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LETTERS

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A monthly review of events and ideas.

DR. SALK AND HIS INSTITUTE
The renowned client discusses with Esther McCoy the design, and performance, of his institute by the sea.

MODEL CITIES
Despite Federal foot-dragging, six exemplary proposals show imaginative enthusiasm. By Priscilla Dunhill.

GIANT STEEL SHOWCASE
Inland Steel’s new Milwaukee plant is a provocative exercise in scale.

FOCUS
A monthly review of notable buildings.

ADVANCEMENT FOR RETARDED
Houston center for the retarded is the most comprehensive ever built.

KANSAS CITY’S PRIDE
Root’s Board of Trade building, a doomed landmark of the Chicago School. By Donald Hoffman.

SUBURBAN SURPRISE
Cluster housing comes to suburban Connecticut. By Donald-David Logan.

OF ORDER AND DISORDER ETC.
Piet Hein, Denmark’s Renaissance Man, talks about art, artlessly.

HOUSE OPENS 180 DEGREES
House on Long Island Sound is a study in enclosure and openness.

BOOKS

REBEL IN FINLAND
Reima Pietilä’s two latest buildings show a complete break from geometrical order. By Marc Treib.

PREVIEWS
Competition winner; reservoir town. Cover: Design based on photograph by Richard Nickel, page 54.

THE ARCHITECTURAL FORUM
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PRECAST MAKES THE DIFFERENCE.
ATLAS WHITE MAKES THAT DIFFERENCE WHITE.

H. D. Lee Building, Mission Woods, Kansas. This is precast at its best. The slim, graceful columns taper from 16-inch square bases to 10-inch square tops, where they meet precast capital arches that flare out to 8-foot squares. The design is made even more striking by the use of Atlas White Cement. Universal Atlas cements are known for their uniform brilliance, whiteness, and physical characteristics that assure quality throughout every phase of construction. And Atlas offers more types of white cement than any other producer.

Mo-Sai projects an image of strength and solidarity for savings and loan offices

Deeply textured Mo-Sai facing units 9 feet wide by 25 feet tall were used as forms for the poured-in-place concrete structural columns. The few required joints were well concealed, giving the columns a monolithic appearance both inside and out. Random quartz aggregates from dark brown to almost white impart a warm, friendly color. Mo-Sai in contrast with exotic wood paneling was used to create the dramatic teller windows and was also used throughout the unusually beautiful offices. The rough textures and colors of the Mo-Sai were chosen by the architects as an expression of the rugged beauty of the Northwest.

First Federal Savings & Loan, Bremerton, Washington
Architects: Branch, Branch & Garrison
General Contractor: Hainsworth Construction Co.
How practical is carpeting for all the needs of a Convention Center?
When you approach the contemporary Anaheim Convention Center in Anaheim, California, you’d hardly guess that it’s made to house everything from major conventions and trade shows to concerts, rodeos and sports events. Its striking design seems much too compact for such ambitious undertakings.

But when you enter, you discover this is a major deception.

Inside, the Convention Center is an enormous complex. Situated on a 40-acre site opposite the entrance to Disneyland, its three major wings encompass 374,845 square feet of hardworking space.

Tom Liegler, General Manager of Anaheim Convention Center explains that the Center has been designed so it can be used by one large convention; or two relatively large groups; or—without confusion—by a number of smaller groups.

The Convention Center’s three principal areas are the Arena, Exhibit Hall and Meeting Room Wing. The latter includes the Main Ballroom. The centrally located Grand Lobby with its contiguous Cocktail Lounge is the Center’s focal point. There is also a lanai style interior patio, a press bureau and administration offices.

A feeling of elegance
The Center’s handsome interior makes generous use of such materials as wood paneling and wool carpeting. Combined with a subtle coordination of color, ceiling heights and room arrangements, the total effect is one of elegance—and practicality.

Chosen to design this multi-purpose facility was the architectural firm of Adrian Wilson Associates. W. Craig Bullock, Project Architect, says, “In every aspect of the design we were guided by practical considerations. This dictum applied equally to our selection of carpeting—from our choice of colors to our recommendation of wool.”

C. H. Masland & Sons’ wool carpeting is used in the Arena Concourse and Stairways, the Grand Lobby and Cocktail Lounge, the Meeting Rooms and in all offices.

Four fibers analyzed
“Experience were the main influence in the selection of fiber, it would be difficult to justify using other than wool,” states Mr. Bullock. “We’ve used wool carpets in heavy commercial areas for years without loss of confidence. But in order to stay current in our thinking, we conducted a thorough analysis of four major carpet fibers: wool, nylon, acrylic and polypropylene.

“We found in testing resilience, that none equals wool. And wool proved the most resistant fiber to soil. Traffic just doesn’t grind dirt into wool, while synthetics become impregnated with it. Wool colors, too, are unlimited in selection. They’re clear, colorfast and have a high resistance to fading.

*The wool mark is the registered certification mark of The Wool Bureau, Inc.
Studies indicated that the Grand Lobby would be the most heavily trafficked area and would receive wear as rugged as any existing installation today.

Reports Craig Bullock, "We felt that the stability and sturdiness of heavy loop pile 2-frame Wilton would be the only satisfactory way to achieve the density of fabric required. In addition, the Wilton with its jacquard attachment, provided complete flexibility in pattern and color."

Adrian Wilson Associates had their own specific designs of carpeting in mind. Working closely with the contract department of C. H. Masland & Sons, they obtained precisely the variations of color and pattern they desired.

For the Grand Lobby area, the following specifications were used:
- 2-frame Wilton
- 3-ply pure wool pile
- 256 pitch
- 9.5 wire
- .370 wire height
- 75 oz. per sq. yd. face weight
- 105 oz. per sq. yd. total weight

Because the Grand Lobby flows into the Arena Concourse and Stairways, the same pattern and color were maintained in these areas. However, since studies showed that wear here would be more widely distributed, a lighter face weight and lower pile height were specified.

Traffic flow to the Main Ballroom and Meeting Rooms does not go directly from the Arena Concourse and Grand Lobby. So, for this part of the Convention Center, Mr. Lang selected gold wool carpeting. This covers all lobbies and corridors, maintaining color continuity in all public circulation areas of the Meeting Room Wing.

Avoiding regimentation
"In the meeting rooms themselves, we used blue, olive or gold carpeting," says Mr. Lang. "By varying them, we were able to avoid a feeling of regimentation and to give a different color accent to the decor of the individual meeting rooms."

Since the meeting rooms and offices receive an entirely different type of wear, the architects, working with C. H. Masland & Sons, decided on a more economical velvet weave. To reduce crushing, eliminate shading and get optimum durability, a cut and loop pile in a moresque pattern was chosen.

Carpeting for the meeting rooms and offices called for:
- 2-beam velvet weave
- 3-ply cabled to 6-ply pure wool pile
- 216 pitch
- 8 wire
- .250 wire height
- 44 oz. per sq. yd. face weight
- 76 oz. per sq. yd. total weight

The key: practicality
But Adrian Wilson Associates had other practical reasons for specifying wool. "The acoustical value was a major consideration. So, too, was the maintenance factor," Craig Bullock says. "It has been proven to our satisfaction that in public areas, wool carpeting is the easiest to maintain. And another point: wool carpeting is permanently mothproof, highly flame-resistant. It's not readily damaged by burning cigarettes. All these things are tremendously important in a building like the Anaheim Convention Center because of its constant exposure to the public."

While there were many reasons for the selection of wool, the main consideration was practicality. "The fact that the 12,550 square yards of wool carpeting we used weave together the many different facets of the Anaheim Convention Center and add a nice note of elegance, are plus benefits we would not have gained with any other flooring material," Mr. Bullock concludes.

All the advantages that made wool the carpeting for the Anaheim Convention Center also make it the choice of contract designers and specifiers in every field. Today it is the standard for such diverse installations as schools, banks, hospitals and civic buildings.

If you would like information, technical aid or assistance, contact Wool Carpets of America, 360 Lexington Avenue, New York, N.Y. 10017. We will be pleased to help.
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GROUP sounds like small town gossip.

I would rather put my approval on the judgment of the paid Architectural Consultant, Mr. Stewart, than on your editorial Writers or a Committee selected by the AIA.

It is about time that you looked into design criteria based on buildings, not people.

GEORGE O. LLOYD
Architect

Unlike the so-called "Architect of the Capitol," several of our editors have graduated from architectural schools and/or happen to be registered architects; and their qualifications to judge the James Madison Memorial Building are superior to those of Mr. Stewart—Ed.

AGRICULTURAL FORUM

Forum: Your story on the Trinity College Library in Dublin (Oct. issue) comments: "three centuries' buildings regard one another across the podium with complete equanimity." This appears to justify the myopic placement of the new-bulwark concrete hunk between the 18th-century library and a 19th century museum.

If "equanimity" is your word, might not a bulldozer in a low pasture regard the cows with equanimity, with equally meek and regard revealed by the cows?

Esthetically, I find bulldozers stimulating, especially if painted orange, but not in a pastoral habitat.

BEVERLY HILLS, Calif.

ALLEN G. SPIRE
Architect

SECOND CHILDHOOD?

Forum: I object to the kind of lip talk which seems to be the tone of most of your writing; cute heads, clever captions, and the panning of almost everything in a kind of giant architectural put-down. But I tend to think of all this as the premeditated iconoclast, and that someday soon, Forum will grow out of it.

JOHN B. HACKER
Architect

Forum celebrates its 75th anniversary next month—Ed.

Forum: It was with great pleasure that I reviewed the design of the James Madison Memorial Building in Washington, D.C.

It was with great displeasure that I reviewed your review of the same (Oct. issue, page 30).

Your childish approach to buildings not designed by your in

fronte to use their own staff to design buildings. But the architects remain a cozy, clubby group when a brother designs what only can be described as an esthetic abortion. A case in point here is our public auditorium which is now being remodeled. Every architect with whom I have talked says that not only is the design awful, but that the whole project is a monument to architectural incompetence. Yet not one architect has publicly criticized the project. I could cite other examples, but I'm sure you get the point.

I am familiar with all the rationales for most of the cases of critical silence. I believe they are pretty pallid excuses. My main objection is that in any given community the architects constitute about 70 per cent of the individuals professionally qualified to comment objectively and competently on structural design. The average citizen certainly isn't, and when I bring my rather limited knowledge to hear I leave myself open to the charge that I am not trained and am hence ignorant. This leaves landscape architects and city planners as potential critics. But both can be as easily skewed with the charge of "self interest" as the architect who uses this very argument as an excuse for silence.

Our cities are going to hell faster than we can devise proposals for saving and restoring them. And in an indirect manner I believe architects are abetting the policy by refusing to become actively involved in debate in the public forum. To be sure, such participation can be rough. One architect here has involved himself in the battle for a better environment and has paid for his activism in lost commissions. But at least he can look the public in the eye and say, "I cared." Most architects can't.

This professional inertia coupled with super-caution, I'm sure, depriving the nation of a wealth of creative ideas for improving our urban environment. It is a pity both for architects and the nation, that they do not choose to utilize even a portion of training in the public interest.

When the profession has matured sufficiently to dispassionately evaluate its own work publicly, then perhaps our cities will begin to benefit from the architect's knowledge and creativity. The only question remaining is will it be too late when it comes?

JOHN PAINTER JR.
Architect

SEATTLE, Wash.

The Organizer

WANTED: NEW DEAL DATA

Forum: For a research project designed to ascertain the cultural and economic effectiveness of New Deal patronage of the visual arts between 1933 and 1943, I would like to contact artists and administrators who worked in New York City, and state, on any of the government art projects. These projects were: The Public Works Art Project (P.W.A.P., 1933-34), the Treasury Section (1934-43), The Treasury Relief Art Project (T.R.A.P., 1935-39), and the W.P.A. Federal Art Project (1935-43). I am especially interested in corresponding with those who kept detailed records, diaries or letters which would provide specific data concerning the day to day operation of the projects, and in any and all material and recollections which would throw light on the relationship between government and artist during the '30s.

FRANCIS V. O'CONNOR
101 Madison Avenue, N.Y.
Washington, D.C., 20005 Room 102

UNDERGROUND CREDIT

In our October issue, page 57, we incorrectly credited the design of the underground parking facilities at Hopkins Plaza in Baltimore to the firm of Rogers, Talbott, Kostritsky, Lamb. That office was responsible for the plaza itself, while the Down Under Parking Garage was designed by the H. K. Ferguson Co. of Cleveland, Ohio. Our apologies—Ed.

FITCH RESPONDS TO MILLON

Forum: In his review of my book (Oct. issue, Professor Millon takes issue with my methodology; but the objections he raises actually go deeper, to the underlying philosophy of which that methodology is only the instrument.

To begin with, I take it as obvious that the historic process is evolutionary: that, in terms of both men and movements, it is by definition a process of change. Yet, since change implies the loss of kinds of stimuli (economic, ecological, intellectual) eliciting responses from both the individual and his milieu. If this be true—as I think it most demonstrably is—the historic process can be described as spiral or (if that seems too optimistic) at least cyclical. In either case, the process itself is continuous and never-ending. The historian can interpret it, dissolve it into its component parts, only for analyti- cal or descriptive purposes.

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ary process in the design field has been many times analyzed—most comprehensively in the studies of C. Theodore Larson and Knut Lonberg-Holm (Planning for Productivity, New York, 1940) and a brilliant paper by the late Frederick J. Kisler, “Correlation and Biotechnique” (Architectural Record, September 1939, pp. 60-75). They saw the individual designer as being stimulated by new needs evolving in his culture and then responding with new designs which were made possible, in turn, by new means afforded by that culture. This leads to the evolutionary development of the artifact in question (house, painting, auto, tool) which Larson and Lonberg-Holm describe as a six-phase cycle: 1. research; 2. design; 3. fabrication; 4. distribution; 5. consumption; 6. elimination. This analysis seems to me to correspond so closely to experiential reality as to require no defense. If this be a correct description of historic process, then the individual historian can—indeed, must—decide at what point in the spiral/cycle he can intervene to begin his analysis of any given epoch. He can begin with the broad forces to which the artist is exposed (stimulus); or with a description of the formal esthetic nature of his works (response). In the first case, the result would tend to be objective, historical; in the latter, subjective and biographical. I have chosen the former point of entry as offering the most illuminating vantage point from which to view the process.

One can, of course, with Millon (and Jordy, whose authority he invokes) begin the analysis with the response of a given artist to the demands of his day; and then show the subsequent impact of that response upon his contemporaries as becoming, in turn, a new stimulus. But—unless one wants to be forever trapped inside the chicken-egg conundrum—one must view the creative personalities of any epoch as responding in characteristic ways to the stimuli afforded by that epoch.

The “great” artist may seem to stand outside this relationship, becoming himself what Giedion has called a “constituent fact” of his epoch. Such an artist (Michaelangelo, Picasso) is the individual who, because of unusual intelligence and sensitivity, sees the deeper implications of his epoch more clearly than his peers; and responds artistically with designs which anticipate or forecast the future course of events more profoundly than those around him. In this sense, the great artist is also a prophet, an avant-garde. The term comes from French military practice and defines the man who spots out “the lay of the land” before the army—i.e., the immediate future.

But, when viewed from an historical, as opposed to a psychological, point of view, even the great artist will be seen as operating always within the parameters established by his own social and cultural milieu. He will be seen as manipulating the forces of history, not creating them. Thus, it remains demonstrably true that neither Wright nor Gropius nor Corbusier invented industrialism. It was, to the contrary, the characteristic mode of production of the era into which they were born. They sought to extract from this circumambient fact a new esthetic expression which would be congruent with its potentials. They aspired to direct its energies: they never claimed to have invented them. They have become “great” because they have proved that they saw further and clearer and deeper than the men around them.

The historian undertakes to explain why, at any historical moment, the vectors of force are resolved in a particular way. Of course, these forces are each represented by live men. Or, to put it another way, live men make incarnate these forces. To imply that I have denigrated the role of the individual in history, as Millon persistently does, is to caricature the whole thrust of my book. As I explicitly state (page 141), the evolutionary process implies “not merely blind social and economic pressures. Specific human agencies are also required: live men who, by the breadth of their understanding, are able to master all the factors involved and force the project through to completion.”

And the development of American building is actually described in terms of the life work of some dozen giant figures: Jefferson, Laforet, Ruskin, Greenough, Paxton, Richardson, Sullivan, Wright, etc., etc.

Millon accuses me (inaccurately, as the whole of Chapter 6 should prove) of describing as “invariable” the selection of the Classic style for the Chicago Fair of 1893. “Different men,” he says, “or even one man with stronger ideas . . . might have made the meeting and the decisions different.” True: but history is a record of what did happen, not what might have happened. Sullivan might indeed have carried that day in Chicago. Had he done so, the subsequent course of American architecture would have been far different. But Sullivan was not successful; and the responsible historian is faced with the task of explaining why, under that precise configuration of forces then obtaining, the vote went the way it did. It may appear to Mil­lon that there was no internal connection between ideology and artistic idiom in that decision; that is his privilege. But the record shows that the connection was clear and explicit and understood by all.

Veblen's whole theory of conspicuous waste revolved around the ideologically reactionary use of historic architectural and decorative motifs. Burnham (who was the whip responsible for the Chi­cago vote) said “all the great men of the day—all of them” wanted to see the fair done in “the noble, dignified Classic style.” Much of the Kindergarten Chat is de­voted to the preference of bankers and financiers for the idiom of Imperial Rome (Sullivan demanded that, to be consistent, they wear sandals and togas); Democracy: A Man-Search discusses scarcely anything but the antidemocratic implications of this imperial iconography. And Wright, in his first recorded address to his profes­sional colleagues, described a visit to “the palace of one of Chicago's great captains of industry”: “His pride in his belongings was immense, and he submitted that nothing in Italy could hold a candle to the magnificence of it all; but he was simply paying half a million dollars to advertise to pos­terity the fact that he was neither scholar nor gentleman. There was no single beautiful touch to mitig­ate the horror of the 'tou­ent ensemble' (another visit) in the home of a trust magnate who reveled in the sort of thing caricatured in the funny papers . . . but the papers were feebly and kind com­pared to the hopeless vulgarity of the reality. Such homes are the re­sult of a lust for possession . . . as conspicuous in the homes of New York's 400 as in the homes of their clumsy Chicago imitators. Such per­version is contaminating . . .” (On Architecture, New York, 1941, page 6)

Finally, Millon demands to know how I can acknowledge the objective accomplishments of such Victorian capitalists as the Potter Palmers and the Vanderbilts, on the one hand, without at the same time accepting their taste in houses as being of exactly equal objective significance. Millon him­self describes the Potter Palmers' Chicago and the Vanderbilts' Ash­ville estates (page 185) as being “exemplary productions.” But if these piles are exemplary, how is one to characterize the exactly con­temporary taste of other capitalists —the Glessners (page 195 in Chi­cago or the Stoughtons and the Lowes in New England (page 187)? The historian of finance or med­icine is, mercifully, spared the nec­essity of rendering subjective, es­thetic decisions on the events he deals with. But the artistic ac­tivities of mankind permit no such simplistic approach. (From an historical point of view, Uncle Tom's Cabin is almost certainly the most important novel ever written; from an esthetic point of view, however, it must be rated as a two-dimensional pietistic cut-out.) It is not “moralistic hind­sight” to rate Richardson as being a more important architect than Messers. Cobb & Frost. From the vantage point of 1967, no other judgment is rationally possible. Fifty years from now, the vantage point may well be different; but other historians will be writing books and other men reviewing them. Meanwhile, both Millon and I are trapped in the here-and­now. Most of the paradoxes Mil­lon finds in Fitch seem to me ac­tually to lie in history itself. What we both require is a philosophy ade­quate to cope with them.
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Yes, the Luminaire Ceiling System combines many factors in one easy-to-install package. Installation instructions, application-engineering data, and guideline specifications will tell you more about it all. Ask for them by writing Armstrong, 4206 Rooney Street, Lancaster, Pennsylvania 17604.
Now that a deal has been made by Washington and Moscow to provide suitable sites in each of the two capitals for new Soviet and U.S. Embassies, the choice of an architect for our new building on Sadovaya Blvd. has become a matter of some concern.

The State Department's Foreign Buildings Operation has been a bit somnolent in recent years—at least by comparison with its golden era of a dozen years ago. So the final selection of an architect, to be made after final plans are approved, may end up being made by someone who knows how to get the most money out of Congressman Rooney, rather than by someone who knows how to get the most talent out of the architectural profession. (We might add that the FBO is advised by a panel of AIA members.) If so, a great opportunity will be lost to present in Moscow a first rate example of what may be America's most creative art. After all, the Soviets themselves are pretty good, nowadays, at building Hilton Hotels (see our November issue)—and we might want to show them something they have not seen before.

**SEQUELS**

NCARB RECONSIDERS

Last December, in our Footnote, we reproduced a few paragraphs of Form 117-66, issued last year by the National Council of Architectural Registration Boards. Architects wishing to retain their NCARB certificates have to sign such a form each year.

The paragraphs we reproduced a year ago would have required the architect's consent to the following: an investigation into his moral character; the reporting of such information received to architectural registration boards of states or other political subdivisions licensing architects; the waiving of the architect's rights to copies of statements, papers, or documents received by the council in its investigation. The signer would also have exonerated the NCARB from any liability arising from such an investigation.

We are happy—and reassured—to report that the objectionable paragraphs have been eliminated from this year's form.

**SAYONARA?**

Frank Lloyd Wright's Imperial Hotel in Tokyo closed its doors on November 15. Completed in 1922, the building soon became his most famous work because of the way it withstood the 1923 earthquake. Only slightly damaged by World War II bombing, the hotel was later weakened by construction of a subway next to it.

For decades, the Imperial has been an essential part of every traveler's image of Tokyo. But every traveler has not wanted to stay in a 1922 guest room. Rooms in the highrise annexes (of undistinguished design), added since World War II by Japanese architects, were reportedly more popular. What the management could not measure in yen was the prestige of the old building.

This fall, the owners announced that the original hotel would be torn down and replaced by a 17-story block (in time for the expected Expo 70 crowds). The Committee for the Preservation of the Imperial Hotel, which had fought all the way up to Premier Sato to save the building where it stood (below), has now launched a new campaign.

At the urging of Mrs. Wright and the committee chairman,
Taro Amano of Tokyo University, the hotel owners offered to defer demolition while the committee raised money to move the structure. Tokyo Governor Minobe designated a site in Kanagei Park, where the building would serve as a museum. Estimates of the moving cost vary from $4 million to $10 million.

As we go to press, the possibility of preserving the Imperial remains in doubt.

**A&A: 1911-1967**

The death of a small, regional architecture magazine is not usually cause for widespread grief; but *Arts & Architecture* was an unusual magazine.

The circulation of *A&A* never reached more than about 10,000, but its influence was far wider than its distribution would suggest. *A&A* had subscribers in every state in the U.S. and in almost every country in the world.

The magazine reached its zenith in the decade following the war, when John Entenza (now director of the Graham Foundation) had stepped in as editor and transformed it from a provincial champion of traditional styles to an international medium of contemporary art and architecture. Yet, in a sense, *A&A* remained a “regional” publication, concentrated most of its attention on the architecture, and the architects, of Southern California, and it was the first to give recognition and encouragement to such now-prominent designers as Charles Eames and Craig Ellwood.

*A&A* will perhaps be remembered best for its program of Case Study Houses, under which it became a client and commissioned promising young architects to test new concepts. The architects were given freedom to experiment as they pleased, and the resulting houses often represented breakthroughs in residential design. The program pioneered in the development of the steel-frame house, to name one example.

Most of *A&A*’s life was a struggle to make ends meet. Its advertising revenue, never great, dwindled gradually over the years, until finally, on October 16, *A&A* called it quits.

**MOVING UP**

A few months ago (May issue), we reported that Olivetti-Underwood would probably move into the sleek, much-honored Pepsi Cola building on New York’s Park Avenue, as soon as Pepsi takes up its suburban resi-...
crete pouring technique developed in Norway.

The Norwegian system packs the aggregate tightly around the armature of reinforcing rods, and then injects a liquid cement grout, resulting in an even distribution of aggregate and admixture throughout the pour. In this case, the aggregate will be black basalt pebbles imported from Norway. Where the Picasso model suggests a white or off-white surface, the concrete will be left unfinished when the forms are stripped off. Where the model calls for black surface or lines, Nesjar will sandblast the concrete surface to bring out the color of the aggregate.

Before giving his approval to the project and deciding on the appropriate model, Picasso studied photos of the site and the surrounding buildings (above). The scale of the final work and its placement on the site was also worked out with the artist.

The sculpture will be completed in about 11 weeks. Its cost has not been disclosed.

METRO CULTURE BOOM

The art of the Louvre is about to descend to the level of the masses—or at least of mass transit. As part of a major overhaul and facelift of the Paris Metro and its 344 stations, the Louvre station will be transformed into a vestibule of the museum itself. Waiting passengers will be able to view artistic treasures through vandal-proof cases (right). The culture-promotion plan is yet to receive final approval by André Malraux, the government’s Minister of Culture. Naturally, no advertising will be permitted in the station—but, then, there is no Pop Art in the Louvre yet!

The N. Y. studio will continue to create limited-edition original lithographs. Its special contribution will be in the field of color lithography—offering a sensibility and experience not before available in this country.

CITIES

STREET SCENE

Long life, and new life, to Calle 103—otherwise known as 103rd Street in Spanish Harlem. The block has recently undergone a dramatic rebirth, between Lexington and Third Avenues, that is visible in more than the brightly colored mural (above).

On a bright Saturday this fall, residents from 103rd Street were joined by some 300 suburban volunteers for a one-day renovation. The renovation was a success from many angles—50 truckloads of garbage were carted away (each, alas, requiring a separate letter of authorization); a new coat of paint was applied to the surface or lines, Nesjar will sandblast the concrete surface to bring out the color of the aggregate.

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The visible renovation is only part of the activity on 103rd Street. A leadership training program, usually a difficult proposition, is having marked success by using photos of the area to spark discussion. A TV program at Christmastime will show street carolling and Puerto Rican customs to an audience that has a largely negative image of this culture. A program to teach Spanish to the police, not in schools but in the homes of bilingual residents, has generated official approval and an enthusiastic response from policemen; Federal funds may launch the program city-wide, but its likely beginning will be on 103rd Street. An art and drama workshop will begin when another basement is cleared out.

A local lawyer, Julio Flores—local to 103rd Street, that is—had suggested the renovation as an appropriate first step for wide local participation, a way of mobilizing a tense community after the riots of July, in which a woman of 103rd Street was one of the two persons killed. The Institute for Human Development, a nondenominational group headed by Msgr. Fox of the New York Diocese, is coordinating the various programs.

After 103rd Street’s renovation, three other blocks planned to do the same; one of them has already done so, followed by expressions of interest from six more.

NO IVORY TOWER

Five academic institutions in San Francisco are submerging traditional rivalries in an unacademic approach to solving urban problems. The universities involved will pool their resources for a cooperative attack on such problems as environmental health, manpower training, urban design, intergroup relations, and other aspects of city life.

The San Francisco Consortium—consisting of the University of San Francisco, San Francisco State...
College, City College of San Francisco, Golden Gate College, and the University of California's San Francisco Medical Center—hopes to find directions that will have national implications. Operating independently of any of the participating schools but drawing upon the academic talent of each, the consortium will serve as a clearing house for the acquisition of funds and information. To start with, the group raised enough money from a foundation to keep going for the next eight months.

PLACING THE BLAME

Two investigations are underway to determine the causes of last summer's riots. In an interim report of the riots panel, due about January 1, the Presidential Commission on Civil Disorders, headed by Governor Otto Kerner (Illinois), will place the major blame on city administrators' lack of response to ghetto problems. It will emphasize realigning and improving municipal government, rather than massive Federal spending programs for urban areas. The final report will discuss the possibility of a criminal "conspiracy" by underworld forces, civil rights militants, or political radicals. The conspiracy theory itself is being currently investigated in open hearings by a Senate subcommittee headed by Senator John L. McClellan (Dem., Ark.). So far it has found little material to substantiate the theory.

The findings of the Presidential Commission will be based on case studies of 23 riot cities, among them Detroit, Newark, Cincinnati, New Haven, and Milwaukee.

In response to the commission's recommendations, the Justice Department is making plans to organize seminars on slum needs and riot prevention for mayors and their top assistants.

The final report—due around June—will study the fundamental causes of city unrest and the long-term measures to prevent it.

NEWSWEEK MAKES NEWS

The story has been told before—the wretched situation and growing anger of the black poor, the possibility of intensified rebellion and consequent repression. But the mass media have rarely told it so poignantly and responsibly as in the November 20 issue of Newsweek.

Under the title "The Negro in America—What Must Be Done," Newsweek departs from its tradition of 34 years, and in a 22-page report becomes the advocate, offering its 2,150,000 readers a sensitive Program for Action.

The article recommends a 12-point program for immediate action, suggesting as an opener that Lyndon Johnson should apply the prestige and power of the Presidency to the racial crisis with the same energy he uses to nourish his faltering consensus on the war in Vietnam.

The magazine then proposes $6.9 billion in new programs for the next year, to be met partly by a tax increase, partly by a reallocation of funds (from non-Vietnam defense spending, perhaps from highway construction or the space program). Among other proposals: lowering of color bars by the craft unions, "voluntarily, if they will, or under government pressure, if they won't"; providing the slums with the same level of public services that other neighborhoods take for granted, "even if it means short-run reduction for other neighborhoods"; increasing rent supplement and Model Cities programs and adding new funds for "sweat equity" projects (a total increase for housing programs of $160 million this year, $1 billion next year); encouraging citizen participation ("It is particularly important that white officials recognize what is healthy in the new 'black consciousness'—the Negro's will for a measure of control over his own destiny. This mood will often be expressed abrasively and even disruptively. But it is too important to be dismissed as mere troublemaking.")

And so on. "The nation must conquer its aversion to the concept of planning," says Newsweek in only one of its many surprising statements. As long-range programs, Newsweek wants to see a start made on the creation of "millions of new jobs" (teachers' aides, community workers, etc.); the dispersal of Negroes from the ghettos (with a Federal fair-housing law, and a quota system), and developing of jobs and decent living conditions in the rural South.

The editors of Newsweek believe that none of this is possible except on an emergency scale until the war in Vietnam is resolved. Their main concern, however, which can only be tested when the war ends, is whether America "has, or can generate, the will to solve its racial problems."

GOOD START

Ground has been broken on the first project in the life insurance industry's pledged program of $1 billion for ghetto redevelopment. The Prudential Insurance Company of America began construction November 13 on a $4.5 million middle-income cooperative at the edge of Newark's Central Ward, following the announcement of the project by little more than a month. Construction is to be completed within a year (reportedly 40 per cent of the time that Federal sponsorship would have required).

The 270-unit garden apartment project is a joint venture of the State of New Jersey, the City of Newark and Prudential; the insurance company has promised to invest a total of $250 million as its share of the industry's $1 billion pledge.

For the Newark project, Prudential is purchasing bonds of the new State Housing and Finance Agency to provide funds for a 50-year mortgage. Prudential is also giving the developer a 2-year construction loan. The state will guarantee the $800 down payment required from each prospective occupant. Monthly rents are expected to average $27 per room, which, according to the state, should be within reach of many of the families to be displaced by the proposed New Jersey College of Medicine and Dentistry.

LOST & FOUND

LAST STAND

Masada, an exhibition based on the largest and most important archeological expedition carried out in Israel under the direction of Professor Yigael Yadin, is on view at the Jewish Museum in (continued on page 81)
Dr. Jonas Salk is quite aware that he is one of the most important architectural clients of the decade. (That he was a client at all was because of the support for the creation of the Salk Institute of Biological Studies by Basil O'Connor and The National Foundation, he says.)

And Dr. Salk is a happy client. One proof of this is his staunch way of looking at the Salk Institute, designed by Louis Kahn, as the sum of its parts. He returns constantly to the idea of its wholeness. He compares it to the body—the laboratories and studies carrying the cerebral function; the service spaces carrying arteries, veins, and nervous system; the mechanical acting as the respiratory system, etc., each integral. He knows the spots from which the wholeness is best revealed, and to these spots he leads his visitors. It gives him pleasure to watch their eyes scanning. He calls the exterior "a hard shell" which is understood only with a knowledge of the interior spaces. He dismisses easily the isolation of a part from the whole; an inquiry into a part is "like asking for a logical justification for a work of art."

He has been intimately involved in the design and construction of the building, a building which was to represent an institute in which the creative minds of the sciences and humanities will meet. He participated, naturally, in the planning, but he also sat in on the pouring of the test slabs. He was unhappy over the color and texture of the first slabs; the experiments to arrive at a satisfying color and good seams, bevels, even a pattern of tie rod holes, filled up a large section of one of the walls below grade. "Go and see them," he said.

As a client, he came prepared. "There are few clients," Louis Kahn said in 1964 in a taped conversation, "who can understand philosophically the insti-

Mrs. McCoy is a well-known architectural critic and the author of numerous books on architecture, including several on pioneer architects in California, where she lives. She has frequently contributed to the Forum.
Dr. Salk is an exception. Few clients have it or even sense the lack of it. Usually a written program is handed to you and you must assume the role of philosopher for the client.”

Dr. Salk talked about the selection of the site. “The first week in January of 1960 I went around to various possible locations with San Diego’s assistant city manager and city planner (by a vote of the people, San Diego had made a gift of the land to the institute) and saw this particular area. I don’t want to make a point of this, but it struck me at that time that this site had special qualities. I was out on the cliff and saw the convolutions, almost like cerebral convolutions, the cliffs just off the edge here of the areas that were eroded, looking off to the north shore toward La Jolla and the Oceanography Pier. The kind of institute I had in mind would be more appropriately situated at the juncture of the land, sea, and sky.

“When questions arose as to how much land and the shape of the site, it was at this point that Lou Kahn came out with this very ingenious idea of the irregular site, with the intrusion of the city park land, by creating an arrangement of the three basic elements: working, meeting, residences for visitors.” He got up from his desk and went to the site plan on the wall and indicated how the park cut into the site and buffered the buildings—the present laboratories and the future Meeting Center, residences, administration building, and the structures for animals. He commented then on the similarity between the institute and an academic institution with its classrooms, working places, laboratories, and dormitories.

“Kahn designed a shell . . .”

The laboratory building of the institute is finished. It is there in its wholeness. Only the south block of the building has yet to be equipped. It is not an open-ended building to be added to. This is it. The two blocks, yoked together underground by a mas-
sive mechanical system, layered with 9-ft.-high mechanical spaces (which are the heart and the pocketbook of the building), and held in by a 20-ft.-high retaining wall, could be expanded only at enormous cost. Kahn has said that he builds for today, not the future, but Dr. Salk maintains that in the laboratory building the future was built into today. "The building does guess tomorrow," he says. "The obsolescence is reduced by the investment in flexibility. We would have had to put the laboratories to test to know what was needed, and that was not possible. We could not wait five years for each scientist to contribute to the design, so we made adaptable space. The overall pattern is similar, but everyone designs his laboratory space differently. Kahn has designed a shell which is a loft: the artist subdivides."

"I remembered the cloister"

Kahn has also designed in the building what he calls "a sense of 'beyond the need.' The building must work," he says. "I care about that, but anyone can make it work, anyone can do that; the building must also have the sense of man."

Dr. Salk, too, wanted the building to be "beyond the need." He said, "The architecture could be a means of expression of the basic idea but also have an operational effect upon Fellows by their seeing themselves from a different point of view, which would be produced by the site, the area, and the architecture."

What determined the design more than any other one factor was the number of Fellows. This had to be established very early. "I wanted the institute to be kept relatively small, and the ultimate size of the institute defined the architectural integration. The studies came out to be 36, half of which are likely to be used for resident Fellows and the other half for visitors."

The court plan concept had its beginning in Dr. Salk's memory of the monastery of St. Francis of Assisi, which he saw when he visited Italy in the '50s.
"I remembered the cloister there, and I conveyed to Kahn the idea that this is what I would like—the cloistered garden. It became the court, and the arcade the colonnade. The studies then grew, evolved, and developed along the sides of the laboratories, like a necklace strung along a building, and provided the basis for the colonnade."

Kahn recognized "the dichotomy in the place of the laboratories and the place of the studies," and commented that "a demand for space for experiment increases and tends to edge out the other space, or, if the other space persists, it tends to give less room to those spaces which are capable of being services." He calls one the architecture of the oak table and the rug, and the other the architecture of the pipes.

Dr. Salle said there were many discussions concerning the various levels, not only from the aspect of working spaces but of views. "We wanted an unobstructed view from the laboratories and the studies, and we wanted both a west view of the ocean and a view of the court from the studies. So we placed the studies opposite the pipe spaces, with the public spaces in between."

"People will use the court"

A concern of Dr. Salk's is the hangover of the custom of the Fellows and staff of meeting indoors rather than making use of the outdoor meeting places provided. "Habit—also a lack of furniture; now we have to carry chairs to the court," he said. "New generations will grow up to recognize the architecture and use the outdoor spaces. When it is denser next year, after the education functions begin, people will use the court. Outside, you get the feeling of the wholeness of the space, and the arcade gives the feeling of looking inside. The building can't be read from the court unless you have been inside."

The present gathering place is the cafeteria, and the seminar and conference rooms are used for meetings. "Architecture has to be used to induce people to move in new directions. When the Meeting Center is built this will change." Dr. Salk leads the experiment in outdoor living. He sits often in one of the outdoor rooms sandwiched between the studies, and he likes to meet visitors there.

"Nothing to block the view"

Originally, he had thought of creating the Institute at the University of Pittsburgh, and it was Dr. Robert Oppenheimer who first suggested that he consider California. "It was an intriguing idea," he said, "because of the shift of the intellectual center of the country toward the west. A pioneering atmosphere still prevails here. The concept of an institute bringing into fusion science and the humanities is readily acceptable here."

Moreover, he continued, "an institute of this kind belongs away from the city. I wanted unencumbered laboratories in communication with the outside—the lower, middle, and upper laboratories all in communication with the sky. The institute will relate forever to the ocean. There is nothing to block the view between the institute and the horizon, provided for by planning the institute on the edge of a mesa. The feeling was that the institute should be away from the mainstream for the purpose of contemplation. I am sensitive to other people, to their emanations. I tried to provide for people to get away from each other as well as to come together."

Dr. Salk had to leave for his next appointment. (It was, I had been warned, a surprise luncheon given by his staff to celebrate his birthday.) We had been talking in his office on the next to top floor at the west end of the north block. His desk was placed far back into the room, and he faced windows shielded from the glare of the sky and sea by louvered teak screens streaked with rain marks. Before he left to change from his white lab coat to an olive tweed jacket, he paused to comment on the materials and the windows.
He would have liked the windows lower. He allowed that they composed well on the exterior, but inside they were so high he lost some of the view. As for the wood panels, frames, and screens of the window elements, "Wood posed some problems of jointing. It isn't watertight. The wood wasn't installed with a healthy respect for rains. The first year the building was up was the heaviest rainfall, and for economy we had left out the weather-stripping. It was unwise; there is no tight seal."

"It's a tranquil place..."

As we walked down toward the court, he told me that they had first considered stone as the material for the studies, either an indigenous stone or a Texas limestone which came from out of the sea and had fossils in it. "Then I saw how massive the studies would be. I asked if it would not be better all of concrete—a single material so as not to destroy the monolithic character. Kahn agreed."

A whining sound came from the east end of the south block. The air conditioner. They would, he indicated, have to do something about it. There was also an acoustical problem inside. "There's always an acoustical problem in a concrete building. Some attention will have to be given to reducing it—possibly acoustical plates. It's a tranquil place and has to be kept that way inside and outside. The plan for the Meeting Center will have to go through various revisions in the light of what we've learned from the construction of the laboratories."

The light had changed while we were talking in his office. That morning, 30,000 acres of brush and pine woods were burning in San Diego County, and there was a phenomenon of two distinct horizons, one at the sea line and the other separating the clear sky from a dense cloud of gray-yellow smoke, which sometimes glowed red at the center. Pine ash collected in the arcades, the open stairwells, on the hair of the men laying travertine slabs in the court. The teak, straw-colored under the usual overcast sky, was now golden, and the concrete took on the orange glow of the temples at Paestum at sundown. Everywhere were exaggerated Chirico perspectives. This was the day, it struck me, for which the building had been composed.

Dr. Salk's analogy of the studies as a necklace strung along the laboratories was faithful that day, for the studies were separated by air from the laboratories, and sandwiched with air; the muscles of the building—stairways, walks connecting studies to laboratories—demanded the eye for the first time more than the angular plan and teak window assemblies. But the small diagonal walls serving as sunscreen and column were as sharp as the slash marks they make on a smallscale plan.

In the fall, days of heavy smog alternate with days when the Santa Ana winds from the desert drive brush fires into woodlands and into the new developments carved out of the foothills. The Santa Anas bring a clear light, but never the eerie one of that morning.

FACT AND FIGURES:

PHOTOGRAPHS: Marvin Rand, except page 27, John Waggaman, and page 29, George Pohl.
When President Johnson asked Robert Wood, head of the political science department at the Massachusetts Institute of Technology, to come to Washington in 1964, his mandate was paralyzing in its magnitude: devise a program to save cities. “You come up with the program,” the President said, and “I’ll worry about the politics.”

Not since Roosevelt had asked David E. Lilienthal to set up TVA or Harry L. Hopkins to set up WPA had an assignment for domestic legislation been so sweeping. To carry out the undertaking, Wood gathered up an all-star task force of urban savants, and the group worked for three years preparing its recommendations. These were embodied in the Model Cities (then called Demonstration Cities) Program, immediately adopted as the cornerstone of the Great Society’s attack on urban ills.

When, in mid-November, after months of procrastination, HUD announced the winning cities and their appropriations for the first round of model cities planning, it was clear that Johnson had not been able to deliver his half of the bargain. A recalcitrant Congress had appropriated only $312 million of the $662 million requested.

The reasons are complex and ugly. Yet for all the Congressional penury, the model cities program remains one of the most innovative and hopeful platforms of the Great Society. The signal importance of the model cities program, and its essential differences from its shopworn predecessors (FHA and urban renewal), are twofold:

1. **Its scope.** Model cities provides for the total transformation—both social and physical—of selected slum neighborhoods which will become “showcase demonstrations” of what a concerted attack on urban blight can accomplish. First emphasis is on people, and second, on construction programs.

2. **Its flexibility.** Model cities money can be used to coordinate or supplement existing city, state, or Federal city-aid programs, or it can be used for such mundane tasks as, for example, speeding garbage collection.

“Our intent is to set up laboratories to learn what really works and what does not,” explains Walter B. Farr, HUD’s model cities administrator. “We have said to cities, ‘Come up with something truly exciting.’”

That cities complied is evident from their proposals, which are optimistic, audacious and reasonably realistic. (The most audacious of all, perhaps, was New York City’s, which asked for not one, but three, model cities areas—and got them all accepted!)

In the main, they center on five major concerns: housing, transportation, the use of computers for problem solving, new methods of financing construction, and the use of mobile units to upgrade the quality of ghetto life (artmobiles, dramamobiles, healthmobiles, etc.).

By definition, all the winning cities put forth proposals of the breadth and scope required by the program. But a few of the winning cities stood out with some refreshingly off-beat proposals:

**NORFOLK, Virginia, has asked for funds to develop an economical waterborne mass transit system which might utilize hydrofoils, air cushion or conventional hulled vessels, or a combination of all three. Every major industry in Norfolk is linked to navigation and located along the innumerable waterways which honeycomb the city.**

“So why not convert our biggest barrier into our greatest asset?” asks Lawrence Cox, one of the authors of Norfolk’s model cities proposal. “Autos and a tunnel are too expensive...
and impractical because our waterable is so close to the surface. Volume and land use patterns do not justify a monorail or subway system. We have the Elizabeth River and its branches, the Lafayette and the James to the northwest and, to the north, all of Chesapeake Bay."

As in most ghettos, the problem with Norfolk’s is getting residents to better jobs and to the educational and health facilities which are located in the more prosperous sections of town. Just what form this water transit should take, the city will now investigate.

There are precedents—hydrofoils on Oslo’s fjord and across the Straits of Messina to Italy’s boot. Said Cox, “Of course, Stockholm, Venice, and Amsterdam have always had their ferries, but nothing of the magnitude we need—hundreds of water taxis of varying sizes which can move up and down our rivers and estuaries, stopping at many destinations. . . . Besides, there is an important social consideration. Waterways do not displace people or neighborhoods.”

SAN ANTONIO’S model neighborhood is Mexican-American, and although its one- and two-story frame houses are products of the early 1900s and often dilapidated, the neighborhood has a high morale, fierce pride, and many small colorful shops and bistro. Houses front on the street, turning inward on a corral, often shared by as many as a dozen families. Like the Mexican barrios from which they derive, the corrals contribute a strong sense of community and are an important stabilizing factor in an area where many fathers are itinerant farm laborers who return to San Antonio only in the winter months.

For this neighborhood San Antonio has proposed an educational mall and an industrial mall which will run two miles in length, and be built where housing has deteriorated beyond salvation. The malls will be connected to each other and to many small existing patch parks by a network of bikeways and walkways, which will provide recreation and transportation to school and jobs.

SEATTLE will use a proposed transit corridor (highway on top, rail on bottom) to provide the city with a continuous greenbelt of sit-in parks, playgrounds and recreation areas. “It will be possible,” explains Edward Devine, assistant to the mayor, “to walk along a greenway five miles through the heart of the city to the arboretum.” Along this green spine at major interchanges will be three “communities”—clusters of schools, housing, and shops.

The area is one of Seattle’s oldest, most eclectic, and most beautiful sites, pinched on a mile-wide strip between Lake Washington and Puget Sound. It was originally settled by lumberjacks at the turn of the century when the Douglas fir on the surrounding hillsides was being logged. Today it is mostly a Negro community with some second- and third-generation Japanese living in shabby-to-decent frame houses.

The transit corridor plan is the outgrowth of an urban design study for a mass transit system for Seattle. If coupled with the greenbelt idea, the highway will be reduced from eight to four lanes and be financed by a three-way contract between Federal, city, and state governments. Although the highway is not on the Interstate system, Devine said, “We are taking [Secretary of Transportation] Alan Boyd at his word when he said he would finance the right combination of good urban design and transit.”

ATLANTA hoped one of the byproducts of preparing a model cities application would be a new esprit de corps in the depressed area; still, no one expected to see the Grand Dragon of the Ku Klux Klan and leaders of the black nationalists sit down at the same conference table. But they did, at a model cities planning session. Both were residents of the proposed model cities neighborhood, and wanted to work out a housing plan for the area’s 47,000 inhabitants, hemmed in by an inner belt railroad system. The problem: how to get high population density without building highrise apartments, and still do away with the existing substandard frame dwellings jammed together? The problem is compounded by a distinctly Southern tradition of a detached house and a plot of ground for every family.

“We don’t want to swap a vertical ghetto for the one we have now, with elevator crime and all that,” said Dan Van Sweat, Atlanta’s model cities administrator. “And what do we do with 47,000 people during reconstruction? Maybe mobile homes?” Mobile homes particularly interest Atlanta, since ghetto residents are highly transient, coming in from rural Alabama and Georgia: one elementary school in the Capital Avenue district last year had 100 per cent turnover.

To this end, Atlanta has asked for funds to study new building techniques and materials—“Maybe a Habitat?” Van Sweat asks—and to examine building codes and new concepts with a joint task force of building industry engineers, architects, and city officials.

GARY, Indiana, will try to solve the problems of the old town by building a new one on a gently rolling, wooded site six miles south of Gary. The new town will offer multiple-choice housing with single-family dwellings, garden apartments, and clustered townhouses. With the new Interstate 65 opening a direct truck route to Indianapolis and New Orleans, the new town hopes to lure steel-related industries such as stamping plants or metallurgical research firms.

The theory behind the plan is to establish a kind of voluntary population interchange between the ghetto’s residents, mostly Negro, and the ghetto’s former residents, the Poles, Serbs, Croats, Slavs, and Russians who came at the turn of the century to work the steel mills and who are now scattered throughout Gary’s suburbs. Their shops, churches, and assembly halls in the old town still operate; but will the Americanized second- and third-generation children come back into town to live near their old folks?

“It will take money,” believes Bill Staehle, director of planning for Gary. “International villages all over the country are doing a booming business with shops, restaurants, bakeries. Living in the center of the city is more convenient, and with good schools and housing, they’ll come back.” Gary plans a national design competition for the new town as yet nameless.

CAMBRIDGE, Massachusetts, is a ragbag of dilapidated houses, neat, middle-class frame dwellings, light and heavy industry. This is the Cambridge that nobody knows. It sits in the lee of land-hungry giants—Harvard, MIT, NASA, Polaroid—which are eating away the residential neighborhoods piecemeal.

Cambridge will use its model cities funds to erect a battery of legal barriers against real estate speculation and insane market pressures. Proposals include such devices as private agreements among landowners not to violate land uses mapped on the Cambridge city plan; a prohibition against the eviction of tenants and the imposition of rent controls for the two-year period following the sale of property; more stringent zoning; encouraging entrepreneurs to develop private housing on city-owned land, such as the dump.

What is most noteworthy about the Cambridge application, according to Justin Gray, assistant to the city manager, is the degree of grass roots involvement. “It has rallied a whole new spirit. It is the residents themselves who have plotted our model cities proposal, not the giants . . . . We paid for 25 monographs prepared by Harvard Law School, MIT, Harvard Urban Center, Engineering, and so forth, on city problems. For the first time we are harnessing those intellectual skills which have been in our town, but not part of it. And we intend to go on using them . . . .”
The most difficult thing to grasp upon first seeing the new Milwaukee plant for Inland Steel is its size: for example, the concrete base under the lower slot of windows and ventilators (photo and section, below) is about 6 ft. high, and even a tall man walking past the plant would have to stand on tip-toe to get a glimpse into the building through the glass. And the total height of the facade detail shown here is 45 ft.—or better than three stories of a typical office structure.

So the architect, William P. Wenzler, had to solve two problems above all others: first, how to design a building that would meet his client's functional requirements; and, second, how to
design a building that would not dwarf the people working in it. He solved both with style and with economy ($13.56 per sq. ft.). The functional requirements were relatively simple: a plant that would produce the components for the SCSD schools to be built in California (see our April '65 issue). The basic layout of the plant was predetermined, as was the column spacing. Continuous rail and truck roads would pass through the building just inside its long north and south walls. Entrances would be at the east and west ends, and future expansion was contemplated toward the north. There was only one serious problem—a hair-raising schedule, under which construction of the plant had to begin within three weeks after the architect had been commissioned to design it!

In solving the functional program requirements, Wenzler decided that, obviously, this plant should (among other things) demonstrate the versatility and elegance of his client's products. So he used not only an insulated steel curtain wall, but a steel truss-deck framing system developed specifically for the SCSD schools. This spans in the short direction of each structural bay and forms the roof of the plant. (The bays measure 50 ft. by 80 ft.) It is expressed on the exterior by the distinctive sunshades (below) that punctuate the west, south, and east facades of the building.
Combination window-and-ventilating slots open views and clear the air of fumes

More difficult than the solution of the functional problems of the plant was the solution of the problem of scale.

To reduce the huge dimensions of the building to a scale understandable to (and comfortable for) the people who would work inside the building, Wenzler did two things: first, he placed a mezzanine over the entrance areas at the east and west ends of the plant, so that workers enter the building under a ceiling height of 14 ft. before they get into the taller (40 to 45 ft.) spaces of the plant itself. And, second, he introduced a continuous slot window-and-ventilator all around the perimeter of the plant. This slot is 2 ft. high and its sill is located 2 ft. above the...
main manufacturing level of the plant (see section, page 39). This means that most workmen inside the huge space can look out of the building in all directions—an important psychological asset—and that there is a double-scale established within the plant: the very big scale of the industrial operation, and the eye-level scale of the men who actually direct the operation.

To supplement the light and ventilation supplied by the eye-level slot around the base of the plant, Wenzler introduced a second glass-and-ventilator slot just under the roof structure, and a series of roof monitors to help light the center areas of the plant. The high glass-and-ventilator slot is shaded on three sides by the projecting steel eye-brows that give this building its distinctive character (below).

This combination of clerestory lights at different levels and roof monitors in the center of the plant effectively eliminates the glare that might have resulted from a single source of natural light. Moreover, the ventilation grilles at two levels effectively eliminate the welding fumes generated in the plant. These fumes have been known to make crane operators, working high up above the manufacturing floor, groggy and dizzy enough to constitute a serious hazard. The natural ventilation through the two slots of grilles, combined with some mechanical ventilation, has solved the problem.
Simple and bold forms, and the play of light and shade, dramatize the owner's product.

More and more industrial plants being built today seem like "high-styled" packages wrapped around an operation which the package designer did not really understand. This plant is a refreshing exception. It is a clear-cut statement of function, and an attempt to establish an understandable scale. It is built with its owner's products, used about as elegantly as they have ever been used, and as rationally. Although, in this particular case, the plant layout and operation were, in fact, predetermined, the final result is a neat and unpretentious integration of plan, function, materials, and form.

And by using the owner's products boldly and with imagination, the building succeeds in being an excellent advertisement for those products—without recourse to trademarks or other packaging devices.

This plant is the first unit in a large complex: already an office building, using similar details, has gone up on the other side of the road; and the plant itself may soon be expanded.
FACTS AND FIGURES

FULFILLMENT IN BOSTON

Unlike monumental motion pictures, Boston City Hall is delivering everything promised in the previews. Looking very much like the competition-winning drawings by Architects Kallman, McKinnell & Knowles, it rises commandingly on piers over the hub of Government Center, a 60-acre wedge of downtown Boston. The need for public access dictated the composition of the building's volumes and voids. Visitors will enter at the southwest corner (right in photo above) to the first levels, enclosed in brick—a reminder of historic architectural neighbors. These initial floors will accommodate bill paying, licensing, and voter complaints. From this level, steps lead up to the central court, which is open on all sides and to the sky. Suspended into the court are council chambers on the west (expressed in the extending concrete hoods, above) and municipal reference library on the east. The mayor's office (photo right, over construction sign) dramatically rounds a corner and provides him with a view overlooking Faneuil Hall and Boston's fishing wharves. The highest plateau comprises three office floors seldom or never trafficked by the public. Mayor-elect Kevin H. White and his city administration are scheduled to move in next spring. Meanwhile, the rest of
Government Center grows apace.

A private high-rise office tower, designed by Edward L. Barnes, may be seen in the background of the photo above and at 2 o'clock in the plot plan at right. Proceeding clockwise, buildings include the Sears Block (renovated); Two Center Plaza by Welton Becket; John F. Kennedy Federal Office Building by TAC. Light gray hatch indicates proposed buildings. Faneuil Hall is at high noon.
TOWER FOR THE AGED

Indianapolis, Ind., at last a grudging convert to Federally funded urban renewal (Sept. '65 issue), has been given a persuasive argument for public housing in Evans Woollen & Associates' 21-story apartment dwelling for the elderly (above). The building can be read at a glance and should inspire confidence among no-nonsense Hoosiers. It is a simple visual statement of program requirements: one- and two-person apartment units. Eight concrete structural walls, which project beyond wall-to-wall windows, delineate the width of apartments; fire stairs at either end indicate apartment depths by marking the location of the double-loaded corridor; the stepped-out floor near the top divides single- and double-occupancy floors and consists of common space—lounges, meeting rooms, and balconies. Angled precast spandrels (detail, above left) vary the play of light and shadow.

SQUARING THE CIRCLE

New York's Guggenheim Museum was provided by its architect, Frank Lloyd Wright, with a concept for highrise expansion on the northeast corner of the site (see early drawing). With that as its genesis, the 7,300-sq.-ft. annex (below) is being carried out by the Frank Lloyd Wright Foundation. The Guggenheim's familiar circles and smooth concrete facades (once described by Wright as an "unbroken wave") here give way to octagons and squares cast in low relief (right). The addition adjoins both the main building and the cylindrical, corner administration wing. The rectangular structure is suspended on one side from a truss and supported on the other by a wall at the property line. The truss, level with the fourth-floor tier of the grand ramp spans the length of the rectangle. This permits the ground-floor area to remain fully open for deliveries. Two floors with high ceilings are gained by the expansion. They will be used for storage, maintenance, and assembling of exhibitions, thus freeing the top spirals of the grand ramp for gallery space. Projected vertical extension may reach as high as ten stories.
AN AUTUMN NIGHT'S DREAM

A new generation of Chicagoans got their first view last month of what is, paradoxically, one of their oldest and best-known architectural environments. The 79-year-old Auditorium theater (right) by Adler and Sullivan was given a glittering revival, after 26 years of disuse, with a performance of *A Midsummer Night's Dream* by the New York City Ballet. But the night’s celebrity was Louis Sullivan, whose “presence” eclipsed all: the murals, the gilded plaster mouldings, the gently soaring arches. From the stained-glass skylight (six panels of which arrived too late for installation) down to the carpets (specially manufactured after his design) Sullivan’s delights were suffused in the soft amber glow of carbon-filament bulbs. Today’s science-minded sophisticates, though properly dazzled, gave special praise to the engineering feats of Dankmar Adler: the unobstructed sight lines, the structural soundness, the hydraulic stage equipment. Above all, they marvelled at his largely intuitive genius for acoustics. The restoration by Harry Weese calls for reinstatement of gold leaf decals on the facing of boxes and ceilings, and for introduction of air conditioning. Whether or not the 4,200-seat Auditorium can prove economically viable, remains to be seen. Said Beatrice Spachner, principal fund-raiser for the $2.25 million project: “One hurdle at a time.”

PHOTOGRAPHS: Pages 44-45, Barbara Abraham. Page 46 (top left), Robert Young; (top and bottom, right), George Cserna. Page 47, Richard Nickel.
ADVANCED CENTER
FOR THE RETARDED

For a wide variety of facilities, a campus plan seemed suitable. The workshop, for instance (left, and foreground in aerial photo, above), is somewhat isolated from the rest of the complex. The drive to the classrooms is also separated from the main entrance, and smooth-surfaced for rollerskating. The site is one of the few high points in Houston, leased by the city at $1 per year, with the request that the center not feed off the adjacent parkway.

The new Harris County Center for the Retarded is unusual. It is, first of all, the country's only center for the mentally retarded built and operated through community funds, the local United Fund supplying two-thirds of the cost and the Hill-Burton program the remainder. Secondly, it is the country's most comprehensive facility for the retarded. All facilities except residential are here—preschool and high school classes, recreation and therapy, sheltered workshop, psychological testing, medical and dental programs, research.

Architecturally, too, it is unusual. The Houston Post writes that the new center, designed by Barnstone & Aubry, "is being acclaimed by many as the outstanding institutional building complex in Houston. And remarkably, there is nothing institutional about it." This is deliberate. As Howard Barnstone explains it, "they said to us, if you design special facilities for the retarded, it will be impossible for us to teach them how to live in a nonretarded world."

True, there are special features. There are, for instance, wheelchair ramps auxiliary to stairs. (The incidence of physical disability among the mentally retarded is not high—perhaps 20 persons among the 500 children and adults now using the center are in wheelchairs.) There are observation areas between classrooms, for teacher training. There is a bathroom in each classroom (a number of the retardates are not toilet-trained). There are small windows in the classrooms, since distraction is a serious problem for the retarded (making a strange sameness, says Barnstone, between the retarded and the PhD student in this regard). The swimming pool is only 4 ft. 6 in. deep, and has no diving board. Finally, there is the therapy building's special training area called "The Apartment," enabling retardates to learn the rudiments of everyday living.

But none of this gives the six-building complex an institutional aura. Appropriately so. The
View toward main entry (top left) shows student therapy building in foreground (3 on key plan), a concrete frame structure built on 90-ft. piling over what was previously a garbage dump. Large scuppers were the cheapest way to get rid of water from the large expanse of roof, says Barnstone; there are no internal roof drains. Main entry to administration building (2) has deep beams at stairway (middle). "Our engineers tell us we needed this," says Barnstone; "at $1,400,000, there was no money for anything unnecessary." Classrooms (1) are load-bearing masonry (bottom), with poured-in-place concrete roofs. Balcony over arcade is barricaded for safe use. View (right) is from main entry (2) into classroom court (1).

The Harris County Center is philosophically the polar opposite of an institution where the retarded are "put away" for a lifetime. Frank Borreca, executive director of the center since 1956, believes strongly that for the good of the retarded and their families, retardates should remain at home. The goal of the center is to train as many as possible for a productive role in the community. Some former students work in town; some work at the school as teacher aides and maintenance personnel. Those who move up only from classroom to workshop in a sense represent something of a failure—by the retardate or the center in not proceeding further with training, or by the community in refusing to accept them into jobs for which they are fitted.

The Harris County Center is only the first of many facilities expected to be built along these lines. State officials throughout the country are quick to see the economy of a system that precludes room and board. (The Houston center is, however, thinking of adding a residential building, an eight- or nine-story building on the geriatric principle of providing separate apartments for tenants who do not require full institutional care. This will be an increasingly important need as medical knowledge enables retardates to outlive their parents.)

Because the center is a prototype for a new kind of treatment, and because it is an architectural solution of distinction, hardly a week goes by without visitors. One such was an eminent architect from the East who afterward stopped in at Barnstone's office to give a gratuitous design crit. "It was all very fine," said Barnstone, "but if we'd done it his way, it would have been two or three times our $16.50 per sq. ft."

No one-day visitor can measure the changes that the building has brought to the people using it. Absentee rates are markedly lower, says the executive director. Among retardates, attendance is largely a reflection of parental motivation, but staff absenteeism, too, has
Student therapy building (3, and top left) has cafeteria, auditorium, swimming pool, therapy rooms. Upper floor (middle) looks out toward administration (2) and classroom units (1). Construction throughout is designed for low cost and low maintenance. Workshop (5, and below) is a concrete frame building, with parking at ground level and a precast roof of 60-ft. clear span. Construction costs for the workshop building were well under $10 per sq. ft., says Barnstone, probably between $7 and $8 per sq. ft. Total costs averaged $16.50 per sq. ft.

dropped considerably. There is greater motivation in learning, he believes, and among the trainable retardates, many more are now moving from classroom to workshop. *Esprit de corps* in the workshop is extraordinary. Use of the center is already up to levels projected for 1970.

The center has a sense of community, but not of a closed one. All those who use it go home at night. The local school system has a cooperative program with the center, and an "adult education" program brings in an additional group of retardates who come only in the evening. The auditorium is rented out to private groups, and the center also serves as a polling place. The workshop is a serious industrial enterprise, and now that it also looks like one, the center gets many more large subcontracts than it did previously (the most recent from Maxwell House, for the attachment of a special promotional item to the standard container of coffee). All contracts are competitively bid; rates paid to the retarded are below the minimum wage, but are controlled by the Department of Labor for the amount of work the retarded can do.

Architecturally, the complex is comfortable without being boring, and interesting without going through what Barnstone calls "gyrations." The design is a product partly of low-cost and low-maintenance necessities, partly of an attitude that respects the wish of the retarded person to live, as far as possible, a self-sufficient life in the community at large.

**FACTS AND FIGURES**


PHOTOGRAPHS: John T. Hill.
THE PRIDE OF KANSAS CITY

By DONALD HOFFMANN

Burnham & Root's Board of Trade building, completed in 1888, has been praised by the British architect, James Stirling, as "the toughest building of its period on either side of the Atlantic." But tough as it is, it is now being destroyed to make way for a parking lot.

Earlier this fall, when the building was boarded-up but not doomed, the Forum had it photographed by Richard Nickel, who has long been active in efforts to preserve Chicago School architecture. Donald Hoffman, who wrote the commentary, is the art critic of the Kansas City Star and author of The Meanings of Architecture: Buildings and Writings of John Wellborn Root, published this month by Horizon Press.

This story was prepared in the hope that a way could be found to save the building. Now it can serve only as a historical record.

On June 30, 1888, when the Board of Trade moved in, Burnham & Root's new building was the pride of downtown Kansas City, Mo. But over the years the site (210 West 8th St.) proved to be too far north, and slightly west, of the best commercial area. In 1925, the Board of Trade moved southward. The old building was surrounded by wholesale stores and garment industry lofts.

The design of the Kansas City Board of Trade building had its genesis in the early 1880s, when Burnham & Root entered a competition for the Board of Trade building in Chicago. Root prepared several entries, including one said to have provided a clear separation of the grain trading hall and the rental office space. The Chicago competition, however, passed through intrigues and ended in a fiasco.

Root, then, was far from excited when, in 1886, the Kansas City Board of Trade announced a similar competition. But this time the competition was to be conducted under rules approved by the Western Association of Architects (which was to merge in 1889 with the AIA).

The competition attracted more than 50 entries, yet Burnham & Root were slow to respond, even though they had been offered $1,000 on an invitational basis. Root reportedly started and completed their entry on a Saturday before packing for Europe.

Root's design derived not only from his entry in the Chicago competition, but from his thoughts about the Auditorium in Chicago (page 47), a great commission just landed by Adler & Sullivan. Their solution was simply a colossal mass, housing three separate functions.

Root's interest in greater articulation of spaces and functions was realized in the H plan of the Kansas City Board of Trade. The building was divided into two major wings linked by a monumental entrance arch, skylighted court, and boldly rising elevator tower.

The location of the grain trading hall at the top of the west wing was indicated by the giant arcade and by the ornamented gables. The east wing, containing most of the rental office space, was handled with comparative simplicity.

One entered the building through the great round arch, and either climbed the double stairs to a gallery serving the mezzanine offices or passed through the court to the eleva-
The monitored skylight was carried in part by cast-iron columns. The court was an impressive spatial experience, while the mezzanine scheme was clearly a device by which Root sought to provide an additional "first" floor for large commercial occupants.

The trading hall comprised the entire fifth floor of the west wing. It presented an unobstructed space 59 ft. by 115 ft. beneath an elliptically arched and coffered ceiling, suspended from a scissors truss system. A small balcony at the sixth-floor level was once the vantage point for observing activity in the pit. Later, disfigured and painted black, the hall remained a magnificent 19th-century space.

Outside, the Board of Trade was faced on three sides with pressed brick and ornamental terra cotta in a matching ruddy hue. Water tables and string courses divided the facades horizontally at the second, third, and fifth floors. The massively modeled corner piers, curving as if under the strain of containing enormous volumes, were a counteracting vertical force.

Finally there was the tower, ponderous yet thrusting toward the Midwestern sky. It cannot be explained simply as a utilitarian structure: much of it rose above the level of its mechanical equipment. Root once said that—he got the job—he would have designed the Auditorium in Chicago so that the separate functions would be united "with a tower which should bloom like a rose." Plant forms appealed as much to Root as to Louis Sullivan or, later, to Frank Lloyd Wright.

If the Kansas City Board of Trade was a transitional building in the development of the modern high office block, it was nonetheless much more than simply a Richardsonian Romanesque pile. John Root already was sensing a vertical expression of the new building-type; that is the real meaning of the Board of Trade's tower.

Root's later buildings, particularly the Monadnock Block in Chicago and the Mills Block in San Francisco (both designed before Adler & Sullivan's Wainwright building in St. Louis), stand as his crowning achievements. Yet the Board of Trade was an important step. It, too, was one of those buildings that Root himself described as "sincere, noble, and enduring monuments to the broad and beneficial commerce of the age."

In the end, the building was the victim of uncertainty. It was still partly occupied as an office building in July, 1965, when the Mid-Continent Mart Redevelopment Corp. proposed a $17.5-million apparel mart on four blocks that included the Board of Trade site.

Preservationists circulated petitions and prepared for battle. An inventory report was filed with the Historic American Buildings Survey, and the effort led directly to the formation of the Missouri Valley chapter of the Society of Architectural Historians.

From the University of London, Nikolaus Pevsner wrote: "It is sad to think that a city of the civic pride of Kansas City could even consider demolishing the old Board of Trade building...a powerful piece of architecture in which no effect has been left to chance."

A small group (composed mostly of young architects), organized as the Citizens to Save the Old Board of Trade Building, offered several possible programs for the building: as an
office building primarily occupied by architects and engineers, in which the Producers Council might have its headquarters and various companies might exhibit products; as a downtown extension center for the Kansas City Art Institute, the University of Missouri at Kansas City, or the Kansas City Museum. But those suggestions drew no immediate response, and no angel ever stepped forth.

At the request of a city councilman, however, the mart corporation agreed not to begin land acquisition until financing for the entire project was in hand. Early this year the corporation revealed that it had no financing. It has since been granted two 120-day extensions to perform on a revised redevelopment plan, which does not include the Board of Trade property. But the damage was already done: tenants of the old building had moved out. The owners had had the heat and electricity turned off and the doors locked.

While the building was still being used, a survey and study of it was made by Theodore Seligson, a Kansas City architect. He estimated that the rentable space could total only 70,000 to 100,000 sq. ft., but that the building could be rehabilitated for about $1 million. After months without heat or maintenance, remodeling costs would have approached $2 million, Seligson estimated.

To make the old building commercially attractive, a rehabilitation of the surrounding blighted area would also have been needed. At least until that was accomplished, some institutional use would have had to be found for the building. None of Kansas City's institutions came to the rescue.
Because of the enlightened attitude of a town planning commission, the courage of a pair of young developers, and the talents of Architect Landis Gores, the town of Fairfield, Conn., can now boast of a small (70 units) residential development unlike any to be found in more posh neighboring towns.

Nor is any such development likely to be found nearby for some time to come, for the zoning codes of most towns in the area prohibit clustered housing in residential neighborhoods. The result is, generally, the all too well-known kind of development consisting of single-family houses strung out across the countryside, with streets, driveways, and handkerchief-size private yards eating up the balance of the landscape.

Fairfield's zoning code, on the other hand, under the designation "Design-Residence No. 1," goes so far as to permit garden apartments in new areas, provided certain control requirements as to density, area of ground covered, and building height are met.

Gores, a Connecticut architect, kept these stipulations in mind while responding to the clients' program of one- to three-bedroom apartments and townhouses — together with a few units of a type that would attract attention to the project's uniqueness.

The architect's answer to the latter request was to provide the row of single-story houses along the east boundary — two- and three-bedroom units which are planned around an interior open court (opposite). Each of these units has a two-car garage beneath. Cul-de-sac parking areas serve the apartments along the west and the townhouses at the other two sides of the 2-acre interior park. A second bank of townhouses was possible at the north side as their main living areas face a large public park that borders the 5½-acre site.

With cars, drives, and service areas kept to the perimeter of the property, the interior park could retain most of its original trees. With additional landscaping, this park was designed to serve as a commons for the entire project. It is safe from cars, a sheltered playground area for children easily observable from most of the units; and though residents tend to relax or entertain only immediately adjacent to their own quarters, the size of the park adds a feeling of spaciousness to these activities.

With a site plan so new to Fairfield, Gores decided it was best to appear before the town planning commission — and the project's traditional-minded prospective tenants — with units that looked fairly conventional. Hip roofs, for example, were chosen.
for the apartment and townhouse units as being most commonly in use in the surrounding area. The repetition of this motif does bring the scale of these long buildings closer to that of adjacent individual homes; but one may question the contradictory practice of merging two individual units under a single hip roof, without distinguishing between them in any way (plan, left; lower photo, opposite).

The review board, while generally favorable to the project, did ask that the two dead-end parking areas should be connected. Besides the loss of additional trees and a possible decrease in the number of units which could be fitted onto the site under the present scheme, this would have introduced a traffic pattern through the site, which Gores definitely wished to avoid. Happily, a compromise was reached whereby both parking areas, and the drive that services the courthouse garages, were widened, thus giving emergency equipment access to all the units. This did involve the loss of a number of trees on the east side of the property, which would have afforded greater privacy from passing traffic. A rechanneled stream now flows through a deep moat here and acts as a divider between passing pedestrians and the project.

Upon completion, Strathmoor-on-the-Park was fully occupied in record time, and the owners went on to complete a similar plan in Portland, Maine, where they are the town redevelopers. During the past year other builders have approached Gores to develop plans for such projects elsewhere in Connecticut. But opposition from local zoning boards has kept these proposals on their shelves, gathering dust.

FACTS AND FIGURES
Strathmoor-on-the-Park, Fairfield, Conn
Cost: $1,167,650 (construction), $152,790 (site work).
PHOTOGRAPHS: Pedro E. Guerrero; page 50, Morgan Kaolian.
I am going to follow the unusual practice of saying what I am going to be talking about. This may be particularly useful in connection with such terms as "Order and Disorder," which have so many meanings that almost anything one says can be interpreted to bear on them—just as in the case of dreams and the libido, according to Freudian dream interpretation. I am thinking of what a poet, whom I hope I will be allowed to quote, has said in a very short grook:

Everything's either
Concave or -vex,
So whatever you dream
Will be something with sex.

Nobody believes more strongly in the laws of nature than the magician. Because he has experienced, so to speak on his own body, what it takes—not to break the laws of nature, but to make it look as if he were breaking them. And nobody believes more strongly in the necessity of specialization than people who have experienced, as I have, the amount of knowledge and skill demanded by each of several fields. It has given me more and more respect for the specialist—and, at the same time, less and less respect for the way our civilization imposes specialization upon all of us.

Specialization is necessitated by the very amount of skill and knowledge it has come to comprise. That is the respectable reason for specialization. But there are a great many other motivations that work toward the isolation of the specialist.

One of them was expressed by no less a person than Julius Caesar, when he said that he would rather be the first in a village than the second in Rome. Another motivation is the expert's interest in building up his own position by making the gulf between himself and the layman as wide as possible—a tendency which makes every professor a potential enemy of his own topic. And there are many other motivations that do not operate in the best interests of humanity.

The present degree of specialization may be necessary. But not the present kind. What would one think of a travel bureau that knew everything about a certain country but had no idea of where that country was situated on the world map?

An outline knowledge of the place of one's special field in the wider context of human activity and knowledge should be recognized as belonging to the basic facts of any field.

The borderlines are heuristic, organizational means, justified because they are practical. However, one should not carry his faith in them so far that these borderlines become obstacles. Yet this is happening, and it provides us with this definition of man:

Man is that animal who himself draws the lines that he himself stumbles over.

One of the lines we have

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"Grook" is Mr. Hein's name for his own kind of poem—mh.

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Mr. Hein, the Danish poet and scientist, has left his mark on many disciplines, including architecture, city planning, and the visual arts. This article is adapted from a speech he delivered at the International Design Conference in Aspen last June. The theme of the conference was "Order and Disorder."

PHOTOGRAPH: Henri Dauman—LIFE
drawn most deeply and most often stumble over is the line between the two half-worlds which C. P. Snow called the "Two Cultures." I think it is slightly misleading to call both of them "cultures." Before Snow published his book, I called them Cultism and Technoey, respectively. For better or worse, the first one builds on tradition, on former cultures; and the second one is nontraditional, having its roots directly in the soil, in nature. Only a combination of the two will provide us with a really fertile human attitude.

The great potentials of the designer (and much of the confusion as to his position) spring from the fact that his field is placed across that borderline between Cultism and Technoey. The gap is much deeper even than Snow thinks. It is so well established that, in order to gain a reputation for being a sage in cultural matters, one need only show the accepted ignorance of, and contempt for science and technology. And to be regarded as a scholar in the sciences one need only show a similar attitude toward humanistic studies. In fact to be considered well-versed in both fields it should be sufficient to show absolute ignorance of either.

Now, where does the line lie between the field of the designer and neighboring fields? Why is there a place in the pattern for the designer at all? It is a widespread lay attitude to admire the technician because he can calculate his way to the only right solution of a problem. This is a very strange basis indeed for acclaiming somebody as a modern Superman—that he is just an accessory to a slide rule. The truth is quite the opposite. A technician is sometimes worth admiring exactly because he cannot arrive at a result by means of mere calculations—and arrives at it nonetheless.

This happens when the problem cannot be explicitly stated. When it can, the solving of it is mere table and slide rule work. When it cannot, it is what I would call an implicit problem, and the most demanding part of it is the molding of the problem, your orientation in it.

My experience with the different fields in which I have established some footing has shown me that there is no more misleading word than "Art." It is a truly magic word! You need only pronounce it, and all art goes out of art, and only fakery and snobishness are left. But if you pursue the intrinsic reality in art, then you are left with the creative process—which is the same in all art forms, from painting and poetry, to science and technology.

To put it briefly: Art is solving problems that cannot be formulated before they have been solved. The shaping of the question is part of the answer. That is how the creative process works even in the most exact fields—just as it does in the recognized art forms. You have to do an immense amount of work treading the paths across your field—and then deposit it all in the subconscious. And out of the subconscious come new, unexpected, rounded-off units—which then, in science and in technology, have to be tested by confrontation with empirical facts. (But that is a secondary feature, the rule of the game within those art forms.)

The subconscious is as necessary as the handkerchief which the magician puts over his top hat. The rabbits couldn't come into being inside the hat without that handkerchief. Not for any mystical reasons, but for the very reason that consciousness requires explicit questions and answers.

The true creative process, the solving of implicit problems, which is the same throughout human activity, is the source of all art and the true human characteristic—the one function which the computers may never take over.

When technical problems are too underdefined for a single, fixed solution to be arrived at on the basis of strictly technical factors, there is a choice which cannot be made on a strictly technical basis. So there is room for drawing upon other considerations—cybernetic and psychological. And esthetic—which is just another name for the others.

Technical problems most often are underdefined; the opportunity of choosing better or worse solutions—that is the sphere of the designer. If he sees his place in this context, he will produce order in the only sense worthy of the name. If he doesn't see his connection to the rest of human activity and if he, instead, sees his interest in isolating his field, he will produce disorder.

There is no such thing as absolute order. There is no such thing as absolute disorder. We wouldn't want either of them if there were. The designer's place is somewhere between the two extremes, making use of both. But we can say something about which kinds of order and disorder are fertile for us.

The organic world, life, evolution, the process of learning—these raise the level of order. But the material of the organic world is disorder, random noise. Order is not a fixed, fossilized system. Order is a growing and changing, intelligent thing.

Democracy depends upon open possibilities and upon experimentation. We have stressed the minimum of equality of opportunity so much that we are close to permitting democracy to end up in conformity, which is incompatible with its nature. Democracy depends on difference. To discard Order or Democracy or Rationalism after our modest experiences with them to date is to follow the fluctuations in the world of fashions.

The world is full of people who act according to the thesis that the opposite of a stupidity is the opposite stupidity. But the opposite of any stupidity is wisdom.

The true place of the designer is in the wider context of the living order of human activity, and not in an isolated position where he can make himself artificially interesting.

His art is the same as all other true creativity. And—if I may end up by quoting the poet once more:

There is one art, no more, no less:

to do all things with artlessness.
"I wanted to solve the functional problems of the house, of course," says Richard Meier, "but I also wanted to go beyond this to ideas that transcend the purely functional solution. What I was dealing with here was the expression of direction and movement, the distinction between enclosure and openness—how to fit a suburban house, for instance, between two others on either side of it."

The site in Darien, Conn., is not a typical suburban lot, by any means, but a large wooded plot that slopes gradually up to a knoll, then down to the rocky edge of the Long Island Sound. "In a sense you enter the house as soon as you turn into the drive," says Meier (see site plan, below left). The garage is intentionally free of the house, but with the garage set at a 45-degree angle, the direction of movement in the whole design is established. Further on is the entrance to the house itself (below), a flat facade approached straight-on. It is only past this facade, and inside the house, that the direction of movement reasserts itself, and the eye is again drawn diagonally, across the house and out to the water. The location of the entrance ramp, not at the center of the facade but near one end, is part of the directional theme, as an implicit indication of movement to follow.

From the enclosed facade, the whole house opens up in what Meier calls "a 180-degree explosion." The structure creates and reiterates this effect; the entry facade is a bearing wall from which wood framing spans across to a line of lally columns just inside the window wall.
The house isn't at the high point of the site, but just down from it, on land that slopes gently towards the water. Entry, on the approach side, is at mid-level, into living room and master bedroom, up to children's bedrooms and library (up further to the roof terrace), and down to dining room, kitchen, and maid's room.

The same quality of diagonal movement implicit in the site plan is repeated in the interior space; the dining area at ground level (the near corner in these photos) opens upward to living room and entry; the living room, in turn, is open diagonally upward to library and bedroom corridor. The vitality of the house derives partly from this directional energy, partly from the spatial complexities, partly from the exquisite detailing and proportioning.

Meier calls the house an intellectual exercise, and one can see its debt to other intellectual exercises—there is a planar quality that is similar to early Le Corbusier projects and a rhythm that is evocative of northern Europe's de Stijl explorations.

The house is sheathed in redwood siding (cypress being difficult to get at the time), and the surface painted white. "It's more than just my likes and dislikes," says the architect, "but what seems right for the house."

The rear of the house is open to the waterfront in three directions—"a 180-degree explosion," as the architect calls it, from the almost solid entry facade. Entry is at the middle floor; top floor has bedrooms at the front, and the upper part of the living area facing the water; bottom floor has kitchen at front, and dining area facing the water.
Although the house is open to the water on almost three sides of the building, the whole view is never accessible all at once; the viewer is never as if on a vast beach, with the view spreading out on all sides. Instead, there are reference points—mediating events—between the viewer and the view: both man-made (the chimney) and natural (a pine tree just beyond the house).

The fireplace also serves to cut off and frame the secondary view (right), which is straight across the Sound, setting it apart from the main view, which is diagonally into the rocks and beach (left, above and below).

"The owners don't talk about the house in these terms, of movement and space and direction," says Meier, "but I can see that they enjoy it this way. It's a very liveable house."

FACTS AND FIGURES

PHOTOGRAPHS: Ezra Stoller.

Left above: from the entry, the main view diagonally out to the rocky inlet. Left below: same direction, the floor below. Right: the view from over the entry, down to the dining area, and out to the secondary view. Below: in the living room, towards the entry.
ARCHITECTURE: ACTION AND PLAN.
By Peter Cook. Published by Reinhold Publishing Corp., N.Y. 96 pp. Illustrated. 7 3/4 by 6 1/2 in. $5.50 (cloth), $2.45 (paper).

REVIEWED BY JOHN M. JOHANSEN

As with all previous writings and drawings of Peter Cook, the main concern is with Image: the image in history; the image as poetic vision which precedes its technical realization today; and, looking forward, the image as liberating idea in the establishment of a new phase in architectural revolution. First of all the word, Image, by definition, means mental or pictorial representation of a thing, rather than the thing itself. Specifically, Cook is concerned with the inspirational vision, the pictorial aspect, the persuasiveness of the drawing, in the Beaux Art tradition still; with images of new organization, and with images of a process by which human life, using modern technology, can be better accommodated.

Historically, there is no doubt of the value in the liberating idea; the poetic or intuitive statement of a truth yet unrealized. Both Freud and Einstein admitted to having given scientific proof, organization and usefulness to concepts previously stated by the romantic poets, authors, and artists of the 19th century. Poetry and the arts have, in fact, often anticipated science. Peter Cook's images are a valuable part of this historic phenomenon. The quotations: "gestural architecture," the making of a "theatrical point," "architecture feeding off cultural and technical situations in other fields," "symbolism," "embellishment to basic thinking," "show-off," "the avant-garde creates archetypes," "the inspiring rather than the reasonable"; are all statements which unashamedly reveal Cook's concern for the visual image.

Historic precedence in the use of image and liberating idea is noted to substantiate, to give credibility and respectability to the Archigram position, which heretofore may have been lacking. Alternately, a distinction is made between Archigram images and those of the early moderns of the 1920s and 1930s. Having discarded "vestigial styling"—automobile as carriage (equipped with a McLuhan rear-view mirror—the early moderns started on machine styling of buildings, still practiced by our mainstream architects today, in which there is little new organizationally. Cook looks much deeper than styling.

In his recent books, The New Brutalism: Ethic or Aesthetic, an obituary, and Theory and Design in the First Machine Age, Reyner Banham observes the clear discrepancy between practice and the ideal, "a record," he says, "of disappointment." Banham, however, continues to believe that architecture should and can be "an objective approach to building, deriving from the unprejudiced scrutiny of facts," to quote Colin Rowe's review of the latter book. Cook shares this belief, as do many of us. He explains that architecture of the historic past used a static language; that of the immediate past (the 20s and 30s) used a style expressing the dynamic; while that of the future may actually embody the dynamic. This is, then, a new ideal. But images, though they are valuable, will not alone bring about the reality.

Another concern which Cook expresses is for architecture not as a preconceived image but as a yet unseen byproduct of other conditions. This idea comes more from technologists like Fuller (search for high strength weight ratio), sociologists, behavioral scientists, and humanists representing the new ethical interest in the human condition. Cook is, or has become, a humanist and insists such values can exist within his images: "architecture creates environment out of human condition"; "architecture as extension of the human body"; "architecture as embodiment of social idea"; "creative use of sociology"; "reconciling new

Mr. Johansen, an architect whose buildings have appeared often in the Forum, reported in our September '67 issue on the new island-mines in the Gulf of Mexico.
technology with living patterns”; though not original, these are statements which convince us of this. However, these ideals have no convincing connection with his pictorial images.

According to the classification of the approaches to urban design by Françoise Choay in *L'Urbanism, Utopias and Realities*, Cook would take a position between the “Technopians” and the emerging “Environmentalists.” He is surely a technopian, but an environmentalist, one feels, by claiming to be one in order to win acceptance of his first love: his image of a new urban structure.

Industrial processes and other nonarchitectural structures such as Cape Kennedy launching gantries and electronic equipment seem most often to inspire in Cook the visual image. It is these already built structures which make his images valid. In some cases they have, in addition, inspired for architecture new structural organizations. “Urblind,” as Melvin Charney describes it in *Parallel*, is an “operative model that seeks to anticipate where we will live, . . . is disinterested in what it will look like . . . is concerned with the possible organization of the new environment.” This lack of concern for appearance is quite the opposite approach from that which leads to his definitive visual images. It is “these ordinary devices” or “organizing ideas,” however, which are the more valuable contributions. But even the organizations are images, not realities. I doubt if the architect will determine this organization, for it is the industrialist, city planner, the entrepreneur, the politician, the engineer, and behavioral scientist who actually will come to know the processes and determinants of the new organization. The architect may preside, may, in fact, coordinate or synthesize, but if he presumes to know or determine these processes or organizations, he is back in imagery: the image of an organization, and perpetuating the void which Banham has observed between the ideal of the 30s and the reality which came short of it; in this case between what may be merely a second machine style, and really new processes and organizations yet unknown to the architectural profession. When he says that “some far more viable set of operations is seen to add up to something—not a style, not even a discipline, but some indefinable set of operations which have been intelligent and appropriate,” he speaks of a very new attitude toward planning and design; one which does respect determinants yet undefined. This position frees Cook from the accusation of being a new stylist.

Cook’s concepts of organization, applicable at any scale, house or city, is basically what we have known as “eage and infill.” He describes again the concept of prefabricated inter-changeable components and the “leap from instinctive design to computerization” which prefabrication implies and lends itself to. This seems to be the likely direction. But if “architecture becomes a science rather than an instinctive art” what place is left for the faneiful image, one wonders, which Cook holds so dear? Is the image a device used only during periods of stylistic resignation and regeneration? And computerization during periods of established scientific design processes? Beyond the visual or organizational image are found other valuable observations. Architecture is not “any longer the dominant method of organizing cities”; “zoning laws and highway engineering define the basic environment”; “architecture is the infill”; “the transition of values from action through circumstance to concept remains the basic process”; “the fascination of architecture is method and creation, not just the final objects”; “architecture will be infinite and transient”; “architecture as part of a total design strategy.” As well as containing the original thinking and the Archigram image to date, the book is a very up-to-date catch-all of advanced thinking.

A good part of this small book is taken up with attitudes toward architecture in general: ways of looking at or recognizing qualities of architecture, analyses of space, sequence and experience, scale, and siting. This I'm sure is useful to student and lay reader. However, it tends to classify this book as a primer. It is certainly more. The book is most worthwhile. Though not altogether new to some of us who know Cook, it is interesting to any serious reader of architecture; a “must” for all architects—students or those in practice who claim to be “with it.” In the past five years or so the regard for Peter Cook and Archigram has changed markedly from that of amused tolerance to that of serious respect. To me and a few others, the influence of these young men is to be regarded as major. Accurate or no, these images free us from the comfortable establishment of today’s architectural design. It remains to be seen, however, whether in the next 20 or 30 years these images are proven, by those who will be in charge of building, to be romantic ideals, and a style, or to share Banham’s hope, that they are truly conceived, and this time become a reality.

![Lost New York](https://via.placeholder.com/150)

In the current excitement about saving vestiges of an older New York, it is certainly timely to be reminded of what has already been lost. Nathan Silver’s book *Lost New York* is more than just a nostalgic catalog of these losses.

In his introductory text, he examines the role of old buildings (and other objects) in the city and makes a convincing plea for “conservation” as a higher goal than mere preservation. Conservation, as Silver defines it, means keeping whole buildings and neighborhoods as working parts of the city. It requires thorough understanding of the city as a complex system, and coordination of all community powers to maintain and improve valuable elements of its form.

Only occasionally, Silver argues, are esthetic and historical reasons strong enough to justify preserving structures that have no real function. He points out, however, that much of what is destroyed in New York (as elsewhere) is not functionally obsolete. Many excellent structures, performing well, fall victim to a tangle of arbitrary or haphazard forces: taxing and zoning policies, real estate values, and accidents of site acquisition. What replaces them (or what they are converted into) often functions less adequately than the original. With a well-organized policy of conservation, a city could gain new physical assets without the witless destruction of existing ones.

In Silver’s scrapbook of New York’s lost assets, which takes up the major part of the book, the causes of many needless losses are detailed. There is, for instance, the problem (especially acute in New York) of assembling sites for large projects. It is easier to tear down a Pennsylvania Station, a Metropolitan Opera, or an Astor Hotel than to acquire a block of shabby little buildings nearby. At least one of New York’s great assets was lost because it was too well loved: the open top decks of Fifth Avenue buses were eliminated because patrons rode happily for hours on a single fare. His selection of examples is remarkable mainly for its breadth. There are of course the lost mansions and churches, but there are also amusement parks, subway kiosks, and even less...

(continued on page 96)
PIETILÄ
REBEL IN FINLAND
BY EDWARD MARC TREIB

The brick-faced concrete "chutes" that enclose the Tampere church rise on a low hill at the end of the town's main street (above). Inside (left), their bare concrete surfaces show subtle gradations in brightness as they splay outward from full-height windows.

Among recent buildings in Finland, the works of Reima Pietilä stand as the signposts of a new direction. His two most recent buildings, the church at Tampere and the student union (called Dipoli) at Otaniemi, lay a firm foundation for greater freedom in generating architectural forms.

In Pietilä's first major structure, the Finnish Pavilion at the Brussels World's Fair of 1958, he used a rectangular grid, but broke through its restrictions by fragmenting wall and ceiling planes. In these two buildings, he has completely broken the fetters of geometry.

TAMPERE

In 1959 the Kaleva Congregation at Tampere decided to build its first church, with the architect to be chosen through an open competition. The site was superbly located knoll in a residential sector of the city. Pietilä's scheme was awarded first prize, and he was selected as the architect. Economics, politics, and discussions brought about changes in the final building (among them: reducing the volume by 15 per cent and a reversal in materials from raw concrete on the exterior and brick on the interior to the exact opposite), but the basic architectural character has been retained.

The church building is a "clearly ambiguous" form statement, ever changing to the moving eye. From afar, for example from Tampere's main street, the flat-roofed structure looks like a solid, rectangular block. It is only as one approaches and begins the ascent of the hill that the play of light (when the sun does shine) and the jagged roof silhouette clarify the moving, angular-curvilinear form of the structure.

The greatest movement within the sanctuary is caused by the subtle, yet powerful, slope of the choir gallery. Despite its many shortcomings, the church interior presents a fine feeling of unity and resolution, and an excitement of a different kind from what the drawings suggested.

One of Pietilä's greatest virtues is that the detailing at the smallest scale reflects the same care and feeling as the larger, more dominant forms: all the smaller elements work together toward reinforcing the overall design concept.

The related spaces, including a smaller chapel and approximately 15 additional rooms for social and educational purposes, provide a fine experience in spatial flow. Unnoticed light sources play delicate, yet strong, accents along the paths of travel that link these rooms.

The structure was built with a cavity wall of slip-formed, poured-in-place concrete, with exterior wall of pale yellow-tan brick. Trim and furniture are pine, and flooring is sand brown clinker. The ceiling is of rock wool between steel channel sections, with acoustical boxes of varying depth above them.

Mr. Treib holds a Bachelor of Architecture degree from the University of Florida and spent the year 1966-67 in Finland on a Fulbright grant.
Dipoli, the new student union at the Finnish Institute of Technology at Otaniemi, differs completely from the Tampere church in both site and scale. Yet it embodies the same freedom in form and movement—this time carried into the third dimension.

The institute opened its central, Aalto-designed complex in 1964, but in 1961 a competition had already been initiated for the new student union. Pietilä's entry (designed with Raili Paatelainen, whom he later married) was chosen as the winner. The building accommodates a far more complex program than one would imagine at first glance. In addition to the necessary student functions (rooms for the student government, party and meeting rooms for the students, four cafeteria lines and two snack-bar lines, and a small theatre) there are also central facilities for the international conference center, which operates through the year, and a first-class public restaurant. It is to the architect's credit how simply and gracefully the entrances to the facilities are separated, and how easy it is to move through the building.

The competition entry bore the name "the caveman's wedding march," and it is indeed difficult to imagine a more expressive title. The building sits boldly among the trees, quietly rippling and moving under the great pulsating roof. A walk around the building reveals a strong contrast between areas of looser, freer forms and those of a more rectangular nature. Dipoli is entirely sheathed in copper, which Pietilä hopes will mellow to a color similar to that of the surrounding trees. Likewise, it is planned that the now seemingly disparate boulders placed at the base of the structure will provide surfaces for growing things—that time will aid in a site-building merger. (In winter, the snow already effects this merger.)

The path of movement through the building from the pincer-winged entry is a march from dark to light. Just inside the entrance is the dark, gently
The Otaniemi student union stands in a pine grove (left) east of Aalto’s boldly formed auditorium-classroom building. Cavernous halls meander through the lower floor (plan above), connecting entrances from all sides. The upper floor (section, top) houses kitchens on the north side that serve a vast, divisible dining-partying space stretching more than 300 ft. along the south side.
winding, boulder-faced "Hall of the Teekaris" (technical students' nickname) which contains the cost and rest rooms and leads to the student government offices and a beer-drinking cavern for the students. Highlighting is provided by single spotlights and the inviting brilliance of daylighting from upper, but still unknown, sources.

From here stairs lead directly to the four serving lines, where the skylight sources become apparent; or a turn to the right offers a view of promised brightness in the main stair hall, which leads to the series of festival and eating spaces. These were conceived as weaving and plastic spaces, providing a series of varied-size areas which are capable of opening to form dance or celebration rooms for up to 1,300 people. Huge doors, superbly related in detail to the whole, divide the spaces into smaller, noise-proof rooms for ordinary occasions. Here the roof, unlike that of the Tampere church, comes alive, weaving and twisting. Even in the smaller meeting rooms the ceiling is not a neutral plane but takes an active part in the defining of the spaces.

The pine woodwork on the interior is excellently detailed; the window mullion divisions (wood or steel, sheathed in copper) are "active," they are never bland in proportions or divisions. The roof is poured concrete, as are wall segments, floors, and roof beams.

The criticism that some of the forms are awkward and uncontrolled is in many ways justified. The complexity of the structural system, moreover, raises doubts about the validity of these forms. Whatever might be said in formal architectural terms, one visit to a student party in Dipoli shows how nearly perfect the building is as an expression of the not-always-entirely-earnest student spirit.

Dipoli demonstrates Pietilä's mastery of an especially risky design approach. Without the discipline of either geometry or structural system, he has produced a thoroughly consistent work of architecture.

FACTS AND FIGURES

Kaleva Church, Tampere, Finland. Architects: Reima Pietilä and Raija Paatelainen. Seating capacity: 1,050 (nave); 80 (choir). Cost: approximately $1,190,000.

Dipoli Student Union, Finnish Institute of Technology, Otaniemi, Finland. Architects: Reima Pietilä and Raija Paatelainen. Building area: 112,980 sq. ft. (10,500 sq. m.). Cost: approximately $3,313,000.

PHOTOS: Martti J. Jastinen; page 74, Raija Paatelainen.
FORUM

CONT'D

New York City until February 18. It will be shown in the next two years in Philadelphia, Chicago, Detroit, Dallas, Los Angeles, San Francisco, and Washington.

Masada, Herod's royal citadel, located 1,300 ft. above the western shore of the Dead Sea and overlooking the Judean Desert, was built between 37 and 31 B. C. as a defense against the Jewish rebels and the threats of Cleopatra. The ruins were first discovered and correctly identified in 1888, by an American, Edward Robinson. From 66 A. D. to 73 A. D., Masada was the site of one of the most dramatic episodes in Jewish history: the siege and revolt of the Jewish Zealots against the Roman army of Titus. In the first century Palestine was under Roman occupation. When, after constant guerilla warfare, Titus conquered and destroyed Jerusalem and the Temple, the outpost of Masada (which the Zealots had seized from the Romans in 69 A. D.) alone held out. Under the command of Eleazar ben Yair, they held siege until 73 A. D. when the concerted attack of Flavius Silva and his Roman legionnaires rendered their resistance hopeless. Rather than surrender, they chose mass death, the last man setting fire to the citadel.

The finds are manifold: the palace (terrace, below), royal chambers, baths, storage rooms built by Herod; mosaics of the first century; rare coins of the period of the Jewish revolt; the earliest known synagogue; remnants of food (grains and salt); and physical remains of the Zealots. Of special note is the water system, whereby flash-flood water from the riverbeds was channelled through aqueducts into two series of large cisterns. But the most important finds were the biblical scrolls (Ecclesiasticus) and the scrolls of the Dead Sea Sect, definitely predating 73 A. D.

The exhibition, arranged by George Him, has attempted, by use of photographs, models, and exhibits, to convey the significance and excitement of the expedition.

LARCENY OF BAUHAUS LORE

Attention: Bauhaus friends, anti-quarians, civic-minded citizens. STOLEN! 150 pounds of scholarly books (some from the Busch-Reisinger Museum) and papers on the Bauhaus. Also personal letters from Kandinsky to Howard Dearyne, two cases of handwritten notes on 3 by 5 in. cards, and a carbon copy of a manuscript containing 14 chapters for a book on the Bauhaus. Place: parked car in Chicago.

It is superfluous to say how precious these documents are and how irreplaceable their loss. Any clues leading to their discovery should be addressed to Howard Dearyne, Dept. of Architecture, Illinois Institute of Technology, Crown Hall, Chicago, Illinois 60606, U. S. A.

PLANNERS VS. PALMS

Miami, Fla., is the center of one of America's fastest-growing metropolitan areas, now housing more than one million people. But during the explosive growth of recent years, its downtown core has grown only shabbier.

In a belated effort to revive downtown, the city authorized one of the world's biggest planning firms, Doxiadis Associates, to draw up a master plan and a series of detailed proposals—at a fee of about $250,000.

It would be hard to detract much from downtown Miami's concentration of cracked stucco and parking lots, but—in one of its first proposals—the Doxiadis firm has found a way. As a key element in their plan, they have proposed to build a convention center in the 50-acre Bayfront Park, one of the city's pitifully few open spaces on Biscayne Bay (see map). Preliminary plans show the center as a complex of buildings 1,000 ft. long, with parking for 680 cars, access roads, etc. To make up for the near obliteration of the present park, the plan envisions filling in 360 ft. out into the bay, reducing the strait between the park and the nearest man-made island (Miami's new seaport) to a mere canal.

The local AIA chapter has assailed the Doxiadis plan with a speed and vehemence that architects rarely muster. While emphasizing their support for downtown revitalization, they have denounced the convention center proposal (along with some less significant parts of the plan) in the press, on television, and at public hearings.

The architects contend that other nearby sites, including an area of soon-to-be-abandoned piers just north of Bayfront Park, could accommodate the center without closing downtown's only window toward the bay. The Doxiadis site has the approval of the city government, which apparently hopes to exploit public land in its effort to spur private investment and increase the tax rolls—in other words, to try to get something for nothing.

But any planning proposal for the city of Miami must be approved by the Dade County Com-

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FOOTNOTE

Biggest pop—The four silos shown on the opposite page are located close to downtown Minneapolis. They are 80 ft. high and 35 ft. in diameter, each, and they are part of a paint company's manufacturing complex. So, one day recently the management decided to spruce up the silos and paint them in bright colors to resemble giant cans of paint, stacked up in pairs. "The reaction," according to a company spokesman, "has been extraordinary." Go West, Andy Warhol!
misioners. Following the advice of
their Metropolitan Planning De-
partment, the County Commiss-
ioners recommended on Novem-
ber 21 that the city investigate
other sites.

REWARDING AN ALUMNUS

Harvard has commissioned an
Australian (now a Torontonian),
John H. Andrews, as the architect
for its new Graduate School of
Design. The new building, to be
located just outside Harvard Yard,
across from the apse of Memorial
Hall, will consolidate all activities
of the school in one center. The
departments of architecture, land-
scape architecture, urban design,
and city and regional planning
have burgeoned into five older
buildings around the Yard.

Although alumni and others had
hoped for a competition, initial
reaction to the selection of the
34-year-old Andrews is favorable.
He has Dean José Luis Sert’s com-
mandation as “one of our most
brilliant alumni of recent years,”
and world-wide acclaim for his
Scarborough College in Toronto
(May ’66 issue).

The school already has pledges
of $8.5 million toward its goal of
$11.6 million, and fund-raising is
now turning toward the 2,600
living alumni of the GSD. The
proposed building will require $6
million (plus $1 million for the
site); and the remaining funds
will be part of a far-reaching effort
to strengthen all programs in the
design disciplines.

WATERFRONT REBIRTH

After New York City announced
plans for a new passenger ship
terminal (right) on Manhattan’s
Hudson River last summer, the
city decided it might as well go
all the way and revitalize a major
section of Manhattan’s run-down
West Side adjacent to the pro-
posed terminal. Furthermore, the
city had the daring to seek help
from an architect 3,000 miles away.

The man selected is James
Stirling, the noted British archi-
tect, winner of the 1965 Reyn-
olds Metals International Award
for his design of the engineering
laboratory at Leicester University
(May ’65 issue). He has been
hired by the New York City
Planning Commission (in coopera-
tion with the Port Authority) to
make a study of the development
potentials of the area and of what
might be built there. It is Stirling’s
first design commission on this
side of the Atlantic, and he will
carry it out in association with

The section under study (from
40th Street to 57th Street and
from 9th Avenue to the river)
now consists largely of automobile
equipment concerns, small hotels,
apartment buildings, run-down
tenements, and a certain amount
of open space. About 40,000 people
live there, who, under the pro-
posed plan, would not need to be
relocated.

Plans for the consolidated $76.5
million passenger ship terminal
call for construction of six ship
berths on the site between 46th
and 50th Streets, now occupied by
three piers. The terminal will not
only fulfill the normal functions
of a pier, but serve as a recreational
area as well, allowing residents and
tourists to see and visit passenger
ships; it could also be used by
naval vessels on weekend visits.

The New York City Planning
Commission and the Port Author-
ity will each pay half of Stirling’s
$50,000 contract, which includes
expenses. His report is due mid-
February.

BARRIERS FOR BROTHERHOOD

Chicago’s proposed “International
City” (below), a project of the
N.A.A.C.P. (Chicago chapter),
would form a microworld, fes-
tooned like Camelot on jousting
day. In their own words, the “sort
of Disneyland approach” would
demonstrate “how men of all back-
grounds can work together for a
common goal.” But it may appear
to less buoyant spirits like a gin-
gerbread ghetto.

The concentric, walled cloisters
provide each participating country
with what can only be called
“separate but equal” facilities for
extending its history and culture.
Countries would be further segre-
gated by gates. Visitors would re-
quire “visas” to cross “boundaries.”

To complete its air of alienation,
the whole would be located on an
island in Lake Michigan, accessi-
ble by causeway and monorail.

It is not, we hasten to add, an
amusement park. Over 12,000 peo-
ple would actually live here, ac-
cording to a principal planner and
promoter, the Treasure Island
supermarket chain.

COMPETITIONS

SEASIDE CONTEST

New York has announced an
AIA-approved competition open
to all architects eligible to practice
in New York State. The subject is
a moderate-income, limited-profit
housing complex for an oceanfront
site in Brooklyn. Anonymous
donors have put up a $5,000 first
prize (to be awarded along with
an architectural contract) and
$5,000 more to be divided among
runners-up. Philip Johnson is the
chairman of the jury, which also
includes José Luis Sert of Har-
vard, Donlyn Lyndon of MIT,
Romaldo Giurgola and Charles
Abrams of Columbia, Richard
Ravitch of the HRH Construction
Corp., and Samuel Ratensky of
the city’s Housing and Develop-
ment Administration. B. Sumner
Standing under the concrete bulk (below), Weaver called Gruzen of Gruzen & Partners is professional adviser. Those wishing to compete must write expressing their interest by midnight, January 2, 1968, to Mr. Gruzen, Office of Planning Design and Research, Housing and Development Administration, 110 Church Street, New York, N.Y.

INVIDIOUS COMPARISON

On the same day last month, HUD Secretary Robert C. Weaver and DOT Secretary Alan S. Boyd descended on the Bay Area to praise two strikingly different modes of transportation: rapid transit and cable cars. After all was said and done, the cable car looked like the best bet.

Weaver was there to dedicate the nation's first "rapid transit parkway," a 2.7-mile landscaped strip running along the right-of-way of BART's elevated track structure. Standing under the concrete bulk (below), Weaver called the HUD-financed project "urban beautification in the truest sense." He added: "It enhances the area by productive use of open space created through construction of the new aerial rapid transit line which, in itself, is an exciting innovation."

That should come as news to New Yorkers and Chicagoans, who have had plenty of experience with "aerial" lines—all of it bad. Weaver didn't spoil the occasion by bringing that up, nor by mentioning the fact that BART is some $150 million short of funds to complete the system and doesn't know where to get the money.

Boyd was there to dedicate the renovated cable car barn, and he took the occasion to point out that San Francisco's cable cars (sample below) are "the only transit system people are not only willing, but genuinely want to ride." By all the laws of obsolescence, he noted, the 94-year-old cable car "ought not to have outlasted other forms of transportation that at first looked more durable; but here it is, fresh and frisky as ever, not just surviving but thriving, carrying more people than ever."

WHAT IS A TIDELAND?

Why England's King Charles rewarded his brother James, Duke of York, with nearly 400 sq. mi. of New Jersey swamp in 1684 is unclear, but no such magnanimous gesture is apt to resolve the question of its ownership today. Values have changed. Though still a swamp, it includes the 20,000-acre Hackensack River Meadowlands lying unused just across the Hudson River from the Statue of Liberty's "huddled masses, yearning to breathe free" (above).

The State of New Jersey—whose Commissioner for Public Affairs Paul N. Ylvisaker has prepared five conceptual proposals for Meadowlands use, ranging from intense development to open parklands and sanctuaries—claims the tidelands by right of eminent domain over Charles' grant.

Last month the New Jersey Supreme Court upheld that claim in a title suit brought by Mrs. Catherine O'Neill of Ramsey, one of 517 such titles existing in the Meadowlands. But once reaffirmed, the "state's rights" were not established in Mrs. O'Neil's case. The court ordered a retrial. Still at issue: whether or not her tract met the definition of tideland.

While legislation languished, the state's lower courts threatened to be inundated with title claims—and the Meadowlands lay quiescent. Only their potential remains undisputed.

PILOT PLANNER

Paul Lester Wiener, head of Town Planning Associates of New York, which he founded with Jose Luis Sert, died on November 16 in Munich. He was 72 years old.

Best known as the developer of numerous pilot plans for cities in South America, Mr. Wiener also designed, with Charles H. Higgins, the American Pavilion at the Paris Exposition of 1937. More recently he had served as site planner or consultant for such projects as Gateway Center in Minneapolis, the Downtown Community development in Syracuse, N.Y., and Washington Square Village and the McCombs Bridge urban renewal in New York.
A PHOTOGRAPHER'S GIFTS

The first of George Cserna's photographs that I recall was an enlargement of a 35 mm shot of the Seagram edifice on Park Avenue. This cramped negative was not simply a detail; it caught the large building, plaza and all, looking downward from the roof of the Racquet Club across the avenue. The photograph was compelling because it was clear, calm, inclusive, graceful, and not pretentious. I remember turning the print over to see who had taken the picture, and being quite surprised when I was told he had brought it off with such a small camera. Architectural photographers of that time still traveled only a little more lightly than Matthew Brady, and the more equipment they brought along, the less agile seemed their eye, the more marked their mannerisms.

In the years since the Seagram print, George has taken many more fine photographs, all with the same visual candor, bringing a great deal of natural daylight, verité, back into architectural photography. In the doing he has become a stalwart of that small group of professionals upon whom the magazines—and the architects too—are quite dependent. He, like the others, seems to be always on the road, or in the air, on his way to help us see something.

Another reason I admire George is that I think of all photographers as being Hungarians, perhaps because of the charm and adaptability essential for success in that field, and George really is Hungarian, born in Budapest. He came to the U.S. at the age of 32 in 1951. He and his wife Gisele travel for pleasure as well as work. His Christmas card tells you where they have been; it is always an extraordinary photograph. To the right are five such cards from a prized collection of Cserna Christmases: top left, Orvieto, 1964; top right, Chartres, 1963; center, Yuriria Pundaro, Mexico (this year's card, a hauntingly appropriate one just now); bottom left, Assisi, 1965; bottom right, Santiago de Compostela, Spain, 1962.
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A tightly integrated scheme that gives the pedestrian preeminence above the streets has won first prize in a one-stage design competition for the Broome County Cultural Center in Binghamton, N.Y. (below). It is the work of three members of the architecture faculty at Berkeley: Barry Elbasani, Donn Logan, and Michael Severin.

Their entry places the two major elements of the program—an auditorium (A) and a theater for the performing arts (T)—at opposite ends of the site and links them with an elevated pedestrian network that spans a dividing street, has a terrace overlooking the Chenango River, ties in with a medical-office building (M), and sends off several shoots to join with the surrounding downtown area. “An absolute clarity of directions and emphasis of space,” declared the jury’s report.

The jury complained that most of the 60 entries “tended to a unified whole often at the expense of an adequate human environment.” But it noted that the top four designs avoided that trap. Second award (top right) went to Kallman & McKinnell of the Boston City Hall team (see page 44); third (center) to Wells, Koetter & Sherwood of Ithaca, N.Y.; and fourth (bottom) to Abraham W. Geller and Raymond J. Abraham of New York City. (continued on page 90)
What does General Motors have in common with

Montgomery Ward?

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Take one reservoir, drain it, and you have an ideal site for a "new town in town"—free of clearance and relocation problems. That's the idea behind East Park, a middle-income (221d3) community for 20,000 people which the Philadelphia Gas Works proposes to build on the site of the reservoir in Fairmount Park.

East Park's planners and architects, Stonorov & Haws, have let the reservoir's form serve as the framework for the new community: the high ground of the site—the dikes that traverse the reservoir and the banks around its rim—will support the residential spine, with units strung along the major street system (plan below). Around the perimeter, single-family townhouses (1) are placed parallel to the streets and are bridged by elevated apartment blocks (2). Along the center axis, the townhouses are clustered around parking cul-de-sacs and spanned by elevated blocks of apartments for the elderly (3 and photo bottom left).

The "lowlands" will be given over to large detached houses near the perimeter (4) and to a variety of community facilities, including a junior high and trade school complex (5, and photo bottom right), an elementary school (6), shopping center (7), "sub" city hall (8), and church square (9).
Three cheers for the elderly...

and their nurses.

Elderly patients sometimes have trouble using bathroom fixtures. As nurses who have to help them know. Now American-Standard offers three special fixtures—designed for the needs of older people.

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BOOKS
(continued from page 73)

"architectural" features. He includes the pedestrian walks across the Whitestone Bridge (sacrificed for added lanes of cars) and the central pedestrian mall that gave Park Avenue its name (hardly mentioned by others who lament the passing of the stuffy buildings that once lined it).

Silver's exclusive concentration on the lost New York presents a distorted picture for those who do not know the city well (and many New Yorkers don't). They may not realize that a number of the losses illustrated are matched by equally valuable survivals: The "Collegiate Gothic" buildings on Columbia University's midtown campus (1880's, by Charles C. Haight) were short-lived, but a similar group still stands at the General Theological Seminary (same architect, style, and period). The "Moorish" Temple Emanuel (1866-68, by Leopold Eidlitz and Henry Fernbach) has disappeared, but the Central Synagogue (similarly "Moorish," 1872, by Fernbach) survives. A. J. Davis's country villas in Manhattan were bound to disappear, but superb ones still stand in Brooklyn and Tarrytown.

Some of the "losses" shown are hardly worth mourning: the bulging post office that once usurped half of City Hall Park, the monstrous exterior of the original Waldorf-Astoria, and a number of vulgar mansions.

New York's most serious, unredeemed losses have been in the area of privately owned gathering places. The lively beer gardens, exposition halls, and amusement parks of the 19th century have all fallen victim to changing living habits (helped along by fires and fire codes). The best designed theaters seem to have ended in bankruptcy, and the vast movie palaces are steadily being destroyed (some exuberant ones do remain, if only for the moment).

One great structure that Silver includes among the losses has been saved since the text was completed (almost two years ago, judging from this discrepancy). That is Philip Johnson's New York State Pavilion for the fair of 1964-65. Silver is one of the few writers who has given it the praise it deserves.

The book ends with a collection of 18 "landmarks in danger." Of these, four have already been demolished (the Metropolitan Opera, the Ziegfeld Theater, the Singer Tower, and the Astor Hotel). Only one, the Jackson Square Library, is assured of preservation (as a private residence). The fate of the rest is uncertain.

Some of them are not threatened with total destruction, but with munificence (Ellis Island) or abuse (Madison Square Park a perennial target of public garage promoters). Some others, the cast-iron buildings, have no long-range usefulness. It is their prefabricated facades that are valuable, and ways should be sought to use them in new construction in situations that would show their effectiveness as street architecture.

Of the buildings in danger, only the U.S. Customs House seems indispensable to the city form, because of its pivotal position between two parks, at the point where the city was founded. If the Government abandons the building, it will be essential to find new uses for its monumental interior.

Hopefully, Silver's book will inspire workable proposals for maintaining and using New York's landmarks. Otherwise, the city will have nothing left eventually but a few preserved facades.—J.M.D.

RICHARD NEUTRA 1961-66 BUILDING AND PROJECTS. Edited by W. Boesiger. Published by Frederick A. Praeger, New York, N.Y. 256 pp. 500 photos, and drawings. 9 by 11 in. $20.00.

REVIEWED BY ESTHER McCOY

The first two volumes of the Boesiger series on the work of Richard Neutra deal mainly with residences and small buildings, while much of the work in this volume was commissioned or begun in the '50s, when Neutra was in partnership with Robert Alexander. Here is Neutra in the large office, designing new or expanding campuses, a tower, museums, etc., with Alexander—and smaller buildings under his name alone. This was his first experience with a large office since his days as draftsman with Holabird and Roche, shortly after his arrival in the U.S. in 1923. His work in that Chicago office—as well as the industrial landscape of America in general—was the source of inspiration for his 1927 book Wie Baute Amerika?, in which he expressed so vividly the possibilities for the industrialization of architecture—possibilities which could best become a reality through the large office.

It is a pity that the re-experience of the large office should have been so long delayed for one who had such a rapport with standardization—viz., his 1929 Lovell house with its factory-built steel frame, and the industrial materials he translated from factory to residential use. But the scene had changed by 1950. The various efforts to turn the inactive airplane plants into factories to produce standardized parts for much needed housing had been abandoned; the Gropius-Wachsmann production of standardized elements had, like lesser schemes, floundered on the shoals of craft unionism and distribution problems; so instead of continuing in the direction envisioned by Neutra in the late '20s and '30s, we turned to what was variously described as humanism, nonregimentation and sensualism.

So here was Neutra in the large office, facing a corpus of architecture so covered with scar tissue that there was little living flesh which could react to technological experimentation. He was almost 60 at the time, and the technology on which he had based the Lovell house was then obsolete, as technology has a way of becoming every five years. The new technology, which was to be at the service of the space program, bypassed architecture as completely as had the technology of the '20s and '30s.

Fate used rather shabbily one who had a great deal to offer toward taking architecture out of the morass of handcraftsmanship. Or did it? Neutra has been one who experimented before the means for experimentation were ready, before the body of research was assembled. More than anyone in our day he has run ahead of his time into uncharted terrain to pre-test without tools. (continued on page 101)
Architect Haigh Jamgochian designs a contemporary "tree house"

Each floor is attached to the trunk like limbs of a tree. The trunk is a central "slip formed" concrete core. This cantilevered design concept is suitable for apartments, office buildings and motels. The design permits use of small downtown plots of land. Due to their tapering shape, the floors will not block daylight from neighboring buildings. Floor units are precast, then hoisted into position. Post-tension cables support the floors. Sill-to-ceiling window walls are added, and sliding glass doors lead to balconies at wing ends. The type of glass used depends upon building location and orientation. Parallel-O-Grey* and

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A two-wing version of the “tree house” apartment can be constructed on a 25-foot-frontage lot at a cost, the architect estimates, of $20 per square foot. Additional units would reduce this cost. Ideal for urban renewal. Floor plan and variations of “tree house” buildings are shown. They were conceived by Architect Haigh Jamgochian of Richmond, Virginia.
672-room motel with double towers that can rotate so that all views of an area can be seen from each room every hour.
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ided only by intuition, what will eventually be the subject of research projects. He is the intellectual in the sense that he starts with theory, and produces buildings which very nearly demonstrate the theory. The owner of the Lovell house called it “as modern as radio,” it was a handcrafted building which promised the machine. The calendar of the Lovell house shows unmistakably how Neutra is before the fact as only the oner knows how to run: the ans were on the drawing board for six months (April, 1928, rough October) and although the prefabricated frame was jisted into place in 36 hours the building time stretched over four months (building permit date October 28, 1928, completion date October 23, 1929). Which demonstrates clearly that he preceded the tool, and in time the tool followed.

By the time it followed he had gone to studs and plaster and spawned a new generation of steel men with talent to spare it none of the urgency of the oner; the unwavering self-confidence (who is to believe in a pioneer in his early years if himself wavers for a moment?), an ability to sow with one wind, and an insensitivity to the passage of time, the feet of which is to keep the oner eternally young. His spay of creative energy in the te ’20s and the ’30s was tremendous. Each of his machined houses was a concise study of structure, and living adjusted itself to the idealism of structure. As the substance of his shop plan increased, the experimentation with structure lessened.

And then came his second vision: the application of the findings of the biological sciences to architectural design. Again he was in advance of his time. He sensed a new direction. No body of evidence was present by which he could verify the conclusions he had reached by observation and intuition. Only time will supply the tool: computer systems.

Two visions are two more than are permitted the average architect. Neutra’s two lifts him in importance beyond any buildings he may create. If no building in this present volume represents his second vision as the Lovell and Beard houses embodied his first—his vision of technology—it may be that the tool for reading them is still lacking.

In the meantime, I note—always with pleasure—his economy of means, the puritanical caution with which he admits the new, and the wide use of it once he has (louvers, for instance, which he usually describes as “golden anodized”), and the continued rationale for the new, even after it has become a part of his vocabulary. It is the confession of the Internationalist who had never in middle life thrown himself into a headlong and passionate Ronchamps.

There is hardly a building in this book that does not carry him back in some way to the idealism of his youth: the large house in Caracas relates to the 1936 Brown house; the two housing projects for Germany come out of his cube houses of the ’30s. (Neutra, as usual, gives no dates for buildings, which sends his biographers back to his drawings and the building departments.)

If the big office came too late, it did come, and this is still Neutra. “There is a test for these things,” wrote Robert Furneaux Jordan in Victorian Architecture when defining (or failing to define) High Victorian. “Set the minor arts of the time against any building. It is an infallible test.” And against Neutra’s work in this present volume is McLuhan’s iron-coated love-in, The Lonely Crowd, the Angry Arts, and even a little of the obligatory Tiffany lamp. There is also the cap haircut and cloche of This Side of Paradise.
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Yet Flintpoint is so modest in price that even institutions readily fit it into their budgets. It's so quiet, too, that no matter how shabbily it's treated, it won't make a sound. P.S. For more slender budgets and wherever the traffic is lighter, we recommend Rough 'n Ready, the junior partner of Flintpoint. World Carpets, Dalton, Georgia 30720.

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Meet VAPORLUME®, our “anti” luminaire. It’s against everything harmful to lighting fixture life and efficiency. Such as dust, corrosive fumes, moisture. VAPORLUME is gasketed and sealed so tightly, it loves being washed! The high-impact, thermoplastic housing and acrylic enclosure thumb their noses at bumps and thumps. All plastic, VAPORLUME mocks electrical shocks, too. Only 4 5/8” deep by 7½” wide, it’s as anti-space consuming a fixture as you’ll ever surface mount or suspend. Single or dual 4’ lamps.

Where there’ll be lots of steam or dust, or sanitary conditions are a “must”... specify VAPORLUME. The fixture that’s against everything except safe, quality lighting.