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SPECIFICATIONS—
Size: 4" x 36"
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Continuity of significant expression is certainly of greater importance in architecture than continuity of design. Here, however, both expression and basic design reflect overtones of more ancient forms and lend to this outstanding Temple a beauty and delicacy all its own. No small part in the final disposition was played by reliable Vermarco marbles, in this case Eureka Danby, Roman Travertine, Radio Black and Montclair Danby. Depend upon fine Vermarco marbles to perform equally as well for you.

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A Cry for Sanity in Art Criticism

EDITOR, Journal of the AIA:

After reviewing the current furor and the political implications ascribed to the selection of American works of art to be exhibited in the Soviet Union, I should like to observe that bad art ought to be called bad art—and whether it be red, pink or blue bears little relevancy as to its artistic merit.

Until the advent of the avant-garde movement, sculpture, painting and mural decoration were considered to be entirely within the realm of the visual arts and, being such, each work was acclaimed or criticized on the basis of its esthetic qualities.

However, we are also aware that throughout every period of history there have been tendencies in art gravitating toward the exotic, the bizarre and the grotesque. That these art forms as a transitive novelty have their place cannot be denied, for they have an appeal to almost everyone in limited dosages. But to foist them on an unsuspecting public as the credo of art in our era is perhaps the most outrageous esthetic swindle and mass-mesmerism ever attempted.

Thus, the avant-gardists, knowing their works could never survive purely on their visual merit, have added a new dimension—the contemporary art critic—a sophist so intoxicated by his own vocabulary that he has eagerly accepted the role of high priest in the lip-service promotion of a new and weird art cult. This literary propagandist is the nucleus of a powerful claque dedicated to the adoration and glorification of artistic insincerity and charlatanism.

In comprehensible and inartistic "masterpieces" are "explained" to the public by a subtle concoction of glib gibberish, motivational psychology and literary legerdemain. The critics have embarked upon a complete abnegation of art's basic precepts. In their world-stand-on-head lexicon, ugliness is beauty, fantasy is realism and blatant confusion is orderly logic.

These self-styled experts, who have entrenched themselves as the arbiters of the art world, sneer contemptuously at schooled art as "dated," "passe" and "out-of-step with the times." Their substitute formula, however, is to replace artistic anachronism by inartistic anarchism and nihilism.

I am sure that any rational person will agree that we are in the midst of vast and unprecedented changes in our social and cultural mores. Since time and progress are no longer moving as straight-line functions but rather as logarithmic curves, it is particularly important to establish sound criteria for the visual arts that will take these decisions out of the hands of the maguemank, the dilettante and the insincere faddist.

Any country is only as great as its cultural and moral attainments. History affords us much previous experience whereby civilizations flourished or foundered on these fundamentals.

Finally, may I say we have enough social, moral and cultural ills plaguing the contemporary scene without the additional chaos and bad taste created by artistic delinquents and their very vocal coterie.

Bouquets

GORDON D. FRIEDLANDER
White Plains, N. Y.

EDITOR, Journal of the AIA:

I had been meaning for some months to write and express my support, or more properly my enthusiasm, for your general editorial policy as I sensed it develop, but I fear it required the delightful item by Dr. Panofsky on the "Ivory Tower" to strike real fire in me. His range and touch there demonstrated were so perfectly evocative of the qualities I would hope to see inculcated in my ideal architect's education, I could not resist writing in to convey my pleasure.

I would like to add, it is one facet of the Journal which I observe frequently and with satisfaction: Your inclusion of this sort of non-specialist, non-technical, in a sense tangential but in a broader sense significant and vastly enriching phase of the cultural effort of the human race. Perhaps a nostalgic reminiscence on my part of the disappearing genre of gentlemen architects—George Howe, Philip Goodwin, Lawrence Grant White come to my mind; perhaps a throwback further still, to the Renaissance "Homo Universalis" whose bent for self-expression extended through all the arts. In any case, I wish you well.

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Your Guide to the Best in Aluminum Value

For exciting drama watch "Alcoa Presents" every Tuesday, ABC-TV, and the Emmy Award winning "Alcoa Theatre" alternate Mondays, NBC-TV.
Gilson Brown elementary school is completely air conditioned yet costs no more than many “heat only” schools!

Total cost: $13.51 per sq. ft. Air conditioning, heating and ventilating: $2.17 per sq. ft.

READ THESE FACTS

1. Here are the COST FIGURES for Gilson Brown school

The 32,000-square-foot Gilson Brown school cost $13.51 per square foot—excluding complete air conditioning. Air conditioning, heating & ventilating costs per square foot came to just $2.17 (this cost is below that for many “heating and ventilating only” schools in this area). Rids were also taken on heating and ventilating with provision for future air conditioning. The difference between the two was only 50c per square foot, so equipment for immediate air conditioning was installed. Classroom air conditioning unit ventilators, packaged liquid chillers and related refrigeration equipment are products of Herman Nelson School Air Systems.

2. Here’s how the NEED for air conditioning was proved

The administrators and board of Altus Community Unit School District No. 11 had positive proof that air conditioning was needed. In building an earlier school, air conditioning was incorporated in the mechanical system as an alternate proposal which was accepted by the board. Their decision was overwhelmingly justified as the resulting program of remedial enrichment and high school summer classes began to make education a year-round proposition in Altus. The increase in summer enrollment proved that the need for air conditioning was real. This time it was planned for in advance—to take full advantage of the economies inherent in air conditioning design.

3. Here’s how DESIGN ECONOMIES of air conditioning were proved

Architects Keeney & Stolze of Altus proved beyond question that tangible savings could be effected in air conditioned school design. They pointed out that by designing for air conditioning, the cost of installation and operation of the air conditioning system could be greatly minimized. A few examples of Keeney & Stolze design: orientation of the classrooms on a diagonal to the property lines for maximum sun control; a clerestory on the north side of the corridor to give light without heat to corridors and classrooms; a roof of white Georgia marble chips to reflect heat and minimize the air conditioning load.

4. Here’s the KIND of school this planning achieved

Design economies didn’t detract one iota from quality construction. Gilson Brown school contains 13 classrooms, two kindergarten rooms (each with its own sanitary facilities and outdoor play terrace), administration suite, health room, counseling room, multi-purpose room with stage, ceramic-tiled kitchen with walk-in cooler, band room, four large ceramic-tiled rest rooms and a teachers’ lounge. Exterior finish: brick and ceramic tile facing. Doors and windows are of aluminum. Interior has exposed masonry walls and two-inch solid plaster partitions. Corridors have glassed ceramic tile walls. Floors are of asphalt tile with terrazzo or cork patterns.

Send for FREE FACT KIT on school air conditioning

This informative, up-to-the-minute file on school air conditioning includes important data on (1) how air conditioning affects the learning environment, (2) the cost of school air conditioning (including rule-of-thumb estimates you can use in your own planning), and (3) the equipment for school air conditioning. Address requests to: American Air Filter Company, Inc., 215 Central Avenue, Louisville, Kentucky, Attention: Jack O’Neil.

American Air Filter Company, Inc.
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Gilson Brown elementary school, Altus, Illinois. Superintendent of Schools: Dr. J. B. Johnson. This completely air conditioned school was designed by Architects Keeney & Stolze. Classroom air conditioning unit ventilators, packaged liquid chiller and related refrigeration equipment are products of Herman Nelson School Air Systems.
Community Planning News—Nashville, 1970

The first trial step toward the fulfillment of the plans of "Nashville—1970" (See AIA Journal, May 1959) may be taken very soon. The Nashville Banner carried a story not long ago stating that the proposal for a "Church Street Mall" continues to draw comment and study. The plan calls for restricting Church Street exclusively to pedestrian use from Eighth Avenue to Fourth Avenue—except that vehicular traffic would be permitted to cross Church Street on the cross streets as usual.

Ultimately, of course, the street would be paved flush, eliminating curbs, and landscaped. But it is planned to make a trial—probably for only a day or so—in the near future. It would seem too bad that such a trial could not last at least a week, justifying the placement of temporary landscaping in tubs, benches, kiosks and other furniture to attract the shopper. It would also give the merchants, the public and the city fathers a better chance to study the effects.

An "inquiring reporter" sampled opinions from downtown pedestrians. Some of the comments were: "It'd be a good idea. The sidewalks are awfully narrow. When there's a big crowd downtown it's awfully hard to get around. It takes twice as long to walk from one store to another. It would save a lot of bumping around." "According to what happened in Kansas City, it might be a good thing. Malls are in use there." "I don't think it would really be necessary, with the traffic lights we have." "It would be a pretty nice thing, with space as overcrowded as it is. Pedestrian traffic could move freely." "People in cars have the same right to be downtown as we do. There's enough room for all of us. There's certainly enough room on the sidewalks. If you have to walk down Church, it would be a long way to go." "I think you would be a good idea. You could cross the street when you get ready. It would be more convenient."

All of which is interesting but adds to the confusion. AIA Chapter President John Charles Wheeler said: "We are as interested in the proposal now as when it first was presented and will be glad to work with the proper groups to effect it." Mayor Ben West favors it but is worried about re-routing traffic. "There is no doubt but that we need more conveniences for pedestrians downtown," he said, "We also need downtown beautification."

So the discussion goes. Perhaps by the time this story appears in print, the experiment will have been made. Good luck to Nashville.

NOTE—The Editor would like to have a full page of Community Planning News every month, in cooperation with the Institute's Community Planning Committee, Carl Feiss, Chairman. Please send us news of what you and your community are doing.

Inquiry by Canadian Architects into Housing Is Assisted by Federal Grant of $30,000

Arrangements have been completed for a full-scale inquiry by the Royal Architectural Institute of Canada into the design of residential areas. The inquiry will be assisted by a Federal grant of $30,000. The announcement of this assistance came from The Hon. David J. Walker, Minister responsible for the operations of the Federal Housing Agency, Central Mortgage and Housing Corporation.

A committee of inquiry will cross Canada seeking ways in which the new parts of cities and towns can be better designed for the inhabitants. It will be comprised of architects and others involved in the formation of new communities. They are Peter Dobush, of Montreal, John C. Parkin, of Toronto, and Charles Edward Pratt, of Vancouver. Alan Armstrong of the Central Mortgage and Housing Corporation will serve as secretary to the committee at the base of operations in the RAIC offices in Ottawa.

Maurice Payette, President of the RAIC has recommended the establishment of the committee and has been quoted as being confident that the committee will be successful in submitting recommendations for the improvement of the residential environment throughout Canada.

Seven sweeping hyperbolic paraboloids of the Forest Products Pavilion at the Oregon Centennial Exposition graphically demonstrate the freedom of design with wood. Thematically an expression of dynamic form, the building strikingly illustrates the qualities of warmth and freedom inherent in the living material, wood. Separation of the soaring sweep of paraboloids was achieved with skylights which give a studio quality to the light within the structure. Acoustics are of concert hall fidelity.

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Construction Details on Opposite Page
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Southland Center...

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The huge Southland Center project in Dallas includes the 42-story Southland Life Tower and the 28-story Sheraton-Dallas Hotel.

The end walls of the Tower and the Sheraton-Dallas have a curtain wall of flat Mo-Sai panels.

Mo-Sai curtain wall panels—sculptured to give an ever-changing pattern of highlight and shadow—are also used on the second and third floors of the Southland Tower base. All Mo-Sai curtain wall panels have a quartz aggregate surface texture exposed by the franched Mo-Sai process.

Versatile Mo-Sai offers the architect an unlimited choice of color, texture, scale, and third-dimensional effects, such as bas relief and sculpturing.

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everything moved fast –
including other trades!

On this one,

The 6,400-ton steel framework of Four Gateway Center, Pittsburgh’s newest downtown skyscraper, was topped out on April 29, just 3 months and 17 days after the first steel member was placed. Other trades followed closely on the heels of the American Bridge erecting crew as each floor of the 24-story office building was erected.

An important feature of steel construction occasionally overlooked—immediate full strength—is the key to safe, fast and economical construction. When a structure is built around steel, everything about the job moves fast. Not only does the framework go up faster, but other trades can move in and start work almost as soon as members are in place—rather than waiting weeks for concrete to harden.

In addition to speed and strength, steel lends itself readily to all kinds of fabrication and all types of connections. (All field connections on Four Gateway Center were made with High Strength Bolts.) Steel can take rough handling, it can be shipped and stored economically, and it can be safely erected in any season. And steel construction can be readily altered and accurately inspected during and after construction.

The important fundamentals show that steel serves you best. And for the best service in steel construction, get in touch with American Bridge.

A number of new types of concretes—providing a variety of important advantages—have been introduced in recent years. One type, lightweight aggregate concrete, has come into very wide use for suspended slabs in large commercial buildings. When resilient floors are installed over lightweight aggregate concrete* there are two potential sources of difficulty. (1) Lightweight aggregate concretes contain a greater quantity of water than solid aggregate mixes. And, being hygroscopic in nature, they tend to retain this excess moisture, particularly when it is confined under a top layer of regular concrete. This prolongs the drying time. And it can create “alveolar moisture problems” similar to those in concrete laid directly on the ground. When this occurs, adhesive bonds can be ruptured, linoleum, wood, and other flooring materials can be damaged. (2) Due to the low density of aggregates used, the subfloor surface may be too weak to hold a suitable bond with resilient floor adhesives.

Determining moisture conditions
It is essential that moisture tests be made on all lightweight aggregate slabs before resilient floors are installed. While rapid evaporation may cause the surface to dry completely, moisture is often retained within the slab itself.

This test should always be made with suspended lightweight aggregate concrete subfloors. Conducting the test with different types of Armstrong adhesives checks the suitability of the subfloor for resilient floors and determines which adhesive is best for the condition of the concrete and the specified floor.

Adhesives
If tests show a suspended subfloor of lightweight aggregate concrete is completely dry, conventional Armstrong adhesives may be used. In some cases, when the floor is not completely dry, the adhesives recommended for Armstrong floors on grade should be used. When high quantities of moisture are present, the use of special—and somewhat more costly—Armstrong adhesives permits the safe installation of resilient floors.

Surface reinforcement
Because it forms a weak, crushable surface, lightweight aggregate concrete of density less than 90 lbs. per cu. ft. should be finished with a one-inch topping of standard concrete mix before resilient floors are installed. The chart below shows approximate densities of aggregates and gives recommendations for surface preparation:

---

*This article is confined to concrete made with lightweight aggregates such as vermiculite or expanded slag. Other new types of concrete (air-entrained concrete, for instance) do not have the same properties of moisture retention or surface strength as most lightweight mixtures.

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Resilient floors on lightweight aggregate concrete
How to avoid installation difficulties

---

Recommended surface preparation

<table>
<thead>
<tr>
<th>Density in lbs. per cu. ft.</th>
<th>Type of aggregate or chemical composition</th>
<th>Recommended surface preparation</th>
</tr>
</thead>
<tbody>
<tr>
<td>light 20-40</td>
<td>expanded perlite, vermiculite, and others</td>
<td>1st topping of standard concrete mix</td>
</tr>
<tr>
<td>medium 40-60</td>
<td>expanded slag, shale, and clay</td>
<td>approved for use of resilient flooring if troweled smooth and even</td>
</tr>
<tr>
<td>heavy 140-130</td>
<td>standard concrete of sand, gravel, or clay</td>
<td></td>
</tr>
</tbody>
</table>

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The selection of resilient floors
When suspended lightweight aggregate concrete subfloors are thoroughly dry, any Armstrong floor may be safely installed. When there is moisture, Armstrong floors manufactured by alkalis or moisture should be specified. Armstrong Asphalt Tile and vinyl-asbestos Excelon Tile—both low in cost—are excellent choices. Armstrong Rubber Tile, Custom Corlon Tile, or new Opalux Vinyl Tile (both solid vinyl) can be used. Armstrong Vinyl Corlon with Hydrocord Back is the only sheet floor that can be used on lightweight aggregate concrete that contains excessive moisture. Questions can be referred to the Armstrong Architectural-Building Consultant in the Armstrong District Office nearest you. He can also obtain for you the services of the Armstrong Research and Development Center and special assistance from Armstrong installation specialists. Or write Armstrong, 1610 Sage Street, Lancaster, Pennsylvania.
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- Around Fire Protection. With or without a vapor barrier, the Lexsuco system completely eliminates combustible materials between the roof deck and roof insulation. When you apply Lexsuco Adhesive R907T with the Lexsuco Vapor Barrier, or the adhesive only, over nailable roof deck, you get assured building fire protection.

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Contact your distributor or Lexsuco representative for information and the Underwriters' Report, or write to us direct. Ask about THE NEW LEXSUCO PVC WATERSTOPS.

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Noncombustible Roof Constructions and Waterstops

Distributed, in Canada by Bishop Products Limited, Box 30, Toronto 24, Ont., and Sidney Foundry & Paper Co. Ltd., 500 Wigeon Street, Barrie 3, B. C.
they unbutton the walls and they grow!

Off comes the Georgia Marble, on go as many square feet of floor space as necessary for current expansion, back go the walls again. There will be no deference to expediency here. Texas Instruments can spread out over their 300-acre tract without changing form or function. In fact, they've already started.

Such flexibility is unimportant to Texas Instruments, a company with a plant area that is nine times larger than it was five years ago. So is the appearance of their operations, certainly a reflection of the character of the work within.

In using Georgia Mezzotint Marble they found that the large panels (5'3" x 5'0" x 0'11 1/4") made available to them were surprisingly inexpensive when it came down to the buttoned-in-the-wall costs. And they gained the malleable and enduring beauty that only marble can provide. Result: a happy marriage of practicality and the first material of architectural art.

In November of 1958, The American Institute of Architects, along with some thirty other institutions, ranging from the American Medical Association, the CIO, the AFL, the Girl Scouts of America, and the American Farm Bureau, to the Catholic Welfare Council and the National Association of Manufacturers, sponsored a "People-to-People" seminar which circumnavigated the South American continent by air. I found myself honored as their representative and was suddenly on my way.

In each of the seven cities, each member had an opposite number. In other words, I had an architect host or two at all places. An amazing geographical, architectural, political and social experience!

What is the function of an architect on this seven-city intercontinental circuit with representatives of other professional societies? Well, I had to find out. In the seminars there were some periods during which the architect, dressed up in his earphones, was only a listener, but there were other occasions and opportunities to answer questions by savvy Santiagoans or Cario- cans or, even better, by planting questions with his architect counterparts. In the first seminar at Caracas, this became apparent and from then on the architects arranged a freer schedule and used their eyes throughout the urban areas. Instead of detailing it at each city (let me say here that the efficient George Denny and his staff were the organizers of this economic and cultural safari), it was so arranged that everywhere the first privilege we had, with the support of the State Department, was a personal briefing by the American Ambassador — everyone of them sincere, dedicated men. With their encouragement and instruction, we proceeded to explore sources which they could not and which were indeed fruitful. We then went out on the town and at the end of our stay, elegant receptions were held for us and our counterparts — sometimes, I'm sure, at expenses far above governmental allowances (See January 1959 Atlantic Monthly).

In this pursuit, recalling the gift of some of Christ's apostles, the architects discovered that in the visual arts we were benefited by the "Gift of Tongues." Economists, educators, political experts, must talk and translate, but architecture speaks all languages.
Caracas

- My counterpart in Caracas, Dr. Sanabria, a progressive young success in a country building madly (goodly and badly) took us up 3000 feet, almost vertically, on the Teleferico to Monte Avila to inspect his new Humboldt Hotel. This is the hotel which, built by the departed dictator, Jiminez, against Sanabria’s recommendation for rooms, has about four per cent room occupancy per year. Sanabria told Jiminez twenty-five rooms, Jiminez said one hundred seventy-five and they settled for one hundred twenty-five—about one hundred too many. An incredible view of the city—almost in plan—certainly an excellent oblique. The empty space would be ideal for the plan commission. The food and drink was excellent. From this point, the city looked like a dream.

Caracas, seen from inside, is the most nervous city in South America and with earth-moving to create new sites and new roads, the new and half-built buildings, the pre-election tenseness with its ubiquitous posters, gives the impression of a psychological boiler factory about to move into a new location. The handsome Presidente de the Junta, the suave Admiral Lazzarabel, received us graciously and with never a thought of eggs or stones, the Venezuelans in numbers took us to their hearts.

Your representative visited the nuclear reactor he designed for the Venezuelan government and completed the arrangements for the final stage of construction. A white ceramic temple to research, fifteen miles out in the mountains above Caracas. All Venezuelan money except the fuel leased by the Atomic Energy Commission. We survived the revolution.

Bogota

- Banking out from the airstrip at La Guaira overlooking the Caribbean and the northern Andes to Bogota, where a great round table at the airport provided tiny cups of the best coffee in the world and Root Tequendama Hotel. In the morning we discovered that this part of Bogota is also being rebuilt and is in its ugly, empty period. My architect counterpart, Martinez, showed me his new hospital—indeed large (1000 beds plus) and most efficiently equipped, as well as a luxury country club with one of the best glass swimming pools ever built. One of the thousands of examples of the contrasts between luxury and poverty that we were to see everywhere south of the Equator.

The new University of Los Andes, struggling under the leadership of an anti-Hitler German, Dr. Hildebrandt and his dynamic Irish wife, had progressive steam—even the School of Architecture. They took us over one day and showed us how the famous salt mine can become a cultural center. Expecting something “corny,” we found a vast cave, carved out in bays with an orderly plan and detail but one-man concrete and steel which can move up and down seven feet and with two revolving stages at the side which move to center as required. The rest of the house is complete except for a fine mural, one hundred feet wide and sixty feet high, going through two floors, second in quality only to someone like Leger and not yet equalled by anyone in the United States. The place is full of dust and when it will be used, God knows!

- In the University of Santiago, which is a Roman Catholic institution, the School of Architecture, financed by a wealthy Hebrew patron, has a most adequate staff and buildings.

Lima

- Refueling at Quito and Guayaquil, with the sun exactly on the top of your heads and the heat of their mid-summer, the barren horror of the petroleum area at Talara—not a blade of grass or vegetation, but lines of jet fighters. The colossal scale of the waves and the cliffs along the Pacific, brings us to Lima. Compared to Bogota and Caracas, here is a surprisingly finished-looking, comfortable city, even though not so progressive. Here, the best known architect, Belomundo, is too busy to see us as he is a candidate for president. They say very popular, too.

Our seminar, with instantaneous translation earphones, was held in the magnificence of the Cabildo (city hall). The economic problem recurred its ugly head and our economists passed their counterparts in a diplomatic attempt to explain the cut-down in lead and zinc quotas and lowered prices. This criticism of the United States policy began in Colombia on the subject of coffee and we never got rid of it—nor even answered it properly. Our government, after listening to the lead and zinc miners from our western states, with the State Department’s attention diverted to trouble spots in Europe and Asia, created by the Soviets, has made decisions in these areas (coffee, lead, zinc, cotton, wool, and beef) which appear to the South American as deliberately unfriendly. Whether they are accurate, economically, is more than an architect can say, but psychologically and diplomatically they are hollow. Whether the administration weighed these differing considerations is not known, but if we lose the personal friendship of the South American republics to the Soviets for a perfect economic answer, we have lost even economically. The Soviets are everywhere and not under cover. The South Americans want us to be friends and do not want the Soviets, but the hard-boiled economists and the American companies have more than commodities to think of. Before the era of Soviet penetration, these actions would have left themselves with the healing quality of time, but now the Soviet jumps into the vacuum so fast, we have no time for diplomatic error.

Here in Lima, the educators had heavy words with each other: the self-satisfaction of the American missionaries. At Ocampo’s elegant house, we had red-heart cake, “Just pick up the shell, sir,” unique even in the piquance of Peru—and a free conversation between engineers and architects—farther than the seminars because professional and friendly, and the Pisco sours loosened our tongues.

We concluded in Peru the situation between North and South America is bad because of three things:

- The capacity of the American companies
- The stupidity of the American government
- The capacity and stupidity of the Peruvian government.

Santiago de Chile

- From my room: the snowy mountains, the great plaza in front of the hotel, the dark gray of the buildings (due to smoke and a dark native cement), the afternoon attention of my counterpart, Mardones Restat. One morning he secured a helicopter from the Chilean Air Force and with Dr. Van Esteren, town planner only to Amsterdam, we took off and did the whole system of boulevards, river banks, parks, and the satellite developments from low altitude at low speed. This is the way to study the plan of a city. Then out to the Undurraga vineyards (also by helicopter) landing on the lawn a hundred feet from our luncheon table, with Guacho music in the most classic grove of cypress this side of antiquity.

In the University of Santiago, which is a Roman Catholic institution, the School of Architecture, financed by a wealthy Hebrew patron, has a most adequate staff and buildings.

The Chilcan architects, among them Ignate and Bilboch Newberry, arranged (with some influence) for the new “Teatro Municipal” to be opened. It was designed by a brilliant young bad-boy architect named Alvarez. It has a stage, rising totally above and below—about thirty feet—and divided into thirty inch squares, each of which can move up and down seven feet and with two revolving stages at the side which move to center as required. The rest of the house is incomplete except for a fine mural, one hundred feet wide and sixty feet high, going through two floors, second in quality only to someone like Leger and not yet equaled by anyone in the United States. The place is full of dust and when it will be used, God knows!
One question came to me here from my architect friends, "why, at the international conventions, are there only six or seven United States architects and one hundred-seventy French architects or one hundred-thirty Mexican architects?" One of these conventions was held in Moscow.

Upon inquiry, I found that in most cases, the governments subsidize the delegates. In view of our sixty billion budget for military purposes, one wonders why we pay so little attention to cultural propaganda at which our country could be more adept. It happens not only in cases of this sort, but it seems as though our products in the intellectual, literary, radio and movie areas couldn't be any worse. The bulletins from Russia seemed to be doing them more good than the diplomats.

Buenos Aires

- Crossing the Andes not far from Santiago at 23,000 feet, we circled the dramatic peak of Aconcagua and then flew the long, flat flight across the pampas to this great city.

One cannot see Buenos Aires without thinking of its decay through the long dictatorship of Peron. A great country, almost ruined by a single man. Our seminar brought this out. The strength, even after spoiling by Peron, of the Neo-Peronistas still shows in their strikes and their non-recognition of redevelopment contracts with American petroleum companies. Oil, as well as utilities, are government-owned and, therefore, operating badly and at a loss. There was an economic pall over the country—in fact, officially, a state of siege existed.

The best parts of the city suggest the old days of the orientation toward Paris and Europe. But even now, contrasting with the tottering economy existed.

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AIA Journal, October 1959

running around on four sides. A full-size plaster model of one of these intriguing columns is set up for inspection.

Hence, I would guess for perhaps 10,000, is well under way. It includes multi-story buildings (slab) with partitions forming structural wing-walls under six inches thick, row houses, and garages for all classes of inhabitants from the garbage man up through government and white collar workers and including the "brass." The brass includes the many residences for the ambassadors in their separate area over-and white collar workers and including the garden communities for all classes of inhabitants. The brass includes the many residences even greater depth they will have parks of their own. These areas are all the same size except that assigned to the North Americans and this, obviously, makes a conversation piece.

The scope and vastness of the street and boulevard system looks as though it would serve even a greater development of the automobile. The main arteries for circulation are over four hundred feet wide, I would guess, four lanes in each direction and service streets on each side. Intersecting pedestrian traffic will be above or below.

The hotel is brutally simple and rectangular to the point of being visionary high, the rooms all on one side of a corridor 750 feet long, the special glass block is claustrophobic and I understand will be relieved by some clear glass. There are no unions, no trades or crafts, no specialists. They are guided by very competent draftsmen referred to him as "Oscar" and those which are smooth and barren with their high stone curves on top, are beautiful—especially Gavea (Portuguese—Look-out!)

The interior, of which Oscar's daughter—or the designer, is elegant, comfortable, and full of warm colors and sufficient gold and brass to keep the sparkle. All the important rooms have glass walls and look out to the lake, pools, and path beyond. The little chapels with the spiral plan is just outside the formal reception room and, also, has white marble walls, subtle compound curves, developed from the spiral plan and the outward curve at the base.

I have used Niemeyer's first name because all the draftsmen refer to him as "Oscar" in a respectful and he is a little like "Mies." They have come from all over the world and for work for small wages in an atmosphere of creative construction.

The least interesting area is the temporary shantytown, complete with pool parlors and alleys, bars, stores, bawdy houses and other emporia. The paper, sheetmetal, and plywood structures are dumped helter-skelter along one main street which changes from mud to dust instantly. The town consists of about 25,000 people. There are no unions, no trades or crafts, no specialists. They are guided by very competent construction bosses under the control of a government corporation, "Novocap," and earn about $25 a month. The only craft which seems to be causing them trouble is steel erection. The piles of unerected steel diminish very slowly. Every one carries a gun or a knife and life is cheap as a cut rate.

Niemeyer is proud of the Palace and well he might be. It is completely furnished, down to the ash trays, for the President and guests. All service rooms are slightly below and above ground and are vast, forming the terrace on which the building sits. The site is at the tail of the peninsula so that there will be water on three sides and even on the fourth side toward town, a broad basin, four hundred feet wide, with two portals at the ends, forms the barrier to the park surrounding the palace.

The unique shape of the columns is more subtle and beautiful than distant photos reveal. As Niemeyer puts it, "they barely touch the palace. There is such drama in the incredible spread of beaches and bays and the sugar loaves—count them—they are the best vertical masses in the world.

The building in Rio, such as the ABL building, the Ministry of Education, are better by far than the greater volume of structures in Sao Paulo, but where the architecture is more impressive, the engineering is inadequate, even to the extent of being underdeveloped and requiring people to queue up forty or fifty in a line at the ground floor.

In our discussions on integration, one of which took place in Rio, the tendency of the press in the United States, which is then copied by the world press, exaggerated the negative points about the Little Rock debacle and failed to give to the world the true picture of how limited these areas of non-integration are in the United States. Our Negro offset, Mrs. Sampson, did some hard and brilliant speaking in this connection. Brazil is unique in that it has no language barrier didn't exist. As we know each other better, both continents will live better, "Solo y Juntos."

One of our geonius, at a summarizing meeting in Rio, said "when we started this complex journey, we were certainly confused, but after seeing everything, we are still confused but on a much higher plane! It would be impossible to enumerate the many courtesies, professional, personal, and social, which were extended during my journey. The Institute and the writer can boast of our fellow architects in South America and my sincere appreciation is extended to these fellow architects in the various cities: CARACAS: Sanabria.

BOGOTA: Martines, Camilo Cuellar.

LIMA: Hart-Terre, Edeljade.

SANTIAGO: Mardones-Restat, Jorge Artega.

BUENOS AIRES: Sanchez Elia, Peralta, Agostoni, Urgarte.

MONTevideo: Julio Butler, Nelson Revello, Villars, Scang, Brugnini.

SAO PAULO: Iszaza, Ugarte, Achucarro, Iszaza.

BRASILIA: Oscar Niemeyer.

RIO DE JANEIRO: Roberto Marido, Roberto, Uriboro.

Rio de Janeiro

> Travel ads may be of value, but one should come to Rio without having seen a picture of it. There is such drama in the incredible spread of beaches and bays and the sugar loaves—count them—they are the best vertical masses in the world.

However, I wish the Brazilians would leave them alone without cable-cars and illuminated vistas. Those which are smooth and barren with their high stone curves on top, are beautiful—especially Gavea (Portuguese—Look-out!), which rises above the Gavea beach and above the houses around its base. One of these is Oscar Niemeyer's beachhouse which has been published. At the head of a small ravine, it is more magnificent than pictures indicate. This ravine must have looked impossible before the terrace floor was built halfway up with a small sugar loaf rock in the bottom—almost unrecognizable as a building site.

The American Ambassador, Mr. Briggs, gave as a briefing at Wally Harrison's embassy building—strangely enough, the only large airconditioned building in Rio. The Brazilians count entirely on sunshades, which do an amazingly good job (once you are in them) considering they have the cost of cooling. However, with all of the luxury of Rio, the lack of airconditioning is rather amazing.

The office buildings in Rio, such as the ABL building, the Ministry of Education, are better by far than the greater volume of structures in Sao Paulo, but where the architecture is more impressive, the engineering is inadequate, even to the extent of being underdeveloped and requiring people to queue up forty or fifty in a line at the ground floor.

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Photos courtesy The Pan American Union, Wash., D.C.
Being a planner of sorts, one of the most freely used of my prerogatives is that of making assumptions. Thus, I assume that at least one of the purposes of this series of articles on Central Business Districts, and as incident thereto, "city planning," is for others to garner some "do's" and "don'ts" from what their predecessors have experienced. Knowing that very little attention will be paid to such admonitions, I am, nonetheless, (as becomes all good "Mosesque Demagogues") passing them out. I do so at once just to get them out of the way, and in the hopes that a wandering reader may be intrigued into reading further—or at least looking at the pictures. I believe they tell a story which does not require the supplemental literature. These admonitions have particular reference to those who have a yearning to become members of a plan commission, but apply equally well to architectural advisors in the matter of downtown planning.

First Admonition: In a community made up largely of politics, newspapers, pressure groups, and selfishness, as well as a lot of nice people, the path from cheerful creativeness to dull realization is often tough and tortuous. But don't give up.

Second Admonition: Forecasting even ten years ahead means, in essence, being out ahead of the pack. You will be called such dainty things as, "dreamer," "nut," "crazy," "lunatic," "wild-eyed," "crack-pot," etc. But stay out there in front. There is no progress in just meeting what the pack wants you to meet.

Final Admonition: Do not expect too much of a tangible nature in return. It takes a lot of time. There is no salary. It doesn't necessarily create jobs for your office. You get perfectly lovely folks mad at you. But there is no fuller satisfaction than that of having created something of value for your community. Even if it is just a little bit.

And so, with a blush of honest modesty, we offer this bit of our metropolitan planning—Indianapolis CBD.

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### Monument Circle today

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The Metropolitan Planning Department of Marion County was not brought about in a moment. It was the fruitage of careful research by citizens who were aware of a serious need, and who were determined to seek an answer. It seems proper to insert here, that without not only the support but the encouragement of such a group, the probable success of a Plan Commission practically non-existent.

This group in Indianapolis was able to convince the state General Assembly that the future life of our state capital city was threatened. The groundhog automobile was at our vitals. The life-giving stream of industry was being diverted to other cities because of the cumbersome procedures inherent in locating in Indianapolis. Schools, churches, and parks were located with-
Just as deliberate a body as any similar legislative recommendation. You see, our state Assembly is perhaps it is well that as significant a creation came back to the 1955 session with a specific instruction to the Plan Commission. You will recall that the physical area of the Department is restricted by the political boundaries of Marion County. From the administrative standpoint, it is almost impossible to cross those boundaries. But the surging population never sees them. Central Indiana, being relatively flat, offers no geographical limitations, so people spread gaily in all directions, and Metropolitan Indianapolis is way out beyond the boundaries of Marion County. Thus, because we are limited to Marion County, we feel that we cannot do a complete planning job. Practically speaking, there is a fourth component of the planning procedures. All zoning ordinances of the county (including Indianapolis) are approved by the Plan Commission. After having been approved by the Plan Commission, such ordinances must go to the County Council for final adoption. The County Council, being an elected body, is, of course, directly responsible to the people and is the proper body to pass legislation.

The creation of a Master Plan for Marion County is the large and well-nigh awesome job of the Planning Department. As alphabetized in the law, the components of the Master Plan go from “a” to “q”; and then was added a neat “r” which included “... any other factors which are part of the physical, economic, or social situation within the city or county.” That should about cover anything, and certainly must be interpreted with caution.

The first conception of this group was a Plan Commission having jurisdiction over all planning in Marion County plus the seven surrounding counties. This was, of course, a realistic approach. They were thinking in terms of the real metropolitan area, rather than in terms of political subdivisions. But the General Assembly, for some strange reason, is bent by politics. It didn’t require much time for it to amputate the neighboring counties and to limit the geography involved to Marion County alone.

After the usual committee confusions and entanglements with legislation involving daylight saving time, chicken lice, sheep dip, integration, and all-to-work, etc., the General Assembly of the State of Indiana, in session of 1955, passed the act creating the Metropolitan Planning Department. The act applied only to counties containing first-class cities; and at present there is only one such county in Indiana. It is Marion County, with Indianapolis being the first class city. The Planning Department is composed of three divisions: (1) the technical staff; (2) the Board of Zoning Appeals; (3) the Metropolitan Plan Commission. You will recall that the physical area of the Department is restricted by the political boundaries of Marion County. From the administrative standpoint, it is almost impossible to cross those boundaries. But the surging population never sees them. Central Indiana, being relatively flat, offers no geographical limitations, so people spread gaily in all directions, and Metropolitan Indianapolis is way out beyond the boundaries of Marion County. Thus, because we are limited to Marion County, we feel that we cannot do a complete planning job. Practically speaking, there is a fourth component of the planning procedures. All zoning ordinances of the county (including Indianapolis) are approved by the Plan Commission. After having been approved by the Plan Commission, such ordinances must go to the County Council for final adoption. The County Council, being an elected body, is, of course, directly responsible to the people and is the proper body to pass legislation.

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to an outer loop around the city, there is proposed an inner loop circling the Central Business District. It is safe to assume that the most far-seeing and sincere planner in Indianapolis cannot possess the imagination to predict correctly what this system of highways will do to the city. Briefly, and with omissions, the existing changeables, plus the highway threat, constitute our most serious planning problems.

The architectural group served as consultants to the staff of the Planning Department. The staff gathered the requisite technical data, made the finished drawings, and kept the thinking within the confines of sound planning. Calvin S. Hamilton, Executive Director of the Department, was a constant attendant at the meetings of the architects, which consumed many midnight hours. The architectural group was headed by Edward D. Pierre, FAIA. His creative capacity was invaluable. Usually a member of the Plan Commission was also in attendance.

The first job was to fix the objectives. As finally determined they were as follows:

A. Establish well defined land use districts for community cohesiveness.
B. Provide an arterial system of one-way streets and a closed freeway loop to relieve traffic congestion in the shopping core.
C. Provide adequate parking facilities.
D. Provide a combined transportation center to facilitate movement of passengers, freight and mail.
E. Promote private owner remodeling and renovation of property and buildings.
F. Engage in large scale land clearance and rehabilitation of blighted areas.
G. Provide expanded, compact and stabilized shopping facilities.
H. Consolidate governmental facilities on the city, county, state and federal levels.
I. Provide civic, cultural and educational facilities which will extend their influence to encompass the entire Metropolitan Area.
J. Insure that Indianapolis, the capital city of Indiana, symbolizes by its growth the paramount position it holds in the political, economic and social functions of the state and its citizens.

The architects were then divided into four groups with a section of the total area assigned to each group. Shortly thereafter, things exploded in all directions. Turn that many architects loose with instructions to "go to it," and you may expect astonishing things to happen. Of course astonishing things did happen, and it became necessary to reintroduce the realities of the problem without curbing imaginations, after which steady production followed. As schemes and thinking began to take form, the groups were brought together for discussion, for criticism, and for co-ordination. After much hard work and many sacrificial hours the overall scheme commenced to unfold. It was then that our Indianapolis architects commenced to reap the returns on their time investment. They received no money award, but they had the thrill of creation on a large scale, and of thinking in broad terms. More particularly, they had the profound satisfaction of having made a real contribution to their home city, which should add much to the happiness of the days ahead.

The significant parts of the plan are indicated on the map. These are simply particular elements which fit into the complete plan, just as the Central Business District plan must fit into the larger plan for Marion County. As a matter of fact, in planning the CBD the entire Metropolitan area was constantly persuasive. The traffic pattern, as it originates in the county, and as it heads into and out of the CBD, has much to do with the shape of downtown. Zoning for future industry, which existing close-in industry will look at conservatively, will leave areas for new planning in the CBD. Proper considerations for increase in shipping by truck and plane are elements in the central city plan.

Just where does our plan go from here? It has, as yet, a rough course to run. Much can happen to it. First, it will have the close perusal of an Advisory Council to the Commission. This Advisory Council is made up of representatives of various groups interested in the Central Business District. It is a Council composed of dedicated and influential citizens, and I underline the word influential. Being influential, they are persuasive in the proper places. This Advisory Council makes its recommendations to the Plan Commission. The Plan Commission then reviews the plan at a regularly advertised public hearing, where the general public has its say. And you may be sure the public will have its say. The Plan Commission then does to it what it wants to, and may finally adopt it (or a reasonable facsimile of it), as a part of our Comprehensive Plan. In the adoption of the Comprehensive Plan, the Plan Commission is the final authority. All ordinances having to do with zoning and related problems are recommended by the Plan Commission to the County Council, and final adoption of such ordinances is by the County Council, but the Comprehensive Plan is an exception to this procedure.

Much may happen to the architects' conception before final adoption by the Plan Commission. Our belief is, that there is so much in the plan that is basically sound and readily defensible, that it can not be easily destroyed. A basic essential leading to final adoption is the assurance that in general the plan has the approval—in fact, and more the active support—of those citizens most concerned. In this instance it is first those who earn their living in the CBD. Secondly, it is those governmental units concerned with operating the essential functions of a large city. It is a fact, which we all recognize, that local government is to a very large percentage supported by taxes created in the CBD. The more interesting the CBD becomes, the more firm the tax base becomes. Therefore, the enthusiastic support of government is essential. Then the approval of those who spend time and money in the District is not only desirable, but it becomes a most potent persuasive force. Ingress and egress is important to these folks; but I am persuaded that exciting appearance, and an overall "aliveness," is the prime pulling power. They must have something to "Oh" and "Ah" over.

Well, it's a selling job. We envy Philadelphia, and their model. We believe all of the literature, and all of the pictures put together in a book fail to tell a complete story. A model which can be seen in three dimensions, and in which people can recognize streets and buildings, gets attention and interest, and these are the first essentials to a selling job. So far we have not discovered that individual or group able and willing to finance the making of a worthy model. But we will. And when we do have a model, and also the support of business, the approval of government and the interest of the people, it then becomes a matter of taking care of details. The battle is won.
It is difficult to avoid these theological images in introducing him because his reputation, his public pronouncements, his photographs ... the majestic head, the marble serenity, the Millenian collars, the cape of Superman ... all conspired to suggest a sort of exiled Buddha, a high priest scuttled from his temple by the barbarians, one of those deposed monarchs so frequently seen around New York who gamely try to convey that a free-wheeling democracy is just their speed. The room he sat in was somber, in a lavish Edwardian way, and no single furnishing —no chair, fabric, window casement, carpet, lintel, or door knob—was invented much later than the June of 1869 in which he was born. He lay stretched out on a sofa, his fine hands folded on his lap, a swail precisely draped around his shoulders.

He looked like Merlin posing as Whistler's Mother. Indeed, there was always a curiously feminine grace about him, but it was nothing frail or skittish. He looked more like a matriarch of a pioneer family, one of those massive Western gentlewomen who shipped the piano from Boston round the Horn, settled in theSacramento Valley, defied the Argonauts as they set fire to the cattle barns and, having finally reclaimed their Spanish land grants, came into their own again. He wafted the whole vision aside as a bit of vulgarity for which he would not hold me responsible. Then he slipped, from total and inexplicable thrall, into a seniority of forty-odd years, the flattery of calling me "young man" and asking what was on my mind. It was a project that was to waver and die and come alive again in his eventual appearance on a television programme. He dismissed it at once as an absurdity, since it involved a medium only slightly less debased than the movies. I told him that no sponsors would interrupt his sermon, the models he used would be of his own choosing, he could say exactly what he pleased.

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In writing about him as a character delineated by Henry James, or sentimentalized by Gertrude Atherton, I hope that I am not so much arranging a suitable atmosphere as conveying a psychological shock. One expected a tyrant, a man constantly caricatured by the press as a bellowing iconoclast. And here was a genial sceptic whose habitual tone was one of pianissimo raillery. No.tions of an architect's famous crack about television ("Summer stock in an iron lung") and he smiled and seemed to be pacified again. The director's voice came squawking over the loud-speaker: "Mr. Wright, will you turn and face the models?" He must have thought it was God's commandment, for he raised his head and said to the air the appalling syllable, "No."

He thereupon sauntered off to get his hat, cane, and cape. I chased him and got him off for a stroll around the dark cavern of the studio that lay beyond the lighted set. It was a tight moment. He needed to be coaxed, but he could not be bullied. He was a patient man, but his patience was a sort of stupefaction. He seemed to be ready to block their shots and know where the prima donna was."

When I met him first on a winter's afternoon in what I almost slipped into calling the vestry of his suite at the Plaza in New York, I pressed the electric button at first timorously, then boldly, then incessantly, and was about to turn away when the door was opened by a pretty woman, a secretary, or granddaughter, or vestal virgin, perhaps, who beckoned me into the hushed gloom behind her through which I expected to see sacramental tapers. Then she nodded and vanished down the corridor.

Those reminiscences of the gentle Jove who has left us are both amusing and deeply revealing.
"we should learn from the snail...it has devised such a tension so perfect that you can balance a monolith on a pin point." I felt that this lament for the city he secretly adored was a little recitation for Buncombe. In his nineteenth year he could afford to be agreeable to everybody, though he tried valiantly to resist the inclination. After all, it had been fifty-eight years since he had pioneered the sweeping horizontals of the first "prairie house" (which would pass creditably anywhere as a distinguished "contemporary" house), fifty-one years since he built the first air-conditioned building, fifty-four years since the cantilevered floor, poured concrete, and all the other explosive solecisms that are now the grammar of the modern architect.

One imagines him arriving this week end in Heaven, tapping his malacca cane against the peary gates to test the strength of the carbohydrate of time, and greeting Saint Peter with the disarming tranquil gaze and the snowy head held high. He will ask to see "the many mansions I've been hearing about for nearly ninety years," and will be taken on an obsessive tour only to discover, without surprise and without regret, that there is a distressing reliance on Gothic, that there is nothing so bold as the cantilevered balcony over the waterfall in Bear Run, Pennsylvania, that nothing has been done to dampen with coloured glass the enormous glare of the light that never was on land or sea. He will say he is turning away in boredom from his guide: "The principle of floating all these structures on a more or less stable mass of cumulus clouds is no newer than the cushion of mud I put under the Imperial Hotel in Tokio in 1922, with the express purpose of withstanding (as it did) the wrath of God. I understand He has been sulking ever since."


A Medal Worth Its Metal

No matter how great the honor of an award, the medal, plaque, or Oscar that goes with it rarely has much artistic value. Most of them, in fact, are downright awful. But even medals can be well designed, to wit the medal shown here, donated by AIA Regional Director Harold Spitznagel which is awarded annually to the senior student of Augustana College, Sioux Falls, S.D., who has shown the greatest promise in the fine arts. It was designed by Ogden Dalrymple, a sculptor on the Augustana College staff.

VI

I remember my first visit to the Tomb of Napoleon under the Dome of the Invalides (officially, the church of St. Louis), and the extraordinary feeling of space that took me by surprise and exalted me in a way entrance into no other space has ever done. And this I believe is the common experience of those who, surrendering their billet to the crippled veteran at the door, enter and find themselves in a world they never knew, a space like the inside of a vast sound. Nor is this experience a one-time thing; for I have been there often since those days before World War I, and I am always amazed anew.

There is a very different quality to the space of Chartres, to the space of Bourges, the spaces enclosed by today's concrete shells. This is to be expected, and yet how can there be different kinds of space? How can there be Bach's Magnificat and Prokofiev's Concerto in D? The space of Chartres is mystic space through which the search of man for God and God for man is pursued endlessly. Bourges, on the other hand, is a profound unity, defined by lines clearly drawn by St. Thomas, a multiple, five-sided vessel without transom. The lines of force are made clear and luminous by color, not so in Chartres richer and more vibrant. For all that, the unity of Bourges, apparently so complex, is no less complex than Chartres, the mystery of the Trinity remains. The Dome of the Invalides is not complex, and unlike either Chartres or Bourges the unity is exterior as well as interior. It is one thing, one space contained, one form in Space. It is a complete, unitary, comprehensible world. L'Etat c'est moi.

Space today often is mere enclosure. It is not the same thing, and usually is not meant to be. Architects have been obsessed by enclosure because the process of accomplishing it is closely related to the creation of space. So close that they are often confused. And indeed the line is finely drawn: the Dome of the Invalides: Val de Grace: the dome of the Capitol in Washington. In St. Peter's in Rome the feeling of space as space is lost in the feeling that it has been hollowed out of the ma-

Notes on a French Horn

This is the second part of an article by Henry S. Churchill, FAIA, and deals with space in architecture and the inevitable failure of contemporary architecture to evoke great moments.
A garden of some kind, or at least an adjacent garden that can be looked into, or a park perhaps. Slums by our standards, but "picturesque" when we travel. Our own slums are seldom picturesque, they are just dreary. Perhaps it is because we are too familiar with slums: or it is wrong to equate the picturesque with the unfamiliar.

There is little tearing down in order to rebuild, not very much remodelling. There is, as with all new peripheral growth, and where there was war damage the rebuilding was usually more open, less plan-wise and with more glass, than was the old. It is not so picturesque, but it is better for children to grow up in. Architecturally it is mediocre, like our new residential areas. The church and the Hôtel de Ville remain, the one with its cobbled market-square and the other with its cedared garden. They keep the continuity that interconnected time and place. There is a plaque, somewhere, to tell of Nazi murder and local valor. One does not monumentalize these things, recording is enough and proper. There were martyrs under the feudal lords, too; resistance was always there. Better than most the French well know that "liberty is not of tomorrow but of today."

Replacing of the old goes slowly in France, in spite of destruction caused by war, and much of the new resembles the old. A strong and pervasive "modern" architecture does not yet exist in France. Corb is a sculptor with theories about architecture; Ronchamps is a deep personal expression of failure, without a future. For some reason—it is hard to say what—Mies's expression of the modern is either brilliant or broken. Enamel chips. Steel rusts. Masonry improves with age, even concrete. Glass is either brilliant or broken. Enamel chips. Steel rusts.

Why does the architect seek to create space? Why did God, when the world was without form and void, seek to create it? To have space, there must be form. Movement and comprehension need space and form, to create them is delight. In architecture they become visible, in music audible, in poetry they become essence. Painting is magic.

VII

Précy is the old capital of Perigord, and Perigueux is where for thirty thousand years people have lived along the valleys of the Dordogne and the Vézère. It may be the oldest continuously inhabited area on earth. The oldest inhabitants chose wisely, for the valleys are very lovely, and if the air is not of Angévienne keenness neither is it sultry and hot, and no doubt there were truffles even then.

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VIII

In France, as in other countries of long history, full mountain hilltop retreats sit on a castle or a little church, and in the fields are manor houses. These are part of the nation's heritage, nothing much in themselves, yet each is part of the picture of valley or ridge, each would yield, on close inspection, some detail of pleasure—a carved gate, or a charmed garden, or the pleasant proportions of a stair tower, or just a pattern of old brick. "Modest" domestic has not yet become a part of the landscape, the new glass and concrete villas are to be found only in clusters near the big cities, and not many even of those, so that how they will "wear" cannot as yet be even guessed. It is customary to say that the local old materials of stone, clay and wood are what give quality to buildings of little merit otherwise, the weathering, the patina that fits them into the sun of Provence or the mist of Brittany. And this may be true, but perhaps even glass and cement and steel may acquire in time a justifying landscape to harmonize with the corrosion of the material, and the sagging cantilevered rusted facia may become objects of picturesque esthetics, with the mouldy wall and the picturesque, 1be\1be w SR\sr\soro d garment or the pleasant proportions of a tower or just a pattern of old brick. 1be\1be w SR\sr\soro d garment or the pleasant proportions of a tower or just a pattern of old brick. 1be\1be w SR\sr\soro d garment or the pleasant proportions of a tower or just a pattern of old brick. 1be\1be w SR\sr\soro d garment or the pleasant proportions of a tower or just a pattern of old brick.
architecture is so essentially urban that nothing seems quite as silly as the structures at St. Remy, unless it be the remains of Vaison-la-Romaine. St. Remy sits in a fold of the Alpilles, that curious outbreak of tortured rock rising over the Bouches-du-Rhône and of which Les Baux is the crowning horror. St. Remy faces away from the sea, one comes upon it quite casually, there it is for no particular reason, the Mauquoye and the inerible Arch, and some upset stones. And that is all. It is by Chirico out of Piranesi.

It is obvious that the Romans cared for none of these things, whereas the cloisters of St. Theodore and St. Gilles are shelters from whatever fears created the carvings of the porches, the Hells so much more real than the Heavens, the many happy devils busy torturing and the one sad, futile Christ. But this is not just Provencal, architecturally and sculpturally more vivid here, infinitely poorer without the minor masterpieces, the transient attractions even, and these too the ostensible Arch, and some upset stones. And that is all, it is by Chirico out of Piranesi.

After listening to the Ninth Symphony, as I have been this morning, magnificently reproduced on my hi-fi set, I should like to be able to walk into Chartres Cathedral and sit for an hour or two. I cannot, of course. I must fall back on my memory of that tremendous visual symphony, of the emotion it has been my privilege to have felt when there. And I say to myself, these are supreme experiences, but it is not good to try to experience them too often. I do not want to hear the Ninth every day, nor to sit in Chartres as a matter of course. But I would like to be able to realize Chartres or any other work of architecture, when I wished, as I can the Ninth, or a work of Bartok's, or the B-Minor, or a piece by Lully. I have never seen the Parthenon, nor the Temple of Heaven, and though I have seen very fine photographs, and studied the plans, those buildings and others which I have not seen and walked into and out of are as nothing to me emotionally, so I have missed a part of what should have been my life experience. For the emotional greatness of architecture lies in its space and form in relation to oneself, looking at pictures is like looking at a musical score: It is notation and nothing more; the only reality is space and form in space, and sound and the magnificence of the space that sound makes.

Architecture is indescribable because it is something that has to be seen to be believed. It is not possible to convey the quality of something one has not seen, even though it is possible to set down its metes and bounds, at least, at the very least, it could be exactly reproduced by a qualified artisan. A photograph or color print of a painting is a reproduction of a two-dimensional thing in two dimensions, and the impression it gives is of the same order as the original. The letters of the alphabet are words and sentences conceived and not printed page in any language very clear. I will convey anything about a Strass Waltz or the Ninth Symphony, or even a simple song, unless one has already heard it, and has been touched by it. And so with architecture, which is a three-dimensional experience... no words, no photographs can substitute for the physical experience. Architecture must, therefore, remain an art of limited appeal, for too many can stand under the dome of St. Peter's and then St. Paul's, so vast. Hagia Sophia for a month, visit the Taj Mahal when the spirit moves. Or even take the ten full minutes necessary to completely grasp the design of Lever House.

Clever as we are, I doubt if we will find a means of bringing the Taj Mahal and its gardens life-size into a 12 x 24 foot living room in Merley Heights in the same way that we bring music and drama and poetry. How then can we expect even the educated to have a real appreciation of architecture? Discrimination in the arts depends on the ability to make comparisons, to see or hear, and above all to feel, this work and then that, and to repeat and comprehend how these growing on one and this other does not.

So to the untraveled architecture is a non-existent art. What one has not seen does not exist—except, perhaps, metaphysically. It is perhaps possible to accept the existence of God without having seen Him, but it is not possible to know, without having heard it, that the B-Minor is a manifestation of Him, or what Kuba Khan's stately pleasure dome looks like.

The great masterpieces, those which penetrate the bowels and fill the cavities of the body and the interstices of the mind with a radiancy so vast and thunderous and possessive as to blot out existence for the moment—they are worth the time and effort of pilgrimage. As I said before, these are not for daily experience. But life would be infinitely poorer without the minor masterpieces, the transient attractions even, and these too the lover of architecture has to forego as real experience. The attraction of minor works of art is enhanced by associative ideas or concepts from the other arts. They cross-fertilize each other, so to speak. For instance, to take a very minor for instance, how much of the plaintive charm of les Alyscamps at Arles is due to the literary overtones, how much to the architecture and space? les Alyscamps is a good example, because it illustrates what I have been saying just before about the non-existence of the unseen. Here is something that is not even photographic.

Actually, little enough left of this once great and beautiful Roman cemetery. What was once a splendid burial ground with avenues of trees and monuments, has been reduced to a single hot road lined with cypress, between which stand massive sarcophagi. At the end of the avenue is the ruin of a Romanesque chapel. High walls shut out the world beyond. This is all that is left of a Roman and medieval way to heaven, les Alyscamps, the Elysian Fields from which so many thousands started on their long pilgrimage to Compotilla, the Field of the Star. This is the memory, across all of France and all of Spain, the way to heaven. Without it, would the solemn trees—those "sad cypresses" with echo of how many poetic tombs—and the squat, ugly somber tombs between them without these associative undertones would they still seem informed with solemnity and dignity? The chapel itself is very bare, very simple, lighted by small clerestory windows which give moving patterns of brightness across the bare floor and onto more tombs as squat, but more ornate than those left outside. Connecting, a round room with tall columns supporting a gloined vault lost in obscurity, no ornament.
YESTERDAY • TODAY • TOMORROW

Back in 1955 the Octagon passed through a period of major reconstruction in which the interior was strengthened structurally in prospect of an increased use by visitors. In addition to this strengthening, the goal of the Institute was the bringing of the main public rooms of the Octagon into closer harmony with the history of the mansion as the town house of Colonel John Tayloe in 1796 until 1855. In 1855 Mrs. Tayloe died, and the old mansion came to the end of an epoch. It had been one of the chief centers of Washington society, both official and unofficial.

Through its hospitable front door had passed John Adams, Jefferson, Madison, Monroe, John Quincy Adams, Jackson—every President before 1850 with the one exception of General Washington. He had advised Colonel Tayloe to build his town house in the new Federal City rather than in the more obvious urbanity of Philadelphia, the Colonel's first choice. Although General Washington had kept a "sidewalk superintendent's" eye on the work under construction, he died without seeing the Octagon finished. When the British burned the Capital in 1814, President Madison accepted Colonel Tayloe's offer of the mansion as a temporary White House. Here in Madison's study, was ratified the Treaty of Ghent, February 17, 1815. The circular pivoted table on which the Treaty was signed is now in its place, but it had more than its share of adventures after Mrs. Tayloe's death. The furnishings had been distributed among the heirs and friends, the pivoted table being shipped to San Francisco. In 1916 the fire and earthquake left their marks on the City by the Golden Gate, and the Treaty Table, as it has been called, was wrapped in bedclothes and trundled out of the path of the fire. The San Francisco Chapter of the Institute purchased the table and returned it to the Octagon, where it once more stands in the circular room on the second floor, the room President Madison used as his study, now called the Treaty Room.

With this architectural heritage, the Octagon, in our keeping, the responsibility of maintaining it in conformity with the unique associations that hallowed it pressed more insistently upon the Institute's successive administrations. They became acutely conscious that we were more than mere owners of a brick house. More and more the visitors to the Octagon assumed a role of joint ownership and responsibility for what we had regarded as our own private property. The Senate Committee on the District of Columbia, sensing this responsibility, made a careful examination of the structure and reported the need for major operations to strengthen floors and stairs. How they were performed without affecting the physiognomy of plaster cornices, floors of 1½" thickness—each board the result of the octagon's being one of the wealthiest men in the new nation.

Almost immediately, however, the family of the late John Walter Cross, FAIA, became interested in the idea of furnishing the dining room as a memorial to this well-known New York architect. The Institute's committee and its consultant were asked to assemble the pieces of a character suggested by the master plan for this room.

To start with, the original wall color of the dining room was revealed by carefully removing one after another of the many coats of paint applied in a century and a half. The bottom coat was a soft light green. Window hangings of Scaledamidra silk brocade, and an India rug from...
Cashmere formed the background in harmony with the repainted walls and woodwork. A rare set of twelve shield-back mahogany chairs was found in a Richmond collection and re-upholstered in a harmonious green. Mr. Cogar's travels abroad turned up a three-section mahogany dining table, a Scottish breakfront cabinet, an inlaid mahogany sideboard on which was placed a pair of Sheffield candlesticks, a Sheffield urn and a pair of knife-boxes; over it was hung a convex English mirror. There are candle sconces on three walls, the fourth with its fireplace breast flanked by a pair of serving tables, bearing Sheffield wine coolers. All of these, with the exception of the rug and the window hangings, are authentically of the period 1770-1800. Hanging on the wall is the priceless pair of portraits by Saint-Memin, only recently brought together to reunite Colonel Tayloe with his architect, Dr. William Thornton.

The furnishings are not quite complete, for the Cross family has hopes that we might find a Waterford chandelier of the right size, and possibly an oil portrait of Mrs. Tayloe or of Dolly Madison to hang over the fireplace. Some of the original Tayloe china is in the breakfront cabinet, kept from loneliness by some other rare pieces that have been loaned to the Institute.

The Cross family has no thought of restricting others gifts to the dining room; for example the family welcomed the gift by Board members' wives of an eighteenth century Viennese turquoise that graces the dining table.

In the drawing room the beige carpet, of clubroom days, has been replaced by a Persian rug; the dark window hangings have given way to hangings of a light brocade harmonizing with the same light green uncovered on the dining room walls and now made the wall color throughout the first floor. Gone are the clubroom reproductions. Instead there is a magnificent eighteenth century mahogany sofa, in memory of Past-President James R. Edmunds, Jr., flanked by a pair of Pembroke tables holding a pair of exquisite Sheffield branched candlesticks. There are two round tip-top tables, two card tables, a set of six side chairs, and a large Chippendale armchair. Oil portraits of Thornton, Benjamin Latrobe and the Washington family at Mount Vernon are to be seen in this room, and one of the large gold-framed mirrors that had a place on the Octagon walls in Tayloe days. There is still the opportunity for memorial gifts of a pair of armchairs to complete the sofa group, and a wing chair, and an authentic Waterford chandelier.

In the main hall, the marble-floored circular foyer just inside the front entrance, is now to be refurnished in memory of the late F. Ellis Jackson, FAS, of Providence, R. I. The main stairway hall, into which the foyer leads, is in need of oriental rugs to replace the beige carpet. Here are located the maple rattan-seat settee and two matching chairs that were part of a larger set used by the Tayloes, and, one by one, gradually acquired from the heirs by gift or purchase.

Upstairs, in the circular room over the entrance foyer—the Treaty Room—Past-President Ralph Walker and his firm gave a superb circular Savonnerie rug of Adam design. The circular walls make somewhat difficult the use of most furniture shapes, but Mr. Walker's interest continues in hoping to find the right pieces to go with the famous Treaty Table and the eighteenth century wall sconces given us by the RIBA.
The Virginia and Philadelphia Chapters have made generous gifts to the furnishing of the drawing room. It will be readily understood that the Committee's responsibility is a heavy one. The master plan has been very carefully studied, and all details should be in conformity with it. This means that miscellaneous offers of furniture must be scrutinized, and accepted only if they conform to the master plan. This work of seeking out, acquiring and often reupholstering, has for several years been under the chairmanship first of Milton L. Griggs, FAIA, of Charlottesville, Va. and more recently of Bryden B. Hyde of Baltimore. Members of the present Committee are Mrs. Victorieine du Pont Homsey of Wilmington, J. Roy Carroll, Jr., FAIA, representing the Board of Directors, and Mrs. Edmund R. Purves as invited advisor.

A method followed by many of the donors is to give cash to be spent under the direction of the Committee and its consultant in accordance with the master plan, the object to be identified as a memorial to some individual or group, or the gift of cash for the general purpose of aiding the whole project of the Octagon furnishing. It would seem a rare opportunity to establish personal or group memorials which together will bring back to the Octagon a large part of the atmosphere of gracious living that distinguished the grand old mansion in the early days of the national Capital.

The dining room, above, presented as a memorial to John W. Cross, FAIA, by his family, is furnished in authentic 18th century antiques. On display in this room are pieces from the china service used by President Madison during his occupancy of the house. Left, the stairway has a much more effective sweep by not having a corner post.

Toledo takes a step

as President of The American Institute of Architects, I have continually advocated rehabilitation and revitalization of downtown areas all over these United States. That is why I am very proud to see this concept of downtown revitalization occurring in my own home city—Toledo, Ohio.

The “Shoppers' Seeway” has been a great community effort, as indicated by excellent cooperation between the city, the county and private organizations and individuals. This community effort is indicative of Toledo Today and Toledo Tomorrow, and conveys a feeling of new community enthusiasm on a grand scale.

This downtown garden, these four blocks of grass, flowers, trees and plants, fountains, community exhibitions, and park benches, literally sprang up overnight. The project was not in design form until after the fourth of July. It bloomed from blueprint to reality in less than 48 hours—over one week-end. It is the result of community teamwork, backed by the enthusiasm of many people who have the desire to improve their downtown area. The Mall has been built for
Department store president Michael Yamin approves

"Let's keep the Mall permanently, Mr. Richards!"

PHOTOS BY TOM O'REILLY, TOLEDO

Downtown

"Let's keep the Mall permanently, Mr. Richards!"

PHOTOS BY TOM O'REILLY, TOLEDO

is

People

PHOTOS BY TOM O'REILLY, TOLEDO

A music store demonstrates its wares

This was traffic-choked Adams Street

PHOTOS BY TOM O'REILLY, TOLEDO

a trial period of 45 days, to give it a true test as to whether a Mall system will benefit downtown Toledo. The highlight is a display which is causing a great deal of comment—the 67 sq. ft. model of Downtown Toledo. The model is based on drawings prepared by six teams of architects (three men on a team), members of the Toledo AIA Chapter. It is displayed in an open pavilion, which was built and donated by a local contractor. Serving on a voluntary basis, each team worked on an area of downtown Toledo, showing by sketches how that particular section might be improved or rebuilt.

In addition to working together for eighteen months, and with the Toledo-Lucas County Planning Commission, in designing a new downtown area, Toledo architects designed the eight entrances to the Malls.

As Chairman of the Merchants’ Committee, and Chairman of the Technical Committee for the Malls, I have never worked with a more inspired and competent civic-minded group of people. The fruits of their hard work are reflected today in the smiles on the faces of the people who have visited Toledo’s Malls. It has given the city a tremendous lift. In addition, Toledo’s “Experiment For Progress” has inspired people from all over the country—civic and business leaders—to visit Toledo in order to visualize what can be done—with enthusiasm, courage and hard work—to beautify a downtown area.

After a month of use, it appears that business in the downtown area has increased, many downtown merchants wish to make the Malls permanent, and people are coming downtown, because downtown is for people.
Arbitration For Architects-

Does It Work?

Nearly every architect, we suppose, is familiar with the standard clause regarding arbitration which is included in the General Conditions of the Contract and in the Standard Form of Proxy Agreement published by the Institute. Few architects have had occasion, however, to be involved in arbitration, and the question naturally arises in their minds that in the event they were to be forced into arbitration—does it work? Of course the architect is concerned about whether arbitration works when his client becomes involved in an arbitration proceeding. The concern may be even more immediate since he himself may become involved as the representative of his client. The question may be even more involved in an arbitration procedure. Is this true in your experience? Is arbitration worth while?

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In order to answer these questions, the secretaries of all state societies of architects were asked to report to us the names of architects who have had experience with arbitration procedures. In response to this inquiry and our follow-up we received reports from fifteen architects concerning seven instances of arbitration. Reports were received from California, Florida, Louisiana, Michigan, Pennsylvania and Texas. The type of disputes involved may be summarized as follows:

1. Eight disputes were between the owner and the architect.
2. Four disputes were between the architect and the contractor.
3. Three disputes were between the owner and the contractor.
4. One dispute involved two architects.

One dispute involved a contractor and his architect.

Stated in another way, eleven of the seventeen instances reported involved separate instances of arbitration, while five instances involved a contractor; eight instances involved an architect; and one instance involved a subcontractor.

In view of the large proportion of cases in which contractors were involved, it might be expected that the Association of General Contractors would be giving the matter active attention to see whether arbitration worked. An inquiry to them indicated that arbitration is not a matter of immediate interest to them and that contractors are generally well satisfied with current arbitration procedures. Likewise, reports from architects indicate general satisfaction with the results achieved through arbitration in one or two instances. It is quite possible that the right of the owner to demand arbitration as set forth in the General Conditions of the Contract creates a psychological handicap in which the parties seek to settle their disputes by submitting them to arbitration. Experience would seem to indicate from the relationship of the parties to the arbitration that the right to arbitrate creates an atmosphere of fairness and cooperation and a disposition for the quick settlement of incipient disputes.

Should Arbitrators Be Paid?

The American Arbitration Association recommends that arbitrators serve without pay except for reimbursement of travel and subsistence expenses. Many architects, on the other hand, think that arbitrators should be paid a compensation for their services which they would be able to earn in their other businesses. Reports have received indicate that arbitrators have received from $75 to $100 per day. If arbitrators are to receive compensation, it is apparent that their compensation should be agreed upon prior to the submission of the dispute to them. In this regard we might also say that the general opinion among the legal profession would be that arbitrators would receive compensation. A judge in the law courts would not expect to serve as judge without compensation. Therefore it is not reasonable that arbitrators should likewise be expected to serve without compensation. Of course, if the matter to be arbitrated is a relatively simple one which can be settled by the arbitrators in a few minutes, then very likely compensation is not necessary.

However, where the dispute requires the arbitrators to spend several hours, the amount of compensation is important. In such cases the arbitrators have to make a sacrifice of time and it is only fair that compensation be paid to them.

In my opinion, there is the chance that the layman—especially if the layman happens to be an architect—will not abide by the decision, it is well to have the arbitrators agree that the compensation is not indicated. If they are not entirely satisfied with the cost of arbitration can be reduced by agreeing beforehand on the compensation the arbitrators are to receive and that only a single arbitrator is to be chosen. Where the dispute involves a substantial sum of money it would seem desirable that the testimony required by the arbitrators be recorded and that the award of the arbitrators contain a statement of the issues and dispute, a summary of the evidence considered, and a statement of the reasons for the award.

Reaction of the Individual Architects to Arbitration Procedures.

We believe that the following comments on arbitration procedures reflect the individual architects will be of interest.

Time required compared to court action, in my opinion, is less and can be substantially less. Several meetings of short duration (about 2 hours each) are generally reported required two days and a half. There are undoubtedly less. Several meetings of short duration (about 2 hours each) are generally reported required two days and a half. There are undoubtedly less. Several meetings of short duration (about 2 hours each) are generally required two days and a half. There are several instances of sufficient orderliness to assure promptness and finality. The quicker the problem can be settled by the arbitrators, the more likely the dispute will be referred through the courts.

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Effect of Different Arbitration Laws in Various States.

It is impossible to state here in the brief article the considerable variations in existing laws which apply to arbitration in the several states. However, certain general principles can be stated with respect to laws which will not arise under arbitration. Where one of the parties will not accept the award of the arbitrator, the law of most states provides that the court in the particular state in which the matter of the arbitrators can be enforced. Ordinarily in most states the award is reduced to judgment in the courts of law and enforced in the same manner as any other judgment in a law court, without the necessity of a further hearing. However, if arbitration law is not applicable, the parties submitted to the arbitrators and decided by them. Again, from re-
and Form of Arbitration Procedure be the guide or that the rules of the American Arbitration Association be followed. If the AIA procedure is chosen, the party on whom the demand is made must notify the other party within fifteen days, or the statement of the demanding party must be accepted. Within twenty days, if the parties fail to agree upon a single arbitrator or three arbitrators, each party shall name one arbitrator and these two shall agree upon a third. If this is not accomplished, the arbitration shall be administered according to the rules of the American Arbitration Association.

If the arbitrator or arbitrators have been appointed as stated above, an agreement should be reached concerning payment (or non-payment) and reimbursement of expenses to arbitrators. If an arbitrator should not act, the parties shall within ten days agree upon a substitute or refer the matter to the American Arbitration Association. Under the AIA standard procedure, arbitrators must be retired and should have no financial or other business, property, or family relations with either party. Unanimity of the arbitrators is required. The parties may be represented by counsel, witnesses may be heard and subjected to questioning, and exhibits may be introduced.

The expenses of the proceedings, (including salary of a clerk if needed) may be assessed against the parties in just proportions. The award shall be made within thirty days from the closing of the proceeding, and shall be mailed simultaneously to each party and a copy thereof sent to the architect. Wherever the prevailing law differs from the Standard Form of Arbitration Procedure the prevailing law shall be followed. If the contract or the parties designate that the arbitration shall be administered with the Rules of the American Arbitration Association, he must mail them a copy of this demand. If the AIA standard procedure, either party fails to name an arbitrator, or if two arbitrators fail to name a third, or if the two parties are unable to agree upon an arbitrator to take the place of one who does not act, the arbitration shall be administered with the American Arbitration Association. With their panel of over 13,000 business and professional men in 1,600 offices and representing various branches of industry, the American Arbitration Association is able to carry the proceeding with a minimum of expense and reasonable fee. Their service is valuable to the architect and their arbitration board is a highly valuable adjunct to the arbitration procedure described in AIA Document M-201, Standard Form of Arbitration Procedure. In some states a court may be asked to appoint arbitrators when the parties are not able to agree upon them.

As stated before, the award of the arbitrators should set forth in detail the matter in dispute and the nature of the award. In this regard a suggested outline for the formal award of an arbitration board is given below:

- Names and addresses of parties and their sponsors.
- Subject of arbitration and questions in dispute.
- Place and date of hearing.
- Admittance of evidence and present at hearing and their sponsors.
- Designation of exhibits.
- Complainant's contentions.
- Other party's contentions.
- Summary of facts.
- Reasons for decision.
- Arbitrator's decision.
- Allocation of expense.

How to Avoid Arbitration.

In conclusion we might say that the best way to avoid submitting disputes to arbitration is to make sure that the contract provides for arbitration to avoid submitting disputes to arbitration. A letter was received a short time ago asking for an official interpretation of the phrase “substantial completion” as used in Article 4 of the Standard Form of Agreement between Owner and Contractor on a stipulated sum contract (AIA Doc. No. A-101). In spite of the fact that this phrase has been in use in this form since 1915 there may well be others who may be introduced. The expenses of the proceedings, (including salary of a clerk if needed) may be assessed against the parties in just proportions. The award shall be made within thirty days from the closing of the proceeding, and shall be mailed simultaneously to each party and a copy thereof sent to the architect. Wherever the prevailing law differs from the Standard Form of Arbitration Procedure the prevailing law shall be followed. If the contract or the parties designate that the arbitration shall be administered with the Rules of the American Arbitration Association, he must mail them a copy of this demand. If the AIA standard procedure, either party fails to name an arbitrator, or if two arbitrators fail to name a third, or if the two parties are unable to agree upon an arbitrator to take the place of one who does not act, the arbitration shall be administered with the American Arbitration Association. With their panel of over 13,000 business and professional men in 1,600 offices and representing various branches of industry, the American Arbitration Association is able to carry the proceeding with a minimum of expense and reasonable fee. Their service is valuable to the architect and their arbitration board is a highly valuable adjunct to the arbitration procedure described in AIA Document M-201, Standard Form of Arbitration Procedure. In some states a court may be asked to appoint arbitrators when the parties are not able to agree upon them.

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The Institute

From the Executive Director's Desk

Not only by virtue of a training which strengthens self-confidence, an indoctrination which endorses training, and an experience which butts against challenge and to a gratifying extent by his nature, an architect is competent to understand almost any given problem and to provide a solution for it. He is at home anywhere with the exception probably of those areas which call for advanced knowledge in the current seemingly esoteric sciences. And I suspect that the members of our profession who fears to venture into these mystic worlds has yet to appear in our midst. I suspect that given enough time and training an architect's solution for, let us say, a space manner, would probably work. I, for one, have never hesitated to explore any natural and acquired talents for the benefit of mankind, even if certain elements of mankind were neither receptive to, nor interested in, my brilliant findings.

For reasons which only the United States Army might explain (and the likelihood of that ponderous body so doing, is slight), I was ordered to solve problems and assume responsibilities which were completely foreign to me. The problems did, however, hold an aura of undeniable fascination. But, by falling back on my architectural indoctrination, on the ability which was nurtured by such masters as Paul Cret and Georges Gromort, to identify the major elements of any problem, to relate those elements and to produce a solution, I found myself successfully engaged pursuing villains and solving riddles, occupations scarcely associated with the architectural profession or its organization, the AIA.

On one occasion, after struggling through jungles and up steep mountainsides, using a rushing stream as the only available trail, I determined...
An Editorial

The Image of a Profession

Bob Alexander brought out some good points and raised some good questions in his vividly presented "The Architect and Society—The Image of the Architect" in the July Architectural Record.

Not only has the image of the architect changed during the past three hundred years, but I wonder if it has ever been a very clear image? Is it now? Is architecture even a clearly defined profession?

We consider the professions of medicine and law to be clearly defined fields of work, with definite obligations to society. They are everywhere—well, almost everywhere—recognized the highest respect. Yet ancient as those activities are, it has only been a little more than a century since the doctor was simply a barber or a leech, and the lawyer was not admitted to polite society. They have traveled far ane since then.

The activity of architecture is even more ancient, yet we consider that we came of age as a profession only a century ago. But I fear that by the standards of the other two we are still a disparate and widely divergent group, many pulling in different directions, many not pulling at all.

The American Medical Association and the American Bar Association together with their affiliated local bar associations, exercise considerable influence and even control over the education of those entering their profession and their licensing to practice. The image of the doctor or the lawyer today is partly the result of the image presented to the public by these associations, but they have travelled far and wide since then.

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Industry today the image of the architect is in
profession of architecture, not just of the few best
men. If the country is looking to pull it out of the mess of
environmental problems of mankind and creating
if we don't show ourselves capable of solving the
it in the name of all architects, of the entire pro­
cess of the control of the profession, broadened to insure
thereby the beauty and order we preach.

> Pool all our intellectual resources and
our skills by a system of more frequent and better­
attended meetings—call them seminars or con­
ventions if you will, both regional and national,
with inspiring speeches, importantly informative papers and lectures, and plenty of informal dis­
cussions of the bulb-section type.

Every architect should have at his disposal the accumulated fund of knowledge of all his fellow architects; we must build a cumulative tradition of know-how to which everybody contributes and upon which everybody can draw. An outgrowth of this would be a system of brush-up seminars at various points about the country which would be so good and so valuable that architects would flock to them.

> The American Institute of Architects can and
should be the medium through which all this is accomplished—in fact, it must be.

This is aiming pretty high and to accomplish
it will take the re-oriented thinking and whole­hearted efforts of every architect in the country.
If we claim the responsibility for the total design of man's environment—as we are doing in our public pronouncements—we have got to be capable of it, every one of us. At the present time I doubt that we are.

When every architect awakens to the poten­
tialities of which his talents and his training make him capable, when he lifts his nose from the
drawing board and the golf tee, when he gets over
his smug satisfaction with the money he's making
—at long last—during these best of possible years, when he realizes that he has a civic duty to
his community and does something about it and
finally when he realizes that he is a member of a
highly essential and closely-knit profession with a great responsibility to society, then we will have true profession days.

The present list comprises the titles of books which the Library has that deal with the architects and the architecture of the Amer­
can outside the United States. They cover a wide range from the ancient to the contemporary, and vary in
length from the picture book to the scholarly history. All are available
for corporate members of the Institute on the Library Loan Ser­
vices—fifty cents for the first volume, twenty-five for each additional.

**British West Indies**

**ACWORTH, ANGUS W.**

Buildings of architectural or his­

**ACWORTH, ANGUS W.**


**Canada**

**COULTIER, MARIE A.**


**GOWANS, ALAN**


**Canada**

**GOWANS, ALAN**

Looking at architecture in Can­

**MORISSET, GERARD**

L'architecture en Nouvelle-

**NORMS, REBECCA**

Architecture in Canada. Lon­
don. 1924. 89 p.

**ROY, PIERRE GEORGES**

Les vieilles églises de la Province de Québec, 1847-1800. Quebec, 1925. 323 p.

**Mexico**

**AYRES, ATHEL E.**

Mexican architecture: domestic,

**BOSWORTH, ALFRED C.**


**GARRISON, G. RICHARD & G. W. KUSTAY**

Mexican houses, a book of photo­

**KILHAM, WALTER H.**


**KURBER, GEORGE**

Mexican architecture of the six­

**LAREAU, LOUIS & W. B. PAPIN**

The picturesque architecture of Mexico. New York, 1915. 118 pl.

**MARQUINA, IGNACIO**

Arquitectura cristiana del valle de Teotihuacan. Mexico, 1931. 54 p.

**MYERS, IRVING E.**


**ORREGON SANCATIJA, CARLOS**

50 años de arquitectura mexi­

**ORREGON SANCATIJA, CARLOS**

Los 25 años de la arquitectura mexi­

**SANDFORD, TREN'T B.**


**SANFORD, TREN'T B.**

Suelo y sociedad en el mundo hispanoameri­

**SANFORD, TREN'T B.**

Sobre arquitectura mexi­

**YANEZ, ENRIQUE**

RESEARCH FOR ARCHITECTURE • PART II

AN AIA CONFERENCE SUPPORTED BY THE NATIONAL SCIENCE FOUNDATION
Ann Arbor, Michigan, 10-12 March 1959

HIGHLIGHTS

A recap of significant findings

The first conference on research for architecture considered:
- contributions and relationships of other disciplines to environmental and esthetic design
- criteria for future project proposals and support

There was general agreement:
- on need for such research
- on lack of trained personnel and current induce-
tments
- on use of existing buildings for case-studies and data on failures
- on need for long-term support and continuity of cross-discipline meetings
- on avoidance of rigid definitions of basic and ap-
plied research

Brief findings, in each of the six conference subject-areas, as discussed by participants:

Architectural

Architecture is a creation of a total environment within which can be accomplished the aspirations of man. We need a center and organization for planning will not only exploit technology but will humanize it.


If you are more than a casual or occasional user of the slide rule, this book could have considerable practical value. The author, who has had long European experience with the slide rule, describes this book could have considerable practical value.

William-Frederick Press. $5.00

E.P.

RESEARCH FOR ARCHITECTURE

A recap of significant findings

The first conference on research for architecture considered:
- contributions and relationships of other disciplines to environmental and esthetic design
- criteria for future project proposals and support

There was general agreement:
- on need for such research
- on lack of trained personnel and current induce-
tments
- on use of existing buildings for case-studies and data on failures
- on need for long-term support and continuity of cross-discipline meetings
- on avoidance of rigid definitions of basic and applied research

Brief findings, in each of the six conference subject-areas, as discussed by participants:

Architectural

Architecture is a creation of a total environment within which can be accomplished the aspirations of man. We need a center and organization for planning will not only exploit technology but will humanize it.


If you are more than a casual or occasional user of the slide rule, this book could have considerable practical value. The author, who has had long European experience with the slide rule, describes this book could have considerable practical value.

William-Frederick Press. $5.00

E.P.

Architects and behavioral scientists must learn something of each other's methods and data already on hand—must apply themselves to realistic problems. Need study of organization-client—a vacuum of knowledge about social functioning of organizations. Architects should take responsibility for shaping the future and not feel that they must conform to a sociologist's prediction of it. Forget sharp boundaries between disciplines. Avoid current faddism of team and project research—people who agree to agree are not going to get very far in research. You cannot decide what you are going to prove. You cannot plan research.

Psychology

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Sociology

Need studies in architectural theory (professional practice theory), quite possibly non-academic in method and including relationships of individuals, physical and social environment. Esthetics is least-developed area in sociology and psychology.

Planning

Conceptual or design responsibility of the architect has been outrun by technology. Designs are solutions of hypotheses—how can we research or teach in this field? Problem-solving approach to creativity has been tradition. Need to define architectural problems in clinical terms in order to get help from other disciplines—or to develop the profession's own research talent.

Architectural research efforts and support should be centered on architectural problems—city planning, for instance, currently has some recognition and support. Scope of design must be enlarged to help clear up the urban mess. Architecture deals with problems of management of space, and needs evaluation of factors of environment. Basic fact is that you cannot plan without an inventory. Do not confine measurability of a research subject with its ultimate importance.
RESEARCH PROJECTS

Suggested or reported by conference participants*

1 METHODOLOGY OF ARCHITECTURAL RESEARCH
1 A master outline for advanced architectural research
2 Ways of financing architectural research, including development of public demand as a prerequisite to substantial support
3 Modus operandi for interdisciplinary frontal attack on architectural research
4 Use of new techniques in systems or operations engineering
5 Role of schools with respect to research—development of research talent
6 (Current project): Policy statement on architectural research for the College of Architecture, University of California, Jan. 1959

2 COMMUNICATIONS AND DOCUMENTATION
1 Collection, classification and dissemination of past and present research findings
2 Information technology that will place at architects disposal an usable form the enormous mass of available information he needs
3 Communication by architects with each other and with the public of major general ideas developed in the course of designing a building
4 Study of architectural drawings, graphic arts and writing as a basic form of communication with the audience they serve—is there a better form?
5 Feedback of information from job investigations being made daily but lost in individual files
6 Architectural history—documentation of special building types
7 A study of humor in architectural design
8 (Current project): "Building Science Dictionary" published annually by Building Research Institute, lists building industry associations, societies, organizations engaged in research—their research programs and publications

3 ARCHITECTURAL THEORY
1 Bridging the social and physical sciences; principles of transition from aspatial considerations to spatial arrangements are evaluated by the architect for design
2 Kinds and sequence of information needed by the architect for design
3 Analytic concepts and techniques, including effective analysis of alternative design possibilities
4 Principles of the creative processes—thinking, reasoning, intuition and systems of alternative development
5 General rules of visual space perception and color phenomena applicable to specific design problems—an orderly rationale for esthetics as preparation for "the intuitive leap?"
6 Use of predictive capacity of other disciplines to help present designs fit future needs—or should present designs shape the pattern of future living?
7 Social responsibility of the architect to raise design standards held by the public to higher standards
8 Clear statement of architectural theory, principles and objectives to encourage better practice and comprehension of architecture
9 The basic issues of civic design—enlargement of concept of scale and scope of design to include urban and regional design.

4 FACTORS AFFECTING ARCHITECTURE
1 Design impact of the client
2 Crucial decisions and points at which they occur in evolution of architectural form
3 The effect of mortgage policies on architectural design
4 Impact of technological change on architectural design
5 Psycho-physical basis for color preference and selection in architecture
6 Physiological and psychological lessons learned from experiments with atomic submarines and space vehicles, and their application to building design

Examples of completed or current projects:

7 Influence of climate on architecture, Prince Edward Island Institute of Technology
8 Human relations considerations in the architectural design of offices, College of Architecture, University of California
9 The following projects at Engineering Experiment Station, Texas A&M College:
   - Effects of landscaping on natural lighting
   - Effects of sound on buildings
   - Solar radiation and its effects on buildings

5 ARCHITECTURE'S INFLUENCES AND EFFECTS
1 Bridge-building between physical and social sciences: effect of spatial arrangements on functional organization
2 Effect of major alternative approaches on people—large apartment and shopping centers versus traditional communities
3 A systematic basis for clinical research on relationships between physical forms and the goals they are supposed to serve
4 Use of psychological data in designing spaces to induce desired reactions, as for children, elderly people, the mentally ill, etc.
5 Constructed environments that have produced similar responses by peoples of various ages and cultures
6 Extent to which an environment created throughout history indicates evidence of conscious design effort—what part of conscious design philosophy is rationalization and an architect's end-product?
7 (Completed projects): "Space for teaching" and "Building for learning," Engineering Experiment Station, Texas A&M College

6 REACTION OF PEOPLE TO ARCHITECTURE
1 Effect of social and cultural forces on individual's perception and attitudes regarding the architect's end-product
2 Behavioral and emotional awareness and reaction to buildings, arcades, rooms, etc
3 Comparative study of conditions under which specific styles of architecture have or have not gained popular acceptance or acclaim
4 Analysis of fads and fashions that sweep across major building types
5 Systematizing predictable environmental reactions into known relations which, if built into structures, would produce desirable or avoid undesirable results
6 Elements of visual perception of color, space, scale, line and form
7 What natural values such as sunlight or grass, cannot be supplied by technological improvements—when may such natural values be ignored?
8 Psychological impact (perception) of cities (urban environments)
9 (Current project): Studies of form and color, Architectural Laboratory, Princeton University

7 EVALUATION OF ARCHITECT'S END-PRODUCT
1 Evaluation of completed buildings of various types in the light of original objectives and as affected by influences exerted during program and planning phases
2 Methods of follow-up to determine how satisfactory any structure is
3 Feed-back of evaluation of completed projects to the architect
4 (Completed project): Measuring the quality of housing, Housing Research Center, Cornell University

8 ARCHITECTURAL TRAINING
1 New systems of education, appreciation and interpretation to improve society's understanding of architecture
2 Correlation between school training and the roles assumed by graduates as they work up in architects' offices
3 Better preparation of architects and planners for full range of opportunities and responsibilities involved in new operating scale, where large projects are built quickly by single organizations
4 Program and function analysis
5 Study of need for organized training in field of "architectural sciences"
6 Extent to which architects should become sophisticated in terms of existing psychological information
7 Use of sound films and cartoons in conjunction with model analysis and testing to teach architects the feel of what goes on in structures
8 Architectural aptitude testing
9 Development of research talent
10 (Current project): Cooperative study by AIA, ACSA and Educational Testing Service: Aptitude tests for admitting architectural students

9 PROFESSION OF ARCHITECTURE
1 Professional behavior of the architect: the image of the architect as held by the public—by architects

*These hundred-odd suggestions have been gleaned from several hundred in an audience possibly aware of the committee—for measurability, support or potential value.
Research in related fields

A Acoustics
1 Effect of acoustical treatments on the quality of sound as distinguished from volume
2 (Current project): Effects of landscaping on sound. Engineering Experiment Station, Texas A&M College

B Economics
1 Economics of reuseing plans for buildings
2 Comparative analysis of construction industry with other industries

Completed or current projects:
3 Planning criteria and methods for building conservation; a study of San Francisco as an example. College of Architecture, University of California
4 A study of the useful life spans of school buildings. College of Architecture and Design, University of Michigan
5 Methods of reducing the cost of public housing. School of Architecture, Pratt Institute

C Environmental Health
1 Treatment of domestic, industrial and municipal sewage (no significant advances in four decades)
2 Problems of liquid and industrial waste disposal associated with increased demand for water supplies due to metropolitan and industrial growth
3 Control of water and air pollution by industry, including radioactive substances
4 The physics of environment: study of temperature, humidity, air movement, illumination and noise as a means of achieving physiological well being through control of mechanical systems, insulation, lighting and acoustics

D Planning
1 Design objectives in urban and suburban residential neighborhoods
2 Better patterns of urban land use—radial instead of concentric
3 Predictable trends in scientific and community development
4 The planning process; how to make it more than a static and negative means of regulating what people are going to do anyway when they get around to it

Completed or current projects:
5 Perceptual form of the city, sponsored by Rockefeller Foundation at Department of Architecture, MIT.
6 Housing Research Center, Cornell University:
   Commingling patterns of industrial workers in the Northeast
   Housing and journey to work

E Psychology, Physiology, Anthropology
1 Visual perception of architectural spaces
2 An approach to architectural design through exploration of anthropological factors and physiological relations

Completed or current projects:
3 Social and psychological aspects of home lighting. Housing Research Center, Cornell University
4 "The rise of shells" and "Psychology of shells." Articles in July '58 Architectural Forum

F Sociology
1 Analysis of occupancy requirements and trends as affected by rapidly changing technology
2 Effect of mobility on the character and role of institutions in the urban pattern
3 Effects of increased exercise of right of eminent domain due to increasing population and competition for land
4 Patterns for domestic life with extrapolation for 20 years hence
5 Social organization, organization theory and function of the client

Completed or current projects:
Housing Research Center, Cornell University:
   Housing and social values
   Farm housing in the northeast
   Housing and human values
   Housing for the aged

G Structural Design
1 Use of electronic computers and other techniques for more rapidly evaluating probable behavior of structural systems
2 Methods of studying realities of structural behavior that go beyond the mathematics and mechanics of analysis, such as model analysis and testing
3 Extension of ultimate strength and limit design concepts, especially to structural forms for which unit-stress solutions are not available
4 Behavior of materials in complex structural shapes and under combined stresses
5 Redetermination of design live loads and utilization of probability theory to achieve a more rational relation between loads and strength
6 Sequence and relationship of certain mathematical curves to problems in structural analysis and construction of buildings

Completed or current projects:
Completed or current projects:
7 Development of thin-shell precast concrete roofs. College of Architecture and Design—University of Michigan
8 Research in stressed skin structures. School of Design. North Carolina State College
9 "How firm a building foundation," article in August '58 Architectural Forum, describes research at various universities on soil behavior.

H Unclassified
1 Transportation techniques encompassing movements of people, goods, messages and ideas; their purposes and relation to land uses
2 (Completed project): Institute of Engineering Research, University of California: Real Estate Research Program, Studies of Organization of the Home Building Industry

11 Examples of applied research (Unclassified)
1 Composite studies of units of major building types in which a number of variables are kept unchanged while one of the factors is varied
2 Optimum balance of physical obsolescence of building components
3 Design criteria for various building types, methods of determining such criteria
4 Studies of plastics in housing. Sponsored by Monsanto Chemical Company, MIT.
5 School Plant Studies. AIA Committee on School Building & Department of Education & Research
6 The Cornell Kitchen — product design through research. Housing Research Center, Cornell University.
7 A study of the thin concrete hyperbolic paraboloidal roof for the Cowboy Hall of Fame Building. Sponsored by A-E for the building, University of Michigan.
8 Architectural photogrammetry for (a) historic American building survey (b) building movements. Ohio State University.
The program of research for architecture which is being submitted to the AIA Board at its meeting in November will reflect to a considerable degree the thinking of and suggestions made at the AIA-NSF conference. These have been reported above and in last month’s issue of the Journal.

It must be obvious to the reader that the Institute will have to oversee a very large and expensive operation if it is to assume responsibility for architecture—a redefinition—Herbert H. Swinburne, AIA. The work will be organized so that we can begin on a modest scale and gain experience for a fully developed program. We must operate independently with our own profession and the building industry and in other scientific fields which are interested and concerned with environment and shelter. This is not merely a pious hope. A reasonably careful sampling of opinion among persons who are knowledgeable in the field of research and research finance has been encouraging. The work will be organized so that we can begin on a modest scale and gain experience for a fully developed program. We must operate independently with our own profession and the many others whose concerns lie in the same areas. It is with sincere appreciation that on behalf of the Institute, the Committee on Research for Architecture expresses its thanks to the participants in the AIA-NSF conference, as well as to the members of the Steering Committee who responded so generously and ably in organizing this quest for knowledge towards a better total environment.

AIA Committee on Research for Architecture
WALTER E. CAMPBELL, FAIA, Chairman
ALFRED S. ALSCULER, JR.
C. MELVIN FRANK
HERBERT H. SWINBURNE
KAREL YASKO

SOURCES
1 Architecture—a redefinition—Herbert H. Swinburne, AIA
2 The architect’s role in structures research—Myke J. Holley
3 The behavior of the architect: process and product—Albert H. Hasto
4 Architectural research from a sociological perspective—Donald L. Foley
5 Environmental hygiene and its meaning for architecture—M. Allen Pond
6 Planning and science—Burnham Kelly, AIA

CONFERENCE POSTSCRIPT

1 Conference proceedings (first draft)
2 Recent projects reported in architectural magazines
3 Additional projects reported by Robert W. McLaughlin, FAIA
4 Suggestions made by deans and staffs of architectural schools—1958
5 Survey of the current status of architectural research at US Universities—Ezra D. Ehrenkrantz—30 January 1959
6 Policy statement on architectural research for the College of Architecture of the University of California—Donald Foley et al. January 1959

The word “hurricane,” meaning “big wind,” has been attributed to Carib Indian origin. “Hurricane” is the term for tropical cyclones in the Atlantic Ocean, Gulf of Mexico, or the Caribbean Sea, and also is used for similar storms in that part of the Pacific Ocean near Central America and Mexico. Not all tropical cyclones reach hurricane intensity—if wind speeds remain below 74 mph, they are known as “tropical storms.”

The “typhoon” of the China Sea, the “bagoio” of the Philippines, and the “cyclone” of the Bay of Bengal and the Indian Ocean, are names used elsewhere for the same type of storm we generally call a hurricane.

AREAS WHERE HURRICANES FORM are over all tropical oceans except the South Atlantic. Hurricanes which affect the Gulf and Atlantic coasts of the US originate in two principal regions: southeastern portion of the North Atlantic between the Cape Verde Islands and the Antilles; or the Caribbean Sea and Gulf of Mexico.

AVERAGE FREQUENCY of tropical storms and hurricanes by decades is given below:

<table>
<thead>
<tr>
<th>Year Range</th>
<th>Tropical Storms</th>
<th>Hurricanes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1886-1890</td>
<td>47</td>
<td>29</td>
</tr>
<tr>
<td>1891-1900</td>
<td>77</td>
<td>49</td>
</tr>
<tr>
<td>1901-1910</td>
<td>71</td>
<td>35</td>
</tr>
<tr>
<td>1911-1920</td>
<td>49</td>
<td>35</td>
</tr>
<tr>
<td>1921-1930</td>
<td>56</td>
<td>36</td>
</tr>
<tr>
<td>1931-1940</td>
<td>104</td>
<td>48</td>
</tr>
<tr>
<td>1941-1950</td>
<td>57</td>
<td>56</td>
</tr>
<tr>
<td>1951-1960</td>
<td>80</td>
<td>51</td>
</tr>
<tr>
<td>Total</td>
<td>581</td>
<td>339</td>
</tr>
</tbody>
</table>

For the past seventy-three years a median of four hurricanes per year have occurred. This increased to five per year in the past thirty years and in the past ten years to...
in the Northern Hemisphere. The rotation is always counter-clockwise.

At Blue Hill Observatory in Milton, Massachusetts, but estimates go up to 250 mph. The strongest winds usually are felt in the northeast quadrant of the storm, where the speed of the wind rotating about the hurricane's center is additive to its general forward movement. Rotation is always counter-clockwise in the Northern Hemisphere.

Figure 1. The Hurricane Belt (from data supplied by the U.S. Weather Bureau)

WIND SPEEDS of more than 150 mph have been observed at the surface in mature hurricanes. A gust of 186 mph was recorded in 1938 at Blue Hill Observatory in Milton, Massachusetts, but estimates go up to 250 mph. The strongest winds usually are felt in the northeast quadrant of the storm, where the speed of the wind rotating about the hurricane's center is additive to its general forward movement. Rotation is always counter-clockwise in the Northern Hemisphere.

STORM WAVES associated with hurricanes sometimes cause severe coastal inundations. High water is the cause of more loss of life than high winds. More than three-fourths of all loss of life in hurricanes can be attributed to storm waves. High water tone to sixteen feet above normal tides has been recorded during some of the larger hurricanes along the Gulf and Atlantic coasts.

RAINFALL FROM HURRICANES. The record rainfall associated with a tropical cyclone in the US was at Hamilton, Texas, in September 1921 when 23.11 inches of rain fell in a period of twenty-four hours. Characteristically the rain begins as the hurricane approaches, changing to severe squalls, then heavy and continuous rain near the center sometimes lasting for several days as in New England after "Diane" of 1955. Very heavy rains may occur just outside the high-wind area, causing floods there as well.

THE CALM CENTER or "eye" of the hurricane. The "eye" or center of a mature hurricane (where calm or low surface winds prevail) averages about fourteen miles in diameter, ranging from five to forty miles. If you are in the path of the "eye" this calm interval will follow a period of strong winds in one direction, and be followed by a period of equally strong winds in the opposite direction.

CHANGING WORLD CLIMATE? The increasing number of hurricanes is not the only evidence of a long-term change in world climate. Out summers have become hotter, particularly in the eastern United States; winter has become considerably colder. Such phenomena have been advanced to explain these weather phenomena:

Changes in solar activity (sunspots) have some effect on terrestrial weather.

Volcanic eruptions create a dust cloud in the atmosphere which reflects the sun's heat for extended periods thus lowering the temperature.

Increased population and enormously expanded industrialization have pumped added amounts of CO₂ into the atmosphere at a rate of one billion tons a year. When combined with water vapor a veil forms over the earth which absorbs the sun's radiant heat to pass back to the earth raising the temperature.

There are two relatively stable high pressure areas or "anti-cyclones" whirling in a clockwise direction high above the Atlantic and Pacific oceans. Pushing against our shores and combining with other "favorable" conditions, they tend to generate counter-clockwise wind systems, or tropical cyclones. The "anti-cyclones" have shifted northwest and inward towards the US (although no one knows why).

The nuclear explosion theory has little scientific support but has been suggested by citizens who do not realize the magnitude of forces required to create weather. A hurricane expands the energy of two Hiroshima-size atomic bombs every second. In one minute this amounts to more energy than the entire US produces in electric power in fifty years.

MAN-MADE CHANGES. Microclimatology can be changed by deforestation, leveling of sand dunes at beaches, replacement of vegetation with paving. These have a double-barreled effect by destroying the protective or compensating features provided by nature.

II \ Extent of Damage or Loss Due to Hurricanes

The damage resulting from the most devastating tropical storms and hurricanes is given in columns headed "Deaths (US only)" and "Damage by Category" in Fig. 3. Notable is the fact in the last fifteen years, the number of deaths caused by such storms has decreased compared with earlier years. From 1944 through 1958, the death rate averaged about 65 per year, and in no single year during that period has it reached the single storm less of 1938 (600), 1928 (1836), 1915 (550), or 1900 (6,000). More adequate warning service can in part be credited for this development. On the other hand, property damage has tended to rise in terms of cost. This is explained by the increase in value of property lying in the paths of tropical storms. Neither trend necessarily bears any relation to fury of tropical storms. Total damage in any particular year may greatly exceed or be far less than the average. It is particularly startling that the $34-billion damage from such storms in 1954 was far more than in any preceding year of this century, yet the period from January to September, 1955, topped 1954 by more than $1 billion.

Individual losses vary widely. In an insurance study of windstorm losses in Iowa which has the highest wind losses of any state (mostly from tornados) structural damage to farm buildings ran from $110 to $2,443 with an average of $286—roofing damages averaged $25.60. Losses to manufacturing plants in the New England hurricane of 1938 averaged from $20,000 to $200,000 at Waterfront at Milford, Conn. Being battered by hurricane waves and winds which forced evacuation of 300 persons from exposed areas.

Figure 2. Tropical Cyclones affecting Gulf and Atlantic Coastal Regions 1886-1959 (from data supplied by the U.S. Weather Bureau)
Figure 3. Notes on Devastating Atlantic Hurricanes of the 20th Century

<table>
<thead>
<tr>
<th>Date</th>
<th>Area Affected</th>
<th>Land Station With Highest Wind Speed*</th>
<th>Damages</th>
</tr>
</thead>
<tbody>
<tr>
<td>1915</td>
<td>Texas</td>
<td>Capo Henry, La. 10 mph</td>
<td>Hurricane Harvey</td>
</tr>
<tr>
<td>1927-30</td>
<td>Florida</td>
<td>Miami, Fla. 120 mph</td>
<td>Hurricane Okeechobee</td>
</tr>
<tr>
<td>1935</td>
<td>Florida</td>
<td>Tampa, Fla. 113 mph</td>
<td>Hurricane Okeechobee</td>
</tr>
<tr>
<td>1938-39</td>
<td>Florida</td>
<td>West Palm Beach, Fla. 135 mph</td>
<td>Hurricane Okeechobee</td>
</tr>
<tr>
<td>1940-41</td>
<td>Florida</td>
<td>Miami, Fla. 160 mph</td>
<td>Hurricane Okeechobee</td>
</tr>
<tr>
<td>1944</td>
<td>Florida</td>
<td>Miami, Fla. 135 mph</td>
<td>Hurricane Okeechobee</td>
</tr>
<tr>
<td>1945-46</td>
<td>Florida</td>
<td>Miami, Fla. 110 mph</td>
<td>Hurricane Okeechobee</td>
</tr>
<tr>
<td>1947-48</td>
<td>Florida</td>
<td>Miami, Fla. 110 mph</td>
<td>Hurricane Okeechobee</td>
</tr>
<tr>
<td>1949-50</td>
<td>Florida</td>
<td>Miami, Fla. 140 mph</td>
<td>Hurricane Okeechobee</td>
</tr>
<tr>
<td>1950</td>
<td>North Carolina</td>
<td>Cape Henry, La. 10 mph</td>
<td>Hurricane Okeechobee</td>
</tr>
<tr>
<td>1951</td>
<td>Florida</td>
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<td>1953-54</td>
<td>Florida</td>
<td>West Palm Beach, Fla. 135 mph</td>
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</tr>
<tr>
<td>1955</td>
<td>Florida</td>
<td>Miami, Fla. 140 mph</td>
<td>Hurricane Okeechobee</td>
</tr>
<tr>
<td>1956</td>
<td>Florida</td>
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<td>Hurricane Okeechobee</td>
</tr>
<tr>
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</tr>
<tr>
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<td>Miami, Fla. 110 mph</td>
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</tr>
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<td>1959</td>
<td>Florida</td>
<td>Miami, Fla. 160 mph</td>
<td>Hurricane Okeechobee</td>
</tr>
</tbody>
</table>

*Average five-minute maximum speed.

Note: One mile unless otherwise noted.

1. Wind damage due to direct action of the wind may include the following:
   - Wind panes broken or entire slate blown out
   - Roof broken off, partially or entirely—this is caused by suction or negative pressure of wind over a flat or low-sloped roof or side of steep roofs, and may be aggravated by pressure building up through broken windows, or by overhanging eaves under which the wind can apply a prying action
   - Walls in upper stories caving in or out if stiffening or bracing members of roof structure are blown off
   - Roofing, shingles or tiles blown off
   - Steeples, pont-houses, skylights or other roof structures damaged or removed
   - Electric power, telephone, water and sewer service lost, usually because outside lines are broken
   - Sprinkler pipes and fire escapes not only losing fire protection but possibly water-soaking both building and contents
   - Injury to buildings (and people) by sheet metal roofs, roofing gravel or other flying debris blown from damaged roofs

2. Complete demolition of structurally weak buildings whether of wood frame, masonry or any other materials

3. Entire building lifted off its foundation or overturned

4. Damage to all kinds of building accessories, which are especially vulnerable due to their isolation, elevation or lighter construction than main buildings: signs, chimneys, metal stacks, fences, sheds, water tanks, TV antennas, telephones, etc.

5. Blocking of streets due to fallen branches or trees may seriously affect speed with which repairs can be made and services restored

6. Wind-driven rain: In addition to water damage from leaking

III Types of Damage

The force of a hurricane is such that whatever lies in its path is likely to suffer damage varying all the way from minor to total destruction. Loss of life statistics are given in Fig. 7. Countless injuries add to the direct effect on people. Negative activities are also seriously disrupted. This report is limited to a discussion of damages directly affecting the architect — namely, damages to buildings and groups of buildings.

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AIA JOURNAL, OCTOBER 1959
Beach property damaged and foundation completely undermined by battering wave wash (Long Island, N.Y.)

roofs and broken windows, the force of rains driven by high winds often is sufficient to penetrate joints around normally weather-tight openings and even solid walls.

• flash floods may exceed the capacity of drainage systems, especially if drains are clogged by leaves or other debris

• rapid erosion and penetration of soft ground may cause a landslide

3 FLOODS: The torrential rains which accompany hurricanes frequently cause floods resulting in far greater destruction than the wind itself.

• besides the physical damage to foundations and structures and their contents due to direct action of rising water, the impact of floating objects may be very destructive.

• it is important for owners and mortgagees as well as architects to gain a better understanding of hurricane characteristics so that everyone will insist on proper measures to minimize damaging effects.

IV • Existing Code Provisions

There are four major codes in general use throughout the US:
• National Building Code of National Board of Fire Underwriters
• Southern Standard Building Code of Southern Building Code Congress
• Uniform Building Code of International Conference of Building Officials (formerly Pacific Coast Building Officials Conference)
• Basic Building Code of Building Officials Congress of America, Inc.

Only the first two of these contain adequate provisions for effective resistance to lateral wind forces. The NBFU Code is somewhat more empirical and SSBC, both conform with American Standard Building Code Requirements for Minimum Design Loads in Buildings & Other Structures (Reference 6 at end of report).

There are special provisions for: steep roofs, eaves and cornices, anchorage, chimneys, tanks, towers, signs, shielding, etc., which accompany hurricanes frequently cause floods resulting in far greater destruction than the wind itself.

• it is important for owners and mortgagees as well as architects to gain a better understanding of hurricane characteristics so that everyone will insist on proper measures to minimize damaging effects.

V • Customary Construction Practices

Except in cases of architect-designed construction or where building code requirements are enforced, little or no regard is given to construction to resist hurricane forces. One or more of the following factors put much construction in a questionable construction relative to hurricane resistance:

1 Economic pressure by merchant builders who lean to visible selling and eye-appeal rather than investment in "invisible things which the purchaser cannot see or appreciate."

2 Marginal prefabricated farm and industrial buildings are sold and erected in face of competitive price conditions and lack of code - although properly designed structures are available.

3 In non-code-controlled areas a prospective owner is often unwittingly sold on construction whose quality or adequacy of design he is not capable of determining. Although statistics are lacking, there is evidence that in some places as much as 90% of the work is constructed without the use of professional services.

4 Lack of knowledge of construction principles on the part of some general contractors, particularly in the jockeys classification, where the locality is not under code and where professional services are not employed.

Although hurricane-resistant framing devices such as clips, braces and ties are commercially available, in the Tampa, Florida area for example their use is actually decreasing, probably due to complacency and economic pressure.

There is increasing use of open structures such as carports, and long-span roofs in light industrial and residential work where inadequate anchorage is provided against uplift. Other current trends which call for special structural analysis, proper anchorage and moisture-proof construction are:

• large expanses of glass

• panelized or curtain-wall assemblies

• light-weight aggregates in masonry units and poured concrete

• wide overhangs

• reduced weight of entire structure

VI • Conclusions & Recommendations

The Committee on Disaster Control is considering a supplementary report to contain construction details of good hurricane protection practice and would welcome submissions from readers having experience in this field.

1 BASIC PRINCIPLES OF GOOD CONSTRUCTION PRACTICE

• Good Siting takes advantage of microclimatology (see Regional Climate Analyses and Design Data,
... and after being struck by a tidal wave and hurricane (Massachusetts)

Even well constructed buildings of highest cost materials may become a total loss if design is unsuitable. Even very strong fastening devices and materials may become useless in a total loss if design is unsuitable. A few of them are:

- Architectural Planning reduces vulnerability to hurricanes by adapting layout and materials to prevailing or probable local conditions.
- Structural Analysis should replace adherence to fixed minimum standards or rule-of-thumb solutions. Complete reliance cannot be placed on codes which are frequently too specific and therefore adequate for only average conditions, or too general, merely providing for example that anchorage shall be "adequate".
- Competent Supervision of Construction helps ensure use of sound materials and good workmanship.
- Emergency or stand-by utilization of storage facilities and supplies should be available.
- Awareness should replace the almost complete indifference to hurricane protection that exists in areas not recently subjected to hurricanes.

2 IMPROVEMENTS TO EXISTING STRUCTURES

One or more of the following measures may go far towards reducing vulnerability and damage in event of a hurricane:

- provide storm shutters and strong fastening devices
- provide temporary hurricane braces or tie-downs for installation during storm warning period
- strengthen anchorage of TV antennas and other appendages
- add structural bracing and anchors if roof and wall framing is accessible or when undertaking major alterations or renovations
- keep joints properly pointed or caulked
- keep trees pruned around house
- remove branches that may sway against roof or windows
- prepare floor plans of larger buildings such as hospitals, showing area designations, route charts, brd expansion, etc, for planned emergency program.

3 DESIGN CRITERIA FOR NEW CONSTRUCTION

Structural criteria for hurricane-resistant construction vary widely for different localities, building shapes, heights, elevations, etc, and cannot be enumerated here. Authoritative local standards and data may be obtained from offices of the US Weather Bureau, US Department of Agriculture, and often from local building offices. The Insurance Company of Hartford has one of the best private weather bureaus. Other authoritative sources are the following:

- Wind Pressures: "Wind Pressures in Various Areas of the US" (Revised Wyss)
- Wind Loads, Hydrostatic Pressures and General Structural Requirements: "Minimum Design Loads in Buildings and Other Structures" (Ref. 6)
- Anchorage: "Anchorage of Exterior Frame Walls to Various Types of Foundations" (Ref. 15), "Preventing Storm Wind Damage to Farm Buildings" (Ref. 21). "Handbook of Industrial Loss Prevention" (Ref. 28)
- In General: Electric power and telephone lines underground (in streets and subdivisions as well as private property). Storm drainage system adequate for peak load. Buried tanks anchored and floor slabs reinforced against uplift with water at maximum height. Pier or pile foundations preferred over continuous walls where exposure to wave action is possible. Use heavy weight or rigid roofing materials.

4 RECOMMENDED CODE PROVISIONS

Chaos would exist in modern cities and towns without the minimum standards established by locally adopted building codes. But lack of uniformity and other built-in defects of our antiquated codes cause immeasurable waste, plus endless frustration on the part of architects, builders and officials who have to cope with them. Major elements of necessary code reform are:

- replace "specification type" with "performance type" codes. This would permit desired results to be achieved without limitation to specific materials and methods.
- encourage legislation making a model code available in every community and encourage communities to adopt it, as 34 cities, 96 towns and 162 villages have done with Model Code of the State of New York.
- the perfect code has not yet been written but uniformity is possible with performance type codes. Every effort should be made in this direction. Local amendments should be encouraged where model code standards are too lenient or too severe.
- adequate codes must be coupled with adequate enforcement to be effective.

Lending agencies as holders of the purse strings could exert great influence in seeing that proper standards are met. A few of them do and others should be encouraged to provide inspection ensuring code compliance, particularly in non-code areas or where professional services are not employed.

5 RECOMMENDED PROCEDURES AT TIME OF DISASTER

- Get into a house or other building that is out of danger of waves or high water, is well anchored to its foundation and has a strongly secured roof.
- Install storm shutters or board up windows on sides exposed to most violent winds. Securely fasten garage doors. Do this well before the storm as these things are hard to handle in a high wind. Insecure shutters may blow loose, do more damage than none at all.
- One or more small windows on lee side may be opened but if wind or flying objects create openings in windward side, additional vents should quickly be opened on lee side to prevent build-up of internal pressure which could lift roof or blow out walls.
- Apply adhesive tape to any unprotected glass areas. This may not prevent breakage but will prevent damage to interior.
- Securely fasten or bring indoors any loose objects that might be blown around causing damage by impact—garbage pails, porch furni-

One of several homes in El Sobranne, Calif., wrecked by earthquakes from heavy, drifting rains typical of hurricanes.
6 RECOMMENDATIONS TO ARCHITECTS FOLLOWING DISASTER

Like other citizens, the architect should cooperate with but not hinder organized relief agencies, and take every precaution against safety and health hazards. In addition, he should join the fight against unnecessary destruction, injury and loss of life, incidentally improving his own qualifications, by:
- investigating, photographing and reporting to AIA examples of damaged structures, construction details, site planning, etc.—both successes and failures.

- offering collectively with other architects in disaster area, recommendations to public officials and the public for replanning and rebuilding.
- encourage insurance companies, Red Cross and other restoration agencies to restore damaged structures in a better manner than they were before, or to permit their abandonment if in a marginal location.

7 ADDITIONAL RESEARCH NEEDED

- The Weather Bureau has made great strides but continued meteorological research is needed to further improve weather forecasting and warning services, weather control and air pollution control.
- Research on new building products and assemblies for exterior use should include performance testing under hurricane conditions.
- Methods of unifying, modernizing, extending enforcement and geographical coverage of building codes are urgently needed.
- Our rapid urban growth and spreading population make it imperative to find better ways to utilize the land or prevent its wrong use.
- Our rapidly growing population make it imperative to find better ways to utilize the land or prevent its wrong use.

8 REPORTS ON DISASTER RESEARCH


13 Stanford Research Institute, Menlo Park, Calif.


15 National Science Foundation, Washington 25, D.C.


18 Building Research Advisory Board.

15 Anchorages of Exterior Framing Walls to Various Types of Foundations, 1955: 71 pp. typed. 8 x 11. Analytical study with formulas, design data.


17 Division of Anthropology & Psychology Committee on Disaster Studies.

18 Nationale Academy of Sciences—National Research Council, 3101 Constitution Avenue, N.W., Washington 25, D.C.

19 Report on Disaster Research, Metropolitan Museum of Art, Jan. 1958, mostly on hurricane pre-diction.


24 *Notes on Sources of Information on Hurricanes, U.S. 502 Rev. June 1, 1955. 4 pp. 8 x 11. Notes on sources of information are given in this publication.

25 *The Hurricane, By L. R. Froman, rev. 1956 by Office of Climatology, 22 pp. 8 x 11.

TRADE ASSOCIATIONS & CORPORATIONS


28 Handbook of Industrial Loss Prevention, 1956. 60 pp. 8½ x 11. Authoritative publication on industrial loss prevention.

29 National Board of Fire Underwriters.

To bring out the beauty and bring in the customers, HV Trimline permits endless design possibilities in flush-glazed walls. Inherently beautiful, with no exposed fastenings, the anodized aluminum construction system stays bright and weather tight indefinitely. HV Trimline is also available for insulated glass.

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ARCHITECT: SAGGST, WILLIAMSON, VAUGHN & SPINNER, ATLANTA; GLAZING CONTRACTOR: A.C. GLASS & MIRROR CO., INC., ATLANTA

ARCHITECT: PAINTER, WEEKS & MCGARTY, KNOXVILLE; GLAZING CONTRACTOR: PITTSBURGH PLATE GLASS CO., KNOXVILLE
As an indication of appreciation for the hospitality extended by the Institute, the group presented two handsome volumes of the works of Antonio Gaudi, which will become a part of the Institute collection.

The Fifth Annual Student Forum

On November 23-25, the Institute will again welcome students from many of the architectural schools in the nation to the Fifth Annual Student Forum. By discussing the objectives of the AIA with practitioners, deans, staff members and fellow students, with first-hand inspection of the AIA headquarters, each representative will return to his school prepared to answer many of the questions about his profession which normally arise during his academic training.

The aim, on the part of the Institute, is not entirely selfish, for by helping the students, the AIA strengthens itself. In doing so it places its ever-increasing obligation to society.

The Institute pays the principal transportation expenses of only one representative from each school. However, in past years many additional students have attended on their own initiative. Last year, due to a problem of logistics, a strict limitation was imposed allowing only one student representative from each school to attend the Forum. This year the Institute is pleased to announce that arrangements have been made to permit the attendance of a limited number of additional students.

As this issue goes to press there are only a few short weeks left in which to make final preparations. We have heard from most schools, but we wish to remind those schools who have not sent in for their delegate to do so as soon as possible. It will also assist in final planning to know the number of additional students representing each school.

British Architectural Student Seeks Kindred Soul

Peter W. Mortimer Bruton, a third-year architectural student in England, is interested in corresponding with someone in the United States. His letter says that he is interested in exchanging ideas with a “Westcoaster having a progressive outlook.” Of most interest are the subjects of design and construction methods. Peter’s address is: Shilliams Cottage, Thripp Lane, Stroud, Gloucestershire, England.

Window manufacturers and Monarch work together to produce "Compatibly Engineered" window units with greater weathertightness

Weathertipped windows of different makes, although apparently of equal efficiency in weather protection, actually vary widely in effectively retardating infiltrating dust, moisture and cold. The difference is reflected in the homeowner’s cost for heating, air conditioning, redecoration and cleaning, as well as comfort for the family and time spent on burdensome housework.

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October 2-3: New England Regional Meeting, Newport, R. I.

October 7-9: Central States Regional Conference, Des Moines, Iowa.

October 8-12: California Council Convention, Hawaiian Village Hotel, Honolulu, Hawaii.

October 8-10: New York State Association of Architects, Whiteface Inn, Lake Placid, New York.

October 8-10: Northwest Regional Conference, Spokane, Washington.

October 8-10: Western Mountain Regional Conference, Western Skies Motel, Albuquerque, N. M.

October 8-14: Western Regional Conference, Austin, Texas.

October 8-14: Pennsylvania Society of Architects, Galen Hall Hotel, Vernorville, Pennsylvania.

October 13: Fourth Annual Architects' Tour of the Pacific. For project JOHN DOE SCHOOL, 100% are in accordance with plans and section A of specifications.

We hereby certify that we have furnished all materials and labor on the project of the work in accordance with the plans and specifications as furnished to us. According to notices received at The Octagon between July 31, 1959 and August 21, 1959

Honorary Fellows
CHRISTOPHERSEN, S., Buenos Aires, Argentina
CHRISTOPHERSEN, N., Buenos Aires, Argentina
FITTE, RAUL J., Buenos Aires, Argentina

Financial Aid for Student Architects
A financial aid plan for student architects and schools of architecture has been announced by the Barrett Division of Allied Chemical Corporation. Participating in the new program during the academic year 1959-60 are the Universities of Cincinnati, Florida, Pennsylvania, Syracuse and Wisconsin.

The plan provides an annual allocation of $1,000 to each university's school of architecture. Of this amount, $650 will be given to one or more students, the remaining $350 will be available for the school's architectural program.

Eligible for grants are third, fourth, and fifth year students who meet the financial need and academic requirements of the scholarship committee of their institution.


Henry Weis Manufacturing Company, Inc.
President
Secretary
Weis is now solving one of the architect's greatest problems. A certification of specifications is being issued on request . . . guaranteeing that building owners will receive all the quality their architect has specified. Here is additional assurance from a company whose history of manufacturing dates back for more than 5 of a century.
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He can choose large special Roof Scuttles in double- or single-leaf design for replacement or removal of large equipment...

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The curving of Wooster Super-Grit and Safe-Groove Safety Treads is just one of many exacting operations necessary to meet specific requirements of our customers.

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PPG's Architectural Representatives would be pleased to help you select and apply the glass products best suited to your needs. This service is reserved exclusively for architects—learn more about it by phoning any Pittsburgh Plate Glass Company office.

See Sweet's Architectural File—Sections 3e, 7a, 13c, 16a, 16d, 21.

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metal scraps, no rustles, no plastic squeaks—just complete silence. For compression applications, Schlegel weatherstripping is most desirable because it can be compressed at various points to provide a complete positive seal between irregular opposing surfaces.

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- First National Bank
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- Minneapolis, Minnesota
- Westbrook High School
- Omaha, Nebraska
- Lawrence Road School
- Uniondale, New York
- Burlington Industries Office Building
- Greensboro, North Carolina
- Moraine Meadows School
- Dayton, Ohio
- Lexington School
- Oklahoma City, Oklahoma
- Arlington Elementary School
- Pittsburgh, Pennsylvania
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- Arlington, Virginia

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8. Save construction time. As much as three to four weeks. No waiting for wet work to dry. Building earns income sooner.

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For complete information about new Armstrong Acoustical Fire Guard ceilings, consult your Armstrong Acoustical Contractor or your nearest Armstrong District Office, or write Armstrong Cork Company, 4210 Sage Street, Lancaster, Pennsylvania.

Armstrong ACOUSTICAL CEILINGS
**AIA's New Typography**

A year or so ago we began to apply some professional typographic design standards to the Institute's publications. The job began with the "Handbook of Architectural Practice" which also includes most of the AIA contract and other documents. By now practically all printed matter which comes out of the Octagon has a deliberate "family resemblance," including, since the July issue, the Journal.

We achieve this family resemblance of AIA typography by sticking basically to the same type, the type you are now reading—Times Roman. It is not only the most recent addition to contemporary body types, but also, unquestionably, the most highly legible, distinctive and beautiful.

Times Roman was designed just a few years ago by the British typographer Stanley Morison for use in the London Times which has since become a pure delight to read and to behold. I am told that more than 11,000 drawings were made, tested, and analyzed by optometrists and ophthalmologists (doctors dealing with the anatomy, functions, and diseases of the eye), before the final design was selected. This design might be called "classic," in fact its capitals closely resemble the Roman letters on the Trajan column.

The basic forms and shapes of these letters are, however, not constructed with T-square and compass, like most so-called modern typefaces, but go back to the calligraphic letters which were organically written with a broad pen which automatically creates the serifs and transitions from thick to thin. Morison achieved his feat of packing more, larger, and more readable letters into a line of type of comparable size by making the body of his lower-case letters proportionately larger in relation to the ascenders and capitals and by slightly condensing them.

While being somewhat purist in our tastes, we use the same type for headlines and display. This, we feel, gives our documents a quiet dignity and distinction we could never achieve by using either bolder or contrasting type.

A studied variation of upper and lower case, capital, small caps and Italic letters and a rhythmic and well balanced arrangement provide the interest. We occasionally use a different letter to accent the basic harmony of our type page.

While we stick to this basic "vocabulary," as architects call it, in the Journal's typography, we enhance the rather severe Miesian beauty of Times Roman with a touch of Ed Stone's baroque—the italic in which the words "AIA's New Typography" above are set. It is called "Bulmer" italic and is a replica of a famous type cut by one William Bulmer about 1790 for William Bulmer of the Shakespeare Press. With its swash capitals and its sharp contrast between thick and thin lines, this type is reminiscent of the quill penmanship of the baroque period which has never again been equaled.

Our permanent headings, such as "Allied Arts" above, are treated like trade-marks on the theory that you recognize rather than read them. We have set them in an almost silly circus poster type called Egyptian and adorned them with spot drawings to brighten otherwise utterly dull type pages like this one. The drawings are by a very young and, we think, very talented girl who just walked into our office one day, recently, looking for work. Judy Plotzer also designed last month's cover from a picture postcard Henry Churchill sent us to illustrate his article.

The cover, of course, must recommend the Journal to you. It determines whether you open the book or file it away. Yet, fortunately, it need not compete with other magazines on the newsstand, so we don't have to scream for your attention. Our solution is to let our expensive, coated white cover paper do most of the talking, keeping our imprint as direct and simple as possible, and allowing as much flexibility for the picture or design which is supposed to get you sufficiently aroused and mystified to open the magazine.

Once we get you inside, each article must be presented so that it invites you to read it. We attempt to accomplish this by arranging its words and pictures as straightforwardly and logically as we're able. The recognizable structure of the layout, rather than frills or tricks, is supposed to provide the appeal. Given enough white space from our editor and good pictures from our authors, we hope that their message will, in designer Walter Dorwin Teague's words, "emerge from the designer's hands more efficient than when it reached him." For nothing can be right unless it looks right.

W. V. E.