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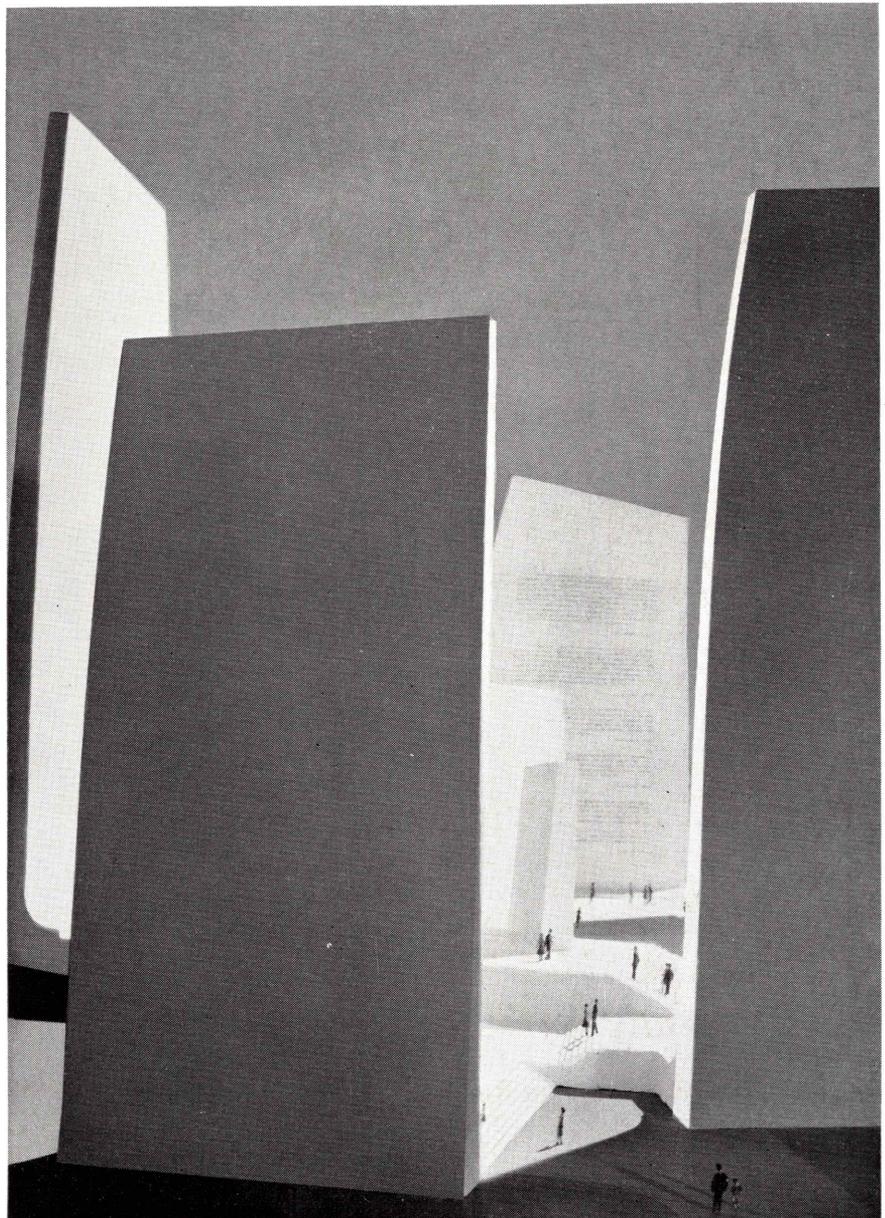
March 1962—In Two Parts—Part I



A · I · A

Journal

OF THE AMERICAN INSTITUTE OF ARCHITECTS



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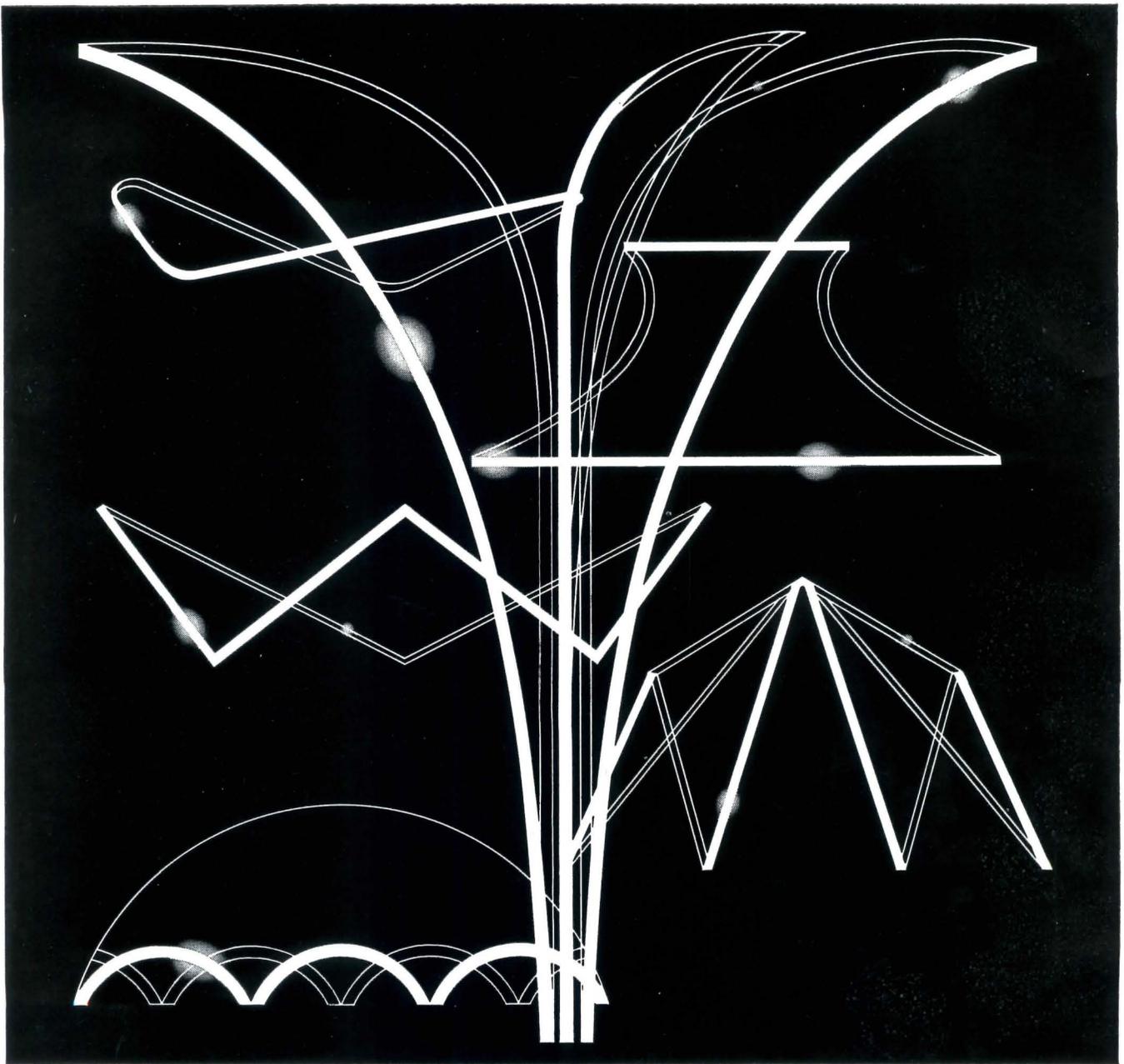
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Winning design for the FDR Memorial Competition, photographed by James Dunlop. See page 25 for a symposium on the competition and the winner



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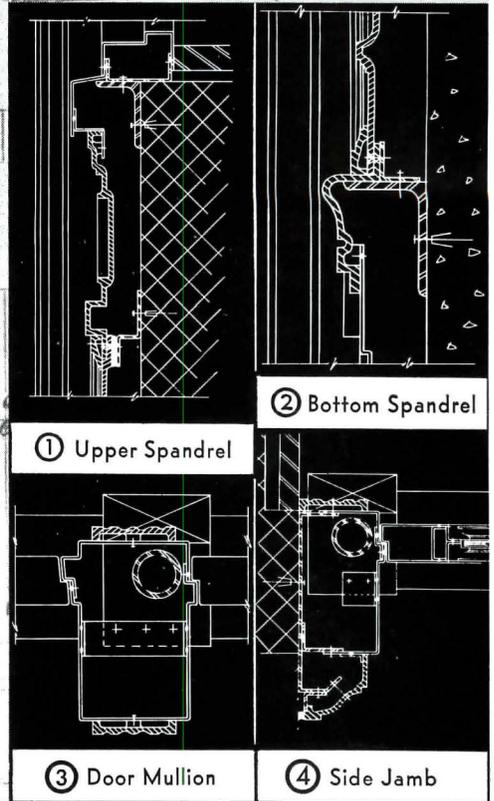
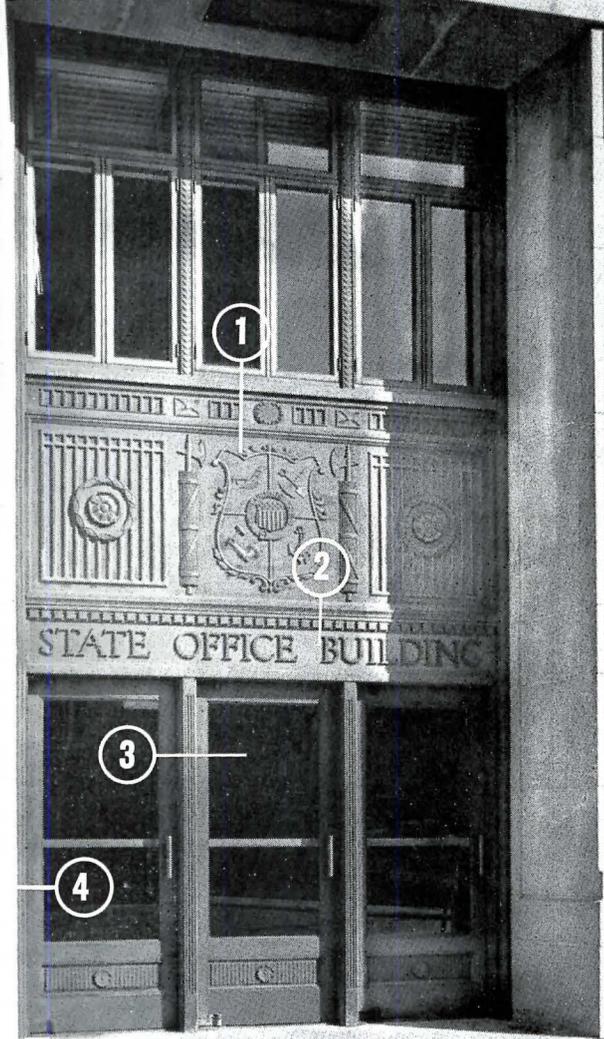
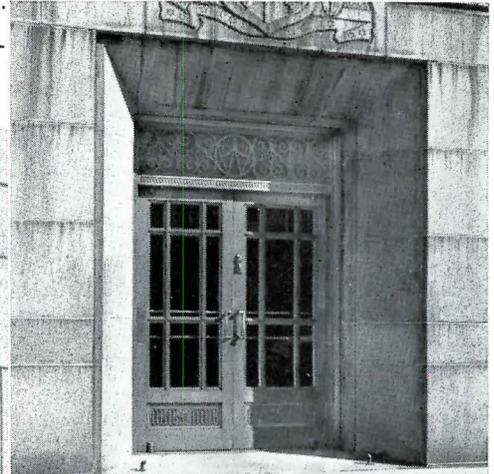
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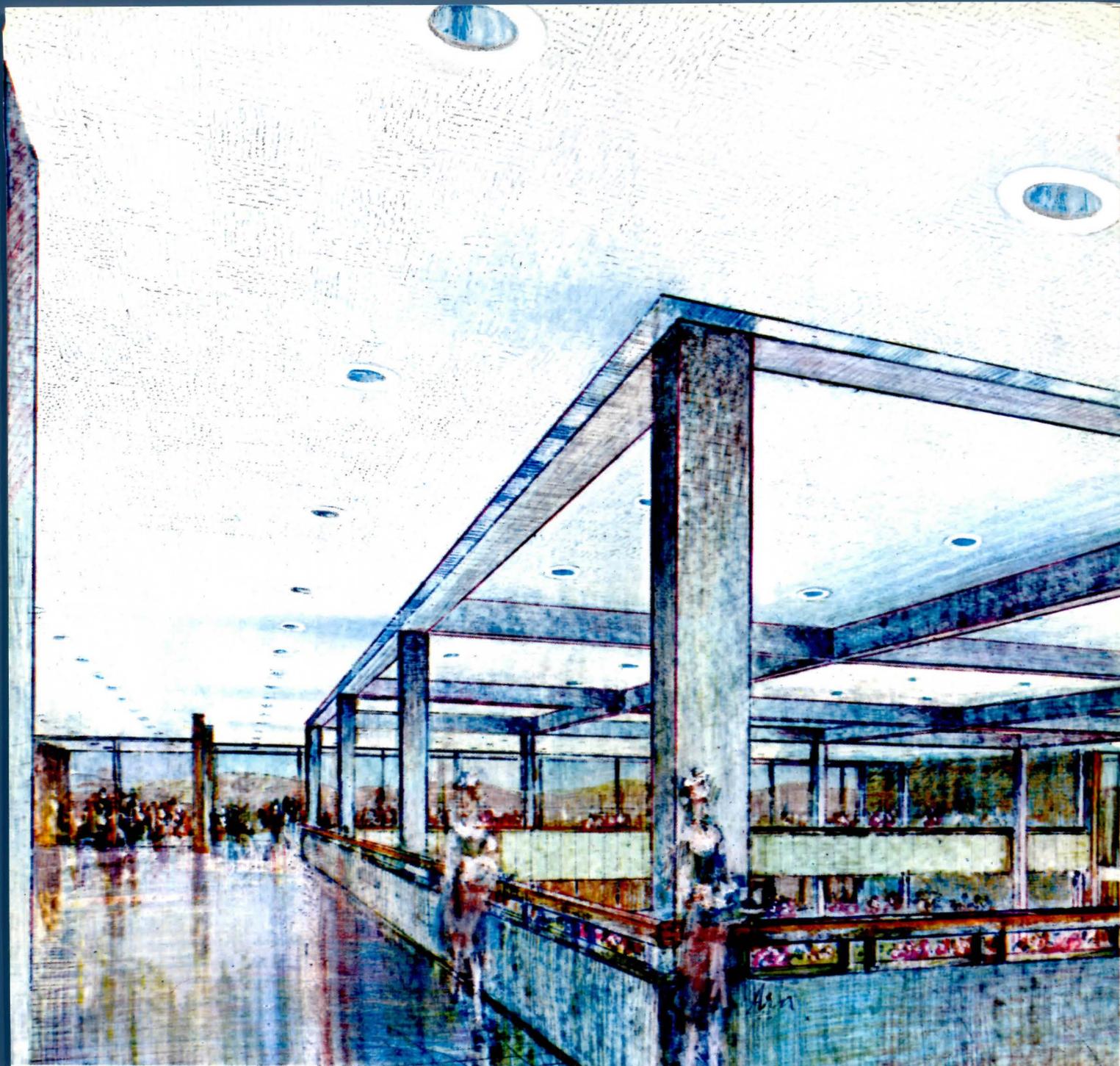


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Letters

Promoting the Profession

EDITOR, *AIA Journal*:

In December I sent two gift subscriptions to friends of mine who are engineers. The response to the reception of the *AIA Journal* was so gratifying that it prompts this letter as tribute to our fine magazine.

I might add that the initial issue which you mailed them (December) was particularly appropriate, since it featured the two outstanding awards the *Journal* received at the Industrial Marketing Competition. I am happily convinced that there is no easier way to promote the profession than through the *Journal*. . . .

EDWARD VAN AMERONGEN, AIA
Portland Cement Association
Chicago, Ill.

Stamp Out Kitsch

EDITOR, *AIA Journal*:

Your excellent article about "kitsch" (*Allied Arts*, January, 1962) touched a subject very close to my heart. You cover the subject pretty thoroughly and I admire you for your frankness. If only this article could be read by a greater majority, of people, not that most of us architects need an education about kitsch, but I feel that kitsch can be stamped out if our little children are already indoctrinated with the values of good taste in . . . early childhood. The elimination of kitsch should start in the nursery, because the first impressions in life are the ones which will decide taste in later life. Therefore it is still possible today, in our modern age with pushbutton kitchens etc., to sell houses with colonial ornaments, colonial fireplaces, etc. The big seller is the so-called "colonial modern rancher."

. . . If we cannot overcome this reaching for kitsch at an early stage in the life of a human being, then it will be very hard to do. . . . Helping [contribute to] kitsch is our entire industry with so-called decorator items, and last but not least, many of our own architects, who do not hesitate to paste dollar-bills on fronts of buildings in form of decorations . . . to create effects and "please" the public or their client.

During my high-school years . . . in Germany, there was a big movement started against kitsch with the help of newspapers. Our teachers told us to clean out at home all things and decorations we considered kitsch and bring them to school, even over the protest of our parents.

Our teacher arranged an exhibition, invited all the parents, and gave a talk about kitsch and what it is and means in general. The result . . . was quite satisfying. . . .

You started something very big with your article. . . . Why not ask all our architects what they consider kitsch? You will be surprised at the answers.

MARTIN GUTTMAN, AIA
Camden, N.J.

Setting the Record Straight

EDITOR, *AIA Journal*:

In an effort to categorize me, Professor Carver has been less than accurate in his paraphrases of parts of the "1984" article ("An Approach to Architectural Education," William W. Carver, January, 1962). [He states] "It is unfortunate that he felt compelled to completely eliminate the 'art' from architecture." On the contrary, the intent was to amplify and update the old claim that architecture is the most comprehensive art, the "mistress art." Vide direct quotes from the "1984" article (some phrases in italics this time). "At last it is recognized that architecture is entirely unique *among the arts*." ". . . demand of industry new products and resources *for his art*." ". . . *He is an artist* in recreating the environment—a creative coordinator—an *art* quite unrelated to the graphic and plastic arts, and vastly more complex". . . .

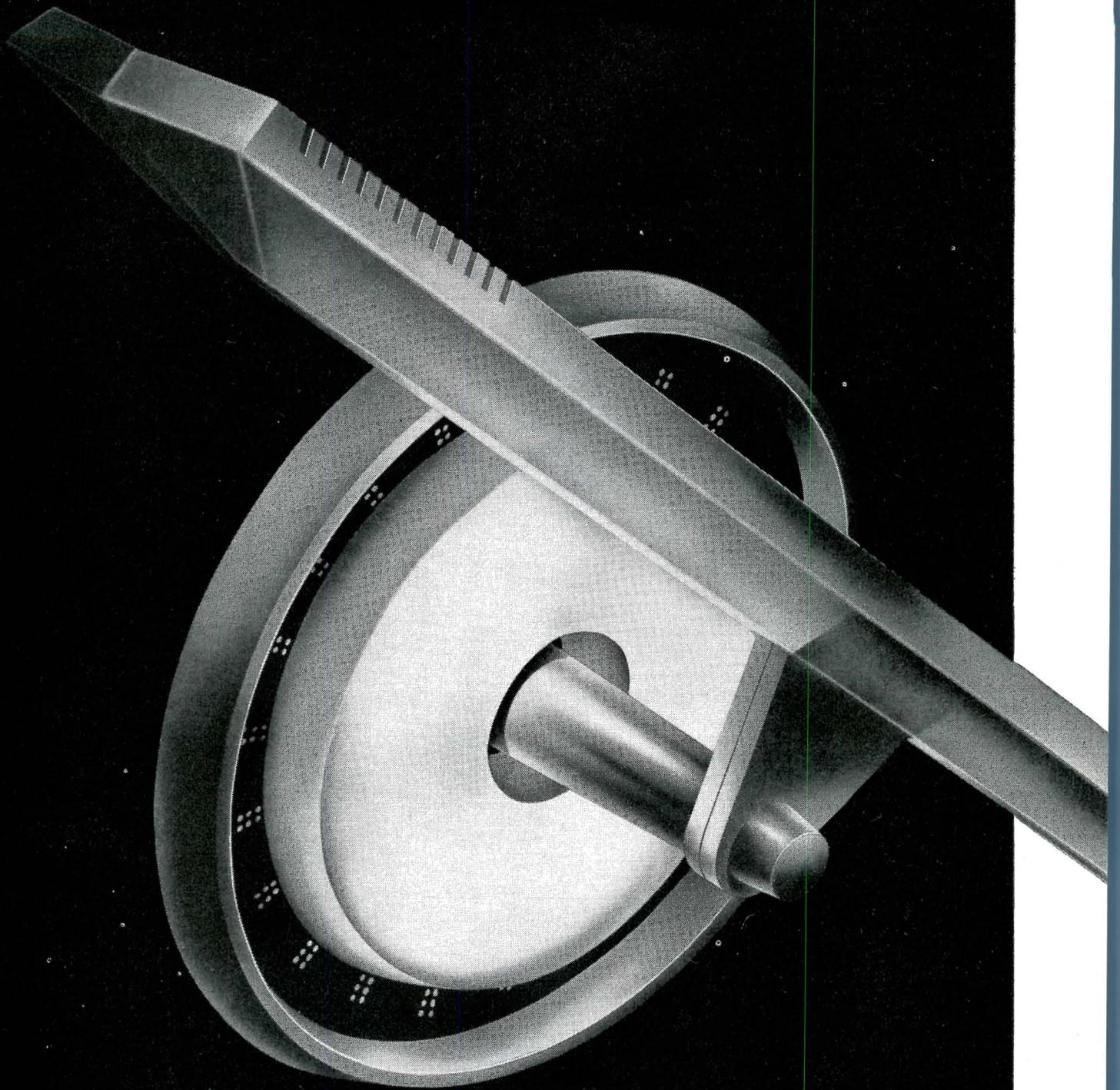
Nowhere does the "1984" article prophesy or advocate the abolition of intuition and inspiration. The concern is to eliminate their "vague qualities" and "nebulous character." In fact the article attempted to describe the process more adequately as "creative analysis and synthesis," and advocated more serious study of the creative process. . . .

The "1984" article did not say that "the psychologists, sociologists and physiologists will have provided the architects with a new rational esthetic." It *did* say that they "had provided *some* of the *ingredients* for a rational esthetic." Carver himself says, "Science can supply new and accurate information on the reactions of individuals and groups to known stimuli."

It is a matter of personal opinion whether Mr Whyte "exposed as fallacious . . . the essence of scientism." Whyte, who is a journalist, writes of "the average mind" and says, "The mind of man is an illusive thing, not subject to definition, regimentation nor categorization."

In higher education we are dealing with minds

(Continued on page 10)



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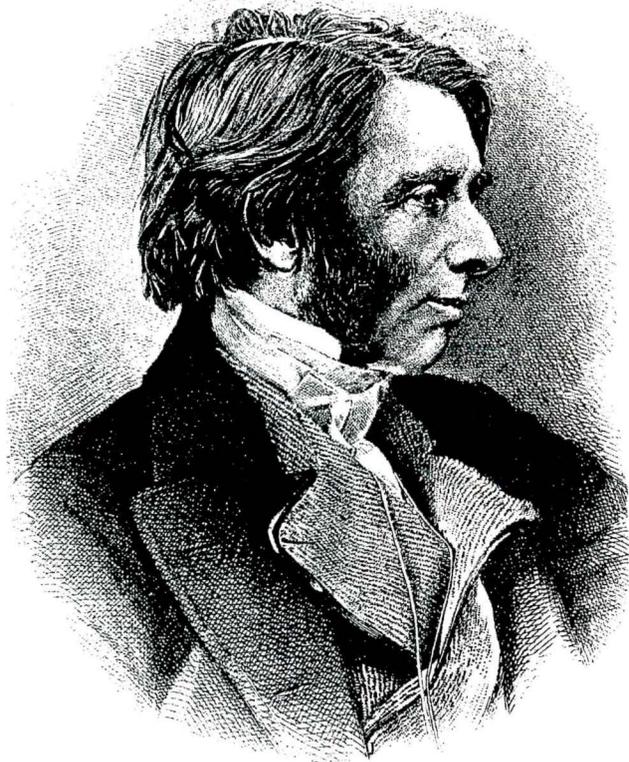
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Letters *(Continued)*

superior to the average. In any case I prefer to rely on the findings and judgment of the best psychologists and sociologists and to accept their claims and efforts to be rational and systematic. . . .

WALTER A. TAYLOR, FAIA
Ohio University
Athens, Ohio

Light and Shadow

EDITOR, *AIA Journal*:

I find encouragement in what is reported to have been said, at the 1961 Seminar at the Cranbrook Academy of Arts, to try to put into words the recurring impressions I get from so many illustrations of the new buildings that are being erected all over this country. So many of these structures seem to have been given no study as to their total design. They seem to resemble filing cabinets. The basic floor plan, for apartment or offices or whatever, has been worked out in detail. Then the only question is, “How many stories are there going to be?”

Of course, if the structure is wrapped up in one of the wall panel units, it doesn't matter whether the building is 200 feet long and 100 feet high, or 100 feet long and 200 feet high, the wrap-around units can meet either situation with the same monotonous result.

There was a time when buildings were designed as a whole. At the roof line there was something in the nature of a cornice, which not only marked the culmination of the façade but decorated it with a shadow. There might be some belt courses and a carefully-designed first story to form a base to the façade. Now that seems to be an outmoded fashion. Projections with shadows are as rare as hen's teeth.

Is there no way to design a structure for apartments except on the filing-cabinet basis? There used to be. Are we to be always confronted with exteriors faced with alternating panels of glass and metal which, when viewed at an angle, fade into a vague uniform grey tone with no interruptions from the window jambs that have ceased to exist. No solid corners give a sense of a frame for the façade.

Shadows used to be an important element of charm in the exterior design of structures. Is all that definitely a thing of the past?

WILLIAM STANLEY PARKER, FAIA
Boston, Mass.

(Continued on page 12)

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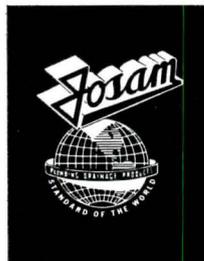
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Letters *(Continued)*

Business or Profession?

EDITOR, *AIA Journal*:

Please enter a one year gift-subscription. . . . My check is enclosed. The *Journal* improves with almost every issue—it's wonderful. The above subscription is for a cousin who is showing interest in the profession. I believe the *Journal* will indicate what the profession should be like (and may become) rather than the business which other publications would make it.

FRANK KENNETT, JR, AIA
North Conway, N.H.

Bucking the Packagers

EDITOR, *AIA Journal*:

I read with interest the article in the December issue of the *AIA Journal*, "Owner's Responsibility, Architect's Responsibility and the Contractor's Responsibility."

This article written by Mr Blanchard quotes Mr Charles Luckman, Architect, as saying the architects only designed one-third of the work that was let for building construction in 1960. This is a misleading statement. The architects *never* do anything in regard to oil refineries, bridges, tunnels, road work or complicated engineering work where the mechanical trades predominate. . . .

We will admit that housing constitutes about forty-five percent of our building dollar, which, of course, includes apartments, hotels, etc. Many of the small family houses are built from books that can be purchased. However, our state law now demanding that the seal of a licensed architect be on the drawings before the building permit is issued, has done a lot of good. Most of this work goes through the architect's hands.

Even the package buildings go through an architect's hands. Large builders corral the job, then peddle the architecture to somebody, hoping that he will reciprocate by giving the builder a job off his drawing boards. The architect really does the work, however, not wholly in a professional capacity. I do agree that the package building deal making the glorious draftsman, which is wrong for our profession. . . .

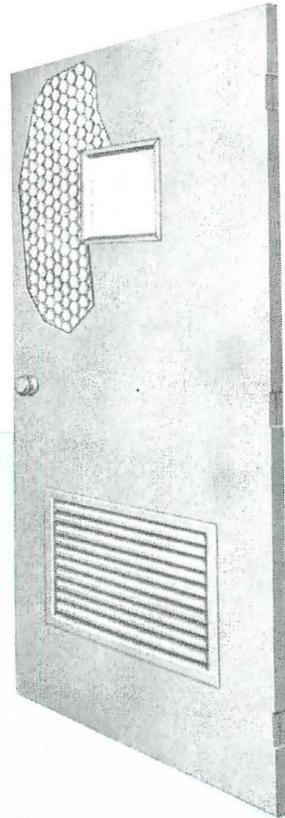
I would like to see the architect become a general contractor like they do it in Europe—design the job, build it by subcontracting the work. Maybe that is the way to counteract the builders' activity.

LEO F. CAPRONI, AIA
New Haven, Connecticut

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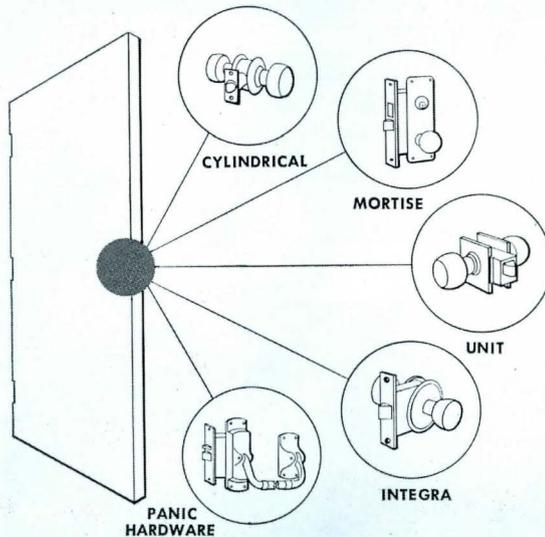
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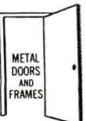




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News

Architectural Tours

Four architects' treks have been announced for 1962, according to the United States Travel Agency, Washington, D. C.

A post-convention Technical Architectural Study Tour of Central America and Panama will leave from Dallas immediately following the AIA Convention. Tour participants will fly to New Orleans, where they will be briefed by the consuls of the Republic of Panama, Costa Rica, Nicaragua, Honduras, El Salvador and Guatemala on their respective countries.

First stop on the trek itself will be Panama. High spots of the trip will include meetings with heads of state, cabinet members and other high officials of the host-countries, and sightseeing trips to outstanding points of interest, such as the Mayan Indian Market in Chichicastenango, Guatemala. In many cities the tour-participants will have a chance to enjoy special dinners in the best of the native tradition.

George D. Rockrise, AIA, will act as trek leader. A spokesman for the travel agency stressed that the trek will give participants a chance not only to familiarize themselves with architectural and cultural aspects of the countries they will visit, but to act as unofficial goodwill ambassadors from the United States to the host-countries.

Two alternative post-convention trips will be offered, in addition to the Central America trek. Both tours of Mexico, they will include architectural study tours of Mexico City, the Floating Gardens of Xochimilco, and other points of interest.

In addition to the treks leaving from Dallas, a grand tour of Europe, including a Mediterranean cruise, will leave from New York on June 30.

Descriptive brochures on each of these tours are available from the travel agency.

New Steel Specification

A specification making available six major grades of structural steel, instead of the two grades previously provided for, was announced at conferences held recently across the country by the American Institute of Steel Construction.

(Continued on page 16)



The offices and publishing facilities of the American Baptist Convention's new national center are combined in an enormous—yet graceful—circular building. *Architect*—Vincent G. Kling, FAIA; *Contractor*—Turner Construction Company. Windows by General Bronze have been skillfully detailed to enhance the design's serenity. GB has long been recognized for its ability to translate architectural needs into efficient, trouble-free window systems.

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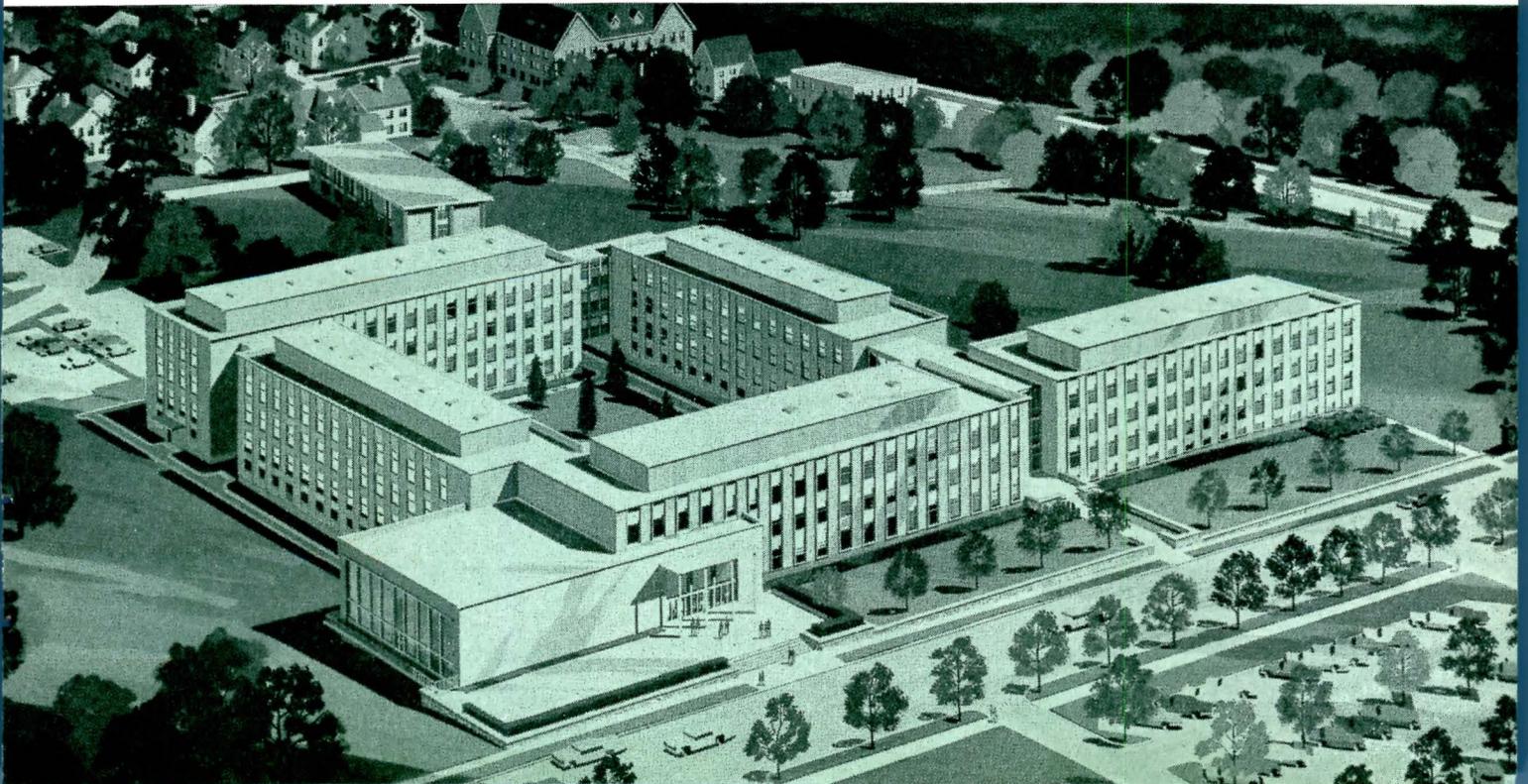
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Princeton University's Engineering Quadrangle dictated an entirely different window architecture. Here, General Bronze worked with *Architects* Voorhees, Walker, Smith, Smith & Haines and *Contractor* William L. Crow Construction Company. For custom-engineered windows—and for curtain walls, architectural metal work, entrances, revolving doors, call on General Bronze Corporation, Garden City, N. Y. Sales Office: 100 Park Avenue, New York, N. Y.



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News (Continued)

According to the AISC announcement, the new specification will make it easier for designers to prescribe the appropriate steel for the job—for example, a heavy working load can in many cases now be supported by a lighter beam of higher-strength steel. In announcing the specification to the conferences of architects, engineers, public officials and engineering educators who met in Chicago, New York, Dallas and San Francisco during January, AISC spokesman stressed economic and esthetic advantages of the wider range of alternatives offered by the specification.

Besides saving money by designing with stronger steels, designers can make more imaginative and esthetic use of steel than has been possible in the past. More detailed information on the specification may be obtained by writing to AISC, 101 Park Avenue, New York City.

RAIA Convention

The following communication has been received from Miss J. Garvin Smith, Convention Secretary, Royal Australian Institute of Architects: "The Chairman and committee of the 1962 Australian Architectural Convention have requested me to write you to seek your assistance in conveying to your members an invitation to come to Australia and join in our convention next May.

"The exact dates of the convention are 19-25 May, inclusive. It is to take place in Sydney and the theme will be a broad discussion on the question of the 'Effects of Architecture on Human Behavior.' In addition to the formal papers on this subject and discussion thereon, we have made ample arrangements for visitors to see something of Australia and its buildings during their stay and additionally, to have the opportunity of personal discussions with Australian architects on subjects of mutual interest. . . .

"Should any of your members indicate their interest and desire to come to Australia for the convention we will be delighted to send them a rather more detailed brochure than this letter is able to cover, with further information about the convention generally."

Miss Smith's address is: Convention Secretary; New South Wales Chapter, RAIA; 118 Alfred Street, Milson's Point; New South Wales, Australia.

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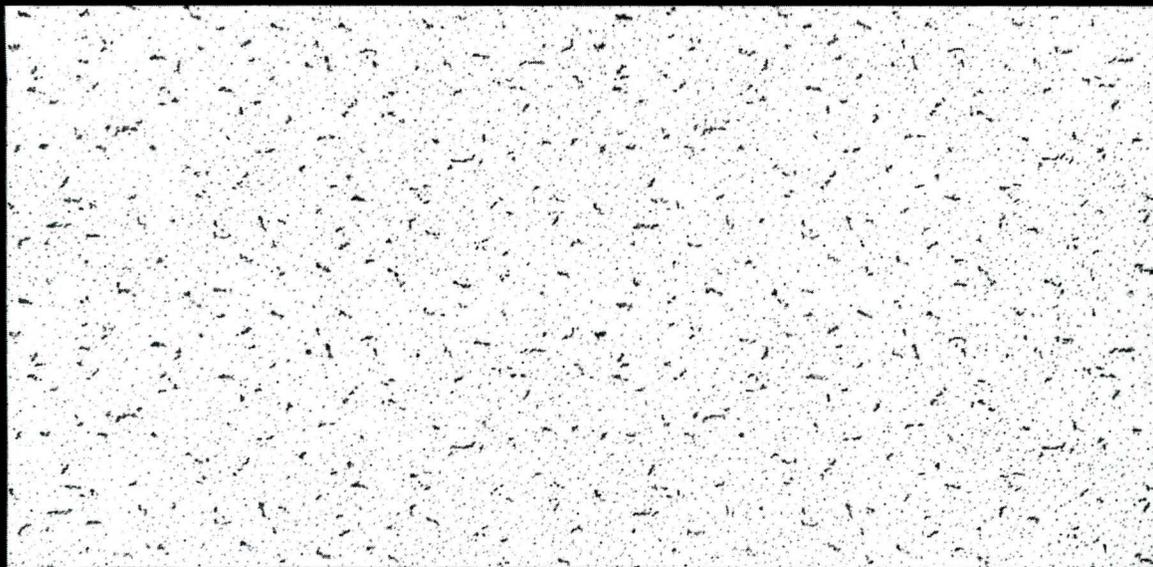


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under a wood joist assembly, in a fire-rated exposed grid system. Here, Lo-Tone achieved a 1½-hour U.L. fire rating. ■ These tests give striking evidence of the strong, dense and uniform mineral board produced by the Lo-Tone wet-felted process; and of precision fabrication. ■ As a further recent product development, we now offer Lo-Tone boards with improved furnish and coatings which give greater resistance to mildew and high humidity. Whites are whiter, textures have more depth and contrast. For technical data, write: Wood Conversion Co., First National Bank Bldg., St. Paul 1, Minnesota.

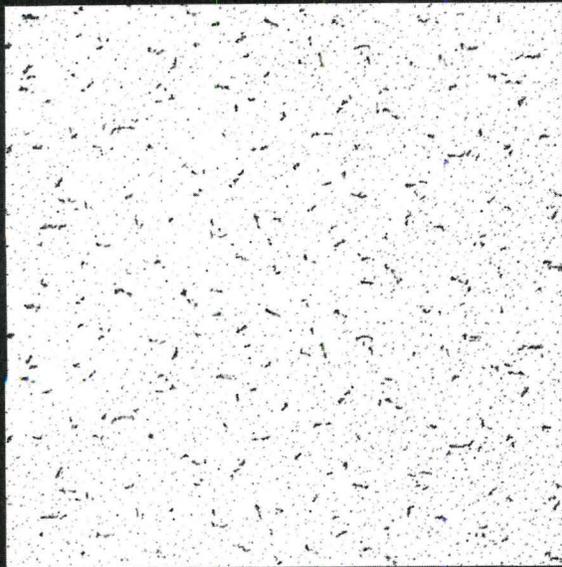
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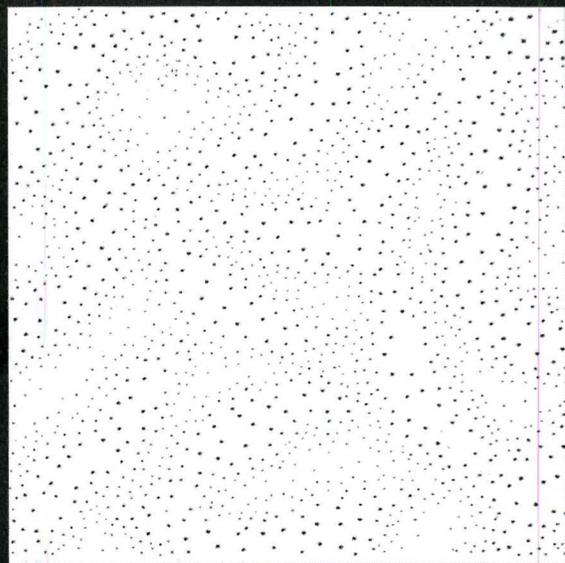


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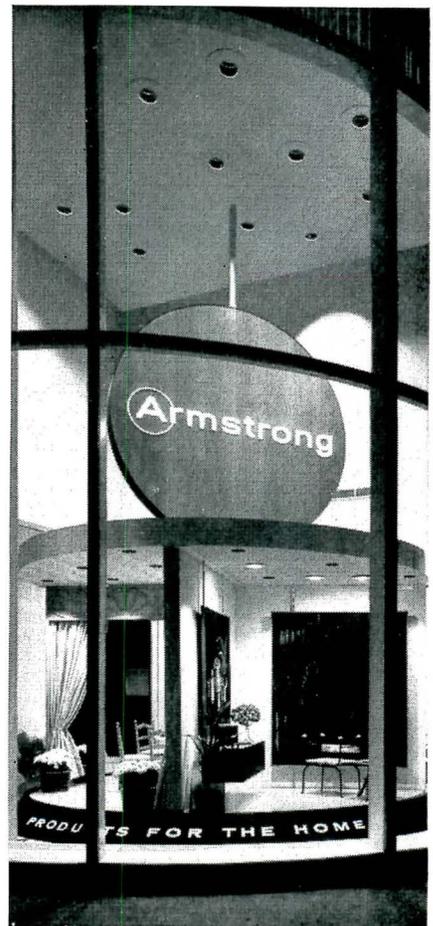
At the new Armstrong Product Center, Rockefeller Center, New York City, you will see displays of all Armstrong floors, plus Armstrong ceilings, wall coverings, packaging and industrial products. In the pictures at left are a section of the spacious showroom (above) and a conference room. Many products of particular interest to architects have been used.

New Castilian Vinyl Tile, in two colors, is used on the showroom floor. A rich, translucent floor, Castilian has remarkable properties of indentation resistance. Because of its resiliency, Castilian Tile "gives" with the impact of stiletto heels and concentrated static loads. But because of its unique polyvinyl composition, Castilian has a "memory." Almost always it recovers its original surface smoothness from static or dynamic forces that would permanently impair conventional materials, such as wood, carpet, or concrete. Approximate cost: \$2.00 per sq. ft. installed.

Parquet, a richly colored pattern in Custom Vinyl Cork Tile, is used for the floor in the conference room. This luxurious floor takes full advantage of the natural beauty of cork and the functional benefits of vinyl. Slices from thick cork blocks are arranged in a parquet pattern and fused with layers of clear vinyl. Thus, the aesthetic values of cork and the easy-maintenance characteristics of vinyl are combined. Approximate cost: \$1.50 per sq. ft. installed.

Wall Corlon, a new kind of vinyl wall covering, was specified for the plaster walls of the conference room. This material was designed and formulated with the help of a nationwide panel of two hundred architects. Developed exclusively for commercial and institutional use, Wall Corlon has moisture and mold-resistant Hydrocord Back. It is dimensionally stable, resistant to impact damage, fire retardant, and economical to install. Three embossed surface treatments each in twenty colorings are available. Cost before installation: .030" gauge 35-45¢ per sq. ft.; .040" gauge 60-65¢ per sq. ft. Installation costs vary widely according to local labor rates and job conditions.

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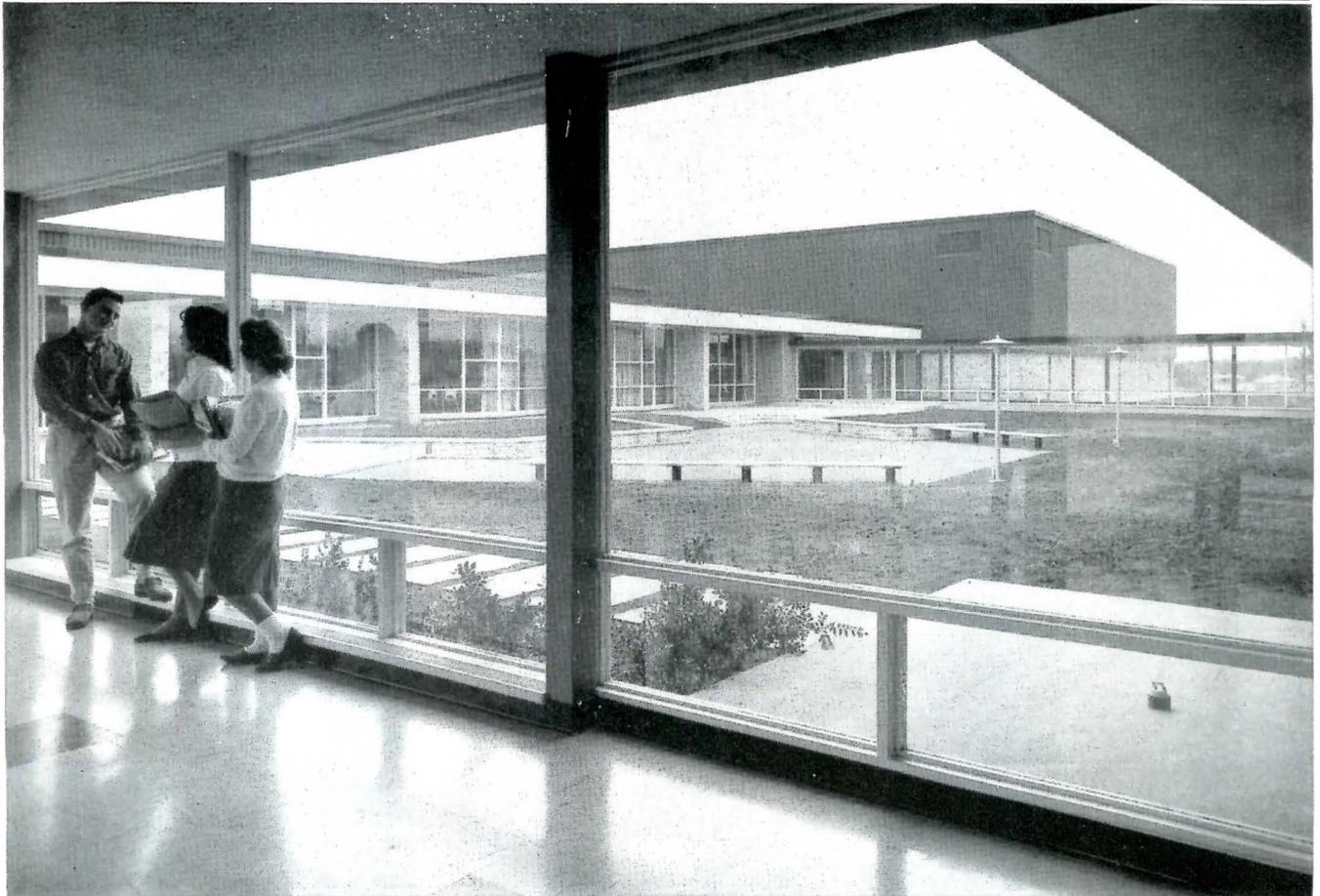
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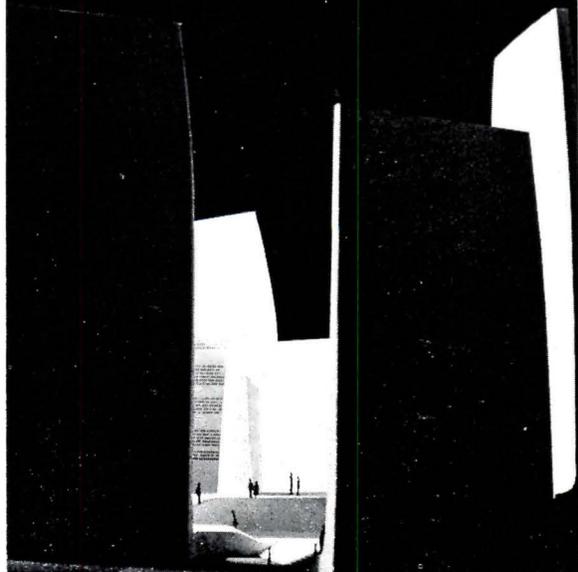
A · I · A

Journal

The FDR Memorial Competition

It has now been a year since the winning design of the FDR Memorial Competition was presented to the public. It seemed to the Editor that a round-up of opinions, pro and con, stated from the vantage point of a year later, might be both interesting to the readers of the AIA Journal and helpful to the progress of the Memorial itself

William F. Pedersen, AIA and
Bradford S. Tilney, AIA, Architects
Norman Hoberman, Sculptor
Joseph Wasserman, Associate
David Beer, Associate
Ammann and Whitney, Consulting Engineers



The Competition

by **The Hon Francis Biddle**, *Chairman,*
The Franklin Delano Roosevelt
Memorial Commission

Judge Biddle, former Attorney General of the United States, recounts the story of the competition from its inception by the Congress to approval of the winning design for the Roosevelt Memorial by the Commission on January 11th, 1962

► Lawrence Lowell, when he was teaching government at Harvard, said in one of his lectures that the test of the American democracy was its ability to use experts. The way in which the site was chosen and the competition held for the Roosevelt Memorial was an outstanding example of how the government can make use of the leaders of the profession of architecture in obtaining a design to commemorate a President.

The Franklin Delano Roosevelt Memorial Commission was made up of four United States Senators, four Representatives, and four individuals appointed by the President, under a joint resolution providing that it should report its recommendations to Congress for a suitable memorial. After studying several proposals the Commission appointed a committee to advise it on an appropriate site and memorial. The committee was distinguished and representative, including Pietro Belluschi (Chairman), Lewis Mumford, R. Sturgis Ingersoll, and Holmes Perkins. The site, chosen on the committee's recommendation, is in the West Potomac Park. The Congress also authorized a competition, without any limitation on the nature of the design, except that it should harmonize with but not imitate the three other great memorials in that location—the Washington Monument, and the Lincoln and Jefferson Memorials. An appropriation was authorized to pay the expenses of the competition—about \$40,000—and to furnish six prizes of \$10,000 each in the first stage, and a final prize of \$50,000 to be awarded to one of the six selected by a jury.

Edmund N. Bacon, the brilliant young Director of the Philadelphia City Planning Commission, borrowed on half-time, ran the competition, which resulted in 574 entrants, and lasted through most

of 1960. A distinguished jury agreed to serve: Pietro Belluschi, as Chairman; Thomas D. Church of San Francisco; Bartlett Hayes, Jr, Director of the Addison Gallery of Art at Andover; Joseph Hudnut, Professor Emeritus of Architecture at Harvard; and Paul Rudolph, Chairman of the Department of Architecture at Yale.

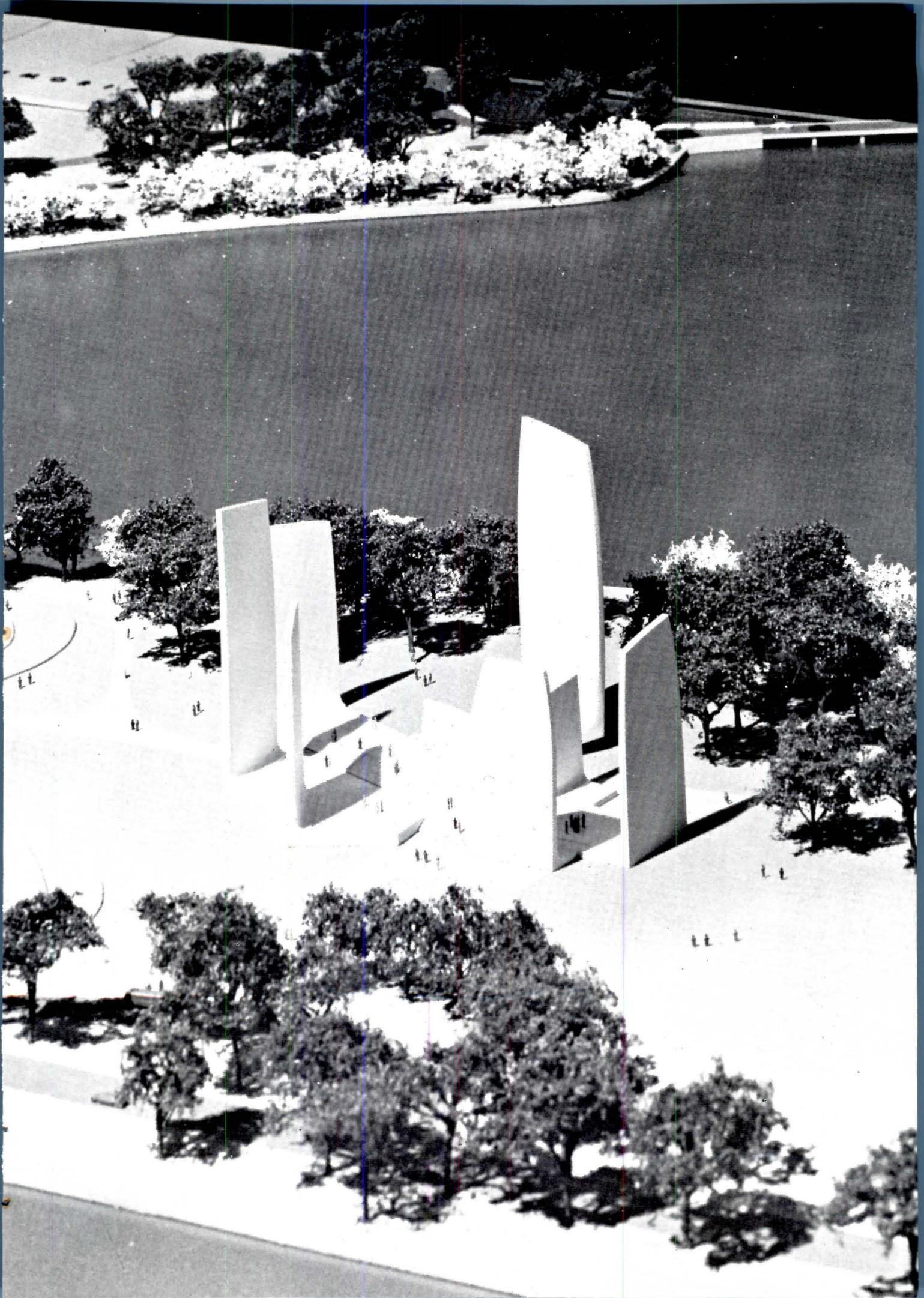
The jury awarded the first prize to Pedersen and Tilney of New York City; and reported to the Commission that "the monumental quality of the project comes from the simplicity with which this idea [of Roosevelt's greatness] is transmitted. . . . As one moves into the various levels of the platforms the views change and new spaces acquire significance. . . . Among its many virtues is the way its open character incorporates the natural beauty of the landscape, including altering views of the Potomac River and the Tidal Basin, in which the bright shafts are reflected. . . . The shifting play of light and shadow as the sun traverses the sky animates the structure. . . ."

On January 11, 1962, the Memorial Commission by vote of nine to one approved the winning design and provided that a statue or bas-relief of President Roosevelt should be added.

The winning design has been highly praised, particularly by some of the leading architects of the country; and attacked, often violently, and too often by cheap wisecracks. I believe that a majority of those who have seen the actual models, and not merely the newspaper photographs, which give no idea of its satisfactory relation to the surrounding landscape and to the other three memorials, are enthusiastic about the design.

The American Institute of Architects adopted a resolution commending the design. It has been praised by José Luis Sert, of the School of Design at Harvard; by Thomas H. Creighton, in *Progressive Architecture*; by Douglas Haskell of the *Architectural Forum*; by Siegfried Giedion, the Swiss architectural authority; by Bruno Zevi in *L'Espresso*; by William Lescaze, who has won many honors and medals for his designs; by Philip C. Johnson, the architect for the Museum of Modern Art; and many others.

It has been suggested at various times that the memorial should be "useful"; that it should be



"living"; that there should be no more monuments; and that a "Roosevelt Park" should take the place of the proposed monument.

At an early meeting the Commission ruled out the idea of a "useful monument"—in effect tacking Franklin Roosevelt's name on a hospital, cultural center, or (in a specific plan proposed) a school for diplomats. If the Congress wanted to spend money for such useful projects it could do so, but when it spoke of a *monument* that meant something permanent, that should be open "twenty-four hours a day, every day of the year, to all people within range, not just in the hours of use of a concert hall"—to quote from John Ely Burchard in the *Architectural Record*. Those who want a useful memorial, he continues, "believe that nations become great through prudent

parsimony," and that those who save capital will succeed, while those who squander it on art and luxury will die.

Other critics say that this is not a *living memorial*, whatever that means. Is the Lincoln Memorial dead because it performs no other function than to recall the greatness of a President, and every year to renew that tradition in the hearts of thousands of Americans? The critics talk about a park. These four great monuments, drawn together by footpaths and landscaping, will form a splendid park, not merely a park with Roosevelt's name on a gate, but with this symbol of his greatness. It is now proposed to use a statue of the President at some appropriate spot in the memorial, which should add warmth and personality to the design. ◀

A Design of and for Today

by **Edmund N. Bacon, AIA**

Executive Director of the City Planning Commission of Philadelphia

The Professional Advisor for the FDR Memorial Competition finds in the winning design an affirmation that the architectural profession can design in terms of today, and still stand on firm ground with the great eras of the past. The design makes a statement consistent with the greatness of the man whose memory we honor

► The Franklin Delano Roosevelt Memorial Competition imposed a severe test on the American architectural profession. The program was so devoid of the usual practical limitations, site restrictions and client's requirements and tastes that the test was in terms of pure design. Was the architectural profession capable of producing a form freed from the ancient shapes of cube and pyramid, of the rigid, individual-centered Renaissance one-point perspective, of the Baroque one-directional axiality or the gropings of the beginnings of the International Style? Could our architectural profession today produce a design expressive of the scope and breadth of the Roosevelt Age, in tune with current philosophical and scientific thought?

The fact that the answer is an overwhelming "yes" should be a source of satisfaction to arch-

itects everywhere, the fact that the Board of the Institute recognized the winning design as such is a good indication of the vitality of the profession as a whole, and the further fact that the design has been approved by the Memorial Commission should be a cause for shouting in the streets.

Here is a design conceived in terms of our own day, a design that could not have been built under an earlier technology, a design so freed from the limitation of one-point perspective that it cannot successfully be represented on a single plane. Here is a design which recognizes the meaning of extension in space, one which depends not on absolutes but on relatives, one which is truly built on a flow of space experiences.

Here is a design in which the American tourist will look good.

But, most important, here is a design in which the ideas of Franklin Delano Roosevelt, the one thing we honor him for, are the source and the purpose of the design, where spaces are created which are dedicated to communing with facets of his concepts, each different, each related, each separate but part of a whole.

Here is a great statement of the vitality of American culture, a statement to the world, a statement which is worthy of the very great man we seek to honor. ◀

Problems of a Winner

by William F. Pedersen, AIA

The winner of a nationally-heralded design competition has problems of his own, says a member of the firm of Pedersen and Tilney

► To be on the winning end of a great national competition is a unique professional experience and one which produces a variety of emotions. Like playwrights, painters, composers and sculptors, one reads the reviews with feverish interest. What one's peers say and what the public says is important and significant.

The comments from the profession, including the letters, have generally been competent, understanding and, for the future development of the Memorial, helpful. In a word there was general understanding of the design problems faced and solved. Comments from almost all other sources were a great disappointment, centering chiefly on a complete lack of understanding of the Memorial design as a work of art, as a design in the specific landscape in which it is placed and in its relationship to the three other presidential memorials and the city of Washington. The failure to view the Memorial as a work of art and to so judge it is to my mind a fearsome commentary on the attitude of the public toward architecture as an art and should be of concern to every member of the profession.

Apart from the narrow objectives of diversion of the monies to be raised for the Memorial to another project of a "useful" nature, the thought that something useful can serve as an adequate memorial is indicative of a complete misunderstanding of the role of the architect as a creator of things to be seen as well as used. When Katharine Kuh asks in the *Saturday Review* "Must Monuments Be Monumental?" and then in her text suggests as a solution "a totally new kind of playground for children (possibly crippled children) or a highly specialized reference library devoted to the Four Freedoms, or a modern public recreation building of some sort," she and all others who suggest the public auditorium, the concert hall, etc, are, apart from their atavistic puritanism, guilty of confusing social purpose with the plastic arts—of which, remember, architecture is the mother. There are hundreds of useful buildings all over the country with names on them, many with the name of Franklin Delano Roosevelt, which are dead in every sense of the word simply because they fail architecturally and as works of art.

Let the profession ponder Miss Kuh's comments and those similar to them and consider if it is possible to really design stirring buildings in the face of the demand that they be uncompromisingly practical. ◀

Must Monuments Be Monumental?

by Katharine Kuh

Art Editor, Saturday Review

"This structure [should] be at once esthetic and utilitarian," Miss Kuh believes. (Reprinted from the Saturday Review, Sept 2, 1961)

► I still remember the poignancy of an unexpected encounter I experienced in Chartres several years ago. Having just arrived there, I was, of course, headed straight for the cathedral when I came upon an arresting though small monument seemingly growing out of the earth. Merely a truncated arm with hand holding a broken sword and accompanied by a dedication to the memory of a particularly brave leader of the French Resistance, it made me pause and begin to wonder why monuments must be so monumental. For here was a commemoration of valor that made itself felt without pompous pedestal, gaudy gilt, or imposing setting. In brief, it told a moving story without the deadly conventions we habitually associate with the valiant dead. This strong arm, appropriately thrusting out of the land it had protected, was equipped only with the painful symbol of a broken sword, but communicated the spirit of the French Underground with an eloquence that the usual costly and pretentious monument might well have mocked.

If we in America are to continue investing large sums of money in architectural shrines dedicated to the memories of great individuals or events, it seems only sensible to turn these structures into more than purely ostentatious landmarks. Surely the time has come to be done with competitions and committees compromising

on imitation Stonehenges, pagodas, peristyles, and colonnades. One need only compare two Italian monuments, the bombastic empty one to Victor Emmanuel in Rome and Michelangelo's ineffable Medici Chapel, to realize that it is wiser to depend on creative artists than showy dimensions.

After all, were we to choose the greatest single memorial conceived during the present century, it very likely would not be made of stone, brick, concrete, or bronze, but of paint on canvas. I am thinking of Picasso's "Guernica," a composition dedicated to a small town wantonly destroyed during the Spanish Civil War. This, one of history's most bitter indictments of man's inhumanity to man, will undoubtedly preserve the name of an otherwise obscure village longer than could all the equestrian statues now punctuating American boulevards and parks. True, in Picasso's painting there is also a horse, or rather the head of a horse, tortured, twisted, contorted in agony. But how different from those conventional animals that nameless and numberless sculptors have modeled after the once great Mediterranean tradition of "horse and rider," a tradition that comes watered down to us through the Greeks, the Etruscans, the Romans, and finally through those superb Renaissance artists, Donatello and Verrocchio. Many experts today would agree that the outstanding modern American monument is a lofty New York office building designed by Mies van der Rohe and ironically dedicated to whiskey—from the house of Seagram.

I suppose what I am really trying to say is



Photos—Morton Hoppentfeld

that democratic methods are not always the ideal solution for public monuments. No matter how able the committee of selection, no matter how eager the contestants, the final choice from free competitions often results in nothing more than monumentality. Far better, it seems to me, would be one of two plans—either to select a great artist, preferably a man involved emotionally with the subject at hand, and give him free rein to make his memorial in any medium and in any way he finds most meaningful; or if for some reason specifications demand an architectural monument, then why indeed cannot this structure be at once esthetic *and* utilitarian?

Take, for example, the Franklin Delano Roosevelt Memorial about to be erected in Washington. It was chosen from a large competition by a distinguished panel of specialists. At present one can only judge from photographs, but even so it seems difficult to fathom why these towering steles, designed by William Pedersen and Bradford Tilney, have anything to do with Roosevelt despite their function as background for his engraved words. One scarcely needs eight concrete slabs 172 feet high to accomplish this end, for FDR's words have adequate grandeur without undue aggrandizement. In return for the considerable cost of this structure (well over \$4,000,000) couldn't a more ingenious though still impressive solution have been found? We in America might even have pioneered in design, as Roosevelt did in government, to come up with a fresh idea of interest for the entire world, such as, let's say,

a totally new kind of playground for children (possibly for crippled children) or a highly specialized reference library devoted to the Four Freedoms, or a modern public recreation building of some sort. Human dimension, when interpreted creatively, can be no less effective than magnified ones. The Sainte Chapelle in Paris, the Baptistery in Florence, the Erechtheum in Athens give ample proof of this.

Several of the many competing architects, some of them finalists, shared the idea that the Roosevelt monument should be more than visually impressive. One incorporated in his design plans for a national children's school; another, plans for a museum and a sculpture court. Perhaps the most interesting idea came from Joseph Wehrer and Harold Borkin, two young architects of Ann Arbor, who developed a non-static scheme involving an annual FDR award to be presented each spring from a specially designed podium with a covered gallery nearby where an exhibition of the winner's work would be shown throughout the year. Thus, continued visits to the memorial would be assured, and even were the architecture to become dated, the awards and exhibitions might easily remain timely and related appropriately to Roosevelt's objectives.

When public memorials begin to encompass more than outworn symbols, exaggerated dimensions, or sheer novelty, we can perhaps hope for an improvement in the so-called art found in private cemeteries, an area so dismally mediocre as to make the slightest cause for celebration. ◀

Once Again: The Question of Monumentality

by **Thomas H. Creighton, FAIA**

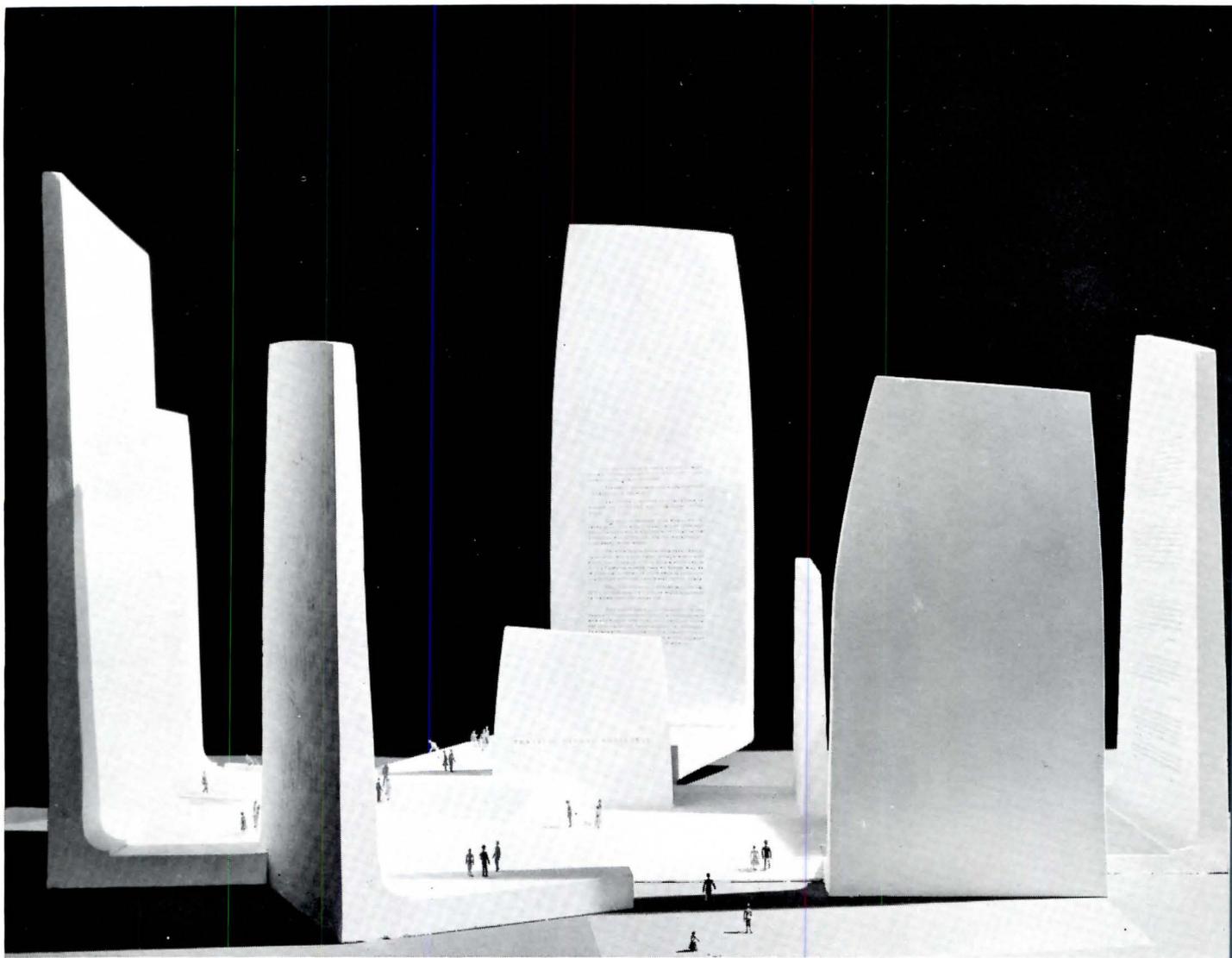
The Editor of Progressive Architecture has compiled and edited a book containing a large selection of the designs submitted in the FDR Memorial Competition. It will be published in the late spring

► The Franklin Delano Roosevelt Memorial Competition was a noteworthy event for many reasons. There have been few major competitions for architectural subjects in the United States, in comparison with many other *countries*. And this one brought to the fore once again the dormant questions related to monumentality—its desirability, the proper approach to it when it is deemed desirable, and its relationship to other physical expressions in the community. These have been subjects of intermittent debate since the beginnings of the modern movement.

Most of the discussion about the winning design has been on the basis of monumentality: whether or not it is a successful monumental expression; whether or not a monumental expression in architecture is meaningful today. A typical reaction was the question of Katharine Kuh, art commentator for the *Saturday Review*; “. . . if for some reason specifications demand an architectural monument, then why indeed cannot this structure be at once esthetic and utilitarian?” Her suggestion that we might have “come up with a fresh idea of interest for the entire world, such as, let’s say, a totally new kind of playground for children . . . or a modern public recreation building of some sort,” far from being “fresh,” brought back nostalgic memories of similar arguments three decades ago.

One of the tenets—one might say slogans—of the early years of the modern movement was that monumentality no longer had justification. Walter Gropius wrote, for example: “The old monument was a symbol for a static conception of the world now overruled.” Through the declarations of this sort that abounded in the manifestoes of the ’twenties, the word *monument* was used in a very literal and limited sense. The symbolic nature of a monumental composition was not at all discarded in practice; there is enough perspective now to realize that at that time symbolism was simply attached to a new style—and to new purposes for buildings.

What is a monumental structure, truly? There are three apt definitions of the word *monumental*. One limits it to direct application to a monument that is “a building, stone, or the like, erected in memory of the dead, or of a person, event, etc.” This was the definition that Gropius had in mind. There is, however, a broader meaning: “*servicing as a monument, a memorial.*” Here was the justification for the “living memorial,” and the rationale during a long period when it was considered immoral to speak of pure monuments to “a person, event, etc.,” but not at all wicked to design memorials in the guise of libraries, play yards, or community centers. This again is the Katharine Kuh argument today.



But there is still a third definition of a monumental structure: "of the nature of a monument, hence massive and lasting, impressive." In this context of *monumentality by nature* came all the familiar literary allusions to dams and power plants as "modern monuments." (As far back as 1891 Montgomery Schuyler had referred to the Brooklyn Bridge as "one of the greatest and most characteristic of the monuments of the nineteenth century.") It appeared, then, that there was no longer anything wrong with monumentality, as long as the monument served what Arthur E. Morgan termed "the democratic spirit in architecture."

The next step was for the articulate architects and their critics to describe what the British *Architectural Review* called, in a wordy and inconclusive symposium in 1948, the "New Monumentality." Such critics as Sigfried Giedion and Henry-Russell Hitchcock came to the defense of "emotional impact" in architecture. Matthew Nowicki wrote in 1949 that "monumentality, in

the sense of a contrast between architecture of exceptional importance and the size of an individual, has its true and eternal qualities of which man should not be deprived."

And so now we have come to a point in architecture and its sister arts in the United States when we can look on monumentality as a matter of scale and of hierarchy within the range of building types and purposes. We still, properly, demand a consistency with the aims of a democratic society. And we still must prove an ability to produce, within the media of modern architecture, a significant and emotionally convincing result. We feel now that we *may* approach even the problem of a memorial to a "person, event, etc" (574 architects did in the case of the FDR Memorial, at least, and among them were many of the design elite); the question remains, can we?

It must be admitted that the history of failures to find a monumental design expression in our century is an extensive one. Monumentality is fundamentally a problem in *expression*, not in

function, technology, or economics. The expression of a monumental concept in classic, or in pompous imperialistic terms is not too difficult; it is simply boring. However, the use of heavy masonry forms was for a long time the easy way out of the monumental design dilemma. Paul Cret and Bertram Grosvenor Goodhue provided prototypes for the memorials we built during the first half of the century, rather than the emerging modernists.

As a matter of fact, the first attempts to reject the classic approach and substitute a contemporary monumental expression were usually equally massive. They were typically the products of the earlier expressionist periods of those who later became purists (as Mies' monument to Karl Liebknecht and Rosa Luxemburg;) or the later expressionist work of those who had once been purists (as Le Corbusier's design for a Monument of the Open Hand at Chandigarh); or the work of those who remained expressionists (as Mendelsohn's Memorial for Jewish Victims). It seemed that the simple rectangularity of the modular frame could not be monumentally expressive in itself, and could not be violated without grotesqueries resulting. Rogers' Monument to Those Fallen in Germany, in Milan, is thin and structural—an intellectual exercise. On the other hand the Fosse Ardeatine, by a group of architects in Rome, massive and deceptive in its structure, is impressive and moving.

For a time the matter of scale was elusive. The domestic scale which was being developed for one contemporary expression (the Bay Region work, for instance) could not be brought up to the monumental scale; nor could anyone succeed in bringing down to the level of a comprehensive memorial the urban scale of the developing skyscraper solution. Further, it seemed for a time that the very materials which provided both the rationale and the expression of the architecture of our time—glass, steel, aluminum, plastics—were characteristically inappropriate for perpetuating an ideal or immortalizing a personality.

There has been recently much discussion in intellectual-architectural circles of the question of hierarchy. Even the raising of the question hinted at the possibility of a new monumentalism: a hierarchical range implies not only an "unimportant" building at one end of the scale, but an "impressive" building at the other. It has been suggested that a distinction should be made between "background" and "foreground" architecture—the anonymous architecture that simply does its job well, and the more creative, even monumental architecture of the geniuses who cannot be restrained. Of course each architect has staked out for himself the privilege of fore-

ground creation, and each architect criticizes the work of his colleagues (but not his own) as being a succession of monuments—monuments to the architect himself and to his virtuosity, rather than to abstract concepts.

However, more than a lump of clay in the hands of a technically capable artist is needed to produce a form which is emotionally moving. In a time of existentialist belief and action, can we expect an architectural expression that will memorialize the past and point to an inspiring future? Does our materialist society provide the background of emotional inspiration that can produce a monument? At least the question is suggestive, and 1960 seemed an interesting time in which to raise it directly, by the announcement of an important national competition for a monument to an important national figure. One would expect many approaches and many solutions to the problem of monumentality, and many were submitted. There were bright and original ideas about the use of the land, and about the way something might rise up above the land. There were various conceptions of what would impel viewers to remember Roosevelt, and what, in any case, they should remember. There were uses of water, and uses of planting, and uses of paths, byways, bridges, and even continuous scenic roads. Buildings, of many forms and shapes, used for many purposes from museums to research centers, appeared. And non-utilitarian structures were suggested in many guises.

And yet, with all this variety, it would seem that there are really only a few basic approaches to the problem of designing, in our time, a memorial to a revered person. Bruno Zevi, in an editorial in his Italian magazine *Architettura*, stated his feeling that there are three basic "rhetorics": the academic (building a temple); the modern (landscaping a park); and the symbolist (usually combined with the former two). He felt that the Pedersen-Tilney-Hoberman solution does not fall into any of these rhetorics, and is therefore the only one of the finalists that indicates original thinking.

Without at this point judging the merit of any of the six finalists, or the 570 other designs not premiated, one can be glad, it seems to me, that an opportunity was presented to the architects of the United States to try their skill at a monumental expression. The total picture is not so discouraging as some critics would have us believe; when several hundred of the solutions are published together later this year, we may be convinced that a monumental architectural expression—not excused as playground or community center—is creatively possible in our time, as well as intellectually permissive. ◀

Unmemorial or In Memoriam!

by Paul Thiry, FAIA

Mr Thiry, as Chairman of the Institute's Committee on the National Capital, is concerned with—and well informed upon—developments in design that may affect the Washington Plan

► It is impossible to view the proposal for the FDR Memorial without relating it to the city of Washington as a whole. Disregarding the memorial's design or high purpose, judging it strictly on the basis of its size and location, it may be considered to possess all the characteristics displayed by currently proposed bridges and roadways—namely that of intrusion into areas set aside and programmed for other purposes.

This intrusion should be a subject of concern to those interested in the planning of Washington and particularly to those who have an interest in the placement of commemorative structures of all kinds.

In the current contest between the advocates of the mundane, the ethereal and the esthetic, it may be well to consider what has been done in the past and what is now being done and to ask a few questions.

In general, there is a competition for space. Because highways appear to take precedence, proponents of buildings and memorials look to safety in isolation. It is in this desire for safety that a real danger lies. Highway junctions threaten axial and other important positions in the Washington Plan; consequently, these pivotal points are now avoided as places of importance and accent. This diversion encourages escape to open lands and the countryside. Particularly there is migration to the Potomac River areas for uses of all kinds including the establishment of the FDR Memorial.

While fear is primarily felt with reference to freeways, why exclude the danger of the misplacement of memorials and buildings of public use as well?

Whether encroachment is under the guise of utility or under the guise of immortality—either means destruction.

In short, current projects being envisioned, such as the FDR Memorial, regardless of its handsome architectural composition of elements, encroach on and into areas which should be kept in trees. The FDR's towering form is out of cast with the principles of the park lands along the Potomac. Not only in itself is it a threat, but it suggests the possibility of added memorials, string fashion, in the future. Memorials along the river and its waterways, left to develop to their ultimate, could line the riverbank much as do the burning ghats along the Ganges at Benares, but with less significance.

On the other hand, the Washington Monument, the Lincoln Memorial and the Jefferson Memorial are examples of memorials which give quality to the expanded L'Enfant plan of the Mall. Aside from their dedicated purpose, they give emphasis and interest to the Washington scene. They are places of public pilgrimage and most important, they form accents and are not subject to change of use and design. They are entities in fixed locations. Remarkably, their programming and placement seem entirely in harmony with the plan. They may be enjoyed in passing or, more intimately, by entering. The Washington Monument provides a place from where the entire city may be viewed—to this extent it provides a functional adjunct.

These monuments may be contrasted to the so-called "living monuments" which do not enjoy

this ability to withstand change, are susceptible to management, flexibility and adaptable uses. Using the Washington and Lincoln Memorials as examples, it would seem reasonable to build memorials and monuments to conform to the architectural characteristics of the Washington Plan and to place them where they add to the formality and quality of the avenues, boulevards and streets. This is preferable to their encroachment into the hinterland, or more particularly, into the green areas which were planned as sanctuaries to protect and to frame the city of Washington.

It is becoming increasingly evident that careful selection of sites for all purposes is necessary and that indifference in this regard may upset an entire area. The placement of buildings, bridges and commemorative structures, with their incident walls, accents and forms should be thoughtfully related to open spaces and to the general environment.

Pentagonian mazes and rock-encrusted bridges already disturb the visual and physical characteristics of the Potomac shores. It would be sad indeed if the plan of Washington should be overshadowed or domineered by expediency, especially when many contradictory and purportedly "unsolvable" problems can be unraveled by wider range, conscientious study and concerted effort. For example, the thought of increasing the tempo of traffic at the Lincoln Memorial should hardly be conceived, much less callously proposed.

The FDR Memorial deserves a more singular site where it will not be related visually to either the Lincoln Memorial or to the Jefferson Memorial. Its selected location between the two would serve to devalue the importance of each of them individually and all collectively. Mixed with a few bridges, parking lots, added accoutrements and memorials the scene could lose much of its aura.

Memorials as architecture can furnish needed functional accents for the L'Enfant plan and for the expanded plan of Washington. Therefore, they can and should be used with reference to the plan. In this way, at least, if they fail as memorials they will succeed in completing and complementing a total design.

In the light of the fact that lasting things are not to be found in the purely mundane but rather in the sentimental and the architectural qualities which go to make the city of Washington what it is—and what it has always been intended to be—"a place of remarkable beauty," it is difficult to understand why current problems and projects cannot be related to the expanded plan and carried out accordingly.

As a foregone conclusion it must be known

and appreciated that Washington is one of the few cities in the world designed from its outset to accommodate a systematically preconceived balance of spaces and that its plan was created to follow a definite order. It must *also be recognized* that if the original concept is adhered to the "orderly plan" can be developed to magnificence. If it is ignored, the results can be chaotic. The Washington Plan is threatened from every direction. Incompatible land uses could completely dissect it. This should not be allowed to happen under any guise. Planning L'Enfant style is not flexible or adaptable to strange and foreign ideas. It is necessarily static.

Primarily, the basic plan for Washington provides for broad avenues and secondary streets, for plazas and circles, for radiating vistas, for accent and for areas of public buildings both important and unimportant. L'Enfant allowed for commercial enterprises and for quiet residential streets. As a concept, his plan is comprehensive and based on a technique of accomplishment.

Since the day of the drafting of the L'Enfant Plan, to supplement and support the original draft, extensive open lands have been set aside for parks and recreation. Much of these lands were made in the Potomac waterway to create extensions to the Mall and to provide basins, lagoons and channels to enhance the total scene. Significantly and most important these lands establish green separating areas which provide a backdrop to the city and are designed to prevent overcrowding in general.

Considerable effort and expense have gone into the establishment of these green areas to divide districts and to make the landscape satisfying and beautiful. Yet on one occasion after another there have been attempts to disregard the basic nature of the plan. Fortunately, as often as not, these attempts have been defeated successfully by the advocates of continuity.

Discipline in new developments and preservation of existing heritages are necessary ingredients to co-existence with the Washington Plan. There are sentimental attachments to monuments, memorials and historical markers. These can be directed to stabilize the plan.

Many elements constitute the framework for a plan. They are all important in relative positions. If the Washington Plan has anything to offer the country and the world, it is its possibility of perfection based on time-tried principles.

Architecture, trees and greenery are choice ingredients of good living and as such require respectful treatment.

Washington, the National Capital, requires particular consideration—and certainly better treatment than it is currently getting. ◀

Home Beautiful in City Terrible

by Victor Gruen, FAIA

► We are presently, as a society, busily engaged in decorating homes, depreciating real estate, and desecrating cities; but we are moving along a dead end street. The "Home Beautiful in the City Terrible" is an unworkable paradox. The schizophrenic attitude manifest in the prettied-up model home within a filthy cityscape will drive us into a national neurosis. Though I subscribe to the old motto: "My home is a castle," I cannot go along with its present extension: "My home is my fortress."

To live in esthetically pleasing fortresses, defended against the outside world, with filters in the air-conditioning system to keep out the poisoned air, heavy curtains at the windows to keep out views into neighboring slums, sound-proofing to defend us from the nerve-wracking noise of mechanized traffic, surrounded by precious objects to keep our minds off the vulgarity of the outside world, is a hopeless task. The prettier and more protected our shelter becomes, the more we suffer at every sortie and foray into the outside world; and inasmuch as these sorties are necessary in order for us to gain a livelihood and to participate in the social and cultural life of the community in which we live, our return to the fortress finds us physically and psychologically maimed and exhausted.

Those who have fled the city altogether, hoping to get away from it all by moving into the suburbs or exurbs, are no better off. These urban refugees suffer by existing in a segregated, artificial, one-sided society, undergoing the time-consuming, nerve-wracking experiences that daily commuting entails. Finally, they wake up one morning to find that their sacrifices were in vain; that bulldozers and construction crews have arrived as the vanguard of the city which has caught up with them.

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A man's home is his castle—but must it be his fortress? Victor Gruen, senior partner, Victor Gruen Associates, first posed this question in a speech to the National Home Fashions League in New York. We are pleased to reproduce it here, in slightly condensed form

Los Angeles, that sprawling collection of dozens of suburbs in search of a city, proves the point. Here we have super-suburbanism flowing under Southern California sunshine. The Los Angelenos in their gorgeous home fortresses, surrounded by gardens full of geraniums and kidney-shaped swimming pools, face a losing battle with the evil forces of the neglected city. The decaying urban body sends its stench in the form of smog into the palatial gardens, making indoor-outdoor living an eye-smarting experience. The forays from the fortress involving the daily battle of the freeways and cloverleaves become increasingly more dangerous, difficult and time-consuming.

It is inherent in human nature to run away from things unpleasant. Finding that our escape from the city to the suburb was futile, we now are looking hopefully to the stars, and the suburbanization of the moon seems to be our next goal. Most people are worried for fear the Russians will get there first.

However, I happen to have reliable information from a friend of mine who is a space salesman that in fact an expedition of American astronauts has already been on a faraway planet and has successfully returned to earth. The reason that this historic event has not become public knowledge is that the information brought back by our astronauts is threatening our national economic security and therefore must remain top secret. What I am telling you now is strictly confidential.

This is what our astronauts found. There is in existence another planet with a civilization similar to our own but much further advanced. Unfortunately, by the time our astronauts reached the place they found that all life was extinct. From records which they found, it appears that the planet is called "The Star of Motorius"; the outer space beings living on it referred to themselves as "Motorists."

The planet "Motorius" is crisscrossed by ingeniously engineered eighty-six-lane expressways which intersect over cloverleaves eighteen stories high. This expressway network covers 92 percent of the planet. The slivers of land remaining between the expressways are utilized for service stations which dispense gasoline and a fuel for the upkeep of the inhabitants, called "Motrocal."

Before the final catastrophe on the star occurred, all the expressways were filled with mechanical vehicles moving slowly from one service station to the other, where each of the vehicles stopped for a short time and where the Motorists gave a short order in their native language which sounded something like "Fill 'er up." This applied not only to the machine but also to the occupants inside. The inhabitants who, due to the population explosion of their mechanical vehicles, had to demolish all of their buildings in order to make space for their highways, finally lived, slept and procreated in their machines.

This wonderful civilization was destroyed—as a diary which the astronauts found revealed—when a blow-out in one tire in one automobile occurred; the tire change was rather inefficiently handled, and thus within one hour all traffic on the entire planet stopped. Death by starvation, of the entire Motoristic race, was the sad result.

You will understand why this information must remain strictly between us. Any kind of leak of this news might have disastrous effects on the progress of the National Freeway program, on the employment situation in Detroit, and on garage construction projects.

This secrecy which is imposed on us is probably unwarranted as we here on earth, being intellectually a highly superior race, of course, immediately realize that these space men made space monkeys out of themselves by allowing their machines to become their masters instead of functioning as their servants. They were foolish enough to allow mechanical beings to take over the surface of the entire planet.

On our own planet, known as Earth, the battle between those who would have the machines take over and their antagonists who believe that human beings should remain in charge, is joined. The deeds of those whose battle cry is "Auto-

mobiles si, People no!" are visible everywhere. They have succeeded in destroying many of our city cores physically and economically with the effect that, for example, in downtown Los Angeles two-thirds of the land has been given over to mechanical beings in the form of freeways, parking lots, parking garages. In Detroit, the facilitators of automobile traffic have been so successful that the downtown traffic problem has been completely solved. The garages which they built are never fully occupied and the streets are pleasantly empty. After they were through creating living space for the automobile, there was finally nothing left over which would be worth driving to, and the end result will be the conversion of downtown Detroit into a ghost town.

The Wiley Plan

In New York, Traffic Commissioner Wiley is urging that we follow the example of Los Angeles and Detroit by the construction of 10,000 parking spaces in garages located in the middle of the pulsating business heart of our midtown area. Many of our business leaders are naive enough to believe that Mr Wiley's plan, which would in effect destroy productive buildings and replace them with storage facilities for tin, and which would draw thousands of additional automobiles into the already overcongested area, might bring them more customers. They overlook the fact that right now 300,000 fewer people per day come to Manhattan than did ten years ago, and that 270,000 people have moved out of Manhattan during the same period of time. The main reason for this decline of people has been overpopulation with vehicles, which makes life in Manhattan dangerous and inconvenient.

A famous real estate developer recently explained, on a television show, that the automobile, riding the "wave of the future," must be submitted to by all of us; that everybody's deepest wish is to drive his car right into Manhattan and park at the door of the place he wants to do business in. Just try to visualize what would happen if all of Macy's customers were to drive to the doors of that great retail emporium. Macy's would have to have 40,000 doors which would stretch over a length of forty miles. If a forty-mile-long store should appear impractical, we could of course arrange a parking area all around Macy's which would have to cover thirty-three blocks; let us say, from Third to Eighth Avenue, and from 30th to 38th Street. Now, what would Gimbel's say to that?

Few people seem to realize that Manhattan depends on public transportation for its existence. Of the people, for example, who work in the

Wall Street section, only a little over two percent arrive there by car or taxi; and altogether, during the entire day, only ten percent of the people who work in Manhattan or come here to shop or to participate in its recreational or cultural activities, do so by car or taxi.

How little automobile transportation has to do with Manhattan's functioning was demonstrated during the big blizzard some time ago. At that time a courageous measure by the Mayor decreed that all automobiles had to stay out of Manhattan. In spite of the fact that the snow masses created general inconvenience, it was found that buses and pedestrians were able to move faster, and the business volume of our stores was only insignificantly lower than usual.

Symptomatic of the mentality of the traffic plumbers are their unceasing attacks on anything that makes a city a desirable space to live and work in. Only a popular uprising prevented them from cutting a multi-lane highway through Washington Square Park which would not only have destroyed the park but would have cut one of our communities, Greenwich Village, right in two. They have successfully crippled downtown Boston by constructing a billion-dollar highway right through the middle of the city. Tourists who now want to follow the famous Freedom Trail in order to view the shrines of our national history, reach a point where the Freedom Trail crosses the great city artery and it becomes necessary for them at this point to choose between freedom and life.

The followers of the new religious cult which I call "Autocrazity" and which has made the Golden Cadillac its goddess, claim that they are for progress, and everyone who wishes to restrict the automobiles in cities is a black reactionary.

Earth for the Earthlings

The contrary is the case. Separation of utilitarian and human activities has been, throughout history, the earmark of the progress of civilization. It was progress when smelly sewer lines were eliminated from Main Street and put underground. It was progress when our western towns built sidewalks in order to separate horses and vehicles from people. It was progress when we took railroad tracks off the streets and put them underground, and when we did the same with water pipes, gas pipes, electric cables and telephone wires. As the number of our technological gadgets grows, so must our willingness to separate them from human activities increase.

Automobiles smell nearly as much as sewer lines and are much more dangerous. By giving them their own spheres of influence, their own

natural habitat, we will increase the efficiency and speed with which they can operate, and will simultaneously free ourselves from the disturbance they cause in the human *lebensraum*.

Just as in our own homes we have learned that it is more comfortable to have special places for the toilet, the vacuum cleaner, the refrigerator, where they do not interfere with the pleasures of dining or conversation, we must find places in our urban areas for all backstage functions of utilitarian nature in order to enjoy the urban living room.

The forces which would in the end bring about on Earth the fate suffered by the star Motorius are lately, however, being challenged and combated by more thoughtful people who realize that we are involved in a decisive battle to preserve our cities and, with them, urban culture and human dignity. We are now beginning to realize that in a time of dynamic population explosion and growing urbanism, we must take energetic measures to save this planet for human beings; that we must preserve the basic natural resources represented by land, water and air, and protect them from technological pollution. We can no longer sit by idly, watching every last square foot of green space being devoured by unplanned urban and residential sprawl, while our city cores are rotting away; we cannot allow any longer the wholesale destruction of human values and of valuable buildings created by former generations, and of the beauty bestowed on us by Nature. An excellent example of wanton destruction of a building with historic and public character was the proposal to introduce bowling alleys in the air space of the waiting room at Grand Central Terminal. As chairman of a special subcommittee of The American Institute of Architects, I participated in the fight against this desecration of the Terminal, and it appears that up to now at least we have won.

We are running out of time, of space, and of resources. Only by careful over-all planning can we turn back the onrushing tide of destruction of our environment. It was encouraging to hear Dr Robert Weaver, the new Federal Administrator of HHFA, express the thinking of the new Administration in a speech given before the National Convention of The American Institute of Architects. He said it is now realized that it is no longer possible to deal with our urban problems merely within the narrow field of housing and slum clearance, and that a much broader approach, which would include problems of regional and urban transportation, of providing green areas and recreational areas, must be taken. This broader approach will be symbolized by the proposed establishment of a new Federal Depart-

ment of Urban Affairs, headed by a Secretary with Cabinet rank.

The tools which we have at our disposal to implement such a planning philosophy, whether existing or in a formative stage, are still inadequate and sometimes poorly conceived. Though I firmly believe in the need for nationwide urban renewal programs, I do not, by any means, believe that the existing laws and their administration are perfect. One part of our duty as people who are interested in human environment is to press for steady improvement of the tools which are to permit us to achieve our ends.

Inexperienced as this country, by its historical background, is in any large scale urban planning measure, we have proceeded haltingly; we have often faltered, and we have made many mistakes. Over the last twenty years, for example, we have overemphasized improvement for one transportation method over all others, namely, transportation by private automobile. Only within the last year have we started to recognize that urban organizations can be served effectively only by public mass transportation. With respect to mass transportation, we have made no progress for the last eighty years, and in an epoch in which we have achieved speed records by jet planes and rockets—when Commander Shepard reached outer space and came back again within seventeen minutes—it still takes us over an hour, on the New Haven Railroad, to get from Grand Central Station to Stamford.

One-Stop Culture

We have embraced the simple but inhuman method of mass demolition by the bulldozer approach in an attempt to remove slums. We now realize that more often than not we have not removed slums but just moved them from one place to another. Only now are we learning that a new and sensitive approach in combining our methods of conservation, rehabilitation and new construction is required if we are to achieve the desired results. Acting in the grip of a cultural inferiority complex, we have attempted to carefully segregate culture and civic activities from residential and business areas. Such an approach impoverishes the city as a whole and isolates culture and civic activities from daily life.

The Lincoln Center project for the Performing Arts has certainly some praiseworthy aims. I do regard it, however, as potentially dangerous because by concentrating cultural activities in one rather isolated area it may eliminate them from present locations where they are an intimate part of our general urban environment. It has been claimed that what is right for a shopping center

should also be true for a cultural center. I beg you to consider that the advantages gained by one-stop shopping in the supermarket, drug store and department store can hardly be duplicated by one-stop cultural enjoyment, since it is unlikely that anyone would want to stock up for the season by attending the ballet in the morning, a matinee in the early afternoon, a concert in the late afternoon, and the opera in the evening.

Another form of segregation of which we have been guilty is that of creating economic and racial ghettos; we have been committing the sin of Projectitis. By constructing large projects, sometimes containing thousands of living units, we have created institutionalized housing for the poor in huge public housing projects; others for lower middle income, middle middle income, and upper middle income groups. We are now beginning to understand that by intermingling smaller structures serving the various income groups, we can achieve a sociological pattern more in keeping with our democratic ideals.

Finally, we have neglected to establish sufficiently rigid standards to protect convenience, privacy and human dignity. We are building rooms too small, ceilings too low, partitions and floor construction between housing units with insufficient soundproofing, corridors too long; and if we don't improve our performance, we are running the risk of building today the slums of tomorrow.

Nothing, however, would be more fatal than to retreat in the fight for an over-all concept of urban renewal. By fighting for improvements in legislation and administration, by acquiring greater skills and by formulating a basic philosophy as to what we really want our cities and our towns, as well as our metropolitan areas, to look like and to do for us, we will be able to create a better Urbia for the millions of urbanities of tomorrow.

Architects are now beginning to realize—and this has been stated forcibly by speaker after speaker at the 1961 Convention of the Institute in Philadelphia—that if they don't succeed in creating an over-all better environment, their profession might be doomed. The designing of an anarchistic, congested Urbia is a frustrating and senseless experience.

The same logical thought processes hold true for those who are concerned with the beauty of our more intimate environment: the interiors of our homes, whether they are urban or suburban.

As I stated in the beginning, the interdependence of livability of our homes with the livability of our cities is extremely close. In the long run, we will be able to have better homes only if we succeed in getting better towns. ◀



Sketches by Thomas E. Hutchins

The Slob and the Concept

A plea from the man in the street—whose environment we design—for a little humane consideration. The author made this plea in a speech at the Central States Regional Conference, AIA. Art critic for the St Louis Post Dispatch, he is an Honorary Associate Member of AIA's St Louis Chapter, and a prize winner of three AIA journalism competitions

by **George McCue**

► When addressing myself to the architectural profession, the only role that I feel capable of filling, with the radiant confidence that grows out of being indubitably well qualified, is that of the man in the street. Or, as he is sometimes confidentially referred to, the slob.

We men in the street are fiercely conscious of our state of innocence, and will defend it to the last drop of our bile. We sometimes feel that our innocence is in jeopardy, and that we are almost about to get the hang of the new glittering technology that the architects keep winding up and letting us play with.

We move about in our one-third-local and two-thirds-Federal environment, barking our shins on old bulldozer blades and shielding our eyes from the refulgence of newly-cut marble, newly-hardened quartz aggregate, newly-textured glass and all sorts of newly things.

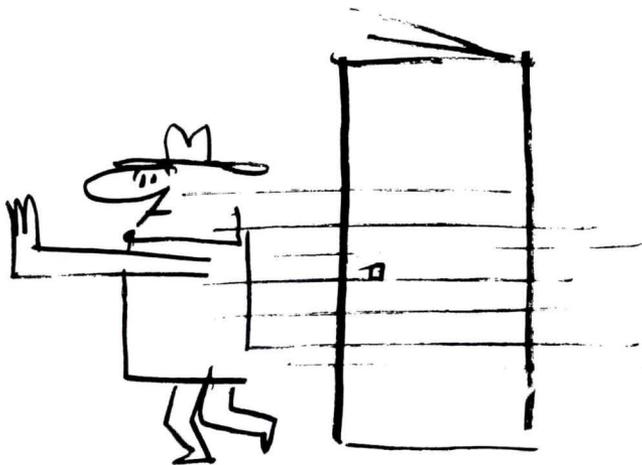
We have a newly-acquired instinct of caution. When we approach a door with one of those large flat handles that sticks out somewhat and then is folded back parallel with the door panel, we know enough to grasp it with the hand reaching around the plate. Then we give a tentative push, and if nothing happens are ready to pull the door open. We eliminate the wrong possibility with so light a touch that no one suspects our uncertainty.

We approach all glass doors in a particular state of uneasiness. We were getting along pretty well with those that we push open ourselves, but which swing on top and bottom pins instead of on hinges at the side. We learned to discount the possibility of having the entire width of the doorway in which to maneuver, because the pivot point was somewhere in from the edge of the panel, and we came to realize that although the door

action was unorthodox, at least the door was one way of getting into the building. Anybody who ever got into a baseball park by lifting a loose plank in a board fence could understand it perfectly.

Lately the glass doors seem to be opening wide again, but now the big question is: Does the door magically open itself in the nick of time, or do we, having got used to magic doors and having encountered one that is not under the spell, simply crash into it?

There are few things that make us men in the street feel sillier than to walk up to a door with hand outstretched, and then to have the door suddenly swing wide open leaving our hand hanging in mid-air. There is no way to retrieve this situation, except to convert the outstretched hand into a debonair wave, a command to the door to do our bidding, but delivered *ex post facto* and always just past the moment of saving grace.



But if we don't put out our hand in a state of readiness, and if it isn't a door that opens itself, we can't help but think there is always that outside chance that we will be wearing a glass door around our neck.

Then there is the door that isn't a door at all any more, but just a hole in the building. We walk by in the dead of winter, and look right into the building, where people are walking about nonchalantly. We have had it explained to us that there is a moving stream of air instead of a door. It moves from top to bottom, and not in the direction of the air currents in the old-time fun houses, so that's that.

Inside the buildings of our time, we experience an interaction of architecture, technology and paper-hanging that sometimes reminds us of what Victor Gruen said he saw on a roadside restaurant sign in California. The sign announced "Genuine kosher Hungarian goulash with Italian spaghetti, Dixie style, served with French bread."

We find ourselves in offices without windows, as though our skyscraping office tower was a walled-in coal mine or a bomb shelter. Sometimes we go all the way down to the first floor on the automatic elevator, with a door that acts as though its electronic brain is signalling for two-for-one split-ups of its human cargo, only to find that it is pouring rain. So we have to involve ourselves again with the elevator's nervous system, and make another round trip for an umbrella.

The gesture that people make in reaching out to open a store door that is about to open itself is rivalled in its pathetic fatuousness only by the strange, jerky, half-determined motions that they make when they stand before an open automatic elevator door that keeps giving menacing indications of being ready to close.

In our fumbling way, we have discovered that a beam of light shines across the elevator en-



trance. When the beam is broken, the door gives us another chance. On some elevators, the beam is below knee level, and on others it is higher up. When we do not know where the beam is, we make kicking motions and up-and-down arm motions, earnestly hoping to connect with the beam somewhere, but shrinking from chancing it with our whole body. The doors are supposed to yield when they contact a solid object, such as a stenographer who is not all aboard, but it is hard to convince a stenographer that she can count on it.

A quality of modern living that makes us men in the street feel like slobs, much as we may resist being one, is that we are constantly being thrown off-balance.

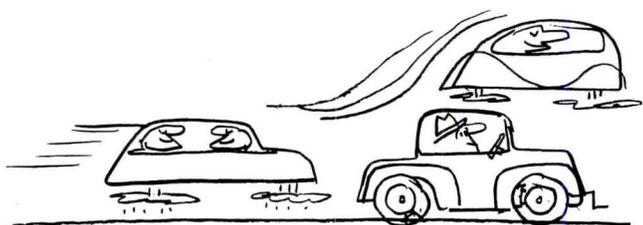
It would be terribly nice for our self-esteem if we could move through the day's activities with some feeling of poise. We don't ask to be able to command every situation—we accept the fact that modern living requires a great deal of accom-

modation. We do feel, with a great wistfulness, that *modern living* is complicated enough without having complications designed right into it.

We could even go along with some of that, hoping that present difficulties are just bugs that are being worked out. But we react with disgust and wrath when we become convinced, as we often do, that the emphasis in design is not in making things perform better but in giving them a surface glitter that will make them sell better, and which can be modified slightly next year to make them obsolete.

We keep hearing that this accelerated, designed-in obsolescence is good because it maintains our annual rate of turnover, and that to falter in our commitment to conspicuous consumption would deal a staggering blow to our economy.

Of course, it is the slobbism in us to which this kind of argument is addressed, and heaven



knows we have given every indication of being easy to convince.

We begin to feel pushed too far when we find that a large amount of our household budget is going to service men who are constantly telling us that parts no longer exist for automobiles and appliances only a few years old, and when we find that we are expected to junk some large, expensive item and start all over because of the failure of some small indispensable piece of it.

Our confusion sets in almost from the moment we start to work in the morning. If we get in the wrong lane on the expressway, we may never get to work at all. Meanwhile, back at the ranch, our wives are having to maintain whole libraries of appliance manuals so they can get through the washing and rinsing cycles, and convert from the rug nozzle to the dust brush of the vacuum cleaner without going out of their minds.

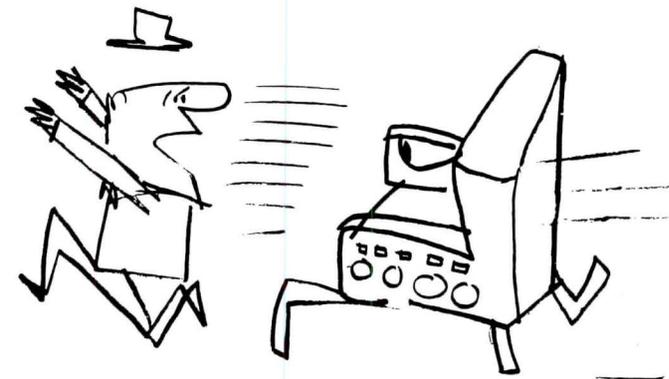
When you look at the back of one of the new kitchen stoves, you wonder how it ever got cross-

bred with a telephone switchboard. A hunk of beef roasting in the oven seems to wear as many telemetering devices as an astronaut.

In the new *House Beautiful* magazine, there is a picture of an installation of step-on relay switches in the flagstone floor, beneath the host's chair in the dining room. "One turns the hi-fi system on and off, the other two control the lights in the kitchen and over the dining table, so the host can change the level and type of light to dramatize the presentation of food." I am quoting from the picture caption.

That is just too much power to vest in one individual. I wouldn't even trust a committee with it. It used to be the height of gracious living to have a button under the table with which to summon the maid, and now they're turning hosts loose with theater lighting and musical effects.

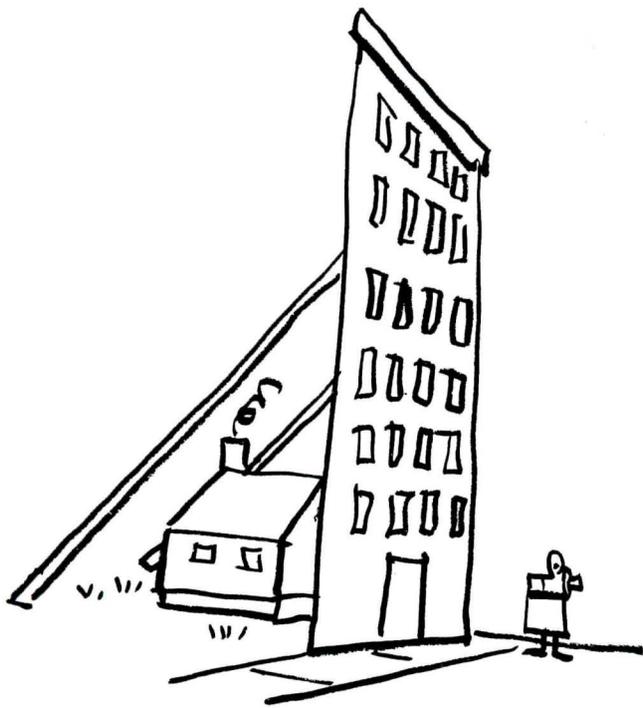
All this may appear to have very little to do with architecture, but it is relevant to considera-



tions of our environment, and it has some bearing on how we think about architecture.

These are some of the small, specific confusions that contribute to the large, general confusion. They are the trees that we have a hard time seeing the woods on account of. They may have some association in our minds with an all-too-familiar transition that we see going on every day—the rapid retrograding of a fresh stylistic expression from style, to fashion, to vernacular, to stereotype, to borax.

We have so much *kitsch* running out our ears that something really good has to be patiently explained to us. It may be that the more it approaches being really good, the more it is endangered by efforts to explain it. An explanation to a suspicious or indifferent audience of why something is good falls too readily into a tone of defense, which is just a short jump from apology. *Having* to explain it suggests that we really do have something to apologize for, to ourselves.



There are no absolutes in matters of goodness, or esthetics, and that is one of the problems of designing in a free-enterprise democracy. No one can decree a state of goodness, and everyone has a democratic right to mess up the landscape to his heart's content. This is one of our most widely-exercised prerogatives.

But our conversations, and our convictions, about design would be more solidly based if the whole idea of design had not become contaminated with all the side issues of transitory, eye-catching surface glitter that amount to nothing. It is just this year's model's sales appeal.

People are becoming accustomed to thinking of design as a sort of visual icing. It is the façade that tries to make something ordinary seem extraordinary. The architects went through all this façade business about a hundred years ago, when they would put a Gothic, or a Roman, or a Greek, or a Tudor envelope around any kind of building, on any kind of site. You just picked your style out of a book.

Now it's more a matter of last year's fender having fins, and this year's "Design"—to use the word with the most laughable facetiousness—having a horizontal flair.

This is a good time to be reminded of a story. It is one that Dr Robert Oppenheimer told at the AIA convention in San Francisco about a motorist who had a flat tire. He put on the spare, and then found that through carelessness he had lost all the nuts that held the wheel in place.

He was angrily scratching around in the grass along the curb, trying to find them, when he was addressed by someone behind him.

He saw that it was a man leaning out the window of the building in front of which he had had his mishap. In the same glance, he noticed the sign over the door, which identified the building as a mental hospital.

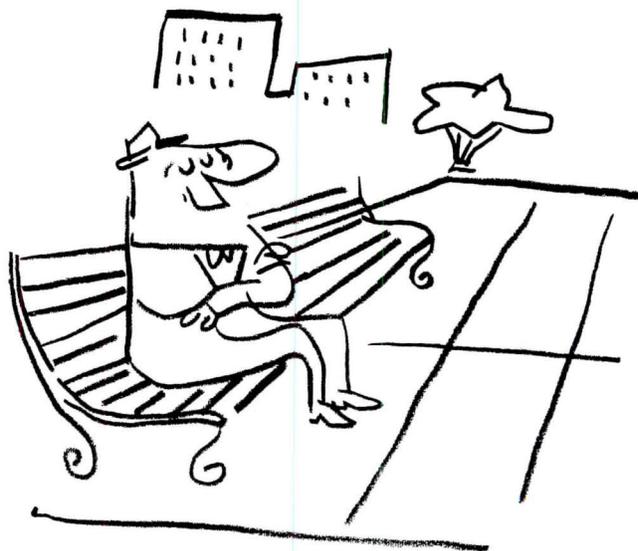
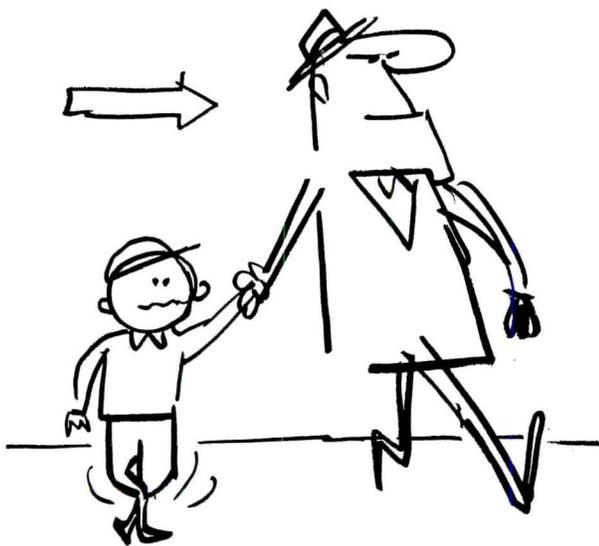
"Why," said the inmate onlooker, "don't you just take one nut off each of the other wheels, and use them instead of the ones you lost? That will hold the spare on until you can get to a service station and get some more nuts."

"That's a wonderful suggestion," the motorist said, "especially considering the fact that . . ." and he paused in sudden embarrassment.

"Oh, I may be crazy," said the inmate, "but I'm not stupid."

When we men in the street are fulfilling our roles as the occupants of architecture, and when we are leading our dogs and pushing our baby buggies about in the new open spaces, thus giving flesh-and-blood enactment to the human activities being performed by the sketchy little creatures shown in the delineations, we do so with all the joy we can muster.

We respond gratefully and gladly to any attention that is paid to us as men, and as men in the street. We may occasionally remark that so many of the new buildings look so much alike, but if we can have some congenial activity in the buildings, and in the spaces that we hope you will continue



to address your attention to around them, the chances are that you can count on a good deal of enthusiasm about the city of tomorrow.

We may be slobs, but we are not stupid.

I think that we are slowly developing a resistance to shiny trimmings and fancy jargon, and are beginning to reserve our appreciation for the environments that really nurture a good city life.

We are not going to wander about aimlessly, just to animate the scene. But we will turn up in it spontaneously, and animate it beyond your fondest expectations, if you will kindly imbue it with a little urban magnetism. Just a few simple little touches to help remind us that we are human beings, and that being human is not necessarily a disadvantage.

We want trees and shrubs and flowers, along with buildings that fire our imagination and fill us with excitement, and yet are rational enough to allow us a sense of ease and pleasure at being in them, or walking about them. By the time we have been through the clover-leaf maneuvers, we are in no mood for puzzles.

We would appreciate a few pleasant surprises. We would bestow heartfelt thanks on project designers who care enough about our spiritual needs to include some good sculpture in the open spaces and good murals on a few walls. And who care enough about our physical needs, for heaven's sake, to install some public toilets. One of the most agonizing experiences in taking children into an urban environment is to be informed, on

very short notice, that your little boy has to go, and then to start the long search in the most obscure corners of department stores, for the little boys' room.

As a major contribution to the humane environment, nothing is more welcome than a scattering of benches where we can rest and look at our surroundings. If you can't give us anything else, just give us some benches. The most ordinary surroundings take on at least a token charm when they are viewed from a sitting position.

But one of the best things you can do for us men in the street is to make us happily unconscious of our feet. One of the surest and easiest—and most overlooked—tests of an urban environment is the tired-feet-test.

One trouble with so many American cities is that they ignore, or try to deny, the simple truths that the feet of innumerable citizens and visitors have been proclaiming for years.

In parts of New York and Washington, and in most of Philadelphia, it is possible to walk almost indefinitely with the feet in eager acquiescence. San Francisco, too, even with those hills. Just to look at Jersey City from a train window makes the feet instantly tired. In St Louis, Houston, Cleveland and Detroit, among a depressingly large host of other examples, the feet are willing to go along for a few blocks, but they soon protest.

There may be an esthetic sense residual in the feet, that remains sensitive and active after the

eye has abdicated its power of making distinctions.

If we hope for this kind of result to the great tearing-down and rebuilding programs that we are now carrying out and will be doing for the rest of our lifetimes, in what direction do we direct our steadfast gaze, our eyes bright with hope and expectation?

Right straight at the building and landscape architects, and the land-planners, of course.

And who is it that is usurping a vast amount of your original jurisdiction, vetoing a great many of your crucially important contributions and insisting on features that you know perfectly well do not belong in the concept?

We are beginning to be aware of the heavy hand of the real-estate promoter, of the banker, of the politician with his catering to vested interests in antiquated building codes, of the insurance broker who oversteps his responsibilities, and, to a certain extent, of us men in the street who fail to sense and support the potentials in an unfamiliar scheme.

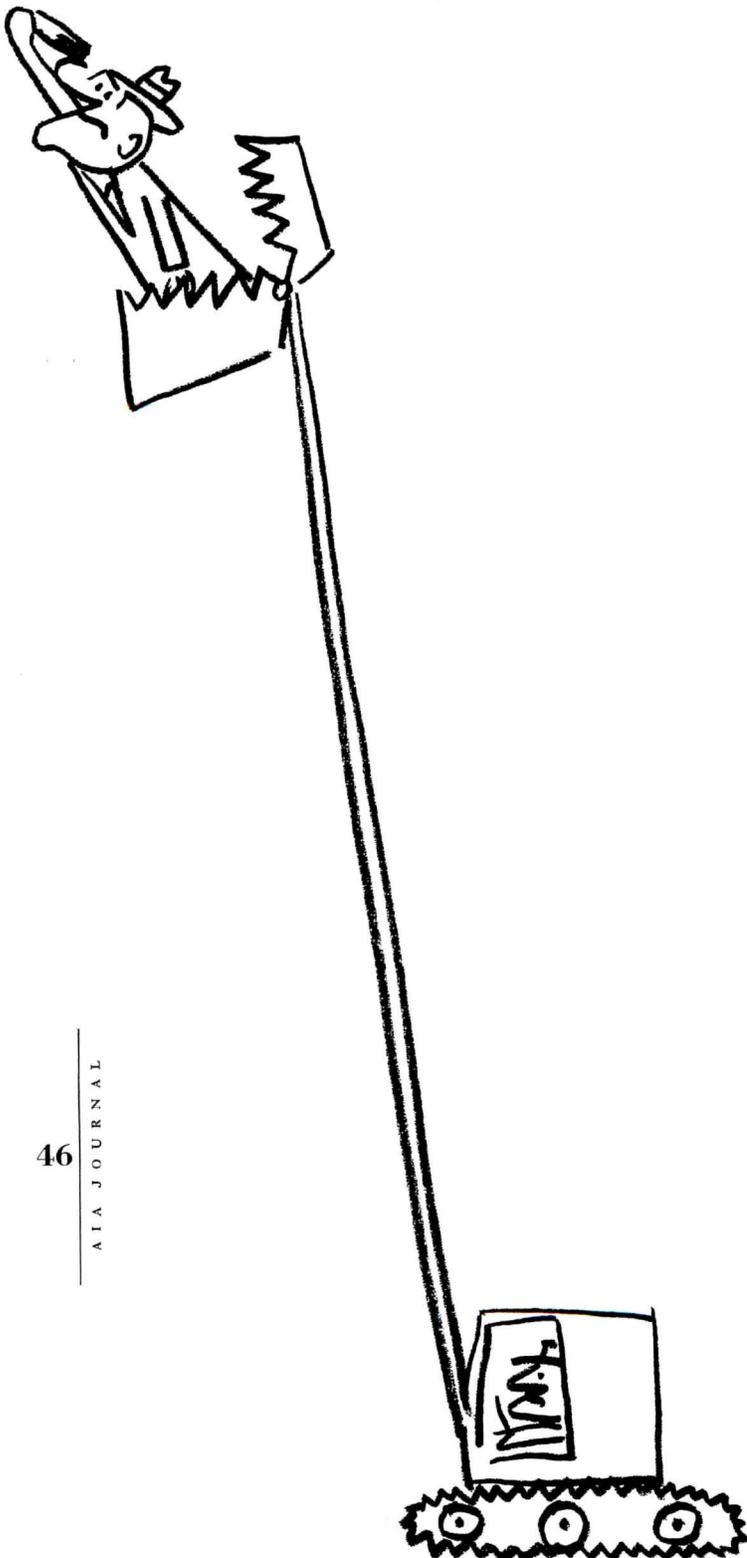
You gentlemen are going to have to regain design authority, first and last. You will find this increasingly taken for granted if everything you do wears an unmistakable aura of rightness.

If there are going to be choices between various alternatives, we want them to be architectural choices, and not real-estate choices, or balance-sheet choices, or insurance choices. If there are going to be mistakes, which is fairly expectable, they won't hurt us nearly so much if they are mistakes made in an architectural effort, and if they are made in the process of trying to achieve something of architectural value.

If we don't get perfection, and we hardly expect that, we shall be reasonably happy if we can only feel a rightness in the general direction that is being taken. Perhaps our slobbism is partly owed to the precarious, idiotic state of our planet. The restoring of order will surely need your help in establishing a new order of civic vision, and a more welcoming everyday environment.

If you architects find your conceptual authority being threatened by those who should have to do only with the ways and means, it is going to be up to you to make sure that you are always to be found on the side of good principles.

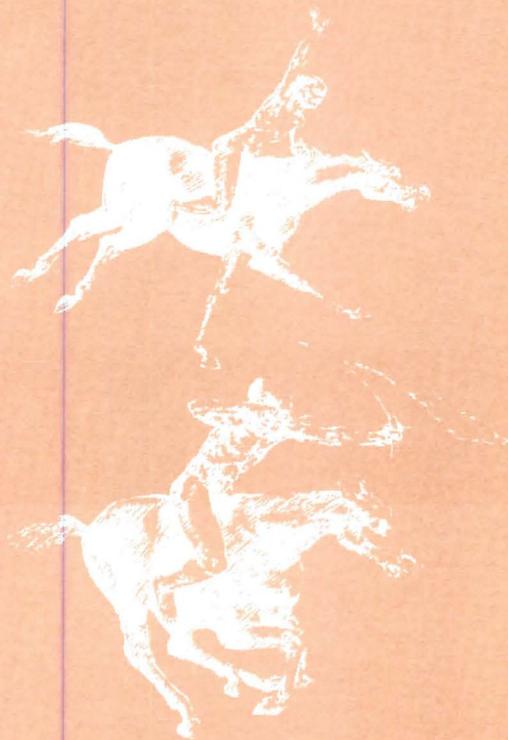
It is going to be up to you to stand up and speak up for good principles, so the rest of us will recognize that this is an issue, and can familiarize ourselves with the questions of values that are involved. Otherwise, our cities will end up with a watered-down sense of values, and we shall have thrown away some of the most challenging opportunities of modern times. ◀



P R E S E R V A T I O N

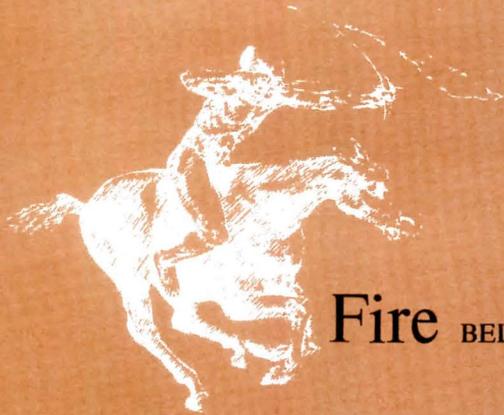
The Heritage of Progress

This exhibit of photographs was selected and assembled by the National Trust for Historic Preservation in the United States, to exemplify the main currents of the preservation movement • It was prepared under the direction of Leonard Rennie of Design & Production, Alexandria, Virginia, and first shown in October during the fifteenth annual meeting of the National Trust in New York. After leaving the Octagon, the exhibition will go on tour to various cities under the auspices of the American Federation of Arts • “The Four Horsemen of Destruction” were envisioned by Helen Duprey Bullock, Director of Information for the National Trust, as symbols of the forces which destroy the nation’s architectural heritage. The horsemen—“Fire” with his burning brand, “Disaster” wielding a scythe, “War” brandishing a sword, and “Man” galloping into the future on a bulldozer—have been brought dramatically to life by artist Miles Rolph after the manner of Gustave Doré’s “Four Horsemen of the Apocalypse”



An Exhibition at the Octagon Gallery

March 14-April 4



Fire BELLE GROVE, WHITE CASTLE, LOUISIANA



Clarence J. Laughlin

One of the last great plantation houses built before the Civil War, Belle Grove enjoyed a brief fling of hospitality and high living before war, reconstruction and

hard times caused its abandonment and rapid deterioration. Ten years ago fire swept through the mansion and reduced its pink brick walls to this blackened shell



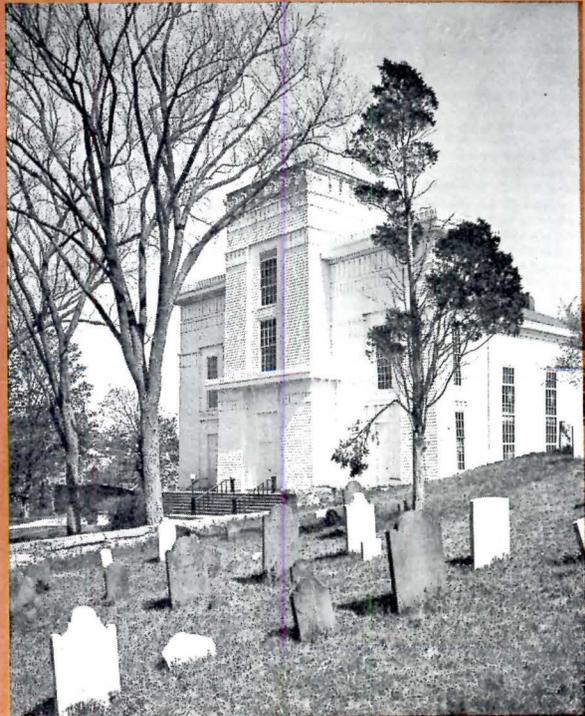
CITY HALL, SAN FRANCISCO, CALIFORNIA

City Hall, relatively new when earthquake and fire swept San Francisco in 1906, was virtually demolished. Ac-

ording to a contemporary writer's report, "Nothing remains but a ghastly past of the once-beautiful structure"

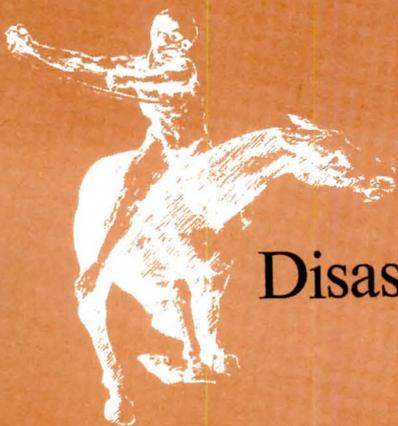
**THE OLD WHALERS' CHURCH,
SAG HARBOR, L.I., N. Y.**

Once crowned with a 165-foot spire of intricate and beautiful workmanship, the church, designed by Minard Lafever, lost its steeple to a hurricane which raked Long Island in 1938. For almost a century the spire had been a last link with home for sailors putting out to sea and their first landfall after the long voyage home

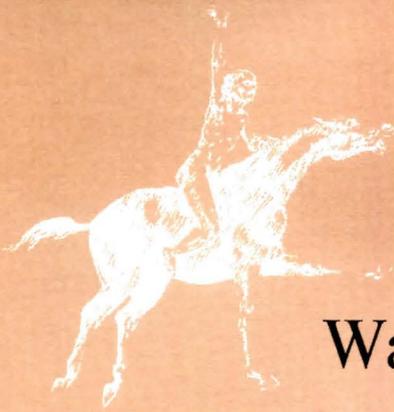


First Presbyterian Church—Mel Jackson

MARCH 1962

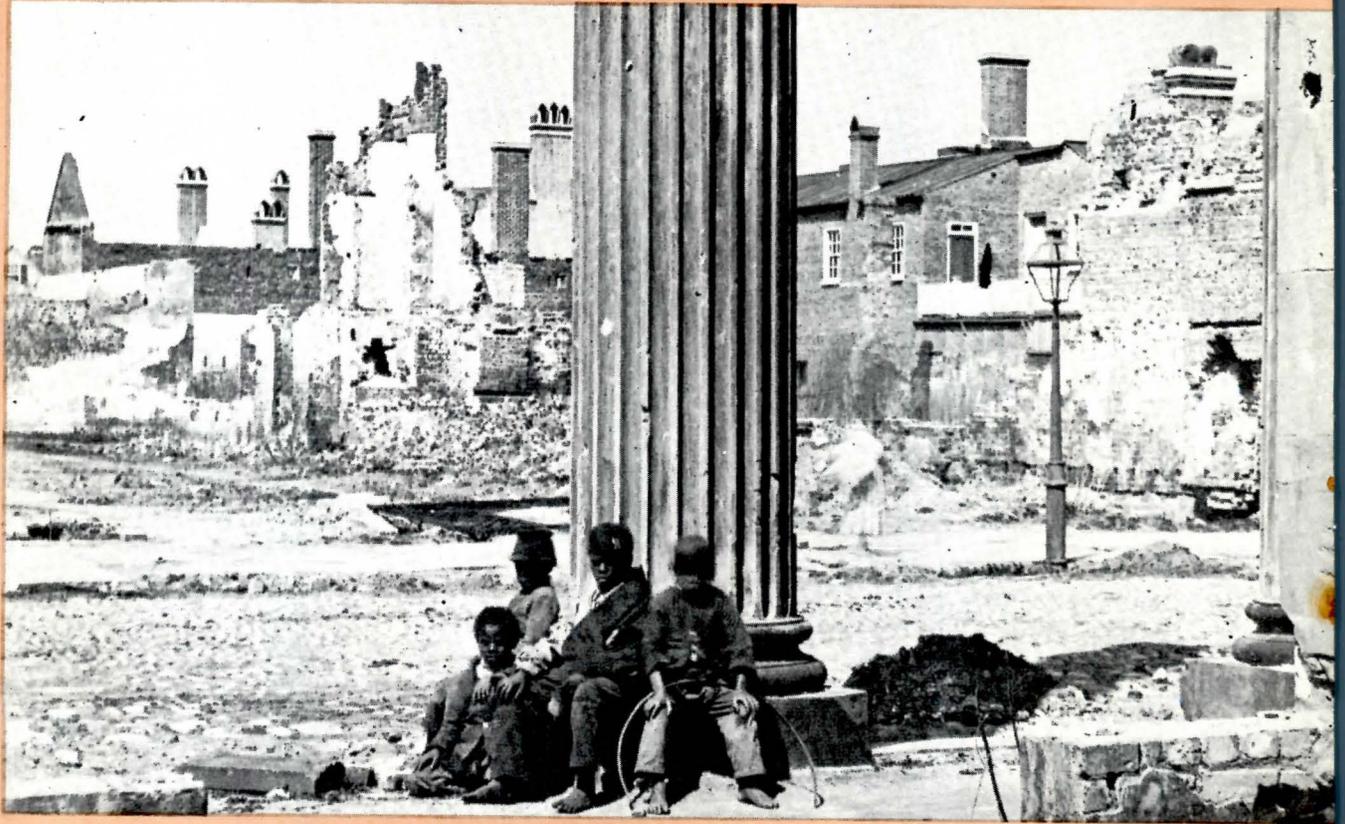


Disaster



War

Library of Congress



CHARLESTON, SOUTH CAROLINA

Charleston was a scene of desolation in April, 1865, four years after the firing on Fort Sumter officially

signalled the start of the Civil War. Here, a view of the city's ruins from outside the famous Circular Church

WASHINGTON, D. C.

Twice within half a century, war scorched a path across American soil and caused devastation of parts of the nation's heritage. Caption of this 1814 British woodcut brags, "The City of Washington was taken by the British Forces . . . when we Burnt and Destroyed their Dock Yard with a Frigate and a Sloop of War"



Library of Congress

New York Times



STEVENS CASTLE, HOBOKEN, N. J.

Restored in 1954 at a cost of \$100,000, the Castle was torn down and replaced five years later by administrators of the technical college to which it had been donated



Man

GARRICK THEATRE, CHICAGO, ILLINOIS

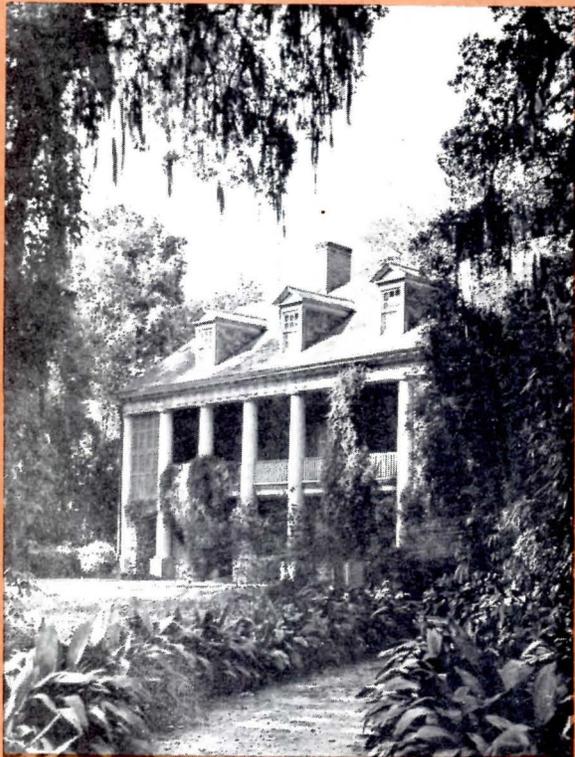
Despite outcries, Adler & Sullivan's Garrick was demolished. Preservation of the elaborate interior

ornamentation was underwritten by World Book Encyclopedia and was accomplished by Chicago architects



World Book Encyclopedia

Saved from the Four Horsemen



Shadows-on-the-Teche, New Iberia, La. Grounds behind "The Shadows" drop gently to Bayou Teche. Union headquarters from 1863 to 1865, it was restored after World War I, is now property of the National Trust



Leonard Rennie

New Harmony, Indiana, a small town on the banks of the Wabash, was laid out in 1814 by Father Rapp. Surviving Harmonist constructions include "Rappite Corner" (four houses) and "Community House No 2"



The Breakers, Newport, R. I. Designed by Richard Morris Hunt as a seaside villa for Cornelius Vanderbilt, "The Breakers" reached a new high of opulence even for the '90s, an era not noted for restraint in design



Marbles and alabaster from Europe, even semi-precious stones were used in elaboration of the interiors. A contemporary critic sniffed at it as "institutional-looking," but "entirely correct . . . in the Italian style"



Nebraska State Historical Society

Sod house near Broken Bow (Custer County), Nebraska. Of the thousands of soddies that once dotted the western plains, only a handful survive. This 1883 example, more elaborate than most, is described as

"The most aristocratic building ever constructed of 'prairie marble' in the country." Present owner, a descendent of the Belgian homesteaders who built it, has no specific plans to preserve the crumbling house

Casey Jones Railroad Museum



Casey Jones Railroad Museum, Jackson, Tenn. While the rich played at Newport, brave engineer Casey lived and raised a sizable family in this small frame house in Jackson, now a museum administered by city of Jackson

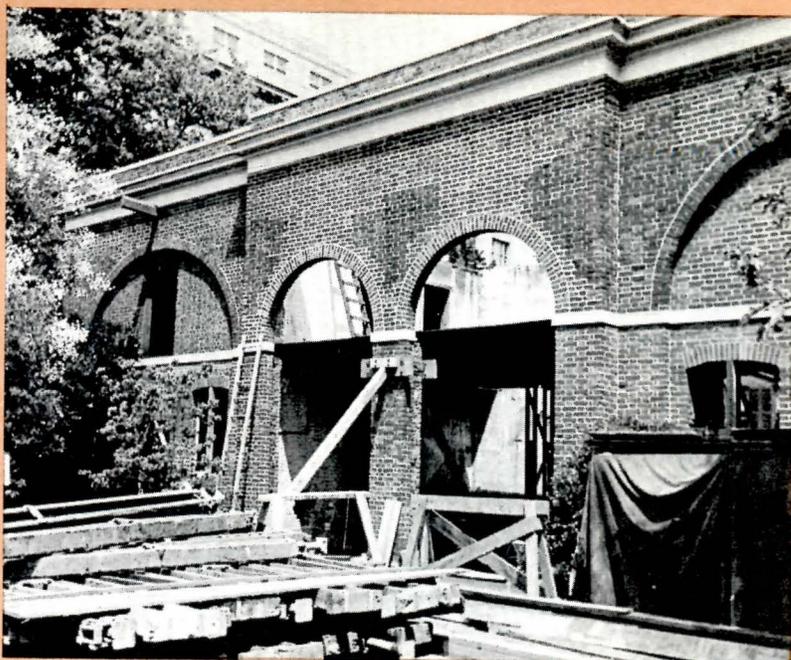


Parlor of the museum is filled with family mementoes; other rooms are crammed with souvenirs of Casey and the Golden Age of Steam. In the side yard stands an Illinois Central locomotive, bearing Casey's number

Casey Jones Railroad Museum

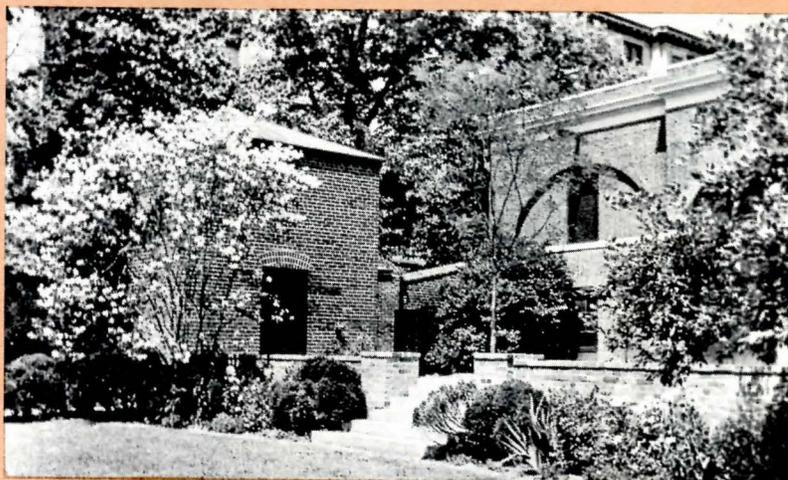
AIA LIBRARY,
THE OCTAGON,
WASHINGTON, D C

Restoration of Octagon's brick stable to house the Institute's library ended a half-century of controversy over the stable's fate. District of Columbia had once condemned the structure as unsafe, and the walls were patched in the nick of time



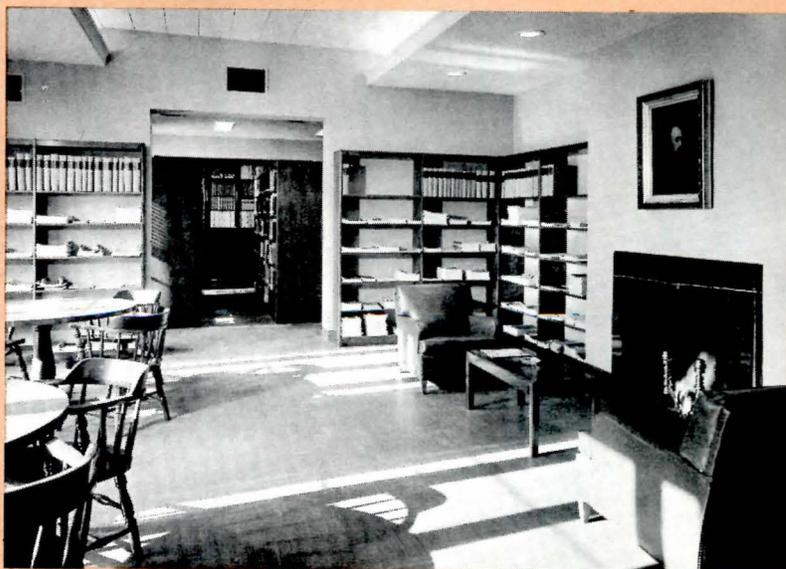
Henry H. Saylor, FAIA

Original stable doorway now frames French doors leading to a terrace and gardens. Another surviving outbuilding, the smokehouse at left, is used for storage



Henry H. Saylor, FAIA

William Dewey Foster designed the fireproof and air-conditioned library, using original brick stable walls as its shell. The library is equipped to serve all members of the Institute



Robert Lautman

The Preceptorship Program at Rice University

by **William W. Caudill, AIA**, *Chairman,*
Department of Architecture, Rice University

Any new idea in the field of architectural education is news. This one, which is really being put into effect by Chairman William W. Caudill, will be worth watching

► When Phil Will, the deep-probing, energetic President of The American Institute of Architects, spoke before a group of architectural teachers at Sagamore Lake, he stressed the need for "architectural statesmen." He is right. The crux of the problems of our profession is the need for more architectural leaders on the statesmanship level—men with great breadth and depth who use architecture as a means for making this planet a better place on which to live, and who have the dedication and leadership ability to influence people to action. The program presented here is an attempt to give architecture a few of Phil Will's "architectural statesmen."

This educational plan is entitled the Preceptorship Program. We borrow the concept and the name from the medical profession because doctors practice what they preach when they say that practitioners should be involved in the educational process. We hope this program has enough merit to warrant its use by other schools of architecture. We will cooperate in any way we can to help other schools benefit from our experience with this program.

After a hectic week at school and in the office, I often reserve Sunday afternoon to take a three-dimensional drive in my little airplane—to get above it all, as the saying goes. I practice landing on a cloud. It is satisfying and improves my flying skills, to a point. I follow exactly the same check list I would over an airport while preparing to land. I go through the routines above the cloud until my wheels actually touch the cloud. It is fun, and provides relaxation and flying experience,

but this is not doing the real thing! It certainly doesn't get me back safely to earth. Practicing landing on a cloud is a synthetic experience. It reminds me, in some respects, of architectural education.

Let's face it. Architectural education at its best is synthetic—clientless programs, no cost realities, no construction, no supervision, no outrageous locations for utilities, no bog at nine feet to play havoc with footings, and no building committee to say no.

The student of architecture, through no fault of his own, is paper-trained. A sexy rendering interests him more than a building. To ooh and aah over a paper model is more fun than experiencing the spaces of real buildings. This is perfectly understandable. From the day he enters the university, the student is graded on how well he fills up white sheets of paper or pastes pieces of it together. He looks upon the 30" x 40" illustration board as architecture's greatest building material. He can draw "buildings" on it. He can make "buildings" out of it. He can sculpture paper as Salvadori does concrete, or arch it as Candela, or cantilever it as Torroja, or hang it as Severud. We train our students to be paper mechanics.

The Profession

Real building materials for building real buildings for real clients under real circumstances are not at our students' disposal. To build real buildings would be too costly a procedure. Consequently, when the student gets his sheepskin (probably paper, too), he finds it most difficult to work in a realistic world of breathing (down-the-neck) clients, limited building funds, restrictive codes, over-sold building materials, under-sold services, and hard-nosed competitors.

Practice Shock

If the young diplomat serving his first assignment in a foreign country goes into "cultural shock," most certainly the architectural student, when he leaves the cool ivy and paper architecture for the hot pavement and real buildings, suffers from practice shock at the hands of pooped practitioners.

One prominent architectural educator bemoans the fact that the schools have very little influence in educating architects. He contends that any good work that the school does is lost completely after the graduate has worked two or three years in the office of the average practitioner. This is stretching it, but he may have a point. Our young architect-to-be, full of his architectural religion and paper approach, has it tough when he faces the reality of building buildings. His first boss pooh-poohs his paper approach, "We can't use that multiple hyperbolic paraboloid roof; neither my engineer nor I can figure the darn thing; besides my client won't buy it!" The boss then questions his architectural religion, "Who cares about the 'spatial experience' or your 'phenomenological space'? This building we are doing is *not* a phenomenon." Our young friend then goes into practice shock.

Many highly-trained, talented young men and women have not been able to span the gap between college and practice successfully. The contrast between paper and practice is too much for them. How to cope with the problem? Landscape architects have a similar problem with tree seedlings. If a seedling is moved directly from its hothouse to a position in the direct sun, it burns up. It needs a period of modulation in the semi-shade of a lathhouse. The seedlings are soft when they are taken from the hothouse, and are placed in the lathhouse to "harden them off," (as the process is called), to condition them for the harsh weather outside so the tree can survive to grow tall and strong.

The lathhouse approach gives us the concept for the Preceptorship Program. The program allows for the proper modulation from school to office. It makes the architect-to-be grow professionally tall and strong into an architectural statesman. We think it is a sound plan for introducing the best students to the best in architectural practice. To make the plan work, we have called and will continue to call upon some of the nation's best architects to provide the lathhouses.

How It Works

To get the Preceptorship Program at Rice University started, we selected six of the most outstanding architects in the South and Southwest.

These men had to be competent, creative architects, highly respected as community leaders. They had to be architectural statesmen: professionals to whom we want to expose our best students. We wanted them to get an intimate *exposure* to the thoughts and practice of men of the highest professional stature, the possible beginning of lasting friendships between the experienced and the beginner, the proper introduction to the profession for the architect-to-be by a successful architect.

This is our plan: to have one of our promising students (the preceptee) live with one of the selected architects (the preceptor) for a period of two to three weeks.

The student during this period can see how a really good architect conducts his professional business, can have benefits of the thinking of this outstanding architect, and see how he lives. He can attend civic meetings with the architect, sit in on meetings with clients, and when the architect goes to church with his family, we want him to include our student as part of the family. We want this architect-teacher to take time from his busy schedule to explain the economic facts of life of his practice. When he shows the student the beautiful prize-winning building he designed, we want him to tell our student what the magazines did *not* tell about this building. We want this to be a "hardening off," learning experience for our youngster. We want the preceptor to furnish the lathhouse. As we see it, the Preceptorship Program for architectural students at Rice University is a *controlled educational experience for potential leaders, by today's leaders.*

The Program

The Preceptorship Program is designed to fulfill needs of the student, and enable him to:

- 1 Grasp the broad scope of private practice
- 2 Observe the way of life, the thinking, the problems, and the satisfactions of an architect of high professional stature
- 3 View a member of the profession in terms of his social and civic responsibilities
- 4 Realize some of the problems of management and economics which confront the practitioner
- 5 Gain intelligent and gradual conditioning to architectural practice.

The preceptor must be an architect who is recognized as a leader in the profession. He must be a principal in private practice. In a partnership, one practitioner is designated preceptor.

Preceptors are appointed by the President of Rice University to the position. The school catalog will carry the name of each active preceptor, his firm name, and his location. Each appointment is for a two-year term.

Preceptees are outstanding fourth-, fifth- or sixth-year students. They are selected by a panel of professors of the Department of Architecture. It is understood that selection designates the student as an honor student in architecture.

The program must radiate from the office of the preceptor, but the learning experiences are not limited to any location—they can be in the home, the office of a client, a construction job, or the meeting room of a civic club.

The program will last for two or three weeks, depending on the preceptor's wishes. This period of intensive training may occur during the school year or during the summer months.

The exact dates and length of time will be a joint decision between the architect and the student. Such a decision naturally will depend on the professional activities of the preceptor and the school workload of the preceptee.

Execution

1 The preceptor may use any teaching method, depending on the current activities of his practice and his own personal preferences. The chief concern is not the method but the learning experience to meet the student's needs.

2 The preceptor takes the student with him on construction supervision trips and discusses with him the complexities of building.

3 The student participates during the hectic periods of wrapping up a set of working drawings or preliminary plans, and experiences some of the excitement and confusion that accompanies this process. (If he can render a service during this period, well and good—but the objective is primarily his education.)

4 The student has the opportunity to see at first-hand some examples of successful buildings, and learns from the architect who did them some of the trials that do not appear in the magazines.

5 The preceptor invites the student to sit in and be allowed some participation in client conferences.

6 The student witnesses a bid-letting and is told of the problems that occur when bids are too high or too low.

7 The preceptor discusses the hard facts of office management and the economic aspects of architecture.

8 The student accompanies the preceptor to professional meetings, civic clubs, church and town meetings to clarify the architect's social and civic obligations. (This also lets the public know that architects are interested in better training for future architects.)

Ground Rules

1 The student is treated as an individual and as a colleague.

2 The preceptor is responsible for a thorough indoctrination of the student into the profession.

3 The student comes to the preceptor with humility, an open mind, and a willingness to work, study, discuss and observe on a day-and-night basis.

4 The student is not to receive pay for work done. The preceptor is financially responsible for the student's transportation to and from the University, his board and room, laundry, and \$15 for miscellaneous expenses for the two- or three-week period. (It would be most beneficial if the student could stay in the home of the preceptor; however, this is not a necessary requirement.)

5 The student is expected to participate in office routine and work at night, if necessary, to help meet a deadline and experience some of the pressures on the architect.

6 Within two weeks after completing the assignment, both student and preceptor submit, individually, short confidential reports to the Chairman of the Department of Architecture. ◀

COMING IN THE APRIL JOURNAL

Astor-Cooper Square Area Urban Renewal Study
by David L. Eggers, AIA

As an exhibit for the Convention of the New York State Association of Architects, Eggers and Higgins prepared a study of the Cooper Union area of New York City.

The Challenge of the Unexpected Obvious
by Fred H. Bair, Jr, AIP

This well-known planner and economic consultant shakes up some of the complacent predictions by the experts.

The Architect in the Community
by Albert Bush-Brown

Professor Bush-Brown is disturbed by the architect's apathy toward his responsibility to his community. The architect must "alert people with a social conscience to the physical conditions that sustain the good and healthy communal life."

The Dallas Convention

This is the *Journal's* "Pre-Convention" issue, with a story about Dallas, and a plan of the exhibit area with a list of the exhibitors.

A Second Report on Your Profession

Ever since the first "Report on Your Profession," which appeared on the blue pages of the June 1960 *Journal*, the Committee on the Profession has been working on a specific statement of the problems which face the profession and some definite answers to them. Following this Report, the *Journal* will present monthly for a year or more, a series of articles on the Comprehensive Services Concept, the New Standards of Professional Practice and the New Role of the Architect.

Union Internationale des Architectes

by **Henry S. Churchill, FAIA, AIP**

► In a time when international good will is held in uneasy balance by political power struggles the efforts of non-governmental organizations to help keep the balance are of quite significant importance. Among the many organizations of this sort is the Union Internationale des Architectes, of which The American Institute of Architects has been a member since its beginning in 1948.

The idea of an International Union was sparked by Pierre Vago, a French architect, and a small group including Sir Patrick Abercrombie, who was the first President, and Ralph Walker who was for many years First Vice-President. Pierre Vago was—and is—Secretary-General, and to him goes the credit for the successful growth and solidarity of the Union.

From the beginning the Union has been strictly non-political and almost entirely non-ideological. It has, on the one hand, insisted that architectural societies of any country are eligible; and it has also insisted that no particular brand of esthetic thinking should color its purposes.

These purposes, broadly, are the interchange of professional information; the comparison of technical procedures and structural methods; the strengthening of the status of the architect and the establishing of uniformity of the standards of professional ethics; the standards of education and practice; the conduct of international competitions; and last, but by no means least, the building up of international understanding that can come only from personal, social contacts.

The Union is an organization of architectural societies, not of individual members. There are now forty-three Sections. They are represented in the Assembly, which is the governing body, by from one to five delegates, according to the number of members in the national society. The Assembly meets every two years.

Between Assemblies the UIA is run by an Executive Committee which consists of the four officers, the Secretary-General, (Pierre Vago) and fourteen others carefully distributed by four geographical groups. All are elected by the Assembly. The Executive Committee has a small "Bureau," centered for accessibility in Paris, for the transaction of immediately pressing business. Robert H. Matthew, United Kingdom, is the current President, and Willy van Hove of Belgium is Treasurer.

We asked Mr Churchill to write a brief article for the AIA Journal to tell the profession about the organization, objectives and present status of the UIA—something we should all know more about. Mr Churchill is a member of the AIA Committee on International Relations and serves as a member of the Executive Committee of the UIA

There are two Vice-Presidents—Ramon Corona-M. of Mexico and Yang Ting Pao of China.

The real work of the UIA is done by the "Commissions de Travail," or Working Committees. These are all international groups; theoretically, any Section having interest in the work of a Committee can send a member; practically, this is seldom the case. Committees meet on the call of their President (Chairman). Generally they meet once a year, and the Section where the meeting is held acts as host, paying all the expenses of the members, except travel to and from the country. Meetings have been held in all the major countries except China and the United States, and in a majority of the smaller ones.

Naturally, the meetings tend to center on Europe (which includes the USSR). The focus, however, is always on continuing problems—city planning in many aspects; housing, particularly the development of methods for producing it in the underdeveloped countries; competitions, in which field the Committee on Competitions has had remarkable success in cleaning up irresponsible proposals; health (hospitals); schools; research into structural methods, and so on.

The big get-together is the Congress, which is also held every two years. The one last summer, in London, was a very great success, with close to 2,000 architects attending. The RIBA was host.

It should be noted that at none of the Congresses—this was the sixth—was there any question of political exclusion: USSR, Red China, Cuba, have all been participants—nor were any Western countries made unwelcome at the fifth Congress in Moscow. At the sixth Assembly in London there was evidence of some ill-feeling manifested against the re-election of the United States to the Executive Committee, but it was slight and was felt to have been most unfortunate.

The UIA publishes a *Revue* six times a year, which tries to do what any such publication should do—give the news of the UIA, its Committees, the results of international competitions, a brief overlook of international publications. It has so far been privately financed by a group of French architects. With issue No 10, in English as well as French, it is hoped in time to make it financially independent. Copies are on file at the Octagon, or it may be subscribed to (20 new

francs or \$4) at the UIA, 15 Quai Malaquais, Paris, 6^e.

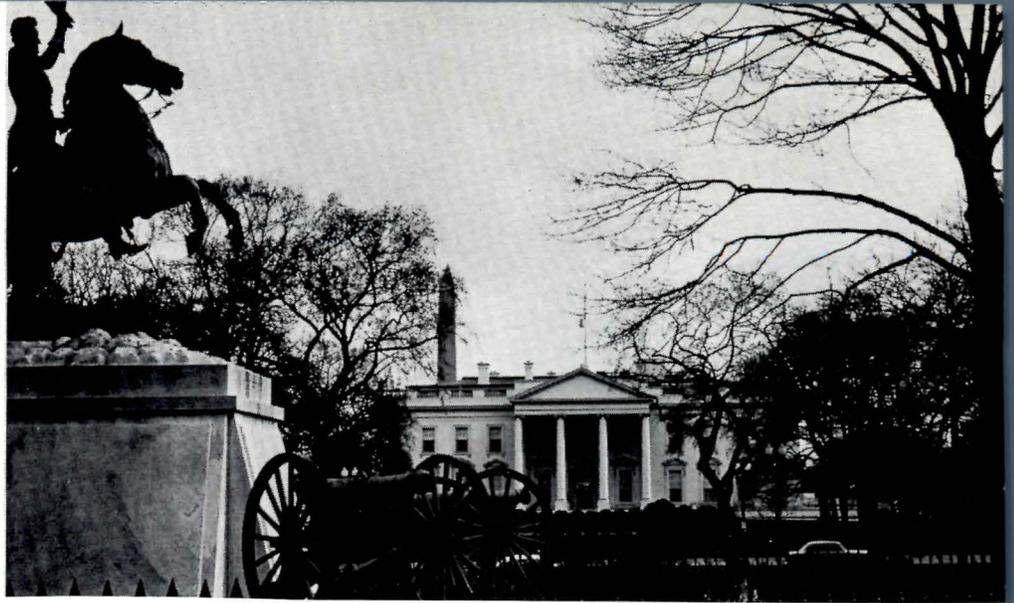
The UIA also maintains close liaison with the Social and Economic Council of the United Nations, and with other suitable organizations such as IFHP, CIB, WHO, FPAA, etc.

I have been a member of the Executive Committee for five years now, and I am convinced that the AIA cannot afford *not* to participate more actively. I have endeavored, with some success, and due to the great help of President Will, to build up closer staff and committee relations with the UIA. The Institute is now formally represented not only on the Executive Committee but on most of the important Working Committees. Staff has been assigned to take care of the growing volume of correspondence, inquiries and contacts between the UIA committees and those of the Institute. This work is, of course, closely connected with the general work of the Committee on International Relations.

The AIA Board has authorized an invitation to the UIA Committee on Research to be the guest of the Institute either before or after the seventh Congress in the fall of 1963. We hope to welcome them in Washington and then show them something of our industrial production, meeting perhaps on some college campus in the Midwest. This will be the first time the Institute will act as formal host in this manner to a group of foreign architects.

I would like to see more members of the Institute become concerned with this movement, more chapters setting up formal committees, more willingness on the part of the Institute to reciprocate in showing the architects of other Sections what we have to offer. To do this will take money, and I want to point out that general understanding to the contrary, the architects of other countries are *not* subsidized by their governments. That there are one or two notable exceptions—USSR and China, for instance—does not change the generality. The willingness to spend the few thousands necessary for us to take our proper place in a world cooperation of architectural endeavor depends on the interest displayed by members. I do not claim that your interest will have any financial or other visible results: I just do not think we can afford to stand aloof. ◀

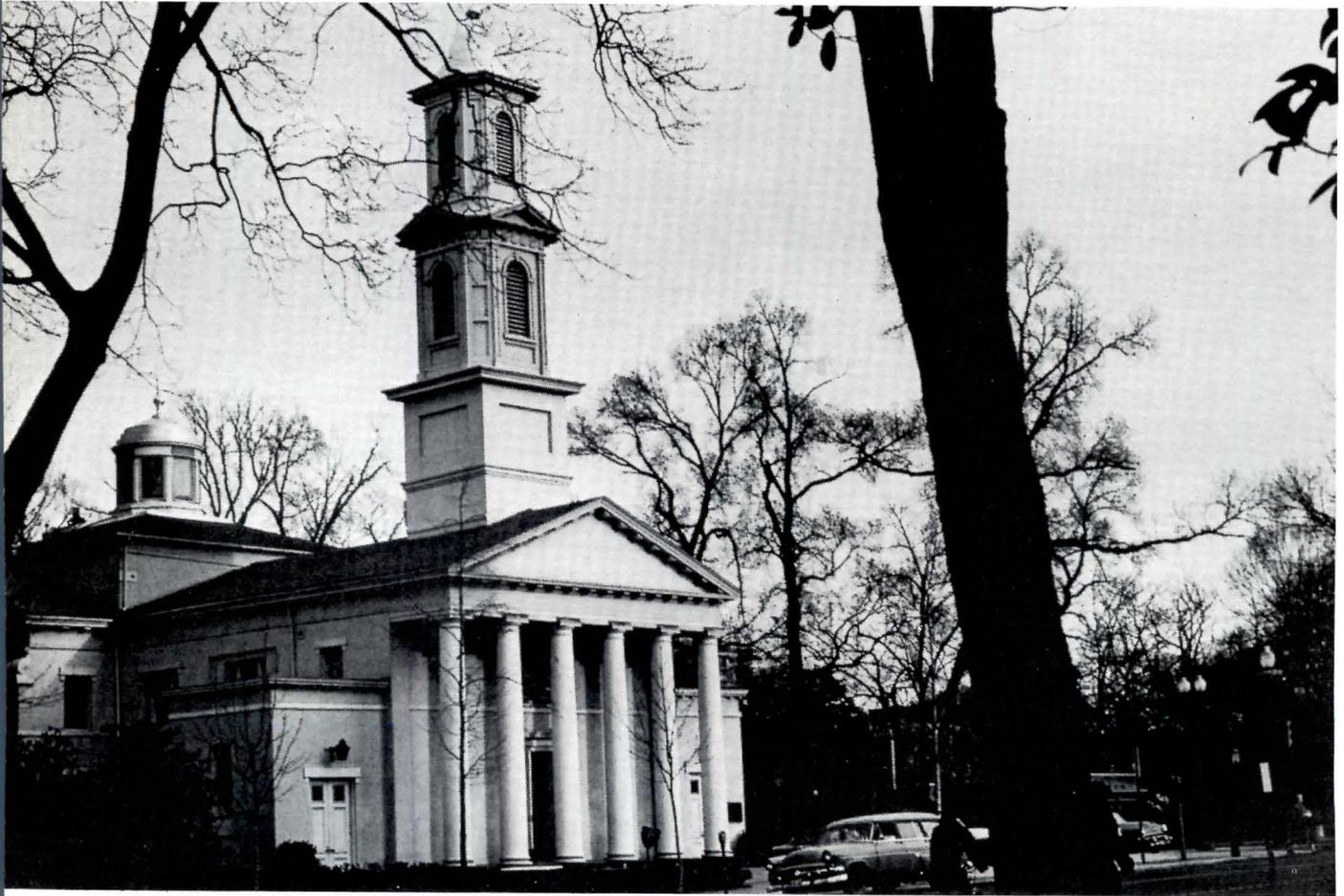
"Lafayette Square—Gilding the Lily."



"Howdy!"

"Look Sees"

Some Photographic Commentaries on the Washington Scene by Paul Thiry, FAIA



"Lafayette Square."

"In Action"

NO
PARKING
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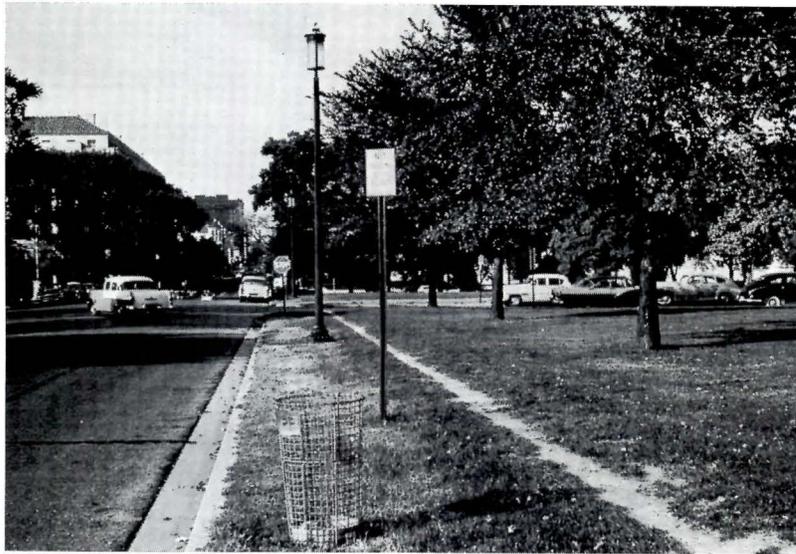
NO
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“Democracy”

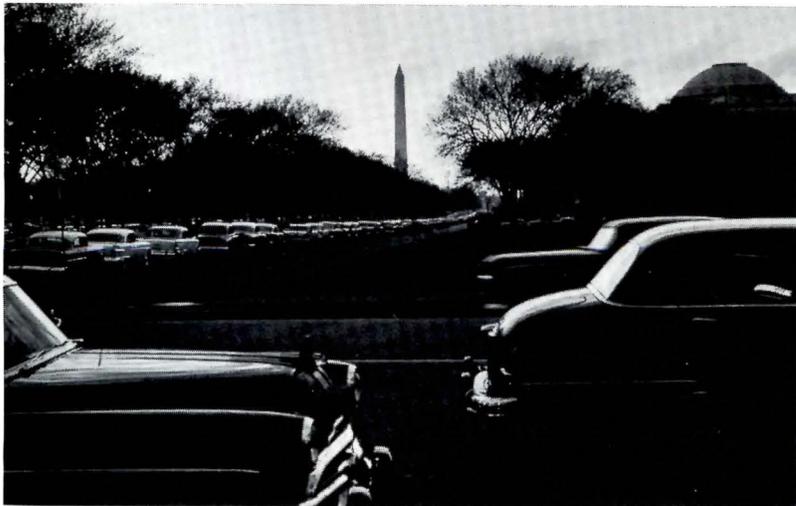
“Look Sees”



“The Mall”



“Democracy”



“The Mall”



A Guide for Planning Baptist Church Buildings

by **Kenneth E. Richardson, AIA**

This is the second of the series of reports prepared by the AIA Committee on Religious Buildings intended as guides for the architect faced with planning a building for a religious faith not his own. Others will follow

► The story of the Baptists as one of the Protestant groups is the story of resistance to centralized religious authority; resistance by many groups of people, each autonomous, loosely held together by a few comparatively similar attitudes towards Christianity.

As a recognizable organization, the Baptist Church usually is assumed to have had its beginning in Gainsborough, England, in 1609 when John Smyth gathered about him a group of persons who stood for baptism of believers only, rejecting infant baptism and denouncing the Church of England as non-scriptural.

Three years later (1612), Thomas Helwys and John Murton, with a few followers in London, founded the first actual Baptist church as an entity, although some sources say it actually was not called "Baptist." This group later became known as "General Baptists."

A second group organized about 1616, also in the London area, subsequently became known as "Particular Baptists." Like the "General Baptists," they rejected infant baptism and espoused "Primacy of conscience to Christ." Both groups believed in autonomy of local churches and were cool to any central authority.

During the ensuing three hundred years they suffered persecution from both Roman Catholics and the Church of England; gained a number of followers; lost ground at times, but regained it at other times, usually during periods of greatest persecution.

In 1891 they combined to the extent of general aims in "Baptist Union of Great Britain and Ireland."

Other Baptist groups eventually became formed in England (Strict Baptists, Welsh and Scotch Baptists, etc), and in other parts of the Empire except Canada, where most Baptists trace their heritage to American sources.

Two men usually credited with having begun the Baptist movement in America are Roger Williams, dissenter-emigrant from England and Massachusetts Bay Colony (in 1639 in what is now Rhode Island, he launched the American Baptist Movement), and John Clarke, a Boston medical doctor, also a dissenter-emigrant from England, who organized at Newport, Rhode Island, in 1644, the first Baptist church there.

In early years American Baptists did not look with favor upon general organizations, associational, state or national, stemming from experience in England with tyranny of centralized ecclesiastical system of Church of England.

As in England, Baptist groups suffered at the hands of other better organized authorities, both civil and religious, but grew in spite of persecutions.

In 1818 the American Baptist Foreign Mission Society had its beginning. In 1824 the "Tract Society" (later called the American Baptist Publication Society) was organized; and in 1832 the American Baptist Home Mission Society. These and other

The Institute

organizations became affiliated as the Northern Baptist Convention in 1907 and the name was changed to the American Baptist Convention in 1950.

The Southern Baptist Convention was organized in 1845 as a protest against the refusal of the Missionary Societies to appoint any missionaries from

slave-holding states. It was started on an entirely different basis from previous Baptist organizations, and the agencies which it set up through which to do its work were owned and controlled by the Convention. The term "convention" refers not so much to the annual meetings of members as it does to the organization needed to give substance to the annual meetings throughout the year.

Today there are more than forty Baptist conventions in the United States. The largest is the Southern Baptist Convention. Some of the other conventions are: American Baptist Convention, National Baptist Convention, USA, Inc (Negro), the National Baptist Convention of America (Negro), Freewill Baptists (organized 1727), the Negro Freewill Baptists (recognized as a separate group in 1901), American Baptist Association (1925), North American Baptist Association (May 1950), General Association of Regular Baptists (1933), Primitive Baptists (organized in North Carolina in 1827, sometimes called "Hard Shell" Baptists), National Primitive Baptist Convention of the USA (organized by Negro groups after 1875), United Baptists (1787), the National Baptist Evangelical Life and Soulsaving Assembly of the USA (1937), the Duck-River and Kindred Association of Baptists. Total membership of all Baptist churches well exceeds twenty million.

Baptists sponsor "home" and "foreign" mission groups, the latter distributed mainly throughout Asia, Africa and South America. Baptist churches are now in nearly every country in the world.

While there is a number of identifiable Baptist denominational groups or conventions, each church within each group is separate and sovereign, independent of any control of any kind from any other group but willing to join churches of like faith and order to project missionary work and to develop denominational ministries. It therefore becomes almost impossible to set forth a single list of "basic beliefs" and say that they represent the Baptist faith. Another factor relates to the once general division into "northern" and "southern" groups, a factor which may become less important as population shifts to various parts of the country intermingle once-sharp geographical differences.

Because of the above situations, brief statements will be made applicable to only two of the main groups, the Southern Convention and the American Convention. An architect selected to work with a Baptist church committee should check these statements both with the specific church and with the head office of that group.

Basic Beliefs—Southern Baptist Convention

The Southern Baptist Convention in 1924 appointed a committee to consider the advisability of issuing a Statement of the Baptist Faith and Message. That committee presented at the meeting of the Convention in 1925 the New Hampshire Confession of Faith. Following are quotations from a statement introductory to that Confession of Faith:

"That they constitute a consensus of opinion of some Baptist body, large or small, for the general instruction and guidance of our own people and others concerning those articles of the Christian faith which are most surely held among us. . . .

"That we do not regard them as complete statements of our faith, having any quality of finality or

infallibility. As in the past so in the future, Baptists should hold themselves free to revise their statements of faith as may seem to them wise and expedient at any time.

"That any group of Baptists, large or small, have the inherent right to draw up for themselves and publish to the world a confession of their faith whenever they may think it advisable to do so.

"That the sole authority for faith and practice among Baptists is the Scriptures of the Old and New Testaments. Confessions are only guides in interpretation, having no authority over the conscience.

"That they are statements of religious convictions, drawn from the Scriptures, and are not to be used to hamper freedom of thought or investigation in other realms of life."

Following are excerpts from the "Baptist Faith and Message" of the Southern Baptist Convention referred to in the foregoing quotation.

"God. There is one and only one living and true God, an intelligent, spiritual, and personal Being, the Creator, Preserver, and Ruler of the universe, infinite in holiness and all other perfections, to whom we owe the highest love, reverence, and obedience. He is revealed to us as Father, Son, and Holy Spirit, each with distinct personal attributes, but without division of nature, essence, or being.

"The Fall of Man. Man was created by the special act of God. . . . He was created in a state of holiness under the law of his Maker, but, through the temptation of Satan, he transgressed the command of God and fell from his original holiness and righteousness; whereby his posterity inherit a nature corrupt and in bondage to sin, are under condemnation, and as soon as they are capable of moral action, become actual transgressors.

"The Way of Salvation. The salvation of sinners is wholly of grace, through the mediatorial office of the Son of God, who by the Holy Spirit was born of the Virgin Mary and took upon him our nature, yet without sin; honored the divine law by his personal obedience and made atonement for our sins by his death. Being risen from the dead, he is now enthroned in Heaven, and uniting in his person the tenderest sympathies with divine perfections, he is in every way qualified to be compassionate and all-sufficient Savior.

"Justification. Justification is God's gracious and full acquittal upon principles of righteousness of all sinners who believe in Christ. This blessing is bestowed, not in consideration of any works of righteousness which we have done, but through the redemption that is in and through Jesus Christ. It brings us into a state of most blessed peace and favor with God, and secures every other needed blessing.

"Regeneration. Regeneration or the new birth is a change of heart wrought by the Holy Spirit, whereby we become partakers of the divine nature and a holy disposition is given, leading to the love and practice of righteousness. It is a work of God's free grace conditioned upon faith in Christ and made manifest by the fruit which we bring forth to the Glory of God.

"God's Purpose of Grace. Election is the gracious purpose of God, according to which he regenerates, sanctifies and saves sinners. It is perfectly consistent with the free agency of man, and comprehends all the means in connection with the end. It is a most

glorious display of God's sovereign goodness, and it is infinitely wise, holy, and unchangeable. It excludes boasting and promotes humility. It encourages the use of means in the highest degree.

"Sanctification. Sanctification is the process by which the regenerate gradually attain to moral and spiritual perfection through the presence and power of the Holy Spirit dwelling in their hearts. It continues throughout the earthly life, and is accomplished by the use of all the ordinary means of grace, and particularly by the Word of God. . . .

"Baptism and the Lord's Supper. Christian baptism is the immersion of a believer in water in the name of the Father, the Son, and the Holy Spirit. The act is a symbol of our faith in a crucified, buried and risen Saviour. It is prerequisite to the privileges of a church relation and to the Lord's Supper, in which the members of the church, by the use of bread and wine, commemorate the dying love of Christ."

The Lord's Supper is administered to the seated congregations by the minister with assistance of deacons. The baptismal ceremony is conducted by the minister who stands in a baptistry of water sufficient in size to permit complete immersion of the candidate. The ceremony is watched by the entire congregation. The baptistry may or may not be screened by sliding doors or other means when it is not in use.

Basic Beliefs—American Baptist Convention (Northern)

The following statement on the basic beliefs of the American Baptist Convention is taken from a release by the Associated Home Mission Agencies, dated 1961:

Characteristics of American Baptist Churches

- 1 Salvation by Faith
- 2 Recognition of Lordship of Christ
- 3 New Testament sufficient guide for faith and practice
- 4 Regenerate Church Membership
 - a Believer baptism (by immersion)
 - b Open communion
 - c Baptism and Lord's Supper as symbols only
- 5 Priesthood of Believers
- 6 Soul Liberty
- 7 Separation of Church and State
- 8 Recognition of the integrity, worth and responsibility of the individual
 - a Freedom of conscience under leadership of Holy Spirit
 - b Privilege of dissent
- 9 Nature of the Local Church
 - a Recognition of responsibility in association
 - b Congregational freedom with denominational responsibility
 - c Determination of membership requirements by Local Church
 - d Acceptance of democratic principles and procedures for church polity
- 10 Generally accepted Program Practice
 - a Dignity of Worship
 - b Co-educational Christian Education
 - c Recognized financial procedure
 - 1 Planned budgets
 - 2 Unified missionary budget nationally administered
 - 3 Every-member canvass

- 11 Cooperation with other denominations
 - a Membership in National Council of Churches of Christ, World Council of Churches and Baptist World Alliance
 - b Cooperative planning (comity)
- 12 Ministry to *entire* community (Social-racial-economic inclusivism)
- 13 Ministry to every-day needs of the community (applied Christianity)

Baptism and the Lord's Supper: "The Lord's Supper is observed in some Baptist churches once each month; in others, once each three months; in still other churches different customs prevail."

(From "Faith and Fellowship," American Baptists.)

Church Government and Sequence of Authority (Southern Baptist Convention)

The local church congregation is central and supreme over all of its work. The minister is the leader and is assisted by deacons.

While there appear to be certain basic Baptist beliefs that are common to all groups, there are differences along lines of procedure and affiliation. The Southern Baptist Convention is not affiliated with the National Council of Churches. Its churches, in their religious education organizational setup, do not use a Board of Education, Board of Missions, in fact, any "boards" of any kind. It does not recommend auxiliary organizations in the churches. They work directly through church agencies—the Sunday School, Training Union, Brotherhood, Woman's Missionary Society, Choirs, etc. They have deacons and use committees. They recommend a church council made up of the pastor and the directing leaders of each of the church agencies.

American Baptist Convention (Northern)

As it is in the Southern Baptist Convention churches, each church of the American Baptist Convention is the first and final authority in the conduct of its activities. However, the American Convention is an affiliate of the National Council of Churches. There are state "conventions" in most states. The national Convention is administered by a general council made up of president, vice-president, secretary, treasurer and persons representing various areas of activity—societies, boards, commissions, committees, conferences, councils and alliances.

Each local church makes its own decisions in all matters affecting its existence. It may seek advice from the state or national convention, but it does not have to act upon such advice. The pastor is the spiritual leader of the church, but the highest authority in the local church is a majority vote of its members, such vote calling a pastor, adopting a budget and determining the support to be given to missionary work of the wider fellowship.

Officers, varying in number depending upon the size of the church, assist the pastor. They include a moderator, clerk, treasurers (usually two, one for local funds and one for mission funds), director of Christian Education, etc.

Buildings—Southern Baptist Convention

There is no architectural design heritage in the Baptist movement. Worship, preaching, and religious instruction are primary to the space in which they

are conducted. The usual type of building today consists of an entrance vestibule, seating space (auditorium) for the congregation, and platform area which contains a pulpit, baptistry and choir. Integral with the church worship and preaching space is additional provision for the religious education program, mainly the Sunday School and Training Union. These are for all ages, including a growing program for adults. Proper administrative offices usually accompany these facilities. When the church is small or is new and beginning to grow, the educational building frequently doubles for preaching and worship services.

Almost all Baptist church buildings make provision for a social hall with kitchen since great emphasis is placed upon complete family participation in church activities. Attention in the auditoriums should be given to proper provision for music.

Although there are no mandatory planning requirements in the strict sense of the phrase, the pulpit is centrally located and the baptistry is located so that all the audience can watch the ceremony. The baptistry is large enough to permit complete immersion of a person.

The Convention planning office recommends generous building sites to accommodate all facilities on a single-story plan together with off-street parking and outdoor recreation activities if they are desired. Consideration of Southern Baptist age-grading and program procedures with resultant building needs requires special information. This applies to all areas of the buildings and grounds as they have important program differences from general Protestant groups.

It is important to note that the schedule of services in Baptist churches covers mid-morning, afternoon and evening services. This will affect orientation of the church buildings to take advantage of natural light.

The Southern Baptist Convention has various Boards, Agencies, and Institutions scattered in several cities. Its Executive Committee is located at 127 Ninth Avenue North, Nashville 3, Tennessee. This is also the address of the Sunday School Board of the Southern Baptist Convention, which maintains a well-staffed church architecture department that can supply suggested plans and check lists for local building committees and architects. This office stresses the necessity of obtaining the services of local architects.

Buildings—American Baptist Convention

General building types do not differ materially from those described above for the Southern Baptist Convention churches.

The three main elements of this faith are preaching, baptism and communion, but considerable leeway is given in location of the pulpit, the baptistry, the communion table, and the choir. The baptistry, pulpit and communion table must be visible to all the members of the congregation and usually also the choir. Some churches prefer the pulpit to be in the center and some desire to have it at the side. The communion table is definitely a table and not an altar and should be free-standing. The baptistry must be large enough to permit complete immersion of a person. When not in use the baptistry may be open or may be concealed or screened.

Church sites today should be from three to ten acres and should provide for off-street parking. Provision for music and a library are often recommended, since choral music is an important element in the service, but there is considerable freedom in location of the choir.

Church services are conducted in mid-morning, often in the afternoon and the evening, so buildings should be oriented to utilize natural light to advantage.

Planning assistance from their headquarters office may be obtained from the American Baptist Home Mission Societies, Valley Forge, Pennsylvania.

Bibliography

The following list of books and pamphlets constitute only a small number of those available from these two Conventions, but they will give an idea of the types of publications prepared, and may be obtained from the respective Convention offices.

SOUTHERN BAPTIST CONVENTION

- "The Baptist March in History," Robert A. Baker
- "The Baptist Faith and Message"
- "Building for Church Music"
- "Building for Church Recreation"
- "Fundamentals for a Church Building Program"
- "A Suggested Guide for Planning and Survey Committees"
- "A Suggested Guide for the Church Building Committee"
- "Planning Better Church Buildings," William A. Harrell

AMERICAN BAPTIST CONVENTION

- "Faith and Fellowship of American Baptists," Ralph M. Johnson and R. Dean Goodwin
- "When You Build Your Church," Dr. John R. Scotford
- "Building and Equipping for Christian Education," Rev. C. Harry Atkinson
- "Building for Worship"
- "Recreation and the Church"
- "Church Extension Handbook." A handbook containing materials of help in guiding churches in the steps in establishing a new church.

Negro Conventions

Two of the larger Negro conventions are National Baptist Convention of America, 523 Second Avenue North, Nashville, Tennessee; and the National Baptist Convention, USA, 833 Marcy Avenue, Brooklyn 16, New York. Data for this article were not secured from these conventions; their names and addresses are included here for convenience of possible reference.

Postlude

It is re-emphasized that the foregoing outline relates to only two of the major Baptist Conventions. While it probably fairly represents the general make-up of the faith as a whole, the many differences make it essential that architects working for the first time with a given Baptist group be aware of the flexibility of decisions which are possible and of the changes which are in the process of development within the entire church movement. ◀



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

The Examination Committee

by **Fred L. Markham, FAIA**

The author, a former president of NCARB, is a member of the National Architectural Accrediting Board and Chairman of NCARB's Committee on Examinations. He has practiced architecture in Provo, Utah, since 1930

► The report of the Commission to Survey Education and Registration published as the "Architect at Mid-Century" in 1954, contained eight specific recommendations directed to the National Council of Architectural Registration Boards. The key recommendation No R-35 recommended "that the AIA, in cooperation with NCARB, undertake, with the assistance of expert and experienced testing agencies, a thorough investigation of current methods used in registration examinations in order to determine their validity and reliability in establishing competence to practice architecture, and to ascertain whether and what improvements should be introduced into the examining process to secure more trustworthy results." The other recommendations detailed specific steps to effect the general purposes outlined in R-35.

The Examination Committee of the NCARB, charged with the responsibility of implementing these recommendations, has been active since 1954. During this period, the committee has made certain assumptions and accepted some

generalizations. The statements of a few of these should preface an interim report of its work.

After review of possible alternatives, a study of the provisions of state laws and an appraisal of the general public acceptance of current registration procedures, the committee has accepted the examination as the most reliable means of evaluating competence currently available. As a result of this acceptance, it has expended its full effort in a study of the improvement of the examining process.

The states generally place the licensing responsibility solely in the hands of the licensing board. This, in its strictest interpretation, has been read to mean that the licensing board membership must write the examination. Even in the most liberal interpretation, the licensing board must establish the content of the examination. That the actual composition of the examination be by the individual board members, is of less importance than that the content of the examination be established in terms of actual professional practice. A frequent criticism of past state examinations is that many questions are academic in character and content, and would be more appropriate in a college examination. A professional examination, to evaluate competence, should not be the same as the final examination offered at the completion of a collegiate course of study. It demands a character of its own and should be so written as to investigate the analytical faculties and judgement developed through facing practical situations in professional

office operation. It should be highly improbable that a student who has passed the final examinations in an accredited school of architecture with an "A" grade, may be able, without the architect-in-training experience, to successfully pass a professional architectural examination.

This difference in character and approach should apply to history and theory of architecture, architectural design, mechanical equipment, structural design and site planning as well as professional administration. Such an examination can best be prepared by those individuals who are enmeshed in the problems of day-to-day professional responsibility. It is true, however, that many such individuals do not have the background or ability to successfully interpret their experience in terms of meaningful questions. To assist in establishing a satisfactory form, members



Biddulph Studios

The author,
Fred L. Markham, FAIA

of architectural faculties can be very helpful, or, if means are available, testing agencies may supply excellent assistance.

The over-all content of the examination is of vital importance. The NCARB, through its Syllabus, has recorded its cumulative judgment of this content. The only other comparable source is a composite of the curricula of the schools of architecture of the nation. Differences are frequently found among the curricula and, between these and the NCARB Syllabus. For example, Acoustics as a separate course of study is missing from many curricula. Again, the NCARB Syllabus provides an examination division for Professional Administration, a subject covered by short courses in most schools but omitted entirely in some.

An authoritative professional statement defining the content of the profession of architecture, prepared under AIA auspices and comparable in detail to the NCARB Syllabus and the collegiate curricula, could have a profound influence in correlating the content of the architectural curriculum with the registration examination. Such a statement, in broad terms, was reported by the Committee on the Future of the Profession, chaired by James M. Hunter two years ago. The sweeping scope of that committee's report could

be further particularized to the benefit of the profession.

The Examination Committee found it advisable at an early date to further detail the statements of examination division content given in the NCARB Syllabus. Up to the present time, such particularization has been completed and is available for Professional Administration, Building Equipment, and the oral examinations. These have served well in examination preparation.

The Committee at various times has been requested to give consideration to the divided examination. This is usually interpreted as meaning that certain divisions of the examination are to be given immediately following graduation, and the balance following the architect-in-training period. The reason most frequently advanced in support of this procedure is that the candidate, fresh from school, has the most favorable opportunity to pass the examination at this time. This is entirely true if the examination is conceived solely in terms of the candidate's academic training.

There is in this suggestion, however, the implication that in certain specific areas of professional training (those divisions for which examination is offered immediately following graduation) no further growth or enrichment is to be expected during the architect-in-training period. May it not also be inferred that since improvement in these areas is not to be anticipated in three years of office experience, that the possibility of their being a part of professional architectural practice is negligible?

Does it not then follow that these areas of training are assumed to be in the category of the general studies rather than those of a firmly professional character? As the Committee has reviewed the Syllabus from time to time, it has been unwilling to denote any one division as professionally unnecessary. It is committed to a single examination, covering all divisions of the Syllabus, given at the conclusion of the architect-in-training period. The single examination fulfills a requirement considered as basic; that competence must be established at one time, and this date should mark the beginning of the candidate's professional activity.

Those techniques and that body of knowledge which are accepted as characteristic of the profession of architecture cannot be eliminated or diminished in value in the period of instruction, of office training, nor in the examination. On the other hand, if such material is necessary to professional practice, then the individual should be able to pass a properly prepared examination on it at any time in his professional career. ◀

(Continued Next Month)

Let's Look at Ourselves



►What would you say is the AIA's position in today's society—liberal, conservative or reactionary? Why raise the question? No one expects the answer to be "reactionary." Nevertheless a little prodding into this question may be useful in view of our 1962 "push for progress."

First, let's consider the *importance* of our position. The nearly-15,000 members of the AIA (comprising a very high percentage of the practitioners) make design decisions which shape the face of America. Their decisions, affecting billions of dollars worth of construction, are of utmost importance to the building industry. Their attitudes toward urban design, and urban affairs in general, will affect the complicated private enterprise-government efforts required to solve the problems of urban environment. And each AIA member, in his community, is not just another voter, but a force for orderly, beautiful growth.

We conclude that it *does* matter whether the AIA is basically progressive and liberal or defensive and conservative. It matters to your Executive Director, who often interprets your position to other segments of the building industry or to the government. Let's examine several aspects of the profession's general posture.

Design: Here is where the architect automatically considers himself progressive. The controversy over traditional vs contemporary design is over. The natural exercise of our talents for creative imagination has established in the mind of the public an image of a progressive and unconservative profession. But this is a complex business-art. Are we *consistently* progressive?

Business: Here we are more conservative. Our dedication to professional ethics may have contributed to a somewhat hide-bound attitude toward the performance of the business of architecture. Any complacency in this matter has been jarred by the threat of the package dealer. We are talking about new times—new kinds of clients—a new economic environment. We propose to meet this challenge with expanded services and revisions in the Standards of

Professional Practice which will permit us to compete professionally and ethically. This action itself represents a change in thinking which is progressive. The final expression of this view will be revisions of the Standards eventually adopted as ethical criteria for modern practice.

Government: Generally speaking, architects are likely to be conservative in political matters. Here in Washington the AIA usually has been aligned with conservative elements of the building industry which stand pat for private enterprise and oppose government expansion. In 1961, however, we supported the role of government in the solution of housing and urban problems, began to see reaction in the position of others. Our position is independent but not to the left of other progressive segments of the industry.

AIA Management: The final expression of our position is through our national programs and the expenditure of national AIA income. The 1962 Supplementary Dues are allocated for new progressive programs because the membership wants to buy services to improve its competence and competitive position.

The AIA represents the aggregate viewpoint of 15,000 members which is expressed by chapter officers locally and nationally, by national committeemen, and by Directors and Officers who set policy. The leaders of the Institute (generally men in their fifties) are exhibiting a progressive approach more representative of the younger generation than the old.

Finally, major policies are debated on the convention floor where delegates may express extreme or moderate viewpoints. The voice of leadership, so ably expressed by President Philip Will, Jr, is clearly progressive and liberal. He constantly challenges us to equip ourselves to meet the problems of total human environment—a challenge to increase our competence. He sees no virtue in a status quo.

The net result is a consensus favoring a vigorous program of action which may profoundly change architectural practice and education, for the over-all benefit of the profession. W.H.S.

Library Notes

Houses

Last month this page listed books in the library on special types of housing as apartments, hotels, etc. This month it seems appropriate to devote it to houses. This list does not include books which are primarily historical in nature, but rather is devoted to the general illustrative books on houses published in the last decade or so. All are available on the Library Loan Service to corporate members of the Institute.

ALSWANG, BETTY AND A. HIKEN

The personal house; homes of artists and writers, New York, Whitney, 1961. 80p.

82 distinctive houses from *Architectural Record*. New York, Dodge, 1952. 437p.

The second treasury of contemporary houses. New York, Dodge, 1959. 216p.

ARCHITECTURAL RECORD

A treasury of contemporary houses. New York, Dodge, 1954. 215p.

CALLENDER, JOHN H.

Before you buy a house. New York, Crown, 1953. 160p.

CHEARNER, NORMAN

Fabricating houses from component parts; how to build a house for \$6000. New York, Reinhold, 1957. 208p.

CREIGHTON, THOMAS H. & K. M. FORD

Contemporary houses evaluated by their owners. New York, Reinhold, 1961. 224p.

CREIGHTON, THOMAS H.

Homes, selected by the editors of *Progressive Architecture*. New York, Reinhold, 1947. 190p.

FORD, KATHERINE M. & T. H. CREIGHTON

The American house today; 85 notable examples. New York, Reinhold, 1951. 239p.

Designs for living; 175 examples of quality home interiors. New York, Reinhold, 1955. 215p.

Quality budget houses; a treasury of 100 architect-designed

houses from \$5,000 to \$20,000. New York, Reinhold, 1954. 224p.

GAGE, EARLE W.

Outdoor living rooms. Chicago, Popular Mechanics Press, 1958. 159p.

GRAF, JEAN & D. GRAF

Practical houses for contemporary living. New York, Dodge, 1953. 174p.

HOUSE BEAUTIFUL

The *House Beautiful* treasury of contemporary American homes by J. Barry. New York, Hawthorn, 1958. 142p.

INDIANAPOLIS HOME SHOW, INC.

Fifty house designs selected from the Indianapolis Home Show Architectural Competition. 1952-57, 59-61. Indianapolis, 1952-1961.

JONES, ARCHIE Q. & F. E. EMMONS

Builders' homes for better living. New York, Reinhold, 1957. 220p.

KELLY, BURNHAM & OTHERS

Design and the production of houses. New York, McGraw-Hill, 1959. 401p.

KENNEDY, ROBERT W.

The house and the art of its design. New York, Reinhold, 1953. 550p.

KIRKPATRICK, WALDO A.

The house of your dreams: how to plan and get it. New York, McGraw-Hill, 1958. 198p.

KOCH, CARL & A. LEWIS

At home with tomorrow. New York, Rinehart, 1958. 208p.

LIVINGSTONE, JEFFREY

Build your own summer camp or cabin. New York, McGraw-Hill, 1955. 152p.

MCCALL'S MAGAZINE

McCall's book of modern houses, by M. D. Gillies. New York, Simon and Schuster, 1951. 191p.

MOCK, ELIZABETH B.

If you want to build a house. New York, Museum of Modern Art, 1946. 96p.

NELSON, GEORGE & H. WRIGHT

Tomorrow's house, how to plan your postwar home now. New York, Simon and Schuster, 1945. 214p.

NEUTRA, RICHARD J.

Mystery and realities of the site. Scarsdale, N.Y., Morgan & Morgan, 1951. 64p.

PIDGEON, MONICA & T. CROSBY

An anthology of houses. London, Batsford, 1960. 174p.

PRATT INSTITUTE, BROOKLYN SCHOOL OF ARCHITECTURE

An investigation of the small house. Brooklyn, 1957.

ROGERS, TYLER S.

Plan your house to suit yourself. 2d ed. New York, Scribner, 1950. 313p.

SIMON, MARON J.

Your solar house; a book of practical homes for all parts of the country. New York, Simon & Schuster, 1947. 125p.

SLEEPER, CATHERINE & H. R. SLEEPER

The house for you to build, buy or rent. New York, Wiley, 1948. 313p.

SUNSET

Cabins and vacation houses, Menlo Park, Calif., Lane, 1960. 128p.

New homes for western living, Menlo Park, Calif., Lane, 1956. 94p.

Sunset ideas for cabins and beach houses. Menlo Park, Calif., Lane, 1952. 112p.

Sunset ideas for hillside homes. Menlo Park, Calif., Lane, 1953. 64p.

Western ranch houses by Cliff May. Menlo Park, Calif., Lane, 1958. 176p.

TOWNSEND, GILBERT & OTHERS

How to plan a house. 3d ed. Chicago, American Technical Society, 1958. 591p.

WILLS, ROYAL B.

Houses for good living. New York, Architectural Book Publ. Co., 1946. 112p.

Living on the level; one-story houses. Boston, Houghton Mifflin, 1955. 120p.

Planning your home wisely! New York, Watts, 1946. 95p.

WRIGHT, FRANK LLOYD

The natural house. New York, Horizon, 1954. 223p. G.E.P.

Book Reviews

The Future of Our Cities. Robert A. Futterman. New York, Doubleday, 1961. 360 pp, charts, diagrams, and maps. 6" x 8½". \$4.95

The Death and Life of Great American Cities. Jane Jacobs. New York, Random House, 1961. 458 pp. 6¾" x 9½". \$5.95.

Reviewed for the AIA Journal
by Robert C. Weinberg, AIA, AIP
New York City

A little knowledge is a dangerous thing. Here are two books written by tyros, authors who are new to, and generally unfamiliar with the architects' and planners' techniques for the rebuilding of our cities but who have rushed in with enthusiasm to point out what is wrong with the way the job is being done. I have put them together in one review because both are important, each in its individual way, coming from sharply contrasting backgrounds and because each author, subjectively motivated, approaches the subject from a new and fresh point of view. In a sense, both books are welcome additions to the literature of urbanism provided they are not used (by people who oppose all forms of deliberate, thoughtful, design and rebuilding of our cities) as a club with which to beat those of us—architects, planners and other specialists in urban renewal and related subjects—who have been trying for years to create a workable set of theories with which to attack the problem.

Mr Futterman, who died accidentally at thirty-three, shortly after the book appeared, was a talented young man who amassed an early fortune in the management and development of real estate throughout the United States. But his is a broader range of interests than is usually associated with this occupation. By writing this book, with the aid of an able associate named Harry Pollay, he says he hopes that it may contribute in some way to spreading his theory that "tempting as material success may be to one whose conviction is capitalism, I don't want to believe a capitalist society can long exist without a constant awareness that humanity stands uppermost." This pious and wholly unexceptionable

thought is then carried out by means of a clear and thorough going-over of a number of American cities, in which Mr Futterman presumably had some business connection, in respect to their *entire* economy: I stress the word *entire* because Mr Futterman's view is a bird's-eye-view. It is a comprehensive view, but it is rough and sketchy, as seen from miles above the earth.

Mrs Jacobs' book, on the other hand, is just the reverse. A journalist's job, it is written from the point of view of the homeowner, the housewife and the mother, living in the center of a large city, New York, in a community, Greenwich Village, one of whose neighborhoods, West Village, is the scene from which Mrs Jacobs surveys what is happening around her. She sees it, however, from a very limited viewpoint; one might almost call it a mole's-eye-view. Her book is likely to have the larger readership of the two, since it has been so extensively reviewed in every sort of medium from the daily press to the monthly professional magazines. It amounts to a general attack on many of the practices that have, in her opinion, led to a failure in relating current urban renewal procedures to actual human needs. Her proposals, in spite of considerable overstatement and frequent errors of fact, are all well-intentioned, and reveal an unusual insight into certain aspects of urban living that have been overlooked by architects and planners alike.

But while the table of contents of her long book might lead one to suppose that she has covered the whole question of whether to rebuild our cities and, if so, how, a careful reading will reveal that her scope of interest and observation seldom extends beyond her own doorstep and that many of her examples and propositions do not stand up when given a second look. And while Futterman, on the contrary, approaches the problem from a remarkably broad point of view, considering his background as an avowed champion of free enterprise in the exploitation of land, he reveals similar weaknesses that can be traced to drawing hasty

conclusions and to lack of professional training in any field remotely related to planning.

Mr Futterman's thesis, which is a good one, is that the prospective builder, investor in real estate or urban renewal sponsor should look at the city as a whole: the relation of its inner core to its complete urban region as well as the single site and its immediate surroundings; its past history and development and its long-range social and economic prospects as well as the outlook for short-range profits. This is a healthy and laudable way for the enlightened realtor to analyze any community in which he considers sinking time as well as money.

So far as it goes, Futterman's attitude is to be praised in respect to his stand on such basic things as the importance of getting away from arbitrary municipal lines and setting up metropolitan or regional organs of government whose boundaries have some relationship to natural market areas as well as to living and working locations connected with a given urban nucleus, but overriding the legal limits of city, county or even state. Mr Futterman recognizes the vital importance of solving the problem of the Negro and other minority groups in terms of housing if the community is to survive as a balanced organism. He is keenly aware of the complete insolubility of traffic congestion in terms of the present theory of increasing streets and parking space or in terms of the present system of selling, distributing and, most importantly, of *using* private cars. Victor Gruen, who writes an introduction to Futterman's book, also praises this attitude and, even though he does not agree with Futterman's proposed solutions, he salutes the spirit of the book, as do I.

This does not mean that architects and planners should take it as a guide for their own work, or even for quoting without questioning, for it is full of careless errors which, as a New Yorker, I can catch in the New York chapters even though I am unable to check up where Futterman speaks of other cities. For example, he says that "Robert Moses built the great highways along both river fronts and out of the city in three directions" when the fact is that the Great Coördinator built only one of the riverfront highways (and only part of that one) and had

nothing whatever to do with the roads leading out of the city in any direction except that out to Long Island. Elsewhere he refers to the newest buildings along Sixth Avenue, in the lower Fifties, as "integrated extensions of Rockefeller Center," which, alas, is exactly what they are not. Whereas errors like the first one may be put down to the extreme youth of the writer, errors in the second category show his lack of understanding of urban design principles. And while the book is enlivened by cleverly conceived and well-printed diagrammatic sketches of each city he discusses, as well as of a theoretically "healthy American city," one must not take these too seriously. Too much is left out to serve as a practical guide to a planner: The sketch of Futterstock's "ideal" city, for example, does not even include any indication as to where low rent housing for the average-wage-earner is to be located.

Mrs Jacobs' book can be a rather dangerous thing to put into the hands of the less well-informed. This does not detract from its importance to those of us who are intimately concerned with the professional aspects of urban renewal. It deserves careful, detailed study but with close attention to distinguishing the frequent exaggerations and errors of fact from the many interesting suggestions Mrs Jacobs has to offer. Quite a number of her observations and her criticisms of current, routine urban renewal efforts are arresting and have already given planners and architects reason to reappraise their standards. The danger in her book lies in the fact that, in the hands of the sort of layman who is always ready to discredit "expertise," and especially of the reactionaries in Congress and elsewhere, some of her exaggerations and undocumented assertions may be quoted out of context and used to tear down and destroy whatever progress has already been made towards the goal of a better environment which Mrs Jacobs, at heart, shares with the very planners and architects against whose practices she takes such wild swipes.

Hers is an excellent analysis of the basic purpose of neighborhood planning as it should be practiced, but isn't, by the purveyors of large-scale urban renewal operations. There is no question but that her personal involvement in the fight to prevent such an operation in

her own small neighborhood, West Village, lying within one of New York's inner core communities, Greenwich Village, has affected what she has to say in a book which was written while this fight was brewing. She makes her strongest points in recognizing the importance of liveliness of street activity, intimacy of neighborhood contacts and continuity of individual participation at the local level that practising architects and planners have striven in vain to provide the framework for in designs that fail to pass the gauntlet of administrators, political as well as financial, who make the final decisions. It seems a shame, therefore, that she should undermine the work of many of her own friends who share her objectives by throwing them into the same category as the bureaucrats and compromisers who have rejected, misinterpreted or misunderstood their objectives—if they are even aware of them.

Fewer Highways, More Parks

No one will quarrel with her urging more sidewalk and less vehicular roadway in neighborhood streets as opposed to the recent widening of 453 roadbeds in Manhattan at the pedestrians' expense. There can be no disagreement with her oft-repeated argument that the city needs more small parks, well located and related to neighborhoods, rather than large parks difficult to reach, difficult to maintain and police, and far from where people live and work. All of her discussion of the relation of vehicular traffic to pedestrian traffic is good, if at times somewhat poorly defined as to terms and fuzzy as to thinking. Her ideas on old buildings being as important in the cityscape as new ones, is good up to a point, as are also her comments on the scaling of the size of buildings and stores to the human users of these facilities. Her suggestions for combining all types of uses, including particularly those providing small-scale shopping and entertainment facilities in residential neighborhoods and housing projects is, of course, being increasingly recognized by architects and planners, not only in this country but abroad as well. So is her theory of making use of city areas at all times of the day and of the week rather than having dead periods when danger follows emptiness. But it must be remembered that she is no pioneer along these paths

of thought. They have been given increasing attention by architects and planners in the post-war decades; and many student projects that are deliberately freed of "practical" limitations (Mrs Jacobs scoffs at student projects) use these theories as assumptions.

When Mrs Jacobs comes up out of her mole's burrow for air and looks beyond the grass roots and the weeds to state a general principle, one must admire its conviction and force. One can agree without exception with her theory of city vitality summed up in her twenty-first chapter. Planning for this goal, she says, must stimulate diversity; must promote continuous local neighborhoods yet help people's identification with an area large enough to deal with the problems of the big city; must aim at "unslumming" the slums by voluntary effort of their inhabitants; and must result in clarifying the visual order of cities.

Her theory of discouraging unnecessary vehicular traffic by a process of *attrition* is an intriguing one. Perhaps to make things deliberately difficult for automobile traffic is a better way to dispose of it than by outright banishment or channeling it into more and costlier superhighways.

Her chapter on the need for a better organized local government, closer to the citizen, and coterminously operating within well-defined districts in our large cities is the most logical of all her arguments. This is more of a political than an urbanistic subject. But her thinking here is sound, and it is valuable to have the subject in a book to be read by planners and architects. Local district planning, as a part of local district government, is most needed in very large cities, like New York, (or Tokyo, I believe,) which might profit by the example of Paris and London and, to some extent, Berlin.

These and other specifically *urban* problems, centered on neighborhoods of *attached* houses, as Mrs Jacobs discusses them, apply more to New York than to the typical "great American city" as the title of her book would imply, for the other cities are, to a varying degree, more generally *sub-urban* in physical character, i.e., *detached* and spread out. Actually, while Mrs Jacobs is a Pennsylvanian by birth and upbringing, she writes as a New Yorker, and nine-tenths of her observations have lit-

the application outside of New York and the small, old, inner cores of one or two other cities. In fact, many New Yorkers, of whom only one percent live in Greenwich Village, would have difficulty in recognizing her descriptions of the sort of neighborhood she champions.

For the average reader living elsewhere than in New York and a few other large Eastern cities, Mrs Jacobs' general attitude toward the neighborhood will seem strange indeed. For the sort of tight, dense urban living we New Yorkers, especially her fellow Villagers, like this reviewer, are accustomed to, is something which is practically unknown in most of the "great" cities of America, in Canada no less than in the United States. Many of her arguments, therefore, even where relevant to, and convincing for, New York and a few other places, fall flat when applied to the semi-suburban, widely-spaced type of neighborhood that is much more common in the average American city. For readers in these other places, then, Mrs Jacobs' book may be confusing and disturbing and will probably be used much more as an argument against all public housing and large-scale urban renewal than it will be, as she intended it, as a guide and corrective for those who are practicing these activities in our large cities and who are not doing it in the way she thinks it should be done.

What's a Street?

So, too, her failure to define the simple word "street" is a weakness in many of her chapters where it is never clear as to what is meant: a way for pedestrians? a way for vehicles? a way for busses or trucks? space that can be used for *anything that moves*, without controls? Unless she has some sort of controlled or limited movement in mind, she is preaching a return to complete *laissez-faire* in the development of a city's layout, the very process which generations of city planning effort have sought to counteract. Lack of clarity on points like these mars otherwise good sections of chapters 9, 10, and 11. And, in chapter 22, the concept of "organized complexity" sounds fascinating on first reading but evades comprehension on closer study.

A very interesting proposal made by Mrs Jacobs relates to zoning,

and here she may have something, although I, for one, am uncertain of how it can be worked out. We are all familiar with two basic types of zoning restrictions—use and bulk. She would add a third, that of limiting the amount of contiguous floor space of any particular type of store or shop, in a neighborhood retail area, in order to eliminate the establishment, in such locations, of *big* commercial enterprises, of no matter what type of use or size of actual building. Even if this sounds naïve to the practicing zoner who has to contend with public officials, boards and courts, it is certainly worth looking into. In making her argument, however, Mrs Jacobs overlooks the fact that much of what she would achieve through this new type of zoning, actually does result automatically from the continuance of *non-conforming* uses in an area that has been zoned for a more restrictive use than the one previously in effect. But if there can be devised such a new concept of zoning, deliberately intended to promote small-scale diversity of uses and which would be reinforced by the application of Arthur Holden's well-known theory of tax adjustment with relation to building restrictions, we may be making a useful step forward.

What is most disappointing to architects, in Mrs Jacobs' book, is her total lack of concern for design as we understand it. Any book that aims to arouse controversy in the field of urban design should not be so unobservant of what constitutes that greatest of all contributions to the good urban life, namely beauty. Even if Mrs Jacobs were to have thoroughly documented and convincingly expressed the many important arguments that make up the twenty-two chapters of a long book, we would still be missing something if the book is to be regarded as a contribution to the understanding of urbanism. Chapter 19, which ostensibly deals with "visual order," reflects the author's lack of training and background in architecture and the architect's approach to planning. I am not blaming her for this since her occupation is primarily that of journalist and housewife; but she has, after all, spent a number of years as associate editor of the *Architectural Forum* and has written some excellent pieces on planning that do take into account questions of design—notably her

reactions, some time ago, to what has been happening in Washington, and, more recently, her piece on banks. Somehow, in her book, she seems to fail to make a connection between the substance and the form of a city.

For one thing, she does not realize that it is the undesigned character, including the gridiron pattern, of many of our cities which are the very cause of the lack of diversity which she deplors. The accidental vista, the picturesque view which is characteristic not only of medieval cities of Europe but also of such remnants of eighteenth century, casual, non-planning as survive in New York's Greenwich Village or Boston's Beacon Hill, as well as a few other places praised by Mrs Jacobs, cannot just "happen" now, or in the future, unless there is conscious creation of a special *design pattern*, directed towards particular ends such as "landmarks," short blocks, irregular street lines, asymmetrical vistas, diversity of shapes and colors, as *controlled factors*. These are questions of form and design. Along with conscious design of the street pattern goes the expression of selective size, type and position of buildings—which implies *deliberate* diversity, as Mrs Jacobs may be surprised to learn. It is this very conscious planning for visual effects of buildings in groups that creates the attractiveness of a Louisburg Square, Boston, or a Mt Vernon Place, Baltimore, or even of what New York's Washington Square or Washington's Georgetown and other eighteenth and early nineteenth century, designed groupings had originally been. We can create something of this sort in a modern idiom, in the future, only through conscious and deliberate designing for urban beauty. West Village and "North of Beacon Hill" are attractive antiques to be sure; but we need new furniture as well as re-upholstered old stuff: and I doubt if everybody wants to live in refurbished antiques even if there were enough of them to go around, which, of course, there are not.

Perhaps what Mrs Jacobs is unconsciously trying to say is that because so much of the new planning is what the responsible furniture designer calls "borax," or tawdry second-rate "kitsch," clumsily imitating contemporary forms as well as the styles of past ages, we must not, therefore, try to

design any good new furniture; but must content ourselves with renovating antiques. Perhaps she simply has not seen, or visualized, enough of the good type of modern neighborhood planning that the very designers she disparages are creating. One cannot accept her dictum that "a city cannot be a work of art," when, in fact, what little system of order a city can have and does have results from the conscious efforts on the part of the active designers to give esthetic as well as social meaning to its various parts, as these are renewed, or to the whole city, where it is built from scratch. A continuation of the *laissez-faire* process of the past will never achieve order or beauty in today's complexity of urban functions, for it is this *laissez-faire* process, when joined with or imposed upon the gridiron pattern of most of our cities and foolishly repeated in most large-scale housing projects, that continues to account for the lack of diversity and the monotony which Mrs Jacobs merely complains about but which all of us as architects and as civic designers are trying to overcome through the application of esthetic principles.

In this connection, my criticism of Mrs Jacobs' book is made in sadness because I do believe that we have the same common objectives at heart. How much better her argument would have been if, to the pleasures of diversity and lively street activity, she had added the pleasures of color and form. The very need that she recognizes for having separate community districts, with boundaries that have observable characteristics, requires a certain visual awareness of the differences in architectural style, the shape and size of buildings, their spacing, the sort of streets one has, how they are paved, what trees they have or have not, what are the size and character of the houses, what sort of entrances they have, what materials they are made of. Surfaces, textures, light and shade—these are among the things that the traveller with a practised eye notices in the cities he visits; and these are the things that the architect transmutes into new visions when he designs for the future. Using them, there results the creation of a neighborhood that has form, character, distinction *as a whole*, not merely the casual sprinkling on of many small amenities which are mere footnotes, so

to speak, of the whole composition.

And this leads me to the most serious question posed by the publication, in its present form, of "The Death and Life of Great American Cities." The architect-designers, who have given us exemplary semi-suburban enclaves such as Sunnyside, Chatham Village, Baldwin Hills Village, and other places which Mrs Jacobs disparages, have tried to create something new. Using techniques available in the nineteen-twenties and -thirties they responded to the demands in that period from the type of families for whom they created a better, healthier and more beautiful environment than was being given them by the average builder. Most of us believe they succeeded very well, even though they stand alone and most of their imitators have gone from bad to worse. It is unfortunate that those designers—and I single out Clarence Stein, whom the Institute has so rightly honored, as the prime example of Mrs Jacobs' misdirected criticism—should be so misunderstood, if not deliberately discredited, by someone who is basically concerned with the same objectives. Stein worked in a very different medium from the urban renewal projectors of today. He was addressing himself to a situation quite apart from that of rebuilding central areas. Between the first and second World Wars, the problem was to create new types of suburbs, satellite towns and other groupings outside of the central core of the city, that would be attractive as well as economic for those who were driven away from the overpopulated downtown slums for which at that time no saving formula like Title I had been invented. Stein and his colleagues showed the way to doing this effectively, with great art and, above all, conservation of open space and consideration of topography.

Unslumming

Now that the central core has become largely empty due to economic improvement in the lot of many of those who had lived there, as well as for other reasons of which the greater use of the private car is only one, these former slums are now ready for "unslumming" and available for the sort of living that Mrs Jacobs herself enjoys in her West Village neighborhood. A new set of circumstances confront us today. Actually, it is not entirely

new, for the renovation of *urban* residential areas has gone on for years—from Telegraph Hill in San Francisco to Turtle Bay Gardens in Manhattan; but the number of such areas is limited, their dwellings are priced for the fortunate few and the work of the urban renewal people is made more difficult by the ever-dwindling number of remaining neighborhoods that do retain sufficient vitality to be restored and revived even by the most delicate and sensitive treatment that we all know should be given. By all means, let us save what we can, let live where we can let live and make the most of what good old stuff is still available in the heart of our great cities. But at best, this will account for but a small fraction of the total area that has to be either built anew or entirely rebuilt. This is a simple statistical fact that Mrs Jacobs will, I am sure, recognize, and our best thinkers, designers and builders, taking their cue from the very writers and innovators, from Lewis Mumford down, whom Mrs Jacobs so vociferously denigrates, have striven long and hard and continue to strive to discover, establish and execute the *new* neighborhood patterns that current conditions require. It is doing a great disservice to these leaders whom we have learned to respect when one condemns them for not being what they never tried to be.

The result of this type of argument can only lead to the weakening of the prestige of the professional planner and his architectural colleagues, and I am sure that this is not what Mrs Jacobs intends. She wants us, as planners and architects, to do better than we have done and to recognize certain aspects of city life which we perhaps have failed to notice. We thank her for her valued reminder of our shortcomings, but we sincerely hope that her crying of them from the house-tops will not give too much comfort to those who would block and hinder the human ends towards which Mrs Jacobs has actually convinced us we are working in unison.

And so to sum up. We have here two very remarkable books about urbanism, each useful in a way, each with its limitations, but the second potentially the more dangerous if for no other reason than that it is the more iconoclastic, the more stimulating, the more original. In brief notices commenting

on both books, a recent *New York Times* book review said in reference to Futterman's book: "A real estate investor analyses seventeen American cities and presents some rules of thumb for understanding urban needs." Perhaps these "rules of thumb" will be useful to other real estate investors who have hitherto proceeded without any rules whatever. Let them by all means read "The Future of Our Cities," but warn them that after they have read it they must go deeper and find out more than this very superficial, if generally well-directed, bird's-eye survey provides.

Of "The Death and Life of Great American Cities" the same *Times* page says: "a witty, optimistic argument for less systematized planning, and a more organic mixing of the modern city's population." This says too little about the book described. For if Mrs Jacobs' argument was for more "organic mixing" only, the book could be read simply as a contribution to a more rational urban sociology. It is just because it is also an argument against systematic planning, against order, against form, against everything except continuing *laissez-faire* methods of city growth that Mrs Jacobs' book becomes potentially a dangerous document. If it is allowed to be quoted from by those who (for quite discreditable motives) wish to stop all orderly urban renewal in this country, the very architects and planners who would want to put her ideas into effect will have that much tougher sledding ahead.

A distinguished public servant, who has long fought for better housing and saner planning, summed up Mrs Jacobs' approach as that of the able journalist who has little knowledge of the subject she writes about, but can present it entertainingly, if not sensationally, for the reader of the weekly or monthly periodical. Analyzing her arguments point by point, this official explained to a thoughtful audience of civic leaders how many of Mrs Jacobs' assertions were undocumented, and if accepted at face value would mislead the uninformed; how her ideas on diversity, if taken literally, would negate any true progress in zoning; how her theories of density could be quoted to the detriment of efforts to achieve more light and air in our over-built cities; and how, worst of all, her general tone and attitude would increase the popular prej-

udice being fomented by political reactionaries against all urban renewal, all urban design, all public housing no matter how good, and especially against the specific, desirable ends she seeks. The intelligent approach to the overwhelming problems of population, traffic and land use in which all serious-minded planners are constantly engaged is not helped by the sort of lambasting that sees nothing but its shortcomings.

By all means read Mrs Jacobs' book, study it carefully and discuss it; but keep it within the family, so to speak, or, if it must be quoted outside, be sure and point out how dangerous it is to allow a little knowledge to be handed over to those who would defeat all progress. The "know-nothings" will seize this opportunity to attack with unrestrained vigor the efforts of a whole generation of architects and planners who have begun to point the way toward building better and more beautiful cities.

Books Received

The books listed below have been received in the office of the *Journal*. Their listing in this column does not preclude review at a later date.

Elementary Engineering Mechanics.

Eugene George Key, New York, John Wiley & Sons, Inc, 1960. 444 pp illus. 6" x 9 1/4". \$5.50

Design of Steel Structures.

Boris Bresler and T. Y. Lin. New York, John Wiley & Sons, Inc, 1960. 710 pp. 6" x 9 1/4". \$9.75

Regions, Resources and Economic Growth.

Harvey S. Perloff, Edgar S. Dunn, Jr, Eric E. Lampard and Richard F. Muth. Baltimore, Johns Hopkins Press, 1960. 716 pp. 6 3/4" x 10". \$12.00

The Northern California Metropolis.

Karl H. Baruth. Palo Alto, The National Press, 1960. 24 pp. 10 3/4" x 13". \$8.00

Graphic Architectural Drafting.

Edgar Ray. Bloomington, McKnight & McKnight, 1960. 247 pp. 7 3/4" x 10 1/4".

An Encyclopedia of World Timbers.

F. H. Titmuss. New York, The Philosophical Library, Inc, 1959. 264 pp 6 1/2" x 10". \$15.00

Problems in Architectural Drawing.

J. A. Suominen. Miami, Veteran Plan Service, 1958. 105 pp illus. 8 1/2" x 11". \$6.00

Stories of Men and Machines. Ludvik Askenazy and others. Prague,

Technical University Library, 1958. 9" by 10 1/4" illus.

Buildings for Industry, An Architectural Record Book.

New York, F. W. Dodge Corp, 1957. 320 pp illus. 8 1/4" x 11 1/2". \$9.75

Ladengestaltung Shop Design.

Robert Gutmann and Alexander Koch. Stuttgart, Verlagsanstalt Alexander Koch GmbH, 1956. 200 pp illus. 8 1/4" by 12".

Theory of Beams, The Application of the Laplace Transformation Method to Engineering Problems.

T. Iwinski, translated by E. P. Bernat. London, Pergamon Press, Inc, 1958. 85 pp illus. 5 1/2" x 8 1/2". \$3.50

Analysis of Pipe Structures for Flexibility.

John Gascoyne. New York, John Wiley & Sons, Inc, 1959. 181 pp illus. 7 1/2" x 10". \$7.50

Advance Structural Analysis.

S. F. Borg and Joseph J. Gennaro. Canada, D. Van Nostrand Company, Inc, 1959. 368 pp illus. 6 1/4" x 9 1/4". \$7.50

Architecture and Architects of Rochester, N. Y.

Carl and Ann Schmidt. New York, Rochester Society of Architects, 1959. 188 pp illus. 5 1/2" x 8 1/2".

Concise Encyclopedia of Architecture.

Martin S. Briggs. New York, E. P. Dutton & Company, Inc, 1959. 372 pp illus. 5" x 7 3/4". \$5.00

Turkish Islamic Architecture.

Behcet Unsal. London, Transatlantic Arts, Inc, 1959. 130 pp illus. 6 3/4" x 7 1/2". \$7.75

Artists and People.

Yvonne Greer Thiel. New York, Philosophical Library, Inc, 1959. 327 pp. 5 1/2" x 8 1/2". \$6.00

Jews in Music.

Artur Hodle. New York, Philosophical Library, 1959. 364 pp. 5 1/2" x 8 1/2". \$5.00

Fabritecture.

Oscar A. Turner. New York, Pageant Press, Inc, 1959. 137 pp. 5" x 8 1/4". \$3.00

Decorating Begins With You.

Mary Jean Alexander. New York, Doubleday & Company, Inc, 1958. 165 pp illus. 5 1/2" x 8 1/2". \$4.50

Looking At Architecture In Canada.

Alan Gowans. Toronto, Oxford University Press, 1958. 232 pp illus. 8 1/4" by 8 3/4".

Industrial Building Details, 2d Ed.

Duane F. Roycraft. New York, F. W. Dodge Corp, 1959. 356 pp illus. 8 3/4" x 11". \$12.75

The Corrosion and Oxidation of Metals.

Ulick R. Evans. New York, St Martin's Press, Inc, 1960. 1,094 pp illus. 6" x 9 1/4". \$25.00

Editor's Page

The FDR Memorial

We hope the review of the Franklin Delano Roosevelt Memorial Competition in this issue of the *Journal* will prove of interest to our readers. It seemed to us that it was about time a second look was taken at it, after the first outbursts of gushing praise and scathing criticism last year. By sheer coincidence it turned out to be an appropriate time, for the winning design was formally presented to the FDR Memorial Commission last week, and formally accepted, with one dissenting vote. Day before yesterday it was presented to the Fine Arts Commission for approval. This Commission has no authority, yet wields considerable influence in the capital, and its approval is important to the progress of the project. Its decision has been deferred until another meeting next month. An imposing array of architects and other artists came from several cities to give their opinions to the Commission, and the Secretary of the Commission has promised to make the transcript of their remarks available to us as soon as it is transcribed. If they seem of sufficient interest, we shall publish some of them in the April issue of the *Journal*. Next, the design must be approved by the National Capital Planning Commission—and after that, by the Congress. Then the money must be raised. So you see what an array of hurdles architects Pedersen and Tilney and their associates have to take their project over before they can even get it to the working drawing stage.

We invited five men who should know what they are talking about to write briefly on the design, and we reprint one comment which has already had a fairly wide circulation. Judge Biddle sketches the progress of the competition and, naturally, praises the winning design. Ed Bacon, as Professional Advisor, was under no obligation to like or admire the chosen design, and, of course, had no voice in its selection. I think his appraisal is one of the most sensitive appreciations of it I have yet seen. Bill Pedersen naturally defends his design against its critics, and he does so in a poised and highly articulate manner. Katharine Kuh speaks for a large number of people who question the whole concept of monumental memorials—a question which Pedersen answered effectively. Tom Creighton talks a bit about the history of memorials and ends with some good words for this one—

although somewhat less laudatory than his comments last year. Paul Thiry unfortunately got a little off the beam. Not to question the validity of his argument, but it is not germane to the discussion. The Congress has already given the land to the FDR Memorial Commission, so discussion of choice of site is *hors de concours*.

Bill Pedersen tells me that in the discussions that have taken place with the two Commissions which have viewed the design, there has been a general agreement that the design will ultimately include a statue or a bas-relief of FDR. Certainly a statue in or near the group of steles would be an intrusion into the design, but a bas-relief could well be placed on the low central stele. This would also silence some of the design's critics.

It is unfortunate that the models had never been properly photographed, and the newspaper photographs that were published all over the country did the design a great disservice. Thousands of people made snap judgments against the design solely on the basis of what they saw in the papers. Actually, of course, no one should judge a building without having seen and experienced it, or in this case without having seen the model—which too few people did.

As to my own opinion of the winning design for the FDR Memorial, I have already stated it on this page in last July's *Journal*. I now wish to say that since I have recently seen the models again, and had plenty of time to think about it, I am inclined to be less critical than I was at first. I think this design *is* a "clear, strong statement," and I do not get from it a "sense of confusion, a lack of coherence." Its merits have grown on me. However, I still think it is sited wrong. Instead of facing the blank spaces of the Potomac River, it should face the Tidal Basin, the other memorials and the city. And it definitely will need landscaping within the group itself—which I have reason to believe will ultimately be included.

Phil Will was invited to appear before the Fine Arts Commission, but since the AIA Board of Directors is meeting here this week, he was unable to attend. However, he wrote a letter which was read to the Commission, and I'm sure he'll forgive me if I quote from it, for he made a very good point: "Thinking to deride it, some of its critics have compared it to Stonehenge. In so doing, I think they have paid it the highest praise, for I have visited Stonehenge, and walked in awe among those powerful monoliths. I have had few experiences more memorable."

Color Identification Based on Color Order

MUNSELL SYSTEM
OF COLOR NOTATION

by **Blanche R. Bellamy,**
Munsell Color Company

► The method of color notation presented in this paper is a basic part of a standard method of color identification proposed for consideration of the Building Research Institute. It is simple in concept. Accurate color designation for any surface-reflecting specimens may be determined through its use.

This method was developed at the turn of the century by Professor A. H. Munsell. It is known as the Munsell system of color notation.^{1,2} Two ideas are basic:

- a color notation should indicate color of an object as perceived by observer
- notation assigned to color of object should be based upon an accurately reproducible method of color measurement

How well Munsell succeeded is evidenced by the fact that his notation is used all over the world in the fields of science, art and industry.^{3,4} In fact, his concept has so intrigued color scientists that references to studies and applications of the notation would fill a sizable volume. In addition to numerous individual papers, two complete issues of the *Journal of the Optical Society of America* have been devoted to studies of the Munsell notation and repre-

sentative samples.^{15,16} Physical, psychophysical and psychological data resulting from these studies provide contemporary standards used for accurate reproduction of samples.

The American Society for Testing Materials (ASTM) and the Japanese Standards Association both have adopted this notation as a standard method for specifying colors. It is used by soil scientists, horticulturists, and geologists over the face of the earth for classifying colors of soils, plants and rocks. The British Standards Institution has used the notation for designating colors of buildings and decorative paints. The Porcelain Enamel Institute uses the notation for identifying enamels for architectural use, and so on.

Munsell Notation

The Munsell method of color notation is based on the concept that color may be analyzed and described in terms of three attributes—*hue*, *value* and *chroma*. These three attributes of color are arranged in orderly scales of equal visual steps, so that each attribute becomes a dimension or parameter combining to form a space representation of color (Fig 1). Under standard conditions of illuminating and viewing, these scales serve as an accurate instrument for color measurement of all surface-reflecting objects.

Chromatic colors in the Munsell system are divided into five principal classes. These are given hue names of red, yellow, green, blue and purple. A further division yields hue names yellow-red, green-yellow, blue-green, purple-blue and red-purple. Hence, the *hue notation* of all chromatic colors indicates the relation to the ten major hues or any of their subdivisions.

Capitalized initials "R" for red, "YR" for yellow-red, etc are used as symbols for hue names. When finer subdivisions are required, the ten major hues may be divided into ten steps each (1R to 10R,

1YR to 10YR, etc) thus increasing the hue notation to increments of one hundred—or more if decimals are used.¹⁷

The *value notation* indicates degree of lightness of a color in relation to a neutral gray scale. This scale extends from a theoretically pure black (at 0 light reflectance), symbolized as 0/, to a theoretically pure white (at 100% light reflectance), symbolized as 10/. Neutral and chromatic colors that appear

Technical

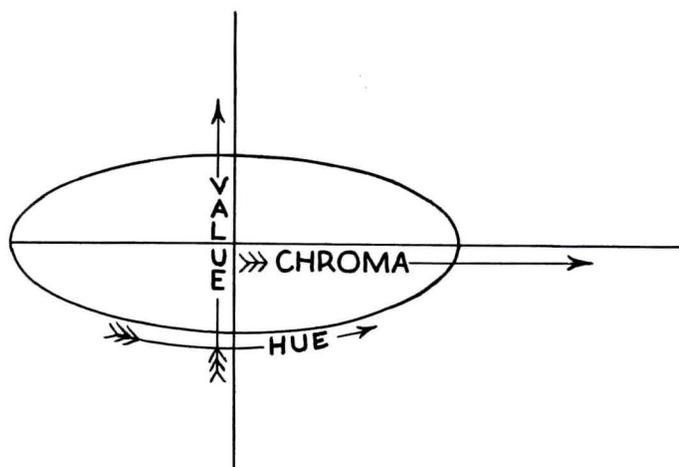


Figure 1 Color space diagram

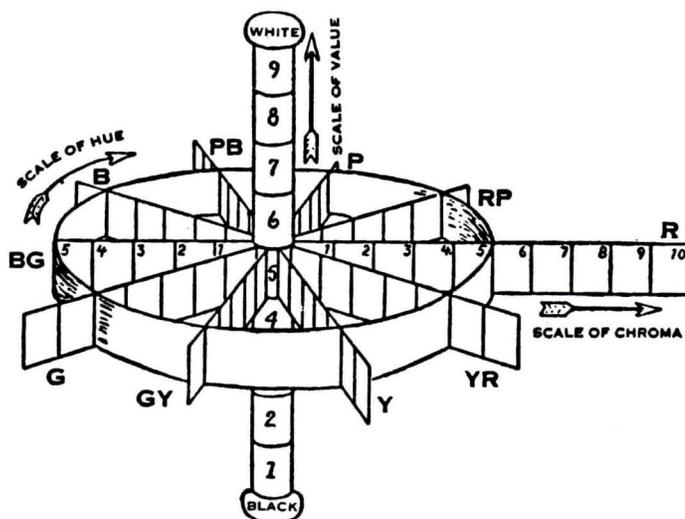


Figure 2 Scales of hue, value and chroma in relation to color space

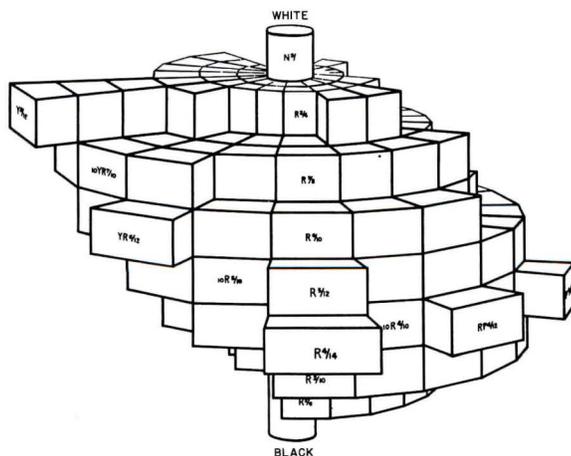


Figure 3 Munsell color solid

visually half-way between pure black and pure white have a value notation of 5/. Lighter colors are indicated by numbers ranging above 5/, while darker colors are indicated by numbers below 5/.

The *chroma notation* of a color indicates the strength (saturation) or degree of departure of a particular hue from a neutral of the same value. The scale of chroma extends from /0 for a neutral gray out to /10, /12, /14, or farther, depending upon the strength or saturation of the individual color. A color classified popularly as "Royal Blue" might have a chroma as strong as /10, while another color of the same hue and value, classified popularly as "Slate" might have a chroma as weak as /2.

The complete Munsell notation for chromatic colors is written H V/C (for example 5R 4/10) with a solidus separating the value and chroma numerals. For neutral colors the letter "N" replaces the hue symbol and the chroma numeral is "0" or it may be omitted, thus: N 4/0 or N 4/.

Color Solid and Its Charts

It will be apparent now how scales of hue, value and chroma (Fig 2) fit into the color space diagram shown in Figure 1. This space representation of color is frequently referred to as a *color solid* and it includes every color that the eye can distinguish (Fig 3). The solid is not symmetrical. It conforms to, or is limited by, chromas obtainable at each value level for each hue. The "key" or most-saturated colors for the various hues differ in chromatic strength. These key colors also vary in lightness for the different hues—they are located at different value levels, depending upon the particular hue.

Vertical, horizontal, or cylindrical slices through the color solid will reveal charts of constant hue, constant value and constant chroma respectively. Through use of this slicing technique, we will see how a color sample may be described in Munsell terms.

If we make a vertical slice through the color solid, we might pull out an array of colors in which the neutral value scale appears in a vertical column in the center, with value and chroma scales for the hues 5Y and 5PB arranged on the opposing sides of the scales. Samples on each side of the neutral scale are of *constant*

hue but they vary in value and chroma. The notation of the sample in question is by reference to this chart 5PB 5/6.

On the 5/ level of the 5PB chart there are other samples which might represent the color names of "Royal Blue" (at chroma /10) and "Slate" (at chroma /2) referred to earlier. However, many of the samples in the area surrounding 5PB 5/2 might be given the popular name "Slate" and many of the samples in the area surrounding 5PB 5/10 might be classified as "Royal Blue." The Munsell notation provides an accurate designation for a particular sample in a popular color name area.

A horizontal slice through the color solid will reveal samples all of the same lightness but varying in value and chroma. A slice at the 5/ value level shows the sample in question again to be 5PB 5/6.

A cylindrical slice through the solid will reveal samples all of the same chroma. A slice at chroma /6, again, indicates the color of the sample to be 5PB 5/6. If a cut in the solid, regardless of direction, passes through the sample in question we will come out with the same notation of the sample.

The eye can distinguish approximately 10,000,000 differences in color.¹⁸ Departures in any direction, no matter how small, from

samples displayed on charts representing the Munsell system constitute another position in the color solid and therefore a different Munsell notation. A collection of charts showing variations in value and chroma for at least forty hues is required to identify the notations of samples with this potential for variety.¹⁹

Samples reflecting colors falling between those displayed on the charts may be identified by interpolation between notations of charted samples. Thus, a sample falling visually halfway between hues 5PB and 7.5PB (a neighboring hue to 5PB in the 40 hue series) has a hue notation of 6.25PB. If it is halfway in lightness between value 5/ and value 6/, it has a value notation of 5.5/. If it is a quarter way in chroma between /6 and /8, it has a chroma notation of /6.5. The complete notation for this sample is 6.25PB 5.5/6.5. Thus, through the use of the decimal system, a Munsell notation for any surface-reflecting sample may be obtained. Conversely, a Munsell notation for which no physical sample exists may be specified.

A collection of charts displaying samples exposed by equally spaced slices through the color solid, whether vertical, horizontal, cylindrical or otherwise, provides a serviceable tool for identifying all colors.²⁰

A system of color notation based on samples of equal visual spacing provides an excellent method for recording color tolerances.²¹ Color Tolerance Sets afford visual aids in judging the acceptability of a color match and are quite popular in industrial and advertising fields.²²

The results of formulations for colorant mixtures may be recorded in Munsell terms. Thus, color standards for future formulations may be established. It is seldom that results from colorant mixture formulas obtain the exact color required. A knowledge of color order is of considerable value in determining the direction and proportion of alteration necessary to obtain the desired color.

A knowledge of color order and a notation based on that order serves also in development and specification of pleasing and, if required, startling color designs.

There are other methods of describing color. There are other tools (or instruments) for measuring color. For simple specification the Munsell is most direct. Through the use of the notation, color samples from any collection, or color specifications from instrumental measurement may be related to color space and Munsell notation to provide a standard procedure for solution of many problems of color identification in the building industry. ◀

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Some Problems of Color Identification

by **Kenneth L. Kelly,**

National Bureau of Standards

► In the preceding article, Mrs Bellamy has shown you the tridimensional character of color. She has gone further and built for you a psychological color solid which correlates all perceived colors with the dimensions hue, lightness (value), and saturation (chroma). This solid was of great help to me when I started to work in color because it gave me a means by which I could visualize the relation of one color to another and later, by which I could evaluate the difference in color between them. I will now briefly discuss some methods of color identification.

Color Defined

You have seen that color can be described by the use of three dimensions, but what really is color? Color may be defined as a qualitative component of visual experience characterized by the attributes of hue, lightness, and saturation, but in certain cases having zero saturation and, consequently no hue, that is a neutral, such as a gray. The light reflected from or transmitted through objects which gives rise to this sensation, the portion of the whole electromagnetic spectrum that you see and which we call the visual spectrum, is only a very small part in the middle. Toward longer wavelengths we find infrared or heat waves, then radar, television, and radio waves. Toward shorter wavelengths, we find ultraviolet waves that sunburn, then x-rays, gamma, and finally cosmic rays.

Briefly there are three ways in which a color may be identified, or described; these are by the use of words, by comparison with colored samples of a color-order system, or by the numerical results of a color measurement. Each of these

has its uses—I want to tell you something about them and how they relate to each other.

Ever since the language of man began to develop, words or expressions have been used first to indicate and then to describe colors. As language developed, more and more color names were invented to describe the colors used in art and industry and more recently in the rapidly expanding field of sales promotion. Many fanciful color names came into vogue such as *French Nude*, or *Pearly Gates*; other color names were confusing for how could you know that *African Green* was in reality a blue or that *Blue Fox* was a reddish gray? Different color vocabularies were developed for use in different fields of color description.

As the designation of colors became more and more detailed, a number of color-order systems were developed and it became customary to assign color names to the individual samples in these systems. It was only natural that the same color name would not be applied to exactly the same color in each of the color-order systems and so these color names really came to describe ranges of color. This was fine for sales promotion but was very confusing if one were trying to describe the color of an object such as a brick. There have been a number of color-order systems published through the years. I am going to mention only a few of the ones which you may meet in your work, listing some of their advantages and disadvantages.

Munsell

"The Munsell Book of Color" (see references) is published by the Munsell Color Company of Baltimore, Maryland, and contains about 1,000 colored samples, either matte or glossy, arranged according to the Munsell scales of hue, value, and chroma. Each sample

on any one chart is intended to have the same hue, each sample in a row on any chart is intended to have the same lightness (Munsell term—*value*), and any sample in a particular column is intended to have the same saturation (Munsell term—*chroma*). This is a true color-appearance system in that the hue steps between successive charts have been selected to appear even, as have the successive steps in the value and chroma scales. Each sample is identified by three symbols, the first indicating Munsell hue, the second Munsell value, and the third Munsell chroma. This Munsell notation, because it is based on uniformly-spaced scales of color, is amenable to interpolation and extrapolation among the samples and is useful in the solution of many problems in industry. This notation, used as a method of color appearance specification, is quite as important as the colored samples—it can be, and in fact is, used by many who do not own a book of samples, for it can be used to describe the appearance of colors on other charts, as you will see. The colored samples representing this system have been measured spectrophotometrically by a number of investigators and are identified by Munsell notation, rather than by color names. However, popular color names can be assigned to them, if required, through the medium of the "ISCC-NBS Dictionary of Color Names" which will be discussed later.

Maerz & Paul Dictionary

"The Dictionary of Color, first edition" by A. Maerz and M. Rea Paul published by McGraw-Hill is a monumental work and has been used extensively in the description and specification of color. It contains fifty-six plates illustrating 7,056 semi-glossy colored samples formed through the use of mixtures of eight chromatic and seven

base gray pigments accomplished through the half-tone printing process. Due to the large number of samples, they are so close together in color that interpolation is usually unnecessary. The coverage of the half-tone screen plates has been so adjusted that the color steps between successive samples are in general about equal. Each color is identified by the number of the chart, a letter to indicate the column, and a number to indicate the row. A dictionary of about 4,000 color names keyed to the colored samples is included along with much information on the early history and development of the color names. Munsell notations of the first 2,592 samples in the red to yellow colors were published by Nickerson¹² in 1947.

Color Harmony Manual

"The Color Harmony Manual, 3rd edition"^{13,14} published by the Container Corporation of America, is based on the color theory of Ostwald. It consists of thirty triangular charts, contains 943 colored samples, and is much used in the study of color harmony and color coordination in design. The samples are divided into charts of constant dominant wavelength and into scales of constant black content, constant white content, and constant full color. Each sample takes the form of a 7/8-inch hexagon made by applying a matte-finish pigmented film to a clear transparent sheet of cellulose acetate, one side of the sample thus being matte and the other glossy. These samples have been measured on the spectrophotometer and the Munsell notations determined for both sides of the chips. A "Descriptive Color Names Dictionary"¹⁵ keyed to these colored chips has been published by Taylor, Knoche, and Granville containing the color names used to describe the color of general merchandise for mass markets.

Plochère

The Plochère Color System¹³ was developed by the Plochères of Los Angeles as an aid to decorators and interior painters, and for use in the selection of color harmonies. This system is divided into twenty-six hues based on the Ostwald system and contains 1,248 matte colored samples. To each of these is assigned a letter designation indicating the color, a letter and number designation indicating the

composition of the paint used, a serial number, and a color name. The Munsell notations of these colors were published by Middleton¹⁶ in 1949.

Ridgway

"Color Standards and Color Nomenclature"¹¹ by Robert Ridgway, Baltimore, Maryland, was developed for the description by naturalists of the colors of rocks, soils, plants, flowers, insects, and birds. This system has been out of print for some years but is included because it is so well known and is still used by some who are fortunate enough to have one of the books. It contains 1,115 matte colored samples and to each is assigned a color name. These color names are listed alphabetically in the front of the book along with a key indicating the color so named. Munsell notations for these colors were published by Hamly⁵ in 1949.

ISCC-NBS Color-Names Dictionary

There have been a number of other color-order systems developed through the years mostly for specialized purposes, some with restricted color gamuts, some with color names and some without, and one used in dermatology has Latin color names. From these short descriptions, you will see that most of the color names used in these systems are those in use keyed to the appropriate colors. That is, the color names follow the system of the colored samples; they do not form a system themselves. There has long been a need for a color-name system in which the names follow definite orders and are illustrated by colored samples.

The color names used to describe colors of drugs and medicines in the "United States Pharmacopoeia"¹⁶ and the "National Formulary"¹⁷ were not based on any system and yet had to serve as standards of purity. In the ninth revision of the USP there was a blackish white, several brownish greens and brownish purples among other confusing color names. At the request of the Chairman of Revision of the USP, the National Bureau of Standards in cooperation with the Inter-Society Color Council (ISCC-NBS) developed a system of color names that was accurate enough to satisfy the scientist, usable enough for the industrialist, and simple enough to be understood by the average man on the street.

The ISCC-NBS system is contained in a set of color-name charts whose coordinates are given in terms of the Munsell scales of hue, value, and chroma. The psychological color solid was divided into 267 blocks, each to contain about the same range in color and to each block was assigned in a regular order a simple color name consisting of a hue name and one or more modifiers, such as very dark red, light greenish yellow, vivid purple, or very light blue. Each chart shows a set of color-name blocks with their associated color names and is a constant hue-name chart. To use the charts, given the Munsell notation of a color and required to find the corresponding ISCC-NBS color name, plot the Munsell notation of the color on the color-name charts according to the scales of hue, value, and chroma. The color name of the block in which the notation plots, is the color name used to designate the color. If the plotted point falls on a boundary between two or more blocks, the color should be assigned both or all the color names of the contiguous blocks, or an appropriate selection of one or more color names may be made. The ISCC-NBS method is published in NBS Circular 553, the "ISCC-NBS Method of Designating Colors and a Dictionary of Color Names."¹⁸

You will notice the word dictionary in the title—this came about through the desire to express the boundaries of the color-name blocks in terms of other color-order systems such as those mentioned above. It was not possible to do this until the colored samples in the "Color Harmony Manual," for instance, had been measured and Munsell notations assigned. Plotting this notation indicated which ISCC-NBS block and color name corresponded to each of the colors in this color-order system. This was done for the thirteen color-order systems for which Munsell notations had been determined for their colored samples, and the color names from each of them were assembled alphabetically to form the color-names dictionary. With each of these color names there is given a code letter indicating the proper color-order system, the ISCC-NBS color name, and the number of the corresponding color-name block. There are approximately 17,400 entries in the dictionary.

Then all of the color names in these color-order systems, whose corresponding Munsell notations plotted within one ISCC-NBS color-name block, were collected. This was done for each of the 267 ISCC-NBS color-name blocks. All of the color names in any one ISCC-NBS color-name group or block are therefore nearly synonymous. All of these color names are arranged according to this plan in the middle section of the color-names dictionary. Also with each of these color names there is given the notation in the appropriate color-order system of the colored sample descriptive of that color name. Thus, if one wanted to find a color name in Plochère nearly synonymous to one in Maerz and Paul, it could be done through this table. Likewise, if one wanted to find a near-match of a color in the Color Harmony Manual to a color in the Federal Color Card, Circular 553 would again be used.

Now let us go one step further in precision. Suppose that a color had been measured on a spectrophotometer or a colorimeter and the numerical designation determined. Through the use of the proper set of charts or a highspeed computer,⁷ this numerical designation can be transformed into the corresponding Munsell notation. Through this notation the corresponding ISCC-NBS color name can be found. So you see that it is possible to determine the ISCC-NBS color name from a Munsell notation or the notation in any one of the other thirteen color-order systems listed, or from the numerical results from an instrumental measurement. The ISCC-NBS Color Names Dictionary, therefore, acts as a means of translation with the Munsell notation as a common denominator.

Centroid Colors

The Color-Names Dictionary does not contain any sample colors. It has long been the hope of the Inter-Society Color Council and the National Bureau of Standards that someday, somehow, color charts could be added to illustrate the color-name charts. But which colors? It was finally decided that the most descriptive color of a color-name block would be its central color, or one illustrating the center of gravity or *centroid* of the block, because some of them are of odd shape, and these 267 centroids were determined and printed.²

At this time ISCC Subcommittee for Problem 23, Expression of Historical Color Usage (color trends)* needed a method of color designation and decided that the ISCC-NBS centroid colors would be a logical starting point. This project was considered sufficiently important by the ISCC that it re-activated Subcommittee for Problem 2, Color Names, to oversee production of these centroid colors with the author as chairman. Again the ISCC and the National Bureau of Standards teamed up. It was agreed that the ISCC would finance the project and the Bureau of Standards would undertake the measurements and studies necessary to insure that the prototype centroid colors would match the published centroid notations within stated tolerances. In this way, proper centroids would be produced which could be used in the solution of Subcommittee 23's problem* and at the same time they would be available to illustrate a set of constant hue-name charts which would be published as a supplement to the Color Names Dictionary.

The prototype centroid colors were produced by Davidson and Hemmendinger, a color company of Easton, Pennsylvania, and the mass-produced centroid colors, based on the D & H samples, are being produced by the Tobey Color Card Company of St. Louis. These chart sets will be sold through the Standard Samples Program of the National Bureau of Standards and eventually will be bound with a future reprinting of the "Color Names Dictionary."

These ISCC-NBS centroid colors are few in numbers (220 to 230 are possible with modern pigments) yet they sample the psychological color solid throughout its entire extent. Now, for the first time a uniform system of simple, accurate, understandable color names has been produced, and most of these color names are illustrated with their own corresponding centroid colors. The great advantages of the ISCC-NBS method of designating colors lies in its ability to offer a coordinated plan of different degrees of fineness of color description and designation. Illustration of the color-name blocks with their centroid colors completes the final step of this plan.

*see the following paper by Everett Call "Identification of Colors for Building."

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Identification of Colors for Building

by **Everett R. Call,**

President, Call Marketing Services, Inc

► It might seem that all you have to do is to reach out and take the color you happen to touch and use it—certainly nearly every shade of the spectrum is in use on some product.

But . . . use of color is not quite that simple. As you start to devote serious thought to the problem you become aware of such things as the physiological effect of color, color-blindness, blending of color, and the effect of lighting on the appearance of color.

Sooner or later three other kinds of problems begin chasing you around in nightmares:

- the economics of producing and stocking a color line
- evaluating consumer's color desires
- understanding the various languages employed when discussing or describing color

The problem of economics differs for each product and indeed for each producer—considerable assistance will be available in this area.

In the past, evaluating consumer's color preferences has been difficult and has been solved by each manufacturer and for each product, individually, if at all. This has necessitated costly and time-consuming surveys resulting in data on a limited number of products and representing a small part of the manufacturing economy. Each such survey is limited to colors in a particular line of merchandise or to colors in the surveyor's palette. Thus, unless one surveyor conducts all the surveys it is difficult to correlate results.

Assuming that a color choice has been made, architect, builder, color consultant or interior designer finds it necessary to communicate this choice of a color to manufacturers of various building materials as well as others.

Our subject today is that of a unique approach to determining consumer acceptance of various colors and at the very same time, an approach to providing a solution to the communications problem.

New ISCC Subcommittee

A few years ago as Director of Marketing Research and Statistics for the National Paint Varnish and Lacquer Association one of my tasks was to conduct an annual survey of all colors of ready-mixed paints sold. In analyzing results, I realized that this survey was of very little value to our members because while they knew what their own competition was doing, there were no data available indicating color usage by other industries—industries that would affect the consumer's ultimate choice of color of ready-mixed paints. Further, even if such data were available, they could not be compared with paint industry data because of the many color designation systems used.

About this time I spoke before the Annual Meeting of the Inter-Society Color Council (ISCC) about my work and suggested that they establish a problem subcommittee to develop a method of expressing historical color usage data, that is, color trends. The Council agreed, and as my "reward" for offering this suggestion, I was named co-chairman of the committee which became known as ISCC Sub-Committee for Problem #23—"Expression of Historical Color Usage."

Designation & Statistics Problems

Before this subcommittee could proceed with its assigned task, it was found that a color designation system acceptable to all industries, one that would correlate data expressed with different degrees of

precision and in different color-order systems as well as one that would allow for easy handling of huge masses of statistical data was needed before any other research could be done. We soon learned that none of the available systems would be acceptable to all industries. But we did have available the Inter-Society Color Council—National Bureau of Standards (ISCC-NBS) color names system wherein the boundaries of the 267 named blocks were specified in terms of the Munsell System and therefore, by extension, in terms of a number of the recognized color systems. Next we were faced with providing color identification for industries that were not concerned with precise color designation—either because of usage or because the tolerances resulting from manufacturing processes were so broad. Again, the ISCC-NBS color names system was the key.

A solution of designation problems turned out to facilitate statistical plotting. We developed a simple method of dividing the color solid into successively smaller blocks in five steps. Each finer subdivision is accomplished by dividing the blocks in the previous step. Thus in step A, the entire color solid is divided into thirteen large blocks. In step B, some of these thirteen blocks are divided into a total of twenty-nine blocks. These twenty-nine blocks are further divided into 267 smaller blocks—the ISCC-NBS method. These 267 ISCC-NBS blocks are specified in terms of the Munsell system which contains 1,000 to 1,200 colored samples. These colored Munsell samples have been measured and specified in terms of the numerical CIE* coordinates, x, y, and Y. As Mrs Bellamy explained, by use of decimals the Munsell designation system is limitless. Thus this sys-

tem provides five levels of precision of specification. This method is described fully in the report of ISCC Subcommittee for Problem #23.**

The paint manufacturer can and does deal with color in terms of Munsell notations, or sometimes even in terms of CIE coordinates. When the manufacturing process will not permit such accuracy, or when a color match is not required, the ISCC-NBS blocks serve all specification and designation as well as identification requirements.

Each individual manufacturer can utilize at least one level of the Subcommittee 23's method for classification and reporting purposes.

The levels that include only twenty-nine and thirteen colors are useful in permitting easy statistical treatment and simple charting.

Applications

Milo Folley, AIA, a member of Subcommittee #17 of the ISCC—Color in the Building Industry—outlined at a recent meeting of the ISCC the color problems facing architects, designers, and builders and asked if Subcommittee 23's method could be utilized by the entire building and building materials industry. Our answer was a biased "yes" on several counts.

Mr Folley described the major problem of architects in the color field as the lack of a universal systematic designation—the lack of a common color language. He felt that this lack has placed architects at a disadvantage in any plans to achieve color coordination of a variety of materials.

But we now have an instrument that provides a common color language for all industries through the work of Subcommittee 23.

Our approach does not require abolition of custom names, nor does it require a manufacturer to restrict his palette of colors. Rather, our approach makes it possible for a manufacturer to take maximum advantage of this marketing tool.

Plotting Consumer Taste Trends

Key to all these advantages is in the method of expressing his-

torical color usage information as developed by the ISCC and, taken one step further, a means of processing data from all industries so each manufacturer can compare his experiences directly with his industry total or with other industries. By doing this, color trends can be developed permitting companies which participate in the program to have colors in their line when the consumer first seeks that specific color in that particular product. Also, these same trends will indicate when a color will drop in popularity.

There is an organization performing this service which is available to all manufacturers and retailers. In order to participate, a company need only report its color experience in terms of percentage of total sales represented by each color used, in accordance with the methods developed by the ISCC. This data is converted into Munsell notations and fed into a computer. As the result of a specially-designed computer program, the data is processed and is available in practically any form conceivable.

These special reports show data on an industry-wide product basis. Individual company data are never disclosed.

For their cooperation, each receives a composite report at no cost. Special reports by product or by color, compiled by specifications established by those requesting the report are available for a fee to participating companies only.

Other Color Tools

One producer may find that consumer acceptance surveys are necessary—others might find that they can permit a designer to let his artistic abilities run wild. For most, however, economics of their own industry, demands a close check on the number of colors utilized. This automatically poses color-choice problems.

Again, depending on the product, one should consult experts—colorists or color consultants. They are trained in the complex field of color and can anticipate problems and provide solutions before an economic disaster calls your attention to these problems. Your colorist utilizes every tool he can find all the way from historical color usage data provided through the color service mentioned, to the psychological and physiological as-

pects of color discussed by Mrs Bellamy and Mr Kelly.

Color problems facing architects are far different. They are concerned only with application of color to a specific situation and coordinating colors for one specific job. There is no single source of knowledge—however, I believe the starting place is a colorist or color consultant. The truly competent colorists will assure you that they themselves cannot answer all your problems but they can recognize them, evaluate them, locate the tools and apply those tools.

By tools I refer to physicists, chemists, illuminating engineers, marketing researchers, designers, architects and statistical tools such as the color service.

A Color Manual

While industry is not adopting a universal color language for the sole purpose of helping the architect, builder, colorist and designer, this common language is precisely the goal sought by all of them.

One possible approach could be a loose-leaf color manual with a section for each product. Heading each section would be a chart showing the scope (highest values and chromas offered) of colors available in that product. These limits can be determined by reports of companies participating in the color service mentioned earlier. Also, the tolerances the builder, architect, color consultant and interior designer must allow because of technical problems involved in manufacturing would be shown.

Following each product introduction would appear the colors offered by each manufacturer. Each manufacturer's colors would appear on separate pages and be identified as that particular company's colors. Under each color chip the manufacturer's own designation would appear along with the Munsell notation.

Those who specify colors would use this manual by referring to the Munsell notation of one product and using this common language in all other product choices.

The development of such a manual will be a tremendous task. Manufacturers who are currently participating in the color service have expressed unanimous interest in such a manual. If the interest spreads, I personally will do all I can to develop this additional aid to color decisions. ◀

*International Commission on Illumination—(CIE in French)

***"Expression of Historical Color Usage", Feb '61. Available through Ralph M. Evans, Secy, ISCC, Color Technology Division, Bldg. 65, Eastman Kodak Co, Rochester, NY

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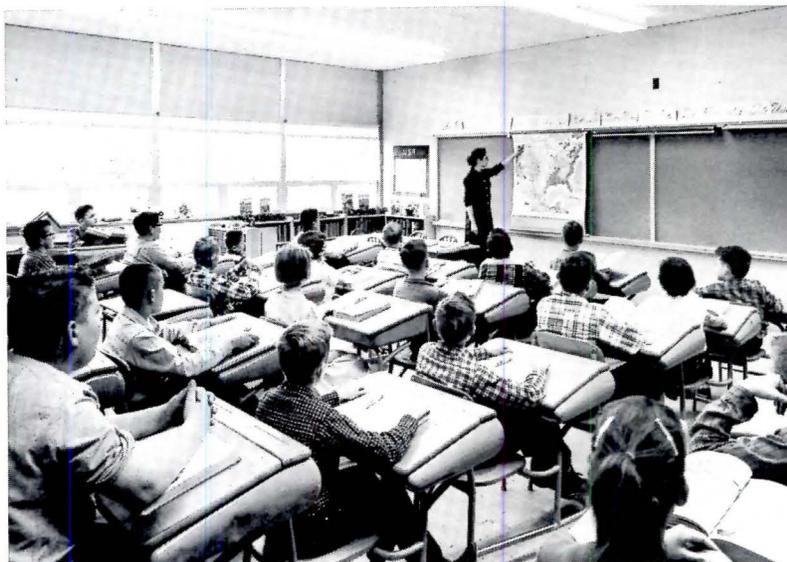
School Plant Studies

BT 1-47

Small Schools-I

(1 to 3 CLASSROOMS)

by Eric Pawley, AIA



One of a series of papers prepared by members of the AIA Committee on School Buildings, and by selected specialists, to make laymen aware of school building problems and trends and to stimulate discussion. They are not intended to be definitive last words and carry only the authority of their respective authors. New subjects are being worked on and contributed articles are welcome. Reprints of these non-technical articles are widely distributed to educators and interested laymen. One copy of each current issue will be sent free of charge—additional copies 10¢ each.

Small Schools-I

(1 TO 3 CLASSROOMS)

by Eric Pawley, AIA, Staff Executive,
AIA Committee on School Buildings and Educational Facilities

► Few of us realize the continuing relevance and importance of small schools today—not only for countries where public education is beginning new development but in populous, already industrialized places. The one to three-classroom school still has obvious pertinence for rural education, in sparsely settled areas.

“... But surely not in metropolitan regions?” We can hear this assumed-self-answering question. The facts supporting the need for small urban and suburban schools are based partly upon our lethal traffic-ways and murderous intensity of traffic, and partly perhaps upon educational values, of which more later.

Traffic

A strange and savage form of urban surgery has been inflicted upon our cities in the name of “modern transportation.” Massive programs of federal, state and municipal limited-access highways, freeways, parkways and interchanges have carved neighborhoods and school districts into islands adrift in a rough sea filled with finny traffic as deadly as the sharks, barracudas and piranhas it so much resembles. It is difficult to see a valid need for the 300-hp, 120-mph personal automobile, but Madison Avenue would have us all believe that this is our birthright and an essential part of our economy. There are many such pressures upon us for highway programs, which are beyond the scope of this brief paper, but it is encouraging to note that our one major city which everyone agrees has the most charm and individuality, San Francisco, also had the strength of civic character to say NO! to plans for six cross-city freeways.

One eastern county school superintendent, noting that a new 10-mile stretch of highway nearby was posted for a construction cost of \$1,000,000 per mile exclaimed “We could have built our whole

school system for the cost of that ten miles of road!”

Buses

Provision of school buses (a large and influential pressure in itself) adds a particularly cumbersome vehicle to the traffic and occasionally has been a convenient, modern, packaged way of getting rid of loads of children all at once. With all the lip-service to planning we have had in the intervening thirty-five years, few have followed the excellent thinking (Clarence S. Stein, FAIA, and Henry Wright Sr) behind the classic Radburn residential concept of separate pedestrian walks without crossings at grade. There must be something about it the real-estate developer and “merchant-builder” (who now have almost complete responsibility for our suburbs) find unacceptable.

There have also been more and more caustic comments about the changing concepts of walking as something people do, and the elaboration of facilities for physical education and the viewing thereof.

Nearness—a Value

All of this points up the idea of primary schools within safe walking distance of homes. One-to-three classrooms means a pupil-load of twenty to 100 children. In some urban areas of this traffic island or enclave type this may well be all the primary children. Certainly there are values in the smaller scale unit for younger children.

Temporaries

Another type of need for small units results from temporary fluctuations of population. Alert superintendents and school boards can be forewarned of these and some have met them with temporary, mobile or demountable units. An architectural wag has called them “disposable teaching cartons” but if the situation is truly temporary and such units are not permitted to become permanent (not easy) it is

one solution. They also may meet the need of some remote districts where construction on site is difficult and expensive. An expandable scheme has been used and others may employ several trailer-width units sealed together at the site. With such minimal facilities good design is of the utmost importance. They cannot be single trailer-size shoeboxes. A recent School Plant Study* on orientation for solar heat control pointed out proper design methods for alleviating some of the discomfort in such small shelters in hot climates.

In Housing Developments

From time to time proposals are made that one or more typical dwelling units in housing developments be allocated for primary school use. The argument is again to meet a temporary need and that the units can later be completed as dwellings and sold.

There seem to be several objections. Usually there are radical violations of school safety and fire laws—in materials, construction, details and planning. Also, usual residential finish materials and hardware just will not take the beating of school-use. Instead of perhaps three pairs of stampers, door-bangers and sticky hands there will be more than twenty pairs. Maintenance is multiplied. Illumination also will be below par in daylighting with usual residential fenestration, and in electric lighting unless there are special installations.

Why not do it right in the first place? Architects of some larger-scale housing have done this—notably the pioneering example (1947) of Affonso Eduardo Reidy in the five-classroom elementary school within the great Pedregulho housing development in Rio de Janeiro. Some New York City housing has also included school facilities.

The Teacherage

In remote areas there may be need for a “teacherage” or living-quarters for the teacher related to a small school. This may be the only solution. A 1958 survey indicated that nearly six percent of teachers of one-teacher schools lived in them, an additional two percent in trailers.

*AIA Journal, Aug 1960: 69-72 BT 1-40: Holmes & Chance, “School Building Orientation”

A combination of this kind is basic in the remarkable rural education program of Mexico developed under the leadership of Jaime Torres Bodet, Federal Minister of Public Education, and his most capable architectural chiefs: Pedro Ramírez Vázquez and Enrique Vergara. This system is of such interest that we shall devote a separate study to it in the near future. The teacherage is also found in Europe.

Educational Values

The small school, particularly the one-teacher school, makes strong demands on the teacher. It may involve mixing age-levels and suitable instruction for six to eight grades. The old tradition of using older pupils as assistants is doubtless frowned upon by the profession as an invasion of hard-won certification. It may even have been made illegal but every capable teacher must recognize two of its specific values: delegation of the teachers' work-load under guidance, and a definite educational value for the young assistant even if not aimed toward a career in teaching. The experimental work with legitimized teachers' aides in Michigan several years ago seems to have died out—we wonder why. . . . It seems to have turned into full-union-card team-teaching. Perhaps such unofficial methods are best left informal, spontaneous and undiscussed?

Anyone who has observed or has been a part of the multi-age classroom must have been impressed with certain educational values which no other situation gives. The young child is strongly motivated to emulate anything it admires—in fact this is education. Perhaps this is stronger in the upward direction (emulation of elders) at first—but teenagers must abjectly conform to their own age. Artificial segregation of age-levels removes opportunities for understanding and even tolerance, in the downward direction. A curious thing happens, however, when a bright younger pupil can outshine an older pupil (we'll leave the teacher out of this!). Instruction which permits this is possibly salutary for all ages. So much for the sacred cow of "readiness!"

Paul Woodring notes ". . . the one-room school of the 19th and early 20th centuries changed us from a predominantly illiterate nation of frontiersmen to one in

which each child, rural as well as urban, had a chance to get an education. . . ." That 1958 survey** (latest accurate figures) again shows that from nearly 200,000 such one-teacher schools in 1918 the total has decreased to about 24,000—but 400,000 children still attend schools with one teacher teaching six to eight grade levels. Eleven of our states each still have more than 1,000, four states each have more than 2,000. Pupil access figures are also interesting for such schools:

40% in automobiles
20% in school buses
31% walk
balance: bikes, even horses

Consolidation

A great effort has been made to abandon small schools and to consolidate their populations and offerings in larger centralized facilities, even if it means forty-mile bus rides. We hear much educationese about this and bags of foundation money have been spilled for studies, research, reports and dissemination. It is true that much of this effort has been directed toward elimination of marginal high-schools which may have persisted through local pride alone in spite of decreasing numbers of graduates. It would seem wise to re-examine any extension of the idea to elementary and primary schools. Some state education officials are inclined to view smaller schools as administrative nuisances and, in support of consolidation, go so far as to claim that certain new small schools were built by localities "to block consolidation."

In some cases the pendulum of largeness has boomeranged. The 2,000- or 3,000-pupil school has had to be subdivided into four or more "little schools" or "schools within a school"—to offer "better educational opportunities" of several sorts. Largeness may also reflect a certain amount of ambitious administrative empire-building and other values not related to education. We are told, rather inconsistently, that below a certain size a school "cannot offer adequate educational opportunities. . . ." Surely this is a mistaken concept which equates education with equipment rather than teaching. It smells so much of commercial pressure that it reminds us of the zeal for audiovisual instruction *über alles*, the

prime example of the holy crusade for fringe commercial benefits.

At a recent meeting of the AIA Committee on School Buildings and Educational Facilities our member from the AIA Western Mountain Region remarked that he had gone back to Wyoming from the last meeting determined to apply in the work of his own office some of the things he had heard discussed. "You know," he said, "some of the ideas you fellows talk about are very exciting, but we found it pretty hard to apply those 'school-within-a-school' and team-teaching concepts in a one-classroom job!"

Growth

All schools, small and large, must face the possibility of needing to be larger. Design for growth is not a new idea. It requires forethought in site acquisition and building placement, in building plan and utilities. Plans are best developed with the ultimate in mind, then adjusted for early needs. It takes skilful design to make all stages look well.

Esthetics and Education

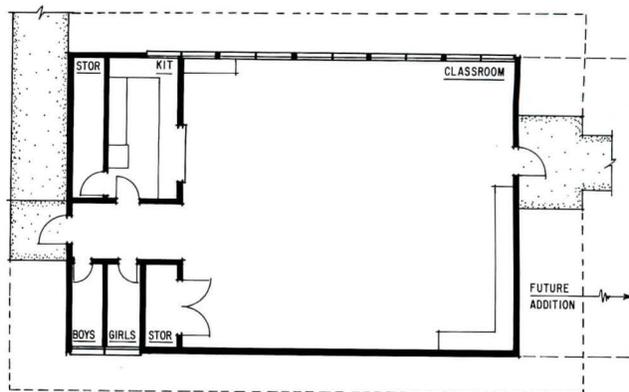
The time should long ago have passed when education is thought of as something within books and other media, useful tools for a teacher, or that the teacher (and the school) are the only avenues of education. The child's total environment teaches. Good architecture teaches and in a school can be conducive to an improved teaching-learning situation. Our best school architects have done far more for contemporary education than they get credit for. This does not mean that using Smearalover Paint and Blastotherm Heating or Dazzleouch Lighting will help Johnny learn to read faster (if ever). It does mean that a carefully-designed interior which approaches an integration of all elements of design: space, light, color, acoustic, thermal, etc. can be, as required, a relaxing, pleasant experience or a stimulating one. Spaces can be designed specifically to facilitate certain school tasks. Exteriors can be orderly, well-proportioned, in good scale with their surroundings and suggest a building you would like to enter—instead of a forbidding or monotonous place in which children must spend so many hours each day. It does not take great expense to accomplish this—it takes good professional service. ◀

*Saturday Review, 18 Feb 61 p 62
**"One-teacher Schools Today" NEA Research Monograph 1960—M1 75pp paper \$1.25

One-Teacher Elementary School

Forks of Salmon, California
Smart and Clabaugh, Architects

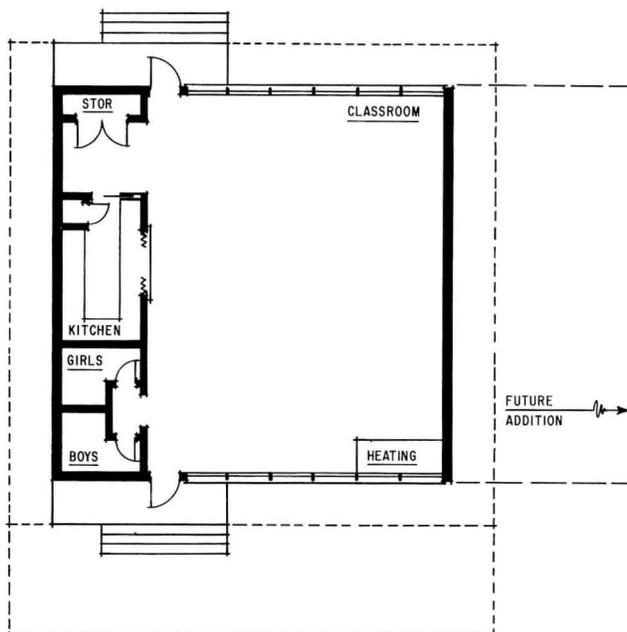
Note expansion—daylighting unilateral (N)
roof construction: 2 x 6 truss framing over
4 x 18 glulam beams; separate generator
shed to reduce noise and vibration



One-Teacher Elementary School

Coffee Creek, California (1960)
Smart and Clabaugh, Architects

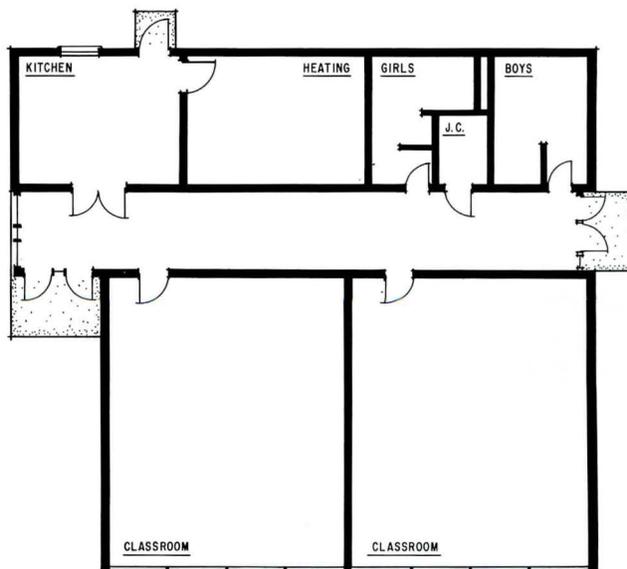
Bilateral daylighting (E+W) with broad
overhang on west; separate cottage for
teacher's residence (at local expense)

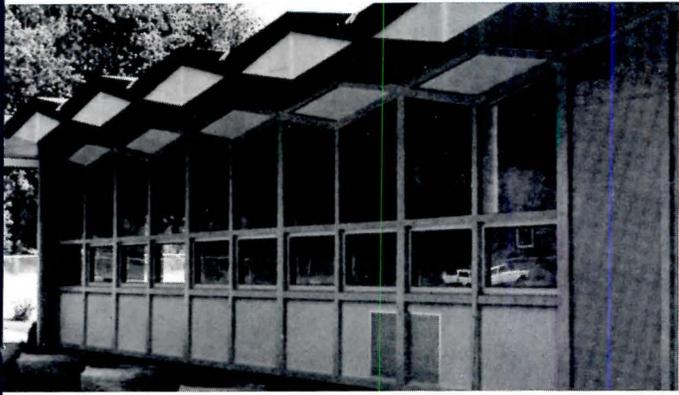


Two Classrooms and Kitchen

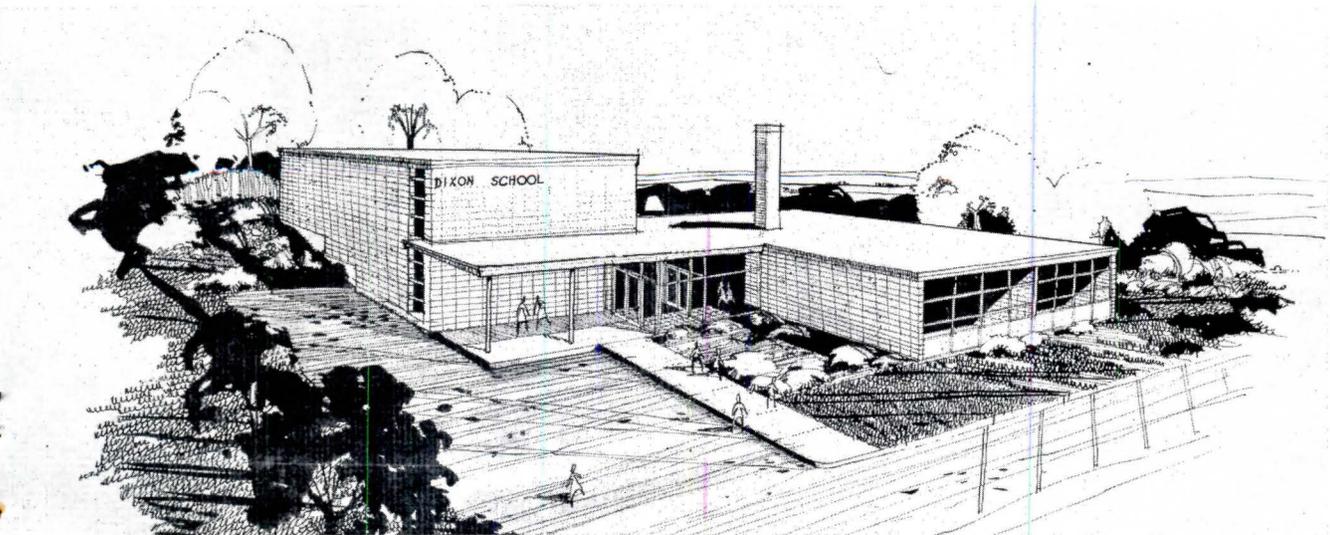
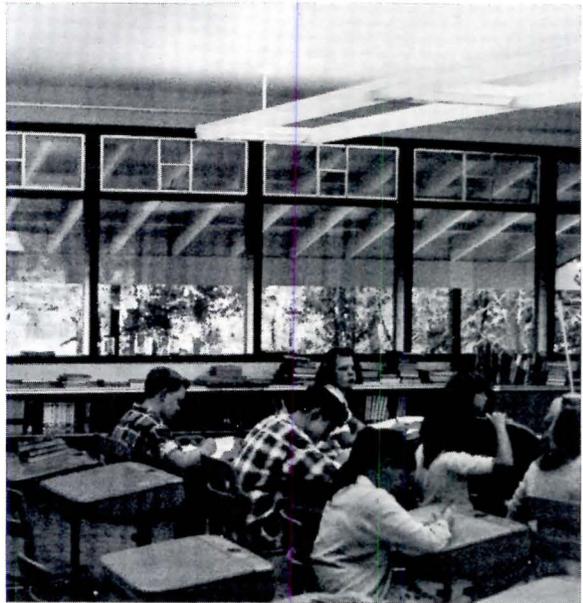
Dixon Elementary School
Lone Rock, Wisconsin (1959)
Weiler and Strang and Associates,
Architects

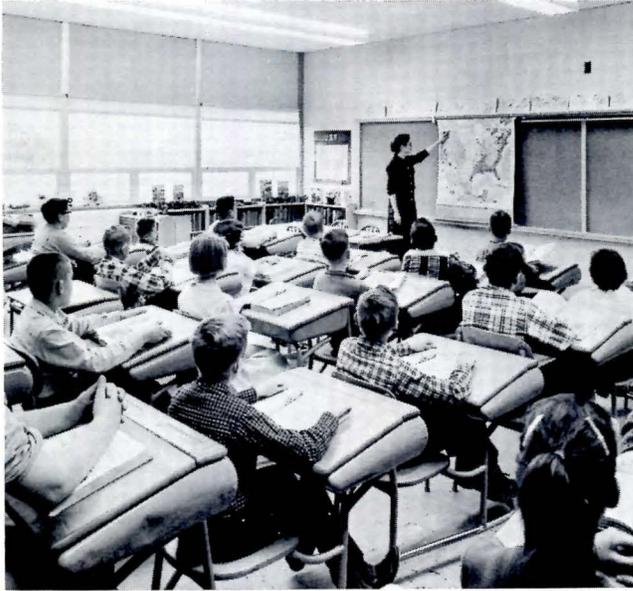
Unilateral daylighting facing east;
plan permits easy expansion





William Wollin



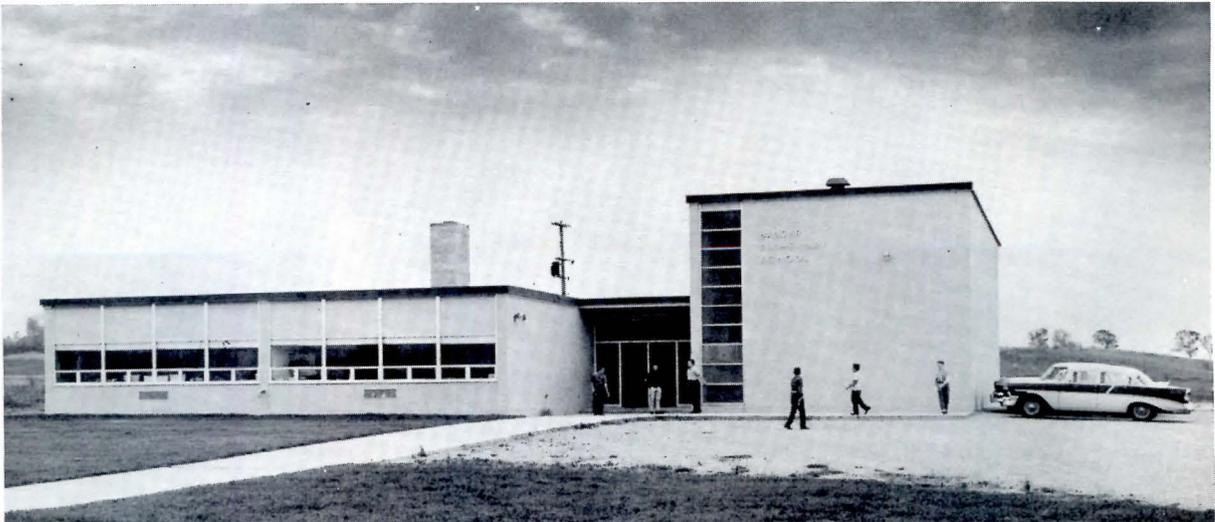


**Three-Classroom Plus Multi-activity
Room and Kitchen**

Badger Elementary School (1957)
Dane County, Wisconsin (near Madison)
Weiler and Strang and Associates,
Architects

Acoustical tile ceiling; unilateral daylighting;
roll-shades; sandwich panels above glazing

William Wollin



A I A



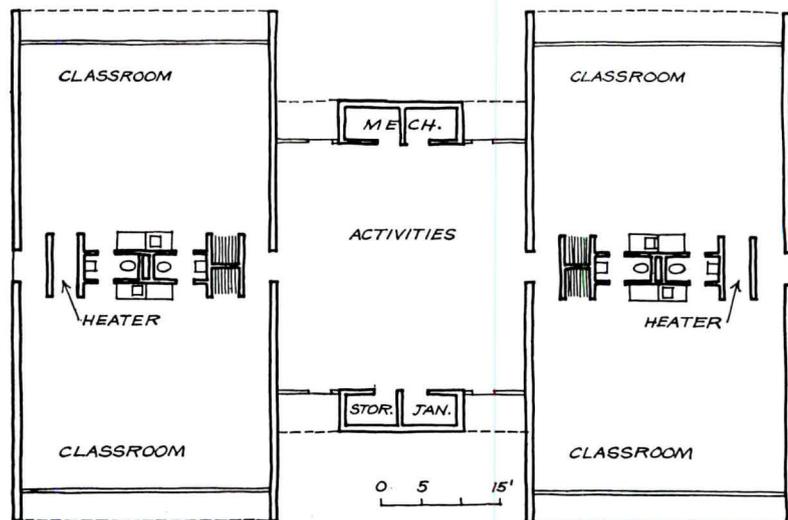
School Plant Studies

BT 1-48

Small Schools-II

(4 CLASSROOMS)

by Eric Pawley, AIA



Minnie Jeffries Primary School, Detroit Michigan (1961);
Linn Smith Assoc; Courtesy: Architectural Forum

One of a series of papers prepared by members of the AIA Committee on School Buildings, and by selected specialists, to make laymen aware of school building problems and trends and to stimulate discussions. They are not intended to be definitive last words and carry only the authority of their respective authors. New subjects are being worked on and contributed articles are welcome. Reprints of these non-technical articles are widely distributed to educators and interested laymen. One copy of each current issue will be sent free of charge—additional copies 10¢ each.

Small Schools-II

(4 CLASSROOMS)

by **Eric Pawley, AIA**, *Staff Executive*,

AIA Committee on School Buildings and Educational Facilities

► A curious phenomenon of some of our suburban development has been its almost complete lack of local government. The new residents come from cities where they personally had no part in government except their votes. Planning, zoning and building in the new area may be under minimal regulation. This situation grew so bad in one metropolitan region that permits for construction of several hundred houses were held up until proper school facilities were assured. Some subdivisions have been planned with a completely callous neglect (omission) of school sites. Others have allotted only such areas for schools as could not be used for houses.

Sites

While such sites present a "challenge" to the architect, with skilful planning in which the picturesque qualities and changes in levels are taken advantage of they may result in most attractive and functional school properties. No one could claim for them the simplicity of treatment which leads to sure economy. A method has been found, however, and numerous examples exist of a practical and pleasant way of handling such rough sites by what has come to be known as *campus planning*. To avoid the difficulties and expense of changing levels within a larger building the elements are subdivided into appropriate small units connected by walkways which may or may not be covered, and/or enclosed, depending upon climate. Changes of level are much less expensive outdoors. This scheme also lends itself to pleasing groups of small-scale structures, preservation of trees, a real identity for each school subdivision, possibly better natural light and ventilation, easier access, exit and fire protection, and simplified additions to existing school plants.

We believe that by far the most popular examples of such campus units have been designed with four-classrooms and their appropriate local services. Illustrations for this School Plant Study are a sampling of several varieties of these "quads" from different parts of the US. In some of the actual school plants these may be initial or the only buildings—in others they are multiplied or related to other units such as the two kindergartens in the Bristol Primary School. There is nothing magical about four classrooms; one excellent school has three classrooms plus a larger common activity room in such a unit plan.

Covered Walks—Landscape

The variety of covered walks is so great that we may devote a separate School Plant Study to them. They offer many opportunities for design. Such campus sites also provide a better relationship of school to landscape and in the most highly developed examples of this sort (Heathcote and Wilbert Snow) a delightful natural environment becomes, as it emphatically should be, part of education. It should be realized also that this is not an accident or due to well-meaning gifts of plant material, cast-stone benches, or decorative bird baths by local nurseries or garden clubs. Significant landscape design is a professional service and well worth whatever budget can be set aside for a competent landscape architect *even if it must be limited to a design for future treatment* (future planting). Then with a good plan as a basis, community generosity can be explored. A notable school planned by an association of two well-known architectural firms was made ridiculous in appearance by a gift of what one of the architects calls "green chicken croquettes."

Effective landscape design will

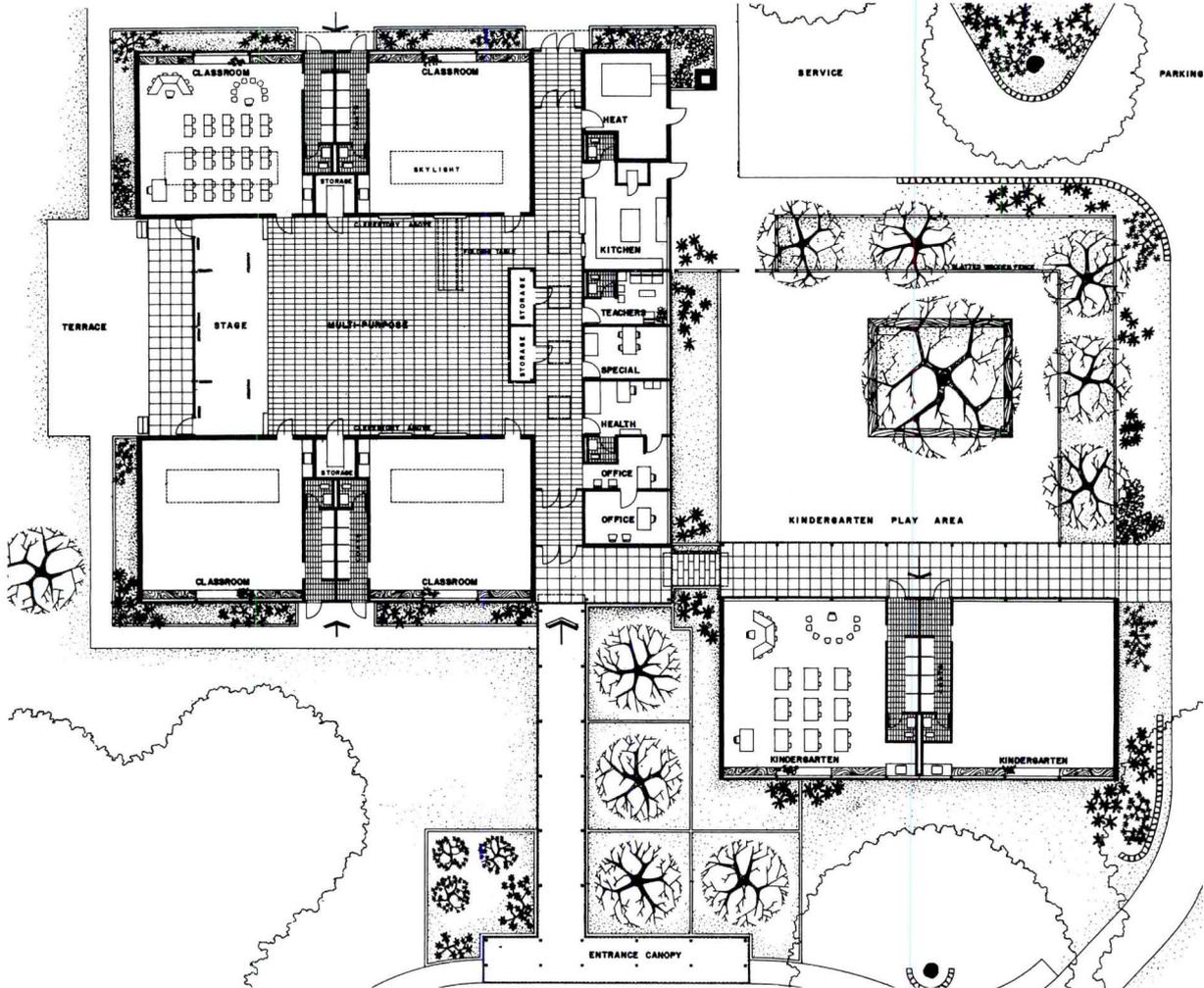
also aid visual conditions within the school. A view out into leafy foliage screening sky-glare removes the Enemy Number One of a desirable balance of brightness contrasts. Most interesting studies have been made with wind-tunnel models at Texas Engineering Experiment Station of the effects of different landscape treatments on natural ventilation of school buildings. Design does not stop at the wall and we must agree—*good design does not cost, it pays.*

Down with Multi-purpose

The school may well be the first focus or fulcrum for community action, and the school board members the first local officials. The school is also a center of local pride and organized athletics or entertainments with their demand for a community or parental audience. These facts explain the early demand for a larger-than-necessary school auditorium—which is really a town hall—and for a gym overloaded with spectator-seating, neither of which should be part of the cost of the schools. These spaces are rarely effective for teaching—a little theatre of a few hundred seats is far better and is becoming an extremely popular element—by no means a frill but an important educational space if well-designed.

Such a feature in the lay mind pre-supposes seating capacity equal to school population but as a matter of fact it might be part of a quite small school which is expected to grow. The activity of the Children's Theatre Conference (a part of the American Educational Theatre Association) is evidence of a strong development of the idea that such experience is not extra-curricular but an important part of general education.

Smaller schools usually settle for "multi-purpose" rooms which end up being no-purpose if conversion from one use to another is awkward. These hybrids: cafeteriums, gymnasiums, audinasiums may appeal to some but there is little educational benefit from stacking folding chairs, pulling tables up or down, etc, or from waiting for it to be done by help being paid from education budgets. Over the life of the building these losses are only too real. Solution? Minimize multi-purpose—permit continuous scheduling of these spaces. Multi-purpose space is the foe of utilization and compromises every function. ◀



MacMazuzki



**Four Classrooms, Two Kindergartens,
Multi-purpose Room, Kitchen**

Bristol Primary School,

Webster Groves, Missouri (ca 1955)

Hellmuth, Obata & Kassabaum, Architects

Self-contained classrooms;

daylighting: bilateral in KG (NS),

unilateral for classrooms plus

toplight; heating: hot-water radiant

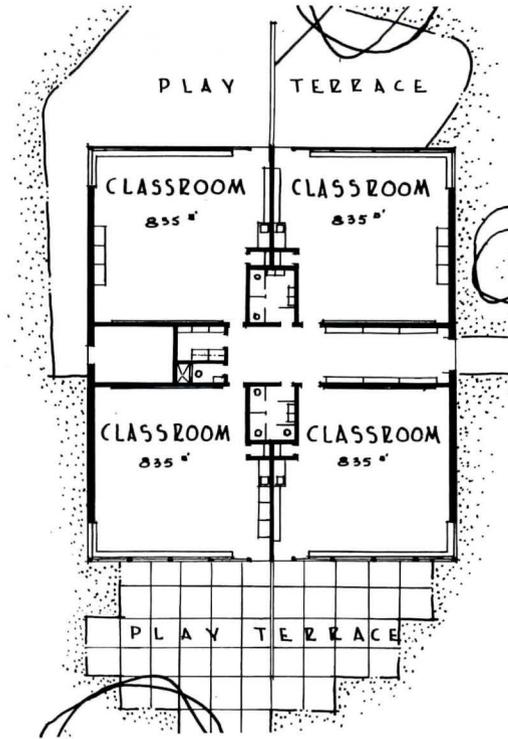
in KG floor, individual controls in C.R.



MacMazuzki

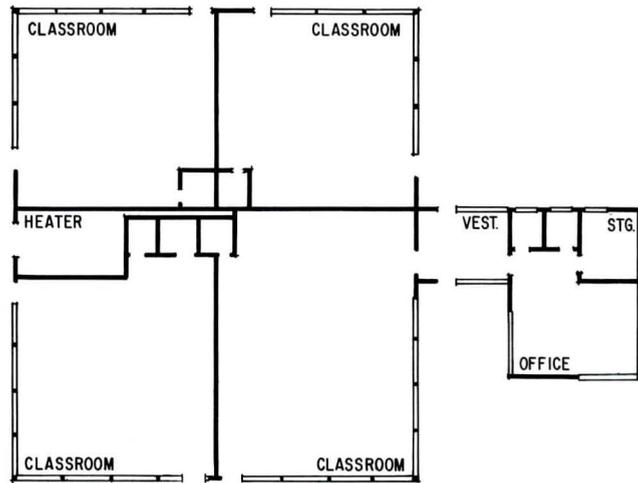
Four-Classroom Unit (1 of 5)
 Wilbert Snow Elementary School,
 Middletown, Connecticut (ca 1955)
 Warren H. Ashley, AIA
 Photos: Joseph W. Molitor

Bilateral daylighting: 1 bay and transom on side,
 lift-slab concrete construction;
 informal hardtop play areas



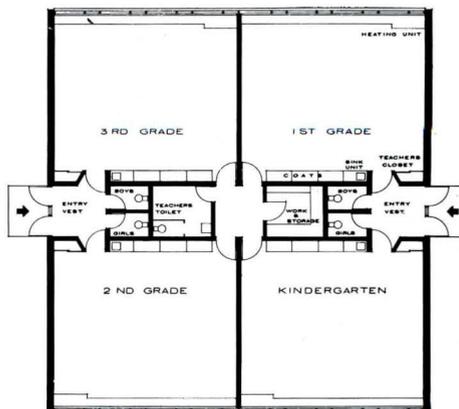
Four-Classroom School
 Valley School, Los Alamos,
 New Mexico (1951)
 Flatow and Moore,
 Architects

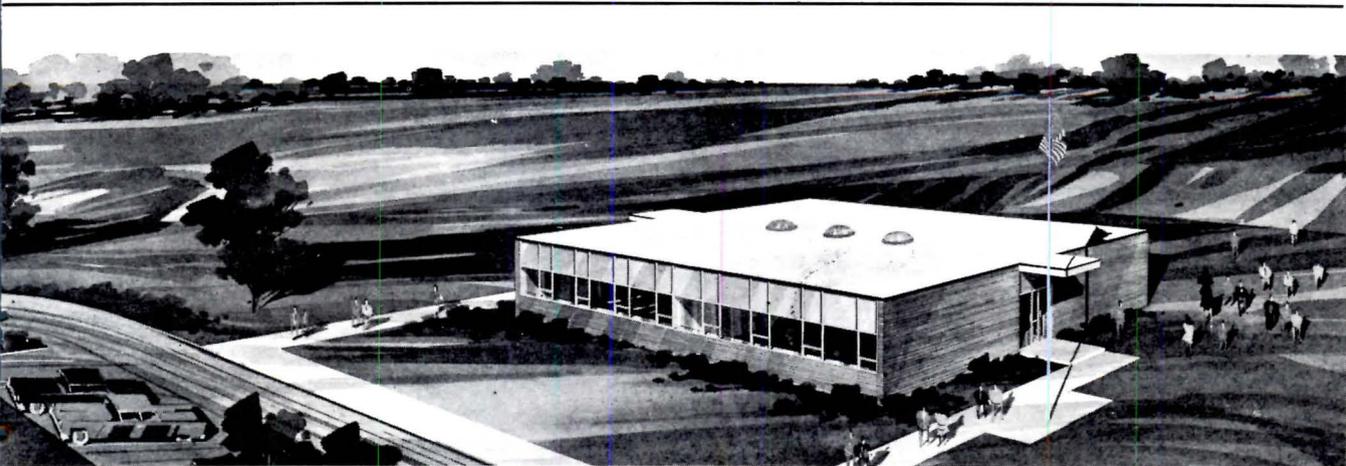
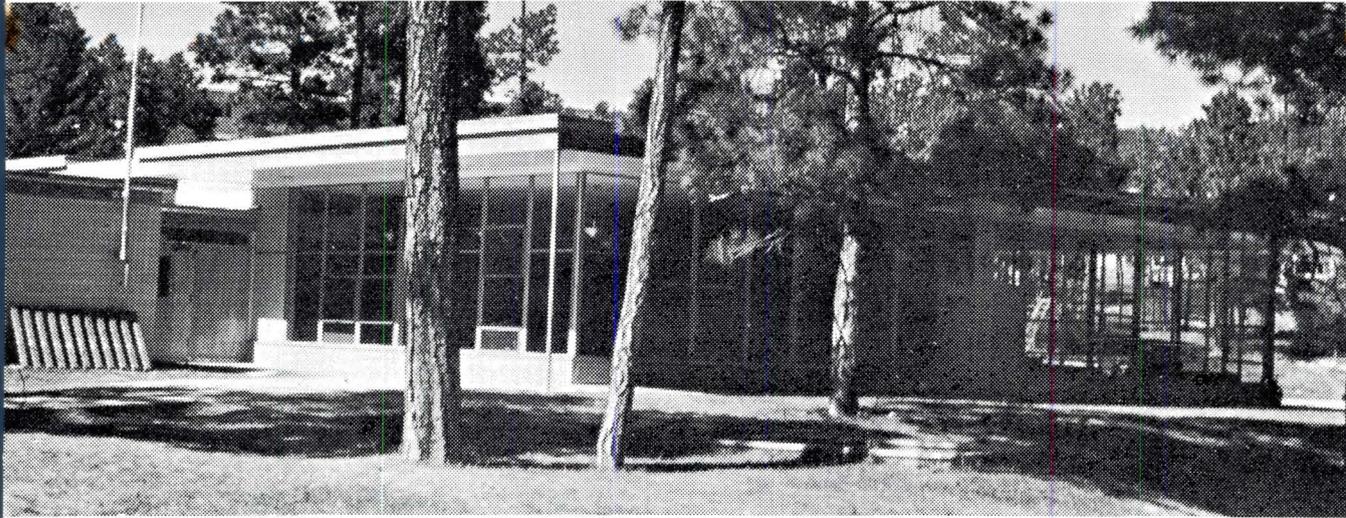
Kindergarten, 2 primary, 1 elementary
 centralized services; bilateral daylight



K-3 Four-Classroom Unit
 Merrill Primary School,
 Merrill, Iowa (1958)
 Harold Spitznagel & Associates,
 Architects

Unilateral daylighting; neatly-planned quad





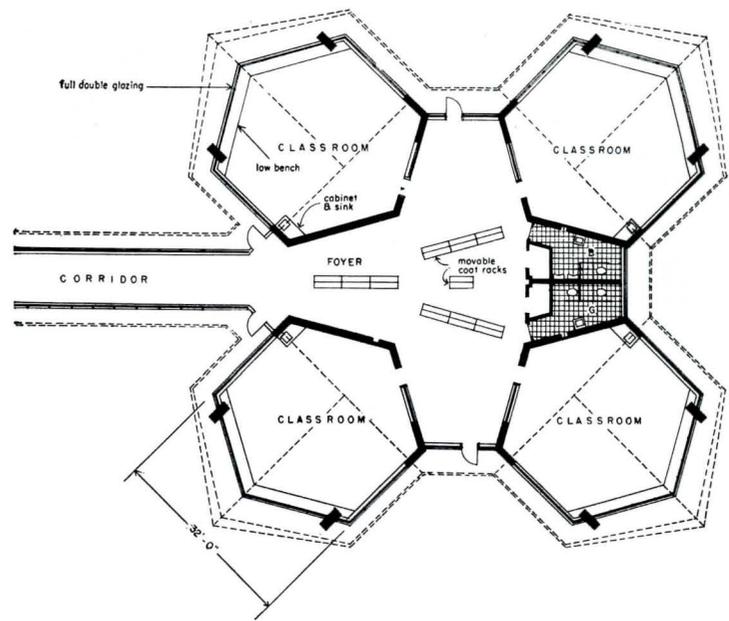
Four-Classroom Unit (1 of 3-5)

Heathcote Elementary School,
Scarsdale, New York (ca 1954)

Perkins & Will, Architects

Plan: "Architectural Forum"

Elaborate auxiliary facilities in campus plan;
glazed corridors a specially attractive feature;
daylighting: 4 sides of hexagon—landscaping



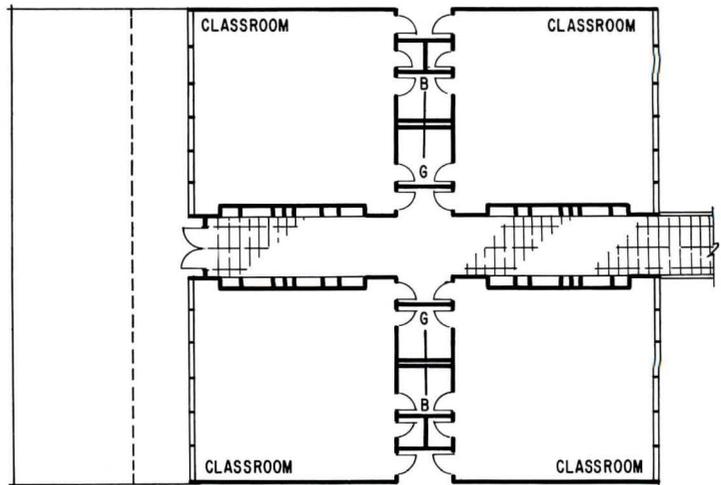
Four-Classroom Unit (1 of 6)

Valley Woods Elementary School (K-6)

Birmingham, Michigan (ca 1957)

Eberle M. Smith Assoc;
Architects

Quads preserve excellent site quality in
large campus plan school
because northern climate units are
connected by glass-enclosed passages

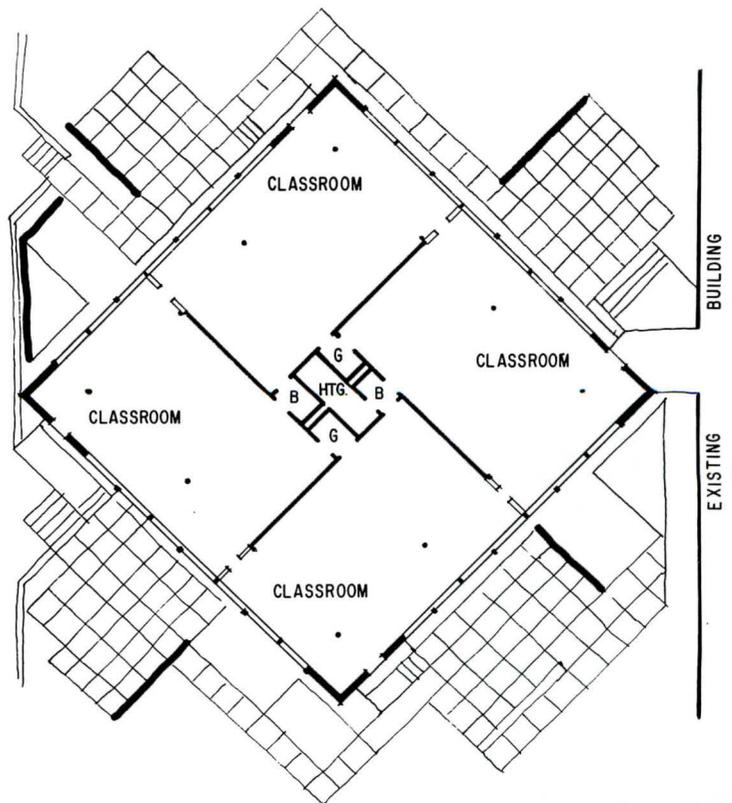


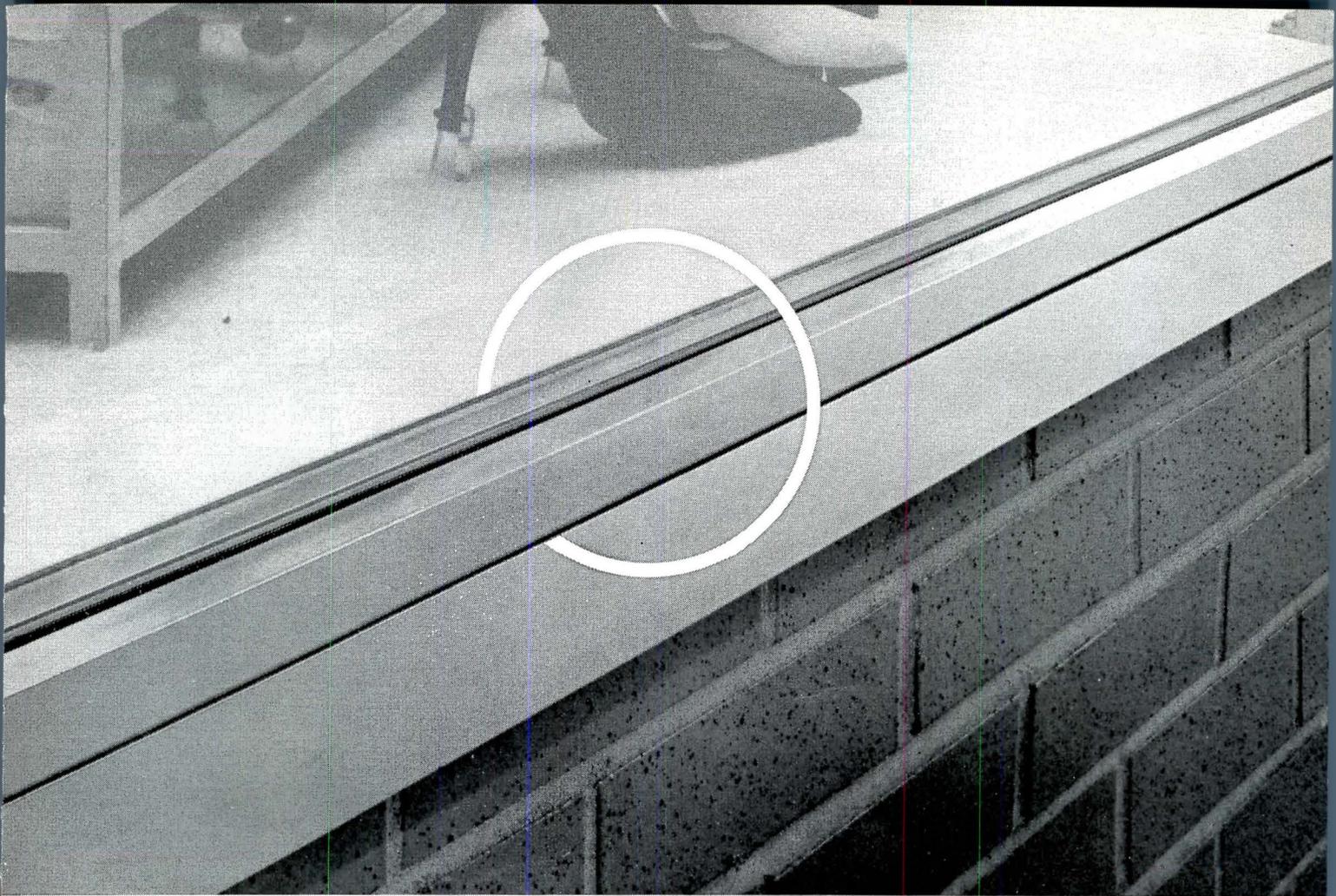
Four-Classroom Addition

Jane Phillips Elementary School
Bartlesville, Oklahoma (ca 1955)

Caudill-Rowlett-Scott, Architects

Free-plan, lift-slab construction;
daylighting bilateral plus toplight

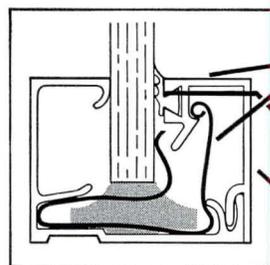




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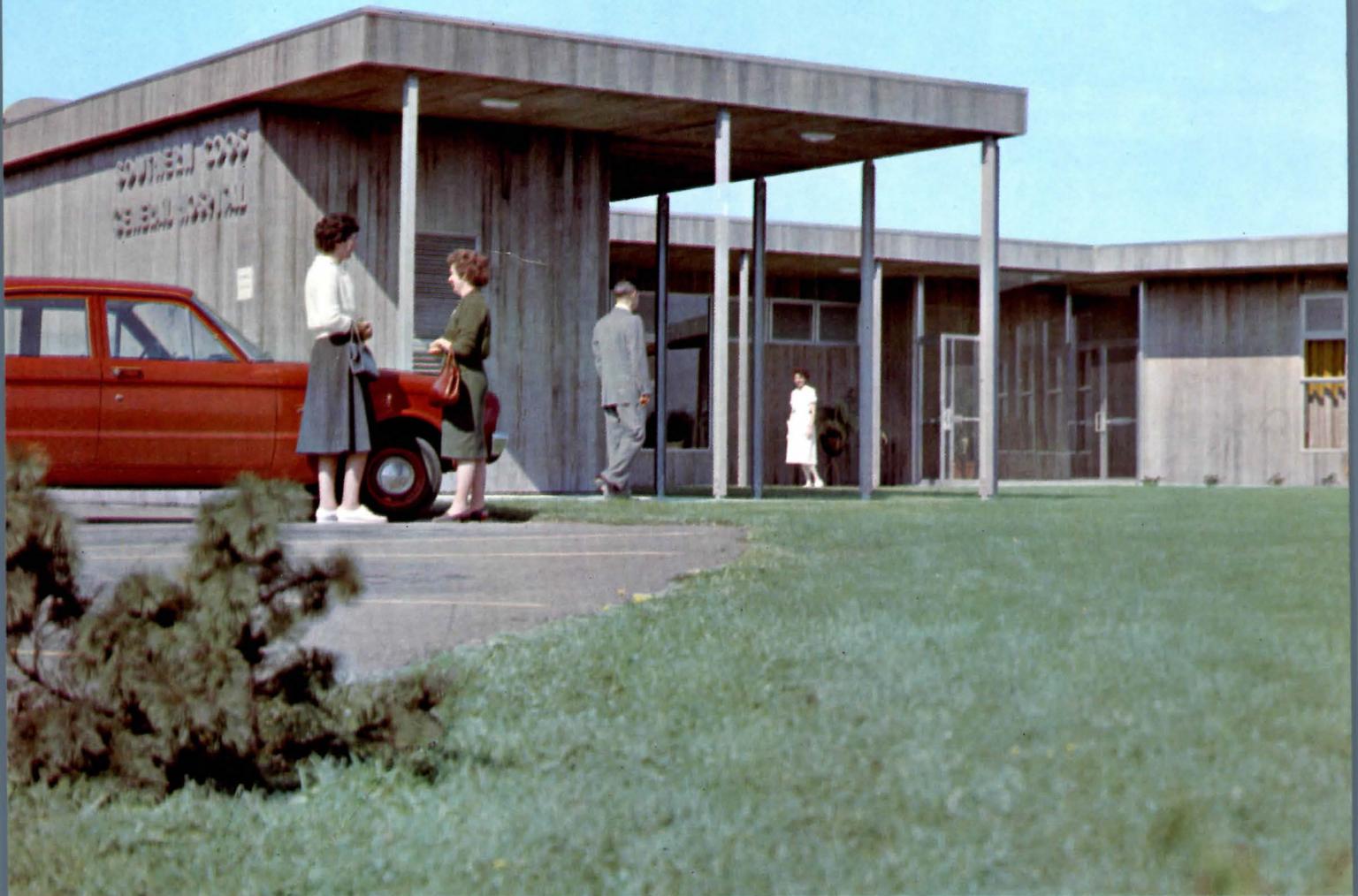
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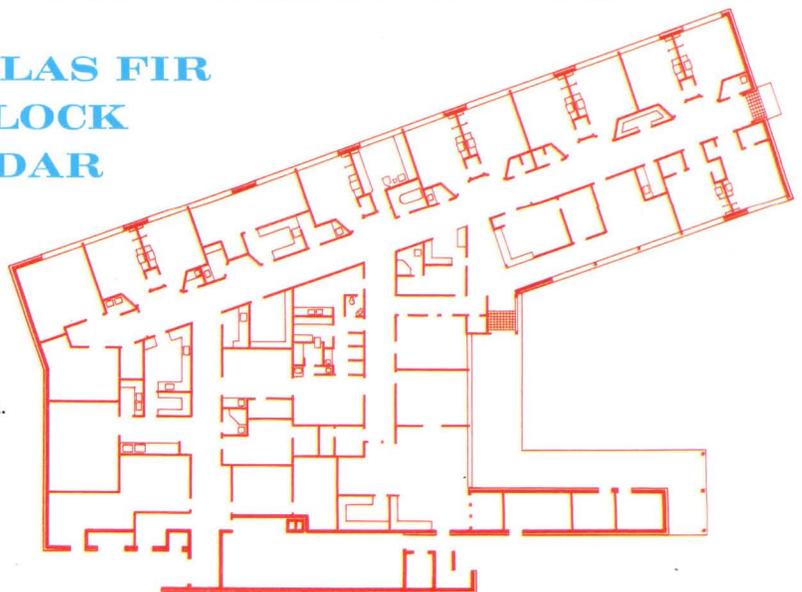
MODERN DESIGN

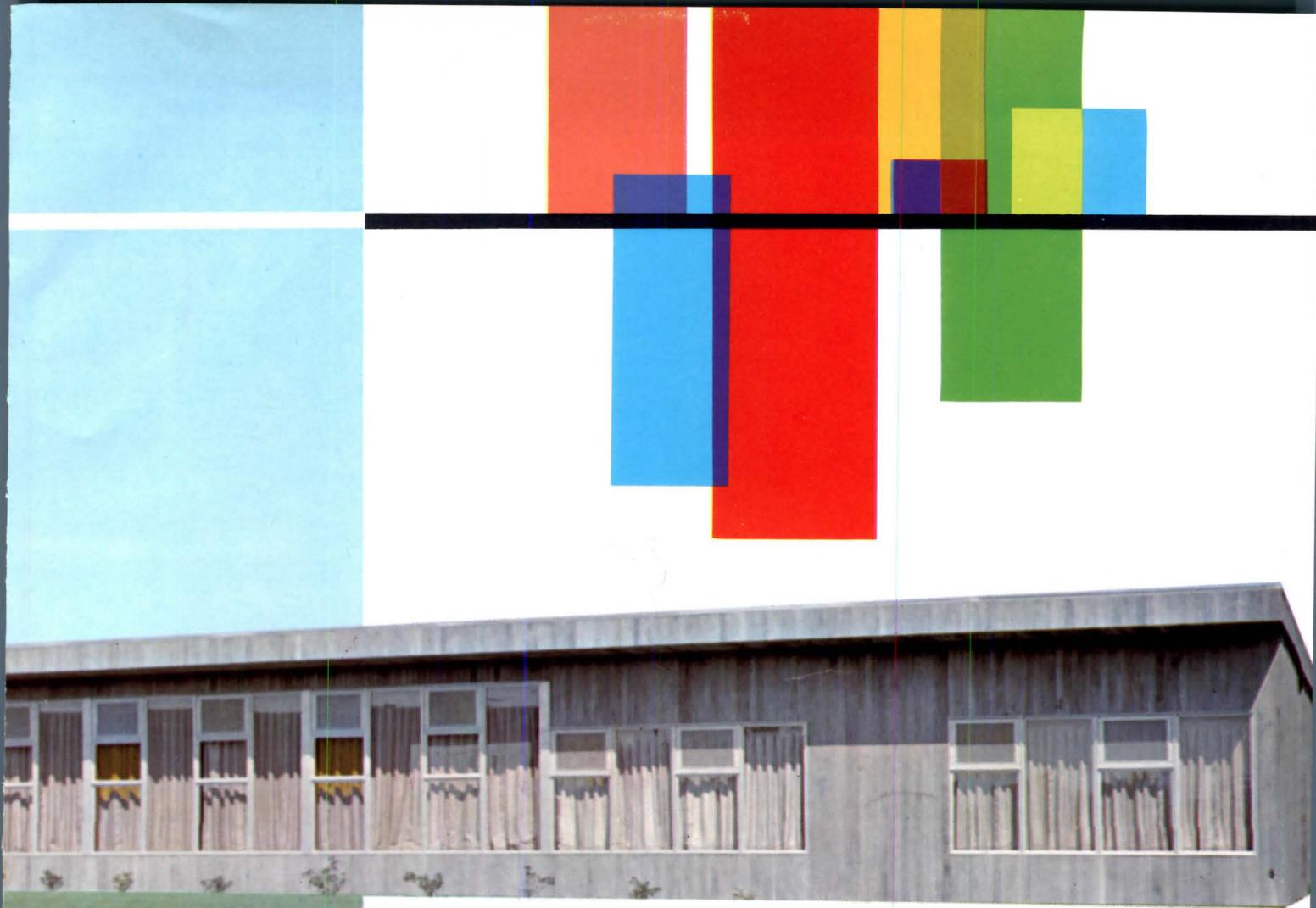
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Architect: HOWARD LEONARD GLAZER, A. I. A.
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Necrology

According to notices received at The Octagon
between December 6, 1961 and January 5, 1962

BRENNER, A. JOHN, Phoenix, Ariz.

CARR, WILLIAM HANNS, Tucson, Ariz.

FULTON, HARRY A., Cleveland, Ohio

GALLOWAY, EUGENE M., Fanwood, N. J.

GILROY, GERALD M., Norwalk, Conn.

HORNPOSTEL, HENRY, FAIA, Melbourne Beach,
Fla.

KENNEDY, NELSON DAVIS, Ellwood City, Pa.

LASSWITH, ALFRED HUGO, Champaign, Ill.

MALKUS, LLOYD, Philadelphia, Pa.

NEEL, W. MORRIS, Arlington, Tex.

NIGGLI, EMIL, Austin, Tex.

RICHARD, WILLIAM J., Columbus, Ohio

SAWYER, HOUGHTON, Piedmont, Calif.

SCHURMAN, JOHN, Ft Lauderdale, Fla.

SHAVER, CHARLES W., Salina, Kansas

SIMPSON, LESLIE B., Kansas City, Mo.

SULLIVAN, MAURICE J., FAIA, Houston, Tex.

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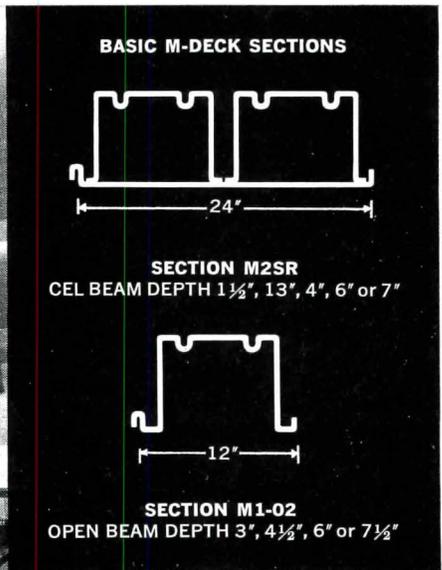
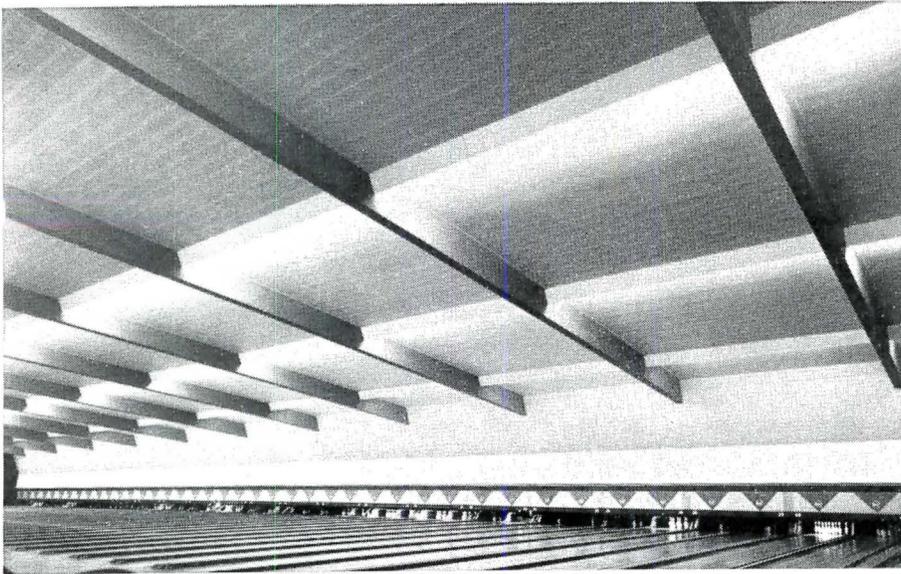
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Calendar

March 3-4: Annual Conference, US Institute for Theatre Technology, New York City

March 6-7: Second Conference on Correctional Architecture, the Octagon, Washington, DC

March 14-15: Reynolds Memorial Award Jury, the Octagon, Washington, DC

March 20: Conference on Church Architecture, Cleveland, Ohio

March 20: Homes for Better Living Award Juries, the Octagon, Washington, DC

April 6-27: Gold Medal Exhibition of the Building Arts, New York City

April 21-28: Historic Garden Week in Virginia

April 24-26: Building Research Institute Spring Conferences, Shoreham Hotel, Washington, DC

April 28-May 13: Maryland House and Garden Pilgrimage

May 7-11: AIA National Convention, Dallas, Texas

May 19-25: Royal Australian Institute of Architects, 1962 Convention, Sydney, Australia

June: Twelfth Annual International Design Conference, Aspen, Colorado

June 11-21: ACSA-AIA Seminar on Architectural Education, Cranbrook Academy of Art, Birmingham, Michigan

June 17-20: American Society of Landscape Architects, Annual Convention, The Americana Hotel, Bal Harbour (Miami Beach), Florida

July 10-13: British Architects' Conference, Coventry, England

July 14-August 24: Thirteenth Annual Summer Architecture Workshop, Instituto Tecnológico de Monterrey, Mexico

July 25-August 2: UNESCO International Conference on Educational Buildings, London, England

(Continued on page 106)

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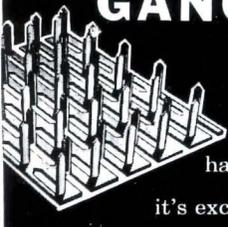
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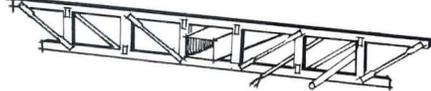
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Calendar (Continued)

1962 AIA Regional and State Society Conventions

March 28-30: Michigan Society of Architects, Sheraton-Cadillac Hotel, Detroit

May 24-26: Indiana Society of Architects, Indianapolis

June 14-16: New Jersey Society of Architects, Essex and Sussex Hotel, Spring Lake

September 27-29: Western Mountain Region, Sun Valley, Idaho

October: California Region, Monterey

October 11-14: Northwest Region, Ocean Lake, Oregon

October 18-20: Pennsylvania Region, Hotel Hershey, Hershey, Pennsylvania

October 25-27: South Atlantic Region, Atlanta

November: Texas Region, Houston

November 8-10: Florida Association of Architects, Hotel Soreno, St Petersburg

1962 UIA Committee Meetings

March 15-26: School Building, Mexico City, Mexico

March 31-April 5: Executive Committee, Charleroi, Belgium

April 24-29: Practice of Architecture, Amsterdam, The Netherlands

June: Public Health, Tel-Aviv, Israel

June 9-15: Town Planning (Urbanism), Athens, Greece

September 5-14: Research, USSR

September 16-25: Training of the Architect, Czechoslovakia

October: Housing, Spain

November: Sport Constructions, Sao Paulo, Brazil

December 16-17: Organization, Paris, France

emphasis

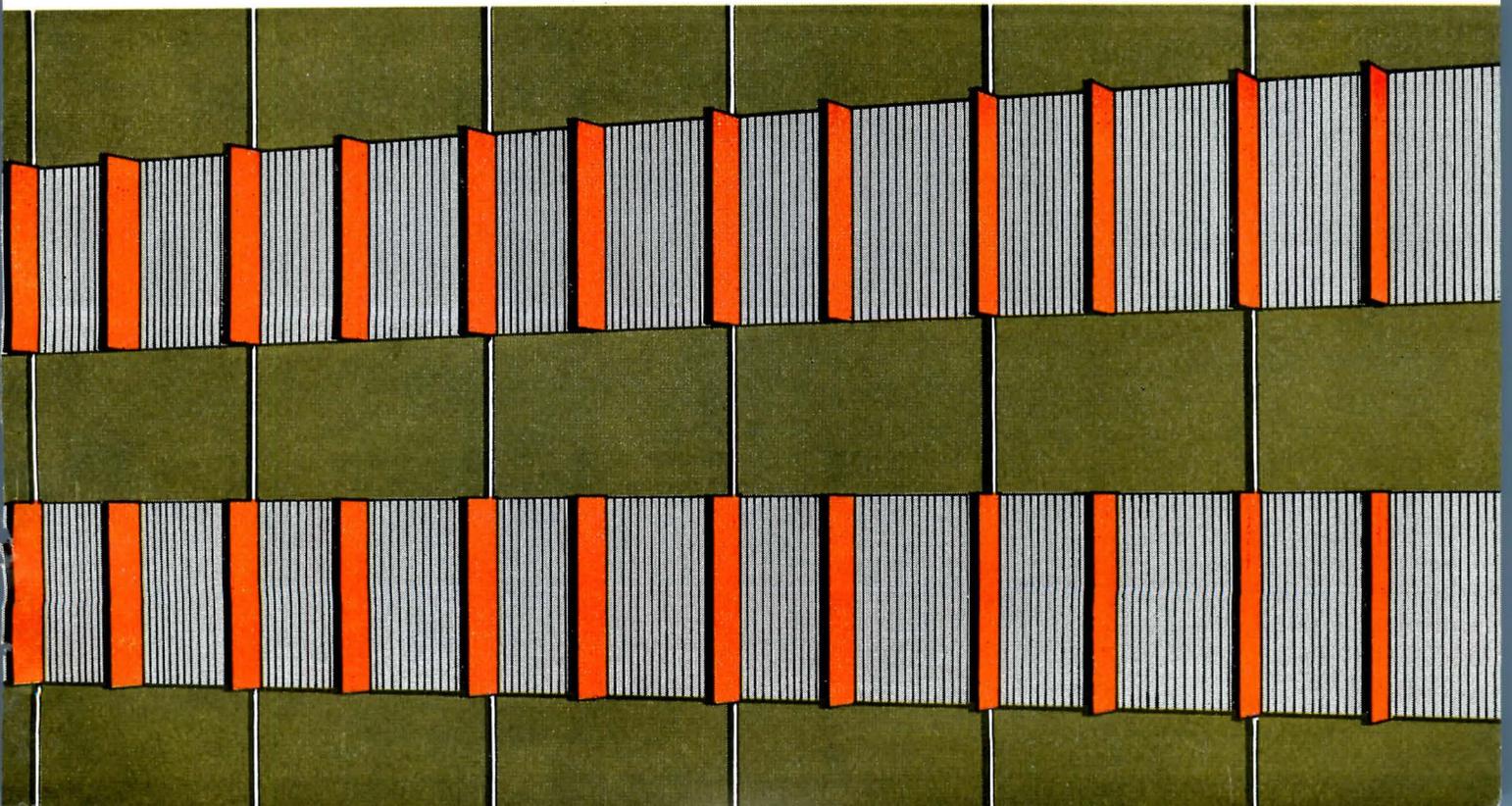
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*From "Expression in Curtain Wall Design" by Peter Blake, A.I.A.

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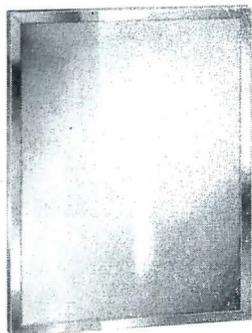


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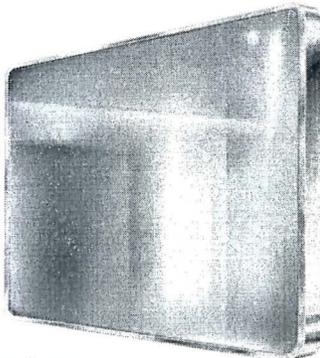
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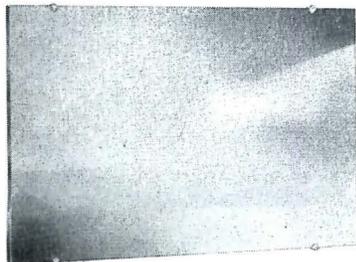


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Technical Abstracts

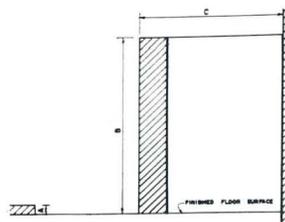
**In the Interest of Plants; or
It Shouldn't Happen to a Dogwood**

*Robert F White, ASLA
2728 Wesleyan, Houston 27, Texas*

Advocates of any contemporary school of design would have us believe that the only criterion which leads to really complete satisfaction of space formation is one of honesty, yet, there is much evidence of faulty design thinking and complete abandonment of reality in the use of plant materials.

Plants grow on a comparatively thin layer of soil over the earth's surface. Plant life depends on five simple factors—soil, light, air, moisture, temperature—only if these are provided in proper relation will plants grow and flourish.

Artificial planting areas so widely used invariably result in built-in deficiencies of factors necessary to plant growth. Consequently, planting areas usually are not worthy of the prominence forced upon them. They present a very bedraggled, un-cared-for appearance, making their neat, functional surroundings look cluttered and untidy. If this unfortunate result is to be avoided, such planting requires expensive maintenance by the property owner. The ultimate solution is often an uninspiring array of plastic plants—if the effect desired can be attained by artificial means it could be arrived at much more easily in the planning stage.



Minimum height of 3" (A) prevents dust from being pushed into plant box; maximum should not exceed 54" for ease in tending (B). Box can be up to 42" wide if accessible from one side only (C); double that if accessible from both sides

Plant roots originate from a primary root which penetrates downward, lateral secondary roots develop; in most plants the entire root system develops in 3 to 5 feet of soil. However, if the plant has a tap-root system, it may, under favorable conditions, penetrate to 20 or 30 feet. Roots cannot penetrate dry soil in search of water; they grow extensively in moist soil but will rot if soil is kept too wet by poor drainage. Horizontal spread of root system is in no way related to diameter of spread of its branches nor its height. Root growth may be limited by crowding, heredity, or general environment. Particular requirements may be met by moving prepared soil in necessary quantities to any desired location. Nebuchadnezzar proved this with the Hanging Gardens of Babylon but there are no traces of his masterful feat remaining.

(Continued on p. 110)



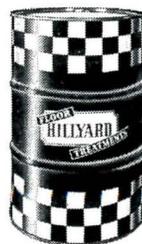
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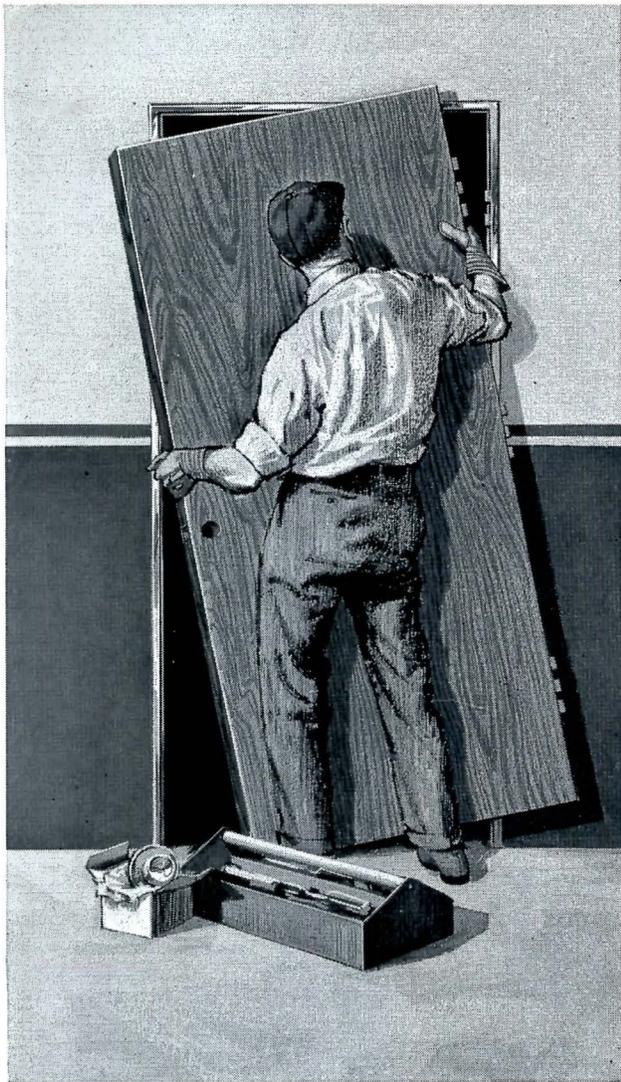
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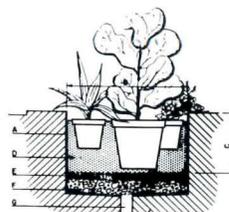
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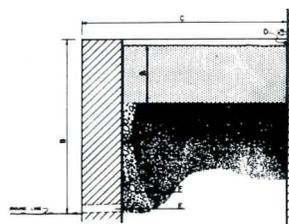
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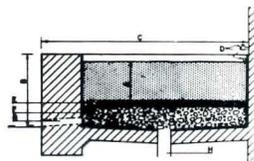
Technical Abstracts (continued)



Cross section shows (A) watertight material; (B) width (must accept maximum-size pot plus additional for desired planting effect;); (C) depth—(must accept deepest pot with rim 1" below edge;); (D) space between pots contains peat-moss, vermiculite or similar material; (E) layer of charcoal; (F) 3" of coarse gravel; (G) drain



Bottomless exterior plant box detached from building. (A) Minimum 12"-18" of prepared soil. (B) Maximum height of 54". (C) No maximum. No excess water, such as roof drip, should get into area. (D) Sill cocks or built-in automatic watering device. (E) Weep holes. (F) Crushed rock. Channel at weep holes only



Exterior plant box with bottom a part of building. (A) Minimum 12"-18" of prepared soil. (B) Maximum height 54". (C) No maximum, except as noted above. (D) Sill-cocks or automatic watering device. (E) 2" charcoal. (F) 6" coarse gravel. (G) Weep holes. (H) Drain for each 200 sq ft, connected to storm sewer

Answers to questions of use of plants in planning do not lie in past practices nor in present design clichés. In our zest for unity between house and site, we do not stop at opening the outdoors to view, but we try to "bring the outdoors indoors", and often the resulting picture is distorted, with New York or Iowa outside, and the Caribbean inside. But the most serious problem is the constant attention planters require. In some areas it is possible to hire experts to keep planting at its best at all times by constant transfer of weakened plants to greenhouses for rejuvenation.

Therefore, if interior planting areas must be used, they should be designed as pot receptacles rather than units of soil in which plants are planted directly.

A similar practice is that of creating planting areas under extensive roof overhangs—here again, planting, robbed of light and natural moisture, must be watched constantly and given the aid it needs in order for it to survive. Quality of plant growth is inevitably the result of its care and maintenance.

Sun Self-Serv Drug Stores specify TERRAZZO

for new Supers

Study by Chicago-area chain proves that asphalt tile costs 6.8% more, vinyl 19.8% more, over 10-year period.

Terrazzo floors will be used in the chain of super drug stores planned by Sun Self-Serv Drug Stores, a division of General Stores Corporation. Five of these stores with a total floor area of 40,000 square feet have already been opened in the Chicago area.

The decision to use Terrazzo was the result of a study comparing total cost, including installation and maintenance, of Terrazzo, asphalt tile and vinyl tile floors in drug stores. Savings of 20c per square foot with Terrazzo were revealed. Later years will show an even greater saving, the Sun Self-Serv Drug Stores' study indicates, because asphalt tile must be replaced every five years, while Terrazzo will last the life of the building.

Results of the study are summarized below:

Comparison of Total Cost of Terrazzo and Asphalt Tile Floors Over 10-Year Period

ASPHALT TILE FLOOR*

Total installation cost per sq. ft. for 10 years	.62
<i>(average original installation cost of \$.31 per sq. ft.; must be replaced every 5 years)</i>	
Total cleaning cost per sq. ft. for 10 years	1.70
<i>(total daily cleaning cost per sq. ft. of \$.000466 x 365 days x 10 years. Includes daily cost per sq. ft. of \$.000366 for labor, \$.000100 for supplies)</i>	
Cost per sq. ft. of stripping, waxing, buffing of floor every 90 days for 10 years	.80
<i>(cost per sq. ft. of \$.02 x 4 times yearly x 10 years)</i>	
Total cost per sq. ft. including installation and maintenance over 10 year period.	3.12

TERRAZZO FLOOR

Total installation cost per sq. ft. for 10 years	1.40
<i>(average original installation cost of \$1.40. Replacement not required)</i>	
Total cleaning cost per sq. ft. for 10 years	1.46
<i>(total daily cleaning cost per sq. ft. of \$.000399 x 365 days x 10 years. Includes daily cost of \$.000366 for labor, \$.000033 for supplies)</i>	
Cost per sq. ft. of stripping floor 3 times in 10 years	.06
Total cost per sq. ft. including installation and maintenance over 10 year period.	2.92

*Vinyl tile used in some Sun Self-Serv Drug Stores has a total cost over a 10-year period of 38c per square foot more than asphalt tile and 58c per square foot more than Terrazzo.

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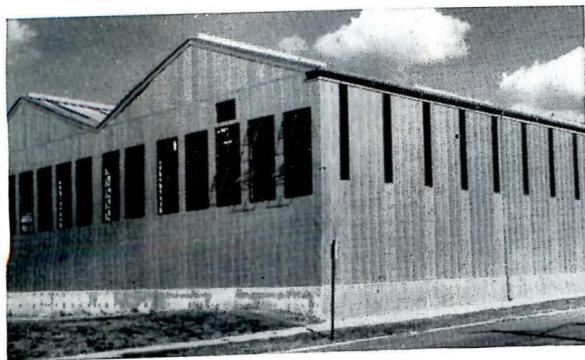
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◀ Unretouched photograph of a panel of Armco ALUMINIZED STEEL Type 2 exposed in an industrial atmosphere for 20 years. Metal was cleaned of surface dirt to show condition of aluminum coating that still protects the base metal. (Panel photographically enlarged about 30%.)

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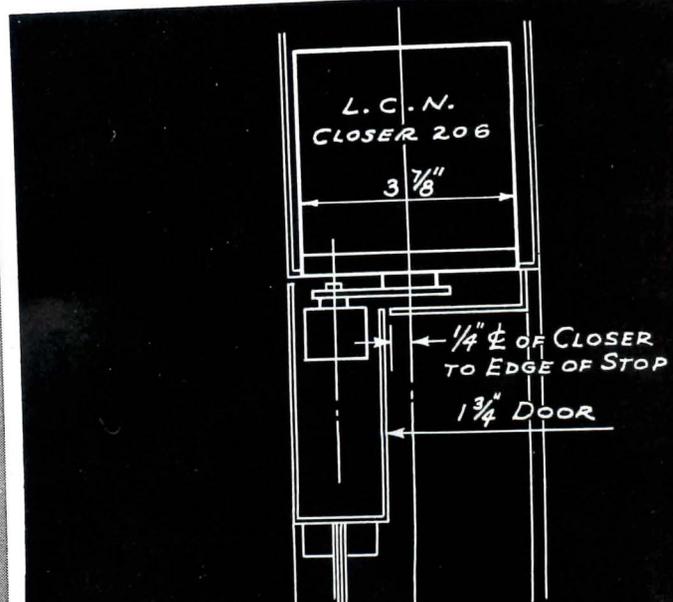
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