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THIS MONTH IN P/A

Progressive Architecture® June 1966

COVER

VIEWS
Our readers' comments on the architectural scene.

NEWS REPORT

TITLE PAGE
This month's quote is from an article by David Crane, "Architecture and the Urban Revolution," in the Winter 1966 issue of Connection.

FRONTISPIECE
A billboard on a highway near Point Pleasant, N.J., that has the imagination to comment on the national blight. Photo: Kenneth Mitchell, Chief Designer, Office of Max O. Urbahn, Architects.

EDITORIAL
In this issue devoted to the War on Ugliness, P/A's Editor discusses the social and aesthetic context of that war—its ambiguities, its methods, its goals.

THE WAR ON UGLINESS: P/A's VERSION

INTRODUCTION: Beauty treated superficially is merely a cosmetic disguising the true face behind the mask. The war on environmental ugliness must strike at the sources of ugliness, rooted in our very way of life.

UGLINESS MAKES AMERICA GREAT: A humorous article that explores the implications of an economic system that self-perpetuates ugliness.

THE ANATOMY OF AN INSTITUTIONAL CLIENT: The Church is an interesting example of an institutional client that influences the environment by investing millions in its building programs. Includes case study of an I.M. Pei urban renewal project in Boston.

THE CORPORATE CLIENTS: WHAT ARE THEIR ATTITUDES?: In investigating the approach to the building programs of several large corporations, P/A interviewed the executives concerned and came up with some surprising opinions.

THE NEED EXPERTS ARRIVE ON THE SCENE:
A controversial but little-publicized influence on the
appearance of our cities is the work of the nonarchitectural firms that write building programs. P/A interviewed several such program writers, then got architects' opinions on the merits of their work.

170 A RURAL PROBLEM: WILL MARTHA GET RAPED? The commercialization that has already destroyed the natural beauty of great portions of Cape Cod now threatens Martha's Vineyard. This article tells of the cross-current of forces that seeks to develop, to conserve, to exploit it.

180 AN URBAN PROBLEM: THE PEOPLE OBJECT: The controversy surrounding Philip Johnson's proposals for beautifying the downtown campus of NYU illustrates the complex problems encountered when an urban university seeks to expand into an existing neighborhood.

194 TAKING THE CURE: SOME CASE HISTORIES: "Beautifying" our cities requires intelligent planning and intensive knowledge of a city's problems. Three urban renewal projects are examined: one for a small town; one for a small city; and one for the section of a large metropolis.

P/A OBSERVER

203 "LA PLAZA DE LOS CONOS": A huge sculpture advertises the presence of the Automex plant in Toluca, Mexico. Consisting of two massive towers that house, among other things, an auditorium, the architect-sculptor team proves that symbol and function can be joined in harmonious union.

205 GOOD START TO A COLLECTION: Leo S. Woo's College of Business Administration, the latest addition to a long-range development plan for the University of Hawaii, is an imaginatively expressed scheme for Warnecke's plan.

207 SIGNS OF LIFE: Designer Barbara Stauffacher's outdoor signs add vitality, color, and focus to open spaces.

209 ACROSS THE RIVER AND INTO THE THEATER: Ralph Rapson's Performing Arts Center for the University of Minnesota promises to provide the focal point for the West Bank Campus that was previously missing.

212 THE MALTESE FASHION: A report on a one-man architectural boom on the island of Malta.

216 ABOVE PERFORMANCE STANDARDS: The new Performing Arts Center for the University of Toledo will be the physical center of the campus and will integrate the old and the new.

MECHANICAL ENGINEERING CRITIQUE

William J. McGuinness discusses need for cooling schools even in winter.

SPECIFICATIONS CLINIC

Harold J. Rosen describes how spec writers should follow new techniques developed by manufacturers to insure that materials meet specified requirements.

IT'S THE LAW

Bernard Tomson and Norman Coplan discuss means by which an architect can protect himself against the pirating of his plans or designs.

BOOK REVIEWS

A cross-section of significant new books.

JOBS AND MEN

DIRECTORY OF PRODUCT ADVERTISERS

A monthly service to P/A readers who desire additional information on advertised products and those described in the News Report, who wish to order Reinhold books, or who want to enter their own subscriptions to P/A.


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Madison Hospital & Sanitarium: Madison, Tennessee  

Uniontown Hospital: Uniontown, Pennsylvania  
Architects: Alfred D. Reib Associates; Mechanical Engineers: Finelich & Finelich; Mechanical Contractor: McCary's Plumbing & Heating Company

Miami Veterans Administration Hospital: Miami, Florida  
Architects-Engineers: Smith, Korach & Associates; General Contractors: J. W. Bateson Company, Inc.; Mechanical Contractors: Limbach Company
Dear Editor: Your Editorial in the March 1966 P/A was well conceived as a preface to “Does Architectural Design shape Liturgy?” It recognized the changes in the position and attitudes of the churches, the problems arising out of these changes, and their implications to religious architecture.

The article itself seemed strained in answering the question it proposed. The answer was a definite affirmative, but the dialogue presented and the explanations of the solutions that followed were ambiguous and inadequately convincing. Was it because architectural design does not shape liturgy?

To suggest that architects should shape liturgy is unrealistic, and would, perhaps, create even more chaos in religion and religious architecture today. To argue that God is dead is out of the realm of architects; in fact, it is out of the realm of anyone. There will undoubtedly always be skeptics and atheists, and probably in greater numbers, as higher education becomes more and more universal. But there will also always be, as there are now, those of great intelligence and impressive credentials who hold to the idea of God until forthright evidence disproves His existence. Until that time, God will be alive, and the need for recognition of this God, through worship, will continue. And places of worship will be required.

Perhaps the present ecumenical movement will achieve its goal—unity. This would make things infinitely more easy for the architect and would even give rise to a renaissance in religious architecture. Until then, there are still the many denominations of the Protestant Church, the Catholic Church, the sects of Judaism, and others, all with their own approach, with a hierarchy of theological ideas. It is these ideas that should shape the architecture and its expression. The importance of the table, the lectern, the font, the choir, the relation of the congregation to these various elements, the relationship of the religious leader to his congregation, and the position and responsibility of the church and its congregation to the community—these are the factors that should influence the religious space.

LABAN W. WINGERT
New York, N.Y.

Delighted
Dear Editor: I was just given a copy of the March 1966 P/A and was extremely delighted to read the article and look at the pictures of our new church. May I express to you my appreciation for this excellent coverage given to our parish. Congratulations, also, for the articulate copy, which expresses the simple truths and practices of the Orthodox religion. The photographs taken by Mr. Cabanhan are terribly exciting. The only comment I have to offer on the article is the inclusion of Miss Margo Hoff as the Iconographer. Apparently, a misunderstanding had occurred with Mr. Dart on this matter.

FATHER WILLIAM S. CHICANOS
Holy Apostles Greek Orthodox Church
Westchester, Ill.

Deeply Appreciative
Dear Editor: I have received the March 1966 P/A and am delighted by the manner in which you presented our church. I thank you especially for the opportunity your excellent article gave us to speak about that which we feel is most important—our faith. Thank you for
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allowing us to speak the Good News of forgiveness of sins through the blood of Christ. We feel that the building lends itself well to a contemporary expression of the Gospel. I deeply appreciate the fact that you have permitted this expression to come forth vividly in the article on our church.

DANIEL D. REINHEIMER, Pastor
Evangelical Lutheran Church
New Shrewsbury, N. J.

**Good News for Blockheads**

Dear Editor: "The Child at Play in the World of Form," in the APRIL 1966 P/A, is an excellent article, since toys do influence tomorrow's architecture.

Here is further proof about one of the architectural toys shown on page 193, Blockhead, a balancing game of 25 tricky blocks of unusually shaped, brightly colored wood blocks, played by today's architects and architectural students as well as children.

I know, because I own the game, which has sold 1,700,000 sets. I have played Blockhead with architects at Martini parties in Pittsburgh, New York, and Chicago.

Architectural students at Carnegie Tech's Theta Xi fraternity made Blockhead a major construction project by building a king-size set eight times larger than regular size. The students used step ladders to pile a tower of cardboard blocks 12 to 15 feet high. One Pittsburgh architect, now deceased, designed a 3' x 4' decorative wall plaque of "Blockhead" type blocks which is hanging in a Savings & Loan Association office.

The key to the plot of a new movie, "Moment to Moment," starring Jean Seberg and Sean Garrison, is based on finding a missing heart-shaped block from Blockhead. The movie hero, a U.S. ensign, paints landscapes as a hobby and meets Miss Seberg on the dock at the French Riviera. He next admires her villa, which, he says, is a two-story replica of a genuine, 17th-Century provincial farmhouse, built in 1962, and tells her he knows because "I'm going to be an architect." Then they play Blockhead and misbehave.

Any survey should prove that Blockhead is the favorite fun game of architects—and editors too.

GEORGE MOTHERAL
Pittsburgh, Pa.

**A Proud Client Spreads the Good Word**

Dear Editor: Although our company has built a number of branch offices through the years, the North Carolina Life Insurance Company Headquarters is the company's first undertaking of this magnitude (pp. 222-226, APRIL 1966 P/A). Thus we have had to depend rather heavily on the architects every step of the way. That we have achieved what is reported to be an "advancement in architecture," as well as a distinctively "different" building, has pleased us greatly.

In mid-1961, our management decided to establish a planning department and indicated that the staff work on this building would be the first major planning assignment. Since I am neither an architect nor an engineer, it was necessary to make substantive preparation for the assignment. Thus, nearly nine months before I reported on the job, our management underwrote the expense of my attendance at three of the Workshop Seminars of the American Management Association on planning a new building, space planning, and operating and maintaining same.

Thus, upon my arrival on the job, we had a checklist of over 100 items. Among these, the question of architect selection was most prominent. As back-
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Designers of the big Garton Toy Company plant in Wisconsin avoided the expense of warming the huge air volume of a high-bay plant. They specified 97 PANELBLOC Gas infra-red overhead heaters. Result: plant engineers control numerous temperature zones, operating units only where personnel are working.

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ground for handling this problem, visits to the offices of a number of the country's leading architectural firms, as well as visits to their major buildings, were made. Early in the investigation, it became evident that one architect—Welton Becket—had created a wide variety of buildings that reflected rather effectively the corporate identity of its owners. In addition, his clients recommended him to us because he was able to provide these individualized designs within their budgets.

Since we were seeking to reinforce our corporate identity with a building that adhered to the four hallmarks of a great structure, and, at the same time, must work within established budget limitations we knew we had to select an architect who could meaningfully take this last into account, the Becket organization then became management's choice.

One of the first things learned from the A.M.A. seminar, and later from Becket, was that the architect must have the dominant role in a project such as this. Many times during the early stages of the project, it was necessary to hold meetings with the architects and members of the Executive and New Building Committees to bring certain items into focus and to bring the whole project scheme into perspective for consistency, and thus avoid the introduction of incompatible elements.

Quite frankly, as a conservative firm, the design proposal impressed us. Our officials felt the building was beautiful, efficient in concept for our operation, and definitely distinctive. As staff coordinator, I have been most impressed with the delicate balance the Becket organization maintains in blending efficiency, economy, and function without underplaying the aesthetic. To me, this is the most outstanding characteristic of the firm.

After due consideration and upon being convinced that we would have for our policyholders an even better investment in that the unique building would permit the use of advanced technology, and thus would not cost as much as a conventionally constructed building, management gave the "go" signal. Possibly the deciding factor (after the matter of cost comparisons was resolved) was the fact that this particular architectural concept would be more expressive of the character of our firm.

Quite candidly, as problems arose in the field with the slip-formed core and a succession of other nagging situations, there were admittedly times when we were not too sure. Then, too, when we moved into the building, there was again
the Sealair 170 window that inspired
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JUNE 1966 P/A
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A bit of head-scratching when the succession of minor problems seemed endless. But after six months of shakedown, even these are gradually being resolved, and, once again, we feel, in spite of headaches, that management’s decision was the right one. We have seen that the architect, being so proud of his creation, has devoted much more of his people’s time to helping us in everything from suggesting better ways to operate and to maintain the building to selecting, furnishing, and decorating.

It has been most stimulating to have engineers, architects, and architectural students and others in the construction business come to Durham just to see this building, and, upon their return, to write us letters from all over the world. This recognition has aroused pride in all of our employees to have been singled out by numerous visitors. The fact that we have been hailed as setting a new standard for our own city and state has also been a source of satisfaction. As a case in point, the city manager of a neighboring city has visited the building twice with assorted dignitaries in an effort to get them to think in terms of a “sufficiently different architectural statement” for their own city building complex.

More than anything, we feel that this four-year experience has taught us something about building a building. Our management has, I feel, learned to rely upon the architects more and to contribute to their work rather than questioning them and making it difficult for them at each step of the way.

As a case in point, due to our tight budget, we turned the architects down three times on proposals for a reflecting pool and fountain on the podium. At Becket’s insistence, management finally accepted a reduced size. Now that the building is finished, we realize its importance to the total architectural scheme, and all concerned are most happy that we yielded the point.

MURRAY J. MARVIN
North Carolina Mutual Life Insurance Company
Durham, N. C.

Extending Credit
Dear Editor: My faculty and I wish to express our appreciation for your assistance in bringing to publication, in the APRIL 1966 P/A, the material titled “Urbanography.”

The material was clearly presented and well captioned. However, I am anxious to call attention to the fact that the text on pp. 186-7 was also the work of the three graduate students: Jeanne...
TERNE METAL: The Accessories

We believe most architects are now aware of terne’s nearly unique design potential for visually significant roofs in the contemporary idiom. But terne is also among the best of accessory metals—probably the best when initial cost is balanced against durability. If considerably fewer architects are aware of it in this context, the fault is largely our own, for we frankly haven’t found too many exciting things to say about gutters, flashings, valleys and gravel stops. Exciting or not, however, these commonplace items still play an important role in most buildings, and any failure can be very troublesome indeed. When next specifying them, therefore, why not give Follansbee Terne a trial? It should not only save your client money, but under normal exposure has a life-expectancy measured in generations rather than years.
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---

Bonham, John T. Beisel, and Steve Gebhardt—to whom you only credited the graphics. Without their studies and their written report, the article would not have been available for publication.

**Correction**

Dear Editor: I read with interest the story on the Uniform Tube Inc., Hexagonal Factory Roof (p. 208, April 1966 P/A). Unfortunately, the credits are in error. The structural engineers for this job were Charles Cho-Lim Ang and Alan Newman.


CHARLES C. ANG
A. Ernest D’Ambly, Inc.

Dear Editor: In your otherwise excellent treatment of the American Republic Insurance Company National Headquarters Building (“No Corn In Iowa,” February 1966 P/A), there is one credit given that is neither correct nor justified. On page 151, under the ceiling systems detail, you state: “Ceiling system developed in co-operation with Engineering Dept., Owens-Corning Fiberglas Corp.” This statement is erroneous and facts are as follows:

The mechanical and electrical concept for this building, including its ceiling system, was developed solely by the team of architects and consulting engineers. The system was tested in a full-size mock-up built on the premises of an air-distributor manufacturer and the only contribution made by Owens-Corning Fiberglas Corporation during the development and testing was to supply the duct material, for which they were fully reimbursed.

Your credit gives a wrong impression of the architect-engineer relationship and the role each plays in the development of a project.

K. STEVE RASHE
Syska and Hennessy, Inc.
New York, N. Y.

[Approved design drawings for the air-handling tube assembly utilized in the ceiling of the American Insurance Building in Des Moines were developed from product development services performed by Owens-Corning Fiberglas.—Ed.]

**Views** 17

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A. Visitors to Niagara Falls will quickly recognize the Niagara Falls Aquarium, designed by Dickerson & Cain, Architects, Cleveland, and the two scenic towers in the background. Pratt & Lambert products were used on all.

B. Galveston Marine Aquarium, Galveston, Texas. Winfred O. Gustafson, Architect, Austin, Texas. Here, also, Pratt & Lambert products were used throughout.

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Rising from a wooded hillside in Washington, D.C., the Great Flight Cage has a steel framework that makes imaginative use of steel members and steel cable. Other features: heated perches for tropical birds, several bird shelters, a meandering walkway for visitors who enter and leave through double-door tunnels.

Steel wire mesh, precoated with white vinyl, was laid over and clipped to the cables. The "lacy" look of the mesh and the lithe arches and cable suspension give the structure a delicate appearance. Wind-tunnel tests proved the fabric alone would withstand 100-mph winds.


Recently completed at the National Zoological Park, in Washington, D.C., this aviary incorporates six parabolic steel arches which intersect in a 130-ft-diameter circle around a 90-ft mast. Its 72 steel cables stabilize the arches, which tilt outward at a 30-degree angle, anchoring the vinyl-coated, steel-wire mesh.

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WASHINGTON, D.C. The tiny, 160-sq-ft Retti Candleshop, designed by 32-year-old architect Hans Hollein, won this year's $25,000 R. S. Reynolds Memorial Award. The shop, which has a 12' frontage on Vienna's elegant Kohlmarkt, was completed last November for a total construction cost of $20,000.

Hollein, a Viennese who is currently a visiting professor at Washington University in St. Louis, used aluminum almost exclusively in his design. The aluminum, which came from Austrian and Swiss sources, was cheaper than the alternatives of brass and steel, was more easily fabricated and transported, and had the necessary modernity that architect Hollein was looking for. He wanted the shop, with its age-old wares, to have a "space-age" image. The lines are smooth, almost machine-like in their exactness—exterior aluminum plates wherever possible were joined with epoxy resin, eliminating surface breaks. The shapes of the doorway and windows, as well as the welcomed omission of advertising signs, create an air of mystery to draw the shopper into the store. The use of mirrors and the continuous polished aluminum with its reflective qualities give the tiny space a necessary lightness and spaciousness.

Hollein, who designed almost every fixture in the candle shop, down to the hinges and packaging for the products (silver shopping bags and wrapping paper), has let his architecture sell the product. There are no signs, no big shopping windows ("How many candles can you see at one time anyway?"). No counters to create a barrier between customer and salesman. Surrounded by the grand dam of 19th-Century ornamentality, this small, elegant shop can hold a candle to any of them. And if "the concept of the shop is the concept of the city," as Hollein says, we look forward to this architect's future designs on a grander scale.

Kling to Propose Modernization of Washington National Airport

WASHINGTON, D.C. Looking ahead to 1980, the Federal Aviation Agency expects traffic at Washington's antiquated, overloaded National Airport to double. Vincent Kling & Associates recently signed a $297,000 contract to make proposals for the airport's modernization. The present runway system will be kept intact, and so will the FAA restriction limiting jet aircraft landing there to less than four engines. Four-engine jets and those flights originating nonstop more than 650 miles from the capital will continue to use Dulles Airport. The study, to be completed in 295 days, will offer four alternate plans. One certain provision will be for increased parking gained by roofing the present parking facilities.

The Stamp of Frank Lloyd Wright

NEW YORK, N.Y. From April 26 to May 31, the Museum of Modern Art exhibited a selection of models, murals, photographic enlargements, original drawings, and working plans of the architecture of Louis I. Kahn. The exhibit was both a tribute to the 65-year-old Kahn and to the museum's 34-year-old Department of Architecture and Design.

Entitled "The Architecture of Louis I. Kahn," the review was overseen by Arthur Drexler, Director of the Museum's Department of Architecture, and was selected and installed by Ludwig Glaeser, Associate Curator of Architecture. Glaeser, a 36-year-old German who trained in architecture at the Technical and Free Universities of Berlin and who has been with the museum since 1964, worked closely with the Kahn office in acquiring exhibited material. He was undoubtedly helped by that office's recently instituted practice of saving and dating everything that comes from the master's hand. Glæser told
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.
Glaeser has used Kahn's materials well. Three-dimensional models contrasted with their two-dimensional counterparts on the walls behind them. And finished drawings contrasted with the evolutionary sketches, working to create an involvement with the architecture and the design. In a sense, the exhibit was an explanation of how an architect works.

Also included was a continuous, 14-minute slide and tape program (the first in the museum's history), narrated by Vincent Scully, Professor of the History of Art at Yale University. The spontaneity of Scully's remarks (taped once and presented without extensive reworking) and the clarity of the color slides added two important dimensions—color and sound.

One wishes more U. S. museums (see p. 52 in this month's News pages for further discussion of architecture and museums) explored the possibilities of architectural exhibits with the Museum of Modern Art's competence and completeness. The Museum's Department of Architecture—the only one in the world—has, since its inception in 1932, collected memorabilia of the "modern movement," with the result that, to date, the museum has presented nearly 200 temporary exhibitions of loan and collection material, has published myriad books and catalogs on architectural themes, and has recently opened the doors to a permanent architectural gallery—the Philip L. Goodwin Galleries. When the museum's new west wing is added, the Goodwin Galleries will have four times their present space for the exhibition of the 4000 items in the architectural collection. The Museum's energetic Department of Architecture will this month be justly rewarded for its efforts with an AIA Citation of an Organization; the Goodwin Galleries will receive a special commendation.

Beautification Begins at Home

JOHNSON CITY, TEX. This is the home of 600-odd other citizens besides Lyndon B. Johnson. And, during an average day, another 600 come through town, either sniffing hard at the scent of history or just out for an easy day's excursion from Austin, 60 miles away.

Johnson City is Any Town, U.S.A.—only more so, being Texan. The main street stretches out comfortably, and the buildings along it have the pleasant attitude of having been invited over to spend a quiet afternoon. It is a place for old clothes, idle conversation, small occupations—a homely place, in the original sense of the word: familiar.

Some small towns achieve Ugliness slowly; others have Ugliness thrust upon them. Suddenly and retroactively becoming the birthplace of a Great Man has undone many a small town. One approaches Johnson City, then, expecting to find a Galloping Uglification. And one wonders what is being done to check it, especially with the extraordinary interest in beautification shown by Mrs. Johnson.

There is little capital—B Beautification. The New York Times reported that the Johnsons were hoping to restore some stone buildings from the 1850's and create a park around them. The full scope of this project has not yet been
made public. From time to time, LBJ has made strong statements about overhead wiring (as we recall, it was something like “We'll bury them”), but Johnson City has not seen any changes on this score either.

On the other hand, the town is not rapidly Uglifying. Lady Bird has had a hand in keeping billboards down, although there are a few signs—proclaiming Johnson City as the home of LBJ, or pointing out the Information Center, or directing tourists one block over to the boyhood home. (The birthplace, 12 miles away, has recently been restored but is not yet open to the public, since its proximity to the ranch poses security problems.)

The family is doing its best to Keep Johnson City Green. Lynda Bird planted six live oaks on Main Street with money she earned writing an article. Lady Bird planted thousands of bluebonnet seeds (the state flower) at the ranch. Another horticultural happening: The entire grounds of the ranch have been wired for Muzak, with loudspeakers planted among bushes and trees. There is a state plan to establish an LBJ State Park across the river from the ranch, to keep commercial exploitation at a distance. In town, however, enterprising merchants sell rocks from the Pedernales River at 25¢ the handful (prepackaged), and Pedernales water at $1 the bottle. Where the dust will settle is uncertain. There are rumors of resorts and housing developments, and Holiday magazine predicts that ranch land will certainly give way to the tourists. Now, however, there are still more sheep, goats, and turkeys than people. But LBJ is everywhere: Just outside town, a woman sells her produce under the sign Large, Beautiful, Juicy.—EP.

Expanding the Golden Triangle

PITTSBURGH, PA. Used to be a man went out and cleared a few acres of forest land, planted some grain, and called himself a homesteader. Now, whole groups of men go out, clear a few acres of city land, put up some developments and call themselves urban redevelopers.

In Pittsburgh, they are preparing to clear 148 acres (40 blocks) along the Allegheny River, adjacent to the Golden Triangle. Shown here are renderings of building concepts proposed for the site by Robert Dowling, chairman of the City Investing Company, New York, planning consultants for the project. When the plan, sponsored by the Pennsylvania Railroad—which owns 80 per cent of the land and is acquiring the rest—was first presented Dowling stated, “May I explain that this is not a blueprint defining the exact size and shape and location of each of these buildings. It is a concept with certain basic assets—the low land coverage, the Mall, the avenues and the service roads. It is a greenprint of how to bring the countryside back into the city and create a healthier, safer, economically sounder community.”

Notable in the Dowling concept are a great traffic circle with a sunken fountain in its center, and a long landscaped mall bordered by curved slab buildings. Once the land is cleared, the railroad plans to turn it into a temporary park before starting actual construction. Among the present structures to be sacrificed for Penn Park renewal are the Pennsylvania Station, the Fort Pitt Hotel, the Greyhound Bus Terminal, and the sprawling wholesale produce market. The latter will be accommodated in the Chartiers Valley Urban Renewal Project.

In 15 years, Pittsburgh has poured more than $331 million into urban renewal. By the end of this year, that figure is expected to reach $400 million. One hopes that Dowling’s preconceptions will not prevent an enlightened architectural effort.

PARIS, FRANCE The undeclared Franco-American War, waged politically with nasty notes shot between the State Department and Elysee Palace, is being won behind the high-level smokescreen by U.S. private enterprise. Flushed with victory at having foisted Levitt houses on the unsuspecting Gauls, our side has now built a Hilton Hotel, that inescapable symbol of international sleeping unity, just one block from the Eiffel Tower. The U.S. tourist can now take refuge from the shock of environmental and cultural changes directly under the nose of Le...
The Institute wanted to find Tigerman peers through a model of combination office/residential structures he designed for the Vermiculite Institute as an imaginative suggestion for the Vermiculite's dead weight by lightening the dense structural concrete floor slabs. A vermiculite spray would fireproof the steel frame. And the vermiculite concrete would help deaden impact noise.

By using only five basic structural units, construction time and costs would both be cut. These units are: steel tubes 2' in diameter, steel tubes 8" in diameter, multicolored concrete floor slabs 18" thick, window mullions, and tension cables to tie the triangles together below grade.

Rising to a height of 485' above grade, the structures would provide 789,000 sq ft of floor space, not including below-grade parking or six top floors of mechanical equipment. Each structure would be 50' wide. Within this area are three lower floors of educational, institutional, industrial and commercial spaces; above these are five office floors; then come 21 stories of duplex apartments; and at the top are the mechanical equipment and a floor for restaurant and recreational facilities.

Tigerman sees in Instant City a possible "synthesis of all those forces which have brought us to this moment in time." He points out that "the return to the rational mainstream of 20th-Century technology, in combination with man's desire to mold space, finds its life-blood in the very matrix that was originally implied by the three-dimensional possibilities of the structural frame, not as envelope but as a meshing of interior and exterior space in the ordered context of structure."

With the proliferation of the automobile and the extension of today's cities, Instant City just might be an exciting, geometrically conceived architectural solution.

Pyramids For the Living

CHICAGO, ILL. Architect Stanley Tigerman peers through the vermiculite optical institution in Athens, Minneapolis, Rome, Los Angeles, Pittsburgh, and other tourist meccas. An accomplishment not within the wildest dreams of NATO or the United Nations.

According to the study, a design research group and Rhode Island seemed ideal for one another. For one thing, there is no such organization anywhere in the U.S., despite an increasing need for and awareness of design. For another thing, Providence, with the Rhode Island School of Design and Brown University, provides an atmosphere in which such an outfit could flourish.

As it is currently envisioned, the Research and Design Institute will do basic and applied research into such problems as the urban environment, graphs, communications technology, products and packaging design, and materials use in industry. The Institute will offer consulting services to public and private clients and undertake educational design programs such as conferences and seminars. During the first year, support will come from $100,000 granted by the Rhode Island legislature, and from
$100,000 to $500,000 provided by Rhode Island industrial and educational concerns. By its second year, Beckman hopes it will be self-supporting.

Beckman brings a varied background to his job as director. While with the Nelson Company, he was Design Director for the Herman Miller Company. He has taught and lectured at many colleges throughout the country, and at one point worked for two years in General Motor's design section. His most recent project is designing library facilities for a Boston high school.

Introverted League Exhibit

NEW YORK, N.Y. Fifty-one architectural projects by 60 architects who were under 40 years of age as of September 1965, make up an exhibit called "40 under 40" presented by the Architectural League of New York at the American Federation of Arts Gallery April 27-May 14. In some cases, the architects under 40 collaborated with architects over 40 on the projects shown. In each case, the architects included have their own offices or work alone.

In his introduction to the exhibit, Robert A.M. Stern, who assembled the exhibit for the League under the supervision of Philip Johnson, states, "Young talent abounds, though it has been tested, for the most part, in projects of minor import. One question remains unanswered: Will this generation be called upon to participate in the significant building programs of our time?" Judging from the selection, the implication is that a young architect cannot make a significant contribution unless he has his own office. It may represent an ideal to have complete responsibility for a work of architecture, but an ideal does not guarantee quality. To assume as much has a certain prima donna arrogance. There are at least some young architects, not at all insensitive, who would rather be involved (sometimes with considerable unheralded responsibility) in the largest possible projects, and who feel they may not get them unless they are in the older, larger offices. There are young architects who are participating in the significant building programs of our time, but that is not what this exhibit is about.

What it is about is suggested by the introductory statement that, "For the first time in 50 years there appears to be no revolution in architecture." The error of this pronouncement lies partly in that the selections are very much a product of the taste and thinking of the generation called upon to achieve. "Exhibitions of architecture are, without exception, bounded north, south, east, and west by Louis Kahn. Comparison with the concurrent Kahn retrospective at the Museum of Modern Art (see p. 47) shows how incompletely digested his work has been by most of these architects.

Another part of the error lies in a preoccupation with form or faade. It is precisely now that architecture is poised on the brink of philosophical and theoretical changes that will profoundly affect design. The changeover from the mechanical age to an electronic one is just one shift that will have a great influence. Splintering of architecture into "experiences" and separated elements is an example of this alienation of today's design from the safe mechanistic pronouncements of the recent past. The exhibition itself is a fast, superficial, and, necessarily, incomplete show of what some younger designers are doing. It will go on tour later this year to universities, art schools, and museums throughout the country.

Museums and Architecture

Visitors to museums throughout the country recently could see a retrospective of the work of Louis I. Kahn (see Kahn at MOMA, p. 47), take a museum-guided excursion to the new town of Reston, Va., or view photos of the work of Alvar Aalto. These architectural exhibitions, although rare, occur with moderate frequency. Thirty-five U.S. museums, responding to a P/A survey, reported that, in general, they have one or two architectural exhibits each year. Despite an increasing awareness of and interest in architecture, museums seem hesitant to either boost this enthusiasm or even ride with it. Reasons most often given for a lack of architectural exhibits were of course limitations of space and budget. Also mentioned were what museum directors consider the difficulty of presenting architecture adequately and meaningfully. "In the first place," writes Addison Franklin Page, Director of Louisville's J.B. Speed Art Museum, "exhibitions of architecture are, for most of us not involved in the profession directly, extremely dull. They do not deal with the essence of the whole matter—architecture. You may have photographs of architecture or models of architecture but never architecture itself, and I think the general public has a very difficult and dull time trying to relate these various representations to the actual thing." There are many ways in which museums can help the public "relate" to architecture. The Washington Gallery of Modern Art, for instance, has occasional walking tours through historic areas of the capital, and so do museums in other cities. In Boston, the Museum of Fine Arts takes an active role in educating the public about the city's extensive urban renewal program. Awards in the Copely Square competition were recently announced there, accompanied by a display of several of the better entries. In conjunction with it, the museum sponsored a lecture by Edward Logue on the principles of urban design, followed by a case history of the Fenway Urban Renewal project, and a bus tour of all the projects in Boston. But de-
spite this activity, the museum has reservations about architectural exhibitions. A spokesman says, "While interest in architectural exhibitions is present, it in no way matches the interest in fine arts exhibitions. I suspect that one of the reasons for this is that the best way to see architecture, as you see a painting or a print, is to see it, not inside a museum, but on the site."

One can hardly argue with this attitude, but what museums can do is prepare the public for "seeing" architecture. More is needed to educate a lay audience than just displaying photographs. Imaginative presentations such as the Kahn exhibition in New York are one solution. Illustrated talks and walking tours are others.

Too many museums rely solely on traveling exhibitions prepared by the AIA, New York's Museum of Modern Art, and the American Federation of Art. And when they do prepare their own exhibits, they are generally put on under the supervision of someone like a curator of paintings.

Of course, most museums actually create good architecture and, by proxy, an architectural awareness through their own building programs. "Certainly," said James J. Rorimer, late director of New York's Metropolitan Museum of Art, "when we built The Cloisters, we were thinking in terms of medieval architecture as well as works of art."

In general, it seems that museums are moving slowly away from the tradition of isolated display. They are quietly becoming, as they should, leaders in awakening the public's architectural awareness. It seems the proper time to increase the tempo.

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**The Jolly Black Giant**

CAMBRIDGE, MASS. The 35 pieces of "La Grande Voile" (The Big Sail) by Alexander Calder were bolted together here last month on MIT's East Campus. Some 3000 lbs of nuts and bolts, black mat paint, and a 33-ton assemblage of steel plates combine to form the largest Calder stabile in this hemisphere. As shown (right) in McDermott Court against I. M. Pei's Cecil and Ida Green Building (Pei, MIT '40, will design the chemistry building which will also front on the court), this Calder sculpture—huge and hulking as it is—has the air of a friendly giant. As with many of Calder's stabiles, the open spaces beneath the Big Sail invite one to pass through it. I. M. Pei & Associates of New York are the architects for the McDermott Court, with Sasaki, Dawson, DeMay & Associates associated as landscape architects.

If the Big Sail seems to laugh, perhaps it is because it stands guard above a bit of human folly. A 150-lb time-capsule "containing a sampling of the culture of 1966" is buried beneath the stabile. The "sampling," sealed in a series of tubes, will give pause to any space-age archeologist. In it he will find such relics as: a brief history of Standard Oil of New Jersey, an MIT mug, one pair of spectacles, a Sears Roebuck Catalog, a Betty Crocker Cookbook, music composed by MIT professors, and a plastic beaver. The beaver, that hardworking amphibious engineer, is MIT's mascot—but the beaver doesn't bury things, he damms them.
oakum which she was employed in picking of" and loosened the worst conflagration the colony had yet experienced, the Hutchinson's handsomely gabled house, along with hundreds of other homes and shops, was burnt to the ground.

The building on the site today was built between 1712 and 1718 by "Dr. Crease," who had his apothecary shop on the first floor and his home above. Other doctors and druggists subsequently owned the two-and-a-half story, hipped-roofed house until 1828 when Timothy Carter decided to set up his publishing and bookselling business there. Carter lowered the first floor 3' or 4' to street level, rebricked the exterior of the first story, adding projecting show windows, and built a brick wing over what had been a formal garden and a large wooden structure to the rear. The following year, the first in a long line of publishers (Ticknor & Fields being the most notable) opened shop on the old corner. By 1903, however, the publishers, books, and authors had gone elsewhere, and the corner witnessed the beginnings of an era of tobacco, hats, beer and pizza.

In 1960, when threatened with immediate demolition, the Old Corner Book Store came under the aegis of Historic Boston, Inc., a nonprofit organization formed for the express purpose of taking title to the building. Historic Boston set about raising funds for restoring the exterior and looked about for prospective tenants for the interior spaces. The signs were taken down, and restoration, under the guidance of Boston architect Francis N. Cummings, was begun. The upper floors were returned to their original 1712 state, while the ground floor, whose brickwork had been obliterated when the building first became a publishing house in 1828, was restored to its original bookstore state. The bricks were scoured, the bay windows on the 1828 ground-floor restored, and the shed dormer built sometime between 1865 and 1883 was removed and replaced with the two original 1712 dormers (locations determined by the notches and mortises in the existing trusses).

On the interior, the existing 1712 hand-hewn beam structural system was repaired, treated for fungus, insect, and rot damage, and reinforced with wood and steel. Cummings told P/A that the framing, because of the required reinforcing, was covered with plaster and wood casing, though beam locations are still immediately apparent.

So far, Historic Boston has put up $117,000 for exterior renovation, and The Boston Globe, which for the past two years has had its subscription and classified advertising departments on the ground floor, spent an additional $60,000 for interior renovation. The second floor, vacant until recently, has been leased to a law firm, and The Globe plans to expand into the third floor and the attic floors. The 1828 addition to the rear, now Driscoll's Men's Bar, has not received the work Historic Boston had planned. Without the necessary funds and prospective tenants, the addition may continue to stand as it is, its upper floors only partially occupied by a tailor and a campaign-button manufacturer.

But the efforts of Historic Boston, The Boston Globe, and architect Cummings have not been in vain. The corner today retains much of its publishing spirit. It has regained its respectability and warmth and it had added another note to the chorus of Boston rehabilitation.

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**AIA Awards**

**WASHINGTON, D.C.** This month at its national convention in Denver, Colorado, the AIA will present its academy awards. To Kenzo Tange (shown above) will go the Institute's Gold Medal, Tange will be the 32nd recipient and the first Japanese architect to be so honored. Elected Honorary Fellows are Jacob B. Bakema of the Netherlands, Ralph Erskine of Sweden, Aarne Ervi of Finland, Denys Louis Lasdun of England, Alfred Roth of Switzerland, Harry Seidler of Australia, Gerard Venne of Canada, and Bernard Henri Zehrfuss of France. Honorary memberships in the AIA will go to Henry F. du Pont, member of the White House Preservation Committee; Harold Bis­mark Gore, president of the Educational Facilities Laboratories, Inc.; the late James J. Rorimer, director of the Metropolitan Museum of Art in New York City; and John G. Flowers, executive director of the Texas Society of Architects and the Texas Architectural Foundation. The Henry Bacon Medal for Memorial Architecture, which is being presented for the first time, will go to the Gateway Arch in St. Louis, Mo. New York City's Museum of Modern Art will receive the Institute's Citation of Organization with special commendation for the Philip L. Goodwin Galleries of Architecture and Design.

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**Rock for the Hudson**

**NEW YORK, N.Y.** As everybody in New York knows, "the Bowery's up and the Battery's down." That won't change, but the shoreline of Manhattan Island just north of Battery Park will (once again), if plans to build a small community on landfill there are approved. Proposed last month by Governor Nelson Rockefeller, Battery Park City, a complex of
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apartments, offices, town houses, shops, and park, would be located on a 98.2 acres of land created by filling that section of the Hudson River with rock fill. It is an area now occupied by 17 piers, most of them in disrepair and 10 of them owned by the city. One of the most glittering attractions of the project is the prospect of $20 million in city tax revenues, as opposed to the $1 million the area is currently yielding.

A political undercurrent swirled around the state's proposal, for while it was received enthusiastically by Mayor Lindsay and other city officials, the mayor made it clear that the city would soon offer its own development plans. One item favoring state support of the $600 million project is that the state's Housing and Finance Agency has $600 million in unused borrowing power for financing middle-income housing. The city has none. Housing costs are estimated at $300 million.

As shown in concepts prepared by Wallace K. Harrison, the governor's architectural consultant, Battery Park City would be built on two levels. The upper level would be a landscaped area, closed to vehicular traffic, from which the buildings would rise: a lower level would provide parking, vehicular circulation, and space for light industry. Two 67-story office towers would add 8,000,000 sq ft of office space to an area that will also gain 10,000,000 sq ft from the World Trade Center. Just how this sudden abundance of office space would be absorbed has been a subject of discussion. In addition, 18 apartment buildings would create 14,000 residential units for families from all income levels. What will all this look like?

Poot-Poot Honk-Honk

Reginald Gardner used to do a wonderful routine about repetitive wallpaper designs featuring huge cabbage roses, in which he practically became the wallpaper. "Poot-poot, honk-honk, poot-poot, honk-honk, zow-zow," he would say, repeating vocally the implaceable pattern of the wall covering.

Large-scale housing and other Government-inspired development in New York (and other cities) has often taken the same course: we wish, indeed, for a Gardiner to vocalize our plight, particularly when confronted with the same old thing as a vision-of-tomorrow-public-relationships-so-the-Governor-can-produce-a-design as represented by the proposal for the landfill on New York's West Side. We happen to know that Wallace K. Harrison, the architect concerned, is inquisitive about the necessary mixture of people, activities, economic pursuits, religions, cultural values, etc., etc., that will make a complex such as Battery Park City really viable. That he or his advisors have failed in the Rockefeller proposal and produced only another Reginald-Gardner-wallpaper-imitation of urban development (high rise-low rise-church-recreation-light industry-high rise-low rise-church-school-recreation-commerce-there's the harbor!), can only be deplored. The idea of releasing more space for New Yorkers is admirable but there is certainly no excuse for repeating once more the dreadful mistakes already existing on the Manhattan mainland, including that of blocking off the waterfront to city dwellers.

Awards

Dr. Constantinos Doxiadis will receive the Aspen Award next month. The award, which honors "that individual anywhere in the world judged to have made the greatest contribution to the advancement of the humanities." Doxiadis, who in his own words has turned to "something even more substantial than architectural design, that is, to the question of how we live," has formulated a philosophy of Ekistics, the "science of human settlements"; his architectural firm has been engaged in massive urban renewal projects in Greece, Pakistan, Jordan, Syria, and Lebanon.

I. M. Pei received the Harleston Parker award for his design of the Earth Sciences Building at MIT at last month's meeting of the Boston Architectural Society. Pei, the J. Clawson Mills Fellowship in Architecture was presented by the Architectural League of New York to Michael W. Baker, a member of the University of California's (Berkeley) department of architecture. The League also elected Ulrich Franzen its next year's president.

Higher and Higher in Houston

Houston, Tex. When completed sometime in early 1969, the 650' Shell Building will not only be the tallest building in Houston—and perhaps in that area known as West of the Mississippi—but reputedly it will also be the tallest building anywhere framed in reinforced concrete. (Chicago's Lake Front apartments, at 645', will be 5' shorter.) Designed by the Chicago office of Skidmore, Owings & Merrill (Bruce Graham, design partner) with Wilson, Morris, Crain, & Anderson of Houston associated architects, the Shell Building will be 47 stories high and have a floor area totaling about 1,450,000 sq ft. Close to one-third of this space will be occupied by 1500 Shell Oil Company employees. The rest will be leased.

Toward the base, the building's otherwise rectilinear facade has two vertical strips that look a little like the folds in a loosely hung curtain. These "folds" serve a structural function, allowing interior concrete partitions to act as shear walls. They take much of the force of lateral winds. The other source of lateral stability is the continuous center service core.

Construction will begin later this year. Under way within two blocks of the new Shell Building (which overlooks a reflecting pool and park in

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Hope For Glessner House?

CHICAGO, ILL. Prairie Avenue, "the sunny street that holds the sifted few," seemed a pretty good place to build a house. And in 1887, on the corner of Prairie and Eighteenth Street, Henry Hobson Richardson, one of the founders of the International Harvester Company and later a Chicago civic leader of note, did just that. The neighborhood was good. A block away was Marshall Field's $2 million, Richard Morris Hunt-designed home; across the street stood W. W. Kimball's smaller $1 million French château, designed by S. S. Beman; and on the other corner, George W. Pullman's mansion.

Glessner chose his architect with equal care, talking with Stanford White, William A. Potter, and finally deciding on Henry Hobson Richardson. When, in 1885, he wrote Richardson asking if he would consider such a small commission, Richardson replied that he would "plan anything a man wants, from a cathedral to a chicken coop." The Glessners, who wanted something in between, were perfect clients, limiting the architect only in the number of rooms he was to provide.

For the next 11 months, the Richardson office worked on the plans, finally settling on an unusual (for that time), inward-looking design. All the principal rooms were to face a quiet interior court, avoiding the dust and noise of the city streets. At the final meeting, Richardson penciled in the positions for the lighting fixtures and turned to Glessner: "There, Mr. Glessner, if I were to live five years longer, that is the last thing I would do on your house; my part is finished." Three weeks later, Henry Hobson Richardson was dead.

Excavation began in June of 1886, and in December of the next year the Glessners moved into the house they were to occupy until their deaths in the 1930's.

The neighborhood has deteriorated the way most once-fashionable areas do, and many of the mansions that lined Prairie Avenue have been torn down, replaced with parking lots and factories. But the Glessner House still stands its ground, the last remaining Richardson-designed structure in Chicago.

Though the house was not admired or architecturally influential in its own day, the Glessners thought highly of it. Almost defensively, Mrs. Glessner was quoted as saying, "For all its granite, this home is wonderfully elastic. You can squeeze as many as you want into it." With its 35 rooms, 10 individual fireplaces, and its 9' and 10'-high ceilings, space could not have been much of a problem. Today, the house is appreciated for its typical Richardsonian granite work. The exterior walls of the house rest on massive foundations of Joliet limestone blocks mixed with bricks and mortar. The street façades use a brick backing and Wellesley granite (alternatively 6" and 8" sheets) facing. The deeper blocks are returned at the openings to imply a wall of solid stone. Structurally unnecessary, since the 2' walls would hardly need any added strength, this type of strictly cours ed masonry shows the aesthetic Richardson used in his granite work. Much of the interior spaces lack the Richardsonian amplitude, but they were largely finished after his death. The interiors do, however, show a number of unusual innovations. A crude air-conditioning system was installed in the basement, circulating air over ice blocks and then into the house. The basement ceiling and all floors were sound-proofed. The furnace was placed under the carriage house to keep soot from filtering into the house. Amid much of the furniture was designed by the Richardson office (see chairs in dining room photo below, left).

Glessner's pride in his house was such that, in 1924, eight years before his death, he turned the deed over to the Chicago AIA. His will asked for the house to be kept as a "museum, library, gallery, and educational institution, including a school of design for legitimate architectural assemblages." But high maintenance costs (estimated then at $25,000 a year) prevented the Chicago Chapter from keeping the will and the house was returned to the Glessner estate, whose heirs in 1938 gave the building to the Armour Institute of Technology. Twenty years later, the house passed (for a reported $70,000) to the Graphic Arts Technical Foundation. And, last July, when the Foundation moved its headquarters to Pittsburgh, the house again was put on the market. Asking price: $60,000.

The house, which is one of Chicago's official 38 landmarks, has been praised by historians such as Henry Russell Hitchcock ("Undoubtedly his finest and most mature masonry mansion... Richardson could never... used granite so magnificently") and by architects such as Philip Johnson ("One of the greatest houses of its period anywhere in the world.").

So far, the interest has been great and certain gains have been made. The Chicago School of Architecture Foun...
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conducted by the Cornell University Center for Housing and Environmental Studies. Alexander Kira, who is Associate Professor of Architecture at Cornell, worked six years on the study, which was sponsored jointly by the Cornell University Agricultural Experimental Station and Plumbing and Heating Division of the American Radiator and Standard Sanitary Corporation. Kira points out that today's bathroom, like the old-time country kitchen, is a truly multi-purpose room. Not only is it used for bathing and eliminating body wastes but it is also the scene for reading, shaving, exercising, relaxing under the sun lamp, playing with water toys, watching TV, applying beauty preparations, and washing clothes. Unlike the old kitchen, however the contemporary bathroom is the last private refuge of citizens beset by picture windows, togetherness and the family room. Here father can retire to read the sports page uninterrupted, and mother can watch "Peyton Place," while washing her stockings, without someone changing the channel.

Ideally, Kira would have the bathroom expanded in size and storage space until large enough to accommodate the facilities needed for every use. But his main concern is with the design—or lack of design—of the facilities themselves. "The bathroom is hopelessly antiquated and inadequate," he writes. "In many respects, the bathroom is in about the same stage of development as the kitchen was 30 or 40 years ago when a stove, sink, and ice box sat in splendid isolation against opposite walls of a room and storage was accounted for by some unreachable fixed shelves in the next room. This is in startling contrast to most contemporary kitchens, which are totally designed and integrated facilities with full utilization of space and with individual items carefully related to one another for convenience."

Among a host of design improvements, Kira suggests self-cleaning tubs with lint- and hair-catching drains located at the end away from the water spout, showers with outside walls of glass brick to let in light, shelves and seats in both tub and shower, toilets that provide support under the body's bone structure, urinals shaped like funnels.

Most of his suggestions are such obvious improvements that one wonders why they haven't been put into practice long ago. Only one item seems questionable. If water controls in showers worked vertically, with water turned on by pushing a lever down, one might slip against the controls and be inadvertently scalded. And unfortunately the problem of bathroom plumbing noise is outside the scope of the study. "From the standpoint of pure noise without reference to embarrassment, the biggest single problem is posed by piping systems which are impossibly sized and which are in no way isolated from the fixtures, or from the walls which contain them . . . it is a problem which also deserves considerably more attention than it has received to date."

Obituaries

JAMES J. RORIMER, Director of The Metropolitan Museum of Art, died at the age of 60 early last month in New York City. Rorimer, who started as Assistant in the Department of Decorative Arts at the Metropolitan in 1927, was responsible for the planning, construction, and development of The Cloisters, which opened in 1938 and houses the museum's medieval collection. During World War II, he served in Normandy, Paris, and Germany as the Chief of Monuments, Fine Arts and Archive Section of the Seventh Army. His latest award was an honorary membership in the AIA.

JOHN LORD KING, of John Lord King Associates, San Francisco, died April 28 at the age of 57.

 Aspen Speakers

Aspen, Colo. This year's International Design Conference in Aspen (June 19-24) will feature such notables as: Dr. Reyner Banham, British architectural historian and critic; Julian Beinart, architect and authority on contemporary African culture; Henry Dreyfuss, dean of American industrial designers; Charles Eames, architect, inventor, and designer; John Peter, designer and architectural commentator; Kevin Roche, architect and principal of Eero Saarinen & Associates; and Ben Shahn, graphic artist.

The conference is open to anyone interested in design. Advance registration fee is $75. For additional information write: the International Design Conference, P. O. Box 664, Aspen, Colo.

Calendar

Craftsmen USA '66, an exhibit of the 268 merit award winners from six regional competitions, will open June 3 at the Museum of Contemporary Crafts in New York City . . . June 19-24 are the dates for the International Design Conference in Aspen. The sources and resources of 20th Century design will be the theme of the conference . . . The National Council of Instructors in Landscape Architecture will convene on June 29-July 2 at the University of Wisconsin at Madison . . . The Stained Glass
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Association of America will hold its annual conference from June 21–24 at the Drake Hotel in Chicago... The International Seminar on Ekistics and the Future of Human Settlements will be held in Athens on July 4–15. For information write: Dr. D. Iatri­dis, Director, International Seminar on Ekistics, Athens Center of Ekistics, 24, Strat. Syndesmou St., Athens 136, Greece... On July 5–9, Stanford University will present a Secondary School Planning Institute... On July 18–22, at MIT, there will be a special summer program on Religion and Community Cooperation in Planning, Housing, and Architecture... September 21–23 are the dates for the International Conference on Space Structures. For information write: Secretary (Registration), International Conference on Space Structures, Battersea College of Technology, Battersea Park Road, London SW 11, England... From September 27–30 the Producers Council will hold its annual meeting at the Waldorf-Astoria in New York City... The 12th annual Architecture and Gardens Tour of Japan, directed by Kenneth M. Nishimoto of Pasadena, Calif., will leave from Los Angeles on October 7. The tour lasts 24 days and is limited to 25 participants. For information write Mr. Nishimoto, 263 South Los Robles Avenue, Pasadena, Calif. 91106... The Architectural Woodwork Institute will hold its annual meeting October 19–21 in Williamsburg, Va.

Rehabilitation With A Vengeance

NEW YORK, N.Y. There are many who fight rehabilitation, who say that it is just a bandage on a broken leg, that rehabilitated slums are still slums, and that the housing of the future should be new—steel, concrete, and glass. The Federal Government (HUD, FHA, and OEO), New York City's Rent and Rehabilitation Agency, and the Community Improvement Corporation of Manhattan (CICOM) are staking $6 million and two years' time to prove that their opponents are wrong—that rehabilitation is economically feasible, socially preferable, and urbanistically necessary.

CICOM, a nonprofit joint venture of the Frederick W. Richmond Foundation and the Carol W. Haussman Foundation formed two years ago, is currently conducting the largest (in investment and units) rehabilitation project in the country. Purchased with a $5,512,000 FHA mortgage loan, 37 "old law" (built before 1901) tenements on Manhattan's 114th Street between 7th and 8th Avenues will be a test case for future large-scale urban rehabilitation. In a city with an estimated 43,000 such tenements housing more than one million people, new construction would involve a prohibitive volume of public funds and resident dislocation. Up at 114th Street, the cost of rehabilitation and land acquisition is approximately at $12,500 per unit—half that of comparable new construction, and no one is forced to move from the block.

In April 1965, work was begun on the first three tenements, now finished and occupied. Next month, seven more will be completed, and by 1967 the whole block of tenements will give more than 1300 Harlem Negroes a fresh neighborhood.

As usual with rehabilitation practices, only the exterior walls, beams, floor sheathing and stairways are retained. Interiors are refurbished with new kitchens, bathrooms, flooring, walls, ceilings, windows, buzzer systems, garbage chutes, and, for the first time, closets. The exteriors will be restored and painted the original brownstone color. Cornices, wherever possible, have been kept. New York architects Horowitz & Chun, responsible for the rehabilitation plans, are to be commended for keeping the neighborhood's architectural integrity. When completed, the brownstones will stand on 114th Street as fashionable as they were when first built.

Though the ways of rehabilitation are the normal ones, the means and spirit surrounding 114th Street make this project unique. From the start, CICOM has kept the program on a neighborhood level. The tenants receive monthly circulars on the progress, meet with block captains and CICOM personnel to offer suggestions and to receive explanations. A local CICOM office in a first-floor apartment keeps an open door at all times. Work crews, despite initial union objections, are Negroes and 90 per cent of the subcontractors are Negroes. Some $390,000 from the Office of Economic Opportunity will open the floor-through basement level to various community services. Already in full swing are a play school, meeting room, laundry area, and Haryou-Act Cadet Corps training center. And now there is talk of planting trees and of cutting the street off permanently to traffic. Behind the tenements, where there used to be nothing but garbage and rats, CICOM plans to create a "block backyard." With the backs of the buildings painted white (see bottom photo), this area will gain light, spaciousness, and an urbanity that other more fortunate New Yorkers to the south would envy. The backyard will be easily accessible. All community basement levels open on to it and a block-through passage-way has been created by clearing the ground floor of one tenement. CICOM is presently negotiating for the purchase of the 115th Street tenements backing on this space.

Upon completion, Harvard and MIT's Joint Center for Urban Studies will draw up an official evaluation of the project for the City's Rent and Rehabilitation Administration who provided the necessary rent subsidies.

Credits for St. Louis Stadium

Credits for work on Busch Memorial Stadium in St. Louis (see NEWS REPORT, APRIL 1966 P/A) are: Sverdrup & Parcel and Associates, Inc., Engineers-Architects; Edward Durell Stone, Architect-Designer; Collaboration; Schwar & Van Hoefen, Associate Architects.

Designing Women

Last Month's issue of Made­moiselle treated its readers to a peep at "A Battleground of the Spirit"—the ups and downs of being a woman and an architect. Welcomed at every major architectural school but one (Princeton), women make up a skinny—but shapey—3 per cent of the 30,000 registered architects in this country.

June 1966
Executives who come from homes furnished like this...

...appreciate office lavatories like this

The pictures above make the point. Office washrooms can be as handsomely functional as an executive's own bathroom at home. They can be made just as personal, too—designed to reflect his taste and the dignity of his office.

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On Readers' Service Card, circle No. 347
This is a far cry from their 24 per cent representation in the Soviet Union, or the more than 50 per cent in Greece. The article attributes the low U.S. female ratio to the fact that the architectural profession in general is undermanned. One would have to pass 6000 people walking along a city street before meeting one architect. And the chances of bumping into a female architect are even slimmer—one out of every 200,000.

Red School House on Capital Site

WASHINGTON, D.C. A design for a District of Columbia elementary school has won praise from the Washington Fine Arts Commission. The brick and cast stone building, which will accommodate 1000 students, blends nicely with the rows of turreted Victorian builder houses that surround it. According to commission member John Carl Warnecke, "The Fine Arts Commission believes this will be one of the great schools in the District." To be built on two acres of cleared land once working drawings are approved by the District authorities, the school has a basic three-story classroom structure with 30 classrooms. Staircase enclosures are articulated. And running from it and enclosing a landscaped courtyard is a one-story section housing kindergarten rooms, offices, library and a combination cafeteria/all-purpose room. The latter will have a raised copper roof (right in rendering). Adjacent to the building will be a playground and below that a playing field.

Architects are Lyles, Bissett, Carlisle & Wolff of Columbia, S.C.

Competitions

July 1 is the deadline for entries to the Department of Housing and Urban Development's Honor Awards Program for Design Excellence. All entries must have been completed or substantially completed since January 1, 1961 under any HUD or HUD assistance program. For more information and entry forms write: 66 Design Awards Program, Department of Housing and Urban Development, Washington, D.C. 20441. Any project whose construction has been or is being assisted by loans or grants under the Higher Education Facilities act of 1963 will be eligible to enter the Awards Program sponsored by the Bureau of Higher Education of the U.S. Office of Education, the Educational Facilities Laboratories, Inc., and the AIA. For information and entry forms write to: Design Awards Committee, Bureau of Higher Education, Room 4931, GSA-ROB, 400 Maryland Avenue, S.W., Washington, D.C. 20202.

The magazine goes on to find bright horizons for the girl interested in architecture and leaves its women readers with the following thought: "After all, how many other fields are there in which one can influence the whole shape of man's environment?"

[As if to rub salt in the wounds of aspiring girl designers, Mademoiselle misspells the first name of our most famous lady practitioner, Clothiel W. Smith, "Clothiel."—Ed.]

WASHINGTON/FINANCIAL NEWS

U.S. Rubber Stretches a Point

CHICAGO, ILL. On view at the last International Home Furnishings Market was U.S. Rubber's contribution to the growing number of prefabricated vacation houses, Wigwam '70 (so called because four aluminum poles, joined at the top, form the 16-sq-ft house's main support) is inexpensive (a $5000 price tag includes bathroom and kitchen units as well as a prefabricated fireplace), and is virtually care-and-maintenance-free. The wall panels, of a Tedlar-finished Royalite exterior with a foam insulation core and a Naugahyde interior wall covering, are light enough to be handled by women and able to resist heat, cold, dents.

BY E. E. HALMOS

Beauty is very much a matter of the "eye of the beholder"—and the newly fledged Department of Housing and Urban Affairs has no present intention of becoming a national arbiter of what's truly beautiful and what's merely a slick cosmetic treatment covering the ugly face of a city.

Nevertheless, HUD could easily find itself in such a position, as it begins handing out "beautification" grants (up to 50 per cent of certain basic costs) to municipalities throughout the U.S. Reason is that Congress, in writing the basic legislation (The Housing and Urban Development Act of 1965), was as uncertain as anyone else about just what constitutes "beauty," and left it largely to HUD to decide how to implement the law, and on what basis. With two principal sections of the program under its wing—open-space land acquisition, and urban beautification—HUD is taking a generous leaf from the Agriculture Department's administrative experience, and is otherwise playing the whole tune by ear.

The administrative end is being taken care of by the department's field service—"local" offices in seven principal regions and in Puerto Rico, and a field staff, to handle applications, advice, and aid, on as nearly a local basis as possible.

As to what constitutes beauty and a proper program, the agency makes these principal demands: that a city's proposed program is in fact a program, not a one-shot cosmetic treatment, that it include both
Plastic forms were used for precision casting of these columns. The high-early-strength concrete, made with Lone Star's INCOR® 24-hour portland cement, permitted forms to be stripped the following day. Maximum aggregate size was 3/8".

A forest of concrete "trees" for a new IBM office building

Incor® 24-hour portland cement used for cold-weather concreting.

This IBM office building is interesting from any angle, but the really spectacular sight is found indoors. Here some 81 graceful concrete "tree" columns have transformed a vast multi-level office area into an indoor forest. These concrete trees have a striated surface texture suggesting bark. They are also interesting from a structural standpoint; as an inverted umbrella, each includes a column, a column capital and a 22½-foot-square slab. The diagonally adjacent slabs were prestressed through a common plane of concrete, but aside from that, the trees are independent vertical cantilevers.

Construction of this concrete forest presented an unusual challenge. Color uniformity throughout the exposed, unfinished concrete surface was a requisite. High early strength was required because casting took place in cold weather. INCOR®, America's first high early strength portland cement, thus played a vital part in the successful completion of this unique, complex and impressive building.
Already years ahead, Quartette today provides total environmental control that more than meets today's exacting architectural and mechanical requirements. Its custom-sized modules fit any interior bay, with each module completely integrating light, air, acoustics, partition support and beauty. Quartette's almost unbelievable lighting. To 600 footcandles without glare. Comfortable, unobtrusive, multi-directional, beautiful — like an open sky. Quartette's complete energy-utilization air exchange, for applications from private office to "clean rooms." Air diffusion below lamp level keeps lighting heat from room space; 65 to 75 percent of lamp heat is removed into negative pressure plenum. Cuts air conditioning needs and costs. Constant circulation at minimum cfm. Maximum adaptability to any heat or light system. Quartette's ideal acoustics. Tames sound in every space. Sound absorption 80 percent, attenuation 39.3 decibels. Efficient sound-blocking at plenum and partition points. Quartette's unique partitioning flexibility. Attains rigid support of standard partitions. Install and rearrange with only a screwdriver. Simple, fast, without ceiling damage. Clean appearance — no air vents or louvers. Quartette's operating and minimum maintenance efficiencies provide remarkable economies. Environment is clean, vital, stimulating... provided by a ceiling that is truly amazing, in a class by itself. Actually, Quartette pays for itself in economies achieved, Challenge us to prove it to you. Quartette, the total integrated ceiling — environment second only to nature's.

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public and private efforts (though no money is available in the program for private work on private property), and that the locality itself make out a good case for whatever it may consider beauty—be that street kiosks, tree and flower plantings, even decorative street lighting and paving. (In general, no major construction or reconstruction can be included.)

But—at least for some time to come—there won't be any list of criteria of what HUD thinks is beautiful or ugly. Not possible, say HUD staffers, who point out that a fountain, or a horseshot, or coach-type street lamps might be ugly in themselves, but contribute to "atmosphere" that a community may desire. Each case must be considered individually, under present plans.

By early May, only a trickle of an expected flood of applications had washed into HUD's temporary headquarters in downtown Washington. Of the first 20 or so, most came from surprisingly small cities (8,000 or fewer inhabitants), and only three from major cities.

They ranged from plans for tree planting in older neighborhoods, expansion of recreation

al facilities and riverfront clean-up (in Pittsburgh): to marsh-grass planting (to screen a city incinerator), an ice-skating rink (New Haven): to landscaping around Government buildings, schools and small parks (Washington), Hayward, Calif., got a $55,350 grant for improvements to "left over" areas in its business district, improving parks, landscaping median strips; Seaside, Calif., got $7257 to landscape five blocks of median strip and three traffic islands, and to perform other work.

Later on, when the applica-

tions come closer to a flood, HUD will insist on one other criterion: In addition to an approved plan, cities will have to show that they are making and have made a real effort to improve themselves (through local ordinances and enforcement controlling unsightly buildings, signs, and other efforts).

Little or no actual construction work is included in the "beautification" program (though architectural services may be covered in some circumstances). HUD does, of course, have construction money available, also, but that is in programs such as urban renewal, the "neighborhood facilities" program (which can cover recreational centers, health stations, and the like); and the urban planning assistance program.

One huge "beautification" sector won't be under HUD's jurisdiction, by the way: the roughly $300 million to be spent on highway beautification. That will be handled by the U.S. Bureau of Public Roads, an agency of the Commerce department.

New Pennsylvania Avenue Plan

After much soul-searching—and much criticism—by the Temporary Council for Pennsylvania Avenue (headed by Nathaniel A. Owings) came up with a plan, in early April, that seemed to please almost everybody. It was approved by the National Capital Planning Commission.

The Temporary Council is charged with plans for making a "grand avenue" out of Pennsylvania Avenue, connecting the White House and the Capitol. Its first published scheme called for a huge square—almost a half-mile on a side—at the western end of the avenue (nearest the White House) that would have knocked out (in favor of park or paving) some of the city's most valuable privately owned real estate (including the 13-story, $16-million National Press Building, the somewhat elephantine Willard Hotel, and other structures). It also included a pretentious "gate" for the White House itself.

This brought loud outcries from many sources, and the Temporary Council retreated to its sanctuary to reconsider. Final result was a plan for a square about one third smaller than the one originally proposed, retaining the Press Building (but still taking out the Willard), with a better attempt to coordinate the downtown section of the city into the new open area (including a new hotel and possibly one or two theaters). Criticism was greatly muted.

Higher Interest Rates May Be Housing Boon

Higher interest rates (by 1/4 of 1 per cent) on FHA and VA mortgages apparently won't have the disastrous results that many observers predicted some months ago when the Federal Reserve Board boosted interest rates generally.

In fact, housing authorities seemed to think the boost in rates (to 5.75 per cent) would stimulate the lagging housing market. Reason: At lower Federal rates, mortgage money was getting scarcer, as investors preferred to go into other areas where returns were higher; and the elimination of the "charging points" (discounts above established ceilings to make up for loss of interest). The upgrading of interest rates also affects FHA mortgages on multifamily housing programs—now up to 5.5 per cent.

If housing men are right, the change could provide a needed boost for housing. Last year, FHA mortgages were used to purchase 196,400 new homes, and about 363,000 existing homes.

(Earlier raises in interest rates by FHA and VA—to 5.5 per cent—may get the credit for the first upswing in new-housing unit starts in many months: In March, according to the Census Bureau, new-housing starts were at a seasonally adjusted annual rate of 1,543,000 units—up 4 per cent over a year ago. In February, the rate of starts was down 11 per cent from the previous year.)

Financial

• There was an ominous note in the statistical news of the construction industry. A huge jump of 2.3 per cent in budgeted work of Bureau of Public Roads Highway construction index, to a new all-time high.

The index touched 109 per cent (1957–59 base is 100), to top the previous all-time high (in the second quarter of last year) of 106.9 Every category in the index was up: 11 per cent for structural steel; 6.1 per cent for excavation; 7.3 per cent for reinforcing steel; 7 per cent for structural concrete; 3.4 per cent for portland cement.

BPR's index doesn't reflect labor costs as a separate item, but most Washington observers were convinced the higher labor costs are the largest factor in the general upswing.

• Nevertheless, construction activity generally continued to show every sign of health. The Commerce Department said that in March, new construction put in place was valued at $5,200,000,000—up 6 per cent over a year ago.

• A trend to be watched—if it is a trend—to began to appear: Cancellation or postponement of Federal construction projects. General Services Administration "rescheduled" several major projects because it said the local building market is "highly active" and has "acute shortages" of skilled construction workers. The projects: A $44,500,000 Federal office building in Chicago, now rescheduled for bids (substantial ture) only in September; a $10,500,000 structure in Louisville, Ky., now set for late summer or early fall; a $7,600,000 courthouse and office building at Rochester, N.Y., now rescheduled for bids in December.

• No Federal spokesman would call the moves economy cutbacks, but the building industry was watching closely.

• Strongest taxpayer support for public works construction was for higher-education purposes, according to results of bond elections in March. Voters approved 100 per cent of all such proposals submitted to them, out of a total of $206,300,000 worth of public works bonds (73 per cent of all issues) voted upon.
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Ask for catalog 2063-B, or better still, ask for a Ceco man to bring samples to your office. The Ceco Corporation, general offices: 5601 West 26th Street, Chicago, Illinois 60650. Sales offices and plants in principal cities from coast to coast.
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The modular panels of Norris walk-ins are all-metal, with no wood to absorb moisture, and extremely lightweight. Standard exteriors are borderized steel finished in white baked enamel, interiors are 22-gauge metal, with custom exteriors or interiors optional at extra cost. Ideal for every industrial, commercial or institutional refrigeration need, Norris walk-ins can be supplied with the correct self-contained or remote refrigeration equipment to meet any application.

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On Readers' Service Card, circle No. 440
Combination radiant heating and acoustical ceiling system features square water pipes which are said to increase its water-carrying capacity 60% over comparable systems. Square-edge perforated panels are self-clipping, and total height of unit, including suspension channels, is 2½". "Acousti-Therm" has noise reduction coefficients of .10 to .90 International Environment Corp., 77 Tarrytown Road, White Plains, N.Y. 10607.

To the Top of the Roof

Redesigned rooftop units for cooling only or for year-round heating and air conditioning are available in capacities from 20 to 50 tons and from 252,000 to 664,000 Btuh. Cooling units can provide mechanical air conditioning at ambient temperatures as low as zero, with an optional control. When outside air drops to 55°F, compressor switches off and unit uses fresh air for cooling. Factory packaging reduces on-site labor, and steel channel base eliminates need for roof curbing. Worthington Air Conditioning Co., 2005 W. Oklahoma Ave., Milwaukee, Wis. 53201.

Effervescent Glass

Random dispersion of air bubbles through a flat glass sheet produces a glass in which there is no exact repetition of design. Sheets, ¾" thick and up to 48" wide, are available in standard sizes. It is suitable for decorative walls, windows, and partitions. American Saint-Gobain Corp., Box 929, Kingsport, Tenn. 37662.

Expansive Mood

Manufacturer states that new expansion joint system will prevent leaks due to cracked roofing felts along the joint, transitions or junctions. Felts do not crack because they are mopped to a galvanized steel water dam and the thermal reactions of the felts and steel are very much alike. Free-floating, extruded aluminum shapes form the sides and top of the joint; plastic flashing at the bottom forms a continuous seal throughout the 4" of movement allowed by the joint design. A 3" x 4" insulation batt is supplied to absorb condensation. W. P. Hickman Co., 2520 Industry Row, Troy, Mich. 48084.

Frame-Up

Framing anchor, in six different shapes, uses nails in shear in three directions. First designed for use in anchoring rafters and roof trusses to wall plates, "Trip-L-Grip" can also be used in wall and floor construction to join joists to beams, solid blocking to plates, rafters or trusses to purlins. The 18-gauge galvanized metal anchors are available in three types, with a right and left hand for each type. Timber Engineering Co., 1619 Massachusetts Ave. NW, Washington, D.C. 20036.

Spanish Doors

Manufacturer has added three Spanish door designs to his stock: the "Matador" (shown), the "Conquistador," and the "Fiesta." The Ponderosa pine panel entrance doors are constructed with dowel joints and are sanded ready for finishing. Size of all three doors is 3'-0" x 6'-8" Ideal Co., P.O. Box 889, Waco, Texas.

Infrared Heater

Ceiling heater uses two infrared lamps or one regular lamp and one infrared lamp. Unit includes air exhaust with 50-cfm squirrel-cage blower; face plate is anodized aluminum. Suitable for bathroom supplemental heating in residences, motels, apartments, etc. Emerson Electric Co., 8100 Florissant Ave., St. Louis, Mo. 63136.
Indigenous handcrafts by American Indians and Eskimos are exhibited in a new shop, The American Indian Arts Center, designed by Architect John Arms. The wares make honest decorative elements for offices and other interiors, and range from Navajo rugs (which the Center believes can be used as successfully as Orientals in either traditional or modern settings) to character dolls and masks, to paintings (unusual and charming) and graphics, to good pieces of the now well-known soapstone sculpture of the Eskimos. Although there is no architectural discount, hand-craft sources should be known. The American Indian Art Center, 1051 Third Ave., New York, N.Y. 10021.

On Readers' Service Card, Circle 111

Furnishings

Native Imports

Tough Tufted

Rhino-Tuft nylon yarn with "Fortress" construction results in—get it?—carpeting as tough as a rhino's hide. The heavy-duty contract carpet "rejects soil, resists crushing and traffic abrasion; endows unprecedented and unmatched strength, durability, and appearance retention." The carpet is also said to require 15 lb of force to dislodge a single tuft; won't fuzz or fray, pill, ravel, or shed. Or matt. Many other virtues. Available in 12' and 15' widths, or custom; 12 colors. Contract Carpet Engineering, Div. Aldon Rug Mills, Inc., Lenni, Pa.

On Readers' Service Card, Circle 112

Modular Units

For Outdoor Days

For patios and pool sides, a practical collection: the "Century" line, which includes a round and square table, side and armchair, and adjustable and flat chaise. Frames are aluminum with baked enamel finish (four colors); 2" vinyl straps allow varied color combinations and easy replacement. And when sunning and swimming season ends, it stacks for storage. Brown-Jordan Co., Box 272, El Monte, Calif.

On Readers' Service Card, Circle 113

Aries Series

Marking the first of the Zodiac year is the "Aries Series," by Swiss designer Hans Eichenberger. The series consists of a club chair, a two-, a three-, and a four-cushion sofa. Focus here is on the frame (of mirror polished chrome steel tubing) with a system of "helical steel springs" supporting loose foam rubber seat and back cushions. Stendig, Inc., 387 Park Ave., New York, N.Y. 10022.

On Readers' Service Card, Circle 114

Harvey Probber introduces his educational furniture division with a collection designed specifically for use in colleges. The line includes a side (desk) chair, lounge seating, tables (originally designed for Harvard University), benches, and carrels. Primary wood is solid oak; tables are also available in cherry; those with ebony bases may be surfaced with plastic as protection from scuffing. Harvey Probber, Inc., 155 E. 56th St., New York, N.Y. 10022.

On Readers' Service Card, Circle 115

Transition Expanded

Stow & Davis "Transition" line has been expanded to include seven desks, several file units and occasional tables, and an "executive 'L' arrangement." Insert tops are offered in black vinyl or laminate, plain or quarter-matched butt walnut, elm burl; white or gold metal trim; light or dark finish. Also: a smaller-scale model of the "Bubble" chair with straight leg, revolving bases. Stow & Davis Furniture Co., 25 Summer Ave., N.W., Grand Rapids, Mich.

On Readers' Service Card, Circle 116

In the Ivy Tradition

Danish Architect Hans Wegner's "Office Group" comprises desks, bookcases, and storage units; each allows many variations of shelf, drawer, and file-rack arrangement. Cabinets close à la roll-top desk: the many wood strips on a canvas backing make a convincingly solid-looking tambour when closed. Cabinets and bookcases available in three heights; desk heights are adjustable, tops in six sizes. Legs and trestles of satin finished chromed steel. Units in teak or oak. Svend Wohlert Inc., 473 Jackson St., San Francisco 11, Calif.

On Readers' Service Card, Circle 117

S. M. Hexter's spring line features a variety of fabrics, from blazing prints to texture wovens. Of note: a nubbly nylon-rayon in 13 muted to bright colors, an indoor-outdoor orlon, a heavy ribbed nylon, and
How 29 out of 30 companies discovered Macomber framing systems provided more building at lower costs

In building one of the Midwest's principal industrial parks, architects and builders working closely with a Macomber representative discovered they could give their customers a building suited ideally to their needs and to their lot size and shape. The buyer can have an architecturally designed building, individualized to his tastes, a better "builder-built" steel building ... and save money.

If you're an architect, you'll like the design freedom; if you're a builder, you'll like the way Macomber makes your job easier; if you're an investor, you'll appreciate the lower costs and quicker occupancy you'll get by working with a Macomber representative.

Special industrial park brochure illustrated here available upon request.

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June 1966
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Hetron-based panels won't support combustion.

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For a list of fabricators and more information on Hetron—the polyester resin that makes panels safer—write us. Durez® Plastics Division, Hooker Chemical Corporation, 7706 Walck Road, North Tonawanda, N.Y. 14121.

Overseas: Hooker Chemical International, Ltd., 6 Place Madou, Brussels, Belgium, Telephone: 186336

DUREZ PLASTICS DIVISION

On Readers' Service Card, circle No. 345
Tiles in Style

Patterned basins are the latest word in bathroom luxury. Two colorful models now on the market feature a petal design in bright yellows or blues; or a stripe pattern with an intricate Moorish border in blue and green or white and beige. Matching accessories include toilet tank lids and seats, ceramic wall tile and towels.

From Robbins for 1966: a vaguely "op" pattern with swirls of color; a spiral mosaic of translucent tiles; four wood-grain patterns (maple, teak, and two walnuts); others. All designs in several colors. Robbins Products, Inc., Tuscumbia, Ala.

Sanitation/Plumbing

Flowers for M'Lady

Neatly designed drinking fountain is fabricated from aluminum with an anodized, bronze-colored finish. Fountain is wall-mounted with an integral back plate; head and push-button are said to be vandalproof.

Haws Drinking Faucet Co., 1443 Fourth St., Berkeley, Calif. 94710.

Special Equipment

Tidy Fountain

Modular Pools

Facade Textures Made To Suit

Spandrel and fascia panels are custom formed in three-dimensional patterns designed by the architect. Lightweight, insulated panels (1 psf) are the result of a cooperative development program between the manufacturer, U.S. Rubber, and DuPont. Exterior face is of Royallite, a self-extinguishing ABS thermoplastic produced by U.S. Rubber Co. The finish is Tedlar PVF film, a self-extinguishing polyvinyl fluoride developed by DuPont, factory-bonded to the Royallite. There is an insulating core and the interior face is usually cement asbestos board or a similar material. Panels are tough, durable, easy to install; the 11 standard colors are stable and uniform, says manufacturer. Smooth surface panels have also been used for exterior walls and roofs.

Pax-Panel, 6311 St. John Ave., Kansas City, Mo. 64123.

Old Dog Has New Trick

Communications system called "Pocket Page" can signal a person wherever he might be in a building. The call is placed from internal telephones or intercom stations and the person paged receives a signal on a 2-oz pocket receiver. He can then go to the nearest telephone and dial a reply number that automatically puts him in contact with the caller. Both call and reply can be made without going through a switchboard.

Treasure Point Products Inc., Coloma, Mich.

"I'm Sorry"

The first major design innovation for that drafting room standby—a lead pointer for mechanical pencils—has been introduced by a company that has been manufacturing lead pointers for 16 years. The device is a disposable abrasive cup that twists off cleanly and is replaced with another unit. Adapters are available for the old-style pointers. Tru Point Products Inc., Coloma, Mich.

Tabletop Computer

The compact DAC-512 consists of a computer unit (15" x 15" x 21") and console (12" x 15" x 8") that operate at room temperatures. Low cost is expected to make the computer a feasible budget item for offices that otherwise could not have afforded one. Since the programming language is essentially algebra, most users will be able to program simple statements with little instruction. In addition to the usual add, subtract, multiply, and divide functions, the DAC-512 can learn and recall as many as eight stored programs, each containing up to 64 commands. To check a program, the op-
The Park Towers Senior Citizens Apartment Building owners studied 1) post-tensioned prestressed concrete flat slab; floor slabs constructed by lift-slab method; 2) post-tensioned cast-in-place prestressed concrete slab, conventional construction; 3) conventional reinforced cast-in-place concrete flat slab; and 4) structural steel frame. Estimates ranged from $4.844 per square foot to a low of $4.056 per square foot for scheme 2. Actual construction cost was $4.038/SF.

Architects, engineers, contractors and owners all gained additional benefits from the post-tensioned prestressed concrete design with the Prescon System. Several were: fewer columns; slab deflection eliminated; design excellence; gravity load balanced; material handling and labor reduced.

Write for “Factual Cost Analysis” or contact a Prescon representative to discuss the many advantages when you apply the Prescon System to your projects. The Prescon NEWS reports many different types of structures which used Prescon; write for your copy.
erator may visually examine each coded instruction and its location, step by step, on the display panel. To eliminate programming errors, unlit keys on illuminated keyboard signal that they may not be used at the moment. Data Acquisition Corp., 2980 Whitney Ave., Hamden, Conn. 06518.

In Conference

Wall-mounted walnut cabinet contains a number of devices to assist visual presentations. The equipment includes an adjustable projection screen (52” x 52”), a pull-out easel for flipcharts or large pads of paper, a magnetic chalkboard, fabric-covered-cork panels for displaying literature, and a concealed map case. The two-door cabinet measures 56” x 48” x 61½”. The “Conference Center” is shipped with such accessories as pointer, markers, magnets, and chalk. Oravision Co., Dept. R-3, Box 11150, St. Petersburg, Fla. 33733.

Surfacing

Bombardy Pine

Wood that is impregnated with plastic and then bombarded by gamma rays to “set” or solidify the plastic inside the wood cells, is now on the market—the first publicly available product that is processed by nuclear energy, according to the manufacturer. Polymerizing the plastic inside the wood eliminates the need for further
Concrete disintegrates...

...G-E Silicone Traffic Topping doesn't!

Let it snow and rain.
Let it freeze and thaw.

General Electric's new silicone rubber Traffic Topping protects walkways, ramps, parking areas, porches, swimming pools, balconies and other traffic areas against moisture damage.

Once on, Traffic Topping stops costly maintenance. It won't let water in, yet "breathes" to let any moisture out. Because the base material is silicone rubber, the most durable, weatherproof elastomer known (the same as Silicone Construction Sealant), Traffic Topping stays flexible and moisture proof.

Traffic Topping won't crack, it's not brittle, and it forms a tough bond to concrete, wood, steel and other floorings. It's remarkably skidproof and is not damaged by salt. Grease and oil are easy to remove. It never needs painting.

To date, no other outdoor coating has been able to stand up to weather and wear for very long. Traffic Topping will. For many years. On patios, steps, garages, runways, for instance. Anywhere there's water and traffic. For complete specifications, test results, application data, color selection and local distribution, please write Section Q6201, Silicone Products Dept., General Electric Co., Waterford, N.Y. 12188.

Quick, easy application. Just prime the surface, add catalyst to Traffic Topping, mix and trowel on. No expensive equipment needed. Only one coat is usually required, so application costs are low.

Permanent flexibility. Traffic Topping is resilient... expands and contracts without cracking even at temperatures as high as 300°F, as low as -65°F.

Safe, anti-skid surfaces. Even when wet, Traffic Topping provides superior traction. Excellent wear and abrasion resistance make it ideal for heavy traffic areas.

GENERAL ELECTRIC

On Readers' Service Card, circle No. 463

June 1966
finishing; since the built-in finish extends through the wood, all that is needed is sanding and buffing. A variety of properties can be obtained by different combinations of woods and plastics. Hardness or dimensional stability, for example, can be increased by the choice of wood species and the type and amount of plastic used. Dyes mixed with the plastic make it possible to permeate the wood with an even color. “Novawood” is irradiated yellow pine available in 19" x 19" parquet flooring blocks in a variety of colors. It is also manufactured in a flakeboard, with a marble-like appearance, which comes in 2' x 4' sections suitable for specialty flooring, and in 4' x 8' sections suggested for countertops. It can be easily machined and sanded, and has good bonding characteristics, but cannot be nailed. These new woods resist abrasion so well that the manufacturer recommends them for flooring in freight cars. The American Novawood Corp., 2432 Lakeside Dr., Lynchburg, Va.

On Readers' Service Card, Circle 129

Noyesi Patterns

A Different Angle

Elongated hexagonal tiles are suitable for use on interior walls, countertops and light traffic residential floors. The shape, measuring 6" from point to point and 4½" across, is a new addition to the manufacturer's line and comes in a variety of subtle colors. The Mosaic Tile Co., 55 Public Square, Cleveland, Ohio 44113.

On Readers' Service Card, Circle 130

Cowhide Squares

Top-grain cowhide leather is laminated to aluminum to make bevel-edged tiles, which are available in 8½" squares, 4½" squares and in 4½" x 8½" tiles. Tiles are easily installed with pre-applied adhesive. Six antiqued colors will not fade or bleed when washed with soap and water, says manufacturer. Vikon Tile Corp., Washington, N. J.

On Readers' Service Card, Circle 131

Ins and Outs of Urethane

Urethane material surfaces both interior and exterior walls and floors with seamless terrazzo-like finish. Said to be a new type of resin developed especially for seamless flooring, “Readtex” hardens in a few hours and maintains its high-gloss, resilient surface for the life of the floor. Readeo Industries Inc., 320-324 Ash St., Reading, Mass. 01867.

On Readers' Service Card, Circle 132

Marble/Vinyl Tile

Fine chips of marble embedded in clear vinyl are backed with vinyl asbestos and embossed with a stone pattern that helps to conceal heel and scuff marks. “Roman Stone” tile, 12" x 12" x 5/16" in four colors, is recommended for residential and light traffic commercial uses. Samples available. Azrock Floor Products, P.O. Box 531, San Antonio, Texas 78206.

On Readers' Service Card, Circle 133

Automatic Sliding Entrances

See your nearest Stanley Magic Door Distributor.

ARIZONA
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Stanley Building Projects, Inc.
4816 S. 14th Street
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Fontaine Door Co.
500 27th St.
916-442-1642
San Diego
Ray Agency
1400 Island Ave.
619-233-2151
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Sunny Storage Door Equipment
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303-741-2344
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Newfield Heights, West
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205-422-3800
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Elk Grove Village
Ject Products Company
239 King St.
312-426-2500
Rock Island
Ject Products Company
312 309 Street
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INDIANA
Indianapolis
Ject Products Company
3519 N. E. 6th
317-948-4366
IOWA
Des Moines
The Roland Company
2800 S. W. 11th
515-283-4603
KANSAS
Kansas City
Edison-Leach Company
323 S. 30th Street
816-322-3660
LOUISIANA
New Orleans
A. Wyle McDaniel Co., Inc.
905 S. St. Street
504-683-4000
MARYLAND
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929 Park Ave.
301-549-3011
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The Stanley Sales Company
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MICHIGAN
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3051 Harrison, S. E.
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Royal Oak
Ject Products Company
31270 Dawson Highway
313-470-7882
MINNESOTA
Minneapolis
Pelle Products
972 Washington Street
612-377-6700
MISSOURI
Bridgeport
The E. Peck Co., Inc.
14240 S. Chas. Rock Rd.
314-729-0120
MONTANA
Great Falls
The House of Glass
406-352-1510
NEBRASKA
Omaha
The Nevin Co.
1911 11th, military St.
402-353-6020
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Albuquerque
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505-244-3347
NEW YORK
Buffalo
A. O. Stellwag Co.
83 Grand Avenue
716-835-2751
Rensselaer
Crosby Door Sales
Albany Company, Inc.
815-877-9774
Recheister
The Mueller Co.
25 Richmond St.
518-424-2990
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B. F. Johnson & Son
390 South Sixth St.
203-357-7417
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409-624-1012
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Harry E. Wimbly Co.
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405-521-7417
Tulsa
Harry E. Wimbly Co.
1164 S. Owasso
918-444-214
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Bain Automatic Door, Inc.
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PENNSYLVANIA
Baltimore
Cleveland
Ject Products Company
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Harries &security.
513 N. Cormen St.
717-3-8711
King of Prussia
390 West Church Road
215-241-8106
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Memphis
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423-73-7101
Washburne
John W. Middaugh Co.
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423-73-7101
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Automart Screw Co.
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Grand Prairie
714, 4-1747
Houston
Shelltop Screw Co., Inc.
715, 4-2457
Salt Lake City
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801-3-7304
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1511 60th Ave.
773-227-4841
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Salt Lake City
1500 South 150 East,
801-4-7202
Virginia
Richmond
1150 South 25th Street
203-326-4708
WASHINGTO NT
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June 1966
Who is moving two-way traffic most efficiently through doorways?

Stanley is.

With automatic entrances like this.

You can eliminate doorway traffic jams by design! Get information on Stanley automatic sliding entrances. Write us for Folder No. M67-COM. Look us up in Sweet's. Or check under "Door Operating Devices" in the Yellow Pages. Stanley offers a complete line of famous MAGIC-DOOR® operators (pneumatic, hydraulic, electric), controls and accessories for doors that swing, slide or fold. Stanley Door Operating Equipment, Division of The Stanley Works, New Britain, Connecticut.

CONSULT YOUR NEAREST MAGIC-DOOR DISTRIBUTOR LISTED AT LEFT

On Readers' Service Card, circle No. 447
Acoustics
Sound Materials

Sound control in industrial, institutional, and testing environments is discussed in a brochure that also includes sound doors, custom-fabricated enclosures, and silencers for machinery. Two steel panel types are available: a 4"-thick flat-surface panel for noisy factory testing areas; and a corrugated panel with 2" acoustic insulation for swimming pools, gymnasiums, airport concourses and general factory application. Fiberglass anechoic wedges (shown) are said to provide 99% echo-free chambers for acoustic research from 50 to 400 cps. Accessories available for integrated installations. Construction details, sizes, sound absorption coefficients, and photos, 4 pages. The Eckel Corp., 155 Fawcett St., Cambridge, Mass. 02138.

The Fabric of Construction

Manual designed to aid the draftsman and detailer to prepare details and layouts for welded wire fabric in reinforced concrete construction is generously illustrated with dimensioned drawings. Divided into an introduction and six sections, the book includes building code information, descriptive text, detailed examples with drawings, methods of computing weight of welded wire fabric, and an area and weight table. Spiral bound, 64 pages. United States Steel Corp., Rm. 8782, 525 William Penn Place, Pittsburgh, Pa. 15230.

Pick a Patio

A group of attractive wooden sun decks and patios are enticingly photographed in color. Grooved and solid flooring, openwork fences and latticed sunshades, space-dividing platforms, etc. 8 pages. Western Wood Products Assn., Yeon Bldg., Portland, Ore. 97204.

Louverly Façades

Construction details and photos illustrate actual installations of exterior louvers on three large buildings. Both grilles and louvers of extruded aluminum with anodized finishes are available for interior and exterior application. A packaged “Spandrelouvre” unit is described and detailed, and cross-sections of five standard styles are shown. Custom work is also available. Finishes, sizes, specifications. 8 pages. Bohn Aluminum & Brass Co., 1400 Lafayette Bldg., Detroit, Mich. 48226.

Redwood, Inside and Out

Sample specifications for redwood siding and interiors are supplemented with siding profiles for tongue and groove, shiplap, and bevel siding; nailing diagram; paneling patterns; grades, properties, and lumber sizes. 8 pages. California Redwood Assn., 617 Montgomery St., San Francisco, Calif. 94111.

Bar, Beam and Channel

Booklet gives section tables for H piles, and lists size and weight of available standard structural sections. A section of high-strength steels briefly compares the properties of 10 types, and tabulates more fully their chemical and physical properties and specifications. 16 pages. Inland Steel Co., Dept. SPC, 30 W. Monroe St., Chicago, Ill. 60603.

Reynolds Wraps

Booklet describes aluminum siding, roofing, and decking with size-weight-cost charts, drawings, load-span tables, “U” value charts, details, application instructions, and suggested specs. Single sheets, insulated panels, and corrugated acoustical ceiling panels are covered. There is a section on the “Concealed Clip Panel,” and on “Colorweld,” a completely automatic enameling process. This process assures the uniformity of eight color finishes. 24 pages. Reynolds Metals Co., Building Products & Supply Div., Park Ridge, Ill. 60068.

Precasting Techniques

A seven-section booklet on precast concrete panels describes procedures for precasting—both by specific example and by general discussion. There are several chapters on horizontally precast exposed-aggregate panels that are either chemically retarded, sandblasted, bushhammered, or polished. One recently developed technique allows bonding of an unhydrated asbestos-cement sheet to the face of a concrete panel to make a smooth, dense surface. Text gives frequency and amplitude of vibrating tables, depth of chemical retarder, thickness of panels, curing and vibrating times, sandblasting techniques, etc. A section on form liners shows patterned effects achieved by this method of forming. Other sections describe sand-bedding.
768 REASONS TO SPECIFY THE NEW VENTED PHOTOMETRIC

The first vented wrap around plastic refractor gives you 768 sound reasons to specify Wakefield’s new Vented Photometric luminaire. 768 small, square louvers the length of the lens allow air to circulate freely throughout the unit, decreasing operating temperature, lengthening ballast and lamp life, and increasing efficiency almost 10 percent. Available in either styrene or acrylic, this slim, handsome, injection molded refractor offers the same brightness level and strength as the popular solid Photometric refractor, while actually increasing light output. Available in standard 2-lamp 4-ft. and 2-lamp 8-ft. tandem fixtures, this super-efficient vented refractor is interchangeable with solid refractors on present Wakefield Photometric luminaires. It features the same easy lift-slide-remove features with no latches or catches. Ask your Wakefield Representative or write for complete information on the new Vented Photometric... the only unit better than the Photometric.

ITT WAKEFIELD LIGHTING DIVISION WAKEFIELD CORPORATION P.O. Box 195, Vermilion, Ohio 44089 A SUBSIDIARY OF INTERNATIONAL TELEPHONE AND TELEGRAPH CORPORATION

On Readers’ Service Card, circle No. 426
Lucite for Lighting

Ceiling, street, and exterior lighting illustrate brochure containing technical and semi-technical information on Lucite acrylic resins and Lucite acrylic monomers. Included are sections on properties, processing and fabrication, colorability, and building codes. A comprehensive properties chart and several pages of graphs compare Lucite with other materials under various exposure tests. 28 pages. E. I. du Pont de Nemours & Co. (Inc.), Plastics Dept., Wilmington, Del. 19898.

On Readers' Service Card, Circle 209

Sprightly Lighting

Catalogue, "Contemporary Lighting by Heifetz," collects information on all of AVAKOL Polysulfide SEALANT, curtain wall grade, was selected because of

- Specification Compliance
- Compounded for Severe Joint Dimensions
- Superior Application Properties
- Matched Colors

Many, many buildings are better today because they are protected with AVAKOL... How about using AVAKOL on your present and your next prestige building!

For full information, write: AVADAN CORPORATION 29 EAST CENTRE ST. NUTLEY, N.J. 07110

On Readers' Service Card, circle No. 470

June 1966
Now—from the Clark Door Man

**Even at high speed, fork trucks don't scare the Clark Shock Absorber Door**

Ordinary double-acting doors quake at the sight of a fork lift bearing down on them ... but not the Clark Shock Absorber Door. That's because fork lift trucks and pallets never touch the door itself.

URETHANE foam cushions behind steel bumper plates take up the entire impact. Impact stress is then equally distributed along the unique, full-length hinges on either side of the door. A spring return at the door top assures tight, accurate closure after each opening.

The Clark Shock Absorber Door comes in one complete, **easy to install, easy to specify** unit! No extra parts or hardware to buy. The initial cost is the complete cost.

A special honeycomb core inside the door and the lightweight aluminum exterior provide insulation against temperature and noise. Neoprene seals on all edges assure tight, positive, draft-free closure. Tempered glass windows in each door panel permit full view, prevent accidents.

The Clark Shock Absorber Door permits hundreds of thousands of punishing openings and closings, year after year with no "time out" for costly repairs. There's nothing to tear, No pivots to wear. No spring hinges to replace.

**FREE 12 page Catalog shows this door, plus a wide variety of automatic and manual industrial doors.** Write or call for your copy today!

**CLARK IDOOR**

69 Myrtle Street, Dept. P-6
Cranford, New Jersey
Tel. (201) 272-5100
If you think this mirror is just a mirror, look at it from the other side.

It's Mirropane®, the "see-thru" mirror. In the brighter room, it acts as a mirror. In the darker adjacent room, it acts as a window.

Here, in a special classroom at the State University of New York's College at Cortland, you see college students observing elementary classes in action, without being a distraction.

Get all the facts on Mirropane. (It's now available in Parallel-O-Grey® plate glass to work satisfactorily with only a 2-to-1 difference in illumination.) Phone your L·O·F glass distributor, listed under "Glass" in the Yellow Pages, or write:

LIBERTY MIRROR
A DIVISION OF LIBBEY-OWENS-FORD GLASS COMPANY
8266 L·O·F Building, Toledo, Ohio 43624

On Readers' Service Card, circle No. 372
Essential Extras II
Catalogue shows a host of well-designed floor and wall-mounted ash trays, including the pyrex sand urn. Others of steel and aluminum in many finishes. Good-looking umbrella stands, waste baskets, and coat racks and trees. 32 pages. Loudac Supply Corp., 327 E. 103rd St., New York, N.Y. 10029.
On Readers' Service Card, Circle 216

Frame-Up
Catalogue shows Hugh Acton's forthright "I-Frame System," which ranges from desks, side pieces, tables and seating (torsion spring and conference chairs) to wardrobes, check stands for banks, lecterns and library furniture. All frames of mirror-chrome-plated solid steel; units in variety of woods or optional laminate tops. Photos accompanied by clearly charted descriptions, measurements and illustrations. 40 pages. Hugh Acton, 420 East Ten Mile Rd., Pleasant Ridge, Mich.
On Readers' Service Card, Circle 218

Vertical Venetian Blinds
Adjustable vertical louvers for interiors may be fixed or traversing. Louvers are attached top and bottom in extruded aluminum channels, or are

FROM WEBSTER: all the advantages of a custom installation with standard components

Telecom® private dial systems can be tailored to your client’s specifications, whether he needs 2 phones or 500. Or more. And if there’s a need for dictation service, automatic code call, conference circuit, area paging, hands-free speaker phones—you can provide it with Telecom.

But we’re not talking about an expensive custom installation as such. It’s all done with standard Telecom modules that fit in, adapt or modify the system as required. No need to compromise—tell your Webster representative what your specifications call for and he can plan it in.

Webster Telecom offers more than component versatility. It assures exceptional dependability because it’s American made...built to the same high standards as your utility phone. All-automatic switchboards, for example, have solid state circuits. There are fewer moving parts—diode circuitry replaces line and line cutoff relays for trouble-free operation.

Talk to your local Webster Electric distributor—he can offer you expert planning counsel and installation. Or, write direct.
Free—portfolio of case history reports covering large and small installations. Illustrates and describes intercommunication problems solved with modern Webster equipment.

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PRIVATE DIAL TELEPHONE • LOUD-SPEAKING INTERCOM • SOUND & PAGING SYSTEMS • TEACHING LABORATORIES

On Readers' Service Card, circle No. 427
vertical section through an hourglass, are joined under seat. The result, according to manufacturer, is "strength engineered to increase under stress." 4 pages. Thonet Industries, Inc., 1 Park Ave., New York, N.Y. 10016

**On Readers' Service Card, Circle 220**

**Mirror, Mirror Anywhere**

Mirror manufacturers have published a brochure to illustrate imaginative use of mirrors in interior design. Some examples: a transparent mirror hiding a TV set; when turned on, the picture is visible through the mirror; when off, only the mirror can be seen; mirrors camouflaging a structural column, warming a sun deck, making an elevator look larger. Includes mirror terminology, proper installation procedures. 25 pages. National Association of Mirror Manufacturers, 807 Jefferson Building, 1225 Nineteenth St., N.W., Washington, D.C. 20036.

**On Readers' Service Card, Circle 221**

**Insulation Series**

A group of five bulletins on plastic insulation and flashing describes: (1) Styrofoam and Dorvon rigid insulation; (2) Styrofoam rigid insulation for built-up roofing; (3) insulation for cold-storage areas, including a prefab panel system; (4) insulations for low-temperature pipes; (5) plastic flashing and waterproofing membranes made from "Sara-loy," a new plastic. Tables, graphs, construction details, specs, design and engineering data, and installation instructions. The Dow Chemical Co., 433 Bldg., Midland, Mich. 48640.

**On Readers' Service Card, Circle 222**

**Sanitation/Plumbing**

**Where's the Soap?**

Catalog illustrates many types of soap dispensers and washroom accessories with photos, dimension drawings, and brief specs. American Dispenser Co., Inc., 860 Broadway, New York, N.Y. 10003.

**On Readers' Service Card, Circle 223**

**Patio Pots**

Hand-molded planters in a variety of shapes and sizes are suitable for interior or exterior use. These asbestos cement pots are finished in 20 factory-applied matte colors or in natural grey, the 24 styles include a shallow dish shape, cones, tubs, hourglass and hexagonal shapes. "Patio Pots" are guaranteed not to crack or chip from frost if drilled for proper drainage. Pamphlet shows pro-

**A new line of rubber stamps is now available for the architectural draftsman. Trees, shrubs, people, cars, buses, trucks, planes, birds, nomenclature and arrows are made in scales from 3" to 1/16". Stamps are fabricated in both plan and elevation from over 600 different illustrations. For information circle reader service card number or write to:**

**Stamp-Out Drafting**

**Instant landscape ®**

520 Capitol Mall, Sacramento, Calif.

**On Readers' Service Card, circle No. 466**
NOW...a handy PULLDOWN SHELF

for restroom booths

A safe place for purses, gloves, packages, hats, coats, and briefcases. Attractively designed...quality built...self-clearing. Easily installed with just 2 bolts. A plus-factor in any building with public restroom facilities.

$12.50 F.O.B. Indianapolis Finished in lustrous chrome

Send for free specifications, price list and installation instructions.

The NIK-O-LOK Company
422 East New York Street
Indianapolis, Indiana 46202

On Readers' Service Card, circle No. 388

REINHOLD

INDISPENSABLE

DESIGN WITH GLASS
by John Peter, John Peter Associates, New York City
1965 160 pages $12.00

DESIGN WITH GLASS is the first book in Reinhold's new "Materials in Modern Architecture" Series. These books are being created specifically to show the design potentials of wood, steel, concrete, glass, plastics, and clay products in modern architecture. The aim of each volume is to give insight into the materials that lie behind the surface design. This new series will provide in photographic reproduction the imaginative and inspirational uses of materials by modern masters from all over the world. Careful architectural drawings will reveal the great details of our times. These will combine the beautiful with the practical in a unique and unsurpassed structural idea series on modern architecture.

Available at your bookstore or write Dept. M-278
REINHOLD BOOK DIVISION,
430 Park Avenue, New York, N.Y. 10022

On Readers' Service Card, circle No. 476

Double-radius-ends—design flexibility with Therm-O-Proof insulating glass.

These 54 double-radius-end units are another way Therm-O-Proof insulating glass is made more ways to fit more ideas. (Plus, all standard sizes.) But Therm-O-Proof units provide economical benefits as well as beauty. The prime reason insulating glass was specified for this building was to reduce heat loss and cooling load. For maximum range in aesthetics, plus savings and prompt service, include Therm-O-Proof insulating glass in your specifications. Every Therm-O-Proof unit is backed by a 10 year warranty.

Thermoproof Glass Company
4815 Cabot Avenue
Detroit, Michigan 48210
Subsidiary of Shatterproof Glass Corp.
44 years of glass experience

On Readers' Service Card, circle No. 421
TERRAFINO is the original 12"x12"x3/16" flexible tile with real #1 and #2 marble chips permanently bedded in a tough epoxy plastic matrix. The TERRAFINO floor pictured above (Calico Kitchen Restaurant, Cheltenham, Pa.) is a typical example of the benefits to be derived from this modern way to install terrazzo.

TERRAFINO SAVES TIME
It is rapidly installed in the same manner as resilient tile—with a troweled mastic. This terrazzo floor can be installed and ready for traffic in one working day!

TERRAFINO SAVES MONEY
In addition to the savings involved in cutting a week or more off conventional terrazzo installations, TERRAFINO saves money two other important ways:

1. It usually costs less than conventionally placed terrazzo.
2. It maintains like terrazzo—for far less than resilient tile.

WIDENS DECORATIVE SCOPE OF TERRAZZO
TERRAFINO can be used with conventional vinyl feature stripping for many practical and decorative effects.

Learn more about how TERRAFINO flexible terrazzo tiles may solve your flooring problems. Send coupon for samples, descriptive literature and specifications to:

TERRAFINO COMPANY, P.O. BOX 52, CARLSTADT, NEW JERSEY
Want the most from electric heat? Consider Styrofoam.

That's because an installation system using Styrofoam® brand insulation board doesn't make demands on floor space the way other insulations do. The combination of properties offered by Styrofoam makes it unusually effective. So much so that you get more permanent insulation value per square inch, and get a maximum of usable floor space, too.

How else is Styrofoam good for electric heat? Once in, Styrofoam is in for good because it doesn't rot, mold, or deteriorate. It needs no vapor barrier. It's flame retardant. And is lightweight and easy to install.

Where does Styrofoam insulation go? Just about anywhere. Over walls of unit masonry or poured concrete, as form liners for conventional concrete, in foundations and slabs. And it makes an excellent base for gypsum wallboard, wood paneling or plaster.

Have we almost made a sale? Then to clinch it, write us or consult Sweet's Architectural File 10a/Do. The Dow Chemical Company, Plastics Sales Department, Midland, Michigan 48640.

Styrofoam is Dow's registered trademark for expanded polystyrene produced by an exclusive manufacturing process. Accept no substitutes... look for this trademark on all Styrofoam brand insulation board.

(It's the least you can do.)

On Readers' Service Card, circle No. 342
with reference desk or as a separate unit. Catalog includes many models in wood and metal plus systems for filing drawings. 34 pages. Hamilton Mfg. Co., Two Rivers, Wis. On Readers' Service Card, Circle 229

**A Colored Sink In Every Kitchen**

Attractive full-color brochure illustrates single- and double-compartment colored sinks from Peachblow (pastel) to Blueberry (deep). Brochure gives sizes and describes fittings, 20 pages. Kohler Co., Kohler, Wis. On Readers' Service Card, Circle 228

**Roll Out the Grille**

Rolling grilles protect store fronts, parking garage entrances, ticket windows, etc., when buildings are not in use. Hand or electric operated grilles, custom-built for any opening, are available in three patterns fabricated from steel, aluminum, or stainless steel. Photos, installation details, and short specs are included with a discussion of operation and accessories. 8 pages. The Kinnear Mfg. Co. & Subsidiaries, Columbus, Ohio 43216. On Readers' Service Card, Circle 229

**Surfacing**

**Wood “Wallpaper”**

Wood veneer wallcoverings are 1/85” thick, bonded to fabric backing. Some 50 woods are available in book- and end-matched sheets for grain continuity on the wall. Sheets, 18” to 24” wide and 8’ to 12’ long, are said to be easily applied and very flexible with a flame-spread rating of 5. Brochure includes specifications, list of woods, and samples of 13 woods including walnut, English oak, teak, and Brazilian rosewood. 4 pages. Modern-cote, Inc., 1717 “I” Ave., New Castle, Ind. 47362. On Readers' Service Card, Circle 230

**Paper Laminates Stop Condensation**

Leaflets describe two kraft paper vapor barriers that can be bonded to a roof deck with asphalt. Manufacturer recommends “Vaporstop 710,” kraft laminated to a plastic adhesive, for simple, low-cost installation on concrete, wood, or gypsum decks. Noncombustible “Pyro-Kure 600,” also a paper laminate, can be applied over metal decks, and is said to give three times the protection of plastic films. Leaflets contain brief specs and application instructions; samples available. Sisalkraft Div., St. Regis Paper Co., At- pleboro, Mass. On Readers' Service Card, Circle 231

**Paneled Walls**

Hardboard paneling in a number of grain patterns, and color stains from a deep brown “Mount Vernon Cherry” to light gray “Glacier Walnut,” is available in grooved boards and random widths. Filigreed panels, pegboard panels, and moldings are also shown in pamphlet containing construction details, charts of properties, and color photos. 20 pages. Masonite Corp., Masonite Bldg., 29 N. Wacker Dr., Chicago, Ill. 60606. On Readers' Service Card, Circle 232

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June 1966
NEXT MONTH IN P/A

For readers with fun on their minds: two swimming pools and two recreation club buildings—good hammock reading. For readers mulling over the eternal question: "The Architect's Toughest Problem," by Robert H. Mutrux, a humorous inquiry into how to select the right client. For the reader concerned with getting well soon: a report on why hospital rooms are so dreary and what can be done about it. For readers asking, "Why don't they do it like in the old days"; A Forrest Wilson look at "What Happened to the Art in Artisan?" And for readers interested, as all P/A readers usually are, in good architecture and how it is put together: a fine TAC school, a magnificent space in a Boston student center by Shepley, Bulfinch, Richardson & Abbott, and technical studies on computer design, concrete platforms, load-bearing aluminum, and suspended structures. Plus, as always, the latest happenings in P/A News Report and the opinionated views of P/A Observer.

All you have to do to be rewarded with this issue and 11 more is to fill in—and send in—the "Subscriptions" part of the Readers' Service Card bound in this issue (see Contents page for location). Do it; it won't hurt you; we think you'll even like it!
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CELLON-treated wood protects
Atlanta's new stadium seats

Stadium designers have long faced a dilemma about seats. When they used materials for seating that did not require great maintenance, the seats got too hot under the summer sun, and were too cold during winter events. The natural insulating property of wood makes it the best material for comfort, and now a new process developed by Koppers permanently protects the wood from rot, decay and termites.

All 56,990 wood seats here in the brand-new Atlanta Stadium have the permanent protection of CELLON® treatment. A preservative—pentachlorophenol—is carried deep into the wood fibers by liquid petroleum gas under high pressure. When the pressure is released, the gas vaporizes, leaving the wood clean, odorless, non-toxic, and non-corrosive. You can paint CELLON-treated wood, but you don't have to. The Atlanta seats were protected with two coats of air-dry enamel, in four shades of blue which color-code the stadium.

Though any type of wood can be CELLON-treated, the Atlanta Stadium seats are made of elm. Anodized aluminum bolts attach the seats to cast iron risers.

CELLON-treated wood is now being used for marinas, roof decks, outdoor light standards and transmission poles; consider it wherever you need the economy and advantages of wood construction, plus permanent protection. Check the coupon for more facts about CELLON-treated wood.
No high-rise building ever had better waterproofing, roofing, or sound conditioning

The total planning of the new 31-story Civic Center—Chicago's highest building—well illustrates the current need in urban design: almost half of the three-acre site is used for an open-air plaza. The architects feel that the plaza breaks up the mass of concrete and bricks, and provides a space for rallies, concerts and art exhibits. The same concern for open space was given to protection. The plaza, with its pool and planter boxes, the below-ground offices and service areas, and the building's roof were all protected with Koppers coal tar pitch.

About 210,000 square feet of 5-ply coal tar pitch built-up waterproofing (see detail drawing) were used to protect the plaza, air conditioning equipment rooms on the 9th and 31st floors, and between the trucking concourse area and ramps. The roof is protected with 50,000 square feet of 4-ply coal tar pitch built-up roofing (Koppers specification #5). The coal tar membrane was topped with a pouring of hot pitch and 400 pounds of gravel per 100 square feet.

Koppers also silenced the Civic Center's huge air conditioning duct system, consisting of five centrifugal refrigeration machines, 17 high-pressure main systems, and 18 package-type reheat systems. This cooling system has a total capacity of 1,800,000 cubic feet of air per minute. To destroy all duct noise, 962 AIRCOUSTAT® sound traps made by Koppers were installed.

For more information on coal tar pitch built-up waterproofing and roofing, and AIRCOUSTAT sound traps, check the coupon.
They saved six months’ construction time on this 3,500,000 cubic foot refrigerated warehouse

It’s the March Cold Storage Warehouse in Indianapolis, and there are three excellent design ideas with Koppers building products incorporated in it. 1. It has structural beams and columns of UNIT®-laminated wood instead of metal or concrete. 2. The walls, roof and dock area are load-bearing Koppers building panels. 3. A Koppers coal tar pitch roof tops it off.

Laminated wood structural beams had a better delivery time than metal. Bays were designed in approximately 40’ x 40’ modules, for efficient warehousing. The main beams stretch 80 feet in length, over three columns. In areas of high humidity, the columns were WOLMANIZED® a pressure treatment that protects the wood from fungi, decay and termites. All structural members were glue-laminated with waterproof adhesives.

The Koppers building panels were delivered to the job site ready to be erected. The wall panels are 22’ high, 4’ wide, and 6” thick, with an insulating core of DYLITE® foam plastic, and interior and exterior facings of aluminum-clad plywood. The roof panels, with the same facings and insulating core, are 24’ long, 4’ wide, and 8” thick. Because these panels are load-bearing, they eliminated much of the need for structural support members and also simplified foundation requirements. Most of the six months saved in construction time was realized in the erection of the walls and roof. The panels were simply hoisted into place and joined together by their built-in locking devices. The water-resistant foam plastic insulation provides a k factor of 0.24 at 40°F. mean temperature.

A total of 1,484 squares of coal tar roofing was applied over the panel roof system. The 4-ply built-up roof was installed according to Koppers specification #314.

Koppers can provide the materials, and lend design assistance, for complete refrigerated facilities, from single cold storage rooms to giant warehouses, clean rooms for industry. Check the coupon for further facts on Koppers laminated wood, building panels, and coal tar pitch built-up roofs.
It's been 7 years between paint jobs at this Las Vegas pool

The concrete swimming pool at The Riviera Hotel in Las Vegas was first painted in 1956, with RAMUC® Undercoater and one coat of RAMUC Enamel Type A, a chlorinated natural rubber-base coating system. Beyond that, nothing more than a touch-up every other year was required to maintain a clean, attractive appearance at the steps and shallow end of the pool. The first repainting, one coat of RAMUC Enamel, was applied seven years later, in 1963.

Every pool material—concrete, plaster-finish, metal, fiber glass—needs a different type of paint; and INERTOL® makes them all: rubber-base, epoxy, vinyl, and more. File this chart for details on concrete pools. For more information or specifications, check the coupon.

<table>
<thead>
<tr>
<th>Concrete Pools*</th>
<th>Coats</th>
<th>RAMUC Types</th>
<th>Coverage **</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unpainted or sandblasted</td>
<td>1</td>
<td>Undercoater A (chlorinated natural rubber-base)</td>
<td>200</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>Enamel A (chlorinated natural rubber-base)</td>
<td>250</td>
</tr>
<tr>
<td>Painted with: Rubber- or oil-base</td>
<td>1</td>
<td>Enamel A (chlorinated natural rubber-base)</td>
<td>250</td>
</tr>
<tr>
<td>Vinyl-base</td>
<td>1</td>
<td>Enamel AV (vinyl-base)</td>
<td>250</td>
</tr>
<tr>
<td>Epoxy-base</td>
<td>1</td>
<td>Enamel EP (epoxy-base)</td>
<td>450</td>
</tr>
</tbody>
</table>

*If your pool is constructed of a material other than concrete, we'll furnish specific information without charge.
**In square feet per U. S. gallon. If a lighter color is used for repainting, two coats may be needed.
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Light Beams Properties for Designing

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“The big news about architecture and urbanism today is not what Edmund Bacon proposes, what Paul Rudolph builds, nor what new urban design theories are advanced by van Moltke, Lynch, Maki, or Crane. The real news is the massive restlessness of the students and recent graduates of our design schools, their lack of commitment to any single doctrine, and their frustration with a profession which is not centrally involved in the great issues of our times.”

DAVID A. CRANE
Help Beautify Junk Yards

THROW SOMETHING LOVELY AWAY TODAY
EDITORIAL

We are puzzled, because after being told that an architect is a generalist capable of offering unlimited services in a multitude of disciplines—ranging all the way from profound expertise in finding money to ritualistic mysteries of picking colors—we are now supposed to convince ourselves, and the world, that this time we are hip warriors charging at environmental windmills in defence of the pale princess (called Beauty) so that the wicked prince (named Ugliness) should not destroy her loveliness. Thus, with the AIA lance in hand, we don the old beret and shout: “No Time for Ugliness! Federal Appropriations Are Available! And So Are We, at Recommended Fees!”

War, today, is an ugly word. Military romanticism began to disappear long ago, in the machine age, and is quite dead in the electronic age. Just as dead is the old vocabulary. Honor, patriotism, and other traditional concepts of right and wrong have little significance to a generation brought up under a mushroom-shaped cloud. For most of us, the values are changing, the focus is shifting, and the meaning of meaning becomes a question mark that one desperately wants to straighten out into an exclamation point.

We find aims no longer simple, or even clearly definable, because life is no longer simple. There is a complexity to everything in our civilization, including the complexity of the concepts of beauty and ugliness. Since we have no commonly accepted academy (understood and approved by a significant majority), our aesthetic standards are difficult, if not impossible, to define. And, in any case, beauty and ugliness, like love and hate, can overlap, supplement, annihilate, and sometimes even nurture each other.

To go to war is bad enough, but to war against outdated ghosts is even worse. If we are not careful, we might end up all alone, in a little War Room, like so many Colonel Blimps, playing cute games of crusading knights hitting windmills of history that vanished long ago.

The future, it would seem, belongs to those who solve problems rather than to those who complain about what others are doing; to those who lead because they are leaders rather than those who would like to lead because they think it is their due; to those who build because they know what to build and how to build rather than to those who merely would like to build.

Hence this issue of P/A is devoted to our version of the War on Ugliness. It is sort of war within a war, a little warlet of our own. Even this month’s garish color on the cover raises the question of ugliness (is it beautiful or is it ugly?), and the drawing attempts to convey not only the contemporary interdependence of man to man, but also the interdependence of all actions—the cause that becomes the effect that becomes the cause again.

Which is really our theme: an analysis of cause and effect, of why things are the way they are. Surely, without an understanding of the forces that shape our environment, all the talk about improving it is, and will remain, merely useless talk.

Jan C. Rowan
THE WAR ON UGLINESS: P/A’s VERSION
In this issue of P/A, we hope to focus the readers' attention on some of the forces that so strongly affect the ultimate result of an architect's work — those unseen yet powerful nonarchitectural shapers of our environment.

"There will be no distinction between beauty and ugliness."

It has been often said, at innumerous conferences, that we can easily cure our environmental ills if only architects were given more free reign, because architects are experts at making pretty things that work well. This was the theme of the AIA's War on Ugliness when it started.

Similar sentiments were expressed at the many Governmental conferences on "beauty" that took place in recent months. We were told that happiness is the planting of daisies within our urban messes and pushing the billboards a few feet further away.

P/A believes that such cosmetics do not solve anything; they merely hide the true face behind a mask of decorative artistry.

A war on environmental ugliness must be waged on the sources of ugliness, if it is to mean anything at all — sources which are deeply rooted in our existing values and attitudes, in our whole way of life.

 Architects obviously cannot change the world by themselves. They are not supermen and never will be. Nor do they have dictatorial powers. Architects are basically servants of society and can only make a little better or a little worse whatever society asks them to do. This is the way the American system works, and, as long as we remain an approximation of a laissez-faire democracy, this is the way it will always be.

For instance, how much influence can an architect have in the design of housing? An isolated masterpiece here and there does not invalidate the fact that the design of a vast percentage of our housing is ruled by land speculation, depreciation laws, fiscal ideas of bankers, the automobile and petroleum industries, trade unions, bureaucrats in city halls, and a host of other people and interests. This is where the real design takes place, the visions are created, the concepts are established— the vision of the automobile industry of three cars in every garage, the concept of a minimum 30-ft setback of the zoning lawyers, the drive of the plasterers to keep everybody plastered, the push of investors to maximize return on their investments.

So we must stop saying that all is well as long as architects get more power and more commissions; instead, we should start saying that all is wrong as long as we refuse to face the basic issues of today.

These issues are many; they range from a general questioning of our national effort to those more directly related to environmental goals. For example: Can we continue spending more than half of our taxes on armaments and space exploration while attempting to build a Great Society on earth? Do we really want an economy whose success depends on overproduction and obsolescence? In an urbanized society, can land remain in private ownership? How long can we put up with our present uncoordinated and disorganized methods of transportation? Can we tolerate our present concepts of land use (including freedom to mutilate), air rights (including air pollution), water rights (including water pollution)? Can we continue all the prerogatives of local governments affecting building codes and labor laws?

It is answers to questions such as these that will determine our future environment. The billboards, overhead wires, and ugly buildings are only a small part of the larger problem, a symptom of the disease and not the disease itself.

In the last few months, Morris Ketchum, Jr., the outgoing President of the Institute, tried to swing the course of the "war" along the lines suggested. This move P/A applauds and hopes it will be strengthened by Mr. Ketchum's successors. Surely it is high time we pulled at the roots instead of merely picking the leaves. Architects can make an important contribution to society by waking it up to the complexity of environmental problems and to the great need for the creation of truly meaningful environmental goals. This way, architects can be instrumental in helping to create a civilization in which they can find their proper place—a civilization that will need us.—JCR
To begin, we present a tongue-in-cheek essay that touches on some of the problems one has to think about as one ponders our environmental plight. Perhaps

UGLINESS

MAKES AMERICA GREAT
Diligent 20th-Century exploitation of our 18th-Century constitutional freedoms has rewarded us with our present richness of smog, pollution, and contamination. We have made the simple wisdom of our forefathers pay off in our wealth of common sense.

Our freedom of speech is enjoyed the most by those who can talk the loudest, the longest, and buy the biggest billboards. Radio and television are our most valuable expressions of free speech, since time bought commercially can be calculated by the second. In a society where money talks, everybody listens, "PUT YOUR MONEY WHERE YOUR MOUTH IS."

Individual enjoyment of life, liberty, and the pursuit of happiness allows the suburbanite to burn his autumn leaves in equal freedom with the chemical factories' privilege of poisoning the air. It permits the child to muddy the stream and the industrial park to contaminate its waters for hundreds of miles. We have the freedom to enjoy life or to defile it essential natural elements, depending on which side of the coin is up, "WE ARE NOT IN BUSINESS FOR OUR HEALTH."

In the game of opulent freedom, we enjoy the liberty of choosing one of countless identical homes for our castle, and, although we may be rooked by the developer as a pawn of the bank whose interest it is to charge 6 per cent, our freedom of choice is to select the door knocker, "DON'T KNOCK PROGRESS."

The freedom of choice of the utility company decrees an overhead polarity heavily wired for profit. The line of power is that exposed wiring may be ugly but to bury profit is uglier. Subsurface wiring is a subversive underground current. "THE POWER OF POSITIVE THINKING."

Although it has been discovered that happiness cannot be bought, it is generally agreed that the two terms are otherwise interchangeable. We have converted consumption into a religious and patriotic duty. The sales volume on our religious holidays escalates from the modest purchases of St. Valentine's Day to the buying orgies of Christmas. Our national days of memorial are bargain day riots with Fourth of July sales and mark-down armistices. The nonconsumer is a man without religion or patriotism, "WE HAVE FAITH IN OUR ECONOMY."

In our pursuit of happiness, we have developed the tempos of consumption into an obsolescent science. Our faith in pursuit for disposal is the mainspring of our philosophy of prosperity and the cornerstone of our economy. It covers our country with junkyards and the world with our armaments. Foreign policy is determined by the ideals of obsolescence: when the missile hits its target, both become obsolete. "WE GET A BANG OUT OF PROSPERITY."

We cannot profitably gain by a war on ugliness, not with all of the money in the country. There is little interest in such a project—certainly not enough to bank on. ARE WE GOING TO KILL THE GOOSE THAT LAYED THE GOLDEN EGG? LET THE PROPOUNDERS OF A WAR ON UGLINESS PUT THEIR MONEY WHERE THEIR MOUTH IS. IF THEY'RE SO SMART, WHY AIN'T THEY RICH?

It is these people who do not have the common sense to see that it is uneconomic to impede costly industry when people are free. If the major human accomplishment of the industrialization of our freedoms has been to create an inhuman environment, we must either transform our industry or people. Since it is unlikely that industry will be transformed, we therefore present some modest proposals for the redesign of man.

Ugliness Makes America Great 143
Historically, man has been the supreme adapter:
• as the weakest, when the dinosaur was top lizard, man was a shrew
• as the slowest, the saber-toothed tiger made a monkey out of man
• as the not-overly bright (it is not demonstrably true that man is not dumber than the dolphin), man became the king of beasts.

Since he is not as strong, and not as fast, and not as smart, how did man emerge as prime primate of the vertebrates? His magic ingredient has always been his environmental ability to maintain his plausibility.

From the cool fish that found there was no wave of the future, to the smart monkey that decided progress was not entailed, man has always adapted as his surroundings demanded. “Survival of the fittest” is the game at which he has always been the most proficient. As man the malleable, his docile ductility has stretched and bent as other evolutionary contenders came and went.

Yet man has yet to secure his position as top evolutionary dog even though he has eliminated nature, which so many times has almost eliminated him. There remains his most difficult adjustment. He must redesign himself to adjust to the environment he has designed.
Abreast of Evolution

The evolutionary implication in the universal weaning of man's young from the mammary gland to the bottle has titillated scientists, who are eagerly keeping abreast of developments.

They have observed that when the natural nursing apparatus falls out of use as a tastefully designed food container, it does not degenerate to the status of the vermiform appendix but instead develops into a physical asset. This is the first positive change in human physiognomy in the ten thousand years of man's history.

The apparatus provides a well-placed bumping attachment in a region unrestrained by seat belts and also acts as a built-in bar bell, allowing the miss or matron to keep physically fit merely by the act of tying her shoes. Some observers feel that they have detected the development of an auxiliary breathing apparatus or natural smog filter ripening in this area. However, it is generally felt that this research has been poorly handled and lacks adequate laboratory verification.

It is unfortunate that Hollywood obscures scientific research by its continued and opportunistic exploitation of the breast as a sex symbol. Nothing could be further from the truth. This was demonstrated ably in the paper presented by Dr. A. Busting in April of this year. His researches show that children suckled on glass and plastic containers tend to transfer their eroticism to neoprene window gaskets and automobile windshield wipers. He also described a dramatic demonstration of transference by a young man, with a severe Oedipus complex, who tried unsuccessfully to marry a can of evaporated milk.

Dr. A. Busting's finding would seem to indicate that there are natural indications of man keeping abreast of evolution. It is unfortunate that the good doctor was not moved by the milk of human kindness to allow the coupling of the young man and the container. The result might have been the cream of the crop of evolution.
Contaminated Man

As air changes from an invisible, tasteless mixture of gasses to blinding, choking fumes, as the sea mother becomes the repository of atomic wastes and the land is sown with bent metal, which, unlike other offal, will not sink back into the earth to contribute its matter to new life, man must adjust to this reshuffling of the basic elements: air, earth, and water.

It is unfortunate that he must cope with pollution this late in his environmental development. If, as a fish, he had been forced to imbibe petroleum wastes, he might today be able to drink gasoline and gain considerable pleasure from sniffing automobile mufflers. This might have become a profitable industry in itself. But since this is not the case, he will have to adjust as best he can or relinquish his primacy. It's the early bird that gets the fumes. Man may well look to the evolutionary changes that are taking place around him.

There has been a report by ornithologists of a gradual change in bird physiognomy. Industrial gasses tend to fuse the bird's feathers together into plastic-like coatings that improve their water-proofing qualities but make them useless for pillow stuffing. Bird guano is gradually taking the shape of the neat merchandizing of the rabbit and the deer with the addition of a similar plastic coating. This development has been applauded by sexton, sculptors, and ferryboat passengers. The process is under patent at present to a jelly-bean manufacturer. It has also been reported by sportsmen that the flesh of game birds is developing a distinct taste of smog favored by Los Angeles gourmets.

The ocean's creatures have not been unaffected by the dumping of radioactive wastes in the sea. Fish droppings have become explosive. An angler off the coast of California is reported to have lost his first and second digits through a small atomic explosion attributable to an uninhibited halibut.

A change in salamander physiognomy in the Jersey flats has been reported. These creatures, heretofore unnoticed and the sole living survivors of the mass contamination of the marshes, have thrived in contaminated earth, polluted water, and noxious fumes for almost a century.

It has been reported by certain coke processors that one of these salamanders bit completely through a 6-in. cast-iron soil line in search of food. The medieval superstition of their ability to live in fire seems to have come true. These wet lizards living in the reducing furnaces have been known to consume live coals instead of the coals consuming them. They gnaw steel rivets of the plant construction and are generally becoming a nuisance, although not unfriendly.

At this time, laboratory experiments have been confined to their observation, since no known dissecting instrument, including the band-saw, has had any effect upon their contaminated hides. It is extremely fortunate that this breed of salamander remains benign, for it is doubtful that man could compete with these creatures, which have enjoyed a head evolutionary start.

However, man, in cloaking cities in fumes, polluting entire rivers, and fouling hundreds of square miles of earth, is creating the total contaminated environment. Man may be expected to rival the evolution of the salamander when he gets a sufficient whiff of what is going on.
Modular Man

The architectural module functions magnificently, aside from the minor problem of major human discomfort. We have modulated man to high-rise honeycombs, cellularized his every waking function, and compartmentalized his wants to the binomial requirements of the computer. However, in our haste, we have overlooked that he does not produce modulate wigglers.

To be or not to be is no longer the question. The module demands that man be a bee. The evolutionary design solution is obvious. Man must himself become modular by the de-evolutionary stratagem of mating with the insect. The benefits are obvious: It will induce a natural, modular, cellular, structural proclivity and at the same time further man's environmental survival potential as the inheritor of a radioactive earth. Such a union will dimension man, who heretofore has been the measure of all things, to the regulated proportion of a grub.

The moral implication of the foregoing suggestion is obvious. Man's indecent haste to reduce his varied world to the simplicity of insect necessity could only be motivated by ants in his pants.

If we recall that life in the water was compressed to the form of a fish, in the trees it branched to the limbs of a monkey and in the cave finally molded to the form of a man, we will conclude that the former caveman must be molded by glass and steel to the new growth that will sprout as a result of the influence of his synthetic environment.

Instead of bending steel and glass to his lumpy irregularities, we must research the fluid possibilities inherent in modern chemicals and plastics of making him ductile, malleable, elastic, and durable. His ideal viscoity must be completely plastic or roughly the consistency of silly putty.

Such a condition will necessarily discard the distortion-eliminating device of the backbone by its very nature. Man, when properly compounded, might be seen through both literally and figuratively. A man who can be pushed by his environment and, when pushed, stay pushed. A dependable man—in short, the ideal projected by the advertising media.

Man thus deprived of all vestiges of rigidity in his system could reproduce when passion dictated, like the amoeba, by twisting himself into segments. Not only would this free him from a ridiculous position and damnable expense for momentary pleasure, but, in a contemporary glass building, it would seem the only decent thing to do.

The coming Plastic Man will be incapable of being cornered or creased. He will flow around his perforations, spindulations, and mutilations. He will be the ideal man of our time, silly putty in the hands of his environment.—FW
THE
ANATOMY
OF AN INSTITUTIONAL
CLIENT
Our institutions have many faces. Their activities often range well beyond the primary purpose of their existence. We have chosen “The Church” to discuss the institutional client, because of the drastic contrast evident in the schism between its spiritual and secular activities.

“Can we develop standards of order and beauty which amount to something more than the foisting of one man’s tastes and self-interests upon another? . . . Can we get that extraordinarily free-wheeling and irascible figure, the American citizen-entrepreneur, to accept the restraints on his ability to build as he wishes and make money as he can? . . . These are the untidy qualities found in all of us which help mess up our cities.”


Is the primary consideration for a beautiful America “good” design? The good design of a single building may be ruined by thoughtless landscaping; thoughtful landscaping may be obliterated by the degeneration of a neighborhood; and the neighborhood itself is subject to the quixotic forces that determine the fate of our cities.

Church architecture represents probably the only building type where aesthetic requirements are the prime requirements of the program: The obligation to create architecture, as distinct from building, is implied in the architect’s commission.

But will individual church designs of merit necessarily lead to a more beautiful America? The point overlooked here is that the church as an institutional builder—may commission architects to create splendid sanctuaries for individual churches, but its financial resources are so vast, its investments cover such a broad spectrum of building types, that, ironically, it is sometimes involved in the unplanned commercial blight destroying our cities.

An Economic Force

The church is one of the most powerful economic forces in the nation, whose community activities may or may not benefit the surrounding environment. The tax status of the church allows it to engage advantageously in both the sacred and the secular areas of our economy. As an institutional builder, it is free, as just mentioned, to invest in a wide variety of building types, some of which do not contribute to enlightened architectural solutions to the problems of urban blight.

When we think of any group as an institution, there is the tendency to see the accumulated faults of all in each constituent member. This leads us to group the store-front church with the cathedral in sizing up church-owned property, which was estimated in a recent survey to total $79,500,000,000. The church is a combination of unit members, just as is true of the nation’s businesses, and each is individually responsible, to a greater or lesser degree, for the environmental blight according to the civic responsibilities it has been willing to accept.

One cannot blame the church, any more than one can blame a business, for taking advantage of our laws, which will allow it a maximum return on its investments, if one assumes that the church is big business, and that church money, like any other money, lacks social consciousness.
Volume Builder

The building of churches and religious institutions in the United States is big business, and although it is not known exactly how big, because no exact records are kept, some indication can be gleaned from statements by various people and institutions directly concerned.

Architect Milton L. Grigg, president of the Interfaith Research Center, said recently that, in 1963, nearly one billion dollars was spent on religious building in the United States. He also predicted that this figure will substantially increase in the coming years, and, according to the U.S. Bureau of Census, his appraisal has been substantiated.

Church-financed construction equals one-fourth of the total of all public and private educational construction and one-half the total of all public and private hospital construction. Burroughs Clearing House, a banking publication, states: “Religious financing totals more than a billion dollars a year, with $500 million in short-term loans.”

Mr. D. J. Kenney, Chairman of the Board of B. C. Ziegler & Company, an organization that Business Week has called the country’s largest underwriter of church bonds, has declared his intention of giving adequate service to this new and expanding market.

“There are not millions, but billions to be spent,” Kenney is quoted as saying in Business Week. He has formed a new company, called First Church Financing Corporation of America, which is technically a subsidiary of Ziegler affiliates. This company has been formed to finance smaller loans, mostly under $1 million. It will engage in “ecumenical” lending to churches, hospitals, and any kind of charitable or nonprofit institution.

Kenney expects to parlay this combination into $100 million volume in three years, and $1 billion in ten. “If you want to be conservative,” Kenney adds, “say half a billion.”

However, there are groups within the church who feel that these financial manipulations should not go unchallenged. The young editors Stephen C. Rose and James E. McGraw of Renewal magazine, published by the Chicago City Missionary Society, were quoted in The New York Times as having advocated “a one year moratorium on church construction and let the millions saved thereby be pooled in a fund for peace. . . . Let people worship in half-built structures to symbolize the impermanence of a world at war.”

How effective this appeal will be on the business interests of the church or business remains to be seen, but by the amount of discussion Renewal has precipitated, there can be no denying the impact of their suggestion on the consciences of many Christians.

The sum Renewal advocates for its missionary project would probably be sizable, for, as Lyle Schaller says in his recent book, “It usually is easier to raise money in the local church for a local building program than for any other purpose.” The New York Times, in February of this year, reported that the Methodist Church alone received $634,516,216 in 1965 for church purposes, which was $19 million more than last year. However, not all church money goes into the building programs that the editors of Renewal would feel are un-Christian. Christian Century, in March 1965, reported that the Protestant Episcopal National Council’s 1964 budget was $11,862,495, and that their priority allocation of funds would be for the “relief of persons, parishes or church-related institutions in distress because of their efforts to bring about changes in local (racial) situations.” This concern is not unusual: There are many religious groups who are taking responsible action on the ugly problems that beset us—slum housing, housing for the aged, and low-cost housing, but their efforts do not seem to be marked by the type of operation that

Favorable Tax Position

The church as an institution is facing attack from another direction. The Christian Science Monitor, in January 1965, reported that the Protestants and Other Americans United for Separation of Church and State (POAU) stated in its annual report a determined effort to upset the traditional separation of church and state in America. It pointed to drives to obtain Government funds for church institutions.

The POAU is also in the forefront of a battle that will probably be of much more serious concern to the church financially. It is asking for a revocation of the tax exemptions held by church institutions. It claims that the church enjoys an advantageous tax-free status that allows it to engage in business transactions of detriment to the nation and that it is in unfair competition with other business enterprises.

Kenney can build into his billion-dollar operation.
This situation is also of concern to the United Presbyterian Synod of Indiana, for it was reported in the Christian Century that this organization will not claim tax exemption on its synod office supplies. It feels that this would constitute a violation of the principle of separation of church and state.

The situation is of more serious concern to Dr. Eugene Carson Blake, present member and former president of the General Board of the National Council of Churches. He said, “I suggest that, 100 years from now, the present pattern of religious tax exemption by Federal, state, and municipal authorities, if continued, may present the state with problems of such magnitude that their own solution will be revolutionary expropriation of church properties.” He further commented, “I remind you that deals are being offered to church trustees by which they can buy businesses and pay a management fee to the present owners which puts both the managers and the church in an advantageous position with reference to their business competitors.”

One cannot deny that the church needs financing to exist, despite the example of St. Francis, but one wonders if the evangelical zeal that prompts the operation of hotels, mushroom-burger stands, and food and beverage supply units (as pointed out by POAU) within a favorable competitive position is good for either business or religion.

Such views are not shared by all clergymen. Dr. Finlay of St. Bartholomew’s Episcopal Church of New York was quoted in Fortune magazine (December 1965) as saying, “The [church’s] money is invested and cared for very carefully by these businessmen [his vestrymen comprising some of the nation’s leading businessmen] who are using their talents, just as I am trying to use mine, so that this church may be maintained to the glory of God.”

The problems of financial investment and tax exemptions are probably the most pressing problems faced by the church as an institution. The tax burden that is shifted from the church to the population is born by all alike, regardless of religious affiliation. The Federal Government, as well as hard-pressed municipalities, in a progressively worsening economic situation, could unquestionably use these tax dollars advantageously in the local and national war on environmental ugliness.

In conclusion, we might listen once again to Dr. Eugene Blake: “In view of their favorable tax position, with reasonable good management, America’s churches ought to be able to control the whole economy of the nation within the predictable future.”

Perhaps the churches should take warning, if for no other reason than that if Dr. Blake’s prediction comes to pass, the almost insoluble problem of national ugliness will shift, with ownership of the nation, to the owners of the nation—the church.
In the mass quixotic surgery that operates on our cities, what steps can the individual church take to maintain its influence within the changing community? There are as many answers to this question as there are varieties of neighborhood configurations multiplied by the number of religious denominations.

When faced with altered communal needs, the church has the option of abandoning the community, changing its congregation, becoming a warehouse, or fighting secular decline to create a fitting sacred environment.

The founding church of the Christian Scientists in Boston has chosen to renew the area around it. It has retained the architectural firm of I. M. Pei & Associates to redesign the blighted Back Bay environment that surrounds the church.

Mr. Araldo Cossutta, partner in charge of design, has been engaged up to this point in making an extensive survey of the community conditions. This includes present and future potentials of the neighborhood, traffic surveys, and an extensive analysis of church needs.

The architect feels that the church is in a unique position because of its strategic location. It sits in the center of its own land precinct, and the future quality of the development of the area may well depend largely upon the standards set by this development.

The Christian Science Church is also unique in that it is the founding church that was built in 1894 and extended in 1904. This is comparatively recent in the history of the world's great religions. The Christian Scientists are just this year celebrating the second century of their church's founding, which gives historic significance to buildings that would otherwise have limited architectural interest. However, the importance of the buildings to the Christian Scientists makes their preservation imperative.

The church center is adjacent to the Prudential Center, which, although it has generally been given credit for sparking the renewal of the Back Bay of Boston, in reality chose to overshadow neighborhood problems by rising above them. In the gutting of Boston, Prudential must be given major credit for the mess.

Cossutta will balance the polarity of the 60-story Prudential tower with two 34-story combination office-and-apartment buildings, triangulated with his own Christian Science administrative building. The latter building, which is adjacent to the insurance tower, forms a gateway to the church triangle.

The Christian Science administrative building will assert itself as the only free-standing structure (other than the church itself) within the church space, and its rounded mechanical service ends will reflect the hemispheric forms of the earlier structure. Cossutta is designing an impressive clear-span, bearing-wall building that will make a structural assertion at this point of the triangle and compensate in quality for what it lacks in size, facing the mediocrity of the Prudential tower.

Cossutta has designed a colonnade, flanking a huge reflecting pool, which begins at a point opposite the administration building and leads from the Prudential space to the triangle and the church (see site plan). This colonnade will unify three elements: the new church facilities building, the two meeting service street terminations, and the end of the existing publishing house. The latter building will be cut back to allow the church tower to protrude forward of the column line, giving it prominence from this direction.

The existing buildings that crowd the church on Massachusetts Avenue will be removed, to make space for a church entrance. A portico will be added here to form a new church entrance. This would seem to have been the original intention of the builders of the extension in their planning of the façade in 1904. The new porch will be in matching Boston Renaissance style. A rather unique project for the I. M. Pei office.

The length of the mall will be devoted to a reflecting pool approximately 770 ft long by 110 ft wide, sunk below street level. Cossutta designed the pool to tie down and condense the overflows of water, which opens out to the Prudential Center at one end and the Horticultural Hall at the other. The bordering church buildings will be centered within this space. The church structure, which is small in the altered scale of its new environment, will be reflected in the pool, giving it added prominence.

The space of the Prudential Center will flow into that of the church center, with reverberations from this point like a stone dropped into a pool of water. The architect's master plan, as it extends in scope from the original project of simply guarding the church precincts, affects the entire surrounding area. Horticultural Hall will now be included, since it borders the triangle. On the side of Massachusetts Ave.
nue that faces the Center, Symphony Hall will be freed from adjacent buildings at its rear, allowing a park to be added, a project presently under design by Hugh Stubbins. The apartments and retail stores further up on Massachusetts Avenue will have an underground garage to their rear covered with a garden area. The overpass over Huntington Avenue from Symphony Hall on the opposite side of the triangle will be enlarged and pedestrian benches and planting added. Use of both the Horticultural Hall and Symphony Hall will be encouraged by church's donating use of its 600-car parking garage when not needed by its own personnel.

The Christian Scientists were motivated to undertake this project by their need for additional space and a desire to safeguard their founding church from the encroaching degeneration of the neighborhood. They profess absolutely no desire to be in the real-estate business, which is a by-product of their project. Their undertaking will produce much the same environmental conditions as those around St. Peter's, Cossutta points out. Their intention is to create a dignified space surrounding their church.

The open space created is primarily a church space, with an emphasis on the dignity of the church, and, secondarily, a public space. It is primarily space the public might enjoy as it passes through, which is the declared intention of both the church and Cossutta. "There will be walks for the public to use in going through these areas and points of interest where one might stroll, view flowers, trees, and a vista of beauty... These areas will be accessible to the public, but subject to certain controls. People will not be permitted to hold meetings, eat meals, sleep, or lounge on the grounds," according to the brochure of the New Christian Science Development Plan. There are no benches in St. Peter's, points out Cossutta in explaining the function of the space.

On a stretch of ground that faces the church and looks across the pool, a flower garden with benches and trees will be built. But public enjoyment will have to be primarily symbolic. Like St. Peter's, it is not a place for the matrons of the surrounding apartment houses to bask their new-born, or a resting place from the city street where boy tarries to meet girl, or the pedestrian sits to enjoy a cigarette.

This church-motivated improvement of the environment is intended to monumentalize the church. It is not conceived as human, usable space, and, other than visually, it will not provide recreational areas for residents of the apartment houses bordering it. It will serve essentially the same purpose as the present immaculately groomed and faultlessly maintained park, empty of people, which presently fronts the church. Although the existing facilities are apparently used at odd hours, it was reported that bushel baskets of empty liquor bottles have been gleaned from among its shrubs.

The Church Center will be financed by the church. The 16-acre perimeter will be financed by private developers on land leased to them by the church. The development will furnish more than 3500 new apartment units to replace the approximately 1200 now existing. There will be a proposed increase of 2600 car spaces over the present 1000. The new development will be in accordance with the town planning of the Pei office. It is estimated that the total cost of construction will exceed $63 million.

The entire project is subject to taxes, as stated by the Christian Science development literature. The only tax-exempt area is the church edifice itself and the park that fronts it. The present taxes will be maintained during the demolition of the existing structures and until such time that tax rates can be set on the new improvements.

If good design is to be the criterion of what makes America beautiful, the existing buildings, being dedicated to monumentalization, are the very antithesis of the principles upon which contemporary good design is usually based. They can be justified by the term "charming," or "Americana," and valued because of their growing scarcity, but the architectural concepts that motivated their creation are the very antithesis of what is usually termed good design. They represent the rampant disorders of the Renaissance, or turreted eclecticism, with a Romanesque bent, or the ponderous monumentalism of the 30's. These were the principles that contemporary design revolted against. Yet these buildings are the central motivating forces that sparked this extremely important renewal project.

The buildings assumed an importance beyond their intrinsic architectural value, and their design is secondary to the real motivating forces that created this space and that sparked the renewal of this area of Back Bay Boston.—fw
Church enclosure presently under design by the Pei office. Included are the new church entrance, reflecting pool and garden, and adjacent administrative building. Opposite these is the colonnade that unifies the new church facilities building, the existing printing building, and two street terminations.

Existing church with new portico.

Underground parking facilities, entering and terminating at the existing Horticulture Hall, and the new administrative building.
Business is business, and yet what is best for one may not be best for others. Much, if not most, of our environment is created by commercial enterprises whose policies determine the world around us. This leads to the question of

THE CORPORATE CLIENTS: WHAT ARE THEIR ATTITUDES?

Do corporations knowingly contribute to the creation of mediocre architecture? Probably not. The men who decide on what their corporation's buildings should be are often genuinely proud of structures that others would be ashamed of. And if all companies built to a predeter­mined level of taste, the narrow variation in building styles would be unbearably monotonous.

Executives of corporations initiating large construction programs often feel compelled to take the view that their corporation builds for prestige, or, conversely, that it builds for the lowest cost per sq ft. If the company has a large sales turnover but a small profit percentage, its directors are inclined to oppose spending money on "architecture." Companies manufacturing or selling prestigious products believe that the public looks to them for good design. Not surprisingly, corporations with an enlightened view of architecture take their cue from the men at the top.

Quite often, corporations seem to have a conscience, or at least a bad conscience, about their building programs. Companies with reputations for encouraging good architecture rejoice in telling about their aims and ambitions, but the buyers of rubber-stamp-architecture are often secretive about their programs. Executives who do not care about the appearance of the company's buildings as long as the cost per sq ft is sliced to a minimum prefer not to discuss their policies.

The attitude of a company toward building may be reflected in its approach to evaluating an architect. An A&P spokesman says that the company checks an architect's rating in Dun & Bradstreet. Presumably, this research will insure getting an architectural firm that is financially solvent, but it will not disclose if it is bankrupt in ideas. Actually, A&P's research into architects' qualifications need be quite minimal, because the company prefers to design its own facilities whenever possible. The exceptions arise when a new project is larger than the Engineering and General Operating Department can handle with its own architect and engineers. The company leases nearly all its stores, bakeries, and warehouses, but A&P has these facilities built to its own design. The owner of the property builds from a set of plans that originated in A&P's office and are completed by a local firm of architects. For really large facilities, A&P prefers to be its own landlord, and hires a firm to design the plant.

The design firm is usually an engineering firm. "We look for an engineering firm unless we want fancy doodads," says the company spokesman. In fact, the company really prefers an engineering firm that can also build the project: a package builder. For its 32-acre plant at Horseheads, N. Y., A&P asked several firms for design proposals, and from them selected the Rust Engineering Company of Pittsburgh to design the plant. Rust is primarily a package builder, and when the drawings went out for bids, Rust also won the $25-million general contract.

The View From Mammon

Investing companies express an interest in how the buildings they finance will fit into a townscape or landscape. A vice-president of Metropolitan Life Insurance
Company, Norman Carpenter, says, “If a building is thought to be injurious to a community, we won’t invest.” Metropolitan Life finds plenty of noninjurious buildings, and last year it put $1,400,000, 000 of its trust money into mortgages. Carpenter is assisted in his City Mortgages Department by an architect who helps determine the acceptability of mortgage proposals. The staff architect, Dale Wright, also heads Met’s own design office.

Metropolitan Life used to be a big-scale buyer of buildings; it built seven middle-income housing projects in New York City, Virginia, and California. Now the company prefers only to invest in mortgages and leave the management problems to others. Apart from mortgage investments, Met does get involved in buildings through its sales offices, called District Offices, scattered throughout the country. These small offices are built to Met’s standards and leased back for a 10-year contract.

Sales offices are designed at the head office. To simplify procedures, Metropolitan Life offers three styles to its branch managers: one Colonial and two contemporary styles. Dale Wright, the company architect, recommends the style of building that best suits the location for a projected sales office, but architectural taste often abridges to the local manager who will control the office. Sales managers believe that Colonial buildings impress their customers, and so the march of time takes 18th-Century styles into regions the original colonists had not even heard about.

Investing other people’s money in building mortgages is a responsible job Metropolitan Life does not take lightly. Judgments tend to be hard-headed business evaluations of rental return on a property rather than aesthetic critiques. The judgments remain impersonal, says Norman Chandler, “We can’t afford to let personal likes and dislikes influence our choice in investing in a building.”

Another big mortgage financier, The Prudential Insurance Company of America (over $9 billion holdings), believes it worthwhile to build on its own account. Prudential’s construction averages about $25 million a year. When it needs an office for a staff of 1200 or more, it builds its own office building. Smaller offices are leased. Prudential also develops commercial complexes such as the Prudential Center in Boston, which contains a 50-story office building, a hotel, apartment buildings, and a public auditorium.

For construction that it initiates, Prudential maintains an Architects-Engineers Division under the direction of an architect, who, by company policy, is anonymous. When a new office building is required in a city, the A-E Division draws up a list of the city’s leading architects. If there are no qualified architectural firms in the city, then Prudential will include firms from elsewhere in the state. The architect’s group then talks to the candidates and selects from the field the firm that in its opinion is the best qualified for the job.

Prudential is not looking for a rubber stamp for its own design. In the words of their chief architect, “We know what facilities we need in a proposed building, but we strive to have no preconceived ideas of what the building should look like.” The A-E Division looks first at the architect’s preliminary plans to see if they solve the space requirements, and then looks at the elevations. These preliminary elevations are passed along to the president and senior officers, and sometimes to a committee of the board of directors.

The rule for picking an architect from the city or state is not inflexible. For its $150-million complex in Boston, the company retained Charles Luckman Associates, of Los Angeles, because of its experience with urban renewal projects. A Boston firm, Hoyle, Doran & Berry, were associated with Luckman for the project.

A Network of Decisions

“We give the most careful attention to all aspects of design. We believe that we should not only be progressive but look progressive.” An admirable philosophy that might have come from the leader of an architectural firm, but in fact was spoken by Frank Stanton, president of CBS. The corporation frequently lives up to its declared progressiveness. CBS’s new headquarters building in New York City marks a sizable step forward from the seemingly routine procedure of cladding high-rise office buildings with curtain walls. Instead, the massive exterior columns support the building, and are faced with black granite as if to emphasize their solid, useful purpose.

CBS got the 38-story tower not only because it hired a highly talented architect, Eero Saarinen, but because its two top executives cared about the project. They knew that they did not want a glass and aluminum box, and they closely followed all the design steps leading to the final solution. Stanton was recently quoted as saying that his involvement in the building’s design had sometimes been too much.

Stanton picks the architect for all major CBS buildings. Minor buildings are designed by architects selected by the Vice-President of Facilities, C. H. Hopper. Hopper’s task is a little more difficult than his boss’s, because he is not dealing with the stars of the architectural profession. After interviewing prospective design firms and making his selection, Hopper hands his recommendations to top management. Then, after receiving the architect’s preliminary design, Hopper takes the perspectives to Stanton for his nod of approval.

CBS is mindful of its neighbors when building on-the-street projects, and asks its architects to show adjacent properties on all renderings. Neighborliness, or good public relations, is important to CBS, and it believes its buildings should upgrade the community.

The corporation likes receiving architectural awards (not all corporations do; one senior executive calls them a damn nuisance). One CBS man commented, “Awards are good for business because people talk about the building and not ‘I Love Lucy.’”

CBS uses its considerable business acumen to ensure it gets economical buildings. Louis LaPorte, the Director of Facilities, says that, in addition to creative ability, the company wants an architect “... who can give us a singular building at a cost comparable with a building that functionally or architecturally isn’t of any great stature.”

It’s Smart To Be Thrifty

Cost control among corporate clients is not always confined to construction. “Retail store owners are accustomed to cutting vendors down to the lowest price, and unfortunately they treat professional services in the same manner.” The architect who said this prefers not to work for retail business anymore, but if he did solicit
work from Macy's, the giant retailing company with headquarters in New York City, he may find himself working for a 4 per cent fee.

Macy's builds stores and warehouses in several states, and usually tries to hire an architect in the city where the new project is to be built. The company prefers to use architectural firms that have served it well in the past. How these firms got on the select list is often lost in history, says Macy's Corporate Architect, Dick Belcher, but new names are constantly being added. One contract arose when a promoter withdrew from developing a store that Macy's was going to lease. Macy's became the owner of the project and retained the original architect to design a larger store.

Macy's gives its architects a program of requirements, and participates in developing the preliminary schemes. Dick Belcher, who works for the Corporate Engineering and Construction Division, works closely with the consulting architect to organize the interiors. Interior layouts can strongly affect the livability of a department store, and corporate executives take an active interest in this stage of planning. However, the complexities of a store remain in the interiors, and the exteriors generally remain plain.

Bell Boosts Buildings

At the American Telephone & Telegraph Company, however, exteriors of buildings count for a lot. The regional Bell System builds about a thousand structures each year, and the corporate headquarters encourages each sponsor to improve the architectural scene by giving awards to the better buildings. The parent company's Engineering Department, which is headed by an architect, Howard Phillips, invites an architectural jury to select the awards buildings, then publishes the buildings and distributes the book to every office in the system connected with building.

In one of the company's books, Buildings Fitting Into the Community, Howard Phillips writes, "Buildings should add something to the neighborhood; they must be neither indifferent nor detracting." To assist Bell companies to live up to its standards, AT&T provides a consulting service for reviewing preliminary designs of any proposed building. Local Bell companies hire their own architects, and, if they wish, they can then consult with one of two New York City firms—Kahn & Jacobs or Smith, Haines, Lundberg & Wachler—on architectural design.

AT&T's major contribution to the landscape is not its buildings, but the cables and wires it feeds to other people's buildings. With a little prompting from the FHA, the corporation is striving to put all new cables underground. Last year, it buried 65 per cent of all cables to new residential construction; by 1970, it expects to bury every new cable.

The original objection to underground cable was that its cost was too high compared with overhead cables. But two developments brought the prices very close together: In 1955, the company introduced plastic-sheathed cables that resist ground moisture; and, later, manufacturers developed equipment that could dig, lay cable, and bury it in one operation.

Keeping Up With the Jones Corporation

Companies that are marketing high-quality products can be sensitive about their sales offices. Salesmen are often as status-conscious about a company building as they are about their own cars. One major corporation recently bought a smaller company and inherited several old sales buildings. Salesmen from the parent company objected to the buildings because they were ashamed of their friends and clients knowing where they worked. Similarly, corporate management, which often comprises former salesmen, wants a building that upholds the quality of the company's products.

One corporation, Olivetti Underwood, leaves its building program entirely in the hands of a staff architect. Bonnell Irvine, manager of Facilities Planning, selects architects to design new buildings (average cost, $120,000) and approves the designs without referring to management. Olivetti does not own any property, so Irvine negotiates contracts with developers who build for Olivetti and lease the space to the company. Irvine does not attempt to develop a "style of building that identifies the company; architects therefore are allowed a pretty free hand in designing a building. The one major requirement is that Olivetti does its own graphics for the building's façade.

A Change of Heart

IBM, which once had a reputation for seeking good architectural design, now looks for economy before aesthetics. Its Real Estate and Construction Division, under a different name, used to be headed by a former Corps of Engineers colonel who once said of the corporation's architecture, "Good taste takes a lot of hard work but not necessarily a lot of money." Later, the command changed hands, and the head of a typewriter division, H. Wisner Miller, Jr., became president of the new Real Estate and Construction Division.

Miller evidently thought that it took more than hard work to get economical buildings. He put part of the blame for rising construction costs on architects by saying, "Too many designers rely on expensive materials or costly and unorthodox structural details." And, "Some architects resist accommodating the owners' needs under the guise of architectural integrity."

To avoid losing its financial integrity, IBM transferred part of its construction program to package builders. The virtue of package builders, claims IBM, is that they deliver a building on schedule at the right cost. Time was important to IBM, because it needed several new facilities in a hurry to prevent its competitors from catching up in the production race.—pg

Cross commercialism never hindered a good designer, but when the inspirational stream runs low, dip into MAD magazine's fount of architectural knowledge and come up with a brand old cliché. 

JUNE 1966 P/A
Most buildings today employ classic architectural designs, and so you can't tell if they're banks, schools or hamburger stands.

MAD feels that buildings should employ the principle of "form follows function." Mainly, they should look like what they are!

HERE IS WHAT A TYPICAL BUSINESS DISTRICT WOULD LOOK LIKE IF MAD'S PLAN WERE ADOPTED, AND THE BUILDINGS ALL USED...
A new influence on the appearance of our society is the growing crop of nonarchitect organizations which write building programs—that backstage force telling clients, and architects, what they ought to build. This is what happens when

THE NEED EXPERTS ARRIVE ON THE SCENE

You want to know who is really responsible for ugliness? Blame those nonarchitects who are the right-arm henchmen of clients, some people say; blame the need experts, those semidesigners who tell clients what they ought to have in their buildings. They wield the early influence. And the poor architect is supposed to provide what they say is needed. The need experts write the programs that architects get tied up by. Who else should be blamed for how bad things look?

Who are these “who else”? (Who has heard of Day & Zimmerman, who reportedly wrote the program for Lincoln Center?)

Well, in this age of flux and fission, it is a confusing picture: People are doing this work who never would be expected to be doing it; and probably there are those not doing it who should be.

Some of the nonarchitect program writers are management consultants, industrial designers, construction firms, and city managers. Traffic-parking consultants, land economists, market analysts, and others are also influential in setting certain “general guidelines” for buildings—and not always flexible ones, as many architects are beginning to learn.

P/A Investigates

To find out who engages in program writing, P/A wrote several of each of these different types of firms and later discussed the matter in person with a few of them. Our findings follow.

For example, power utility companies, as part of their development programs to encourage industries to move into their areas, offer plant location services, which include, “but are not limited to, information of the following subjects: size, location, costs, accessibility to utilities and transportation, zoning, topography and load-bearing characteristics of available industrial sites.”

Traffic and parking consultants also are materially influential in this area. Wilbur Smith & Associates, the largest of these firms, states, “Our firm specializes in transportation work, and in building design only as it relates to garages.” However, shopping centers, for which such firms do voluminous work, want to know how to lay out stores, entrances, exits, and parking lots most profitably. And no one doubts that how one copes with the automobile influences the planning and design of buildings—and ugliness.

Several experienced clients, of course, such as IBM, have their own program-writing departments. Additional influences can come from the accounting firm, the bank, the insurance company, and now even from the systems man from the computer outfit.

Can a major blame for ugliness be laid
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at the feet of these nonarchitectural influences?

To 25 of the largest management consultant firms (a list assembled by Business Week) and to a dozen other different organizations, P/A sent a questionnaire (see illustration, with breakdown). The resulting answers were revealing: eleven firms did not answer at all; several others expressed their reluctance to answer in delicate but evident ways. The director of research for McKinsey & Company, one of the largest management consultant firms in the world, wrote, "To the best of my knowledge, McKinsey & Company is never involved in building programs at the level of detail suggested by your questionnaire." And subsequent telephone inquiries re-emphasized that reticence.

Alexander Proudfoot Company, another large management consultant, wrote, "We are not architects nor are we associated with architects in any way, and accordingly cannot make any contribution to your article." (One wonders what their offices are in.)

Another firm stated, "I must advise you that the subject area of building programs is not an area of management consulting with which we are concerned to a noticeable degree." (Architects may wonder who's noticing.)

It must be assumed that one of the reasons 12 firms did not reply was that they felt uneasy about the investigation. Instead of speaking out with open responsibility for what they do, they imply by silence that there is something suspicious or shaky in their engagement in the whole affair.

Moreover, those management consultant firms who did reply admitted an eagerness to disabuse all suspicion that they are in competition with architects.

"The services of our firm," states the brochure of Woods, Gordon & Company of Canada, "supplement, but do not replace, the knowledge and skills of the architect and consulting engineer in the design of new facilities." Interestingly enough, industrial design firms also indicated a similar reluctance. A vice-president of Lippincott & Margulies, Inc., who describe themselves as Industrial Designers and Marketing Consultants, wrote, "It is not possible to reply to your questionnaire."

Again, one must suppress the previously mentioned suspicion because of a nagging knowledge of how many management consultants—and even industrial designers—who do engage in this work paradoxically engage other program writers and designers to work out programs and plans for their own facilities.

But on to the more positive results of the inquiry.

Who Engages These Outside Program Writers? Who Are Their Clients?

Management consultant firms and industrial designers both, as might be expected, are called in by corporation executives, college presidents, and Federal agencies to write down or review needs. The Phila-
What Advantages Do Nonarchitect Programmers See in Their Doing This Work?

Improved method of operation is the aim of all clients when they employ consultants; for that reason, many of the first management consultant assignments were undertaken by professional engineers. Even today, when some of these firms still continue their consulting engineering work, they say that they can similarly apply scientific principles to program writing and thereby increase operational efficiency and resultant economies.

An article about Cleveland industrial designer Leon Gordon Miller, which appeared in Contract magazine (October 1965), points to the industrial designer's alleged advantage: "The industrial designer plans his project by taking all factors into consideration. This is quite different from the architect or the interior decorator. The architect may be given the task of designing a building, but he is not asked to decide if such a building should or should not be built."

In this direction, Harry Foden scores on a more sensitive point: "An architect's fee is related to the structure that's built; our fees are not based on this. We have nothing to gain if a facility gets built or doesn't get built. So there is a feeling among people that they would rather have someone—like ourselves—who is accustomed to examining the feasibility of a given project irrespective of its architecture."

Another advantage, the brochure of Woods, Gordon & Co. points out, is that "there may be a need for a fresh, outside viewpoint," since "there may be honest differences of opinion within the organization which can be best resolved by an impartial outsider."

The Need Experts Arrive on the Scene
Nathaniel Becker of Becker & Becker expands on this latter point: "There is a real value in this work not being in the architect's office—the same value as it not being in the owner's office—it provides an objectivity. It's very difficult for people to take their own needs, particularly those of a large company, and write them up objectively. Here, we have an analysis of what they need, and as the architect starts to evolve his plan, the need can always be compared to the solution that is proposed. Compare this to a less exact process in which the owner has not put the information in complete enough form for his architect, and then when the architect starts to make some of his proposals, the owner says, "Oh, I forgot to tell you..." A prewritten program prevents all that. I think the owner should be provided with the ability to think about the future growth of his company—as he can do by having control of what is going on in the building before he moves in."

"One further advantage we have over an architect," adds Little's Harry Foden, "is that we can provide our staff with a variety of these kinds of problems. And the techniques developed in a number of different areas can be used in connection with the planning of a particular facility."

**How Is Research Done?**

As far as the methodologies of this research are concerned, procedures seem pretty much the same among the different firms doing it. Richard Dober, of Dober, Walquist & Harris, Inc., summarizes the process: "The possibilities of machine-aided data gathering and evaluation systems for programming now exist, but they are still experimental and costly. However, Harbridge House's Construction Management Center uses their electronic systems for such chores as the location and configuration of municipal stadiums and shopping centers.

Typically, the writing of the program consists of interviewing, examining recent projects of a similar nature, and preparing checklists. "The material is then summarized," Dober continues, "as a description of the size, content, and relationships of the parts of the building. It may include preliminary costs estimates as guidelines."

More specifically, Nathaniel Becker explains, "We try to document in text all of the information that we would need to gain an understanding of the adjacency requirements. We get that through reports, studies, and interviews. This is presented and approved by management, and then prepared in words the architect can understand."

Loewy/Snaith also use the questionnaire technique, and, like others, check financial documents and tax records to verify their market research.

Naturally enough, examples of the work of these firms are not easy to discover because of a reluctance to discuss a building program until after it is built. And even then, there is an understandable diffidence about seeming to be washing dirty linen in public.

**If the Work Is Done in Much the Same Manner, Why Do Some Clients Go to Management Consultants and Some Clients to Industrial Designers?**

Here, as in other areas of consultation, there is considerable overlap of interest and responsibility. The question of what draws people to one organization over another depends on the "image" a client has of that organization. Harry Foden says, "We get a great deal of work because people want a hard-headed answer and a sound economic study."

Nathaniel Becker hopes—since he feels the need is greater than the number of people qualified to do this work—that a lot more will do it—as long as they do it well. But he adds, "A management consultant can do part of the job, but I think he's limited unless he adds staffing. However, this staffing is foreign to his own specialty and is therefore a sort of island in his organization. And it's difficult for him to take any top responsibility for what that island does."

"I think that the interpretation of the research," he concludes, "that is, putting it in a form the architect can work with, can be helped along by having someone who understands a little about the visual and about space."

**What Are the Services Offered by Management Consultants?**

"Our involvement is limited to suggesting to clients," says Leonard M. Lewis, Director of Communications for Philadelphia's Edward N. Hay & Associates, "that they build or relocate a production plant or a warehouse in order to increase the effectiveness of their distribution process in a specific market area. We would not advise them in any way about the construction of such buildings. This is outside the scope of our consulting competence or authority, and we could only suggest to the client that he go to a recognized authority for the necessary counsel and advice."

On the other hand, some management consultant firms go further. Glen M. Richards Jr., Secretary-Treasurer of Fry Consultants, Inc., in Chicago, writes, "Our work on building programs with our clients is usually limited to plant-office site surveys and to plant and office layout work. In our assignments, we normally deal with architects on a very limited basis unless the client should specifically ask us to evaluate architects' ideas in line with our layout proposals."

"The end result of our services," states the brochure of Woods, Gordon & Co., "is the preparation of practical functional plans for the new facilities. These plans include layouts for the operating areas and specifications for such building features as column spacing, floor loading, clear head room, support for cranes or conveyors, shipping and receiving facili-
ties, and other features that permit adoption of the most up-to-date methods of operation."

"We do more than determine the types of facilities that might be required," Harry Foden says. "We go on to attempt to translate this into some square-foot guidelines. Normally, what we would do in the early stages is to work rather closely with an architect. We have called in architects to work out these things, just as architects have called us in to work out what the client really wants."

They could go on to determine square footage allocations without an architect's cooperation, he admits, however.

"Further," Foden continues, "we do operational planning. We would go on to tell what it might look like—without walls—functional layouts without any relationship to what the physical structure might look like as a building, but rather how the various activities or parts should be functionally related to one another. This gives the architects a guide as they try to design it. This leaves the architect free to do the space envelope."

The industrial designers do this, it would appear, and more.

**What Do Industrial Designers Do?**

Edward Agostini explains that "Becker & Becker applies the industrial designer's approach to a large-scale activity like a whole corporate headquarters facility. That is essentially what we do. It's the prearchitectural programming of space needs."

Joseph Lovelace, of Raymond Loewy/William Snaith, says, "We classify ourselves as a firm engaged in 'Design, Planning and Research.' And this is not just a fanciful way but as succinct as possible a way of stating what we do. We don't call ourselves industrial designers anymore, because that term tends to mean just product design or packaging design, all of which we engage in, but we're engaged in a lot more than that."

"The term industrial designer goes back to the beginning of the profession and is now somewhat of a misnomer," Edward Agostini notes. "At this point it doesn't quite apply to the broader scope of understanding requirements."

"The business of pre-design programming," Joseph Lovelace continues, "which you're interested in from the architectural standpoint, we do not only for architects' programs but for all design problems."

"All our design problems originate in research," he says, "from how to sell meat in the supermarket to how to market the arts, if you will. It's a basic belief we have that design is a solution to a problem. But you have to be able to state your problem first, and it's not necessarily the job of the designer to state it."

So it seems that the research organization, no matter what its ultimate or final function for the client, is an agent of the client in this activity. "He is also an agent of the designer," Lovelace adds.

What industrial designers seem to do beyond management consultants is, significantly, to produce floor plans and furniture layouts that are considerably more definite and more detailed. Nathaniel Becker states, "We have established, and constantly modify and further develop, standards, or measurements, for every space we have to satisfy. We then list these in our report as square footage allotments which would provide enough space for the actual measured standards we have developed. The architect can multiply these square footage allotments to adjust for different types of buildings, or different modules. We also state the ideal floor size from these standards, and provide a chart of adjacency requirements."

Industrial designers do so, not only because of their backgrounds as designers, but also, it appears, because they have some hope of being awarded the contract for executing the interior design of the buildings they program.

**Are There Architects on These Programmers' Staffs?**

Arthur D. Little's Facilities Planning Division is composed of planners, engineers, economists, and financial people. There are no architects or architect-trained personnel, but the 25-year-old group does use architectural consultants. Most of the personnel at Becker & Becker, on the other hand, consists either of architects or the architecturally trained, "or people who have evolved into this area from other disciplines; one member of the firm is an AIP member," Edward Agostini notes. At Raymond Loewy/William Snaith, the firm prides itself on having provided the training ground for any number of now well-known architects, and their architectural personnel quota is maintained. Besides, they engage economists and psychologists as a mainstay of their research activity.

Not entirely parenthetically, Nathaniel Becker observes, "Some education in this specialty is long overdue, because there is really no form of preparation for this work. We find that many of our people are trained as architects (although we don't practice architecture, they become intrigued with the research or management end), and this allows them to appreciate the needs and the problems of the architect and to work as part of his team."

**Then Why Shouldn't an Architect Do His Own Programming?**

"Well, I think partly because a number of the questions that are asked of an architect, he is not equipped for," says Harry Foden. "For instance, when one asks how big this building should be to serve a given market. The way you have to identify and characterize the market is something an architect normally is not equipped for by experience."

Similarly, Joseph Lovelace, who headed the team that prepared the program Raymond Loewy/William Snaith wrote for Montreal's Place des Arts, explains that, in Montreal, the clients knew they could "hire an architect, but then they said, 'We wouldn't have any idea of what to tell him to build, and we don't have any land, we don't know where to put the building, or buildings, and we don't know who would come, we don't know if it would support itself.' Now somebody
ought to be able to answer those questions. Well, historically, architects have not been equipped to answer questions that complex." And he adds, "It's my impression that market research has not been used extensively in the architectural field."

Some of the other factors in program writing and analysis that are considered too complex for "normal architectural competence" include: rental techniques, economics and depreciation, along with tax problems, such as the ones the Seagram Building has now encountered. On the other hand, Harry Foden does say that his organization leaves the matter of building and zoning codes to architects.

"My very honest opinion is that an architect cannot do it," says Nathaniel Becker. "We've even had to broaden our staffing so that we have people who understand things that we wouldn't normally have understood." Harry Foden notes: "I think most architects have so far been reluctant to do this."

Lovace goes on to add, "This is not to say they couldn't, if they are set up, but it does require certain research facilities. Not everybody can do research. A highly skilled research man is not just somebody with an inquiring mind; he knows every technique to go about an investigation. Generally, research people have been trained in psychology because there are many techniques in what are called depth interviews. Any firm, if it can afford to hire the right people with the proper training, might build a competent research staff. We think our research is better."

"Even if he adds staffing," Becker concludes, "I don't think that it's something that could be within the architect's own capability, and certainly the further evolution of this as a responsible capability could not be—because he would become someone else, and then he couldn't be an architect."

**Resistance**

Nevertheless, many architects feel some degree of resistance to this work being done by nonarchitects; the majority is still torn between two opposing feelings: one, that when programming is done by others, it is one more nibble from the professional pie; and two, that, if others can do things better, then for heaven's sake let them go do it well, so that architects can tend to what they want to tend to.

Harry Foden adds, "We have faced a similar thing in the planning field, where many planners have seen us as a threat. But the last thing I could get any of our guys to want to do is a land-use plan. They couldn't care less. They don't want to stick to the details long enough. Still, in most fields when you first get into them—among the planners, the architects, the engineers—this resistance is very common, especially if it's a field which a particular organization has nurtured and brought along. And we spend a good part of our time trying to convince them that we are not trying to usurp what they want to do but that we are trying to supplement their capabilities."

Or, as Henry Dreyfuss points out in a nearly convincing turn of phrase, "There is no competition here between the professions, as design does not compete with design."

**How Helpless Is the Architect?**

It will seem to not a few observers that the position of the program writers leaves the architect in the role of being a sort of decorator. It all sounds like the remark of Frank Bennett, Head City Planner of the Detroit City Plan Commission, in a speech to—all people—architects, planners, and engineers. He said, "The city planner thinks and works toward the goal of making or remaking a city livable. The architect's role is to make it beautiful."

"I don't think we leave him in that role," Harry Foden says, "I think we establish certain guidelines, which are pretty critical, and within them he can do pretty much anything he wants to."

Nathaniel Becker tries to dispel an architect's fears of being left only as an "exterior decorator": "That's a pretty defensive description of what's left for him to do. He has to design the building. All we're doing is giving him information which will help him design it."

"He's already shown," Becker continues, "that he wants expert counsel in other areas. He'll still be the master. He will retain the important directing force. Today, there is so much demanding and important work for the architect to do that I would think he would prefer to have more activity in that area instead of diverting his resources—his time and talent—from the things he is really skilled and trained to do."

**Can We Improve Collaboration Between Programmers and Architects?**

"There should be a basis for further consultation as questions arise," Harry Foden believes. "Thus, the architect should go back and discuss the program with whoever wrote it. But I can see, in many cases, why he is reluctant to do so. This field is relatively new," he explains, "Neither architects nor ourselves have had many opportunities of working together, and, if he views us as edging in on his field, is not apt to want to come back to us. Yet he often finds he has to make changes, and he should consult us so he can see what the best change to make is."

"Research in our case," says Joseph Lovace, "always has a definite end purpose—it's to give information to a designer. It has to be a cooperative effort. One of the problems with research is that people do these big tomes, and nobody does anything with them; they gather dust. I think that to engage in research for research's sake is a useless thing to do."

"The architect takes on a maverick when he takes us on," Foden adds, "because we are not just automatically going to buy what he says. He isn't getting a yes man. And sometimes there is some rough slugging. The client has to face this from us as well as the architect, if he is our client. But if we don't have the benefit of the architect's import, we can't take full account of the valuable feedback."

"That is why it is more effective," Nathaniel Becker thinks, "for our work in some way, to continue in the interior planning. Through that process, we can accommodate changes that his design has brought about. There still will be corners that have to be turned, so you come up with a compromise. Or, if the architect does violate a program, he knows he's violating it."
planning, has left something to be desired. The largest office building we have done, for a governmental client, was programmed by such a group, but when it came time to move the people in, we had to rework almost every individual layout.”

“It would seem that the Place des Arts situation,” Fred Lebensold points out, “should have offered a reasonable solution. Unfortunately, the firm which produced the program was ‘quasi architectural’ in its composition. And its role as a coordinator led to constant arguments in the ‘technical committee,’ where the program writers were making a strong effort to enforce their judgment on the architects. This I consider to be about the worst possible practice I have encountered, since it kills any potential creative dialogue between the client and the architect and his advisors.”

Vincent Kling agrees: “Having an outside programmer undertake work that any architectural firm of substance does for itself and the client automatically sets up tension in the progress of the work.”

“The blood’s on the ground,” Lovelace counters. “It’s generally agreed that the hall in Montreal is probably the best hall in North America acoustically. We won that battle.”

“The Place des Arts program,” Lebensold states, “was not clear, accurate, or workable. It certainly did not take future flexibility into account. Many problems are now apparent after three years of building use.”

Vincent Kling continues, “I don’t feel that the advantages of a predigested written program, delivered by a nonarchitectural firm and saving the architect some leg work in looking at nuts and bolts, offsets the disadvantages of being detached from the investigation process during which time understandings, personal relationships, spontaneous outcroppings of clients’ emotions, and fresh responses of the architect are most likely to occur.”

**Conclusion**

Both architects and nonarchitects agree on the critical importance of writing a good program, no matter who does it.

“The involvement of an experienced architectural firm in the preparation and research is very valuable,” says Fred Lebensold. “Whether it could do better than a nonarchitectural firm generally depends on the quality of both firms.”

“In my experience,” says Richard Dober, “the quality of the program varies according to the skill and experience of the programmer, his competency in getting the client to make as explicit as possible the purposes to which the building will be put, and his ability to search out and evaluate a rational set of alternatives.”

“If an architect is to do a top-flight job of designing a building,” Vincent Kling says, “then he and his team should have first priority on examining the intricacies of the working relationship and the functionalities involved.”

“The best programs I have seen were those that were arrived at by discussion with owner and client-user,” Lebesold adds.

“If expertise on the outside is to be involved,” Kling offers, “it might be better for these people to act as fall-safers in helping to avoid any technical omissions.”

Richard Dober concludes, “As we construct larger and more complex facilities, especially those which have both a short-range and long-range dimension to their execution, programming increasingly becomes part of the planning process. A wider range of skills than those typically available from the architect is needed. This suggests that the architect may undertake programming as a specialist or as a broker of specialists.”

Ironically, as architect George Qualls observes, not many architectural firms want to specialize in writing programs without going on to build the building, because “it is kind of uninteresting to a firm that wants to design buildings.”

“To the extent that he is neither prepared nor willing to undertake this function,” Dober cautions, “some other profession may absorb it.”

And finally, the importance of the subject is illuminated by an iceberg of an observation by Professor Harry E. Rodman of Rensselaer Polytechnic Institute, “Considering the increased complexity and industrialization of the building process,” he writes, “programming will tend to merge with design and, in some cases, become design.”

Vincent Kling is even firmer: “There is no dividing line between the programming and philosophizing of a project, and the actual design of the structure.”

So you want to know who might be responsible for ugliness? Ask who wrote the program and how well it was written.—CBS
Much of the U. S. still consists of great swatches of natural beauty. But mere preservation is no answer to the problems of an expanding and affluent population. Land, inevitably, will be developed — but how? So here is

A RURAL PROBLEM:
WILL MARTHA GET RAPED?
So far, Martha has escaped rape. This small Massachusetts island, which is just 80 miles from Boston and 150 from New York, has been protected by seven miles of water—seven miles that have held off the hot-dog-stand commercialization and suburbanization that has destroyed so much of Cape Cod. By and large, Martha has managed to preserve her clear-cut rural character and there is a sharp division between town and country. At the heart of her, she still runs wild: she is moor, long stretching beach, scrubby forest, secret pond, or high crumbling cliff that bares a depth of history most lands never bother to reveal. Her towns are as specialized and quixotic as her varied landscapes. They are concise deposits of often conflicting cultures. Edgartown, the whaling town, is crisp, white colonial clapboard; Menemsha, a fishing village at the other end of the island, is a less pretentious collection of weather-beaten shingled shacks. At West Chop stand the bulky Newport mansions—the grandeur that was Boston; and nearby, at Oak Bluffs, is one of the most delightful assemblages of Victorian Gingerbread.

Summer people have been attracted to the various sections of the island because of their particular flavor. Casual Menemsha has her collection of artists, Freudian psychiatrists, and ritualistic liberals. Edgartown is noted for her New York yacht-club sophisticates, and Oak Bluffs still has its Protestant ministers on holiday, as well as a considerable Negro population. Out on the lonely moors of Chilmark roam the intellectuals.

The Vineyard is a woman of many moods that shift with lightning speed. But recently, she has been changing: She has been losing her sharp divisions between land and town. Summer houses dot the landscape at random, subdivisions appear around her ponds and at the edges of her shores. Some of these are due to the disintegration of farmlands, some of them are local real-estate operations; others are more speculative ventures and broader in their scope like those of the Doctor Strock, wealthy dentist from Boston, or the Sonnabends from New York.

Following the most conventional habits of 20th-Century real-estate development, new buildings are going up on the periphery of the island, where construction can be most harmful both to the appearance of the island and the preservation of her wild life. In comparing a conservation map prepared by Frank McKeaver of the New York Botanical Gardens with a map of recent developments (see pp. 176-177), over half the latter overlap desirable preservation areas. Just recently, one developer—Mrs. Eleanor Attwood, a retired interior decorator who designs and builds traditional cottages—was stopped in mid-development when it was found that she was filling in marshland. Under a law passed by the Massachusetts legislature in 1964, marshlands are to be preserved because of their special value to the shellfish industry.
An Assessment of the Island

This random type of development can take place on the island partly because the land has never been publicly assessed as a whole. The relative value of land, and the specific suitability of each area, has never been determined. No one has decided who Martha is or what she shall be. Last fall, the County Commissioners, led by Dean Swift, a local surveyor, initiated a proposal to engage Metcalf & Eddy, Engineers and Planners from Boston, to do a survey of the island and evaluate it from various aspects: economic, developmental, recreational, etc. The plan has yet to be passed by the Massachusetts legislature, and it will take approximately two years to complete.

Tourism

The urgency of the plan is underscored by the increasing number of tourists and summer visitors who come to the island each year. Since 1960, air travel to the Vineyard has increased 75 percent; boat travel has gone up 45 percent. Route 3, a highway from Boston to the Cape, was finished in 1964 and shortened the trip by half. In the last five years, inquiries handled by the Chamber of Commerce jumped from 17,500 to 36,000. The ferry boat, which reduced its day-exursion fares, has been handling up to 2500 to 3000 passengers a day—60 percent of whom are short-term visiting tourists. This summer, the island may become even more accessible with the introduction of the hydrofoil.

Martha is particularly vulnerable to the tourist trade and the subdivision of land for vacation homes, since she makes her living on her summer visitors. Her winter population of 6000 capitalizes on the lucrative summer months, when approximately 34,000 new residents arrive, along with the more transient visitors. Roughly 94 percent of the gross annual income of the island is derived from tourism. The only other industries or means of support during the winter include shell-fishing (primarily for scallops, which are sometimes very lucrative but often unpredictable in the price they bring on the market, and scarce in the water); caretaking of summer residences, and the unemployment check. It is a lopsided economy and a lopsided working schedule. Officially, the island has been declared a "depressed" area by the Area Redevelopment Administration and the Economic Development Administration; actually, however, it offers a reasonably attractive way of life to some: the resort business requires a few months of intense work and grants a long holiday. Martha may well be raped because she might not really mind it.

The Conservatives

Various measures have been adopted and groups formed to control and guide the development of the island to save the Vineyard—save it, that is, as each faction sees it. One of the strongest forces is the general conservative tenor of the island population, a population which includes
the Mayhews, Whitings, Peases, and Hancocks—all descendants of early settlers and sea captains. No one makes any bones about expressing their opinions in town meetings and the local paper. Last year, public opinion killed a proposal for a motel in Oak Bluffs, and general conservatism is largely responsible for preserving the integral architectural character of the old towns.

Modern design is by and large frowned upon; most town buildings are designed in the traditional idiom. There is a tale on the island that as soon as the summer people go away and the leaves fall off the trees, the scouts go out for a stroll—not to trespass, mind you, but to take a look at recent architectural developments in the more radical portion of the island. Several modern houses by architect William Smull were taken to task several years ago by a gentle critic who apologetically called himself "hopelessly old-fashioned" but acknowledged he could not quite understand the reason for bringing such glassy bits of semitropical modernisms to the temperate zone. Their only God-saving grace was that they were all concealed by the surrounding trees.

Conservatism, then, is twofold in its effect: It preserves the characteristics of Martha's varied architecture, yet permits no deviations to be made in other parts of the island. And yet perhaps nothing could be more suitable to the island than a town in the modern idiom.

**Zoning**

But if the island's history clearly points to the advantages of the tight development, public opinion is far behind. Many people think the salvation of the land lies in zoning—in the privacy of the suburban-type plot. Any construction more dense than this usually arouses immediate alarm. Some islanders work hard to get zoning, which is no easy task in a hotbed of Yankee individualism: "Nobody's going to tell me what I can or can't do with my land," is the typical response. Until recently, the only areas on the island to have zoning ordinances were Oak Bluffs and one section of Tisbury. In a series of town meetings this last winter, one section of Edgartown became subject to partial zoning of the one-acre variety.

The pros and cons of zoning as a planning panacea are well illustrated in an incident several years ago, when engineers from the mainland set out to map a road from one end of the island to the other. State highways are ridiculously wide for island traffic, and ridiculously straight. After much debate, the island got special dispensation from the mainland on highway regulations and the road was returned to a more suitable dimension and configuration.

**The Conservationists**

Beside the power of general public opinion, there are several institutions on the island dedicated to preserving the natural beauty of the land. These include the Garden Club, which keeps a sharp lookout on general goings-on, invites conservation lecturers, and has been responsible for ferreting out some of the more conspicuous billboards and urging the State
Highway Department to maintain the borders of the roadways. The Friends of Tisbury, another conservation group, also keeps an eye out for the blemishes and makes helpful suggestions on such things as plantings.

Probably the most influential voice on the island, reminding the inhabitants of the rare legacy they have in this bit of rural landscape, is the Vineyard Gazette and its publisher, Henry Hough. Interspersed among the news of the week are observations on wild life, nature, and Thoreauvian fragments of philosophy. Hough wages a continual battle for conservation, for zoning, for any measures that might preserve the beauty of the island. But there is also a note of despair at saving a land he has known so long and seen change so much.

The summer inhabitants of the island include some of the most prominent names in the arts, sciences, and politics; Jerome Wiesner, Lilian Hellmann, Leona Baumgartner, Thomas Hart Benton. Although influential on the mainland, they come to the Vineyard to rest and relax—not to wage another battle. Boston Redevelopment Authority chairman Edward Logue, for example, when questioned about the developments on the island, rather wearily pointed to the boundaries of his large estate, and commented that at least he was secure—and that he was tired. Other residents, like Nan Simon, wife of Robert Simon of Reston fame, take up where their husbands leave off. Last year, at the instigation of John Oakes, editor of the editorial page of The New York Times, Dick Pough, a noted conservationist and summer resident of the island, founded the Vineyard Conservation Society. The group is composed of local citizens and summer residents, but is in large part sponsored by the vacation contingent. As Executive Director of the Society, Pough chose Bruce Blackwell, a young man from Rhode Island who had been instrumental in proposing and advocating the salt-marsh preservation bill in Massachusetts. Blackwell keeps an eye on emerging developments, such as mobile homes, and acts as a general source of information on conservation issues. One of the newest strategies devised by the Pough team is the policy of land stewardship—a system whereby large landowners give scenic easements on their property: i.e., they forfeit their rights to subdivide and develop. Taxes are lowered accordingly. The device appeals to the man who wants to preserve his land intact and pass it on with as few tax burdens as possible.

There is considerable friction between the conservation and development factions, which is compounded by a division between summer and winter residents. It is true that, as a whole, the winter population is probably more interested in the economic development of the island, whereas the summer residents would just as soon it stay as it is. However, about half the developers happen to be summer residents, and a considerable number of islanders are conservative enough to resist drastic change.

### The Balanced Economy

One alternative to the wholesale exploitation of the land that nearly everyone is agreed on is to offer some kind of balanced economy. But even this alternative gets bogged down in misunderstandings, in town-and-gown type controversies. Take, for example, the Great Oyster Debate, whose history goes back to 1963. In that year, the Federal Area Redevelopment Administration gave two marine biologists, George Mattheissen and Richard Toner, a grant to develop a system of controlled sea farming to stimulate the shell-fish industry. They experimented for more than two years with a system of seeding oysters to wooden stakes in a hatchery, then transferring them to local ponds. When the two scientists decided to give the experiment a try commercially, using their own funds, but contributing 5 per cent of available seeds to the town at cost, they applied to the Edgartown selectmen for 20 acres of the Sengekontacket pond to try the venture. Two selectmen approved the grant, but immediately there was an uproar from the fishing community: What right did the selectmen have to give the grant; would not the area designated interfere with their traditional fishing locations; might not this new "industry" dump waste and oil into the pond and pollute it? The whole project sounded like an invasion of off-island money about to rob the local fishermen of their rights. The misunderstanding was understandable, since the ARA did not permit the scientists to publish their findings before the administration put them out in printed pamphlets. Consequently, few knew what the project was all about. The debate over the issue gradually widened, other ponds were suggested, and each puddle under consideration drew a wealth of objections from the inhabitants—summer and winter alike. As Mayhew pointed out in a town meeting: Everybody is in favor of improving the island's economy, but when it comes right down to it, they would rather it started in somebody else's backyard.

### The Strock Developments

All the controversy about development or conservation, tourism or fishing, planning or zoning, fades before the audacious enterprises of Dr. Alvin Strock—dentist from Boston, summer resident of the island, and real-estate developer. Over the past few years, Dr. Strock, with his brother Moses, has quietly bought up 2000 acres of the Vineyard. The brothers started, incidentally, in their own backyard, with the acquisition of the Vineyard Haven Country Club. Their properties now include the Colonial Inn in Edgartown, a large farm at Katama, a good portion of Sengekontacket pond, and tracts at Gay Head, Red Hill Farm, and Barnes Road.

Strock is an elusive combination of visionary and pragmatist. His ambitions multiply and change their scope as he goes along. He is not a typical developer with a master plan, but rather a Horatio Alger with a host of ideas. In general, his plans are quite precise. He says he wishes to acquire as much land as possible on the Vineyard—enough to control the character of the island and save it from chaotic development. He is assembling large parcels in every part of the island so that he will have something to appeal to every type, something to offer anyone who wants to come and buy. And, of course, it has to be a good investment.

There is a curious confusion to the Doctor's logic. He acknowledges that the Vineyard has distinct and separate parts, that she is a many-faceted dame, but he seems to want to cloak her in country-club costume. At the beginning of his project, each development was to be centered on a specialized activity: a golf course, a small landing strip (for the private-jet Jet Set), a farm or stable. "Vacationers today are very sophisticated," claims the Doctor: "they have
been all over the world to the best and fanciest resorts and they want the best facilities and comfort." Although some of the schemes have gone by the board, like the golf course for Sengekontacket pond, the Doctor still thinks in terms of an enormous, efficient network of services stemming from a country-club center. He has bought land in Wood's Hole for a Way Station, in case passengers for the ferry or sailors are delayed by bad weather. He is planning a docking facility in Vineyard Haven. Individual houses in various areas set off for different kinds of work into a sophisticated sandbox, with exactly the opposite. It will turn the whole enormous, efficient network of services of the Vineyard, it was the Doctor's idea character of the island, to the uniqueness organized play.

But if this is not being very true to the character of the island, it was the Doctor's idea of beauty. The curious thing about the man is that, in spite of his grand vision, the elements are always shifting as he gains new insight.

In the beginning, Strock went to site planners Sasaki & Walker Associates to sketch out tentative proposals for three areas: Waterview, Lagoon Woods, and Trade Winds. The designers, under Paul Gardescu, drew up tentative plans in all three areas and also for a development out at Gay Head. It was an unusual piece-meal job for the large firm. "Usually the projects we get are thoroughly programmed; we usually have the funds to do a thorough study of the area; the research is made available to us and we prepare a master plan." The tentative-ness of the Doctor's projects is purposeful. He does not want to commit himself; he likes to change his mind. And, on the practical side of the picture, the rumor of a master plan would probably set the island on its ear. It may be for the good of the island that the plan is flexible. His first developments on the island are better than most: He is preserving large areas of open spaces; but, by and large, they are the old suburban loops, the one-acre plots that have dulled many another area of natural beauty.

The scope of the Doctor's imaginative ramblings are sometimes breathtaking. He is constantly investigating other income possibilities for his properties, waging his own little plot for a balanced economy. His eye may be caught by a small notice on one of the weekly newsmagazines that the Government has increased its grant to oceanographic research this

**CONSERVATION MAP**

Frank MacKeever of the New York Botanical Gardens prepared a map of desirable conservation areas for the Vineyard Garden Club. Because of its varied soils, the island has a wide selection of flora isolated in different locations. There are no plants that cannot be found on the mainland, but the island specimens have adapted themselves to the rigors of an insular climate: strong winds and salt spray have in many cases changed their formation. The marsh areas are to be preserved because of their usefulness to the shell-fish industry. Several locations have been set aside for bird populations. The heron was the center of a two-year dispute over the road at Menemsha Bight. Indian fishermen wanted the road for easier accessibility to their boats (and also to open up the area for development). Conservationists wanted it preserved as the nesting place for the heron (and as a strategic scenic spot). The dispute reached as far as the editorial pages of The New York Times. Unfortunately, not even the conservationists agree among themselves. MacKeever, for instance, claims there are other nesting areas for the heron; the Indians, harboring minority feelings, claim restrictions are being imposed on their property while the rest of the island developments are never subject to criticism. Several large estates, such as the Nathaniel L. Harris Property, have been conveyed to the Trustees of Reservations for conservation. Geologically, the Vineyard has the extraordinary high cliffs of Gay Head, which have been labeled a National Landmark. These cliffs represent the only place in New England where the sedimentary rock formations of the preglacial age are revealed. The cliffs, together with the ponds and fringe areas of the Vineyard, are among the most strikingly beautiful parts of the island, and among the most vulnerable.
5 SEVEN GATES FARM: An exclusive community of large estates was started in 1888 when Professor Nathaniel S. Shaler, a noted Harvard geologist, purchased the property. Lots are carefully planned so that each resident has total privacy.

6 DOWN HARBOR ESTATES: October 8, 1965. A 40-acre tract was bought by Paul Sonnahord, vice-president of the Hotel Corporation of America and president of the Plaza Hotel in New York City. December 10, 1965. The tract has been divided into 40 lots, all more or less one acre in size. There will be a shopping area for large and small boats. Mr. Sonnahord and Mr. Young (of the local real-estate office handling the property: Young & Convery) are both to have residences within the development. Young & Convery are also agents for Shinnar, Inc., a rather unique design firm offering a selection of pre-fab. homes, vacation houses ranging in style from Swiss Chalet to Cape Cod and A-frame. Tract is largely wooded and can probably hold and hide this exuberant variety of architectural imports.

7 SENGEOKONTACKET POND: 670 acres including Major's Cove and Dodge Hole; Two sections of development have been begun: Waterview Farm, 15 lots; Trade Winds, 8 lots. Preliminary plans for entire area, see overleaf.

8 LAGOON WOODS: 110 acres of woodlands with a partial plan of one-acre lots. Sandy Point on the lagoon will be recreation area for the development.

9 KATAMA FARM: 220 acres turned into farmland. Tentative development plans call for high densities (see overleaf).

10 GAY HEAD: 200 acres. Preliminary proposals call for quarter acre lots. Plans are to be changed.

11 RECENT ACQUISITION: 35 acres.

ISLAND PROPERTIES, INC. Assembled by Dan. Atkins and Moses Strock.

12 RED HILL FARM: 90 acres. Development to be centered around horseback riding facilities.

13 GREAT PLAINS WILDLIFE PRESERVE: 400 acre forest contiguous to Red Hill Farm. Land would provide excellent cover for pheasant and other types of fowl.

14 DEACON VINCINT LAND IN EDGARTOWN: 150 acres.

15 MAINLAND WAYSTATION AT WOOD'S HOLE.

16 DOWNTOWN MEADOWS: 150 acres.

17 DOCKSIDE 17 Vineyard Haven.

18 COLONIAL INN of Edgartown.

19 ISLAND COUNTRY CLUB, motel and seaside 18-hole golf course.

DEVELOPMENTS
Most developments on the island are small, with the exception of Doctor Strock's holdings — Island Properties, Inc. The developments are located on the fringes of the island, some protected by woodlands. Most are using all the available property for subdivision; the Strocks, however, have planned on leaving open spaces, although, so far, no lot owners have any legal assurance that the land bordering their property will remain undeveloped.

The real-estate news items listed at the left are based on reports in Vineyard Gazette.
Preliminary studies for Katama are based on a subdivision grid laid out by a former developer. The straightforward plan is a logical one for the flat area, and the land—just outside of Edgartown—lends itself to the dense development planned by the Doctor. In preliminary sketches, the Sasaki office suggested a tight peripheral grouping of houses to form a buffer against adjacent properties and protect an open common in the center. Other plans call for a break-up of the street pattern with hedgerows, trees, main roads and subsidiary pathways. The Doctor now has an extensive farm in this area, and, although it does not appear in this sketch, he claims it is to remain the focal point of the final development. It is his intention that the farm nucleus remain, so that children in the neighboring area could work on it during summers, but it is difficult to see how a farm could operate in the area surrounded by housing.

The type of densities the Doctor is thinking of would horrify most Vineyarders, but in this area (close to Edgartown) a highly concentrated development might be an entirely appropriate way to house the increased vacation population, and save some of the land unencumbered.
year, whereas certain other areas of research were cut back. Might there not be a place for a research institute on the island? Recently, his fancy was caught by an item about a college president in the Midwest who has made history by making an educational institution a profit-making concern. He is now seriously exploring the possibility of a permanent educational and research facility on the island, which would augment the tourist economy, and, of course, make use of Strock land and facilities.

150
Square Miles of Natural Beauty

Strock is the knight errant of the capitalistic system and one cannot help but admire his nerve. Whereas all the other parties on the island seem to be taking midget steps and debating about what is to be done, the doctor comes charging in to carry the lady off. In terms of the free-for-all economic system, the Strocks, Rockefellers, Levitts, etc. may be the most effective tools for damnation or—salvation.

But private enterprise has its limitations and the Doctor is limited by the scope of his wealth and imagination. He can control development or preservation only within the limits of his properties. It may be that within the picture of total island development—within the context of what has happened to the rest of the Eastern Seaboard—none of the peripheral areas of the island should be built up at all. Perhaps only certain areas should be tamed or civilized.

By the same token, one suspects that the Doctor, like most other Americans confronted with the same dilemma, is not quite sure of the nature of the lady he has at hand. What precisely are the qualities that have made her so unique, valuable, and attractive? Why do people come to her instead of going somewhere else? What makes her now more alluring than the rest of the Cape. More resort areas have been ruined by well-and-ill intentioned people making the place over into what they think the tourists want. More striking dames have become commonplace by having their faces lifted to fit the standard rule of beauty.

The challenge of Martha lies in sticking to the character she has developed—her particular special brand of beauty. This does not mean that she cannot grow: there is room for it; she has the structure for it. Martha, luckily, has skipped from one cluster era to another. The challenge to the Strocks and the Sasakis is not to apply some trite mainland solution—the suburban subdivision or the country club life. Martha is country; she does not need to import a pallid facsimile.

The local tourist maps advertise "150 square miles of natural beauty." But for how long? Ben Morton of the Chamber of Commerce can claim "the land will always be there; the tourists, they come and go." The insularity of the island has been her saving grace; it may also be her blindness. Whether Martha will be raped or not is still a question.—MD
Our cities are full of conflicts of interest, differing aims, economic and political manipulations. This makes beauty, in the form of a grand master plan, difficult to attain. A good example is this case of
AN URBAN PROBLEM:
THE PEOPLE
OBJECT
Some say that if only better architects create better and more beautiful buildings, all will be for the best in this far-from-beautiful world. If this is true, then New York University is doing its best along these lines, commissioning Marcel Breuer to do much of its uptown work at University Heights, and Philip Johnson to do a development plan and several buildings at the Washington Square campus. But the Johnson proposals for the beautification of the downtown campus have thus far created only one more ugly situation in a series that has continually troubled the relationship between NYU and its Greenwich Village neighbors. This latest controversy is more than the usual town-and-gown problem: It goes to the core of many urban problems, and raises serious questions concerning the various meanings of beauty, visual and otherwise. The problem is not whether these buildings are "good" or "bad," beautiful or ugly, but whether, in the complex way that a city grows and changes, the expansion of this urban university is creating more than it destroys, or is destroying more than it creates.

NYU has been variously called the largest private university in the country (by its news bureau); a dynamic urban university with potentialities for becoming truly distinguished (by its president); one of America's great second-rate universities (by some of its students); and an immoral monster, slithering over the area and swallowing everything in its path (by some of the residents in the Greenwich Village area that NYU has been part of since 1831).

It is, without doubt, a university on the move. Under its new President, 42-year-old Dr. James M. Hester, it is bidding to become not only the biggest private university (41,000 students at present, 30,000 of them at Washington Square, and a projection, made in 1963, for 50,000 at all centers by 1972), but also one of the best. Money is apparently no object. The Ford Foundation, now headed by Henry T. Heald, a former Chancellor of NYU, has granted NYU $25,000 in a three-to-one matching requirement—i.e., $75,000 to come from NYU. Last year, NYU jumped from tenth to seventh place among universities, ranked in fund-raising from
private sources, bringing in $23,700,000 in one year for its development program.

Hester's Hopes

Hester's plans are impressive. He sees a university in general as "the most potent institution in our civilization," and the urban university in particular as a major force in building "a strong urban civilization for the world of the future." He sees the urban university, in fact, as the dominant university of the future, and NYU as a leader among them. He wants NYU to be more than simply a convenient school for commuters, but a real attraction for the best students and scholars anywhere. He wants NYU to give increased attention to research on problems and opportunities of urban life (NYU has just announced the world's first department of urban anthropology, Margaret Mead having played a major part in planning it). He wants NYU to contribute to its urban community. Speaking before the San Francisco Planning and Urban Renewal Association earlier this year, Hester cited the existence of the university in Greenwich Village as helping that historic area "preserve its attractiveness," and he sees NYU as having prevented the fringe of slums that are the familiar tatters around other urban universities. There are some people in the Village who remember the colorful vitality of the area, and smile ruefully, soberly, at Hester's rhetoric.

With this new image for NYU, and its hoped-for transformation from commuter college to Ivy League status, both tuition and scholastic standards have gone up. A few new buildings have also gone up, and older ones have been purchased, to be used as academic buildings or be torn down in the future. It is precisely in this acquisition of property and buildings, in the alteration of the Village scene, that the university has been met head-on by a vocal opposition. The issue of the proposed library is only the most recent eyeball-to-eyeball confrontation. It has, however, led the university to create the new position of Community Relations Director, appointing to the job a man who had previously been editor of the Alumni News and had spent time with the PR department. "How can you hate a university?" he has been quoted in the school paper as saying; "It's like hating the American flag."

But there are people who hate NYU, who see its claim to being a "community of scholars" as pretentious, who equate its methods with those of any self-interested corporation, and who see every acquisition as evidence that NYU is taking over the community and obliterating it as a community, taking over the public Washington Square Park and turning it into a private campus.

NYU on the Square

Comparing the square as it is today with the square 20 years ago (see maps) indicates that NYU has indeed circled the square. On the lighter side, a student ad this spring invited people to visit one of the fraternities, billing the event as "a free tour of one of the last remaining non-NYU buildings in the City, if not the world."

NYU has had lively building operations on the square almost since the time it was founded 135 years ago. In NYU's first decade, the Chancellor became bogged down in a colossal mismanagement that his friends attributed to "excessive zeal." When he resigned, in 1839, he left a disorganized Council, a faculty and student body depleted by resignations, and a $15,000 mortgage on the library books. But the university had its first building (its first on the square, too) and a symbol for its seal, until the building was torn down in 1894 for the present Main Building on the eastern side of the square. Also in the 1890's, there had been growing discontent with the cramped quarters in the vicinity of the square, and an uptown campus in the Bronx was opened.

Johnson and the Future

Until quite recently, the university has succeeded in a more-or-less piecemeal fashion in its over-all planning of the downtown campus. Eggers & Higgins did a colonial plan after World War II, and Harrison & Abramovitz, some years later, did another plan for the square, with two-story buildings and pedestrian bridges. Neither plan was realized. In 1964, Philip Johnson and Richard Foster were retained to do a master plan, and the architectural design for various individual buildings (one of which, the library, was already being designed by another firm of architects). A spokesman for the university says that this planning will serve its needs for at least the next 10 years. To some professionals (architects), the university is proceeding as if it were a large landowner like Cornell, able to plan only one or two buildings ahead, with every assurance of finding space whenever it needs it.

An Urban Problem: The People Object

Map (above) is from a lengthy and detailed proposal for the Washington Square area, made in 1946 by Holden, McLaughlin & Associates for the Washington Square Association. The report cited the association as having "long been a defender of the residential character of the area adjacent to the square." Today, the association is frequently a defender of NYU. Map (below) and various signs (facing page) tell their own story of NYU growth.
Expansion of Academic Facilities: The Protest

The proposals by Philip Johnson and Richard Foster for the development of the Washington Square campus (see site plan) were announced in December 1964. The plans included a unified design of several tall buildings on or near the square—the new library, an extended and refaced Commerce building, a replacement for the Education building, and a new Science building to match; a closed-in galleria extending three blocks in length and two in width, on land that is entirely owned by NYU; and a piazza where one arm of the galleria terminates, at the site of the temporary theater for the American National Theatre and Academy.

Said Johnson: "My whole aim is to quiet the square down; I want a single image, the way things used to be, not like they are at Yale. The whole idea is to preserve the park, to contain it; and with this homogeneity, to give the Washington Square campus an identity it hasn't had before. They are fairly anonymous buildings, maybe even dull, but I'd rather have it that way than have them be pushy. We can't do anything about the 18th-Century scale at the north side of the square, but a square this size isn't hurt by height. And we wouldn't touch other buildings on the square. Some of them—on the south side—even have a certain folkloristic interest: Loeb and the Catholic Center. The only building to be torn down is next to Education. The heart of the campus is this six-block galleria. Then, down here, off the galleria, there's a relief area where there are dense buildings; the openness is more useful here than at the library site where space leaks out."

Said the President of NYU: "Mr. Johnson has developed a concept that will preserve the traditional serenity and beauty of an important landmark in New York City." Said the Alumni News: The library will be "a monumental focal point for the vast changes due in the Washington Square area." Said one resident of the Village: "This is the Anschluss. The Square is now NYU's."

Four Variances Needed

The library will be the first building in the university's Five Year Plan for $60 million worth of architecture by the fall of 1969. The library was announced at $17,500,000, with $1,500,000 coming from state funds and $3,300,000 from Federal funds. (The latest figure is $20,000,000, an upward revision made public in April when NYU announced receipt of $6,000,000 from a single private donor.) But to build the library as designed, it will be necessary to obtain four changes in regulations. The first of these was announced in The Village Voice late in 1965: "NYU will obtain a 40-ft slice of West Broadway if no strong objections are voiced at the City Planning Commission on October 20." Another map change—also on paper—would involve widening West Third Street from 70 ft to 75 ft so that a larger building can be built on it. Then there would be an appeal to the Board of Standards and Appeals for a zoning variance, to permit extension of bulk or land coverage beyond what is allowed. Final action would be a change in the original Housing and Redevelopment Board agreement, made in the 1950's, which now restricts the cornice height along the south side of the Square to 60 ft, and requires a 45-ft setback for any additional height.

In testimony before the City Planning Commission, Local Planning Board #2 recorded its vote (advisory power only) against the 40 ft takeover on West Broadway. "The board's action was not based on a critique of the aesthetics of the Philip Johnson building but only of its effect on the park," said Mrs. Philip Wittenberg, then chairman of the local planning board. The reasons cited by the board were that the park would be overcrowded by students; the building would throw a large section of park into shadow; the "complexion" of the south side of the park would be "damaged" by the 150 ft height; and public open space available for small-park use would be ceded to the university for private purposes. About the zoning variance, the local planning board stated: "The city arrived in 1961 at standards of bulk and land coverage to create a livable urban pattern. A great university, stressing urban life, should be the last to see an extensive set of exceptions from those standards."

Arguments and Alternatives

"We're clearly not against a library as a library," says Mrs. Wittenberg. "But in all the NYU presentations, they have never considered the park as a community institution, only as a foil for this library." And, from the president of the Association of Village Home Owners, in a letter to The New York Times: This is not a square needing closure, "but a real park, needing maximum light and air." From Jane Jacobs: "All the glamour of Philip Johnson won't save that corner of the park from gloom." She had pointed out at one stormy public meeting that publicity photos from NYU show the model with shadows cast from the north.

Others have concentrated their attention on the three-block mall south of the square, which would lose one of its blocks to the library. Why not turn the controversial block into an arcade, with the building over it, suggested one Villager. But the university replied that it was concerned about safety; it was probably equally concerned about the "several hundred thousand dollars" that had already been spent on architectural design. Johnson believes that his proposal "increases the niceness" of the mall, making it a defined plaza instead of a space that simply "empties into the park." There are rumors from a long-time Village resident that NYU has designs on the remaining two blocks of mall: "They haven't said it..."
Development plan by Philip Johnson and Richard Foster (1) shows expansion of NYU into loft area east of square, echoing similar idea proposed 20 years ago (4). Washington Place would be closed to traffic, and the six-square-block area roofed-over. NYU's promotional model, however (6) no longer shows the canopy over Washington Place, and without earnest belief in this feature by university fund-raisers it will probably never get off the ground. (Early studies: 2, 3.) Another feature of the plan is a uniform height around the southeastern corner of the square; Johnson has referred to the Place Vendome (5) as a model. Keystone of Johnson's proposal is the new library (7, 8, 9), which has been described by one enthusiastic supporter as a "square Guggenheim." A skylighted atrium runs the height of the building—"a campus built into the interior," says President Hester. From the inside, there is an unimpeded view of the park. On its exterior, the building will be faced with red sandstone. The plan dispenses with the traditional main reading room; instead, it has many carrels and private rooms, and several large reading rooms. Its seating capacity of 4800 is three times that of the 42nd Street library. The height is 12 stories, with two below grade (Minetta Brook prevented going deeper). The top floor has been planned for administrative offices.
Originally scheduled for construction in the fall of 1965, the Johnson library has not yet been approved by the city; in order to be built as designed, on the specified site, four variances must be obtained. View at left (1) is looking west along West Fourth Street, the tower of Judson church visible through the fire escape, and the turret windows of the new Warren Weaver Hall barely visible before large open space on south side of street. Next to Weaver is the present ANTA theater (6), mentioned by Villagers as a possible alternative site for the library. The ANTA site has been planned by Johnson-Foster and NYU as the location of the new science building (see map above). To counter Village opposition to the Johnson library on its proposed site, the university has shown a design meeting all city regulations; the resulting mediocre tower (5) has been termed "Hester's Revenge," and all but the most ardent foes of the university doubt that the university would seriously propose it. A mock-up of the proposed library construction is on the site (3, 4). Washington Place (7) is site of future galleria.
The University Replies

The university has answered every argument: "This is the only site the university owns that is suitable for a building of such central importance as a library." It points to the acclamation Philip Johnson has received for "his artistic treatment of public spaces." It acknowledges that NYU had previously intended to abide by the 60-ft cornice height, but "the university has been advised by its architects that a much more beautiful building can be built with much more favorable results for the park if the exterior goes up directly 150 ft." It concludes one rebuttal with the statement that "to insist on rigid zoning conformity when an opportunity exists to build a building of great artistic merit would be short-sighted."

The university argues that its 1954 proposal, for a smaller building, was for a different type of library in a different type of university. The new one would have the impressive name of Library and Study Center, portions of which would stay open 24 hours a day. As to whether students will "take over" the square, NYU replies that probably no more than 5 percent of those in the park, at any given time, are students. The same spokesman, however, referring to beatniks and "other undesirables," finds it hard to believe that the community would not welcome a change. As to the promise not to obstruct the view from Washington Square Village, NYU claims it was "only an oral assurance." NYU perhaps regrets allowing the site to remain vacant for several years, letting people grow used to the open space; previously there was a 16-story high-rise apartment and a commercial garage on the site (see photo).

Arguing for the Johnson library, the university points to the building's bulk as preventing, for all time, the possibility of a roadway through the park (see page 191). They point to the shadows from a hypothetical building of 30 stories, which would be possible under the zoning ordinance, and urge the opposition to settle for Johnson, Village Democratic leader Edward I. Koch was quoted in The New York Times as saying, "We don't believe he'll build a tower that could only be called 'Hester's Revenge.' He won't build a building they won't be proud of."

Not everyone in the Village is opposed to the Johnson proposals. Says one planner, speaking off the record: "It is the first plan that I know of, for a university in this city, and it's as valid as any other plan would be." Says one architect, also off the record: "The shadows from the proposed library aren't really critical; it's the shadows from the east, and from existing buildings, that are the real threat to the park." Others have already written off this corner of the park as gloomy "even in our grandparents' time."

Action and Reaction

What is happening now? Albert McGrath of Washington Square Village has made films of the shadow situation and has asked the City Planning Commission to reopen its hearing. The Commission is apparently waiting for the HRB on amending the original urban renewal agreement, as to the 60 ft cornice rule, before it acts. An NYU spokesman says, "We sense a not unfavorable view from the City Planning Commission." Another NYU man speaks of the antagonism as being "negotiable." The city's Commissioner of Parks, Thomas Hoving, is still on the fence, preferring to stay out of a controversy that isn't actually in a park. Local Planning Board #2 has passed a resolution asking the Borough President to map the three-block strip for park use, thus putting it under the care of the Parks Department and making any future transfer to other than park use a potentially difficult one. The architects are finishing their working drawings, and a local renderer has two months' work on the library interiors alone. A member of the NYU Board of Trustees, Elmer Holmes Bobst, has given $6,000,000 toward the construction of the library.

Residential Facilities: Legacy of Controversy

The site for the library has been a source of controversy for years. In 1953, NYU announced that it had entered into an agreement with the city's Committee on Slum Clearance (Robert Moses' committee) to explore the possible redevelopment of an area southeast of Washington Square. Later that year, a memorandum went out to NYU alumni, describing the proposed redevelopment. Nine blocks, bounded by Fourth Street, Houston, West Broadway, and Mercer—were to be ac-

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quired by the city and sold to private developers, with the Federal Government subsidizing the project to the extent of $10 million, and the city granting $5 million. In its memorandum, NYU announced that it had agreed to make a bid for the purchase of the educational area (3 acres of the 17.68 total), but that "NYU will have no financial interest in the housing project."

Opponents of the $25-million project, a number of them living in the comfortable apartment building on the site presently allocated for the library, charged that turning over park-front land to NYU was illegal because the city had discouraged competitive bidding on the property. It was also pointed out, in that last-ditch lawsuit, that NYU had provided $25,000 to the city for planning studies of the project, by architects who had been and were still retained by the university and could therefore not be expected to render impartial judgment for the city. Other critics of the Title I project argued that it was not replacing slum housing, it was not providing family housing, and it was making an outright gift of taxpayer money to a private institution.

The Title I Controversy

The Title I project went ahead, however, in the process changing from a nine-tower development of middle-income units (at $48 a room) to a three-slab development of luxury units (with 48 penthouses at $8000 a year). The Slum Clearance Committee admitted that there was no control over a redeveloper once he had acquired the land. Skidmore, Owings & Merrill, who were then serving as consultant-coordinators for the slum-clearance program, were quoted in The New York Post saying that Title I was "established to provide tax revenue for the city." Moses, at the time, had agreed. Fred J. Cook, writing in The Nation (October 31, 1959), spoke of the disastrous uprooting of 1000 small businesses from these blocks: "the heart of the hat industry" was destroyed. marking the first time in the nation that Title I had been applied to wiping out small businesses. A Congressional investigation judged that "it was a shame and a pity, it shouldn't happen—but it was legal." Cook pointed to NYU as "beneficiary of the taxpayers' largesse" in receiving the three-block park frontage: "What can only be described as a perversion of the intent of Title I was involved in the condemnation of land for the university campus."

NYU Takes Over

NYU not only had its land, but also, as it turned out, had the housing project, purchasing it in December 1963 from the original developers for what The New York Times reported as $25 million. As early as 1960, the developers had wanted to turn over to NYU the three still-undeveloped blocks along Houston Street, although technically this would mean a default of their original contract, with the city then entitled to recover the entire site, including all improvements. A taxpayers' suit was instituted against the city in September of 1963, charging that the city had a right to repossess the still-vacant portion; but the city, while admitting this right, chose to continue in its agreement with NYU. The actual financial interests behind the Title I project have never been fully revealed, although various exposes pointed to slumlords, Tammany politicians, and underworld characters. It was suggested by Fred Cook that high political powers were involved. An NYU spokesman said, recently, "No one left NYU with a sack of money. Far from being too shrewd, universities are generally too innocent."

Filling Out the Site

The luxurious Washington Square Village, with 1300 units, now has about 350 "university families," and the balance will undoubtedly change as apartments become vacant. On the southern portion of the site, where the third slab was to have been built (at one time, there was talk of low-income housing), there are now three towers designed by I. M. Pei & Associates. Only two of them are NYU's, for a total of 350 units between them; the other was developed by the Housing and Redevelopment Board as a middle-income co-op. Martin Beck, Director of Planning and Supervising Architect of NYU, takes pride in the university's service to the community on these apartments, in moving the city's Mitchell-Lama standards up to Pei quality. Villagers voiced some objections to the scale of the towers, the tallest buildings in the area, but the architects consider the height to be a positive attribute. Their first studies included some low-rise apartments (eight stories) along Houston Street, but these were rejected as an unsightly solution along a prime transportation artery, and also as looking too much like a "project." Their solution was to go very tall, and to open onto Bleecker Street, where densely planted trees will give some privacy from the north (see site plan). Occupancy is planned for this fall.

The Need for Bed Space

Changing from a commuter college to a residential university has put acute pressure on NYU to find living space for its students. One new dormitory was built recently (by Hariri & Abramovitz) and others will undoubtedly be built in the future. There are now more student-in-residence at NYU than at any other university in New York City—the number of beds has gone from 600 to 6000 in the past ten years. 2200 of them in Washington Square, and the projection is for 5000 beds in this area within the next few years. "We're ahead of schedule, however," says Dr. Peter Agnew, vice-president in charge of business affairs, and he does not anticipate extensive buying or building.

The major source of beds has been the dying hotel industry; NYU in the past several years has purchased the Grosvenor Hotel (500 beds), the Brittany (500), #1 Fifth Avenue (900), and there have been persistent rumors for months that the Fifth Avenue Hotel, one of the last remaining commercial hotels in the Village, will sooner or later go the same way. The reaction to these acquisitions is, as might be imagined, varied. NYU feels that it is saving the community, saving buildings from demolition when they have outlived their original usefulness. (Also, it costs about half as much to buy an old one as to build a new one.) Non-NYU people see nothing less than the "absolute destruction" of the community, as it becomes institutionalized. (Also, they regret seeing these buildings removed from the city's tax rolls.) The fear of more than one Villager is that with the university stretching from Houston Street in the south to 10th Street in the north, it will not be long before NYU begins to buy up everything in between.

The Square: An Arena in Its Own Right

At the heart of the Washington Square campus is Washington Square. And at the heart of Village life is the sense that a good fight for a good cause is one of the
Proposed Redevelopment of Area Southeast of Washington Square

Sketch of area that New York City Committee on Slum Clear-
ance proposes to be redeveloped for clearance and construction of
multi-story, modern apartment houses of fireproof construc-
tion. Area is bounded by West Third Street, Mercer Street, 
Houston Street and West Broadway. View looking north. Wash-
ington Square Park top left. Architects are Eggers & Higgins.

The library site is shown on the original 
proposal for redevelopment of the area 
southeast of Washington Square (news-
paper clipping); the library itself is seen 
as a low, open building in the upper-left 
corner. The Title I proposal soon changed, 
however, resulting in two long buildings 
(3). The rest of the nine-block redevelop-
ment site eventually became NYU's, along 
with Washington Square Village itself, and 
recent development of the southern por-
tion of the site includes three towers by 
I. M. Pei (3, 4). View north, past these, 
shows controversial three-block mall ter-
minaling at library mock-up (1). Since 
the southwest unit of the Pei towers is a 
Mitchell-Lama co-op, there are slight dif-
ferences in layout and materials. Exter-
nerally, however, they are identical. The 
two NYU buildings face onto a small 
plaza (2); Mitchell-Lama has its own 
roofs. At the northwest corner of the Pei 
site is a Grand Union store, a remnant 
of the original Title I project, and owned by 
a member of the NYU Board of Trustees. 
On the eastern end of the Pei site, NYU 
has scheduled an athletic facility, to be 
designed by Eggers & Higgins. Until re-
cently, this corner was for an experi-
mental school, designed by Pei, with 
participation by Educational Facilities 
Laboratories. A community facility would 
have gone far to mollify dissident Vil-
lagers; NYU says it has hopes of building 
the design elsewhere. NYU has obtained 
other residential space in the Village by 
hotel-buying (6, 7, 8): the Grosvenor, 
1 Fifth Avenue, and the Brittany.
Originally a Potters Field, Washington Square Park was reclaimed in 1797 in an effort to attract development to this northerly part of the city. The Square has seen varied rituals over the decades—military parades, public hangings, and parties atop Washington Arch during the 20's and 30's. More recent views of the park include the panorama to the east (1), the view south (3) before the Title I redevelopment and before cars were prohibited; the view north with folk singers around the fountain (4); and the chess corner at the southwest corner of the square (5). Below is a preliminary sketch of the rehabilitation plan (2), prepared by Robert Nichols, landscape architect, in consultation with a committee of nine Village architects.
essentials of the Good Life. There have been several good fights centering on the square.

One of the longest concerned traffic through the park. The original plans for Washington Square Village (1953) showed several lanes of traffic in each direction—on a fast-moving roadway that led through the park to the project. One year earlier, the local planning board had recommended to the Borough President that Fifth Avenue buses turn around behind the Arch and that the park be closed to vehicular traffic. At that time, Chancellor Heald noted his satisfaction with this idea “from the standpoint of the community and the users of the square, as well as from the standpoint of the university.” But within a year, by the time the Title I project was proposed, NYU had changed sides, going along with the Robert Moses plan for a 48-ft-wide road through the park, then later with the alternate plan of a depressed roadway, and by 1958 with a compromise scheme of the Washington Square Association (which proposed a dead-ended turnaround for traffic at the southern edge of the park, and a strict limitation to two lanes of traffic through the park).

Mumford vs. Moses

Lewis Mumford, in a steaming statement in The Village Voice in 1958, reiterated what many then knew: “The real reason for putting through this callow traffic plan has been admitted by Mr. Robert Moses himself; it is to give the commercial benefit of the name Fifth Avenue to the group of property owners who are rehabilitating the area south of Washington Square, largely at public expense.” Observing that Washington Square was originally a Potter’s Field, Mumford suggested that it “might now prove to be a good place to bury Mr. Moses’ poverty-stricken and moribund ideas on city planning.” Moses had indeed admitted that the private sponsors were “formally, officially and reliably promised, under the Slum Clearance Act, a Fifth Avenue address.”

Amazingly, the struggle against the power of Robert Moses and the full Establishment was successful. Since 1959, the Square has been closed to all traffic. Only a few months ago, however, there was a report that the City Planning Commission was again considering opening the park to traffic, Fifth Avenue having been recently made one-way, depositing its traffic at Washington Arch; The Village Voice in reporting this, notes that the rumor tends to serve NYU in the matter of the library, in so far as it may diminish opposition to the library as the lesser of two evils.

Rehabilitation Protest

A more recent struggle, although a longer one, concerns the rehabilitation of the entire park. The present layout was created in 1870, giving the square a romantic Victorian ambiance that it has kept through the years.

In 1938, the city budgeted $450,000 for a redesign of Washington Square Park. Clarke and Rapuano, landscape architects who were the favorites then and in later years of Robert Moses, prepared a plan that encircled the park with a broad roadway; at the center of the formal plan was an ornamental lily pond. Opposition to this so-called Bathmat Scheme was so immense that Moses withdrew it; he also withdrew the funds, and rehabilitation plans were dormant until the spring of 1964, when the Parks Department again unveiled a plan, again by Gilmore Clarke. This one would move the fountain into a direct axis with the arch, would establish symmetrical flagpoles, a new ornamental basin, and a pair of solid comfort stations linked by a stolid Greek colonnade.

This plan was to require $750,000 as a minimum, and $1 million as an optimum. It was “anti-people” and unpopular, leading Robert Nichols, a landscape architect, to point out in The Village Voice that, traditionally, the bureaucrat’s love for an axial neo-Renaissance scale was prompted by “the line of fire of howitzers against street mobs.” At the time, Nichols also noted that, “with the Boers in South Africa, [the Parks Department] probably ranks as one of the most petrified civil service systems in the world.”

A Plan by the Community

In the protest against the city-imposed plan, the local planning board proposed a committee of nine architects (one is a landscape architect, Nichols, and one is a sculptor; two of the architects are from NYU) to choose a landscape architect and work with him to develop a plan according to community-developed principles. In the anomalies of the Parks Department system, it does not hire landscape architects; Nichols has been retained as consultant to the engineer, John J. Kassner, and Kassner, as prime contractor, will supervise the work but will do no drawings except the topographical.

The workings of this committee of nine have been a highly successful example of community design at a neighborhood level. Design by committee has worked out better than some anticipated: “We’ve all been quite reasonable,” says one of the architects. All are local people, familiar with the park and concerned about it. Under the terms of the work, as established by the local planning board, full control remains with this committee.

Nichols is designing everything—benches, railings, etc.—and is even hoping to get around the standard lighting that is always supplied by the Water Supply, Gas, and Electricity Department. The plan essentially keeps to the existing scheme, although there are a number of changes: a boundary system with earth mounds inside the railing, a student wall along the eastern part of the park, a reading bosque, and a new toilet building by Edelman & Salzman.

The Nichols plan, approved by the planning board and the Parks Department, is now at the Board of Estimate, awaiting approval. Leaving aside the many months required for each approval, the major hurdle was when the city’s plan was overruled and a new plan begun. The major achievement is that the community and the university are cooperating in a professional manner on a project that concerns them both.

Preservation and the Basic Battle

The basic issue around Washington Square is change, and it is no surprise that some define freedom as keeping the area as it is, while others define freedom as being able to change it.

Under the terms of the Landmarks Law, passed by the City Council in April 1965, it is proposed that New York City have its landmarks and its progress, too. The Landmarks Preservation Commission has designated much of the Village as an Historic District (see map, p. 193), using as its criterion “that fully half of the buildings in a proposed historic district be of landmark quality.” If designated, any exterior change would require commission approval. They have also been designating specific buildings as landmarks.

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proves a building there is still no absolute guarantee of the building's future longevity, because of the law's "hardship provision," permitting tax exemption and even demolition under certain circumstances. Nevertheless, being voted down as a landmark by the planning board does not bode well, and some are concerned that if NYU should purchase these few remaining parcels of the Judson Church block, the entire block would see dramatic changes in use and scale. It is an open secret that NYU has been interested in these parcels for a number of years. At one time, NYU developed a plan for the entire block, using some of the existing buildings, and providing a plaza on the interior and an arcade facing the square. (The only empty lot on the square, at present, is a small one next to the Judson student dorms. Philip Johnson has said that if this site is built on at all, it will be to a height no greater than the adjacent dorms.)

Change and Accommodation

What is the net result of the many and various changes in the Washington Square area over the past 20 years? What will happen in the next 20? The city has witnessed the transformation of an area, and the future is difficult to predict, the Johnson-Foster plan notwithstanding.

One evaluates the NYU-Village conflicts according to one's inclination. Either the university's growth is viewed as a threat to interests public and private, and it is riding roughshod against them all, or the university is simply a large institution following its own necessary expansion. Philip Johnson's plan is either cosmetic façadism of little real meaning, by a name-brand architect chosen for his fund-raising potentialities, or it is an attempt at architectural excellence after an unimpressive record over past years. The opposition is either continuing an inherited fight over a minor issue, having become fond of (or used to) Establishment-hating, or it is performing the valuable service of watchdog for a community that is, on the whole, as lethargic as most.

Beauty in a Broad Sense

The conflicts surrounding Washington Square are not unique, although they may seem extreme. Throughout the country, educational institutions have been expanding, and the urban institutions that have chosen to expand in their present big-city locations have been taking over lofts, warehouses, and office buildings at a steadily increasing rate. In New York City alone, there are a dozen other institutions beside NYU included in a real estate study on new educational uses for these varied building types. Some schools grow piecemeal; others make no little plans. A recent announcement details Fordham's vast anticipated growth (Fordham, it will be recalled, received its own gift from the taxpayers by being included in the Lincoln Center renewal.)

Those who want their town "preserved" against encroachments from gow will seek to resist what they call "take-over" by an institution. It is partly a struggle to preserve diversity. As of this writing, the site of the Bleecker Street Cinema (whose lease is owned by NYU) is apparently being considered for use by the new School of Arts of NYU. As reported in the NYU newspaper, a local film critic commented ruefully that "NYU is all over, but there's only one Bleecker Street Cinema," an institution famed for its commanding position in the field of film repertory.

But the struggle for preservation is not simply one to keep historic buildings on the scene or to keep a diversity of uses in them. Jane Jacobs, discussing one aspect of beauty, has mentioned that the Washington conference on natural beauty last year posed two elements as the most destructive of urban parks—highways and educational institutions. Indeed, many view Columbia's plans for a gymnasium in Morningside Park as a genuine threat by private interest to land held by the public, beside which NYU's proposals for the borders of Washington Square are only, literally, a shadow. "Our cities are losing their amenity. All over the cities, there are these competing uses of parks and education. They are both valid. We have to find a way to live together, so that we don't ruin one thing for another." After the mutual charges of "irresponsibility" over the past few months, this plea by Jane Jacobs has a sober poignancy.

"Cities are Giant Happenings," planner Rai Okamoto has said. Change will occur; to deny change is to deny life. But it would be well to ask in whose interest changes are made; and whether architects can and do make a significant contribution to the beauty—in its broadest sense—of our environment. The Washington Square area has had many architectural beautifiers, each marching to a different drummer. But in the long run, it is probably other forces that are calling the tune.
The richness of Village architecture (9, 10, 11) is to be preserved within the historic district proposed by the Landmarks Commission (1). The boundary stops at the northern and western edges of the square, however, leaving out Judson church (2), and the three-houses-made-into-one behind Judson (3). Another landmark needing separate designation is Sullivan-MacDougal Gardens (4). Oldest buildings on the square are the 1830's houses on the north side (6, 7, 8); here lived Dos Passos, Henry James, and Edith Wharton. A group of 19th-Century houses called Genius Row, on the southern side of the square, was demolished by NYU in the 1950's. The Arch itself (5), a landmark without portfolio, was built in the 1890's from the competition-winning design of Stanford White.
There are different ways in which architects and architect/planners become involved in helping cure sick cities. That the placebo, “A dose of ‘beauty’ three times a day” is far from effective can be seen in

**TAking the Cure: Some Case Histories**

The search for “beauty” out of “ugliness,” commodity out of uselessness, firmness out of disintegration, a viable plan out of disorder or no order at all often take the path of restoring or rejuvenating ailing communities. In this search, the architect or the architect-planner is frequently cast in the role of trailblazer, indicating the paths that might be explored to return communities or neighborhoods to health and proper amenity. Such advice is, needless to say, not always successful or in the best interests of the entire community. Architects and planners can become enamoured of particular planning approaches that work either theoretically or only in individual cases, and, in applying them pell-mell as cure-alls to general urban problems, can create as much havoc as they were asked to relieve. Such was the case when many professionals followed a watered-down version of Corbu’s “Ville Radicuse” principles and produced the stultifying environments of high-rise housing in New York and other large cities. Such is the case when some architects or developers, operating under the “greenbelt” guise, produce flaccid versions of Stein’s argument having little connection with their surroundings, but always with “easy access to shopping facilities.” Such is the case when architects become mere cosmetologists—if that is the word in the beautician’s and mortician’s trades—and seek to “bring a fine old district to life” by application of a closed-off city block, paint, potted yews, cute flatterting banners, and a little-used information kiosk. Here architects become tranquilizers, not trailblazers.
galena: resuscitation

Birmingham: prediction

germantown: geriatrics therapy
Resuscitation

The reasons for rejuvenating towns and cities or large sections of them are probably as many as should be the solutions thereof. Galena, a city of about 4500 in extreme northwest Illinois, was a thriving city of 14,000 when Chicago was "still a swamp village," according to Thomas Hodne of Hodne Associates, Architects-Planners of Minneapolis, who was called in to propose ways and means to rejuvenate Galena not only physically but economically. The decline of the community after the "Golden Decade" of the 1840's (1), when its residents included Ulysses S. Grant and other notables, came about when its lead-mining resources were abandoned for more remunerative ore further West, and when rail and road supplanted the river as the major transportation routes. Galena became preserved in amber, so to speak, an almost perfect vignette of American Victoriana (2). Its topography is beguiling, also: "Contained within a sharply delineated valley surrounded by bluffs and outcroppings, the 125-year-old downtown area lies relatively undisturbed. Visually, the downtown is one comprehensive, aesthetic whole with the residential districts surrounding and overlooking it much like spectators in a giant amphitheater." Hodne's initial planning studies say (3).

Charming—just the way many architects would like to plan one of those beautiful little Italo-American hill towns they are always talking about. The trouble is that the town is at best in a state of suspended animation; at worst, dying. Agriculture, long the mainstay of the town, is no longer dependable as a source of income. Young people are leaving completely or commuting to paying jobs in nearby Dubuque, Iowa. Products of the late 40's "baby boom" have grown to the leaving-home stage, and the lower school population is declining or leveling out. All the charm thus hides a pretty sick patient, as in La Dame aux Camelias. Hodne's prescription: More money must be brought into town, obviously. It is evidently unlikely that much industry can be attracted from the Dubuque area, farming is on the way out, river traffic is completely dead, the introduction of crafts industries would take up some of the economic slack and help occupy some of those charming old buildings, but not enough. Thus, increased tourism becomes the white hope of Galena. In 1964, 353,300 people visited the Grant Home shrine, but only 39,000 of them took time for the Old Market House museum in the Galena business district. And such tourist-oriented businesses as food and beverages have actually declined in sales, while the sale of gasoline has risen only slightly. Evidently, according to Hodne, not only must the tourist be persuaded to stop longer in "season" (April-September), but Galena should also plan to push itself as the focus of a winter sports area.

On March 7 and 8, after Hodne's preliminary study had been issued, a seminar was held in Galena featuring local, state, and regional Federal agency officials concerned with redevelopment, recreation, housing, preservation, tourism, and highways, and guest stars such as Charles A. Blessing, Detroit City Planning Commission Director, and William Caples, Inland Steel Company Vice-President. Purpose was to dramatize Galena's need for a development program and to bring to light all areas of investigation before concrete proposals go to the City Council. Hodne says that the meeting was quite successful, and that, for a wonder, many local needs and preferences seemed to make their mark with the state and regional men. The Galena Gazette reported that the city's major access road, Highway 20, is to be relocated, somewhat to the concern of Galenians (4). Ralph D. Brown of the Division of Highways of the Department of Public Works went so far during the seminar as to state that "we are not adamant in our position on Highway 20 and if this is of concern to the people of Galena any proposal will receive serious consideration." One of the means proposed for the advancement of tourism was made by Mayor Robert Buehler, who made the "return of Grant's Tomb to Galena" number 13 of 13 proposals for development. Most design-conscious New Yorkers will no doubt second the motion.

At Galena, the preservation of "beauty" is no problem; the beauty is there (5, 6). The problem is being able to afford it, and the architect/planner advances tourism as the appropriate answer. Then Galena and Hodne can start worrying about preserving the town's natural and man-made attributes from the excesses of success. Mouth-to-mouth resuscitation is necessary to bring expiring patients back to consciousness, but the architect/planner can be said to share some of the dubious responsibility of the Chinese who saves a man's life—even thereafter that man is his continuing responsibility.

The Galena problem might be one peculiar to the United States. In older countries, towns did not usually expire except through man-made or natural calamity. Even in our own West, towns that did die gave up the ghost so abruptly that no one noticed it until Warner Brothers or Lucius Beebe started looking for Western locations. When towns such as Galena reach an arid plateau today, aid must be sought, and revitalization must be induced, but by workable means.

Palliation

A different plight confronts the residents of communities that have planlessly enjoyed a measure of economic success and now find themselves a rather shabby hybrid: not "worth saving" aesthetically, like Galena, but certainly far too prosperous and populated to abandon. Such a city in transition is Birmingham, Michigan (population, about 16,000). A residential suburb of Detroit, it has some commercial, service, and industrial enterprises of its own. To travelers going from Detroit to Pontiac on Woodward Avenue, a through-highway that passes through the heart of downtown Birmingham (7), the city is an array of those highway-oriented businesses and signs that so upsets Mrs. Lyndon Johnson and the President's Beauty Commission. Behind this façade, Birmingham's central business district is a polyglot collection of low-rise buildings, housewives' cars, delivery trucks, and transient traffic recalling many other Mid-west cities of similar size. There is a short stretch of quality shops that provides a lively street experience (8), but the general atmosphere is mediocre.

Fortunately for Birmingham, it possesses an unusually high per capita count of talented architects and related professionals. In 1961, the Citizens' Action Committee was formed by a number of influential people in the city "to help Birmingham organize itself for the future, to forestall a recognized drift towards mediocrity." It soon became apparent that one of the major sources of the city's trouble was its lack of a progressive growth plan. As a spin-off to the Citizens' Action Committee, 10 architects and designers formed the ad hoc Citizens' Development Committee in 1963. Working nights and weekends in a basement donated by a local realtor, the group came up with a plan for Birmingham's development which was unveiled at JUNE 1966 P/A
a cocktail party at the local country club on May 21, 1964. Since that time, CDC members have been "lobbying" the plan every chance they get, speaking at gatherings of any and all "civic, service, social, etc., groups." So far, they have logged more than 25 performances. The Birmingham Eccentric, the local newspaper, has generally given excellent support, and CDC has come to have a "quasi-official status," according to Carl Luckenbach, past chairman of the group. "The City Commission gives serious consideration to CDC recommendations and proposals and on occasion solicits CDC comment and defers action until such comments are received and considered," he says.

Integral to the CDC plan (9) for Birmingham are: a ring road taking through-traffic around downtown; a garage system eliminating congestion; increasing ease of pedestrian movement, and provision of pedestrian-oriented and scaled street design; use of upper stories of downtown buildings for housing, giving the central district a 24-hour life; redesign of the city's major open space, Shain Park (10), and adjacent parking lot; adoption of some sort of graphic controls; and appointment of an urban design consultant to prepare a detailed action plan for Birmingham. Some proposals to increase the amenity of the city are: a new civic plaza north of City Hall; pedestrian ways and plazas at appropriate points, including at the rear of buildings where there are interesting alleways (11) presently used for garbage, deliveries, etc.; an exterior space marked perhaps with a tower at the main intersection of Woodward and Maple (12).

Luckenbach reports that specific achievements so far include retention of an outside firm—Johnson, Johnson & Roy—for the Shain Park and parking lot redesign; adoption of "horizontal zoning" permitting residential quarters over commercial spaces in downtown; major portions of ring road included in 1966 capital improvements program; construction begun on first parking structure for 500 cars on an existing parking lot; work progressing on more stringent sign ordinances; and criteria now being prepared by the City Manager for the selection of an urban design consultant. The "climate" in Birmingham has changed considerably. It is now a political necessity for candidates for the City Commission to espouse the objectives of CDC; the Chamber of Commerce has established a committee to encourage merchants to upgrade their properties front and rear; and the general public attitude is kept favorable by the generally supportive attitude of the newspaper.

The young professionals of CDC—architects Harold F. Van Dine (chairman), Carl Luckenbach, Gunnar Birkerts, Keith Brown, Elliot Robinson, Robert Ziegelman, landscape architect Kent Smith, architectural photographer Balthazar Korab, designers Alice Burlingame and Robert Greager—have handed the city a viable plan for progress, one that can be of great benefit for future development. Both they and the Birmingham city fathers must now follow through.

Geriatrics Therapy

"The number of old buildings is surprisingly large, and, although crowded and jostled by an everwidening modernity, they give to the whole area a rare distinction and charm. They lend an 'air'; they are historic Germantown. The total effect is not one to amaze or overawe. Nor is it artificially quaint. But in its venerability it has an unassuming naturalness, a rightness that sets it apart."

This is Germantown (13), settled around 1683 and annexed to the city of Philadelphia in 1854. It was the site of Washington's last important engagement with the British before retiring to Valley Forge for the winter of 1777. When the Reading and Pennsylvania railroads bounded it east and west in the 19th Century, it became a fashionable suburb. Today, while blended into Philadelphia's urban fabric, it still retains a sense of its own identity and boundaries. As the quote from Historic Germantown by Harry M. and Margaret B. Tinkcom indicates, there are many buildings remaining from earlier days that give the section a decided "historical" flavor without imparting a musty museum impression.

Germantown has been for 30 years a pet concern of architect-resident Henry J. Magaziner. While working for the W.P.A.'s Federal Writers' Project in 1936, he prepared the section on Germantown houses for Philadelphia—A Guide to the Nation's Birthplace. In 1952 and 1956, he wrote and created graphics on Germantown's architectural heritage for the Germantown Historical Society. In 1959-60, in association with Preston Andrade of Wright, Andrade, Amenta & Gane, A Proposal for the Revitalization of the Heart of Germantown was written and distributed to the civic, social, and commercial power structure of Philadelphia. When Magaziner and Wright, Andrade, Amenta & Gane were retained by the City Planning Commission and Redevelopment Authority to prepare more detailed proposals for the section, the "Proposal" became background material for a two-part planning study issued in 1963 and 1964. Since the city considers Germantown as just part of its over-all plan for the northwest area of the city, the proposals in the studies will presumably have to be fitted to the larger final scheme. Magaziner says that he has had no further connection with the renewal program since submitting the studies, "except speaking engagements—all 'on the house.'"

The proposal has two major aims: making Germantown a section that will actively support business and attract trade, while at the same time emphasizing the enviable collection of important older buildings existing there, and creating a traffic pattern that will relieve the present uncomfortable crowding of all the major streets in the area.

For the first objective, Magaziner and his associates proposed retention of as many older buildings as possible and their updating both structurally and in use. Small businesses, professional offices, organizations, or religious or civic groups could occupy these renovated buildings. Buildings that obviously violate the "feel" of the area, do nothing to contribute to its economic progress, or are located in spots proposed for other purposes (Town Hall Square, widening of Wakefield Street to siphon traffic away from midtown, etc.), would have to come down or—in the case of definite treasures—moved to other locations. New buildings would hopefully be sympathetic to the Germantown ambience, but without stooping to phony historicity in design. Many styles exist compatibly in the area; indeed, the Historical Society last year restored an old Victorian house and made it a museum of that period's artifacts. The old Reading Railroad Station (14), now storefronted up with small shops, would be restored to its former dignity and act as a tourist information center. A widening of Germantown Avenue at the Town Hall would produce Town Hall Square (15, 15a). Unfor-

198 The War on Ugliness: P/A's Version
Brown tone indicates manner in which through-traffic would be siphoned past central Germantown on Wakefield and Coulter in Magaziner-Andrade plan.
THIS PARKING LOT
TEMPORARILY IMPROVED
FOR YOUR CONVENIENCE
Permanent Improvement Planned for 1966
Physician, Heal Thyself

The eventual fate of these three programs cannot be predicted at this writing. They do, however, illustrate the problems that confront us in revivifying, rather than "beautifying," our cities: the small city in desperate need for a survival cure; the medium-sized city or suburb afflicted with blight and complacency; the fine older section of a great metropolis seeking to preserve its individual distinction under a massive citywide redevelopment program. They show, also, several ways architects get involved in these problems. In Galena, Thomas Hodne was brought in specifically to find out whether he could propose a tonic to revive the city's interital tendencies. In Birmingham, Carl Luckenbach and his colleagues looked around them, did not like what they saw, and did something about it on their own. In Germantown, the result of a 30-year involvement of a man with the architecture of his hometown was a two-volume study and set of proposals that has been officially lodged with—and paid for by—the Philadelphia City Planning Commission and Redevelopment Authority.

Each of these three programs was the result of direct experience with a real urban redevelopment situation. None of the architects fell for the potted-plant and waving-banner "beautification" approach. Carl Luckenbach says that the difference between real planning and beautification is substantial. "Our study was very much concerned with the functioning of the community—traffic patterns, parking, spatial sequences, land use, the proper role of the pedestrian, etc. 'Cosmetics' are used more or less as bait; tangible, immediate results tend to keep up community interest and support." Henry Magaziner says that "real planning in a physical sense comes only after many other types of planning—demographic, economic, sociological, traffic, historical—have been brought to a certain degree of completion." "Cosmetics," he says, "have little use. If a basic plan is unsound, merely prettying things up a bit may act to hold off disaster for a short period. But it will merely put off the evil hour. It won't stop trouble from coming. Toledo, Ohio, learned the hard way about cosmetics instead of planning."

Hodne feels that "the architect is generally guilty of the 'fruit peddler-cobblestone-kiosk' approach, and most planners believe this is the only role of the architect in city design." His definition of "typical" practitioners in the professions of planning and architecture are: "Planner—an individual inclined to compile a lot of data (mostly meaningless) and to go through innumerable analyses finding need for additional data, by which time the decision has been made by the politicians and he starts another research task; Architect—90 per cent of practicing architects cannot give a 'high-level' one-building decision, let alone cope with a 'beyond-the-lot-line' approach. However, 90 per cent of the remaining 10 per cent are inclined to approach the larger-scale problem from a purely intuitive design standpoint."

"I believe," Hodne states, "the Urban Designer, Architect/Planner, Environmentalist (or whatever he is called), first must have the intuitive design sensitivity, but second must recognize, and interact with, in the design process, the economic-social-political frameworks that the generalist planner and the specialist (economist, sociologist, geographer, etc.) can adequately provide for him. Thus, a more meaningful series of 'outer forces' that will enrich and be the 'guts' from which total design (a building, group of buildings, district, neighborhood, community, city-town, region, etc.) will evolve."

Should a plan be so tight as to enforce compliance by those who follow the planner, or loose enough to allow many individual variations by other designers? "The program should be rather tight in terms of the city's work, or else there is little to press for in terms of specific action to be taken," according to Luckenbach. "The architects must, of course, be prepared to participate in the modification or adjustment of the program to keep pace with scattered private development. A certain looseness is obviously necessary when proposing private development, but the direction of such private development can be influenced by zoning, right-of-way changes, etc..." he says. Magaziner feels that "a plan should not be so tight as to force total compliance. I hold no brief for the type of unplanned architectural 'freedom' which the recent New York World's Fair represented, but keeping everything tightly controlled must result in monotony. While I've never visited Brasilia, friends who have, all report that..."
it lacks color. In their opinions, the real weakness of Brasilia is its complete control by one man who, while gifted, is still just one man—with all the limitations that implies.

"In my opinion, the plan should be a sort of 'performance plan,' establishing in broad strokes what is the general objective for a given area. Then pray that the developers selected are understanding men with dedicated architects."

Hodne feels that a plan should be "tight as hell" to make the "private developer come forth with a better solution—especially in a smaller community where talent is non-existent. There is danger of a 'tight' plan as conceived by a 'data-analysis' planner, but if a competent designer comes forth, he will not be satisfied until the total plan is re-evaluated."

The mere participation of an architect or architects does not automatically insure the success of an urban planning program, sad to state. "Having a plan's architect-planner involved throughout does not insure the result," in Magaziner's opinion. "First his own ability must be considered. But even if he is capable, he can't stand up against a powerful lobby of politicians, businessmen, other special interests and their captive architects." Luckenbach states it another way: "Obviously, the talents and urban design orientation of the participating architects is far more important than registration or AIA membership. Furthermore, the architects need the support and assistance of community leaders and P.R. types to gain widespread popular support for implementation."

"I believe that only when the community, or rather the power structure of the community, truly wants it and has complete faith in the design profession will civic beauty be achieved," Hodne says.

"Tomorrow, the emerging 'total design' architect should be the respected design leader, but this is very doubtful under present mediocre 'cosmetic' attempts; i.e., in my opinion, a very disappointing attempt is being made by the AIA in 'selling' the architectural profession into 'doing' urban design for the community; this used to be free work and now a grand and glorious attempt at a standard AIA Urban Design Contract is being established.

"I believe," Hodne continues, "that 'civic beauty' will not be achieved until the architectural profession—the only group equipped in any degree to be trusted with this charge—leaps at the challenge. A possibility: creation of a National Center for the development of the Art of 'Urban Design,' 'Civic Beauty,' whatever it might be called, including design-oriented research (not purely academic ivory-tower stuff); real problems undertaken; all allied arts contributing; all allied professionals contributing; guidance given to private entrepreneurs at all levels by these 'form makers.' This center could be privately endowed and operated or created in combination with some of the 'Great Society' Federal funding through AIA. At least $1,000,000 would be needed to formulate the programs initially."

"Only then, after much work by the most competent individuals available, will 'civic beauty' have a real meaning. If such a virgin effort is not undertaken, then hell, the Chinese Communists have the simplest answer to civic design: veil bad architecture and political-social ills by planting (landscape). On record is: nine million trees planted in Peking in the late 40's and early 50's for a community of four million people. That's pretty cheap civic beauty, and who questions taste in regard to the tree form?"

At some point in the course of a redevelopment, the architect or architect-planner usually must relinquish all or most of the control to other forces, be they political, new developers, or other architects. Sometimes, possibly most frequently, this relinquishing is not entirely voluntary. If there is an ideal time for turning over the reins, when is it? "Follow-up is essential," Luckenbach feels. "Volunteer work, even of the highest caliber, is apt to be accepted with great thanks, and shelved, if not followed-up vigorously. Furthermore, a complex urban design is not readily comprehensible to the layman; some concepts (e.g., defined exterior space) are foreign and need to be repeatedly explained and promoted until eventual comprehension."

Two approaches on architect-planner follow-up are suggested by Hodne: "Review by the designer of all proposals, both private and public—if the owner's design is incompetent, the community should retain the design consultant to execute the design and either absorb the cost or assess the developer; and/or, create a 'civic design' board, if possible from local talent, otherwise go outside the area." The original architect/planner, he feels, should be "commissioned to do all community-controlled design and be available to do private commissions, but with a list of very carefully selected architects provided to owners."

"Assuming that the architect has both ability and dedication," Magaziner says, "his plan will probably have much merit. Ideally, he should be allowed to see that it is carried through. But it's not very realistic."

"Aside from business considerations, there are political considerations of another sort which I consider to be more proper. Any planner working in an old and troubled community, such as Germantown, must step on some toes with his plan, if it is worth anything. The more complex the community and the more imaginative the plan, the more toes are bound to get stepped on."

"It does seem wasteful of knowledge (and tax money) to have an architect-planner spend a year or two assembling knowledge about a problem, have him reach and publish his conclusions, and then leave him out of further deliberations. Even the best-written and illustrated planning study cannot include everything that the architect-planner has learned about his area of study... If it could be worked politically to allow the same architect-planner to carry through from city or county planning commission to redevelopment authority, I feel that it would generally produce as good a result with less expenditure of the taxpayer's money." This is the voice of the good surgeon, who seeks to lose as little as possible of the patient's blood. Perhaps even now self-concerned or divisive interests in Galena, Birmingham, and Germantown have the ear of those in influential places. Hopefully, the reverse is so, and there will be a chorus of broad support for the rejuvenation of these cities and others like them. To depart from our medical metaphor, however, it appears that, as in a great choral work, the architect can be a major soloist, perhaps even the conductor in isolated cases, but he can never hope to perform the "Messiah" single-handedly. It would seem, moreover, that the composer of the cityscape is almost always our old friend "Anon."—the people who work and live in these cities and give them their final character long after the architects, planners, beautifiers, and bureaucrats have left the stage.—JTB
In Mexico, there exists a certain delightful Latin propensity for putting up large sculptural objects to "advertise" the existence of a place. Sculptor Mathias Goeritz's well-known towers in the center of a highway announcing "Satellite City" are an example. One of the latest manifestations, by architects Ricardo Legorreta Vilchis, Carlos Hernandez, Ramiro Alatorre, and N. Castro with Goeritz as sculptural
consultant, rises at the Automex plant for Chrysler products in the market-industrial city of Toluca near Mexico City. This is a pair of truncated cones, one taller than the other, which, according to Legorretó, "are converted in the emblem of the factory and for an extraordinary advertising and identification symbol." Much more satisfying than the ubiquitous neon sign common in the States, we say.

The towers are the focus from the west of a broad stone approach avenue and from the south of a generous plaza that will eventually be surrounded by offices (at present, there exists an office building on the southern side). The taller of the concrete towers, 67 ft in diameter and 150 ft high, contains water storage space plus an auditorium seating 400. The smaller, 60 ft in diameter and 70 ft high, is used as a cistern. A good case of having your symbol and using it, too.

Completed portions of the project include the engine fabrication plant, the office wing, cafeteria, service garage, gate house, avenue and plaza, and, of course, the towers. Additional construction will be completed next year.

Architect Legorretó tells P/A that the aim of the design was to create an atmosphere "that is human while at the same time being a sober and elegant reflection of the main characteristic of our age: industry." The designers have succeeded in another respect: the evocative forms of the sawn-off pyramids and the directness of most of the materials—native stone, plaster, painted concrete—make this a peculiarly Mexican place just as the fine machine-tooling of Saarinen's much vaster G.M. Tech Center labels it as unmistakably a Detroit product.
The University of Hawaii, under a long-range development plan prepared by John Carl Warnecke & Associates of San Francisco and Honolulu, seems destined to become the Yale University of the Pacific in its collection of new projects by widely varying architects. Presently being designed are an arts center by Paul Rudolph, a biomedical research center by Edward D. Stone, and a social science building by Vladimir Ossipoff, among others.

One of the most promising projects in the new construction program is the College of Business Administration by Leo S. Wou & Associates of Honolulu. On an initial view of the design, and knowledge of past performances by the other architects noted above, it is likely that Wou's imaginatively expressed scheme of spaces, shapes, and levels will be more in sympathy with Rudolph's work than the others. The question has been raised in P/A and elsewhere whether these "collections" by different architects can be made to live happily together in the same manner as buildings
built over a period of years which —good design being taken for granted—respectably represent their own styles in a sort of diplomatic truce with their older and younger neighbors. The result at the University of Hawaii must wait for completion, of course; much will depend upon the university and Warnecke’s office in insisting on a compatibility of the individual architects and their architecture.

Judged solely as an isolated performance, however, Wou’s design will predictably result in a strong and interesting complex. Given a good sloping site at the new entrance to the Manoa campus, Wou has used the topography to fashion a multileveled plan that students will be able to enter at various grades from the perimeter. Circulation through the building will be by open corridors, winding steps, and cantilevered balconies overlooking either landscaped interior courts or exterior views framed by elements of the college complex. Wou says that he has purposely “endeavored to create a colorful collection of complementary interior and exterior spaces which will stimulate the imaginations of the students, and which will expose them to unusual spatial experiences not encountered in more conventional campus buildings, nor in their other daily living.” For a College of Business Administration, which usually is the most conventional building on campus, containing, shall we say, the group least associated with aesthetic or spatial “stimulation,” this represents quite a departure.

Current structural investigations for the school involve a system of precast concrete walls and post-tensioned slabs. Exteriors will be all rough exposed concrete, and Wou expects that ducts and service elements will have a large influence on interior design. Except for open, covered circulation spaces, the college will be air conditioned.

We look forward to seeing other designs for the Warnecke plan of the University of Hawaii, and hope that they match in vitality and ingenuity the one shown by Wou for the business administration school.
All the pro and con verbiage emerging from Washington on the highway sign dispute recently has concealed the fact that, properly used and imaginatively designed, signs can give quite a lift to our environment. That creation of good visual graphics goes beyond merely selecting a slick-looking typeface and a peppy color is demonstrated by the work of Barbara Stauffacher, whose recent work for The Sea Ranch (MAY 1966 P/A) was the subject of a Design Research, Inc., exhibition seen in the New York, Cambridge, and San Francisco stores.

Mrs. Stauffacher’s Sea Ranch “signs” are not really signs in the old “Stop-Go-Men-Women-No-Spitting-Allowed” sense. They are outdoor works of art that can terminate a vista, lead the eye to a desired point, or simply—and this is no minor accomplishment—add a touch of life and interest to an area. Made of porcelain enamel on steel in the same manner as more conventional signs, they resist about everything except small boys with rifles. The artist also designed the symbol and lettered signs for The Sea Ranch, and the informative symbology for the migrant worker’s housing presented in last month’s issue.
This winter, she will go to Berlin to continue work on graphics for the Berlin Medical Center by Curtis & Davis (p. 49, JANUARY 1960 P/A). Originally, she designed a system of symbols for various departments, but when a panel of German psychiatrists declared that the symbols might possess more meanings than basic information for patients, the architects promised to investigate more conservative approaches. We hope the vivacious Mrs. Stauffacher will be able to convince the doctors that an occasional visual *double entendre* can be a salutary thing.

Another project, which will be shown by P/A as soon as approved by the client, is design of the construction hoardings for the huge Bank of America project in her native San Francisco (Wurster, Bernardi & Emmons, and Skidmore, Owings & Merrill, architects). Mrs. Stauffacher says this job, transient as it will be, “was a lot of fun.” As design consultant to San Francisco’s jolly Ghirardelli Square, she knows whereof she speaks, and we look forward to seeing the results.
The West Bank Campus development of the University of Minnesota, under construction for the past few years across the Mississippi River from the main campus, has seen the erection of some dignified, if rather bland, brick buildings (Business Administration Building by Hammel & Green; Social Sciences Building by The Cerny Associates; a classroom building by Setter, Leach & Lindstrom), but has so far lacked a focus for its main open space.

This lack of focus will no longer be evident when the Performing Arts Center and Radio-Television Facility by Minnesota Dean of Architecture Ralph Rapson is built. "Since the building will occupy a key focal spot at the terminus of a main mall," Rapson says, "it was felt that the building should be a strong plastic statement to provide..."
contrast and focus for the other less articulated structures."

The building's plasticity is undoubtedly a result not only of the architect's search for a dramatic focal object, but also, and more importantly, because of the widely varied activities it will house. These include, in addition to provisions for normal curriculum, space for four different types of theater, classrooms for experimental and teaching use, and the separately expressed facilities for the university's radio and television department.

The system could be described as two different complexes, one atop the other. Below, with auditoriums and ancillary service spaces articulated, are the public presentation areas, including principally the four theaters: proscenium stage, thrust stage, Elizabethan theater, and Baroque theater (see plans). Rising above the theaters on a regular structural framework and expressing "a strong rectilinear discipline," are the two levels for radio and TV production, separated from the lower levels by a mechanical level (see section).

Rapson writes P/A of these preliminary designs: "Our thoughts were that the building would be largely concrete, with some brick at the lower levels to create a continuum with large amounts of brick used in the other buildings."

When built, the center will make Minneapolis one of the rich theatrical nodes of the country. The Rapson-designed Tyrone Guthrie Repertory Theater (pp. 98-105, December 1963 P/A) has been operating successfully for several years, the Walker Arts Center stages notable productions of its own, and the university even operates an old-time Mississippi River showboat in warm weather. Who says the Midwest has to be dull?
No doubt P/A's readers have been impatiently tearing open issue after issue, wondering when we would get around to showing the latest architectural developments on the island of Malta. This devouring curiosity can now be assuaged, for we have here the latest projects by one of the leading architects of that Mediterranean stronghold, Richard England of England & England. Since Malta is 95 sq miles in size, Mr. England's portfolio of four hotels, a church, and an apartment can be described as a local architectural boom.

England describes his approach as a "concern with maintaining and evoking in a contemporary idiom, the traditional Maltese vernacular architecture." His success (and it would seem to be more frequent than his failure) can be measured by a consideration of the projects and completed buildings shown here and photographs of older Maltese buildings taken during a visit there by P/A's Maude Dorr. England's forms are usually brave ones; where he falls down, as in the case of the Paradise Bay Hotel, is where Miami Beach takes over from more substantial design. For the most part, this is impressive work—the lapse into googie architecture at Paradise Bay is enough to make even a Maltese cross.

Typical archaic plan

Church of St. Joseph for 150 congregants dominates the village of Manikata from its highest point. England feels that its form evokes the baroque style of older churches and also the shape and plan of "anonymous" architecture represented by the island's primitive sheds called "giren" (see photos, plans).

Ramla Bay Hotel (facing page, top) uses arch motif of old well-head lintels (left). Salina Hotel (facing page, center) has block of suites built around 18th-Century watchtower. Both projects recall the earthy strength and solid silhouettes of the Maltese land and townscape (facing page, bottom).
In forecourt of Dolmen Hotel will be remains of neolithic temple from 2500 B.C. Strength and massing of new structure recall ancient structures (top).
Dolphin Court Apartments reflect sunny, Mediterranean air of a small, seaside Maltese village.

Paradise Bay Hotel departs from architect England's other designs in seeming to come from the sample book of a Florida hotel designer rather than one steeped in more substantial design.
The campus theater and concert hall, where many students waiting for next month’s allowance or the check from the V.A. used to take Saturday night dates to see a murky (but free) Strindberg production or hear "Eine Kleine Nachtmusik" put to rest, have taken on increasing importance as one of the main concerns of most self-respecting campuses in recent years. At the University of Toledo, the new Performing Arts Center will not only be a center of attention for drama and music, it will be the actual physical center of the campus.

The building, designed by Hugh Hardy & Associates and Hahn & Hayes, will be situated in the university's main quadrangle (see site plan), tying together a diversity of eclectic and undistinguished newer buildings. The aim was to create a design integrating old and new on the campus, and, in addition, to foresee the creation of a central mall between University Hall and the Student Union. Hardy says that the building will be used not simply as a teaching and performing facility, but as a transition across campus; it will be a structure to stand on as well as be in; to walk through, to traverse, as well as stop in, he feels.
The center will contain a theater, chamber music hall, workshops, classrooms, and related facilities. Drama offices will be added in phase two. The 500-seat thrust-stage theater and 500-seat chamber music hall will, along with connective public spaces such as the lobby, form the major spaces of the center. The theater will have eight sections of seats at different angles to the stage, which will not be bounded or defined in the formal sense; each production will, in this way, be shaped by its own dictates or needs. The music hall will have fixed seating for 240, with the remaining audience seated on movable chairs in boxes, eight listeners to a box. The fragmentation of both the theater and the hall, Hardy says, will "allow each room to seem complete when used at less than full capacity." The irregularly shaped lobby or public circulation spaces between the two auditoriums will be enlivened by color, ceiling-high mirrors, billboards, art exhibitions, and other devices creating a sense of liveliness and movement. Structure will be composite design of reinforced concrete frame supporting steel joists and trusses. Exterior walls will be masonry; roof, of ribbed metal.

In project form, the Performing Arts Center has promise of a diversity of form and excitement of interior and exterior spaces that augurs well for the aims of the designers not only to provide effective performing areas, but also to give the university a much-needed campus focus.
Heat Pump Cools School in Winter

BY WILLIAM J. McGuinness

The warmth radiated by lovable kids raises classroom temperatures high enough for rooms to need cooling even in winter. McGuinness is a practicing mechanical engineer.

School design has changed considerably over the last few decades. The old concept that a good school building requires large expanses of glass and a big heating system is obsolete. Designers now well understand that even in the coldest weather the heat required to maintain a suitable temperature during school hours is generated by four sources: pupils, lighting, solar gain through glass, and, to a minor degree, from a heating system.

Heat from lighting fixtures is usually much larger than in the past, because lighting intensities recommended by the Illuminating Engineering Society have almost doubled since 1959. But of the four sources, the largest and always the most unpredictable is the solar gain through glass. The challenge for the mechanical consultant is to evaluate the contributions of people, lights, and sun. If they fall short of the heating demands, the heat plant must function. If they exceed it, cooling must be provided. Too often cooling is accomplished by opening windows, but this introduces dust, noises, and drafts, and also wastes fuel.

For economy and for ease of operation and control, the trend is to moderate the big, unpredictable heat source by minimizing or eliminating exterior glass. Although the aesthetics of such solutions is a matter of controversy, there is a steady trend toward compact schools. And, smaller windows not only stabilize thermal gains in a building, they also reduce glare in the interior.

Self-Heating School

At the 922-pupil Albert Einstein Junior High School in Appleton, Wisconsin, architects Sauter & Seaborn and their engineering consultant, Walter R. Ratai, Inc., produced a building and a thermal plant that solve the problems previously mentioned, and many others.

The school is of the compact type, with some interior classrooms and with minimal glass in exterior classrooms (see second floor plan).

In addition, to help the school board decide on accepting the design, the architects made three more comparative thermal studies and evaluated them for installation and operational costs and for performance.

The four systems considered were:

(A) Heat pump, hot-water storage tanks, supplementary heat by gas-fired boiler. Heat pump also cools.

(B) Heat pump and tanks as in (A), plus a deep well as a supplementary heat source. Heat pump also cools.

(C) Heat pump and tanks as in (A), plus electric resistance heating as a supplementary heat source. Heat pump also cools.

(D) Heat by gas-fired hot-water boiler. Cooling by centrifugal chiller. No heat recovery in this conventional system.

Cost estimates were as follows:

<table>
<thead>
<tr>
<th>SYSTEM</th>
<th>INSTALLATION</th>
<th>YEARLY OPERATION*</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>$322,000</td>
<td>$26,200</td>
</tr>
<tr>
<td>B</td>
<td>$343,000</td>
<td>$25,700</td>
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<tr>
<td>C</td>
<td>$317,000</td>
<td>$26,400</td>
</tr>
<tr>
<td>D</td>
<td>$320,000</td>
<td>$28,500</td>
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The first system (A) won because excess heat could be redistributed or stored for later use, and this would save enough on operating costs in two years to pay for the higher first cost of the heat pump system compared with a conventional system.

The chosen system has the following characteristics. The interior rooms, though thermally stable and free of speedy fluctuations, require cooling even where temperatures are below zero. The heat from these spaces is picked up by the evaporative section of a heat pump and the heat of its condensing process is used for heating the exterior rooms. Excess heat is stored as hot water in two 12,000-gal storage tanks for use at night and on week-ends. The system is self-sufficient without the use of the heat plant until temperatures get down to about 25°F, when a small gas-fired hot-water boiler supplements it. In warm weather, the heat pump functions to cool the entire school.

A high pressure, dual-duct air handling system was used for air distribution. Mixing boxes provide individual temperature control for each space. The Trane Company supplied the equipment.

The 104,300-sq-ft school cost $1,849,212, or $2,004 per pupil. This includes equipment, landscaping, furnishings, fees, survey, and test borings. Cost of the structure alone was $1,335,107, or $12.65 per sq ft.

*Based on a 10-8 hr day, 5-day week. Includes cost of lighting, auxiliaries, insurance, maintenance, in addition to energy.

JUNE 1966 P/A
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JUNE 1966 P/A
KEEPING UP WITH NEW PRODUCTS

BY HAROLD ROSEN

Specifications writers should follow new techniques developed by manufacturers and fabricators to insure that materials meet specified requirements. Rosen is Chief Specifications Writer of Skidmore, Owings & Merrill, New York.

Part of a specifier's job is to insure the workability of materials and products selected to transform a set of blueprints into a building. When nonstandard situations arise, the specifier must take special care to investigate new products. If it should happen that no material is fabricated to meet certain requirements, the specifications writer and manufacturer should cooperate in developing the needed product. Some of the procedural guidelines for approaching unusual problems may best be illustrated by a discussion of various sections in a set of specifications.

Concrete
If exposed concrete panels or prestressed concrete framing is used, they usually require investigation, since these items are not used often enough for most writers to be familiar with them. Concrete panels can now be precast in large sections. Some of the fabrication methods were developed in Europe and only recently introduced in this country. The specifications writer should call on local precasters and visit the plants to see what compressive strengths can be achieved, the maximum handling sizes, suitable types of fasteners, finishes, costs, erection problems, and whether or not others manufacture the product competitively. After developing the specifications, he should ask several manufacturers to review it for practicality, and, if necessary, suggest modifications that will make it possible for them to bid on the job.

When prestressed concrete framing members are to be used, the specifications writer needs to learn about high tensile steel reinforcement, pretensioning and post-tensioning methods, curing, camber, erection problems, and costs. With this information, he can write the required specifications successfully.

If cast-in-place exposed concrete is to be used, the specifications writer can get information from the Portland Cement Association and from manufacturers of concrete additives and admixtures. He must obtain data on concrete forms, positioning of metal reinforcement, the use of air entraining agents to prevent scaling and pitting of concrete, the size of fine and coarse aggregate, the maximum height of placing concrete, and proper curing and finishing methods. Since the concrete will be exposed without any covering veneers, the cement and aggregates must come from the same source throughout construction to avoid variations in the finished concrete. All of this information must be incorporated in the specifications to give proper guidance to the contractor.

Flooring
There are countless types of flooring materials on today's market, and the selection of flooring for particular spaces within a building is determined by many factors. Whether a laboratory, corridor, library, gymnasium locker room, food-serving area or toilet, each space presents its own problems. Although the specifications writer is generally familiar with current materials, manufacturers introduce new products frequently, and the specifications writer who is on top of his job will seek out and become familiar with the latest developments in this field. He should appraise and evaluate products on the market so he can make selections based upon serviceability in a given space, maintenance, and economics.

Paints
In the field of paint materials, manufacturers have taken giant steps since the days of linseed-oil paints. There are alkyd resin paints and latex paints as well as the old familiar types. Latex paints are water emulsion, and include butadienestyrene, polyvinyl acetate, acrylic and urethane. The specifications writer should keep up with all new paint developments so he can specify types best suited for a new building.

Chalkboards
Chalkboards and tackboards have changed since the days of the little red schoolhouse. Slate blackboards have been joined by porcelain enamel steel, vitreous enameled glass, composition boards, and asbestos-cement chalkboards. And now, besides corkboards, there are vinyl fabric covered composition boards. The specifications writer should be able to select chalkboards and tackboards that fulfill the client's requirements.

Insulation
The types of insulating materials are legion. These can be made of glass fiber, foamed glass, expanded polystyrene, cork, paperboards, vegetable fiber, mineral wool, cementitious perlite; as of this writing, a dozen others are being introduced. Insulation comes in rigid form, batts, loose fill, pourable for cavity walls and extruded for pipe covering. The kind and type of insulation for walls, roofs, refrigeration spaces and perimeters must be determined by a specifications writer who is familiar with them and who can select accordingly.

Specifications writers must constantly investigate, appraise, and select. Their know-how backs up building design and forms the bridge between the architect's drawing-board and the contractor's blueprints for construction.
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Infringement of Copyright: Part I

BY BERNARD TOMSON AND NORMAN COPLAN

In the first of two articles, P/A's legal team discusses a recent case that examines the important question: How can the architect protect himself against the pirating of his plans or designs?

What protection does an architect have against the copying of his plans or design? The pirating of an architect's "brainchild" can be one of the most exasperating experiences in an architect's practice. It is seldom than an architectural design is copyrighted under the United States Copyright Law; the protection of those rights the architect may have in his plans stems from the common (rather than statutory) law of copyright.

An architect may be concerned with the use of his plans by the client for another project for which the architect is not compensated, or he may be concerned with the copying of his plans by third persons for use in other projects with which he has no connection. Generally speaking, in the absence of a provision in the architect-owner agreement to the contrary, the owner, after payment for the services of the architect, owns the plans and specifications the architect has prepared and is entitled to use them without additional compensation to the architect for another project. Consequently, a properly prepared contract between owner and architect will provide that the plans and specifications prepared by the architect, being instruments of service, shall remain the property of the architect. By retaining his property right in the plans and specifications, the architect will be able to control their future use insofar as the owner is concerned. However, the contract between owner and architect will not afford the architect protection from the use of his plans by third persons. It is in this area that differing rules of law in different jurisdictions exist, and where, in many jurisdictions, the law is not well settled.

It is a general principle accepted in most jurisdictions "that the right of property that an author has in his works continues until by publication a right to their use has been conferred upon or dedicated to the public." This applies to architectural work as well as literary and other artistic work. The basic difference between common law copyright and statutory copyright is that common law copyright protects the property rights of the creator of the work prior to its publication, whereas statutory copyright protects the creator of the work after publication. The primary issue, therefore, relates to the point at which architectural plans and specifications are deemed published.

One of the recent leading cases dealing with the property rights of an architect in his plans and specifications is Wood v. Skene, 197 N.E. 2d 886, a determination of the Supreme Judicial Court of Massachusetts. In this case, a Massachusetts architectural corporation was retained to prepare plans for the erection of an apartment building. The plans were filed with the Building Department in order to obtain a building permit, and construction commenced. The agreement between the architectural firm and the owner provided that the architect retain "all its property rights, title and interest to the said plans for all times."

It was alleged that the owner employed a third party to supervise construction in accordance with the plans of the architect, and, during said construction, the party employed to supervise construction left the employ of the owner and entered that of another builder. It was alleged that he took with him to this other builder the architect's plans for the purpose of constructing a similar apartment building on another site in Massachusetts. Thus it was claimed that the plans originally conceived by the architect were being copied for use in the construction of an identical building on another site, without any compensation to the original architect. The architectural firm sought an injunction to prevent such use of its plans.

The defendants resisted the action on the ground that, once the original plans had been filed, they were "published" and their use had thus been conferred upon, or dedicated to, the public, and the architect had no further property rights in them. They contended the plans were further published when the original project was constructed and that there was no bar to copying the design of a piece of architecture subsequent to its erection.

Although the Wood case was adjudicated as late as 1964, the Court in that case pointed out that the issue before it was a matter of first impression in that Commonwealth, and that it could find only six cases from other jurisdictions and none by the highest court of those jurisdictions. The Court further pointed out that these cases were in conflict, as was the literature on the subject.

The first of the decisions referred to by the Massachusetts court was an 1879 Pennsylvania ruling in which the Court held that the exhibition of a project to the public constituted a general publication of the work. The second case was a 1903 New York decision in which the Court held that the filing of plans constituted a publishing of the work. The third authority was a 1938 Missouri case, which held that unrestricted exhibition of a home constituted publication of the plans. The fourth authority was a 1959 New York decision reaffirming the earlier New York decision. The fifth case was a Federal Florida decision in 1962, which also held that filing constituted a publication. The final case was a 1959 California determination, which held that the filing of plans constituted only a limited publication.

In the Wood case, the Massachusetts court came to the conclusion that the foregoing authorities were unsatisfactory for the purpose of establishing a binding precedent. Next month's column will discuss the Court's holding.
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BOOK REVIEWS

Dreaming With the A.I.A.

BY PERCIVAL GOODMAN

Urban Design: The Architecture of Towns and Cities, Paul D. Speiregen, for the A.I.A. McGraw-Hill Book Co., 330 West 42 St., New York, N. Y., 1965. 243 pp., illus., $12.50. The reviewer is Professor of Urban Design at Columbia University’s School of Architecture, a practicing architect, and a Fellow of the A.I.A.

As we blunder through the last third of our century, all the revolutions that had their origins in industrialization have come to a head. At least six major upheavals, all demanding solutions, are now in the critical stage: the population explosion; the change from a primarily agricultural to an urbanized world; the free time and surplus created by automation and computerization; the struggle for civil rights and elimination of poverty; giantism and centralism in industrial enterprises and government; and the fantastic acceleration in the speed with which we transmit and transport ideas and goods. Pervading all is the threat of a nuclear holocaust.

Today’s city is the symbol and reality of our anarchic state.

Throughout history, cities grew at a cross-roads or port. They were pools of skill, centers of culture and administration, and required convenient water, supplies, and power sources. They were concentrations of people huddled together in the safety of enclosing walls. Up to the present, the growth of tightly knit masses of people, or cities, was a major part of the civilizing influence. The future will alter this historical pattern, for a moment’s thought reveals that the city, as we know it, is no longer an economic, social, or technical necessity. Lewis Mumford put it succinctly: “There was a time when the city was the world; now the world is a city.” But who can face the consequences of this terrifying observation?

Seen in this perspective, a book subtitled “The Architecture of Towns and Cities” sounds quaint and old-fashioned, while the words of the book’s main title, Urban Design, can and should mean not the design of urbs but global design— with the small exceptions (in terms of population) of oceans, wild preserves, and vast factory farms. Unfortunately, the author of this book did not or could not grasp the full meaning of his title.

We of the late 20th Century have a sentimental attachment to the town, and we, the architects, are the especial lovers—with our sweet memories of sidewalk cafes, pedestrian malls, parks, plazas, and squares. We delight in those stepped streets of the Italian hill towns, the “urbanity” of Place des Vosges, Grosvenor Square, and the Piazza San Marco. We thrill at the canyons of Wall Street and the serrated skyline of Manhattan.

But what if this kind of taste is now kitsch compared to that of the people who love false fireplaces and plastic plants? Are not windows—and even fireplaces that draw—leftovers from a time when man controlled his environment by such primitive means as opening the window or balancing a log on the andirons? What if our inclination and education prepared us to design clipper ships and admire the bell-bottom trousers of the jolly tars while the reality is Gemini or Sputnik and the Buck Rogers space-suit?

If that is so, then the book Speiregen has written and illustrated is a remembrance of things past and not a guide to the future. It is (taking the stereotype out of context from Bill Scheick’s Acknowledgments) “a fulfillment of a long standing dream . . .”—a dream based on the myth that obsolescent ideas and customs will continue, a fantasy in which progress consists of attempting to pour new wine into old bottles.

The author writes:

“From the days when the plow first broke the ground and the herdsman built a fence, there has been an unbroken tradition of designing cities, a tradition as old as civilization itself . . . It remains only to know of this experience, to put it to use, to adapt it to particular conditions, and, where necessary, to build upon it and expand it.”

It is true that the essence of our tradition has been the slow modification of custom; what served the father could with minor changes serve the son. But today must we not ask whether this chain is broken, whether for the first time in written history it no longer applies, whether the rate of change is no longer quantitative but qualitative? Have the straws placed on the camel broken the camel’s back? Such questions are not academic.

A major (or is it the major?) element in architecture is planning; and to plan means to forecast. An architect, or his wife, may plan the next meal by making a pleasant, short-term forecast with few unknowns. Urban design requires planning over extended periods—40 or 50 years is a minimum. Working

Continued on page 232
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Continued from page 228

with such time spans, and with situations of utmost fluidity and complexity, the forecaster must know the possibilities, the alternatives, and, because the choices are bewildering, have a philosophy on which to base assumptions and decisions. Here is the dilemma: To plan for today means planning the obsolete; To plan for tomorrow is called utopian.

Paul Speiregen is not unaware of the magnitude of our problems because at the end of his review of the history of cities he says, “The vastness of the current urban problems confounds the average mind.” If he had greater awareness, he would have said, “confound any mind,” and not have announced as his theme:

“The city is as much an object in three dimensions as it is anything else. . . . It is the physical city which is the result of all planning efforts, whether dealing with economy, sociology, or transportation. It is the physical city we have to live in. It is the physical city we must design.”

Could he have written a book for the AIA if he had not taken this view? I do not think so, for as architects we want the immediate and practical; we want recommendations and formulas that our clients will accept and for which programs for financing and realization are immediately available. This can only mean that we cannot and do not plan for the future, only for the moment. An architect's plan, then, is always an alleviation, at best a stop-gap solution. Such conservatism has been our heritage and, as I've suggested, it and the assumptions it is based on are probably worthless. Yet, and here is the second dilemma, we have jobs to do that are immediate and pressing, such as housing over 2,500,000 new Americans each year. This means (granting the family structure remains in our calculations) building over 40,000 dwelling units each week, counting obsolescence of existing stocks. On a worldwide basis, the need is so vast as to be incomprehensible. A statistic given by Charles Abrams stagers even the unaverage mind:

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United States Steel: where the big idea is innovation
Continued from page 232

In architectural practice, this is a first-rate book and will be on the shelf for ready reference. The sketches by the author are not only good to look at but clearly illustrate the text; the writing is unpadded and straightforward. The subject matter covers the gamut from our heritage of urban design, through principles, techniques, examples, and descriptions of government programs, to a final chapter on the comprehensive role urban design should play in the U.S. All of it is beautifully organized. The AIA has done a service to the practitioner in sponsoring such a compendium; Speiregen has summarized our period's architectural thinking on the city in a definitive work.

Alas, the fact may be that the architect's thinking on "urban design" is pretty thin gruel, for it does not, as any good scientist does, consider alternative hypotheses, but instead builds a structure on the sands of assumptions that are both technically and sociologically dubious.

Speiregen writes, "The approach to any urban design program lies in clearly understanding the nature of the problem." The trouble with his book is that it contains little evidence that he has any recognition of the nature of the problem. Finally, it will be said that it is not the architect's function or prerogative to design for the future, because to do so he must determine the values as well as the forms of the future. But if this is not the architect's function or prerogative, then, for heaven's sake, what is?

Art Versus Science

BY MICHAEL BRILL

SER 2: ENVIRONMENTAL EVALUATIONS.

The reviewer, an architect, is an Associate of Helge Westermann/Richard Miller Associates, and an Assistant Professor of Architecture at Pratt Institute.

There is a schism in architecture today between those who conceive of it as a fine art form whose rational base is aesthetic judgment and those who wish it to be an environmental science. The first is nurtured by the incredible wealth and sophistication of large segments of our mannerist society and begets, at its worst, the great white temples to the muses blossoming in our cities, and, at its best, the studied spaces, forms, and structures of the new towns.

The second is a function of the violent speed-up of urbanization the world over, the implications of which are the birth of the non-building (with a non-aesthetic), the loss of scale, the acceleration of the construction-decay-destruction cycle, the leasehold versus ownership situation, and the desire for flexibility and impermanence. Hopefully, it will also force man to examine his reasons for building by re-evaluating his place in the total environment.

Present architectural education reflects this schism. A strong emerging attitude holds that art is not teachable, that we can only teach about art, and, therefore, let us teach what can be taught, let us teach about stimulus, perception, and behavior in space and establish guidelines for a design based on man; let us utilize the resources of the 20th Century to teach architecture as an environmental science with which to build anew and rebuild our cities. The assumption is that if there is an environmental science, it should be possible to make a true environmental...
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To stimulate fresh, new thinking in housing and encourage the use of new designs, materials and structural methods, Section 233 of the National Housing Act permits the FHA to insure mortgages on properties that involve new and untried items which are likely to reduce housing costs, raise living standards or improve neighborhood aesthetics.

The newest FHA experimental home under this program, Arch House '66 near Minneapolis, is attracting national attention because of its advanced design and utilization of over 25 new materials and products in unique and highly functional ways.

The soaring, arched roof is the most striking feature of this house and it dominates all other design elements. The main support of the lightweight roof structural system (patent pending) is provided by its stressed-skin construction. Spaces between the arches are filled with foamed-in-place rigid urethane combined with plywood and glass-reinforced plastic facings for a strong sandwich-type construction covering 2000 sq. ft. of living area.

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For further information on this project, please contact any of the following sources:

- Project Engineer: Keith M. Lang, 5038 Dominic Spur
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- Builder: Hugh Thoenes Construction Co.
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- Foam supplier: Archer Daniels Midland Co.
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For information, write to Dept. P-6, Reynolds Aluminum, Richmond, Va. 23218.

Watch "THE RED SKELTON HOUR": Tuesdays, CBS-TV
Continued from page 238

architecture, and perhaps progress from Newtonian space to Bergsonian or even Freudian space.

It is this climate that generated the SER (School Environments Research) group's recent publication of three volumes: Environmental Abstracts; Environmental Evaluations; and Environmental Analysis. The second volume, "Evaluations," states that it "summarizes... and evaluates... the present state of knowledge concerning the various aspects of environment that affect human behavior," and that the "... individual evaluations collectively constitute an integrated description of an environmental science as it exists today." This book, based on the first volume, which contained abstracts of 600 reference documents in the environmental literature, was prepared by architects, engineers, psychologists, meteorologists, medical researchers, educators, anthropologists, and physiologists—an excellent interdisciplinary turnout.

The book consists of six parts: "The Interactions of Man and His Environment": "Space as a Component of Environment": a chapter each on temperature, light, and sound; and, finally, the "Social Environment and the Learning Situation." However, the book's scope is severely limited, because the authors equate environment with "buildings." The introduction speaks of "the effects buildings have on their inhabitants" and speaks of environmental studies as "building research." In view of the explosive urbanization occurring worldwide, it would seem imperative to study the networks of dependence in a human ecology, and to conceive of the physiology and psychology of cities as colonial organisms. If we are ever to utilize the basic concept of "man undergoing continuous interchange with his environment," looks like this must speak of the environment at all scales.

The chapters on temperature, light, and sound are fairly comprehensive and full of "hard" information. Obviously, the back-up literature is mature. However, the chapters on the younger disciplines (for instance, "Space as a Component of Environment") are sadly inadequate or painfully obvious. The first chapter, by Daniel Carson, a psychologist, is the best of the lot. He discusses man's tendency to structure his environment through perception. Hall's brilliant concept of culturally modulated "personal" space, man's visual, thermal, aural, and tactile capacities, perception and information theory. It is an exciting, but jumpy, gloss

Continued on page 252
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Continued from page 245

of contemporary writings, but one easily perceives that there is very little structure or maturity in these “softer” areas of Environmental Research. An architect/planner (or an interdisciplinary design group) will benefit little from this book. The material is not there; the “state of the art” is immature. Motivation and money to foster the growth of these infant sciences is minimal. Universities need help from the Government or benevolent private industry. Without this growth, we will find our environment ultimately alien to life.

Deghetification

BY EDWARD C. CARPENTER

In his two most recent books, Robert Weaver, the newly appointed Secretary of Housing and Urban Development, outlines fully the problems, as he sees them, that his department will face. Although both books were written before the department was officially created, its advent has long been imminent and Weaver has long been the obvious man to head it.

What Weaver sees as he looks at our urban areas is a complex of social ills. The overriding problem is one of deghettification. He believes strongly that all city dwellers must be given a chance to move freely, economically and socially, within cities and that they must somehow be convinced that this movement is both possible and desirable. His greatest concern is for non-whites, who, he feels, have the least opportunity to improve either their housing or their jobs; by far the most space in both his books is devoted to their problems. His concern is for both immediate and long-range improvement and he is farsighted enough to realize that completely mobile neighborhoods will probably never be achieved: “American urban centers will not soon, if ever, be a total aggregate of class and racially heterogeneous neighborhoods. But we can expect to see a lessening of ethnic as well as economic ghettos. Still, most of our neighborhoods will be predominantly one economic level; some will be almost exclusively non-white; a

Continued on page 258
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few will have a small number of medium-income non-whites; and others will be integrated in varying degrees.”

Weaver’s interest in urban renewal is obviously more social than architectural. This segregation of interest may become a serious one for our cities, if it reflects the policy of the new department. For the creation of a stimulating urban environment is just as dependent on architecture, in the long run, as it is on the movements of people into integrated neighborhoods. There must be architectural quality in cities. It can do as much to uplift spirits—perhaps more—than can integrated apartment houses.

Weaver makes the usual moral plea to architects that most public officials do. But his plea is almost completely lost in the pages of social commentary. “It is not often that a nation rebuilds its cities,” he writes, “and when it does it should do it well. The architects of this nation will have in their hands, in the years ahead, a major part in shaping the urban life of the country. What they do will influence the lives of millions yet unborn for decades yet to come. No other generation of architects had before it such an opportunity or such a challenge.”

The examples he gives of urban renewal programs leading to good architecture do not lead to confidence. San Francisco’s Golden Gateway housing, on urban renewal land, may “generally be regarded as inspired”—but not by architects, and it is probably more inspired than inspiring. It does not create a community, nor does it give one a feeling of the vitality of city life. Another Weaver example of good architecture, the result of an architectural competition for urban renewal land, is the Boston City Hall. This is a good solution, but it is a public building, not housing.

Weaver recognizes the tremendous problems his department faces, although, like any good public-relations man, he spends little time dwelling on them. One of the main reasons for the urban renewal program was that private enterprise was not providing housing for the less affluent. Of the Government’s efforts, Weaver points out: “Urban renewal has torn down ten times more low-income and moderate-income housing units than it has helped to produce. Until recently, most redevelopment housing has been so highly priced as either to exclude or greatly restrict nonwhite occupancy.”

Both books are recommended reading for those interested in where HUD may lead us.

Continued on page 264

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Continued from page 258

Researching Building Needs

BY PATRICIA A. WILSON

Housing in Latin America, M.I.T. Report No. 1. By Albert G. H. Diez, Marcia N. Koth, Julio A. Silva. The M.I.T. Press, 50 Ames St., Cambridge, Mass., 1965. 259 pp., illus., $10. The reviewer is a Research Associate at the School of Architecture at Pratt Institute.

One of the most important aspects of housing this report brings to mind is that the concern of the architect, the builder, or the community is not just to build dwellings. The building effort should consume, bind together, and express every aspect of the life it will affect. Local custom, materials, and climate must dramatically constitute the heart of the concept of planning and design of the residential environment. As the economy seeks a level of industrialization, these elements must play an even stronger role if the character of the community is to retain an identity in the modern world.

The whole scope of economic development and its related housing needs are treated here as a unit. The vast extent of this report touches the many facets as thoroughly as any one volume can. M.I.T. must be very proud to have successfully matched such a well-suited team to conduct this immense research program. The M.I.T. group went beyond the available sources into the field where the events are happening. Their data comes from the experts who are conducting the housing programs so that now the planner, student, architect, and builder have readily accessible all the data they need compiled in an informative book.

The charts of statistical data were not intended for study, since the conclusion is often drawn in the text. The charts in Section I stand only to authenticate the conclusions, since, for the most part, they can only indicate a trend and are usually out of date when published in the source from which they were obtained. Survey work for data of this type is necessarily conducted by the Government, and is therefore done less often than researchers would like.

Housing statistics, although scant, are valuable in making predictions. The inadequacies in Latin American housing are stated best by the United Nations in terms of "need." For example, the increased need predicted for urban and rural housing combined, from 1960 to
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Aerofin smooth fins can be spaced as closely as 14 per inch with low air friction. Consequently, the heat-exchange capacity per square foot of face area is extremely high and the use of high air velocities highly practical. Tapered fin construction provides ample tube-contact surface so that the entire fin becomes effective transfer surface. Standardized encased units are arranged for simple, quick, economical installation.
This strikingly attractive installation is a classic example of the design flexibility of Polished MISCO (wire) glass. Contributing dramatic impact while achieving functionality, Polished MISCO demonstrates its advantages of chemical stability, permanence of finish, color, shape, surface hardness and fire retardance—characteristics available to a degree found in no other glazing material. To combine the utmost in safety with modern beauty, specify Polished MISCO.
A skylight spire of COOLITE heat absorbing wire glass appears to reach heavenward in this lovely edifice. Glare-reduced by our special process, blue-green COOLITE glass admits softly filtered daylight for the benefit of worshipers . . . contributes eye-soothing comfort while affording the protection for which Mississippi wire glass is widely recognized.

When the control of human environment is a requisite, consider COOLITE heat absorbing glass. Available at better distributors.

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Look how we expanded the revolution we started in good light and good looks!

**Sleek new pole-top-mounts for 2, 3, or 4 Profile lights**

Now Profile Light offers you a choice of four pole-top-mounts for even, efficient light. The new options are 2, 3, and 4.

Look them over.

See how you can place light only where you want it. The revolutionary asymmetric reflector of Profile Light makes use of more than 85% of the beam. This means less spill. Less waste. Less glare.

The mounts for Profile Light are cast-aluminum, one-piece, and easy to install on any pole. This means less labor. Fewer poles. Fewer fixtures.

And the sleek designs of the mounts look like the Profile Light itself. Beautiful.


Unique rectangular beam pattern produced by one Profile Light.

New twin mount produces a giant rectangle.

Triangle pattern results from new three-light mount.

Four Profile Lights on pole-top-mount produce an evenly illuminated circle.
Space flexibility is built in with Celotex® acoustical ceiling air distribution system by Celotex.

PONTIAC MOTOR DIVISION, General Motors, Zone Office  •  Square footage: 2,200  •  Personnel: Approx. 15  •  Traffic: Moderate to light  
Partitions: 7 offices plus reception area.
THE WOODCOCK BUILDING ... ANOTHER DRAMATIC EXAMPLE OF THE VERSATILITY AND ECONOMY OF CELO-FLOW ACOUSTICAL / VENTILATING CEILING PANELS.

Acoustical Engineering Co. of Florida

A predicted high rate of changes in space and air distribution requirements was the prime reason for selecting the Celo-Flow System. Celo-Flow through-perforated ventilating acoustical ceiling panels, interspersed with identical-appearing surface-perforated acoustical ceiling panels, can quickly be moved to direct the flow of fresh, comfort-conditioned air to any desired area — with no material loss, minimal time and labor expenses. Ordinary ducting systems would have required tearing out ducts and moving them to accommodate changing tenant needs — an expensive project.

OTHER CELO-FLOW SYSTEM ADVANTAGES TO TENANTS AND OWNERS:

DRAFT-FREE OPERATION — a uniform blanket of air; efficient air dispersion.

NOISE-FREE OPERATION — no diffuser noise.

REDUCED MAINTENANCE — no ceiling stains as with conventional diffusers or slotted material.

ACOUSTICAL QUALITIES — excellent ratings for both sound absorption and attenuation.

SPACE FLEXIBILITY — no modification of ceiling ventilating system required when partitions are relocated.

EXCLUSIVE PATTERNS — miniature perforated and fissured mineral fiber ceiling tiles and lay-in panels; identical patterns in SAFETONE® Class A incombustible and PROTECTONE® UL time-rated products; monolithic single-pattern effect, regardless of number and location of ventilating panels or tiles.

SAVINGS ON INSTALLATION — Only supply ducts; no distribution ducts or diffusers required.

SAVINGS YEAR AFTER YEAR — Maintenance-free modular construction and complete interior design flexibility.


*A. U. Patent No. D191203

PONTIAC MOTOR DIVISION, General Motors, Zone Office
Square footage: 256 • Traffic: Moderate to light.

UNITED DELCO DIVISION, GENERAL MOTORS CORPORATION
Square footage: 1,350 • Personnel: 6 • Traffic: Light • Partitions: 3 offices.

CARNATION COMPANY District Sales Office
Square footage: 1,000 • Personnel: 6 • Traffic: Light • Partitions: numerous separate offices.

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Subsidiary of Jim Walter Corporation
It's more practical, too ... reflects light and heat far better than slag or gravel ... non-porous to defy dirt and smoke, to wash clean and stay bright indefinitely. Lime Crest Roofing Spar is accepted for maximum bonding by roofing manufacturers and contractors ... contains almost no fines ... often costs less than other white aggregates. Unfortunately no photograph can do it justice ... let us send you a sample that will.

Limestone Products Corporation of America
Newton, New Jersey

Please send me a sample of Lime Crest Roofing Spar.

NAME_________________________ TITLE_________________________

FIRM NAME_________________________

ADDRESS______________________________________________

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Continued from page 264

1970, involves a 12 million leap; and, from 1970 to 1975, another 8 million units will be needed.

Financing is considered to be the greatest brake on housing development. Long-term, low-interest financing is extremely scarce. Few are eager to venture into long-term capital investment when the economic and political structure of the country shows signs of instability. The potential is there in many cases, but the Government must set the climate.

Differing economists' views about housing investment are presented. Compared to the extremes, industrial investment and agricultural, the return on housing investment is not rapid. Another opinion is that the range of housing investment benefits go much beyond, into the external economies of employment, and, "most importantly, stimulating small industry by creating new opportunities and wider markets."

Where statistics were available, it was found that only 2 to 6 per cent of the gross national product is being spent on housing. It has been projected by Patrick Ohlliginn, an economist working in the Housing, Building, and Planning Branch of the United Nations, that "10 per cent or more of the gross national product would have to be directed annually to investment in housing to bring housing up to meet minimum standards."

Among the various methods of housing low-income groups, mutual aid and aided self-help seem to be the most common. Where a Government agency is involved as opposed to private industry, the agency exercises controls and promotes prefabricated techniques. They have found traditional techniques slow and difficult to teach; systems must be developed that can be handled by unskilled men. The technique should require little training, but, once experienced, men could become semiskilled workers in a growing construction industry.

The authors point out that "a great deal of research and development can profitably be spent on the search for low-cost combinations of materials and components." The materials mentioned are low-cost "masonry," meaning earth combined with other ingredients; fibrous materials such as bagesse; wood constructions of treated or hard woods; plastics from the petrochemical industry; and many other combinations forming lightweight and rigid sandwiches. Within this range of materials are exciting possibilities, many of which have been mentioned in like publications and either have not been utilized or are in the de-
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how to be sure you get VICRTEX when you specify VICRTEX Vinyl Wallcoverings

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3. specify a low fire hazard classification continually maintained and confirmed by an independent laboratory; and delivery of the wall fabric to the job site in containers bearing the inspection label of that laboratory.
4. require subcontractor to submit with his bid the manufacturer's name and product quality on which his bid is based.

Write for our booklet "A Practical Guide to Specification, Selection and Use of Vinyl Wallcoverings." Do it today!

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development stages by various agencies and industries.

The topping of this report and certainly the most useful and best organized facet of it was compiled from a questionnaire sent to the various National Housing agencies in Latin America. In this manner, the most current data was gathered on the housing activities of 12 countries for the period from 1954-1964. Although it is not the complete housing picture, this significant information had never been previously assembled. The charts of data in this section of the book present a wealth of information.

As long as the extreme contrasts in the distribution of wealth exist, the economic stability required for meeting housing needs will not develop, but it is research of this type that will provide the stimulus for future development in the housing field throughout the world.

NOTICES

New Addresses

MICHAEL J. DE ANGELIS, Architects-Engineers, 507-524 First Federal Bank Bldg., 328 East Main St., Rochester, N.Y.

SAPHRER, LERNER, SCHINDLER, INC., Environetics, 600 Madison Ave., New York, N.Y.

WEBNER-DYER & ASSOCIATES, Architects/Engineers/Planners, 1301 15th St., N.W., Washington, D.C.

New Firms

EUGENE ALEXANDER, Architect, 45 Clarke St., Burlington, Vt.

WINSTON CORDES and H. HERBERT STEGMAN, Architects, 11850 Wilshire Blvd., Los Angeles, Calif.

MICHAEL RETTINGER, Consultant on Acoustics, 5007 Haskell Ave., Encino, Calif.

New Partners, Associates

DRAKE PARTNERSHIP, Architects, St. Louis, Mo., have named MERLIN E. LICKHALTER a partner.

MORRIS KETCHUM, JR. & ASSOCIATES, Architects, New York, N.Y., have named FRANK W. HAVLIK an associate.

EUHAUS & TAYLOR, Architects, Houston, Texas, have named WILLIAM C. BLACKSTONE and WILLIAM T. COX as associates.

PERKINS & WILL PARTNERSHIP, Architects, Chicago, Ill., have named 12 new senior associates, and 24 new associates.
In buildings everywhere, Milcor Steel Access Doors provide service openings in any surface without encroaching upon design. They are carefully made and rigidly constructed for minimum maintenance—economically installed, without on-site cutting and fitting—readily available in seven styles and a wide range of sizes. See Sweet's, section 16K/In. Write for catalog 210-6.


Now...the big ones are going All-Electric!
More and more architects and engineers are finding that all-electric design, with flameless electric heating and cooling, can hold down first costs for clients in buildings of all types through the elimination of such items as boiler rooms, fuel storage, stacks and long pipe or duct runs.

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For more facts about the proven advantages of applying all-electric design to your industrial and commercial buildings, call your local electric utility company. They will welcome the opportunity to work with you.

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ARCHITECT—Key position in progressive Rhode Island firm with diversified practice. Experienced in design development work. Requires knowledge of materials and detailing. Will work directly with partner and consultants in completely developing and coordinating projects prior to working drawing phase and during preparation of working drawings. Registration and some previous design experience desired. Background to Box #210, PROGRESSIVE ARCHITECTURE.

ARCHITECT—Or Architectural Graduate—Excellent potential in small New England office with varied work for one with experience in architectural design, production of working drawings, and meeting with clients. Submit resume of education, experience, available salary, and other pertinent information. Box #211, PROGRESSIVE ARCHITECTURE.

ARCHITECT—Small but active versatile and background to Box #211, PROGRESSIVE ARCHITECTURE.

ARCHITECT—Or Architectural Graduate—Experience, assume responsibility for design and development of working drawings. Excellent working conditions, fringe benefits, with long established firm in Norfolk, Virginia. Top salary to personnel with required experience and qualifications. Give resume of training and experience. Our employees know of this ad. Reply Box #217, PROGRESSIVE ARCHITECTURE.

ARCHITECT DRAFTSMAN—Permanent position in a young progressive firm. Preferably three years experience on working drawings. Salary Open. Submit resume to: David F. Snyder and Associates, 4015 N. Keystone Avenue, Indianapolis, Indiana 46205.

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Contact Personal Agency—Lillian Fox—A highly personalized and discriminating service for executive flight, flight service. References checked. 515 Madison Ave., New York 22, N.Y. PL 2-7640.


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