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See Sweet’s Architectural File—Sections 7a, 13e, 16a, 16d, 21.
Tile increases in popularity with architects for use on outdoor as well as indoor walls. The architect for this school has made effective use of one of tile’s advantages—random color. By avoiding a repetitive pattern, he has added continuity of interest to the ageless life of tile.

New ideas that significantly affect building design are rare—and important. The Supervisory DataCenter control panel perhaps represents such an idea. For by completely centralizing air conditioning control, it shows the way to similar economy and integration of many another mechanical function. Conception, housing and installation of the DataCenter involve creative design factors that are of first concern to the architect. Your local Honeywell man has full details.

Path Ideas that significantly affect building design are rare—and important. The Supervisory DataCenter control panel perhaps represents such an idea. For by completely centralizing air conditioning control, it shows the way to similar economy and integration of many another mechanical function. Conception, housing and installation of the DataCenter involve creative design factors that are of first concern to the architect. Your local Honeywell man has full details.

Visuallyized at right is a DataCenter as it might be integrated into the design of a modern airport terminal. On public display, it oversees comfort, gives the engineer a constant picture of air conditioning system operation, provides major operational economies. For passengers, the panel might show weather conditions in major cities. A DataCenter similarly displayed is installed in the Queen Elizabeth Hotel, Montreal, Quebec. Architect: G. F. Drummond, Chief Architect, CNE; Engineer, N. S. B. Watson, CNE.

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BOUQUETS

EDITOR, Journal of the AIA:
This is to congratulate you on the August issue of the Journal.
As a person who earns his living in the communication arts, I think it is outstanding.
We have recently become subscribers to your magazine, since we are public relations counsel for several architectural and engineering firms in the Chicago area. I must say that we find it a source of much helpful information.

ALBERT CARRIERE
President, Carriere and Jobson, Inc.
Chicago, Ill.

EDITOR, Journal of the AIA:
Mr. Grady Clay's "Plenty of Action" in the September issue was a refreshing piece. It is refreshing because it shows that we have more to build on and to inspire us in this country than we realize.

It is curious that his suggestions seem new to us. Fifty years ago they were an accepted part of the American Renaissance men such as Daniel H. Burnham, Thomas Hastings, Arnold Brunner and Charlesollen McKim turned to them instinctively. In more recent time so did Edward H. Bennett and Arnold Brown, Jr. It is one of the disastrous consequences of present day Picturesque Secessionism that they were forgotten and only now are being rediscovered.

He mentions the new parking garage in the Vieux Carré. It is more than a brick wall that conceals the automobiles; it is a traditional facade of New Orleans designed by the well-known firm of Koch & Wilson. They are also the architects of Brennan's Restaurant, to be found in the same Vieux Carré. Richard Koch and Samuel Wilson, Jr., unlike so many, are unafraid of doing traditional work. Thanks to their courage and to their faith in the classical vision they are responsible for saving the heritage, at least architecturally, in New Orleans.

HENRY HOPE REED, JR.
New York City

MORE ON CLEVELAND

EDITOR, Journal of the AIA:
Mr. William B. Tabler's convention address on Building Codes was in general very good. However, he reveals the typical architect's basic ignorance of the action of fire in buildings and of the reasons underlying code provisions. Transoms in hotel bedrooms are prohibited, not to prevent drafts, but to prevent smoke, heat and toxic gases from entering the rooms and killing the occupants. Also, doors to fire stairs open to the air (1) to provide quick escape from the fatal atmosphere within, and (2) more important, to prevent the stair tower from becoming smoke logged when doors are opened into it. Drafts are ordinarily not a serious problem, and a clean burning well ventilated fire is usually less danger-

(Continued on page 10)
Editor, Journal of the AIA:

Just to let you know that 'The Editor's Asides' is enjoyed by your friends and relatives in Cleveland.

Yesterday I sent Dick Outcalt a suggestion (he's the AIA Chapter President) that we take the lead in forming a planning association in which various portions of Cleveland would be assigned to various architects for study. Our Planning Commission could also do this job but it doesn't, besides this approach would give the Commission an organized local group to work with. This is the very least that we should do to gain a better city for ourselves.

This Association idea will not eliminate the many existing examples of poor housekeeping that you saw on your tour, however. We shouldn't even hope for that, if we are going to be realistic. I think there are just as many slovenly people in Shaker Heights as there are on St. Clair, it's just that in Shaker Heights the housewife can afford to hire someone to clean her house for her, and paint her house, etc. Unless you provide maids and maintenance men to serve each family in the depressed areas, you can't hope for improved housekeeping, in a country like ours.

We have too many people who are living-up (watching TV, drinking away their time, reading lousy escapist magazines, gossiping) to hope that things will get better without subsidizing a veneer of beauty on our slum areas.

So when you have a choice between a veneer of beauty and a genuine slum, I'll take the genuine product. If you must have immediate streets, pretty amages, you will have to go to Norway, Sweden, or the Netherlands where the inhabitants are of common descent. Perhaps in a hundred years we will have assimilated all of the various groups in this country into a blur of standardized behavior, and our slums will have become fairly attractive and our heights have reduced their standards accordingly.

That, basically, is the struggle we face.

Each individual struggles to earn his family's share of the wealth, and at the same time his conscience tells him to contribute some of his wealth to backward groups and to integrate with all groups. If we admit that it will eventually result in a single hybrid specie, with a standardized response to every situation, our approach to the future (and the present) would be very simple. We could begin forgetting about our family interests and concentrate on the economic integration of all groups. However, we cannot accept the single specie concept, and will continue to cope with the conflicting interests that confront us.

But then, life is a struggle by definition.

Harold B. Cain
Cleveland, Ohio

Editor, Journal of the AIA:

I have just finished reading your School Lighting—From an Architect's Viewpoint included in the recent School Plant Studies, and I wanted to pass on the word that I again enjoyed the manner in which you "fabricated" this speech and written presentation. Since I had the opportunity to hear this talk and have had the pleasure to read and re-read, let me say that it is both full of humor and seriousness. I have enjoyed it for both of these qualities. How often we forget the relativity of such things, and most certainly I agree with you that "the building is not an environment until you include the conditions within it and nearby."

Richard L. Featherstone
Birmingham Public Schools
Birmingham, Michigan

TO THE TECHNICAL EDITOR

Editor, Journal of the AIA:

This is to acknowledge with thanks and pleasure receipt of your four-page bulletin, "School Plant Studies."

Your editorial comments are like a breath of fresh air. I was very glad to read the thoughts of someone who has not lost sight of the forest because of the trees, while at the same time giving the "trees" their due value.

In short, let me congratulate you on a wonderful sense of proportion.

Hans W. Logan
Holophane Co., Inc.
New York, New York

Editor, Journal of the AIA:

I have just read your paper on school lighting in the recent "School Plant Studies." My congratulations to you—if we can't stop people in this headlong rush to reduce everything to statistics, charts and formulas—we are all very certainly going to end up with cube shaped heads of pretty much the same dimensions.

It seems to me that your talk was extremely well put—soft enough to be palatable—but with some extremely solid meat—and whether or not you realize it, I believe that one sentence of yours summarizes more succinctly than anything I have read in a very long time our whole problem today: "selection and integration of design elements is still the creative task."

Please keep working at this as you have—for my own part the most effectual thing I have accomplished to date was a recent suggestion to a psychologist that perhaps the rats used in a certain study which he was quoting very dogmatically—may possibly not have been entirely normal—perhaps even a little psychopathic!

Angus McCallum
Kansas City, Mo.
In an effort to "infuse a little 'grass roots' public relations into the architectural profession," Peter Kump, AIA, of Menlo Park, California, has sponsored an AIA Babe Ruth baseball team.

Kump first became interested in the little league activities through his son. He felt that sponsorship of a team would be an excellent way to communicate with future clients and potential architects.

He felt also that an AIA-sponsored team might interest the boys in architecture and would wake up the town to the fact that architects aren't a bunch of stars-in-their-eyes artists—besides making a worthwhile contribution to the life of the community.

The organization of a baseball team is no small task, but the boys, ages 13 to 15, responded eagerly and in no time the AIA seal appeared on the sand lot.

Special uniforms were designed, equipment assembled and a coaching staff was rounded up in time for the opening of the season.

The result of this enthusiastic effort was a team that walked away with the local championship and a trophy almost as tall as some of the players.

According to Kump, this is the first baseball team in the world to be sponsored by architects. The only disappointing fact was that so few architects from the area turned out to root for their own team.

However, with the good publicity the team received in the local press and in the Northern California Bulletin, there will undoubtedly be a better turnout among the architects when the season opens next spring.

The Journal offers its congratulations to Mr. Kump and his team of champions. What a great thing it would be if other individuals and chapters all across the country would follow Peter Kump's lead with activities similar to the AIA Babe Ruth Baseball Team.

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The Illinois Institute of Technology has announced the retirement of Ludwig Mies van der Rohe, director of the department of architecture.

Cited as one of the world's foremost architects, van der Rohe is one of the founders of modern architecture, and has been a major force in the development of modern design. Along with Wright and Le Corbusier, he has defined architecture for the technological age.

A naturalized American of German birth, he had established an eminent reputation as a practicing architect and as the last director of Europe's post-World War I Bauhaus school before he came to the United States in 1938 to direct what later became the architectural school of Illinois Institute of Technology.

Reginald F. Malcolmson, a native of Dublin, Ireland, has been appointed acting director of the school.

Architecture Worth Saving, an exhibition of important buildings in various parts of the country recently destroyed, doomed or delivered, opened at the Museum of Modern Art on October 8 and will be on show until December 15. The purpose of the show is to demonstrate the rapidity with which America is losing much of its architectural heritage and to suggest what to save and how to save it.

The show was organized by the Museum in collaboration with the National Trust for Historic Preservation and the Architectural Forum.

This show is scheduled for exhibition in the Gallery at The Octagon in March, 1959.

On September 26th the Committee on Preservation of Historic Buildings held a full meeting in the Board Room of the Headquarters Building. Chairman Earl J. Reed, FAIA, is at the extreme left in the photo above; third from left is Vice Chairman Charles E. Peterson of the National Park Service. Included are three who came to speak to the Committee: Miss Virginia Daiker of the Library of Congress toward the right; behind her is Cecil D. Elliott of the North Carolina State School of Design; and left of him is Dr. Richard H. Howland, President of the National Trust for Historic Preservation. Mrs. Helen Bullock, of the National Trust, also addressed the Committee.

Each Committee member reported on Preservation progress—or lack of it—in his territory. One of the most interesting stories brought out was the highly successful employment of students and young architects to make measured drawings of old buildings. Trained in contemporary design as they were, once they started digging into the old buildings and saw their rugged and honest construction, and the grace and good taste of their decoration, they built up great enthusiasm for the work, many of them continuing to carry it on as a hobby after their period of employment was over.

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MEMBERS OF THE PRESERVATION COMMITTEE MEET AT THE OCTAGON.

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Write for Bulletin No. 158

JOURNAL OF THE AMERICAN INSTITUTE OF ARCHITECTS

AMERICAN ARCHITECTURE:

Down to Skin and Bones

By ALLAN TEMKO

Mr. Temko is best known as the author of "Notre Dame of Paris"
(1955), an absorbing story of one building and the culture which
produced it. Here, Mr. Temko states that one style of architecture — nude
of body, puritan in spirit — has swept the country in the last fifty years.

Many a business executive, looking up from his

copy of Time recently, must have paused to con­
sider a statement attributed to the president of the
Connecticut General Life Insurance Company. This
gentleman, whose firm had invested some twenty
million dollars in a new headquarters building, pro­
tested wistfully —in the manner of Jane Austen's
Mr. Bennet, as if he expected no one to listen—that
he would have very much liked a fireplace in his
private office, but that Mr. Gordon Bunshaft had not
permitted this homely touch. Since the building's
cost included many expenses not ordinarily seen in a
commercial construction project, such as a con­
spicuous outlay for sculpture. Mr. Bunshaft—chief
designer for the architects Skidmore, Owings and
Merrill—must have had other reasons than economy
in mind when he denied his client the comforts of the
hearth.

His main reason for refusing was in fact an es­
thetic one. A previous Bunshaft creation, Lever
House in Manhattan, had been adversely criticized
because of the traditional interiors of its executive
suites; and Mr. Bunshaft was not eager to arouse
similar criticism again. A fireplace, presumably,
would appear illogical in a building otherwise heated
(and cooled) by faultless modern engineering. A
chimney, yielding wood smoke to the heavens, might
mar the neat horizontal lines of a monument since
"one of the ten buildings in America's future." Quite

apart from the question of why precisely ten build­
ings must have foremost places in the future of this
country, one may profitably ask what our future is
going to be if its architecture is to be dominated by
the style which is being increasingly associated with
the name of Skidmore, Owings and Merrill.

The Connecticut Life Building, which stands
in gracious rolling country near Hartford, is only one
of many ambitious designs to come from a 1,000-
man office which in recent years has achieved a
prominence in American architecture comparable to
that once enjoyed by McKim, Mead and White.

How far the taste of this country has progressed
in a half-century, however, can be seen strikingly in
the differences which exist between Skidmore,
Owings and Merrill's dormitory at Ithaca College, one
of many large projects executed by McKim, Mead and White.

Compared with the clean, weight­
less optimism of the Academy, so modestly placed
at the foot of the Rockies, the ungainly and im­
practical buildings which disfigure Morningside
Heights come off rather badly. The University, in
fact, might well have invited S.O.M. (the abbrevia­
tion current among architects) to design its new
students' center, not only to be sure of getting a
more handsome structure than Ferris Booth Hall
promises to be, but also to provide a sense of his­
torical continuity which is proper to the academic
mind.

JOURNAL OF THE AIA
For the S.O.M. "style"—and it will be seen shortly that it is not their style alone—is distinguished, among its other virtues, by a perfection of proportion and a purity of line altogether classical, or neo-classical, in mood. Classical formalism does not necessarily require pilasters and pediments, and, in matters of pure modular design, the Connecticut Life Building and the Air Academy classroom structures are not to the Force of Versailles and the Court of the Invalides.

Basically classical forms have merely been stripped of all decorative ornament; rigid proportions remain, but the rich surface texture of a Renaissance or a Baroque building is removed. No projecting cornice, no carved frieze, no proof of light and shade and play with it. Instead, the building is sealed by an expanse of glass, held in a graceful metal skeleton. The S.O.M. facade has the smoothness—really, the sleekness—of cellophone; and indeed, it has been called "packaged" architecture. The firm delivers visibly similar designs to Radnor, Pennsylvania, and Burlington, Vermont, and Monterey, California, with as little apparent effort as is spent distributing automobiles, refrigerators, and toasters.

The products all bear some resemblance to one another. All are, as it were, of basic head, organization and modern technology. All make claims of virtual universal utility. An S.O.M. building, like an Edsel or a Toastmaster, can function almost anywhere in the United States, and in much of the rest of the world as well, in any size or model. As Frank Lloyd Wright remarked, these structures "are as good by the foot as by the mile." Moreover, S.O.M.'s favorite materials, like those of General Motors, are metal and glass, which are singularly resistant to human or natural imprint. They do not weather, as does stone or wood. They are insect-proof, and moth-proof too if properly treated; and, like most industrial products of high quality, they take an infernally long time to wear out if they are not neglected.

As does an automobile, an S.O.M. building suggests that it has almost nothing to do, personally or regionally, with the people who use it. If the same basic structure is found suitable in cities as profoundly dissimilar as Chicago and San Francisco, there is the alarming implication that the occupants are as interchangeable as the buildings. Mr. Wright—and it is tempting to quote him often in this context—is long on ideas on the subject—also speaks darkly of "boxation"; and in a sense these buildings resemble nothing if not ingeniously constructed boxes of steel and aluminum, in which smaller boxes are nested and called rooms.

Now, refinement is a dangerous thing. Gothic art perished in excessive refinement after a period of unparalleled structural vigor. For once refinement existed for its own sake, it becomes banalism. In Gropius' early work, refinement was at its most spontaneous and imaginative. The robust massing of elements, the liberal display of brick and other warm materials, the free planes of the roofs, especially in To the Office building erected for the Cologne exhibition of 1914, reveal the bonhomie of pre-war Germany that was to vanish forever in the next four years.

**AFTER THE WAR, IN AN EXHAUSTED AND IMPERVIOUSIZED NATION, FUNCTIONALISM WAS CONTINGENCY AND EVOLUTION FROM"

In America the style has undergone an uneven development beginning with iron-framed commercial buildings such as the chaste and unassuming structures of the St. Louis waterfront, or the old Harper & Brothers Building in New York. It reached an early culmination in the Chicago and Johnson building cloaked in glass remaining alive in this country; Willis Polk's Hallidie Building in San Francisco (1917), for all its "art nouveau" embellishments—perhaps because of them—can match its lively and cheerful facade against anything going up in forty years later, including the Zellerbach Building by S.O.M. and Hertzka and Knowles.

In Europe, a parallel movement was under way before the turn of the century. The sinuous iron and glass facade of Victor Horta's Maison du Peuple in Brussels was constructed in 1897, and the Glasgow School of Art by Charles Rennie Mackintosh, with its great oblong studio windows, in 1898-1899. Before 1914, in the work of Walter Gropius, appeared a succession of buildings that displayed veritable curtain walls of glass and metal and spiral construction, completely enclosed in glass, and enriched with great precision and elegance. Here, last, was a European rationalism—quite distinct from the American—which took full advantage of the lightness and grace made possible by modern materials and technology, and employed them in restrained yet monumental combinations. But the consequence of Wright's work, first published in Germany in 1910, was missing, as was the sheer poetic control of Sullivan's. In their place appeared a new element of re-definition.

**THE DESCRIPTION FITS THE STRUCTURE AS GODDESSES TO THE SKY:**

The description fits. The structure was reduced—refined down—to its skeleton and outer surface. It became, to use Mies' phrase, a "skin and bones" architecture. These geometrically perfect buildings, whose smooth plane surfaces are unbroken by any projection, depend on proportion and fastidious workmanship alone for effect. The entire campus is organized on a standard 24-foot module, and Mies has gone to great pains to design his buildings to the great bays of glass and of impeccably laid brick. As "skin-and-bones" architecture, conception and execution are faultless.

Enough has been completed, however, to have exercised a salutary influence on recent American architecture. These low, interrelated oblong forms, whose smooth plane surfaces are unbroken by any projection, depend on proportion and fastidious workmanship alone for effect. The entire campus is organized on a standard 24-foot module, and Mies has gone to great pains to design his buildings to the great bays of glass and of impeccably laid brick. As "skin-and-bones" architecture, conception and execution are faultless.

And yet there is something phantasmal about these geometrically perfect buildings. In their mathematical precision, they lack heart. A calm prevails which is not repose—certainly not the repose of an Oxford quadrangle or of Jefferson's University of Virginia—but which seems a willful indifference to human values. There is no softening of line or texture, not even a trace of romanticism.
ture, but only endless repetition of right angles, and of steel, glass, and brick. The chapel, like the other buildings, is rigidly rectilinear, and indistinguishable from the laboratories. All, even the strict staircases, has been subjected to the same puristic discipline. Here is structural refinement carried to almost fanatical length. One yearns to see an irregular brick, but every brick is perfect. There is no surprise—one of the most lovable resources of architecture; there is only predictability.

Mies’ intricate architectonic game of chess has given way, in the work of several Americans, to checkers. The American conception has generally been less forbidding, and in Eero Saarinen’s sensitively organized General Motors Technical Center of 1951, it has become almost hospitable. A cheerfulness, in contrast to the monastic severity of the Institute, characterizes the Technical Center, which surely would never have been designed as it was, had Mies not tackled a similar problem a decade earlier. Through warm use of color, including lovely burnt orange and blues, and also thanks to a central lagoon as formally resplendent as the foundations of Versailles, Saarinen has humanized the rectilinear scheme. The idea for a cloister remains, but it would seem now to belong to merry Benedictines, rather than to grave Trappists. And a domed central structure, which might have given a note of coherence to the University, provides the group with increased symbolic meaning as a research center.

Skidmore, Owings, and Merrill in their Air Academy have also made one significant departure from Miesian doctrine. The cadet chapel—a building which will stand at the center of the Court of Honor, and which has received considerable attention from Congress as well as from the public—will not be an oblong box. It is to be an expressionistic creation, meant to symbolize, against the incomparable background of the peaks of the Rampart Range, man’s quest for the unknowable which persists, perhaps more strongly than ever, in this age of an expanding universe.

The proposed design reveals the full measure of S.O.M.’s technical adroitness. A line of tall, pointed tetrahedrons in shining aluminum, very much like a line of swooping seagulls, stands on end, provides the structural envelope of the chapel. The bays between these aspiring ribs of metal will be filled, from top to bottom, with glass. The resemblance to Gothic architecture is obvious. The folded aluminum structure recalls the action of flying buttresses, soaring upward from either side of a great nave, and at last achieving complete verticality in pinnacles and spires. The interior space, with its immense sheets of tinted glass, suggests the Sainte-Chapelle in Paris. But Gothic aspiration, so confident as it lifts dynamically towards Heaven, so robust and masculine for all the openness of the stone frame, is here rendered neater, lighter, rather than triumphant, and lacking in sureness.

In another respect, too, the design is open to question. Like the Sainte-Chapelle again, the cadet chapel is divided into two levels. In the medieval structure, significantly, the upper room was reserved for the King, his family, and the court; the much less impressive lower room was used by retainers. The soaring main space on the upper level of the cadet chapel is reserved for the one thousand men who will attend Protestant services. Below, in rooms which are spacious, but which lack the drama of the upper chapel, are a Catholic chapel with a capacity of six hundred, and a Jewish synagogue seating one hundred. Would it not have been more logical to provide three separate buildings for the three faiths, each expressing its uniqueness, and at the same time a fraternal relationship with the others? This was done, with quiet charm, at Brandeis University, in three chapels arranged about a small pool by Harrison and Abramovitz.

Such are the human problems which remain in architecture, and which will always remain, no matter what technical facility a machine civilization gives to the architect. For an American, the building of St. Mary’s Catholic Church, the Anglican church, of the First Unitarian Meeting House in Madison, Wisconsin, whose winglike roof extends upward too, but with a gesture as tranquil as hands folded in prayer, what sort of religious structure Frank Lloyd Wright might have designed for the Academy. His chapel at Florida Southern College, in Lakeland, perfectly at home in the sun, with a monumental sense of permanence, but with a sense of quiet intimacy as well, in which light filters down beautifully through its stained glass-box residence, placed on stilts in the midst of nature as if it despised contact with the earth, such as Mies’ Farnsworth House in Illinois, Wright has provided his clients, from the days of his early Prairie Houses until today, with an admirable feeling of shelter and local truth. Few of his houses could be moved to other sites without fundamental modifications in design and structure. His own Taliesen homes in Arizona and Wisconsin, placed in utterly different terrains, are quite naturally utterly different houses, each in harmony with its surroundings, hugging the earth, at one with it, sinking roots or shooting out tendrils in the manner of living plants, on friendly terms with sun or snow, with the cactus or the oak.

That this is Romance, Wright is the first to confess. And like any strong emotion, Romance can be overpowering. His proposed “sky-city,” a mile high, is not, as critics suggest, a delusion of extreme age, but a Goethean (some would say Wagnerian) yearning for the grandiose which has a long history. Wright thought of such a structure for the New York World’s Fair of 1933.

If Mies and his followers have attempted to create an “anonymous” architecture which appears to be, and in fact often has been, designed by a committee, Wright has passionately refused to eliminate his own vigorous personality from his buildings. If we live or work in them, we find ourselves on close terms with a commanding presence—too close for many people. For those who wish to live by themselves, as much as possible on their own terms, and yet to enjoy the unprecedented technical wealth of our civilization, there must be some middle ground. This is the promised land of which Frank Lloyd Wright has been the chief prophet and it is up to the new generation of architects—Edward Stone, Eero Saarinen, Louis Kahn, Paul Rudolph, Harwell Hamilton Harris, Robert Aiken and Stephen Allen, and other men whose names are only now becoming familiar to Americans—to prove that this vision of the New Canaan is not a mirage, and that we shall not remain forever in an architectural wilderness.

The Cotton Mather Kids

To some Young Things, what it would appear, What’s beautiful is what’s austere. Renaissance seems too rich a welter. What’s beautiful is what’s austere. Their comfort is in an ice-cold shelter. The classic French? Beneath contempt. Not even Hepplewhite’s exempt. A cheerfulness, in contrast to the monastic Peaceful, or a wave of the sea. Men’s heritage of subtle graces has come with them to utter stasis. For standing, walking, sitting: floor. For to wit, a startled architect to stand, a blue agate banded agate. Most certainly did not expect A cestus, perhaps, a very earthy flower. It was not here, but wonder, this pleasant place! Acetic pleasure uneach face. If “little is more,” as purists boast, If “little is more,” as purists boast, They figure nothing is The Most.

These are the Cotton Mather Kids. But what of their eggs and their Ids? Will some wild night a flaming lust For Down’s night a flaming lust For loveliness flare through their crust? And will their too- long-sober soul With bingey beauty rock and roll?

—Elise Jerard

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Four times repeated. Scale’s quite good. Nothing’s the matter with the wood. A lone victrola squating there Scarcely defaces the chaste air. For standing, walking, sitting: floor. Just floor. That’s all. There is no more. It’s dreamy. It’s our favorite place! Accetic pleasure lit each face. If “little is more,” as purists boast, They figure nothing is The Most.

—Elise Jerard
From the Executive Director’s Desk:

This is not what I want to write about, but rather the reason why Washington draws the crowd and the impact of that reason upon the construction industry and the architectural profession.

Fundamentally and seemingly exclusively the business of the Capital city is government, and government enjoys great magnetism either directly to itself or indirectly by virtue of its appurtenances. All of us have studied government in school. We have read history. We even have a nodding acquaintance with political science with perhaps a scant knowledge of its application. Those of us who can vote (a resident of the District of Columbia may not do so) may occasionally exercise the right of suffrage and feel that a decision has been made by him and that his duty is discharged.

We second class citizens of Washington read editorials, criticize, argue, but we cannot vote. However, our knowledge of government and politics is not to be underestimated. We continually see, meet with and talk to Congressmen, administrators and many career men of all kinds. We learn much about the United States, how it is run and by whom. (I can assure you that it never was run by a one-time politician only in times of crisis, wars, controls, anything untoward which will affect our professional practice and the construction industry which it serves. We run to our government whenever we believe that our way of thinking is hampered. We look to our government as a refuge when the going gets really tough and when recessions set in.

Although the Executive Director of the AIA is not in the Executive branch, nor work continuously with it. The business of any national society is people.

It is easy to be supercilious, to be cynically amused by the cartoons of Herblock, to plow earnestly through the pontifications of the pundits, nodding our heads in solemn agreement with Walter Lippmann’s column—all the while not personally affected by its content. The basic premise of our country is sound and practiced. The United States of America is run by the people, just as the American Institute of Architects is run by its members.

Occasionally an individual rises who, through his ability to turn a neat phrase (original or ghost written) enjoys a sufficiently powerful personality, will appear to be a leader. He may even constitute himself a rallying point of security. There are those who, through their personal courage, can instill confidence in the people and set an example for the betterment of the citizenry. We have had such people in the United States. I hope we will continue to produce them.

We are, however, now being taught to accept the composite man built up by staffs, public relations experts, ghost writers, coaches, policy recommenders, yes men, no men, trainers and publicity people. We are inclined to accept the composite man as the actual embodiment of the talents and virtues of the heroes of our past history. In a democracy such as ours if these composite men can be drawn from the laity rather than from the ranks of the trained professionals, they seem to enjoy greater prestige in the eyes of the citizens.

As a chief of staff for your organization, I find I enjoy a certain appreciation of the trained experienced career men. Although I admire the fortitude and intelligence of the amateur, I never can quite attach the degree of omniscience to him that I do to the professional, especially if the amateur has been catapulted into his position as a result of his contributions and labor for one of the major political parties.

I can profess no expert knowledge about state and municipal governments, but I suspect that there is considerable difference between them and the federal government. Probably there is a difference between state and municipal governments. I am not talking about tables of organization modus operandi, but about philosophic attitudes and relationships. In Washington you look upon the President of the United States as you would upon the chairman of the board of your bank or the president of an industry, or a great private enterprise? Do you believe that the Cabinet of the United States is actually a board of directors assembled to discuss operational problems under the chairmanship of the top man?

As Chief Executive of the country, the President enjoys relatively more power than anyone else in a similar position in the Western world. But he too is subject to checks and balances. His Cabinet is not a policy-making body. It is the assemblage of the heads of the major administrative agencies of the country, each enjoying his own field of interest, his own prerogatives, and subject to the laws which established and maintain his department and to the administrative regulations which guide him.

Not all of the departments are line agencies. The Department of Commerce, for instance, is a sort of fact collecting agency. It bears slight resemblance in attitude, thought or responsibility to the Department of Defense which is another sort of operating agency, charged with the safe-keeping of the country, continually constructing, contracting and advancing. The Department of Defense administers a myriad of programs; the Department of Commerce administers nothing like as many. So it can be seen
that the heads of these two respective agencies have little or nothing in common which would enable them to discuss matters of mutual interest at a board of directors meeting presided over by the Chief Executive.

The Executive Office of the President has become highly organized and has expanded far beyond anything anticipated, even in the days of Mr. Truman. In operation it bears some resemblance to the military headquarters but on a far larger scale, and the number of agencies, bureaus, and individuals reporting directly to the Chief Executive seem to increase.

For the most part the heads of the major administrative agencies are gifted amateurs rather than career men. However, the Secretary of State, a most successful lawyer, has been in public life so long that he has become virtually a professional.

The Congress is the great monument to American democratic principle. It may be criticized and pilloried, it may be seldom praised, but, nevertheless, it probably is the greatest deliberative body in the world and, without question, our Senate is the most august body to be found anywhere today.

Jean Maunoury

One of the Institute's most distinguished Honorary Fellows, Jean Maunoury, was killed in a tragic automobile accident on July 26th. M. Maunoury held the post of Architect-in-Chief of Eure et Loiré, and Architect of Historical Monuments of the same area of France—which put him in charge of Chartres Cathedral. He was a Chevalier of the Legion of Honor (military) and a holder of the Croix de Guerre. He lectured on medieval architecture at the School of Fine Arts at Fontainebleau, and made lecture tours in many countries, including two in the United States in 1948 and 1956.

It is doubtless unique in modern times that M. Maunoury's father and grandfather also held the position of Architect of Historical Monuments, and that his son, Dominique, now holds the post.

As guardian of Chartres Cathedral, M. Maunoury was host to many American visitors, and he had many friends in this country. His aid was invaluable to the Institute in arranging for the acceptance of the window donated to the Cathedral by the AIA. He was made an Honorary Fellow in 1956.

It is truly a fearsome thing to appear before a committee of United States Senators for realizing that one faces men, each and every one of whom enjoys singular power and whether they are there as a result of political aptitude or because of their outstanding virtues, it makes little difference to the witness how they got there. They are there, and they know they are there and they know their position. Any Washington-experienced hand knows this and that in what to often is the amateur witness appearing for the first (perhaps only) time who seems more at ease than the seasoned witness who has come to respect in a very profound sense the men before whom he is appearing. To a lesser degree this could be said about the House of Representatives.

My subject, the architect and policies, still lies ahead. This article has become an introduction.

Sanford Goin, FAIA

The officers and members of the Institute have been shocked and saddened to learn of the accidental death on September 19th of Sanford W. Goin, FAIA, Regional Director from the South Atlantic District. As soon as he became a member of the Board of Directors last year, "San's" quiet wit and sound counsel won the affection and esteem of his fellow Board members.

Mr. Goin was active in many local affairs in Gainesville, Florida, where he had practiced since 1935. A Kiwanian, a Mason and a Presbyterian, he had been a member of the Gainesville City Planning Board and at the time of his death was a long-time member of the Alachua County Zoning Commission.

His AIA activities included most of the offices of the Florida Association of Architects, culminating in its presidency 1950-52, as well as the chairmanship of important committees.

The members of the Institute extend their deepest sympathy to Mrs. Goin and their four children.

John E. Toohey

How we won the Battle in Montana

Mr. Toohey, a past president of the Montana Chapter of the AIA, is a partner in the firm of Cushing, Terrell and Associated Architects, of Billings, Montana. He is also a member for the Northwest Region of the AIA Public Relations Committee. In this frank and revealing article, he tells how Montana's architects overcame one of their most serious problems.

Until July 1, 1957, Montana's architects were unknown to the public, in conflict with the engineers, and penalized by the State Legislature.

Today, all three of these serious problems have been largely solved. The story of how it was done is a story of good community public relations in action. I am telling it in the thought that members of the profession in other states and municipalities may profit from our experience.

Prior to World War II, architecture in Montana was virtually an unknown profession. There were perhaps six to ten architectural firms in the state doing all of the architectural work for the 560,000 people scattered throughout the 147,138 square miles of mountains and sparsely populated rural areas. The practicing architects of the state were scattered among the seven or eight cities or towns in the state with a population of over 10,000 people.

During the post-World War II construction boom, the position of the architect and his public began to change. Montana, like most areas in the country, experienced a heavy construction expansion, particularly in the educational and residential fields. Naturally, with the architectural work required, the number of architects in the state increased and the architect's contact with the public began to extend beyond the urban population immediately adjacent to his home.

With the large amount of architectural work readily available in Montana, the final result was pretty much as expected. An ever increasing number of owners became increasingly dissatisfied with the type of architectural service they received. Some dissatisfaction was a natural result of incompetence in the architect himself; some was due to the shortage of draftsmen. The architect would solicit more work than he could produce in the time he had contracted for. A large part of the dissatisfaction was due to improper supervision during construction. This lack of supervision was, I believe, brought about by two factors. First, a large number of the young architects did not have the background and experience in supervision which was desirable. Second, a large number of the jobs were located at a considerable distance from the architect's office, and it was "too inconvenient and too expensive" to give proper supervision. This situation was further aggravated by the fact that jobs were plentiful and many architects felt there was no need for building a reputation of competence that would result in repeat work.

With the increased amount of architectural work and new group of architects, it was only logical that the profession should attempt to establish stronger licensing and registration laws. Moreover, the engineers in the state (electrical, mechanical, structural, etc.) felt that the architects were per-
forming their work and they wanted to pass legislation which would force the public and the architects to hire registered engineers for all work.

Prior to World War II, the architects felt that the registration law of Montana was inadequate and the state’s Attorney General had found that the law was unenforceable because it did not include a description of what the practice of architecture consisted of.

Although this condition existed and all members of the Montana Chapter of the AIA were well aware of it, they were at a loss to do anything about it. The Chapter had very few active members, and there wasn’t enough money or concentrated interest on the part of most Chapter members to establish an all out campaign against their opposition. Also, there was considerable controversy among the members about what should be done. There was support for the theory that the profession had run into so much opposition in establishing the existing law that any attempt to change it would lead the legislators to kick the law out completely, and the profession would be without a registration law of any kind.

In 1948 and 1949, Everett O. Terrell, President of the Montana Chapter, AIA, working with a few of the interested engineers in the state, spent a tremendous amount of time studying and analyzing the situation and, as a result, decided that the only possible solution to the problem was a joint legislative venture with the engineers in the state. It was thought by this group that by trying to present a joint architect and engineer licensing bill to the legislature, they would have enough prestige and influence to successfully pass the proposed legislation. However, when it came to a final vote in the Chapter, the bill was ruled out by the architects. It was felt by some that the architectural profession might lose some of its identity by being licensed jointly with the engineers.

During the legislative session of 1951, the architects were very hard pressed to defeat some proposed legislation by the electrical engineers, which, if it had passed, would have made it mandatory for all architects to hire licensed electrical engineers to perform all electrical work for architectural plans. Fortunately, the bill was defeated.

This, then, was pretty much the situation until the winter of 1952-53. The number of architects in the state was increasing each year and all seemed to have plenty of work. The architects and engineers were fighting among themselves, and, perhaps more unfortunate, the state, counties and cities, and even private owners, were becoming more dissatisfied with the type of architectural service they were receiving. Also, due to the rumored or actual collusion between one of the architectural firms and some top state officials, the matter of architecture and architectural fees became a major political issue during the political campaign of 1952. Of course, the result of this was that the architectural profession suffered a terrific setback in its relation with the public.

A result of the fee controversy, a “Little Hoover Committee,” appointed by the previous legislature, recommended to the 1953 session that the state establish a maximum architectural fee of 5.3% for all types of architectural work. However, the committee arrived at the figure of 5.3%, no one was able to ascertain exactly. They further strengthened their arguments by showing that most of the state architectural work had been done by one firm at a fee considerably higher than 5.3%. It was only after considerable time was spent in talking to and persuading the members of the House and Senate Committees that the proposed bill was amended to establish a sliding schedule. Although the architects were opposed to fixing their fees, they felt that the bill that was passed was much better than what had been originally proposed.

Fortunately, it was also during this period that the Montana Chapter of the AIA became better organized. Approximately 90% of the state’s architects belonged to the Chapter, and all architects everywhere, we were too busy trying to keep our various architectural firms in business. It was thought by this group that by trying to present a joint architect and engineer licensing bill to the legislature, there would be enough prestige and influence to successfully pass the proposed legislation. However, when it came to a final vote in the Chapter, the bill was ruled out by the architects. It was felt by some that the architectural profession might lose some of its identity by being licensed jointly with the engineers.

The fact that Montana was the only state in the Union in which the architects had their fees set by state legislative action was one of the constant reminders that, as architects, we were missing the boat. It seemed that, regardless of what the architectural profession did, it would invariably hurt us.

For our legislative program in the fall of 1954, it was decided that, so long as the profession was in such a poor light with the public over the fee schedule, we would be smart to let the situation rest.

We were a completely disillusioned group of architects. If it hadn’t been for the perseverance of a small group of architects in Great Falls, the members of the Chapter would probably have decided that it was useless to attempt any further legislative work. However, as a result of the proposals from this small group, the chapter decided to make one final effort to amend or repeal the existing state fee schedule.

Upon the advice of our legal counsel and our public relations committee, it was finally agreed that the only way to successfully promote a complete legislative program was to start about a year in advance of the legislative session and lay out a complete public relations and legislative program so that it could be presented to legislators well in advance of the coming session.

To put the program into operation, the gentlemen that had been largely responsible for the Chapter’s action were put on the legislative committee, headed by chairman Kenneth K. Knight. Realizing the tremendous task which lay before it, the committee started preliminary work for the 1957 legislative session in the late summer of 1955.

The first thing the committee did was to obtain copies of every other state’s (including the District of Columbia’s) architectural registration law, and also the recommended Chapter fee schedule from all AIA Chapters as well as actual fees paid by all states for various types of buildings—schools, offices, hospitals, etc. This itself was a huge task. But, thanks to the cooperation of the other states, chapters, and organizations contacted, it was soon completed. With the information assembled, it allowed the committee to make some interesting comparisons.

It was decided that a graphic comparison of the legislated fee schedule in Montana compared to the fee schedule paid by other states for complicated, ordinary, and simple types of buildings was needed. It would allow us to look at the type of comparison we were looking for. This comparison was plotted for Montana and all the states east of the Mississippi; Montana and all the states west of the Mississippi; Montana and the ten western states, and finally, Montana and the US average. Fortunately for our cause, the fee schedule as legislated was, in most cases, considerably below the fees of other states for the design of the most simple structures. The average fee paid for ordinary and complicated building was, without exception, much higher than the schedule in Montana.

Next, a comparative graph of our chapter’s recommended minimum schedule was prepared.

Perhaps the most startling thing which was illustrated by the graphic analysis of the legislated fee schedule was that it was not a straight or uniform line, but had definite break-off points where the difference of $1 in a bid price could mean thousands of dollars in the architect’s fee. Secondly, the graphic analysis pointed out that there should be considerable difference in the fee paid for preparing plans for a simple, ordinary, and complicated types of structures.

All of these graphs, together with a description of the type of buildings included in each group and appropriate other information, were assembled and printed in a sixteen-page brochure entitled “Architecture—Montana’s Problem.”

To be most effective, we decided this brochure had to be delivered by hand, and explained in detail, to every incumbent Senator and Representative, and every party leader, in every county. This was done prior to one month before primary election time. Also, we decided to contact personally anyone else who might oppose us or be able to help us.

Naturally, this called for considerable money that we didn’t have. We considered increasing the Chapter dues (which had just been increased from $15 to $35 the previous year) but decided instead to assess each corporate member $100, each associate member $50, and each junior associate, $10. At first glance, this may appear rather steep, but with the amount of work involved and the expense of preparing the brochure, entertaining various dignitaries, paying the attorney’s fees for preparing the bills, lobbying, and other miscellaneous expenses, we felt that it would be better to have more money than we might need rather than take a chance on running short.

With financing solved, our next task was taking the information to the necessary people. The simple matter of distance was one of our most serious problems. Montana, with over 147,000 square miles, is larger than New York, Virginia, Delaware combined. Approximately one-third of the state is mountainous, with small, thinly populated mountain valleys. With 56 counties, and one Senator and two or more Representatives in each county, considerable travel was required to contact all of the incumbents as well as all candidates for the various offices.

To distribute evenly the cost and responsibility of contacting the necessary people, we divided the state into three basic areas roughly corresponding to the location of the counties and the number of architects in each particular area. Each of these areas had local organizations primarily formed to handle local architectural and AIA problems. Consequently, it was a simple matter to assign each architect in a given community a specific number of people to contact. In some areas it was possible to assign people where they had jobs under contract and would necessarily be in the immediate area. Every incumbent Senator and Representative, as well as all candidates in both parties, was assigned to some architect.

This was a very hard job, but the architects and all architects approached the public with the same basic story. To accomplish this, a general list of instructions was mailed to all architects. In addition, all members

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were asked to become as familiar as possible with the
brochure explaining the entire situation.

After contacting his man, each architect was asked
to file a report of the interview, outlining the

After contacting his man, each architect was asked
to file a report of the interview, outlining the
time spent, items discussed, material left with the
candidate, and his apparent reaction to our prob-
lem. Made out in duplicate, one copy of this re-
port went to the Senate and the other to the
Legislative Committee Chairman.
The purpose of the report was two-fold. First, it
was a written record of those contacted and by whom;
second, it gave the attorney and the commit-
tee some idea of the apparent reaction to the pro-
posed legislation. All reports were carefully analyzed.
In cases where unfavorable reports were received,
further visits were made to find out why the person
was opposed to our program. In most cases it was
possible, by repeated contacts and by thoroughly ex-
plaining the entire situation, to show that our cause
had considerable merit.

Fortunately, we had allowed ourselves plenty of
time to do this. Had we waited until the Senators
and Representatives were in session, and had dozens
of other bills to consider, our task would have been
hopeless and the legislators would have voted against
our bill, simply because they were not familiar with
the contents of the bill. This was done in several ways:

- We talked to the legislators at every oppor-
tunity, explaining the bills and making sure
that substantial data was available at all

- We prepared briefs of all the bills so that the
legislators could review their knowledge of
the bills without wading through the entire
documents.

- We placed a new copy of our brochure "Ar-
chair, Montana, Problem," on the desk
of each member of the committee hearing our
bills.

On the surface, we didn't seem to have any
organized opposition—our biggest problem was to
overcome the indifference of a large number of legis-

dators. Most had no reason to vote against our bill
but very few would take a stand for us if any or-
ganized opposition developed. There were so many
controversial issues requiring the legislator's atten-
tion, that at times it appeared our bills would fail
because no one was particularly interested in our
cause.

The climax of our campaign occurred the day of
the hearing. We had mounted graphs from our
brochure on large plaques. These were presented
and explained to the committee by our attorney
and several members of our legislative committee.
They were supported morally by twenty-five to thirty ar-
chitects and engineers who attended. The result was
gratifying: The bill passed the House with only a
handful of dissenting votes and went to the Senate.

The job of selling our three bills to the Senate
was largely a repetition of the problems that con-
fronted us in the House: First, keeping the Senators
constantly informed of our problem and second,
making sure that every member fully understood it.
We had found out from our siege in the House that
when anyone knew the full story behind our bills,
they found no logical grounds for voting against them.

Here again, our success was due primarily to the
efforts of five or six members of the legislative com-
mitee who spent most of their time out of their of-
ciles and in Helena selling the cause of the architects
and engineers. In the Senate, our third major task
was to convince the Senators that the rift between
the architects and engineers had been closed and
that we were presenting a uniform front. Very early in
the same procedure was used at the Senate hearing
as at the House hearing. That is, we presented our
problem verbally and illustrated it with our charts
and supported the entire operation by having a large
group of architects and engineers in attendance. All
three of the bills passed the Senate with very few oppos-
ing votes.

All that now remained was for the Governor to
sign our bills into law. Fortunately, during our
original program of public information, we had care-
fully explained the entire picture to the Governor.
Consequently, our bills were signed into law by the
Governor and went into effect July 1, 1957. At
last, after many defeats, the architects of Montana
had been successful in a legislative program—thanks
to the hard and diligent work of Kenneth Knight and
his committee and the capable work of our chapter
attorney, Alfred F. Dougherty.

Now we had a registration and licensing law which
demanded competence of the architect; a law with
tooth in it. We also had a new fee schedule recog-
nizing the value of the work involved.

1. A complete understanding of the problems to be
solved and the results desired.

2. Competent professional guidance.

3. A thoroughly organized program designed to gain
the results desired.

4. The enthusiasm and determination to carry out the
planned program regardless of obstacles which
will be encountered.

5. Careful attention to the premise that the public
know and completely understand both sides of the
question at issue. If your cause is just one, and
people understand it, opposition disappears sur-
prisingly fast.

As a result of conscientiously observing these five
points, the architects of Montana are well on their
way to walking in step with their public.

Maurice Payette, of Montreal, President of the
Royal Architectural Institute of Canada, has an-
ounced the appointment of Robbins L. Elliott, of
Ottawa, to the post of Executive Director of the
R.I.A.C.

Elliott is a native of Wolfville, Nova Scotia, and
assumes his new duties after eleven years of experi-
ence with the Federal Government. He was em-
ployed with the former Reconstruction and Supply
Departments and with the Department of Public
Works. From 1949 to 1955 he was Executive As-
Assistant to Hon. Robert Winters, Works Minister in
the St. Laurent administration. Appointed Assistant
Director of Property and Building Management in
1955, he became Director of Personnel in 1956, a
position he vacates to join the R.I.A.C.
The "chapel" part of the British pavilion displays the inventive thinking of the British. It is breathtaking, dynamic. The exterior is a stark white form punctuated with pieces of stained glass which give textural quality to the sides. The interior is rich and muted with the only light coming through the stained glass windows. The rest of the British exhibitors are a series of messes which force you through areas which are not always interesting. The philosophy of the British building was to control the traffic pattern in order to avoid congestion.

A breezy and purely personal critique of the Brussels Fair by a young Philadelphia architect.

Feet, Architecture and the Brussels Fair...

JACK A. THALHEIMER, AIA

LEFT: The rat-like maze of the British Pavilion was far removed from the luxurious space of the U.S. Pavilion. The old saying "Run into the roundhouse, Nellie, they can't corner you there," works to the advantage of the person who wants to explore the building, and not be forced down a direct path. It is true, however, that a person without special interests would not know which way to go or what to see first. From a propaganda viewpoint this might be dangerous. BELOW: Many architects, particularly the French, feel that the expression of structure is attractive. The interior of the French Pavilion shows how structure has overpowered the display.

If asked to write in twenty-five words or less "I went to the Brussels Fair because..." I suppose I would answer that "As an architect I am constantly looking for new ideas and the touring of the Fair by press, radio and TV managed to arouse my curiosity." (I see that this is twenty-six words, and I guess I am now ineligible to win the prize.)

Besides my inquisitiveness, I had another reason to visit the Fair. I have been appointed chairman of a Bicentennial Committee to plan a celebration for Philadelphia in 1976. Naturally, I wanted to meet with people abroad and get their views on the current Fair, as well as seeing it for myself.

But before I actually discuss the Fair, I would like to tell you the reactions of my wife and myself, as a couple travelling by car en route to the Fair. We were amazed by the lack of interest in Europe, and especially in Belgium. Driving from Copenhagen down through Germany, we found little interest, and no banners, posters—or, worst of all, no country-to-country road maps. When we drove through Belgian customs, neither the customs officials nor the first gas station had maps to the Fair. This was accentuated by the lack of maps (printed in English) regarding the Fair and its buildings. At

Above Right: Esthetically the Russian Pavilion is not worthy of comment. The building, although much has been said of its prefabrication, is merely a Penn Station with displays set five feet on center with an occasional drape and much too often repeated propaganda slogans. RIGHT: Possibly the finest single space within the Fair was the Vatican building, rich with simple form, stained glass and "atmosphere." It is not cluttered with displays proving that a little done well is far more expressive than a busy, crowded space. Below: The Germans have carried the Bauhaus thinking to the epitome, and have built a beautifully scaled and crisply detailed building.

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least, this was the case in late May. Apathy is the only fitting word to describe the general feeling in Europe toward the Fair. As a golfer, I am fortunately accustomed to walking four miles a day. My wife and I spent three days walking—from breakfast to dinner, and still did not have a complete picture of the Fair. This does not mean seeing everything, but merely getting a taste of each country. Walking and planning must surely go together, when thinking in terms of one human being’s capacity to endure. There is no doubt about it—the overall planning of the Fair was its greatest shortcoming.

The unifying devices which would have tied the Fair together as a design entity were not visible. Interesting paving materials, lighting, or signs utilized as tying elements were lacking.

The Italian design magazine Domus offers an interesting comment which I think is worth quoting: "As to architecture (of the Fair), provisional as it is, it teaches us nothing that we did not know already. Nothing links the various pavilions together. And this is a distracting form. If anything unites the architecture, it may be the American pavilion, too. I had expected that 'big car' feeling. Instead we feature the cultural side of our nation which, I think, we possessed. When I was studying in France a few years back, I was exposed to the general European point of view that Americans are materialists, first, second, and last. But our pavilion, with its emphasis on painting, sculpture, and the arts—these, I think, are the things that unite us."

The other pavilions dealt at length with the American versus the Russian pavilion, which might be subtitled "or who is winning the cold war?" George V. Allen, Chief of USIA, after he visited the pavilion at President Eisenhower’s request, returned with the word that he liked the Fair.

I am not being partisan, but I liked the content of the American pavilion, too. I had expected that "big car" feeling. Instead we feature the cultural side of our nation which, I think, we possessed. When I was studying in France a few years back, I was exposed to the general European point of view that Americans are materialists, first, second, and last. But our pavilion, with its emphasis on painting, photography and sculpture, presents the cultural rather than the material. Assuming you like the intent, the pavilion is successful in its goal. Those who criticized were obviously not satisfied with this view of America.

The atom, symbol of the Fair, is, of course, a sub-microscopic thing. And the Atomium is a positive example of a form, which, when enlarged, is no longer graceful. The absurdity is the hot dog souvenir stand on which this whole form rests. Why did they have the Brussels Fair in the first place? If there was a purpose, it is not clear. I would guess that Brussels had the Fair to promote its trade, but our pavilion, with its bit of the American spirit, is a bit of the cold war.

As for the hot dogs, Dorothy Kilgallen, the columnist, said that a hot dog is an American innovation for baseball and football stadiums. Her remark aside, it becomes just a weiner, and the Europeans know what a weiner looks and tastes like.

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I should have clung to this resolution, regardless of its devastating effect on posticity—which hasn’t done anything for me lately, anyway—had not Professor Hugo Zucchinii visited Grand Rapids. The eminent educator’s visit was in connection with the pursuit of his avocation. Twice a day for six weeks a day he gets shot out of a cannon on behalf of the Yale Beauty Circus. Formerly he got shot out of a cannon on behalf of the Ringling Brothers-Barnum and Bailey Circus and I often wished he could be half of Ringling Brothers-Barnum and Bailey Circus. Preferably a ticket-seller with a fast double shuffle at counting out change. But R.B.-B. and B. became allergic to the smell of canvas and now confine their activities to such areas as Madison Square Garden, although a garden is not precisely what sprigs to mind around elephants, if you ask me.

Let us return to the point, however reluctantly. In the intervals between high velocity projections of his art, Prof. Zucchinii confided some fascinating facts about himself to a reporter. A reporter for the opposition paper—not the one I write a column for—so I can speak freely. He said, for instance, that in his capacity as a human shotgun slug, he attained a velocity of 200 miles per hour. I view this statement with suspicion. When did he ever get shot 200 miles? I am not as credulous as my wife believes me to be. My wife (Mrs. Allen) insists that I am too inclined to let one and tell me all kinds of stuff without remarking “That’s a big fat lie” when it is.

However, the Professor also remarked that his hobbies were art and architecture. Ah, ah, now we’re getting to it.

Is it possible that getting shot out of a cannon twelve times weekly has a provable tendency to incite the shoeooee to superb achievement in the field of architecture? Should a course in which the students make like a large caliber bullet be included in the curricula of our schools of architecture?

Frankly, men, the answer is maybe yes, maybe no. We simply do not have enough data. This must be seen to. I will be glad to see it, in an advisory capacity only, as my medical man is of the opinion that black powder fumes will have no ameliorative effect on my sinuses. This does not surprise me: neither does anything else.

I have made inquiries and it would be easily possible, with a moderate grant from the Ford Foundation, to construct an exact facsimile of the cannon from which Prof. Zucchinii so rapidly emerges. We could then shoot some architects out of this interesting weapon and study their reflexes. On second thought, the Rockefeller Foundation should be in on this. Also Blue Cross. Naturally, a test group of architects should be large enough to provide reliable data. One hundred architects would be a nice round number. I have already undertaken the drudgery of compiling the list of architects, myself. Took a lot of blue pencilling to get it down to one hundred, as I have lost too many jobs lately.

Frankly, and I regret to report this, I have not had the cooperation a man should be able to expect from my colleagues in this fascinating scientific experiment. For instance, on explaining, with my usual dignified eloquence, the whole process to one architect—who by a quaint coincidence happened to be on the honor list of one hundred—he insisted on asking a lot of tedious and irrelevant questions. Such as “What kind of a net you going to use?”

What net? I never even mentioned a net. Anybody for gunnery practice?
The United States Embassy in Bangkok

— the Story of its Design

JOHN CARL WARNECKE, AIA

The following article by Mr. Warnecke, telling how he arrived at the form for the new Embassy, was the basis of a talk he gave before the Association of Student Chapters of the AIA at the Cleveland Convention.

By accomplishing these six points we hoped to be able to design a building that would symbolize America to the Thais and that would recognize the site and the climate and rich cultural heritage of Thailand. The final design would then be a blending of both cultures and, it was hoped, would establish a character entirely of its own.

BEFORE BEGINNING the official part of the trip, we spent some time in Tokyo and Hong Kong to gain a broader knowledge of Asia. Subsequently, Mr. Beatty and I went to Cambodia to visit the ruins of the ancient Khmer capital of Angkor, and then on to the more recent ruins of Ayudhya, the former capital of Siam.

It was interesting for us to note that the present capital of Thailand, Bangkok, is one of the newest of Oriental cities. It is less than 200 years old with a history paralleling that of our country. I would like to quote from the book "Siamese White" by Maurice Collis, in which he states "Ayudhya was a city untouched by European thought or ways—a marvellous city of the fabulous Orient with an extravagant atmosphere of its own. It was the seat of a strange king and a fantastic era. The directors of the East India Company, in the 17th Century, stated it to have been as great a city as London. It was larger than Paris, with poor houses, magnificent pagodas, an admirable river, a huge population and countless boats. The King's palace was like a town apart—great and magnificent, many of its buildings and towers being entirely gilded."

Ayudhya remained the capital of Siam until 1767 when it was sacked and almost completely destroyed by the Burmese, never again to be rebuilt. Today it lies in picturesque ruins.

As a result of this invasion, the Siamese moved out and began to rebuild their capital forty-five miles to the south in Bangkok, in an almost identical pattern to the former capital city of Ayudhya.

"The above description of Ayudhya gives a picture of Siam of all times—as it was in A.D. 1350 and 1690 and as may still be seen in modern Bangkok to-day—magnificent beauty and squalor all happily and naturally mingled together."

O UR FIRST Glimpse of Thailand from the window of our Pan American Clipper was of fields of brilliant chartreuse stretched beneath the bright tropical sky. But as I looked toward the sun the green fields suddenly became a mirror of reflections and I realized that we were flying over flooded rice fields. Laid out methodically every few miles between the rice fields are parallel lines of water highways crowded with small boats. These waterways stretched into the distance as far as the eye could see. Clinging to the narrow banks were clumps of trees and small villages which became more numerous as we neared the capital. Upon landing we saw a tall, bell-shaped pure white stupa silhouetted against the blue sky. This was our first exciting view of Bangkok.

Historical tours were arranged through the many fabulous temples and palaces of the area but aside from the official arrangements, we found that our own contacts enabled us to get beneath the tourist facade and to make a more personal appraisal of the country.

We were met in Bangkok by Admiral Abhakorn of the Thai Navy who is a close friend of Denis Beatty's father, Admiral Beatty, U.S.N. (Ret.). Admiral Abhakorn arranged a trip down the river in a naval yacht where we had front row seats for one of the most spirited naval maneuvers that we had ever witnessed. Within a few yards from our yacht depth charges threw up sprays of sluggish, muddy, river water while a demonstration of rescue operations was enthusiastically carried out on a nearby gun boat supported by helicopters. For reasons never made clear to us, torpedoes were thrown into action for a grand finale and almost made a direct hit on the Admiral's flagship from which we were witnessing the lively display.

This happy atmosphere in which throngs of gay people on land and in small craft on the river participated with much gusto was further enlivened by the introduction of huge decorative floats, music and a liberal sprinkling of flowers. It became a regular Mardi Gras.

After being thus assured that the fleet is definitely an active force in Thailand, we made a more relaxed trip up the river to Bangkok. Admiral Abhakorn, I learned, is the grandson of King Mon kut of Thailand, most recently celebrated in Rodgers and Hammerstein's "The King and I." The Admiral's father founded the Thai Navy and is today revered as a deity in the "Temple of the Reclining Buddha" in Bangkok.

Another highlight of our trip was a dinner party given for us by Princess Mom Kobkaew Abhakara, the small and beautiful wife of the former Regent of Thailand. She is a representative of the blending of East and West in Thailand. Although she has no children of her own, she has adopted, reared and educated a large number, many of whom are children of the court. At the present time she has twenty-two children who live with her under her supervision. In this respect her household resembled the scenes from...
Women golfers in Bangkok and one of its leading social figures. All of the thirty guests had the same last name as they were all her relatives. The party was held at her home which is located on the edge of a klong or canal. Japanese lanterns were strung from the trees on the lawn. The men wore white tropical suits and the women were dressed in their rich native colors but in Western style dresses. White herons nested in the dark green rain trees that stood on the edge of the wide green lawn.

Some of the older children helped serve the curries and tasty kebabs, and after dinner a Thai orchestra performed on a little mound of the lawn. A boy and a girl danced in jewelled costumes with all the beauty and precision of the Thai classical dance. Later we walked down to the klong where the traditional display of fireworks was set off in our honor.

This was the season of festivals in Thailand which follows the monsoon season. A full moon rose high over the trees and we were invited to take a boat trip down the klongs which was bright with the reflection of the full moon. Everyone watched until his basket disappeared from sight for it is believed that if the candle still glows as the basket drifts out of sight, you will be forgiven your sins for a year.

The connotations of this beautiful celebration gave us an opportunity to discuss with the other guests many of the religious and philosophical attitudes of the country which later were important to us in selecting certain of the design approaches for the Embassy. It was through personal contacts such as this that we came to know more of the Thais.

Bangkok is a modern oriental capital. It is its fabulous architecture that makes it unique from all other cities of the Far East. The temples and other religious buildings are the most vivid expression of the local architecture. The rich colors are in strong contrast to the subtle art of Japan with its soft, subdued tones. There is a dazzling beauty in Thai architecture found in its porcelain, mosaic towers and mammoth sculpture and the bright gold leaf of the Buddhist stupas. Thai architecture is basically masonry or wood with a rich overlay of color. Carved wood beams are deep brown and gold and blue with gabled roofs overlapping each other with a brilliant red, blue, green and yellow tile. The many palaces and the “solid gold” and “emerald” buddhas all represent the richness which is a part of the Thai way of life—a life that reflects the rewards of peaceful pursuits.

One of the most important aspects of Thailand is that it is a land of artisans. This term is little used in the West and as a profession is almost unknown. We watched a young man one afternoon carefully carving by hand a wooden frame to be used for cement forms. I was impressed with his skill and asked him where he had been trained. He replied that this was a family trade passed down from one generation to the next. His father had taught him the art just as his father and learned from his grandfather. A large segment of the population is trained in this way in all fields of art and can be hired as a laborer’s rate. The availability of such skilled artisans is very evident in the local architecture. The striking teak gables of the temples are some of the best examples of this native craft.

Another aspect of architecture that impressed us was the relationship of the klongs to the buildings. Almost all dry land in Bangkok has been obtained by dredging and filling and the building of dykes. A klong is the general name for any waterway made as a result of these dredgings and can be either a canal or a lake. These waterways often serve as the chief means of transportation. Bangkok has well paved streets for automobiles, street cars, tricycle and pedestrian traffic, but in addition it is, like Venice, permeated by water. The advent of Western technology brought the motor to the small boats of Bangkok and the noise and congestion on the klongs equal any “main street” traffic in the West. On account of the penetration of water throughout the city, Bangkok is alive with reflections. All the color and beauty of the architecture are twice present. The sensitive use of water as a design element architecturally and long-established tradition locally. Angkor Wat is mirrored in a broad moat. A singular monument at Angkor is the little Prath Neak Pean which is a tower in the shape of a huge lotus. It stands—floats—in the middle of a lake on a circular base of stairs that lead down into the water. More recent, the little Summer Palace north of Bangkok is likewise situated in a lake. It is a small cruciform pavilion topped by a central spire and stands on a base on posts with a balustrade of delicate wood filigree. It is one of the architectural jewels of Thailand.

Contemporary architecture in Thailand is mostly an offshoot of the international style as a result of Thai students who studied in Europe and America and then came home to try to apply this style to their own setting. Their office buildings of concrete have box-like, solid walls which are constantly disfigured by mildew common to an area like Bangkok with its humid climate. Because of their nature the religious buildings retain against this problem but public building maintenance proves much too expensive.

Much of the present architecture of Thailand is now under the direct supervision of the government civil service because of these unadapted examples of cement forms. The government has attempted to force the traditional architecture to house activities for which it was never intended and has ended up with a watered-down version that is quite lacking in any real regional character. A further look at government buildings with local architects continued us that we ought not to pursue this direction.

We found some of the best Thai architecture among private residences. We backtracked to homes that had been built twenty-five to fifty years ago. Most of them are two-story structures which make important use of lawns and gardens in their general design. The ground floor is usually of marble or tile penetrated by columns which support the second floor. This main floor is almost level with the lawn and completely open to the outside. Most entertaining takes place on the main floor while a private living area is duplicated upstairs for the family. Both of these areas are ventilated by large ceiling fans. The upstairs quarters also have large windows covered only by shutters without glass or screens. The stairway is the only connecting link between the two floors and provides both security and privacy for the family. These residences are fine expressions of the integration of space from indoor to outdoor areas.

Encouraged by this discovery, we continued to seek out older buildings. Almost hidden from the road in this same area I found an old hospital that had been built before the introduction of the international style. Once again I found a design which was successfully adapted to the site and climate. In particular I noticed the large roof overhangs, the floating balconies and the details of beautiful, precast concrete railings of modular design. The overhang kept sun and rain off the flat wall surface. The whole building had an attractive, lacy feeling. Here I saw the possibility of creating the main elements of design with the technique of modern flat slab construction which could give an even lighter feeling to this concept of design.
A New Subscription Offer for Laymen

The Journal announces another change in its subscription rates, for group subscriptions under certain conditions.

Member of art associations, art museums, civic planning associations, or other such cultural groups, may subscribe to the AIA Journal at the half-price rate of $2.00 a year. However, such subscriptions cannot be handled individually, direct from the members, but should be through the sponsoring organization.

Any association wishing to take advantage of this offer for their members should write to the Editor. Furthermore, the Editor requests readers to call this offer to the attention of the director or other official of their local art museum or association.

The Journal's circulation among non-architects is increasing, and we have many evidences that our articles are of interest to any person interested in the arts or in planning in general.
Greater Bakersfield Memorial Hospital  
Bakersfield, California  
Stone, Mulloy, Marraccini & Patterson, Architects

St. Francis Memorial Hospital  
San Francisco, California  
Frank W. Trabucco, Architect

Medical Clinic and Study Building  
Cook County Tuberculosis Sanitarium District  
Forest Park, Illinois  
Lundstrom & Skobic, Architects
Sako Clinic for Children
Raceland, Louisiana
Curtis & Davis, Architects

Rehabilitation Center for Vanderburgh County
Evansville, Indiana
Greerbel & Salam, Architects

Good Samaritan Home for the Aged
St. Louis, Missouri
Helmut, Obata & Kassabaum, Inc., Architects

Acute & Intensive Treatment Center (Mental)
Central State Hospital
Indianapolis, Indiana
Fleck, Quebe & Reid Associates, Inc., Architects
Valley Presbyterian Hospital, Van Nuys, California
Pereira & Luckman, Architects

Wayne County General Hospital
Eloise, Michigan
Smith, Hinchman & Grylls, Architects

Henrietta Egleston Hospital for Children
Emory University, Atlanta, Georgia
Abreu & Robeson, Inc., Architects

Public Health Center
Minneapolis, Minnesota
Thoreson & Ceroy, Architects
ONE SIMPLE FACT continues to nullify both the efforts of the road engineers and the arguments of those who insist that our road system must everywhere be enlarged to cope with modern traffic: the fact that the more road-space you provide the more motor-cars arrive on the scene to take advantage of it, so that from the point of view of congestion you are back where you started. This is a problem America in particular is having to face today, but America is postponing acknowledgement of the fallacy that the building of roads can by itself outdistance the manufacture of motor-cars, by building roads, allowing them to be flooded with motor-cars, and then building more.

Which she has the space to do. We have not; if we follow the same policy, the time will quickly come when the road-space occupied by motor-cars, moving or stationary (mostly stationary), will take up so much of the total that all territorial development will come to a standstill.

So what about an alternative policy to that which encourages more motor-cars: one which discourages them as energetically as possible? This essay is an examination of the arguments in favour of such a policy. It may sound like a completely reactionary policy, but it is not. It would be reactionary if it represented a retreat from the frontiers that progress has pushed forward on society's behalf, or if it was motivated by a wish to pretend that motor-cars hadn't come to dominate the social and physical scene—that is, by nostalgia for the peaceful days before motor-cars happened.

But planning to make any phenomenon (including the motor-car) an asset, not a menace, to society is progress rather than reaction, and the one thing we can say about the way we have allowed the motor-car, which came into being as no more than a useful contrivance, to acquire its present disproportionate influence on our lives, is that it is the negation of planning. What we have to examine is the fallacy that the multiplication of the private motor-car is one of the given factors that planners must accept and plan for. It is not. Motor-cars are simply an artifact of our time, which society can employ in great or small numbers, according to how they suit society as a whole.

There is a clear parallel between planning for motor-cars and planning for houses. In each case the idea of planning in the interest of the community—especially the community without much expendable ground-space—involves bringing into a closer relationship units which without planning scatter themselves too widely, in order to create cohesion. In the case of housing we try to progress from separate villas swarming out into the countryside to a more organized pattern of terraces, squares and the like, and of blocks of flats, thereby freeing ground-space for other purposes. The private car, spreading itself more widely than our available ground-space can afford, is surely the exact equivalent of the single villa, and the equivalent of bringing houses into more compact groups is perhaps to make more use of public transport, but that parallel we must discuss in a moment.

Just as with houses, it is for society, and the planners to whom society entrusts the task of providing whatever controls it is willing to accept, to decide how far the individual motor-car should be allowed to spread. Planners, as we have found, can do little more than indicate to society what alternatives to existing practices there are. They have shown up the imbecility of allowing little houses to be scattered everywhere, at the whim of the house-owner but to the detriment of the community and, as a result of the public beginning to accept their arguments, we are at last building more compactly and passing legislation that helps us to insist on everyone doing the same.

The planners could, and should, also show up the imbecility of allowing free rein to the individual motor-car, so that society can take action. It cannot, however, act effectively until ordinary people understand what the fight is against. The trouble about the motor-car is that it has been elevated from a con-
venient piece of machinery into a social symbol, and we have thus let it get outside the system of control by means of which we normally ensure that our various machines are our servants not our masters.

We have lost any judgment about the relative value of motor-cars compared with the difficulties they create, because over several generations they have been built up as the yardstick of individual success and as the best creators of self-esteem, and have thus been given an inflated social and psychological value that has no connexion with their utility as transport machines. This has come about through several causes. One is the habit of regarding motor-cars as a symbol of prosperity. Another is pressure for personal power and assertion of their sense of fantasy. Skill in driving and roadmanship, for individual motor-cars for urban use, often glibly of date.

The advance of the great city is in many cases an attempt to get at the personal and obsolete equipment. If my parallel between infrastructure and individual motor-cars and the provision of public transport system against the cost of all the wasted effort and wasted time that our present over-use of private transport creates. We don't complain that the sewage system doesn't make profits and that therefore we would be justified in dealing with sewage as individuals.

If public enthusiasm for public transport were engendered by such means, what a difference would immediately be shown in our towns and cities. Their street-pattern, on which their architectural character depends, and which is nowadays condemned as inadequate, would be found to be perfectly adequate: there would be no need to destroy and disrupt them by road-widening schemes or blast them open with new highways. The parking problem with all its frustrations, would disappear. We would no longer need to view our town architecture across a forecourt of vehicles.

The privately owned car would still of course have its place—for private journeys and especially for travel in the country the equivalent of the country cottage. But the gregarious human being could surely—at least it is worth trying—be persuaded to make travel to work and about his cities (which are after all, an expression of his gregariousness) a cooperative effort, and take pleasure in doing so. The means of doing so would be far more worth while than expensive and unnecessary multi-storey underground car-parks, which spread the whole of the disease they are designed to cure. But let me repeat, this remedy cannot be forced on the community. In its present mood it would only interpret criticism of motor-car worship as an attempt to put the clock back. First of all the false glamour of the motor-car must be destroyed.

Perhaps the tide is already turning. There are signs that our failure to deal with the motor-car sensibly, and stop the havoc it is causing to the shapeliness, habitability and the very existence of our cities, is already causing people to question the validity of the assumption that all planning must make way for the motor-car instead of, sometimes, the motor-car for planning.

Mr. Lewis Mumford, writing recently in the New Yorker on the subject of the motor-car, suggested four necessary measures to 'prevent it from making city life first unendurable and finally impossible': improving public transportation within the city; re-planning both central and residential neighbourhoods to encourage pedestrian movement and restrict motor-car access; designing smaller cars and restricting the use of huge cars within the city; and relocating industry and business on the edge of the city to encourage cross-city traffic to take the place of the daily ebb and flow from outside.

These are all useful ideas, on which planners are already working with varying degrees of success. But unless the validity of multiplying privately owned motor-car is itself questioned, their success will never amount to much. Mr. Mumford's analysis implies this, although he does not draw the only possible conclusion (that the passion for having a private motor-car to play with is a form of social disease—or at least an irritant symptom of social disease) when he ends with the unanswerable statement that 'the main issue is that the right to have access to every building in the city by private motor-car, in an age when everyone possesses such a vehicle, is actually the right to destroy the city... our highway engineers, in defiance of the lessons the past should have taught them, are butchering good urban land as recklessly as the railroad builders did in laying out their terminals and marshalling yards. But the notion that you can free the motor-car from all restrictions in the city without devastating the city's living spaces is a delusion that will probably cause a lot more damage before it dies.'
when air at low pressure is blown through an organ, under the pipes and was put wherever it seemed possible to make organs with many registers or sound effects. Ernst K methodology of the eighteenth century in the construction of church organs. Shortly after the turn of the century, Albert Schweitzer, along with some contemporary organists and musicologists, was accused of "hearing things" when he claimed that the music of Bach and classical organ literature in general sounded better on "old" organs built in Bach's time than on the then "modern" instruments. In his book "Out of My Life and Thought," Schweitzer describes how he traveled around Europe trying to persuade church architects to stop putting organs in separate organ chambers and bring them back into the open. He also describes how the sound produced by an organ when the same pipe is played at a higher wind pressure is compared to the sound produced by a real instrument on one organ and a tea kettle at full boil. After electric blowers were developed, it became possible to make organs with many registers or sets of pipes; as more pipes were added, the wind pressure was increased and the pipes were designed to play louder. Research has shown, however, that when air is blown across an organ pipe, the basic tone produced has a greater number of harmonics—that is, "overtones" or partial tones at regular intervals above the sounding note—than when the same pipe is played at a higher wind pressure. It is these elusive harmonics which give basic tones much of their character and which account for the differences between harsh and pleasant sounds. Scientific analysis of these harmonics, in new and old organs, has shown that Schweitzer and his friends were not the victims of historically influenced fantasy when they claimed that the tone of old organs was richer and fuller. Starting a Note One of the crucial characteristics of musical sound is its manner in which they begin and end. When an organ pipe is played at pressures greater than those necessary to play other wind instruments such as oboes or bassoons, the sound begins slowly, with a slight hissing noise or lisp, and when stopped tends to fade rather than cease abruptly. At higher pressures, both starting and stopping are abrupt, and the difference can be readily seen on a cathode-ray oscilloscope. Thus, acoustical research has explained why the flute register sounds like the real instrument on one organ and a tea kettle at full boil on another. Along with low wind pressures, builders are beginning to favor a return to tracker, rather than electric, key action, to permit direct control of the pipe. The organist can thereby vary the speed with which he attacks each note—impossible with electric action. Sine-tone contact is made the pipe speaks with uniform speed. Another surprising rediscovery is the improvement in sound produced if an organ is set out in the open in a church and enclosed with wooden cases. Seventy-five years ago, most builders housed the organ in cases that were almost free-standing and self-contained; for all their decoration, they were designed along the lines of a large cupboard. Within these cases the various divisions or groups of pipes were placed in self-contained sections so that the pipes were surrounded on all but the front side by wood. With such an arrangement, the wood of the case tends to produce a sympathetic vibration: the effect is rather like that on the violin where strings vibrate over what is essentially a box. The organ case also tends to direct the sound out into the church, permitting clarity and richness of tone. In classical instruments, with their individual cases, the visible pipes always sound, but many of the pipes seen in our churches today are merely for show or to cover a hole in the wall, and the organ sound is at best muffled. Such facts, substantiated by measurement, have enabled contemporary builders of classic style organs to persuade church architects to stop putting organs in separate organ chambers and bring them back into the open where they can be heard in their full beauty. Thanks to acoustical research, we can now describe musical sound accurately enough to help us plan for the results which in Schweitzer's early days could only be tested by the educated ear.
It this architectural critic were to have his basic training as an art historian the following perversions or inadequacies would probably result:

The critic will tend to perform posthumous psychoanalysis upon the architect and will purport to find in his architecture evidence of all kinds of Freudian disorders and the slightest bit of gossip about his personal life will be taken as prima facie evidence.

The architectural critics so trained will try to transfer from the fields of painting and music concepts and vocabulary which do not apply to architecture. He will tend to find his “absolutes” in only one area of the spectrum of esthetic satisfactions. (See Fig. 1).

Unless he has some training in building technology he will tend to ignore or misinterpret structural factors or will tend to glamorize and exaggerate their significance.

The critics of painting and music may perhaps get along with color reproductions and recordings, but the architectural critic should be so conditioned that he would not think of attempting to criticize architecture without actually experiencing it personally in full scale, four-dimensional space-time reality.

The properly educated architectural critic will not indulge in cult-hero-worship, and he will not patronize or shush the man in the street who says “I don’t know about architecture but I know what I like.” Our ideal critic will be catholic enough in his own taste and understanding to know that laymen will call architecture “beautiful” for several different kinds of reasons (Fig. 1), and the critic will make the effort to explain the different bases of judgement, and to anticipate varied reactions to the same example.

Unless we can have some agreement on a rational basis of judgement and a vocabulary which includes as far as possible the terminology which is historic and accepted in the profession, we will simply have more confusion and a delay in arriving at the desired objective of good architectural criticism, intelligible and enjoyable to laymen as well as architects.

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W. A. T.

I Like Architects!

ERIK E. HUMMEL

I LIKE ARCHITECTS. Just offhand I can count fifteen that I know on a first name basis and there are more than that I nod to pleasantly and casually when we pass—this I suspect puts me upstairs the number known by the average man on the street. I like these architect friends of mine, they wear well as individuals and in numbers I find their company pleasant.

On the other hand, I find that my other friends harbor a hesitant attitude where architects are concerned. Architects are to them an unknown lot, a small isolated group who do mysterious things, perhaps necessary and vital, to the production of living and working space, but they are thought of as a group who stubbornly insist on their own views and are said to usually charge too much for their services. The average man, and so my dilemma. Do I sit passively by and let snide remarks pass, or do I spring to the defense of these men who are my friends? So far I have had the uphill task that generally ends with the topic getting uphill task that generally ends with the topic getting.

What is the answer? Over many years I have heard the value of the work accomplished by and the conscientious attitude of these professionally trained and dedicated men. They serve, just as do lawyers, dentists, teachers and physicians: but the average layman contacts them so infrequently, and usually only when some seeming error is apparent in a house or plant, they are not well known and what little bouquets they deserve more often are omitted.

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Foremost as a cause for this situation I place the limitations of time. The limited numbers of architects in any given geographical area means that fewer folk contact these men than meet other business professional workers. The average small city of five to eight thousand will have a dozen lawyers, a similar number of physicians, a number of dentists, numerous ministers and a bevy of teachers, but the same city is fortunate to be the home of one or two architects. Even if these one or two architects devote fully as much of their time to business affairs as do other professional men, the types of services that their training insures the public still will not become generally known. How then to find the time to acquaint my friends with how the architect serves society?

I am not a public relations expert (if I were I perhaps would be an architect rather than a teacher), nevertheless I am convinced that the architectural profession must—

(1) Seize the opportunities that exist in every region today because of our population growth and shifts, to be a part of every public planning group that meets—and participate. Perhaps the local AIA should assign or apportion these meetings to the time of member, but only when the public sees the interest and abilities of architects will they grow to say “Let’s ask them.” I have attended dozens of community planning meetings for school plants where location, zoning, community traffic, utilities, costs and similar topics were discussed and decided. At these meetings I have found doctors, lawyers and shopmakers voicing opinions—but never once an architect. Is this professional modesty, or are you afraid your colleagues will accuse you of soliciting business? Why?

(2) Show the average “little” man and his spouse that buildings are made, not in spite of their suggestions, but as near their wishes as codes permit. Here I find that my friends have no concept of the term “building code” and know nothing of the limitations these often impose on their dreams of having the kitchen located where the exhaust fan would blow into their neighbor’s window. Your work is often considered negative or repressive, rather than helpful and inspiring.

(3) Finally—and most important—I believe you can show, if you try, that my fellow laymen will save dollars if they use your services. Savings in maintenance and the avoidance of future costly structural alterations are the result of proper planning. Do folks know you would plan for them as individuals, or do they feel you would just draw a house for a family of five?

Anyway, I still like architects!
WHERE WOULD YOU LOOK for a book on Moorish pierced screens if you did not have one on your own shelves? This question faced an AJA member recently. He turned to the AJA Library and much to our pleasure we were able to produce one which he is reading. It is unusual and others on it, he noted, are also rare. Naturally, lending books is but one phase of the Library's work and you may have used the Library's reference service. From the questions of just two days might be noted the following: Title of a book by Starrett on skyscrapers; why the Ohio State Capitol has no dome; where to secure a copy of the Virginia Chapter fee schedule; what national building codes we have; a list of articles on curtain wall construction. Or you may have benefited indirectly through a query to some other Octagon department answered from the Library's resources or through a Journal (or Bulletin) article based on use of its facilities.

However you use it, it is your AJA Library and here to serve you. And you don't have to live in Washington to do so. Most of the loans noted above were made to members living throughout the country. It is simple to borrow—any corporate member in good standing may do so—write a letter telling us what you want, a specific title if you know it, or the specific subject you want. Just be sure to define your subject request as much as possible—just as you expect your client to furnish a detailed program of his needs, so your librarian can serve you better if you will be specific, i.e., don't ask for Moorish architecture in general when you really want Moorish pierced screens.

There is a small service charge made on loans to cover postage and wrapping costs. If you are requesting books by title, please send the necessary remittance with your request—fifty cents for the first volume and twenty-five cents for each additional. Stamps, cash or a check to the AJA are acceptable. If requesting by subject we will send a memorandum. The Library publishes an accession list noting new acquisitions, periodically distributed to about 1200 members. Any member may secure it regularly on request. Short lists of books on special subjects appear on this page from time to time, and as opportunity offers, special bibliographies will be issued. If not already a library user why not resolve to become one?

George E. Pettengill, Librarian

NOVEMBER 1958

THE EXPLODING METROPOLIS

By the Editors of Fortune (196 pp. $7.75 x 10½". Illust. Garden City, N. Y.: 1958: Doubleday & Co., $3.95) is a book which should be and undoubtedly will be widely read by architect, official and citizen, bringing to their attention with emphasis the decay of our cities and the plight of our countryside. Oddly in our contemporary. Oddly in review, Carl Feiss, Sr, architect, planner and urban renewal consultant, has served on many planning boards, taught planning, and written many articles on the subject in current periodicals.

By Carl Feiss

The subject matter is a series of six articles first published during 1957-38 by Fortune magazine. The topic of the writers is the American city, its quality, its size, its purpose, its people and its automobiles. The authors are William H. Whyte, Jr., Francis Bello, Seymour Freed Good, Daniel Seligman, and Jane Jacobs. All are experienced journalists, and Mr. Whyte, as editor, has written the most material. Jane Jacobs, the Architectural Forum is well known to most architect-readers. For some curious reason the editors played down the contribution of Grady Clay, the bright young real estate editor of the Louisville Courier-Journal, whose work appears on page 166 of the book, but whose name does not appear in the table of contents. All authors are demonstrably able to tell a good story and some of them make specific constructive recommendations well worth considering.

The quality of the book is good. It suffers as do all compilations from lack of continuity but the individual articles are stimulating and worth reading. The colored illustrations as they appeared in Fortune were excellent and suffer materially in half-tone. Gordon Cullen's sketches came out the best but even they lack effectiveness with the exception of those which were done in black and white to begin with. These are, of course, very good indeed. However, the material might be considered as seriously under-illustrated and it is undoubtedly true that Fortune or the publishers did not supplement the original illustrations with photos or additional drawings to emphasize important points contained in the subject matter. All too frequently one feels that the journalists assume that the reader is as familiar as they are with specific places or trends which are mentioned in their articles.

If you did not read the Fortune articles as they came out, you should read the book. Much of what is said is challenging and controversial and nearly all of it is interesting. However, it is a reading book and not a looking book.

Journalists make good reading when they are good journalists. This is a book of good journalism on cities. It does not pretend to be complete nor is it complete, but it is stimulating and challenging. However, the compilation of good journalism does not necessarily make for a complete book. This "Explooding Metropolis," particularly in its 95-cent Anchor edition should get wide distribution. It undoubtedly will be used and should be used in schools where civics are taught, as background for civic group meetings, and for a wide variety of other popular purposes which are directed towards the better education of the citizen on the problems of his community. However, since the articles are so individual one almost wishes that the "Exploding Metropolis," the fifth article in the book, Jane Jacobs, who wrote the sixth article "Down Town is For People," also became so intrigued with her own ideas that she persuaded the Rockefeller Foundation to give her a grant to prepare a book on the subject of the human use of cities. She has just obtained a leave of absence from the Architectural Forum.

If the authors themselves became so excited about the subject matter of their own articles that they persuaded themselves to continue on, perhaps there could be no better recommendation for the book.

The "Explooding Metropolis" is a useful pellucide of vital challenging ideas for architects. You have to dig to find them but they are there. The one major deficiency in the book is that there is no satisfactory summary of design ideas and concept. This chapter will have to be written by the architects and planners of America and inserted in your copy when it is published.

Mr. Bergel, a professor of sociology at Springfield College, has prepared a comprehensive textbook on urban sociology in which he treats religion; urban recreation; death and topics with which it the book deals. The book is given to the increasing use of aluminum and its alloys, and to the metals other than steel, such as aluminum and its alloys, and to the concept of structural design employed in aircraft work.

The Human Figure. By John H. Vogel. 144 pp. 6 1/2" x 9 1/4". New York: 1958: Dover Publications, Inc. $1.45.

Well-known for many years to every architect or artist who has studied in a life class, this paper reprinted from this great classic is very welcome. It is still unrivaled for its clear and adequate presentation of thousands of fundamental features of the human body. The 430 pencil and charcoal drawings and the accompanying text tell us just what to look for and serve to open our eyes anew.


Dr. Geiger is Professor of Meteorology and Director of the Meteorological Institute at the University of Munich, thus eminently qualifying himself to write on the subject of climate and its effect. Many of the book deals with the climate of the lowest two meters or so of the atmosphere, where nearly all life exists, showing how the microclimate of exposure, kind of soil, plant cover, the works of man, and other conditions are fully described.


The first edition of this book was published ten years ago. Much has been added. The book deals with much more thoroughness than the lesser ones too, in their way-beautifully illustrated, or accepted a command, to build a building for a client. They bought the house—supervised its quarrying in fact, hired the labor, and even flow charts if necessary; preliminary plans based with much more thoroughness than estimates in at least two stages of the process and advising on materials and processes. If all this is done right now is just when we should be ruthlessly examining it to see if it is really fulfilling its function as stated by its founders 100 years ago.

The Directive from the Board of Directors under which the Committee is operating states that "The next major objective (of the Institute should) be the establishment of the Institute as the comprehensive, authoritative force and voice of the architectural and engineering professions (from the cradle to the grave), and to accrediting and licensing the kind and extent of services that should be rendered by the Institute to its members and the public; and the relation of the Institute to other professional and non-professional groups concerned with the building industry in the United States."

As a step toward attaining that end, the Committee on the Profession was formed to study in detail and supervise the vast amount of assistance in finding the money; supervising the client's needs—his existing, or new building; or, accepting a command, to build a building for a client. They bought the house—supervised its quarrying in fact, hired the labor, and even flow charts if necessary; preliminary plans based with much more thoroughness than estimates in at least two stages of the process and advising on materials and processes. If all this is done right now is just when we should be ruthlessly examining it to see if it is really fulfilling its function as stated by its founders 100 years ago.

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Color in Architecture:

IN THE GOOD OLD DAYS when there were traditions in architecture, the way of the architect was simple and direct. All he had to do was to enter his master's shop as an apprentice, spend the years necessary to absorb the style of the day—Greek, Roman, Renaissance or whatever—and then he was qualified to establish his own practice. If, during his lifetime, he was able to add some refinements in design or construction to the current sum of knowledge, he died happy.

Color had its place in the style of the day, obedient to firm, unquestioned traditions which were based upon decorative principles, that is, eye-pleasing traditions. Today, tradition has disappeared. Now, new programs of requirements demand new solutions in design. New services and standards of comfort, circulation and economy call for new systems of construction in new materials. I need no longer suffice. If, as a by-product, the lady tellers looked rosier and prettier against the blue-violet atmosphere (though color constancy made them unaware of it) to see yellow-orange on anything. When they emerged into the Golden Circle any experienced the after-image in masses of yellow, orange and white. The lobby was in orange, brilliantly lit. As a result, couples swam into the dining-room in a visual atmosphere strongly reminiscent of the famous Grotto at Capri.

SIMULTANEOUS CONTRAST

Simultaneous contrast is an old friend which works for me all the time, but could work against me if I were careless. A bank in New York has a large room containing handsome round fat columns, formerly painted in raw "institutional tan." People complained that the room was hot in summer, but construction forbade installation of air conditioning. By changing the walls to light gray-blue-green and the columns to pure white, I solved the heat problem. Everyone agreed that the room felt cooler. And, as a by-product, the lady tellers looked rosier and prettier against the blue-green background than before. Even the president noticed this and I took credit for the improvement.

The young lady who goes to a dance and wishes to be noticed will wear flaming red-orange, the most advancing of colors. If she wears pastel blue, she might just as well stay at home and watch TV. I use this phenomenon of apparently advancing or retreating colors in less dramatic situations, but it is still useful. If I have long corridors, I shorten them by introducing advancing colors at the ends and in the elevator lobbies. Conversely, to add length to a city church on a restricted lot, I use misty blue in the sanctuary.

In speaking of color, I am not unmindful of light, which is both the parent and twin of color. My interest in light takes two directions:

1. Variations in brightness
2. As influence on colors upon which it falls

We are all aware that brightness attracts humans as the candle does the moth. Accordingly, progressions in brightness can guide people as you desire and can direct attention toward the focus of a design. For instance, in the side windows of a church, the order of brightness of stained glass should always lead up to the sanctuary. This makes an
excellent argument for designing a master layout of the windows for the stained glass artist to follow. Also, the spectral order of hue brightness should be observed, for it is based upon a basic natural relationship. Thus a progression from violet through blue, red and green to yellow will seem satisfactory because it responds to nature’s method.

I do not include the East window in this scheme because too great brightness there creates glare, which is disturbing to the congregation. However, if the East window turns out to be too bright, it can easily be cured. I had that problem at the Mould Memorial Church of University of Southern California. With the architect’s permission, I painted over the outside of the window with gray, dust-colored paint and rubbed it off with stiff burlap. Then each small pane had a clear spot in the middle but shaded off to the leads in each direction. This gave the same effect as 500 years of accumulated dirt which I had observed many years before to be the main cause of the beauty of the side windows in Reims cathedral.

Architects pay too little heed to the effect of light falling upon their colors. They choose colors under the cold north light of their drafting rooms and are surprised at the change of relationships which occur inside the windows in Reims cathedral. Painted blue. No other hue would help them soar and float so effectively. The most conservative of hues is green, which demands no emotional response whatever. Surfaces treated in green stay put and cause no disturbance in a color scheme.

I offer the following suggestions as gleaned from the color firing line:

- Any system for color coordination of materials should be simple enough to be understood without considerable explanation — definitions by location on chromaticity diagrams will not work
- There should be a closer correspondence in color between the products of various manufacturers of comparable materials — a lovely gray-blue-green in brand A is a harsh normal green in brand B and in brand C a dull, muddy green.
- Exact color matches between dissimilar materials are not worth trying for.
- There should be more exact conformity between samples and products supplied.

To my mind, the secret of harmonious, appropriate, functional color lies in the man behind the scheme. No system has yet been invented that supplants an experienced, talented eye and mind.
SCHOOL BUILDING COSTS

From a talk given at the Spring 1957 meeting of the Ohio School Business Officials Association by E. W. Dykes, AIA.

We are all aware that unprecen tted sums are now being spent for school building construction. Since almost all such buildings are financed from public money, it is inevitable that controversy over construction costs will arise. Mountains of misinformation are available on the subject. I think I can show the error of some of this talk by throwing certain items of controversy into their proper perspective.

First, let's look at some of the most popular methods of measuring school building construction costs:

- cost per student
- cost per classroom
- cost per cubic foot
- cost per square foot

UNITS OF MEASURE

The cost per student unit reflects not only structural costs but educational program costs as well. Its usefulness is restricted, however, because the layman is generally unaware of these distinctions. Used in conjunction with cost per square foot, the per student unit indicates rather clearly differences in program. Cost per student can be used only for complete buildings, as additions rarely include a complete complement of all necessary rooms.

The cost per classroom unit is the most widely misunderstood of all the units. It is confusing because the other three are used in connection with actual costs per unit of measurement while the classroom cost reflects also the costs of corridors, boilers, kitchens, cafeterias and other rooms essential for a complete educational program. Obviously, the unit means absolutely nothing unless one knows what the other rooms are in a particular building under discussion.

I have seen a simple classroom addition compared with the national average on classrooms. This simple addition did not include the costs of other rooms so the figures were favorable. An interested taxpayer, upon reading these statistics would rush to excoriate his own school board who then turns to the architect and so on down the line until the thing is settled. Since it is not feasible to include an explanation each time the classroom unit of measure is used, this measure is next to meaningless.

Cost per cubic foot has long been one of the popular units of measure in building costs. It is far enough off the mark that I suggest its use be limited to a controlled body. For example, if the height of an 8' high room were increased to 10', 20% would be added to the cubic but perhaps less than 5% to the cost. Unless the use of the room demanded the increased height, very little would be added to the useful ness. Total construction bill would be up but cubic cost would be too. An architect who sticks close to minimum heights in order to cut costs comes up with higher costs per cubic foot than an architect who pays no particular attention to the low ceilings. To compare costs on a cubic basis would be unfair.

Cost per square foot indicates only structural costs. This simple method does not include the costs of other rooms and so the figures were favorable. An interested taxpayer, upon reading these statistics would rush to excoriate his own school board who then turns to the architect and so on down the line until the thing is settled. Since it is not feasible to include an explanation each time the classroom unit of measure is used, this measure is next to meaningless.

In Ohio, school buildings represent about 10 cents of the average dollar; the balance is used for the educational program. So if we cut building costs 10% and in doing so add nothing to maintenance and operation, we gain nothing but a few more headaches and an unsatisfactory building. I am not so sure whether this is wise. I am not so sure that controversy over single buildings is really justified, and I think that controversy over construction costs is really justified. This means putting up the school site, building costs well in advance of the time they will be needed, and preferably large enough to accommodate students.

Also, since winter is a poor time for building, many contractors cut costs so they can get a job at the start of the new season. Some contractors introduce innovations in material handling and cut their office overhead, so they can afford to be the successful bidder.

Although school administrators are interested in the lowest school costs possible, they should also be interested in the contractor making a profit on the job. Then they can be more particular about finishes and correction of little defects in the building. But if the contractor is working on a very close margin.

The first money saving item to consider is a master plan for building construction. This means putting up the school site, building costs well in advance of the time they will be needed, and preferably large enough to accommodate students.

The building levy is a most remarkable way of saving money and should be considered by every area where such a plan is used. Insurance premiums may soon eat up whatever savings are made in construction. Without a well-planned building program, the annual insurance costs may soon eat up the extra cost of insurance to over balance the savings.

The planning of additions is another way of saving. It might even be well to pay the architect for the preliminary planning of a complete addition. After working drawings are ordered only a part of the building will be built mechanically. The first structure will be somewhat more expensive because of heating plant and other facilities for the future building, but thousands of dollars will be saved when the addition is made. This is not only a saving but results in better planned school buildings.

Insurance rates may soon eat up whatever savings are made in construction. Without a well-planned building program, the annual insurance costs may soon eat up the extra cost of insurance to over balance the savings.

The use of standard plans is another way of saving. If identical school boards suggest. On identical plans, the contractors are interested in the lowest school costs possible. They should also be interested in the contractor making a profit on the job. Then they can be more particular about finishes and correction of little defects in the building. But if the contractor is working on a very close margin.

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The building levy is a most remarkable way of saving money and should be considered by every area where such a plan is used. Insurance premiums may soon eat up whatever savings are made in construction. Without a well-planned building program, the annual insurance costs may soon eat up the extra cost of insurance to over balance the savings.

METHODS OF SAVING

In Ohio, school buildings represent about 10 cents of the average dollar; the balance is used for the educational program. So if we cut building costs 10% and in doing so add nothing to maintenance and operation, we gain nothing but a few more headaches and an unsatisfactory building. I am not so sure whether this is wise. I am not so sure that controversy over single buildings is really justified, and I think that controversy over construction costs is really justified. This means putting up the school site, building costs well in advance of the time they will be needed, and preferably large enough to accommodate students.

The building levy is a most remarkable way of saving money and should be considered by every area where such a plan is used. Insurance premiums may soon eat up whatever savings are made in construction. Without a well-planned building program, the annual insurance costs may soon eat up the extra cost of insurance to over balance the savings.

The planning of additions is another way of saving. It might even be well to pay the architect for the preliminary planning of a complete addition. After working drawings are ordered only a part of the building will be built immediately. The first structure will be somewhat more expensive because of heating plant and other facilities for the future building, but thousands of dollars will be saved when the addition is made. This is not only a saving but results in better planned school buildings.

Insurance rates may soon eat up whatever savings are made in construction. Without a well-planned building program, the annual insurance costs may soon eat up the extra cost of insurance to over balance the savings.

The use of standard plans is another way of saving. If identical school boards suggest. On identical plans, the contractors are interested in the lowest school costs possible. They should also be interested in the contractor making a profit on the job. Then they can be more particular about finishes and correction of little defects in the building. But if the contractor is working on a very close margin.

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Insurance rates may soon eat up whatever savings are made in construction. Without a well-planned building program, the annual insurance costs may soon eat up the extra cost of insurance to over balance the savings.
TABLE I
Variations in School Building Construction Costs Resulting from Use of Materials of Different Quality

<table>
<thead>
<tr>
<th>Description</th>
<th>Contract Price</th>
<th>Cost per sq ft</th>
<th>Difference per sq ft</th>
</tr>
</thead>
<tbody>
<tr>
<td>Using best materials for good maintenance without regard to cost</td>
<td>$304,180</td>
<td>$13.46</td>
<td></td>
</tr>
<tr>
<td>Actual cost</td>
<td>285,800</td>
<td>12.58</td>
<td>.88 6.5</td>
</tr>
<tr>
<td>Using lowest limit maintenance items</td>
<td>277,400</td>
<td>12.22</td>
<td>1.24 9.2</td>
</tr>
<tr>
<td>Using lowest limit maintenance items &amp; omitting certain program items</td>
<td>259,488</td>
<td>11.42</td>
<td>2.04 15.2</td>
</tr>
</tbody>
</table>

Using the Charles M. Watson School in Massillon, Ohio, as a case study we see what savings can be made by downgrading materials and omitting certain program items. (Tables 1 and 2) However, the desirability of these savings begins to fade when one considers the probable increase in maintenance cost and headaches, and the lack of proper teaching facilities.

TABLE 2
Decrease in Construction Costs Resulting from Substituting Materials and Omitting Certain Program Facilities

<table>
<thead>
<tr>
<th>Proposed change</th>
<th>Actual cost</th>
<th>Decrease in cost per square foot of building</th>
<th>Decrease in cost per square foot of material or unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Replace galvanized windows with painted steel</td>
<td>$450</td>
<td>$.121</td>
<td>$.019</td>
</tr>
<tr>
<td>Omit painting of boiler room piping</td>
<td>75</td>
<td>.0036</td>
<td>.019</td>
</tr>
<tr>
<td>Omit silicon waterproofing</td>
<td>450</td>
<td>.0685</td>
<td>.028</td>
</tr>
<tr>
<td>Omit Durowal reinforcing</td>
<td>650</td>
<td>.80</td>
<td>.124</td>
</tr>
<tr>
<td>Use asphalt tile instead of terrazzo corridors</td>
<td>2,800</td>
<td>.186</td>
<td>.208</td>
</tr>
<tr>
<td>Use vinyl tile instead of terrazzo corridors</td>
<td>650</td>
<td>.070</td>
<td>.335</td>
</tr>
<tr>
<td>Omit vacuum cleaning system for chalk trays</td>
<td>3,023</td>
<td>.70</td>
<td>.006</td>
</tr>
<tr>
<td>Omit glazed tile in corridors</td>
<td>800</td>
<td>.0200 (each)</td>
<td>.006</td>
</tr>
<tr>
<td>Omit glazing angles (76 lights)</td>
<td>152</td>
<td>.0018 (each)</td>
<td>.006</td>
</tr>
<tr>
<td>Omit 10 corridor tackboards</td>
<td>1,650</td>
<td>.85</td>
<td>.073</td>
</tr>
<tr>
<td>Omit all wardrobes, teachers storage &amp; sink cabinets</td>
<td>5,300</td>
<td>180.00 (each)</td>
<td>.222</td>
</tr>
<tr>
<td>Omit side ceiling partition between cafeteria &amp; gym</td>
<td>4,700</td>
<td>.10</td>
<td>.011</td>
</tr>
<tr>
<td>Omit acoustic in classroom</td>
<td>250</td>
<td>.132</td>
<td></td>
</tr>
<tr>
<td>Omit skylights</td>
<td>3,000</td>
<td>300.00 (each)</td>
<td>.132</td>
</tr>
<tr>
<td>Omit metal sheathing cabinets</td>
<td>3,000</td>
<td>300.00 (each)</td>
<td>.132</td>
</tr>
<tr>
<td>Omit painted window vents</td>
<td>112</td>
<td>2.80 (each)</td>
<td>.005</td>
</tr>
</tbody>
</table>

It has been our experience over the years that no one specific thing is saved a great deal on building cost. It is the intelligent savings in a number of places and the pre-planning of buildings that save expense. Small savings in materials can result in higher maintenance operation and a limited educational program. Don't be penny wise and square-foot foolish.

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  Federal Housing Administration, Washington 25, D. C. 6" x 9", $1.00
  A new and up-to-date edition arranged for convenient reference, and to be kept current with future revisions or additions.

- Location and Space—Economy
  A general theory relating to industrial location, market areas, land use, trade, and urban structure, by Walter Isard. Published jointly by the Technology Press of Massachusetts Institute of Technology and John Wiley & Sons, Inc., New York. 1956. 350 p., diagrs., 6" x 9". $8.75
  Prof. Isard, with teaching experience at Tufts, Harvard, M.I.T., and the University of Pennsylvania, has written a study whose "basic objective is to improve the spatial and regional frameworks of the social science disciplines, particularly of economics, through the development of a more adequate general theory of location and space economy." A highly technical study, the author does not intend that the general theory presented will be of any great utility for handling specific problems of reality, although he plans a second volume with less general and more useful theoretical frameworks.
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---

**TECHNICAL NEWS**

- **acceptability of products**
  Federal Housing Administration
  A. Ruberoid Lock-Tab Asphalt Shingle
  B. Old American Lok-Tab Asphalt Shingle
  A. The Ruberoid Company
  500 Fifth Avenue
  New York 36, NY
  B. The Old American Roofing Mills
  Division of the Ruberoid Co.
  500 Fifth Avenue
  New York 36, NY

- **Richwood**
  The Richkraft Company
  510 N Dearborn Street
  Chicago 10, Illinois

- **Busatti "Plaster"**
  Busatti "Plaster" (also known as "Wall-Kote")
  Busatti Corp of America
  52 Broadway
  New York 4, NY

- **A. Carey Roofmaster Shingle with Sta-Seal Tabs**
- **B. Mule-Hide Master Seal Shingle with Wind-Tite Tabs**

- **A. The Philip Carey Mfg Co**
  Lockland, Cincinnati 15, Ohio
- **B. The Lehon Company**
  (Subsidiary of The Philip Carey Mfg Co.)
  Warren at 25th Avenue
  Bellwood, Illinois

- **Wood Particle Board**
  Brownsville Particle Board and Associated Products, Inc.
  Brownsville, Oregon

- **Durethene Polyethylene Film**
  Koppers Company, Inc
  7001 W 60th Street
  Chicago, IL

- **Weldwood Primed Siding**
  516" Weldwood Grooved Hardboard Siding
  1/4" Weldwood Textured Panels
  5/16" Weldwood Textured Grooved Hardboard
  US Plywood Corporation
  55 West 44th Street
  New York 36, NY

- **Homasote Company**
  Trenton, NJ

- **Dun-Lap Shingle Panel**
  The American Stained Shingle Co
  361 West Spruce St
  Columbus, Ohio

- **Barrett 1/4" Rigidwall Insulating Shathing**
  Barrett Division
  Allied Chemical Corp
  40 Rector St
  New York 6, NY

- **Ammo Studgun and Fasteners**
  Ammo Products, Inc
  1100 26th Street NW
  Washington, DC

- **Homasote Metal Channel Applied Lapped Siding**
  Homasote Company
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October 30-November 2: Annual Meeting of the National Trust for Historic Preservation, New Orleans, Louisiana.

November 10-14: Meeting of the Board of Directors, AIA, Clearwater, Florida.

November 20-22: Florida Association of Architects, Miami Beach, Florida.

November 24: Chamber of Commerce of the United States, National Committee on Metropolitan Growth, Sheraton-Park Hotel, Washington, D. C.

November 24-26: Fourth Annual Student Forum, The Octagon, Washington, D. C.

December 3-4: Conference on Architecture for Adult Education, Purdue University, Lafayette, Indiana.

March 13-23: Middle Atlantic Regional Meeting, Greenbrier Hotel, White Sulphur Springs, W. Virginia.


Necrology

According to notices received at The Octagon between August 8, 1958 and September 29, 1958

CONKLIN, CHARLES W., Mansfield, Ohio
GOIN, SANFORD W., PAIA, Gainesville, Fla.
GUSTAFSON, WILLIAM A., Richmond Hill, N. Y.
HAIRING, DAVID W. B., Sr., Atlantic City, N. J.
HAMPTON, H. W., Huntington, W. Va.
HANKER, WILLIAM J., Memphis, Tenn.
HULL, EMMEET J., Jackson, Miss.
JONES, WILLIAM H., Melrose, Mass.
LORENZ, JOHN A., Webster Groves, Mo.
PRATT, CARROLL H., Brooklyn, N. Y.
SCHWARTZ, RICHARD, PAIA, Boston, Mass.
WALLACE, TODD B., Laconia, N. H.
WEBER, RALPH, Orlando, Fla.

The Rensselaer Polytechnic Institute School of Architecture, Troy, N. Y., has announced its visiting lecturers on its Alcoa Foundation Series for the current academic year. During the Fall Term, Josef Albers, Professor Emeritus of Design, Yale University, Fred N. Severud, Consulting Engineer, and Carl Feiss, Planning and Urban Renewal Consultant, will deliver lectures, and R. K. Thomas, Sculptor, will be Visiting Critic in Design.

William B. Tabler will speak in February at the opening of the second term, and Minoru Yamasaki will criticize the preliminary theses presentations of the Fifth Year class in March. Additional lecturers for the Spring Term will be announced at a later date.

The Alcoa Foundation Lecture Series was established at Rensselaer in order to bring prominent architects and men eminent in allied fields to the campus for lectures, consultation, and criticism.
DEFINITIONS

A. To determine precisely; bring out the limits or outlines of (2 words).

B. Pasadena architect, 1868-1954, with his brother fathers of the college style, represented in A.I.A. centennial exhibition, received special citation (full name, middle initials).

C. A total process resembling stippling in which a chalk drawing is transferred to a typesetter plate for integrale printing (3 words).

D. Made somewhat differently; varied (2 words).

WORDS

A. I.A. special citation (full name, middle initials).

DEFINITIONS

E. The section that lies midway between the nodal points of a circulating medium (2 words).

F. Famous Cromlech at Avebury (Wiltshire).

G. Brother and partner of (given and middle names only).

H. A method of forming stonework with recessed joints, principally employed in Renaissance buildings.

I. Central feature of (2 words).

J. The technical mastery of an art; a taste for (initials).

K. Greek paradise; no relation to Ebbets (2 words).

L. A narrow and retired space.

M. Contemporary mode of design (key expressive, not aesthetic to the profession, 2 words).

N. French verb meaning to flee, escape (participle without reflexive pronoun).

O. Age or period of (2 words).

P. Phenomenon, useful in design of decorative, architectural or other, would be normal for a visual stimulus (2 words).

Q. Achievement of he who read Cecil Woodham-Smith's 1954 documentary book (3 words).

R. The beam or lowest division of the columns extending from column to column.

S. Boston architect, first A.I.A. president of 20th Century (full name, middle initials).

T. Excessively free from doubt or error (2 words).

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