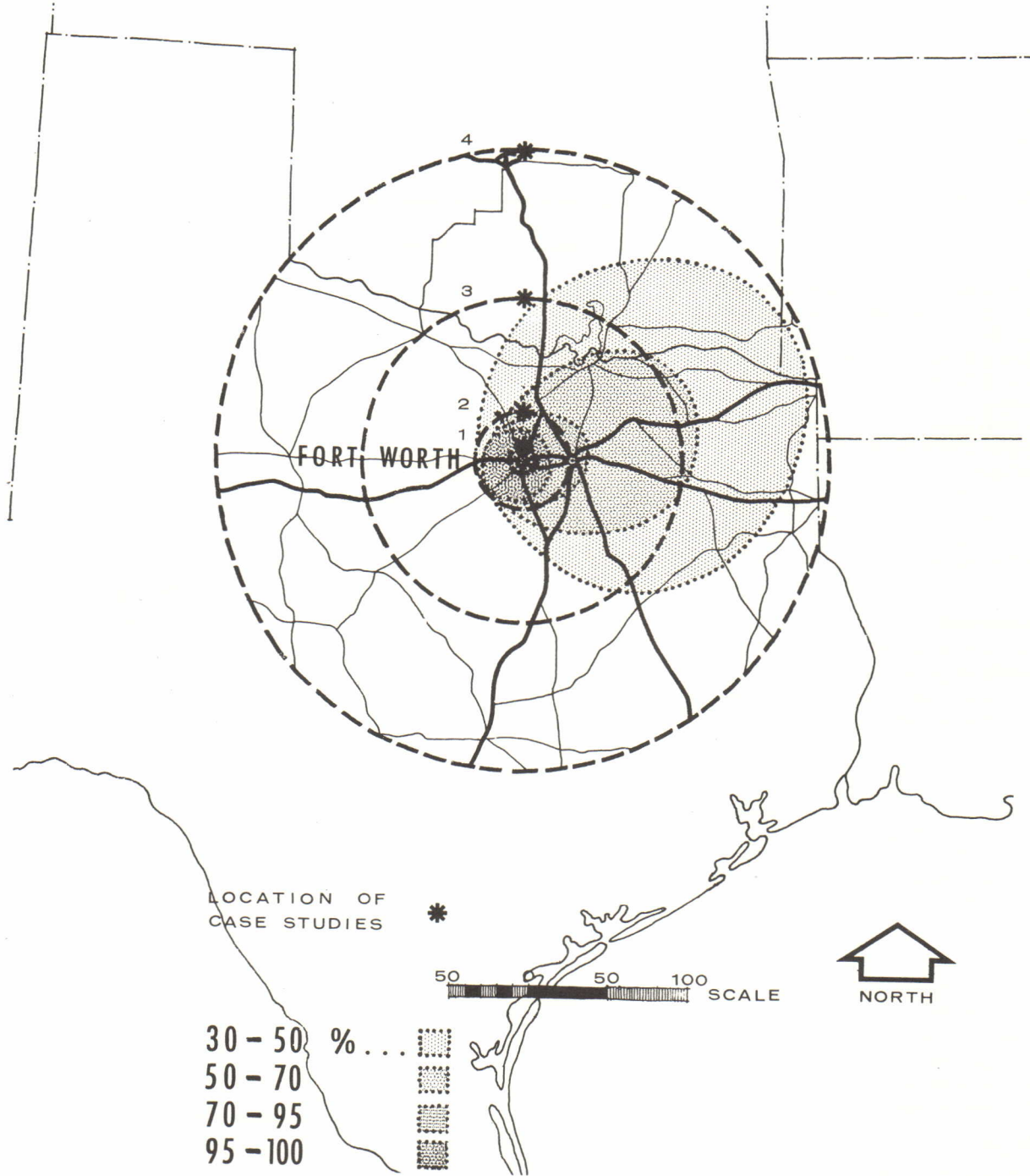


Figure 7. Fallout Probability

Amount of concrete shielding for each condition is based upon limiting accumulated dose to shelter occupants to 10 roentgens for the critical 14-day period after blast. This dose is purposely kept low in order to create a good margin of safety against the time when survivors must go outside shelter into still-radioactive areas to search for food, to evacuate, or to begin recovery operations. Although this report is predicted upon ordinary concrete as shielding material, other material, such as earth and water, may be used provided they are of an equivalent mass thickness.

Entrance Design

Entrances to shelter must be designed to attenuate as much radiation as an exposed solid wall. Therefore, thickness of shielding at entrance must be at least as thick as the solid wall, and no straight path should offer less mass thickness of shielding than that required to give specified protection factor.

Another major consideration affecting entrance design is that nuclear radiation is similar to light and is scattered around corners. Entrances should have equivalent of two 90° turns to reduce this scattered radiation.

Ventilation

Minimum ventilation quantity that should be considered is 3 cfm of outside air per person. This amount of air will permit only very light to moderate activity by shelter occupants.

Airconditioning and increased ventilation of shelter would allow some nearly normal physical activities by efficiently dissipating shelter heat-gain caused by outside air, people, and equipment. An approximate guide to quantity of airconditioning for shelters is one ton of refrigeration per 20 occupants.

Shelter filtering equipment for

outside air is essential to either a mechanical ventilation system or airconditioning.

Decontamination

In general, decontamination measures are not suitable for initial protection against fallout. However, very prompt decontamination might seem to be an alternative to shielding as a method of reducing dose to shelter or building occupants.

Such a decontamination method would have to provide a reliability at least equal to that which we can attain readily with shielding, and would have to be capable of removing 99.9% of radioactive material from roof surfaces of building, and from adjacent ground areas. The problems are enormous:

- conventional built-up roofs with aggregate surfaces require much more elaborate equipment than a simple spray-down device
- removal of contamination from roof only would not eliminate need for shielding because of air-and-structure-scattered radiation around building. To complete the task, it would be necessary to have remotely operated equipment for removal of ground contamination to a distance of a least several hundred feet
- there is a possibility of fallout from several different blasts arriving at different times necessitating continuous operation of equipment for perhaps 6-12 hours.

Decontamination methods with required efficiency and reliability have not been developed to overcome the tremendous problems that result once fallout is deposited on ground or tops of structures. A better approach to the problem would be to find a way to prevent fallout from reaching the ground in selected areas. No such solution appears likely; consequently, mass shielding is best answer.

Fallout Probability

For more isolated regions where population densities are not large and fewer likely targets occur, it seems possible to apply a probability approach developed by the government⁽²¹⁾ to determine need for shelter. Once need is established, then degree of shielding is calculated.

This approach is based upon a five-year study of winds aloft to 80,000 feet, at 41 weather stations across the nation. Fallout charts were prepared for each day of the five-year period for each weather

station, and these were combined to form fallout probability patterns for each station.

Figure 7 shows the fallout probability pattern applied to area in which the case-study school is located. Overlaid on this pattern are circles, concentric with Carswell Air Force Base, indicating radial distance from blast.

Calculated risk, from Figure 7, for each condition is:

- Condition 1: better than 90% probability of needing fallout protection
- Condition 2: 70% probability
- Condition 3: 30% probability
- Condition 4: less than 30% probability

Cost of Fallout Protection

Estimated costs of shelters are given in following table. Costs for equipment and provisions are not included.

| | Total cost of shelter independent of building | |
|--------------------------|---|-------------------|
| | A minimum quality | B good quality |
| Condition 1: (8 miles) | \$177,100 | \$222,300 |
| Condition 2: (30 miles) | 172,600 | 217,800 |
| Condition 3: (100 miles) | 162,100 | 207,300 |
| Condition 4: (190 miles) | 121,600 | 166,800 |

| | Added cost to construct shelter as part of school* | |
|--------------------------|--|---------------------------------------|
| | C minimum quality | D good quality: dual purpose space |
| Condition 1: (8 miles) | \$138,050 | \$82,550 |
| Condition 2: (30 miles) | 133,550 | 78,050 |
| Condition 3: (100 miles) | 123,050 | 67,550 |
| Condition 4: (190 miles) | 82,550 | 27,050 |

Construction quality of shelters B and D exceeds that of minimum quality shelters by:

- air conditioning rather than minimum ventilation
- resilient tile flooring
- acoustical tile ceiling
- high level of electrical illumination

*Existing school construction cost, including water well, pumps, and storage: \$834,450.00

“More background on the cost estimates would be desirable, since it may be misleading to attempt to apply these costs without a thorough knowledge of assumptions on which they are based. As an example, airconditioning of public schools is very rare in northern states — consequently, an airconditioned school, such as the one on which this report is based, would in this respect be less costly to adapt for shelter purposes than a typical northern school.”

“The bibliography is impressive in that it shows breadth of material available locally or through OCD to any architect willing to devote some time to problems of fallout radiation protection. He should first turn his attention to The Effects of Nuclear Weapons which is the basic text and the precursor of the rest, and next to Fallout Shelter Surveys: Guide for Architects and Engineers which is the primer on protection against effects described. Afterwards, he should be in the mood for more selective reading.”

- conventional group toilet facilities and fixtures rather than trough urinals and chemical containers

Cost for shelter where it is a part of Boswell School (C and D) is reduced because shelter and school share in cost of certain construction:

- water well and related equipment is necessary to existing school and would also serve shelter
- concrete roof slab of shelter also acts as floor of library
- in the case of shelter D, it is assumed that 6,300 sf of shelter will be used for everyday educational purposes, thus eliminating an

equivalent area of above-ground construction

Note: *This limited use of dual-purpose space in shelter is not in any sense a recommendation for placing an entire school underground.*

Conclusions

1. If present Boswell School had been designed to include a dual-purpose shelter (D) with good fallout protection, additional cost would be approximately 10% more than original cost.
2. Fewer dollars will be spent (22

to 63% less, in our study) for shelters if they are constructed in conjunction with other facilities such as schools.

3. Cost economies can be made by designing shielding of shelters to fit assumed conditions of distance from target and size of weapon, but, within 100 miles of target, savings are so slight they do not warrant decreased protection.

4. It is entirely feasible, both economically and functionally, to provide fallout protection to a school building without sacrificing conventional design features of teaching space, ie classrooms. ◀

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26 Valuable assistance and information was obtained from Neal FitzSimons, Research Engineer, Executive Office of the President, OCDM



MONTREAL MEETING:

AIA Committee on Hospitals and Health

by Eric Pawley, AIA

► Last spring this active committee sought and received special permission from the AIA Board of Directors to hold a meeting outside the United States—in Canada. This is the first time an Institute committee has done this and it was a rewarding and pleasant experience. We met in Montreal early last May for our regular business sessions, held joint meetings with members of the Royal Architectural Institute of Canada and the Canadian Department of National Health & Welfare, and inspected a number of hospitals in Montreal.

AIA Committee on Hospitals & Health (CHH):

Current members of this committee who participated:

- E. Todd Wheeler, FAIA, chairman (Chicago)
- Rex W. Allen (San Francisco)
- Will W. DeNeff (Spokane)
- John M. Hewitt (Kansas City)
- A. N. Kiff (New York)
- Roland L. Linder (Denver)
- Sherman Morss (Boston)
- William R. O'Connell (Austin)
- Walter B. Schultz (Jacksonville)
- Eric Pawley, AIA, attended as staff executive for CHH, and we had two other AIA members as guests:
 - August Hoenack, AIA, Chief, Architecture & Engineering Branch, US Public Health Services (Washington)
 - Roger Mellem, AIA, Staff executive, Council on Administrative Practice, American Hospital Association, (Chicago)

Members of the committee who were unable to attend the meeting were: Kling, Roessling & Yeates.

Arrangements for the meeting took several weeks of correspondence with Canadian officials and with Robbins Elliott, Executive Director of the Royal Architectural Institute of Canada. Since his office is in Ottawa he enlisted the aid of Jacques Tisseur, Executive Secretary of the Association of Architects of the Province of Quebec and the officers of that Society, all of whom were most helpful although engaged in busy preliminaries for their own annual convention. President Harland Steele of the RAIC himself came to Montreal to be our host at an afterwork get-together of architects and wives.

Agenda (First Day):

The first business session was opened to our Canadian colleagues and several attended with a good simulation of interest, if possibly bewildered at our outlandish abbreviations—to each his own—they have PQAA, etc, which equally baffled us. Without going into detail, the first day's agenda included following items:

AIA board actions:

- AIA-AHA fellowships
- hospital department area studies
- Montreal meeting
- CHH duties
- CHH budget

CHH membership and corresponding members



Around a table piled with plans



"... but how much would it cost?"
(O'Connell, Labelle, Jorgensen)



"... where would you put it?"

"... but the Docs don't want it
there..." (Morss, Hughes,
O'Connell)



CHH regional activities and assignments to members:

- NFPA hospital committee: emergency electrical service standards
- hospital evaluation techniques speaker for College of American Pathologists Seattle
- CHH statement on professional responsibilities
- Washington State guide to planning hospital facilities

AIA Journal Articles:

- future subjects include:
- formula rooms
 - cardiovascular facilities
 - medical units for nursing homes
 - Cobalt-60
 - occupational therapy
 - airconditioning & heating for small hospitals

International Activities:

- A separate report by Pawley on:
 - UIA Commission on Public Health, London meeting (Rex Allen, CHH delegate)
 - IHF Congress in Venice (Allen, Lunden & Probst, AIA delegates)

US Public Health Services:

- current program, legislation

National Plumbing Code:

- American Hospital Association:** many items of mutual concern

In the evening of the first day, after delays due to a projector of a model so new no one knew how to run it (see photo), we had a typical CHH slide show of US hospitals which was enjoyed by an audience of some fifty architects and their guests.

Agenda (Second Day):

- American Hospital Association** (concluded)
- AHA-AIA Collab Research (W-59)** report of Boston meeting
- Other hospital research items**
- Mechanical equipment criteria**
- Hospital lighting**
- CHH department area studies** (continued discussion)
- Evaluation procedures** (continued discussion)
- AIA-AHA architectural school fellowships**
- Seminar planning (joint AIA-RAIC —to follow)**
- American Association of Hospital Consultants**

Seminar—Hospital Operating Rooms

Active participants in this three-hour discussion were: Wheeler—Jorgensen—Kiff—Morss—O'Connell for AIA. Gordon

Hughes, Canadian National Department—Pat Keenleyside, Robert Fleming, Henri P Labelle, RAIC.

After a brief introduction by chairman Wheeler, Kiff presented the subject, and then actual working drawings of five US hospitals were discussed by the group. Gordon Hughes told of some Canadian practices and proposals. Finally the seminar was joined by Dr Slater, a hospital consultant with background in anesthesiology who discussed many problems of his specialty. The accompanying photos give several action views of the seminar.

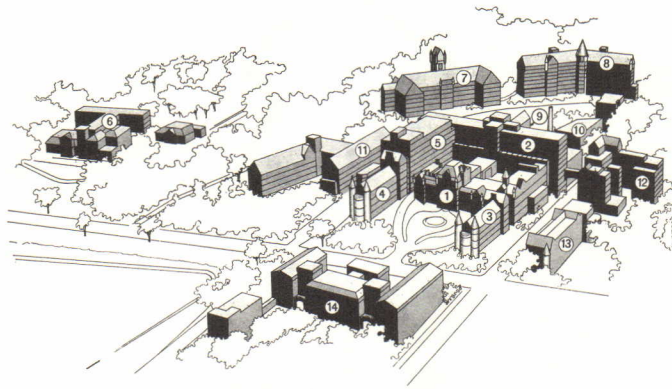
That evening a Dutch dinner was held for some thirty participants in a private dining room of a nearby restaurant.

Hospital Tour (third day):

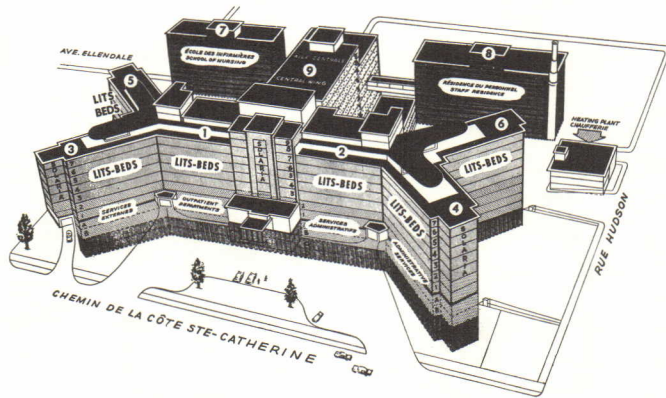
CHH members had selected four hospitals from the seven suggestions made by our Canadian friends and piled into a bus more or less at nine o'clock. First stop was *St Frances Cabrini Hospital*, noted for its treatment of a circular nursing unit (see drawings). After our tour there we went to *Montreal General*, an enormous multi-wing job. Survivors went next to *Ste Justine Childrens Hospital*, and a weary four got to the *Allen Memorial* (Psychiatric unit of Royal Victoria) in just about the right state for treatment. The accompanying diagrams give some idea of the size of these complexes. Diagrams are not drawn to same scale.

In spite of this effort to separate men from boys, the whole crew showed up for the cocktail party given for CHH by RAIC and PQAA. Somewhere along the line several members of CHH talked with the press. *The Gazette* led off with "One of the most pressing problems facing hospital designers is having to make do with existing buildings. . . ." Amen! That goes for tours, too.

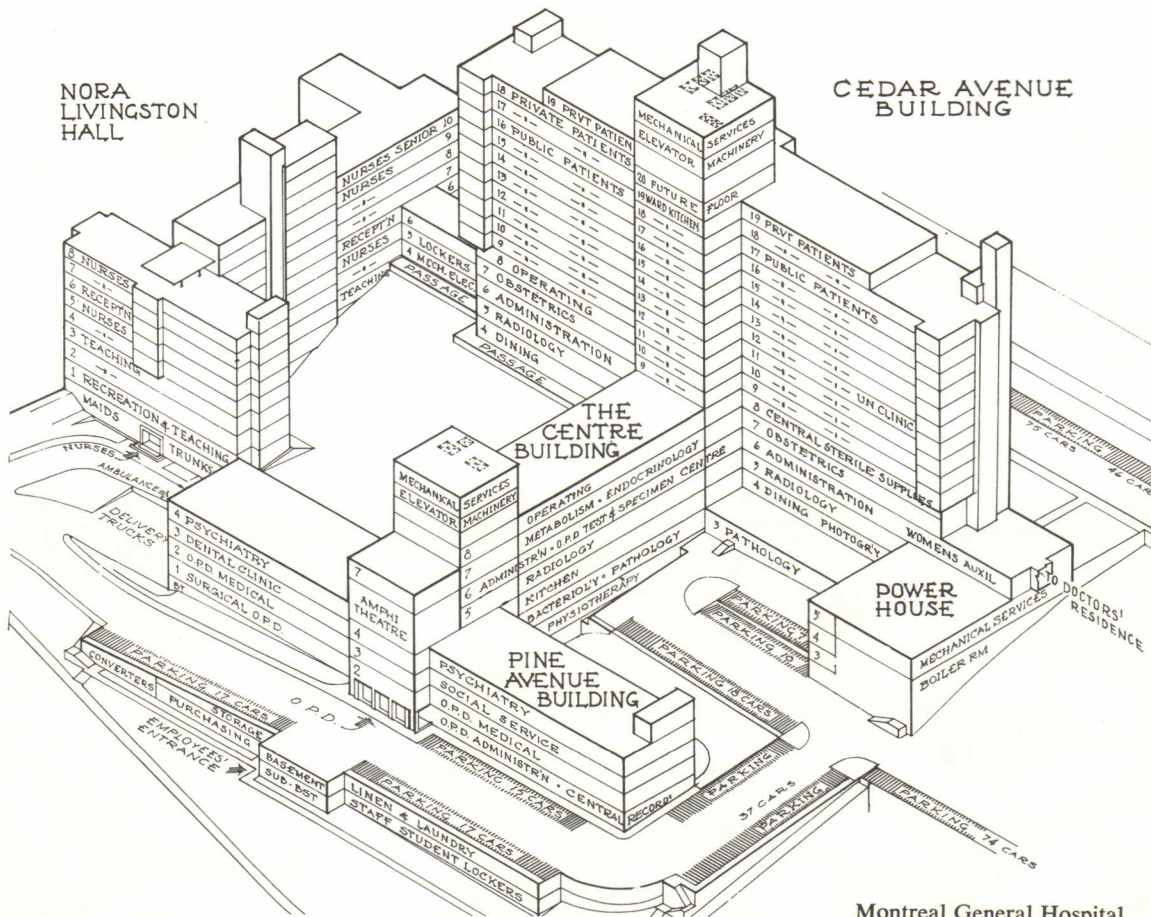
Final recognition must be given to a remarkable man, our colleague across that unfortified border and our friend, H. Gordon Hughes, FRAIC, who is Chief of the Hospital Design Division of the Department of National Health & Welfare. He was the first to welcome the whole idea of our visit (during an AHA Institute meeting in Washington), was tireless in helping with arrangements, attended all of our meetings and was one of the four who made it to the Allen Memorial at the very end—no, he made the party too. This is an enthusiastic man who Knows his job. ◀



Royal Victoria Hospital
Marshall, Merrett and Barott,
Architects



Saint Justine Children's
Hospital,
Labelle & Labelle, architects



Montreal General Hospital,
McDougall, Smith & Fleming,
Architects

The Student Page

by **Raymond Gaio**

► Eighteen months ago in San Francisco, the occasion being the ASC-AIA 4th Annual National Convention, attention was focused on whether or not the Association of Student Chapters AIA would continue in existence as a national entity, composed of autonomous student chapters, or fall by the wayside, thereby leaving the nation's architectural students without a means of contact with the profession which they will shortly enter.

What has happened since then? Has it been worthwhile? In the following paragraphs we shall try to present to you, in chronological order, the sequence of events which have shaped ASC policy during the past eighteen months. The conclusions to the above questions will be for you to decide.

April, 1960—San Francisco

The present ASC-AIA National Officers were elected by some 120 architectural students at Berkeley, California. No politicking was evident, and no "something for everyone" platforms outlined. Rather, the main thought shared by all nominees for national office, regardless of the office to which they were nominated, was "working together," through the Regional Directors, the Deans of Architecture, and the Institute Chapter Affairs Committee for the betterment of understanding among all concerned with the profession of architecture.

The first board meeting of the newly elected Officers and Regional Directors, held on the 18th of April (following their election) ended with the issuance of a joint report outlining a procedure of communication to be employed by the ASC which would embrace each administrative echelon of the Institute as well as the Student Organization. To effect such, the ASC-AIA was divided into three groups from which, and to which material would be collected and disseminated, thereby keeping the Student and

Practitioner fully aware of developments within the ASC-AIA:

1 National Officers—Pres., Vice Pres., Secy., Treas., Staff Exec.

2 Directors—National Officers, Regional Directors, Staff Exec.

3 Total membership of ASC-AIA, Staff Executive.

September, 1960—Washington, DC

In a decisive attempt to resolve the mutual misunderstanding which arose at the 1960 National Convention, Mr George Pierce, Chairman of the Institute's Chapter Affairs Committee, called a special meeting on September 14th in Washington, DC. Those in attendance included AIA President, Philip Will, and Second Vice President Hunter, and the three National Student Officers of the ASC, President Raymond L. Gaio, Notre Dame; Vice President Alex Vergun, MIT; Secy., Treasurer Gary Call, USC, plus members of the AIA Chapter Affairs Steering Committee. Under major consideration was the declining ASC-AIA relationship. As a point of clarification President Will and Vice President Hunter stated that:

"The Institute's concern should expand to include all facets and standards of education in addition to fostering communication; to enlighten, to indoctrinate, and to broaden the Architects' and the Students' view of the profession."

The ASC officers then described the further heights to which the Association aspires:

"To instill in its student members the broadest principles of professionalism eschewing pedestrianism, and the extreme desire for architectural competence."

To implement the aforementioned principles and to safeguard their future relationship, a new joint committee was established as a sub-committee of the AIA Chapter Affairs Committee. It is composed of the three National Student Officers and three institute members. Meeting at the National Convention and the Forum and sitting together for the sole purpose of ef-

fecting a favorable climate in which both organizations can work for the betterment of the profession.

November, 1960—Washington, DC

The 1960 Student Forum, held at the Octagon the three days prior to Thanksgiving saw many changes take effect with the actual implementation of many of the sub-committee's decisions. No longer were the students presented with a hard-sell of why membership in the Institute was desirable, rather they were exposed to prominent men representing the many and varied phases of the architectural profession. So large was the turn-out that plans for larger quarters to house the 1961 Forum were made immediately upon completion of the 1960 Seminar. Tape recordings of all the sessions were made available to the schools for purchase or rental. Through this media those in attendance were able to take the Forum proceedings back to their institutions and fellow students (some 16,000 strong).

Whenever time permitted—and never interfering with the Forums planned activities, business sessions of the ASC-AIA were held. (Several plans for new programs and certain necessary constitutional amendments were presented and moved.) The constitutional changes were as follows:

1 National Student Officer elections are to be held at the conclusion of the Student Forum commencing with 1961 due to better representation.

2 The election of Regional Directors is to be held at the Regions' Annual meeting, should there be an insufficient number of regional representatives at the Forum.

Following a six month critical analysis of ASC-AIA's operational methods and structure, a new organization was outlined by the ASC President, and ordered by the ASC-AIA Board of Directors. The plan called for each school chapter to appoint or elect a Board of Directors composed of two representatives from each class which would advise the local officers of problems existing at the grass-roots level, and aid them in carrying out their programs.

The Student Chapter President would, in turn, serve as a member of a Regional Board of Directors, assisting the Regional Director with his duties and co-ordinating the region's activities so as to benefit the greatest portion of the membership.

The new plan relieved the administrative burden then carried solely by the three National Officers and the thirteen Regional Directors. It brought some 900 additional individuals into direct contact with the Association, and thus provided the ASC with a large number of potential student leaders. Another extremely important by-product of the new plan is better informed National Officers, now more capable of performing their respective tasks in a much more effective and efficient manner.

Inter-Regional Newsletter

The need for closer communication between Regional schools resulted in a call by the Student Officers for the establishment of Inter-Regional Newsletters. The material for such would be collected, duplicated and distributed by the respective Regional Directors, with the publication and mailing costs equally divided among the Region's schools of Architecture. This news media would not only insure proper communication between schools, but would also provide an abundant supply of material for the often empty student pages in the *AIA Journal*—the students' only direct voice to the profession. Craig Protz, Texas Regional Director, by Presidential appointment, became Editor of Student Publications.

International Affairs

Realizing the value of international understanding, a committee to study international communication possibilities was appointed at the 1960 Forum. Vice President Alexi Vergun, MIT, chaired the committee of ten, including students who were attending American universities, but lived in foreign countries. Following their recommendations, the ASC Executive Board forwarded a questionnaire to all student architectural organizations in the world (including those behind the Iron and Bamboo Curtains) in an effort to find out what forms of student exchange (if any) they would favor. Enthusiastic replies were received from around the world. Currently under study are plans for the creation of a library of American Student Works in photographic and slide form, to be housed in the Octagon, with exhibitions of such available to all interested parties merely for the shipping costs.

An international competition call-

ing for the design of a traveling theater was also administered by the ASC-AIA through the AIA Staff Executive in charge of student affairs, M. Elliott Carroll, AIA. Twenty-eight American and numerous foreign schools entered the London competition. The American entries were shown at the ASC-AIA—AIA National Convention in Philadelphia prior to being shipped to London for the judgment.

Scholarships and Awards

A listing of all scholarships and awards available to Architectural students was compiled and distributed to each school of architecture via their representative to the 1960 Student Forum. During the Forum Mr Don McCammond, Public Relations head for Reynolds Metals Company, announced the formation of the R. S. Reynolds Aluminum Prize for students. Awards of \$200.00 were given for the best usage of aluminum in a student design problem at all participating schools. The local winners were sent to the Institute for a competitive judgment with the national winner and his school equally dividing \$5,000.00. John Dewey, University of Cincinnati, was the winner of the first annual R. S. Reynolds competition.

April, 1961—Philadelphia

The 5th annual ASC-AIA National Convention was held in Philadelphia from April 24th to 28th inclusive, purposely scheduled to run concomitantly with the AIA National Convention.

The results of combining conventions far exceeded expectations. Student attendance rose from ninety in New Orleans in 1959 and 120 in San Francisco in 1960 to 520 in Philadelphia in 1961—representing an increase of some 432% over the previous year. Students came to the conclave from as far away as California, Utah and Texas—at their own expense.

Career Guidance

At Philadelphia, a report on "Career Days in the Great Lakes Region" was made by ASC Regional Director George Van Neil.

Such a program was felt to be invaluable and is to be carried out by the ASC's member chapters and affiliate organizations on a national scale during the 1961-62 school year. It is hoped that the sponsor-

ing AIA Chapters will join with the ASC in this worthwhile program.

Finance Committee

Acting on the recommendations of the ASC Finance Committee, the ASC-AIA budget has been lowered some \$8,000 during the past eighteen months. The 1959-60 budget called for \$19,500 to cover operating expenses. In April of 1960 the present Finance Committee thoroughly studied all phases of the association and then estimated the costs to complete its proposed programs, at \$14,500. In Philadelphia at the conclusion of the 1960-61 fiscal year, the Finance Committee again sat down to decide what amount of money would be needed to carry out the activities planned for the 1961-62 fiscal year. Their estimate totaled \$11,500—a representative decrease in operating costs of approximately 41¼% during the past year and one-half.

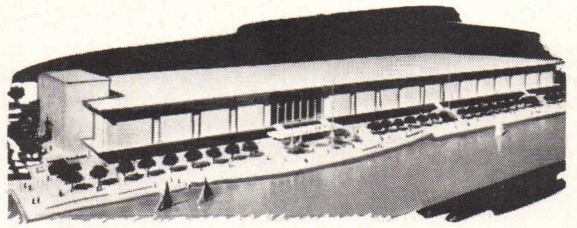
The past eighteen months for the Association of Student Chapters, AIA, have been filled with activity and constant re-evaluation, with an ever hopeful eye toward stability and continued progress. Oftentimes, the success or failure of certain programs is not immediately determinable. Too many variables are present and too many results are not felt until months after the old administration has retired from office. Therefore, a thorough analysis, whether it be for praise or condemnation should be furthest from the mind—with only the thought of what is still to be done or what can be done for the betterment of the profession present!

M. Elliott Carroll in his welcoming address to the 1961 ASC-AIA National Convention, stated, and I quote:

"The AIA bears a responsibility in the total picture of educating both the practicing profession and the oncoming generations of the profession. The Institute hopes through the student program to instill moral convictions concerning the dedication of purpose and the desire to comply with our ethical code, our standards of practice, our obligations of professionalism and our responsibility to society for the total man-made environment. In other words, Student Chapters should be a training ground for the profession."

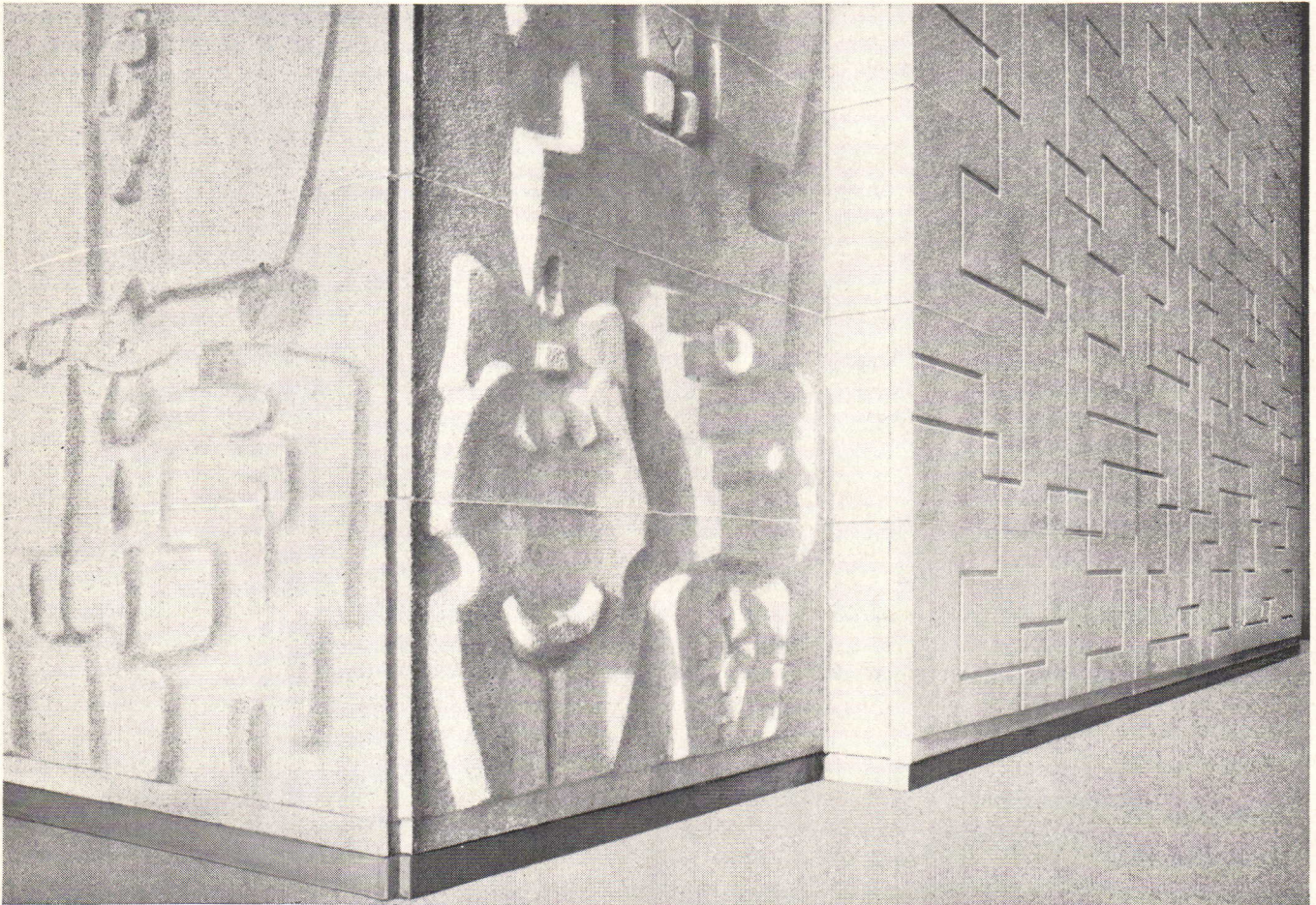
So long as mutual respect exists, and each strives to work for the common good, rather than personal gain, fear need not exist. ◀

The CONCRETE



CURTAIN WALLS

of McCormick Place—new \$34,000,000 exposition center on Chicago's lakefront—were made of Trinity White portland cement and exposed white aggregate



(Top) Model of McCormick Place as seen from Lake Michigan. (Above) Close-up of the sculptured concrete panels

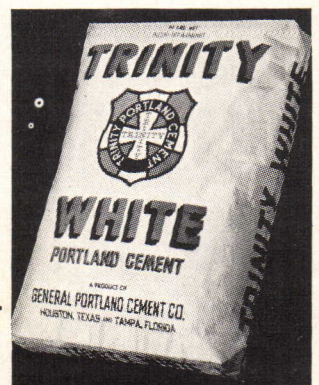
McCormick Place is one of the largest concrete structures in the world—three blocks long by a block wide and high as a ten-story building . . . 2,010 curtain wall panels made of Trinity White and white aggregate were used. Sculptured panel designs by Constantine Nivola.

Shaw Metz & Associates,
Architects;

American-Marietta Co.,
Concrete Products
Division,
Manufacturer.

Trinity White
PORTLAND CEMENT

A Product of
General Portland Cement Co.
Chicago • Chattanooga • Dallas • Fort Worth
Houston • Fredonia, Kansas • Jackson,
Michigan • Tampa • Miami • Los Angeles



Have We Been Had?

The "official" art world in America still maintains that abstract expressionist anti-art is the only style of painting which truly reflects the spirit of our times, the *Zeitgeist*. When John Canaday, the brilliant art editor of the *New York Times*, recently ventured the opinion that this view might perhaps give license to a lot of facile fakery, he was vociferously attacked by some of our most influential taste makers.

Yet all is not well, as this letter to the *Times* by a leading art educator reveals. It is here reprinted with the permission of the author. (WVE)

► "I think it is important to point out just now that in addition to those who say so openly, there are many artists, museum men, professors, teachers of art and art critics who now privately question the views they have held supporting abstract expressionism, action painting and neo-dadaism in art. The trouble is that many who had been enthusiastic about these forms of modern art (until, like myself, they began dropping off the bandwagon in increasing numbers during the decline of the nineteen fifties) still cannot afford to express openly their true opinions.

Some of these men have told me so, after exacting a pledge of secrecy. Others would tell only their best friends or no one at all. The dilemma is that so many have so much to lose by re-examining their fundamental premises in evaluating art. The loss is primarily in terms of self-esteem and professional reputation, but often in financial investment as well.

The producers of art with a built-in non-art value have a lifetime investment in the *Zeitgeist* theories that support the movement, and their livelihood depends upon preventing damaging criticism of it. Almost as serious is the case of the collectors, museum directors, and trustees who have purchased at high prices and exhibited and defended such works of art. Can they now suddenly say they made a costly, but an honest mistake?

Then there are the professors and artist-teachers who have sincerely taught a generation of students to esteem radical eccentricities and to be ultra-tolerant of experimental work because it is "contemporaneous in spirit." Their students have learned to do nothing else, so that even though they may harbor doubts they have not the technical and conceptual resources to undertake anything more demanding. They must go on imitating those abstract artists who are successfully promoted, must continue teaching academic "self-expression" to another generation of high school and college students.

It is quite true that "we have been had." But it would be hard to say that anyone is at fault. We all did it to ourselves, usually with the utmost sincerity, by convincing ourselves that we were being original and contemporaneous and that this is all that really counts.

In the late nineteenth century, the major artists and critics nearly all made similar fundamental errors of judgment, and much of the work that was then highly esteemed and bought is now in the basements of museums or otherwise disposed of. Very likely, a generation hence, the art now enjoying highest prestige will suffer the same fate. But there is too much at stake among the participants for this re-evaluation to occur quickly. We will know the corner has been turned when the press no longer considers it news to publish the latest neo-dada prank in its art columns.

We may hope this time will come soon, since we seem to be reaching a turning point in history. The new mood in the United States to redefine our ultimate purposes, and to take more constructive steps to control our destiny, leaves little time to dissipate our spiritual resources in self-expression as an end in itself, or escapism through trivial abstractions, of action painting, rubbish constructions, and other anti-art gestures.

Obviously, we have the competence to distinguish between the better artists now in vogue by accepting the premises of the theory of art that supports them. But the time has come for the most serious artists, professors, museum authorities and critics to call in question the whole movement. Its superficial radicalism yields increasingly minimal returns, and has become the true conservatism of our day. The truly radical critic today must be the one who goes to the roots of the question of value, who is in advance of his time and consequently misunderstood. Our problem now is to locate artists who are equally advanced and give them due recognition."

LESTER D. LONGMAN

*Chairman of the Department of Art
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