ARCHITECTURAL FORUM / SEPTEMBER 1973

FORUM

Aloha High School, Portland, Oregon
Architects: Hewlett, Jamison & Atkinson, Portland

DOORWAY NOTES . . .

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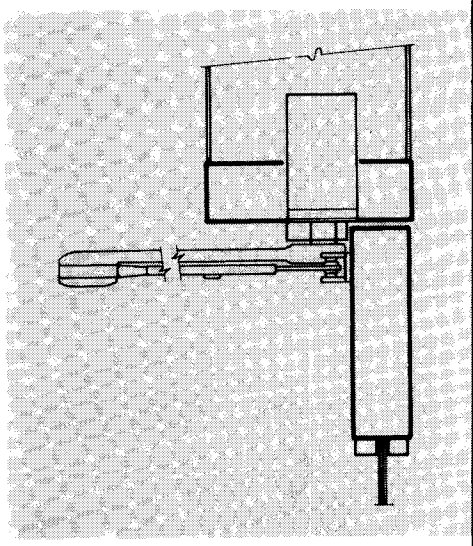

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THE ARCHITECTURAL FORUM - SEPTEMBER 1973
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Cover: The Christian Science Center's Colonnade building photographed by Yukio Futagawa.

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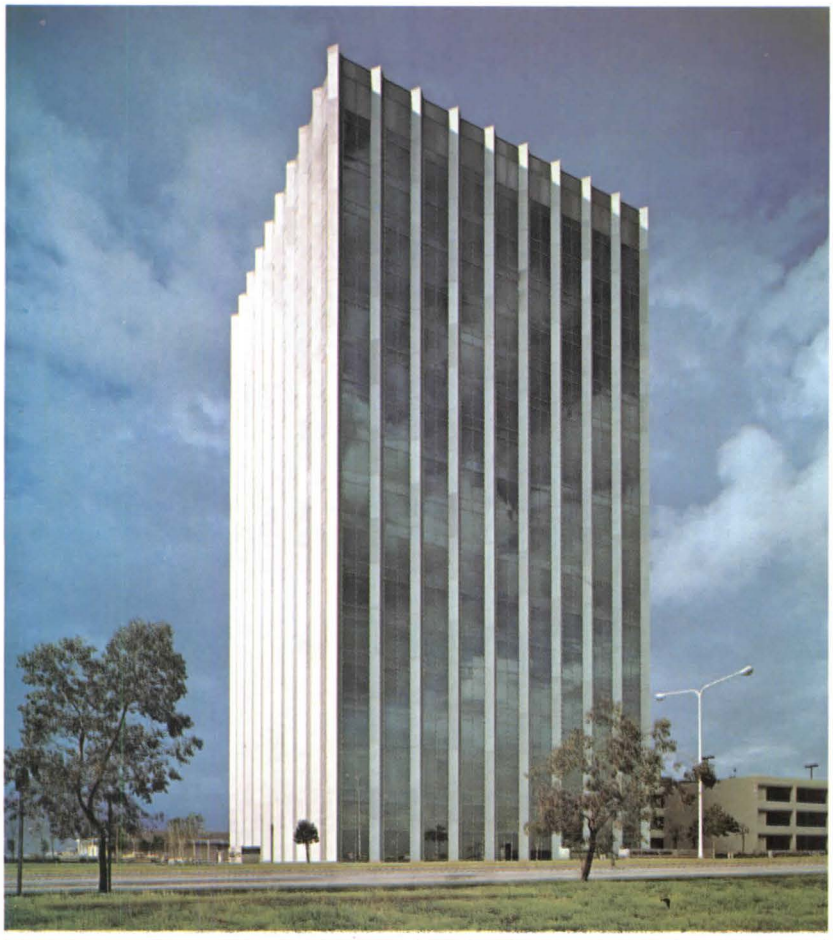

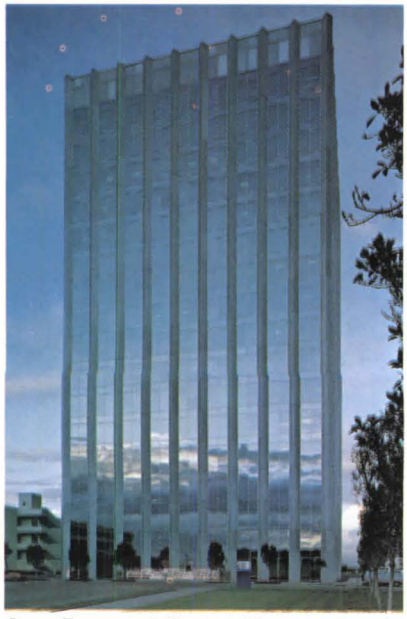

Avco Financial Center, Newport Beach, California • Owner: Balboa Insurance Company • Architects: Welton Becket and Associates • Consulting Mechanical Engineers: James A. Knowles & Associates, Inc., Los Angeles • Glazing Contractor: Golden State Glass Company, Los Angeles

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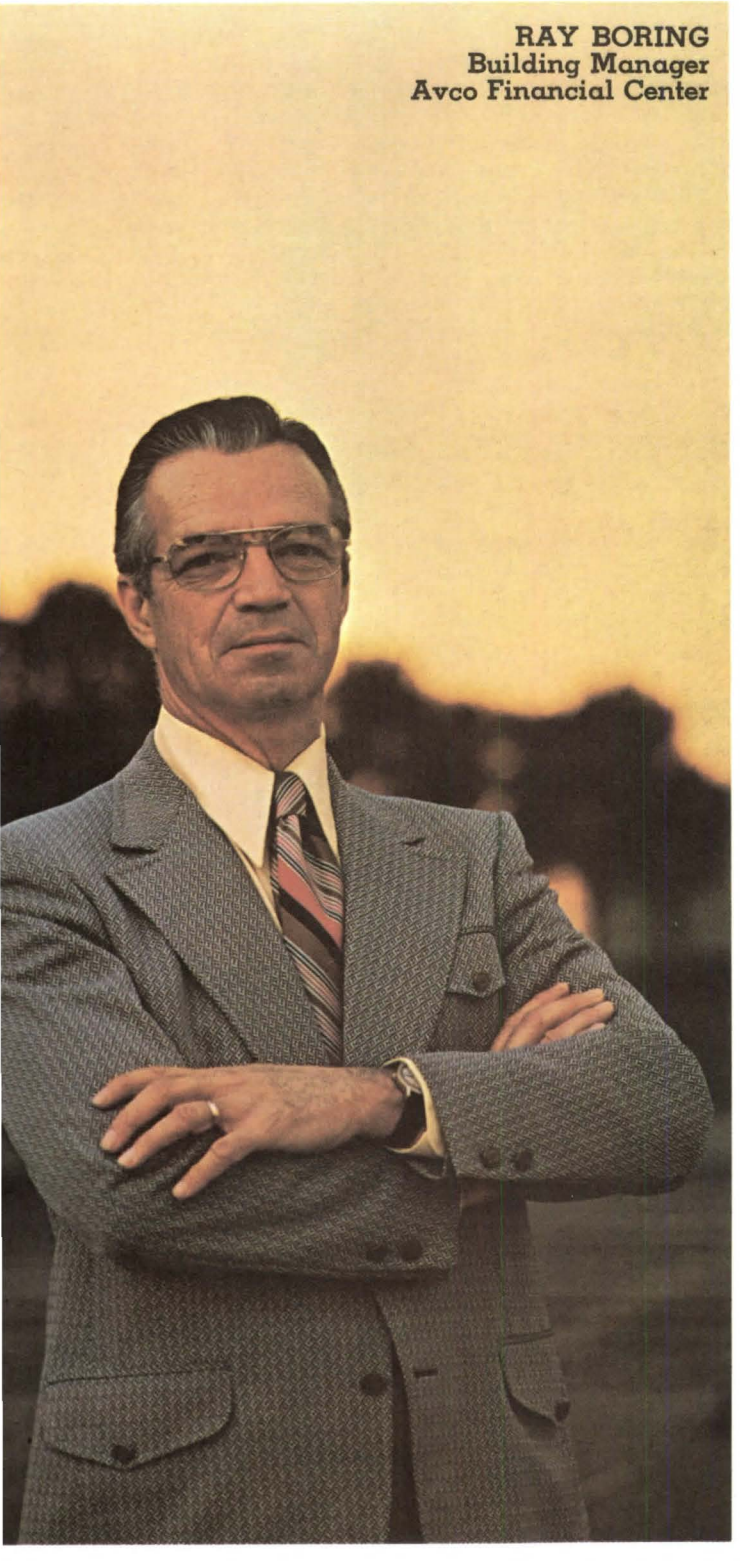

RAY BORING
Building Manager
Avco Financial Center

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LETTERS

FIVE ON FIVE

FORUM: Next in the development of the *"Five Architects"* polemic (May '73) could be a rebuttal by the original Five, a criticism of the second Five by another Five or a presentation of the second Five's work in order to clarify their positions.

To avoid a time lag and to continue to spark public dialogue, I urge you to give the second Five the opportunity to publish their work.

New York, N.Y. ANDREW MacNAIR

The original Five were given the opportunity to reply but they declined.—ED.

FORUM: It was stimulating to read such literate observations on architectural design, a subject so seldom discussed in recent years.

Venturi certainly deserves much of the credit for creating this provocative atmosphere.

WILLIAM HAMILTON ROEHL
New York, N.Y. *Architect*

FORUM: Neither the "Five Architects" nor the "Five on Five" can, in general, be considered to be particularly didactic, since the few incidences of inspiration seem to be lost in the intentions of each of the overall presentations. However, some basic generalizations have been made which are obviously distorted and attention should be given them.

It becomes apparent after the statements are presented, criticized, and re-criticized, that the name and work of LeCorbusier has become the fulcrum of this see-saw battle. Moreover, it is served as both a shield and a sword and therefore leads one to question the substance of both offense and defense.

One can examine for example, LeCorbusier's "Five Points" as a check-off list: 1) Pilotis 2) Roof garden 3) Free plan 4) Horizontal strip windows 5) Free facade. These are formal devices for resolving and expressing technological proposals (column - slab = free facade, free plan) and social proposals (program = free plan, roof garden, pilotis; order = column grid, light; view = free facade). These five points indicate a general rather than a specific attitude towards building. This attitude is amplified by the metaphoric and symbolic content alluded to in Colin Rowe's article as the "spirit of the age." (A design symbolizing a rocket ship or 747 would be closer to Corb's ideas than steamships, an eclectic attitude similar to copying column capitols which was decried by Corb.) This general attitude is most clearly exemplified by the houses in the 1910 - 1929 Oeuvre Complete. Villa Meyer, Maison Cook, Villa a Garches, Villa Savoye are studies and statements for the Immeuble Villas proposal of minimum housing requirements for workers. Maison Citroen, Guiette, and Weissenhof led to the Unite.

There is enough information in the "Five Points" to realize that the "Five Architects" have little in common with LeCorbusier. None of the buildings represent a conviction or definite attitude toward these ideas. They are either generalized proposals about other ideas (Eisenman, Hejduk), or they are very specific and do not explore problems other than those related to the building. (Nor are they a development of these ideas, for neither clarity nor useful, or essential compromise has ensued.) And furthermore, they are not a mannerist manipulation of "a self-conscious, dissenting, frustrated style", as the indices to "a period of tormenting doubt, and rigorous enforcement of no longer self-understood dogma, as the external effects of mental disquiet, disequilibrium, schism." (From Rowe and Slutzky's Transparency II, Perspecta 13, 14.) Perhaps an argument could be made that they are Baroque, but Baroque space was never closely related to Renaissance thought, as the Five are likewise unrelated to LeCorbusier.

In light of this, the critical reviews by the second Five that based their argument on the affinity of LeCorbusier and the first Five were either naive or attempting to perpetuate misunderstanding. In either case, it renders the criticism something less than instructive. By dismissing the work as 'neo-Corbusian', except for the kind of picayune criticism that any and all architecture can fall claim to, no architectural issues were discussed.

Unfortunately if Colin Rowe's article was more carefully considered, important issues might have been discovered, such as the discussion of the schism between formal content and social, moral and political constructs. It can be argued that a one-to-one relationship cannot be found, however one must also ask if any significant architecture can be produced without both present, or the former tested by the latter. Or what effect does the 'hope' or 'guilt' of the architect have on the building's meaning? Can there be a rich architecture based on form alone, or must it not be tested, informed and enriched by polemics? Can forms be admired when they serve only the "decor de la vie for Greenwich, Conn.," a too often unescapable and unchallenged trap for today's architects?

JON MICHAEL SCHWARTING
New York, N.Y. *Architect*

BAL-KRISHNA DOSHI

FORUM: The basic honesty and humaneness of Bal-Krishna Doshi's work (May '73) and its great good sense and humility offer a refreshing antidote to the steady diet of conceptual clutter and high style that FORUM is so fond of dishing up. Another rare exception (in the same issue, yet!) was "Five on Five," a sensible and well-written collection of critical essays, if there ever was one.

DAVID GUSTAFSON
Minneapolis, Minn. *Architect*

NEAL AWARD

FORUM: Congratulations for receiving the Jesse H. Neal Editorial Achievement Award. There aren't many magazines which can do more than pick out pretty pictures, and we are all grateful to you for lending an insightful, intellectual approach to the issues of the day.

I should have written earlier to comment on the San Francisco issue. Many people mentioned it to me, and all with praise.

GERALD M. McCUE, FAIA
San Francisco, Ca.

DREARY DEADLOCK REVISITED

FORUM: I believe that the Hirshen - LeGates article (March '73) is a timely and useful summary of some of the recent public housing experience. There is need for a deep probing of the critical policy issues which must be resolved if the United States is to have a housing assistance program of any major dimension in relationship to the housing needs of low income families. Messrs. Hirshen and LeGates have performed a valuable service by introducing the dialogue into The FORUM.

The article should really be entitled *"Low Income Housing's* Dreary Deadlock Revisited", for the reasons why public housing has not been "widely embraced" or "become a popular and accepted program" are that, even in its limited scope, it continues to probe and test the unpopular issues which must be resolved in any low income housing effort. Basically, these issues are:

- Where shall low-income families live in a community?
- What kind and quality of housing shall be made available to them with public assistance?
- How shall housing management be geared to total opportunities for the family: employment, health and education?
- What level of federal assistance is required, and will have acceptance for a low-income housing program?

No program, other than public housing, has wrestled with these issues for so long, on so broad a scale, and with such a variety of approaches. The story of this experience has never really been told in a comprehensive or incisive way. It would be a major contribution, if FORUM would undertake a series of articles on the public housing experience geared to these policy issues. NAHRO would gladly assist in developing such articles.

Public housing, over its 35-year history, has had success as well as failures, as HUD Assistant Secretary for Housing Management Norman Watson observed on leaving office on January 20:

"There are some great strengths in the local agencies.

"Sure, they can be criticized for not changing their way of doing business, being a bit conservative—but they haven't had the money to hire expensive consultants and buy advanced technology.

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(Continued on page 8)

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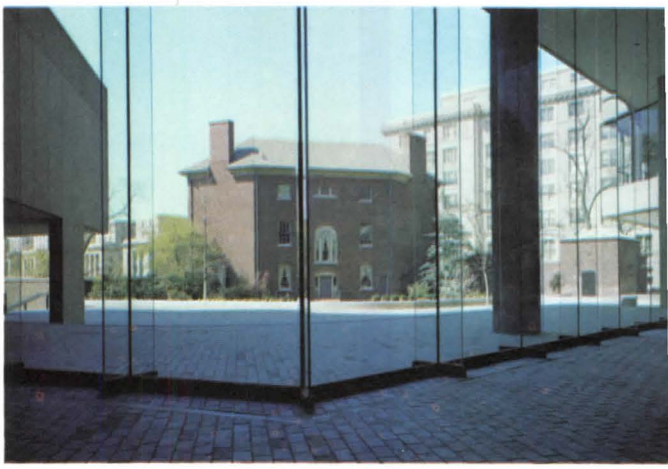

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LETTERS

(Continued from page 4)

lutions, but they understand the problems.

"While problems of public housing 'are just fantastic' in major cities, in communities say of 300,000 or less there's outstanding public housing, nothing wrong with it."

The chief failure of public housing is that it has not been able to devise an approach—a comprehensive housing policy—which will respond to all of the four critical issues noted above in a way to permit a *large-scale* low income housing effort.

Three times, since 1949, it appeared that public housing might be on the verge of a major breakthrough: in the early 1950's, in the early 1960's and in the period from 1968 to 1971.

The Housing Act of 1949 linked an expanded goal for public housing of 810,000 new housing units over six years, to a newly-launched urban redevelopment effort which was devised to provide the complementary support of new neighborhood facilities and services, making possible a "suitable living environment." Yet, the decade of the 1950's became a period of restrictive and shortsighted federal policies: cutbacks in public housing starts; heavy restrictions on housing design and quality; lack of support for social services; and local battles by real estate interests against new public housing locations. Rather than benefiting as a partner in the urban redevelopment effort, public housing often became the "housing of last resort" for disadvantaged families displaced by the renewal activity. The end product of the federal policies which dominated public housing in the 1950's in major American cities were massive "projects" located in declining and blighted neighborhoods, increasingly occupied by concentrations of the poorest families who could not join the rush to the suburbs. Local communities were given the option of accepting public housing on these terms, or not at all.

The *second time*, in recent history, that public housing appeared on the verge of a breakthrough was in the early 1960's when a new authorization for 100,000 housing units in the 1961 Housing Act was coupled with a drive for good though modest, housing design, and a program to house low-income elderly. This approach to public housing did, in fact, succeed, resulting in the development of public housing in large and small communities in almost all of the 50 states. By 1966, over 30 percent of public housing was occupied by elderly.

Yet, even here, although the barriers to the first three critical issues were broken, there was no massive expansion in response to the need, or to local requests for assistance. Looking at some of the public housing for the elderly in the mid-1960's and seeing the enthusiastic response of the elderly occupants, a Professor from a large eastern university (the director of a Ford Foundation project to assist the elderly being displaced) remarked: "This is an answer—we should build public housing like this for the elderly all across the country." Yet, it has not happened in a volume truly responsive to the need. Nor has the effort to extend the *types* of public housing available to the elderly through "congregate housing" facilities, been permitted to be tested in any significant way. There seems no answer as to why these things do not happen except to conclude that the federal government is not willing to make the financial commitment—the fourth critical policy issue has not been surmounted, even with the appeal of the elderly.

The *third time* that public housing appeared in a position to make a breakthrough, followed the adoption of the 1968 Housing Goals, and the increasing acceptance of the Section 23 leasing of private housing, and the growing involvement of the private builder through the "Turnkey" construction method. The annual level of new public housing contracts had grown gradually from the 20,000 to 30,000 unit level of the 1950's, to a level of 50,000 in the mid-1960's, to a record level of over 101,000 units in the fiscal year ending in June, 1972. With a backlog of requests from local communities of almost 500,000 units, it appeared that public housing might reach the annual levels of 150,000 to 200,000 units annually projected in the original 1968 Housing Goals. Two things occurred at this point: (1) the increasing impact of inflation on public housing operating costs (the Urban Institute has estimated that four-fifths of the increase in public housing costs in the years 1965 to 1968 was due to inflation); and (2) the progressive financial impact of the 1969, 1970 and 1971 Brooke Amendments, which moved the public housing program further in the direction of serving the very lowest income families, (by mandating that no family should pay more than 25 percent of its adjusted income for rent) including those who had zero incomes after the authorized deductions and paid no rent. Within the short space of three years, housing authorities all over the country were in deep financial crisis, because the federal operating subsidies, intended to absorb the losses in rental income mandated by the Congress, as well as maintain adequate operating services and maintenance, were not forthcoming from the Administration either quickly enough or in the volume required. Yet, even with an inadequate response to fund the legislation mandate, the operating subsidy in public housing rose from a level of $15 million in fiscal 1969 to an estimated $300 million in fiscal 1973.

The Administration has begun to slow-down new public housing contracts—from 101,000 new units in the fiscal year ending June, 1972, to an estimated 46,000 units for the year ending in June, 1973. The fourth critical policy issue—acceptance of the estimated cost—became a controlling factor. On January, 1973, an 18-month moratorium on all new federally-assisted housing commitments was announced by the Administration, covering FHA-assisted housing and public housing.

It may be that there is an approach, other than those tried in the public housing program, which can succeed in gaining the measure of support necessary for a large-scale low income housing effort. But any such approach must confront all of the four basic policy issues which control the fate of low-income housing. Thirty-five years of public housing experience indicates that such an approach will not be easy to formulate.

ROBERT W. MAFFIN
Executive Director
National Association of Housing and Redevelopment Officials
Washington, D.C.

FORUM: Messrs. Hirshen and LeGates' analytical article provides useful and, I believe, an encouraging review of the significant reforms in public housing development and subsidy techniques that have been adopted since recommended sixteen years ago. (Mr. Hirshen's views, for one, are important because he himself has quarterbacked many recent reforms in improved tenants' rights and ably defended the democratizing new lease and grievance procedures against court attack.)

The quality and scope of the improvements are impressive, particularly because most have taken place since 1964 and in view of the fact that public housing has held a low place in the priorities of HUD at least since 1968.

Nevertheless, the "revisit" does not end upbeat. While the authors would be the last to run up the flag, there is reflected in their article a prevalent mood that the public housing program has been under siege too long to survive.

The authors accurately point out the controversies over placement of family projects in middle class neighborhoods, the effect on public housing units of inner city deterioration, administration impoundment of needed funds and that the program "has not gained broad public popularity."

There is a creeping readiness among some longtime supporters of public housing to plead guilty to the popular charges that public housing has failed. The plea, I believe, is like that of an innocent man who has been imprisoned too long and who begins to think that he must have done something warranting the indictment.

That public housing—a social program—is not "popular" nor reached expected goals is not surprising. Good grief! Has there been such progress or popularity in school desegregation, job re-training, inner-city education, suburban integration, tax reform, income redistribu-

(Continued on page 10)

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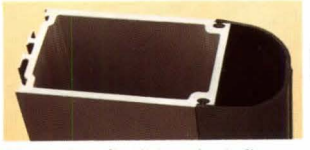

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LETTERS

(*Continued from page 8*)

tion, full employment, welfare reform, health care delivery, crime or drug control? Has there been greater progress in the techniques of other programs than the useful reforms the Hirshen-LeGates article describes? Public housers should not let their deadlocks be drearier than those of other social reformers.

There are a number of stubborn underlying attitudes in our society that retard progress in providing all citizens with the choice of a decent, convenient and affordable house, whether it be in the public housing program or some mythical low cost private housing device, just as they retard social progress in other areas. With the proposed federal "re-evaluation" of the subsidy programs, it is particularly important to review some of these as well as the values of public housing.

Attempts to develop family public housing units in better city neighborhoods—to say nothing of the heaven-on-earth suburbs—are controversial. But the controversy springs largely from racism and—or hostility to lower income people. It is the same "controversy" which faces school integration orders. It is the controversy that will confront any housing program which attempts to meet the needs of large numbers of low income and minority people for better housing and better neighborhoods, including the housing allowance program. It is idle to think there is a non-controversial solution. It is inaccurate to criticize public housing for the problem.

There should also be a moratorium on whipping public housing for its high rise buildings. (Pruitt-Igoe has been re-run on TV as often as a John Wayne western, without ever a mention that high rise buildings for families have been outlawed since 1966.) Those buildings and other over-dense, older projects were often developed because citizen opposition blocked acquiring sufficient low-density, low-rise sites to meet the pent-up Post World War II housing needs. The records of the Philadelphia Housing Authority, for one, are clear on this. The irony is that many who currently oppose public housing cover their prejudices by citing the problems of high-rise buildings which resulted from the prejudices of an earlier generation of opponents. As anyone who has attempted to develop public housing in better neighborhoods knows, it is not "design" or "avoiding the project look" or "homeownership opportunities" which are at issue, it is the occupants.

Frequently, public housing is made the villain of inner city decay and social deterioration. Such is the worst form of guilt by association. In many cities, the bulk of the public housing stock is in the older neighborhoods, placed there for any, or all of several reasons: segregation, availability of urban renewal sites, unavailability of sites in better areas. By now, the neighborhoods in which these older projects are located have come completely apart—slums and abandoned residential, commercial and industrial property prevail, school, recreation and other municipal services are substandard, urban renewal sites stand barren, drug abuse and crime flow uncontrolled. Often the public housing project is a relative oasis in the neighborhood but, popularly, the sins of the entire area are heaped upon the project and the neighborhood conditions described above are treated (or ignored) as though they were the problems of a foreign power.

In short, a considerable amount of the unpopularity of public housing comes from our own prejudices—from the unpopularity of social justice—and from urban decay systems which inevitably involve such public housing projects as are in their circuit. These are the dreary deadlocks.

The public housing subsidy system, as improved by the Brooke and Sparkman amendments, is the only one which serves people with very low or no incomes. Public housing is the only federal housing program which recognizes that people of limited income can and should only pay a reasonable portion of their income for housing, so that funds remain for other basic needs and that the government should subsidize the balance required to provide decent housing. This principle is basic to any equitable and realistic low income program and is embodied only in public housing. Where other federal programs have ignored it, the results have been disastrous for the low income families and for the programs involved. This principle of housing expense-income ratio is particularly important for the poor in periods of rising housing costs which are beyond a family's control, e.g. property taxes, utility rates, interest costs, building material prices, land values and so forth. Presuming that conservatives and liberals alike will agree that public funds should go first to those most in need, public housing should receive the highest priority.

For the present, among the next housing deadlocks to be addressed are: (1) resumption and continuation of the program, free of the administration moratorium; (2) increased funding levels for development and operating subsidies; (3) broadened agency coverage—one-half the counties in the country have no housing authorities; (4) reorganization of undersized and understaffed or unstaffed authorities into regional or broad-area agencies; (5) distribution of funding commitments according to need, not builder or agency initiative, enabling rural areas to receive a fair share; (6) establishment of metropolitan and rural regional authorities with power to override parochialism and develop units according to people-needs; (7) raise income admission and continued occupancy limits to supersede costly, non-functioning FHA interest subsidy programs, if coupled with expanded public housing production; and, (8) adoption of adequate welfare and income maintenance levels to avoid distortion of public housing financial burdens and (9) a thousand other things.

It would be tragic if support for the public housing program among its long-time, creative and often heroic friends in any way faltered now that through their efforts—as Messrs. Hirshen and LeGates have so well described—the subsidy has become the most equitable and the techniques the most versatile of any American housing program.

GORDON CAVANAUGH
Washington, D.C.

WTC

FORUM: I enjoyed Suzanne Stephens 50th *Anniversary* review of the World Center Towers (April '73) except for the use of the archaic foot-pound-gallon British system to describe the structures. Is the author subtly predicting that we will not have switched to the International Metric System within the next fifty years?

GEORGE McCLINTOCK, AIA
Puerto Rico

CHEAP SEATS

FORUM: Your June article on the Mamaroneck Free Library's Emelin Theatre reports accurately and succinctly the problem of balancing a tight construction budget against a program requiring theatrical versatility. One small error needs correction. The architects of the 1966 extension were Gibbons & Heidtmann. Mr. Litchfield, himself a distinguished architect, was President of the Library at that time.

The Library is proud of the success of its Theatre, and we believe that such an institution, in a community of 18,909 people, is unique.

SALLY POUNDSTONE
Mamaroneck, N.Y.

CHANGING WALLS

FORUM: Your article on "Changing Walls" in the May issue was of great interest to me as the Redevelopment Authority's Project Manager for the Nicetown Urban Renewal Area.

The Authority's staff who worked with the community and particularly with the young artist, Carlton Baxter, are very proud of Carlton and the murals that he has created since this was a true "grass roots" effort by neighborhood artists doing "their thing" in contrast to the majority of the efforts mentioned which reflected the work of professionals.

Philadelphia, Pa. CARL A. WERNER

PUSHING PRISONS ASIDE

FORUM: I am reading your March issue in flight, for no apparent reason except that it seemed important reading and I brought it along as a substitute for *Esquire*.

It is excellent. We have not had tough journalism before; we need it today. Your "Prisons" edition should be read by those who missed it.

CLOVIS HEIMSATH, AIA
Houston, Texas

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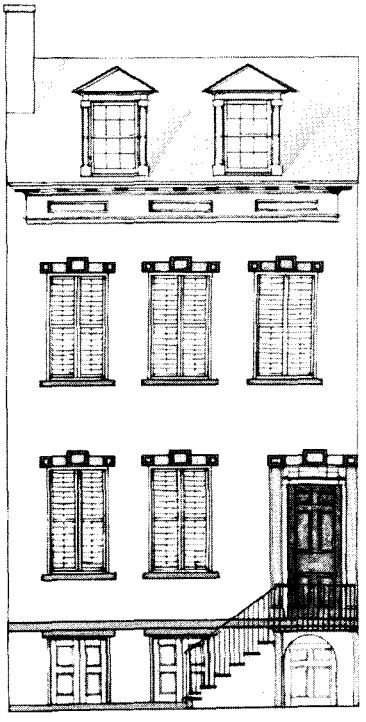
REVIEWED BY CHARLES E. DOLE



With the never-ending need for better housing in urban America, the venerable brownstone offers fresh hope, a substantial alternative to suburbia, to thousands of people.

Long ignored and too often allowed to decay, there is now an awakened interest in this architectural genre. In some cities such as New York, it's a literal revival, where the brownstone row house has been wrapped in a protective coating by, for example, the big city's Landmarks Preservation Commission. The old stone structures, in short, are again respectful.

Whole neighborhoods, from Boston to Savannah, Chicago to Richmond, and Washington, D.C., and Baltimore to San Francisco, are reclaiming this bit of 19th-century America in a joint effort by people who care as well as by governmental and private institutions.

Mr. Dole is the real estate editor of The Christian Science Monitor.

In "Bricks and Brownstone" Charles Lockwood takes the reader on a nostalgic journey into the past, a detailed study of the evolution of this sort of citified housing.

Mr. Lockwood outlines and discusses the major architectural styles and their effect on the American city, notably New York—the Federal, Greek Revival, Italianate, Anglo-Italianate, and Second Empire. He begins with Gotham in 1783. The British were beaten and so was New York, in effect. Before the war, the city was a thriving social and commercial metropolis. After it, in 1783, it showed mute evidence of the horrors of war and no city in the fledgling new nation had suffered as much physical damage. Its population was halved, from 25,000 to about 12,000. Yet this was the platform from which a new city was to rise; and by 1790, its population was up to 33,000.

The author picks up the growth of the city from this post-Revolutionary War nadir, up through a series of building booms, and concludes with the decline of the brownstone after the turn of the 20th century.

New York City quickly obliterated any trace of its early Dutch beginnings. The architectural style for its developing row houses after the Revolution was the Federal, a link between the English Georgian style of prewar days and the Classical revivals to come. The houses were modest in scale and ornament. "The narrow front of a row house," the author adds "also discouraged a pretentious architectural treatment"—even so, they had dignity.

Of the nearly universal front stoop, Mr. Lockwood says it did serve a practical as well as decorative function. "Because Manhattan and Brooklyn blocks rarely had service alleys behind the houses, as in fine streets in Philadelphia or Baltimore, the doorway under the stoop provided a much-needed separate entrance to the kitchen by way of the basement hallway."

Also, in the early 19th century, well-to-do New Yorkers already had discovered the pleasures of "stoop sitting" on warm evenings. He quotes an Englishman writing in the 1820's: "It is customary to sit on the steps that ornament the entrances of the houses."

Pointing to a developing trend to uniformity of scale and appearance, he says that by the 1830's, New Yorkers "had begun to tire of the usual street built up haphazardly, wherein each house is of different height and composed of different materials." The Le Roy Place and Depau Row blockfronts emerged which "afford a new evidence of the surprising improvements visible in the city," according to a guidebook to New York written in the 1830's, "and have a uniform color, and present an imposing appearance."

Supplanting the Federal tradition was the emergence of the Greek Revival style in the 1830's with their superb free-standing columned doorway porches. "The late 1840's and early 1850's were years of architectural ferment in New York," writes the author. "After decades in restrained red-brick-front Federal and Greek Revival style row houses, New Yorkers now yearned for picturesque and impressive dwellings which would reflect the wealth, social competition, and the rising Romantic movement in architecture," he adds. The Italianate style appeared in the late 1840's.

It was inside the front door that one found the full richness of the architectural mode. The wood and plaster of the interior were far easier to work than the brownstone of the street front, says Mr. Lockwood. "We must peep within the palaces if we would comprehend the full extent of their splendor," wrote a newspaper describing the dwellings rising along Fifth Avenue after the Civil War. He goes into some detail about the marble used in the marvelous buildings; and quotes, for example, from an 1853 Godey's Lady's Book magazine which visited a marble-mantel works in Philadelphia. In the "stonecutter's department, workmen carved elaborate forms and ornament into the marble with steel tools and wood mallets."

The final chapter deals with the New York row house from 1875 to 1929 and pinpoints the gradual decline and the reasons behind it. Many wealthy families were beginning to quit the city for their spacious homes in the suburbs or they were moving into high-luxury apartment buildings on the fashionable East and West Sides. Hundreds of brownstones were demolished for high-rise apartment buildings and hundreds of others were turned into rooming houses.

But the death and burial of the brownstone was not to be as a new generation began to buy up and restore some of the remaining buildings which were, in effect, pulled from the scrap heap. "Besides making for a healthier city," concludes Mr. Lockwood, "the brownstone revival also has saved thousands of fine nineteenth-century houses and several architecturally distinguished neighborhoods for the enjoyment of Americans as yet unborn."

An architectural purist, Mr. Lockwood gets right down to the stone and mortar of his subject. "I systematically walked off the blocks with remaining nineteenth-century row houses throughout Manhattan and Brooklyn to examine the architectural styles and to become acquainted with these areas," he says. "I visited numerous houses to view interior architectural design of the different eras."

Part of the book's treasure is its scores of masterful pictures, many of which show in delicate detail the architectural features which the author chooses to emphasize. Information in the book provides valuable documentation and guidance in the proper way to restore some of the tarnished old buildings to their onetime glory. Many of these in-city renovators are people of less than great affluence but rather those who have tired of the suburban routine and cookie-cutter sameness or else have an overriding desire to upgrade the urban fabric by helping to reweave a portion of it. They have vision even if not too much cash.

"Bricks and Brownstone" is one of a number of row-house revival books, but this one is oriented more toward the architectural history of the brownstone than as a how-to-do-it book for novice renovators.

Mr. Lockwood knows whereof he writes. After all, he owns a century-old brownstone in Brooklyn.

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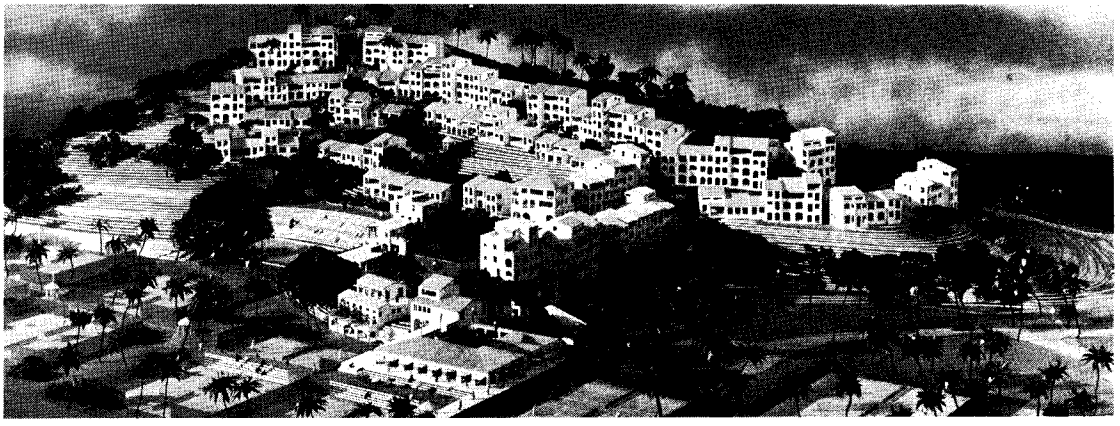


SPORTING WITH NATURE

In a joint venture Architects Niddrie/Todd/Cabrera have designed a tennis village for Palmas Del Mar, Puerto Rico. The developer is a subsidiary of Sea Pines Company which built Sea Pines Plantation in South Carolina, the first community in the United States to receive the AIA's Citation for Excellence in Private Community Planning. In keeping with their other efforts, Palmas del Mar will conserve natural configurations and open space by a predominantly cluster development.

The tennis village in its first phase (photos) will have 24 villas and 19 courts, with an ultimate capacity of 800 villas, 40 courts and a 2,500 seat natural amphitheater for tournaments, exhibitions and clinics staged by resident tennis stars.

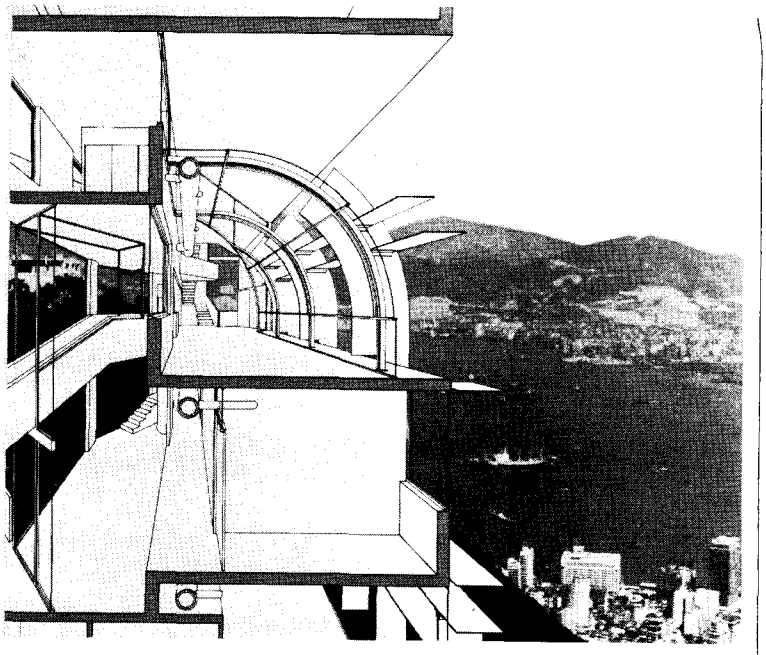
This village is one of four in the 2,300 acre Palmas del Mar community which has an anticipated first phase cost of $15,000,000. The development is on the island's southeast coast, an hour's drive from San Juan. There will be no high rises, nor their shadows, nor honky tonk neon. The land use patterns are based on the best found in European resorts. Amenities include nature trails for walking and riding; a tropical conservancy with 20-foot ferns and wild orchids; six miles of coast and four miles of crescent beaches. The terrain includes a former sugar plantation, flat lowland, rolling hills, and rocky promontories in a climate continually moderated by tradewinds. The residential area is to cover 60 percent of the site. The balance will be green belts, golf courses and other recreation areas connected by walks and bike paths. The total development over ten years will ultimately include 4,750 villas (attached housing), and 850 individual homesites. The social and nautical center will be Harbour Village with plazas for sidewalk cafes and discotheques connected by canals. There will also be a beach village amid a 150 acre coconut grove and golf course and a hillside village that will be developed later.

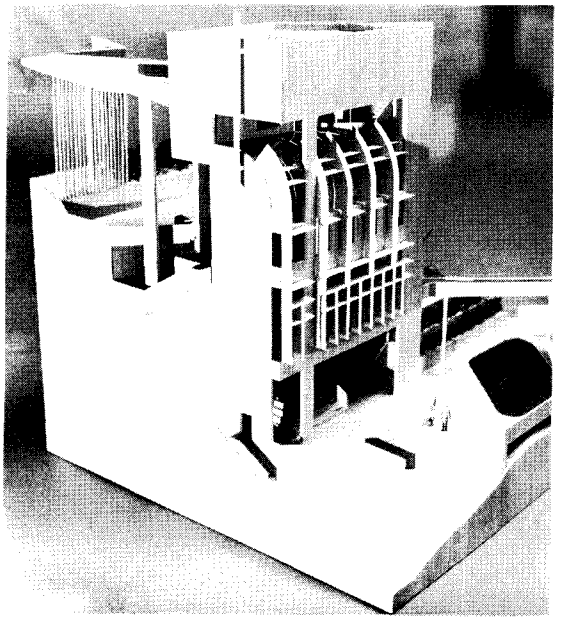
The developers reserve the right to modify the master plan according to their most recent research and input sought from residents. Architectural guidelines, administered by the company's Architectural Review Committee, discourage fads—either historic or modern—yet encourage keeping the Mediterranean in mind along with the best in tropical climate design. There is an odd taboo—somewhat contradictory to both of these directives—against the use of white or light cream colors on residential buildings, which are to be colors of the forest, hillsides and coast. White is reserved for an occasional public building. Allowable materials are displayed in the building standards room. And the company will gladly furnish a list of architects. We hope the strictures are challenges to the best conservatism rather than ready rubber stamps of mediocrity.

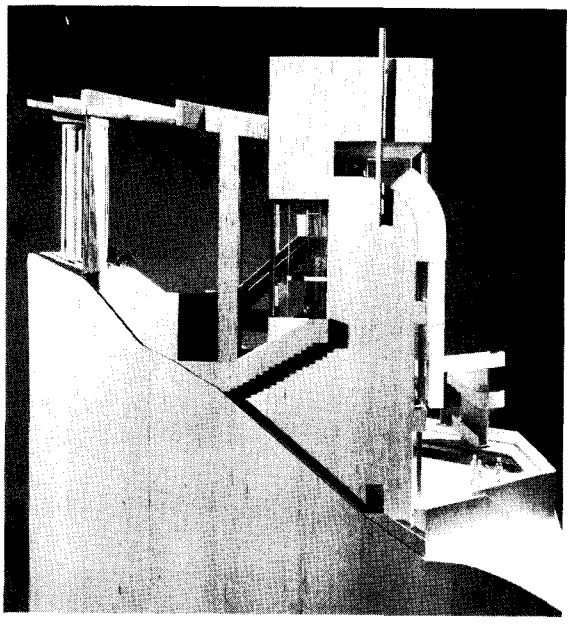
LOOP DE LIU

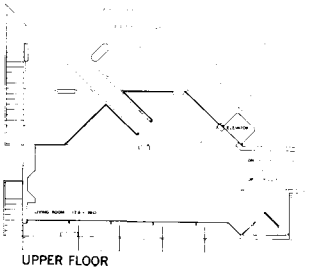
Site work is just starting on the Koo residence in Hong Kong by Liu Urban Design Associates, based in New York. It is a most pleasing relief to discover that this first-glance fantasia turns out to be a highly pragmatic and ingenious solution to an extremely steep, tight site where zoning allowed only 15 percent coverage and only three floors of enclosed space. With an open loggia below, overlooking the pool, a semi-open carpark above, and three split levels in between, Henry Liu has not only made the most of the situation but provided cross-ventilation for all enclosed spaces pending installation of air-conditioning (requiring no tearing away of walls) which may, as is the custom, be years off.

Though this house looks expensive, it won't be in Hong Kong where complicated form work can be done without paying a penalty. (Mr. Liu says the reason for building boxes there now is that it's the "latest thing" rather than representing what available labor can best do.) With the exception of the over ten-foot-high spaces, and the curved living room windows requiring custom mullions, the architect feels the house is a straightforward response to the challenge of climate and terrain. We find it exhilarating and are reassured to see that the straightforward can still be such. The Forum will publish the Koo residence upon its completion in mid-1974.









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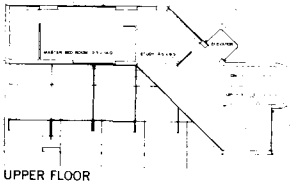

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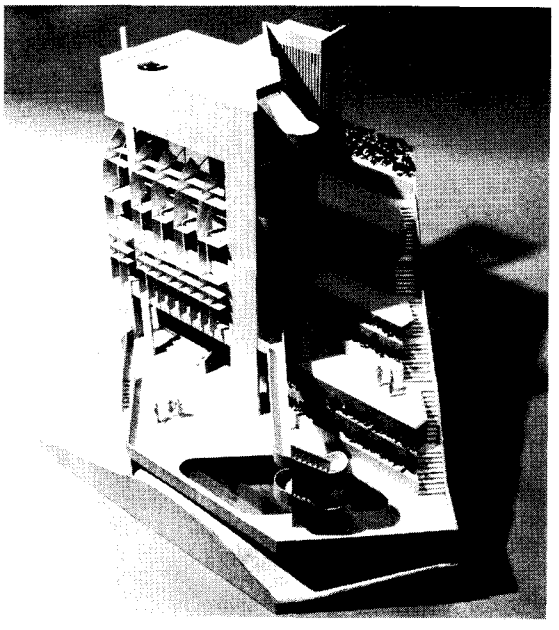

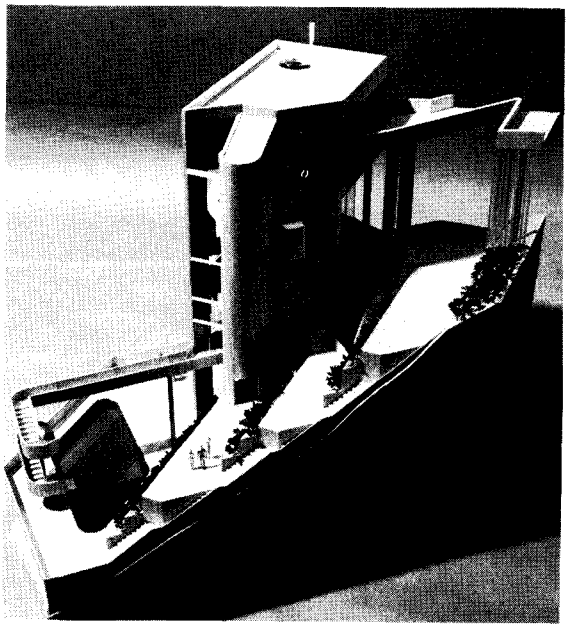

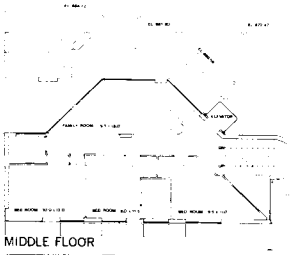

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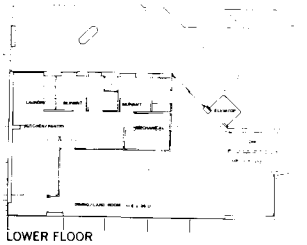


LOWER FLOOR

A-COURTIN' ON TIMES SQUARE

New York is slated to have its very own Portman hotel on Times Square between 45th and 46th Streets on the west side of Broadway, opening in 1977. Incorporating a new and remodeled theater, it will help bring back the Great White Way glitter which has succumbed to less spirited theaters built in recent office buildings as a result of a concomitant bonus in floor space offered by the city's special Theater District zoning aimed at keeping the area alive.

The Office of Midtown Planning and Development regards the project as the chief catalyst for the redevelopment of the area which, despite its seedy undergrowth, is expected to be the next major area of midtown development, comparable to and an extension of that which has taken place on Sixth Avenue in the last decade. There will be considerable public interaction with the new hotel building, given its seven-story retail space, two revolving restaurants and a sidewalk cafe, several ground level public areas including an extension of Schubert Alley, over 2,000 rooms, a new 1,050-seat theater, a renovated 1,340-seat 46th St. Theater, and a 400-car garage.

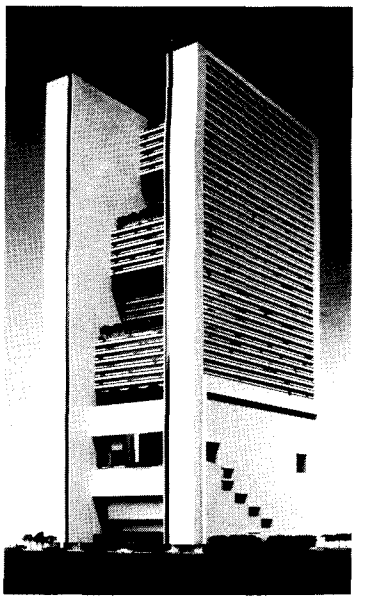
Further development for the area, now being contemplated, emphasizes the transformation of Times Square from a traffic island and intersection to a pedestrian oriented space with a large plaza and extended sidewalks. Efforts are also being made to control the physical design and uses of the building frontages by creation of a special district.

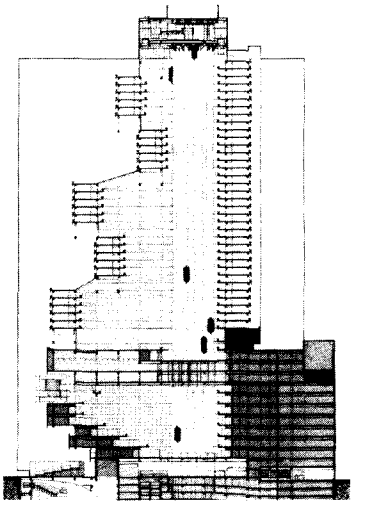
The hotel is an offshoot of planning for the controversial Convention Center (by SOM) on the Hudson River. Mr. Portman says, "It would have to meet all the needs of a person coming to New York to attend a large convention—legitimate theater, shopping, gourmet dining, and night life. Of course, it would have first-class meeting and exhibition spaces. We felt that if we could offer all these with a controlled environment which also created a sense of closeness with nature and the soaring dimensions of New York's skyline, we would have a truly new experience for our guests."

The feature attractions of the building are two central courts: one seven stories high through the retail section, the other 37 stories high through the hotel. Twelve glass elevators rise through reflecting pools at the base of each of the two courts, one at the lowest shopping level and one at the level of the hotel lobby. In the hotel portion, the rooms open onto balcony corridors overlooking the court. Between the side wings are a sequence of terraced rooms and skylights illuminating the court (section).

The go-ahead for the building awaits approval (perhaps in August) of three items by the City Planning Commission and the Board of Estimate. One, a zoning remapping to permit the back half of the site to equal the front half in floor area ratio; i.e., bringing the back half to 15, the highest FAR in midtown and lower Manhattan. Additionally, two special permits are required: One for a 20 percent bonus in floor area, and modifications of height and set back regulations, in exchange for providing a theater and other amenities. The Office of Midtown Planning and Development is recommending the full 20 percent Theater District bonus which equals an FAR of 21.6; the announced design assumes the full bonus. The second permit is for a public parking garage to serve business generated on site, mainly by the hotel and theaters.

The project is being developed by Portman Properties and Peter Sharp both reportedly enjoying initial responses to the building including such descriptions as: A wishing well, a bottomless pit, your mother's old washboard. From our standpoint, *any* Portman in a storm (especially that of Times Square) will do just fine.

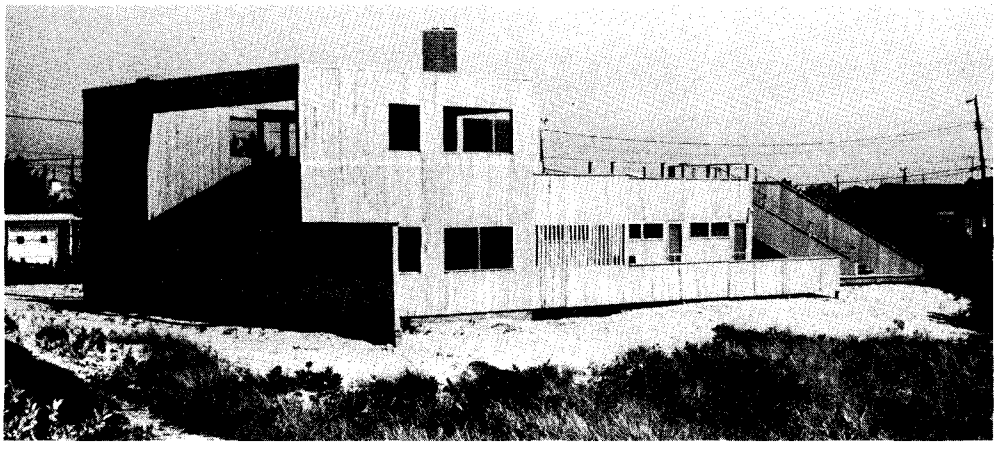


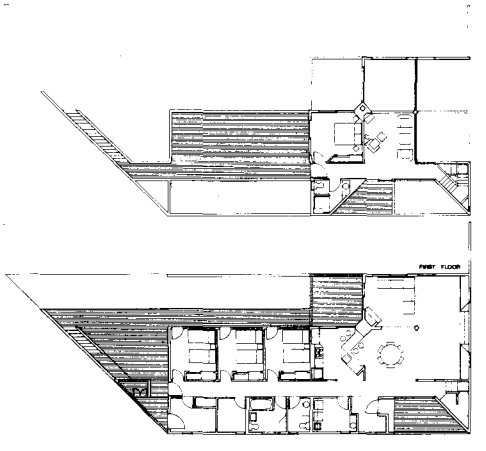


HOUSE OF DECKS

The Snell house in Amagansett, Long Island, the first residence designed by Franklin Israel, 27, has all the spaciousness, openness and light one could hope for in a beach house. The clients are most pleased by the light. The sun hits the multiplicity of decks at just the right time. And the night lighting, on dimmers, very sensitively accommodates reading and listening to music. The frame on the north elevation reduces glare in the sitting areas of the master bedroom upstairs and the living room downstairs. A clerestory illuminates the hall off of which three boys have their bedrooms, each with its own outdoor exit. The kitchen is open to the central dining area as well as a walled-in, roofless outdoor dining room. The master bedroom sundeck is the only place from which one can see the water. Under its steps is an outdoor shower. The V-cuts in the front exposing the parapet wall and the vertical detail on the north give centrality to the facades. The cedar siding has weathered to a very satisfying, light, light, sandy grey.

PHOTOGRAPHS: Page 14, Louis Checkman.





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PRESERVATION

ST. JOHN'S

Sally B. Woodbridge, a friend of ours in Berkeley, California, is understandably upset about the careless treatment of the local St. John's Presbyterian Church. One of the early landmarks of the San Francisco Bay Region Style, St. John's is being cast aside by the naive majority of its congregation, who think the new is better than the old at any price. Mrs. Woodbridge wrote us at length about St. John's and her story is worth sharing:

In 1908, a newly formed congregation commissioned Julia Morgan to design their church. Miss Morgan, who had already achieved distinction as the first woman graduate of the Beaux Arts in Paris, had started a thriving residential practice in the area. She had also established a relationship with the Hearst family which was to culminate years later in her most famous work, San Simeon for William Randolph Hearst.

Within St. John's stringent budget, she produced a simple hall with an exposed redwood structure. There were no ornamental features except for lighting. The total design exhibited an economy of means and materials consonant with the ideals of the Craftsman Style then burgeoning in California.

Two years later the congregation returned to Miss Morgan with a request for a larger space, also to be delivered within a bare-bones budget. Her design was passed on to Walter Steilberg, first draftsman in her office, for detailed development. Again the result was a wooden structure so Spartan that it could be built for slightly under $10,000 or about $1.60 per sq. ft., an economic achievement even in 1910.

The church was built adjacent to the original hall. Though much larger, it retained a low-keyed, residential quality in keeping with the general character of the neighborhood. Known as the "south of campus" area because of its proximity to the University of California, the area was well-settled by 1910 with University personnel. Even today, after a heavy population increase severely taxing existing housing, the area retains the finest stand of shingle-style residences in the Bay Area.

Julia Morgan, along with her former employer and close friend, Bernard Maybeck, designed several houses in the neighborhood. Maybeck's masterwork, the First Church of Christ Scientist, is two blocks from St. John's. Also built in 1910, it cost over four times as much. While Maybeck's church reveals his genius for combining disparate styles with an innovative use of modern, industrial materials, Miss Morgan's is a single-minded, straightforward expression in one material, much like a perfect barn.

On a recent visit to St. John's, Walter Steilberg, who at 88 still lives in Berkeley, talked about the design of the building. The structure is Douglas fir, since by 1910 large redwood timbers were too costly. Steilberg lightened the appearance of the roof truss by leaving out the vertical member along the ridge; he exposed the framing members of the wall to reduce fire hazard. Above the altar at the west end, the wall was left open to reveal the organ pipes, continuing the general functionalist character of the design. (The altar end was expanded in 1954, and a new organ, unfortunately no longer exposed, was installed.) The clerestory at the east end has a simple, Celtic cross worked into its tracery. Originally, this was all that marked the building as a church, but the congregation was unsatisfied with this understatement and a wooden cross of the same design was mounted on the roof.

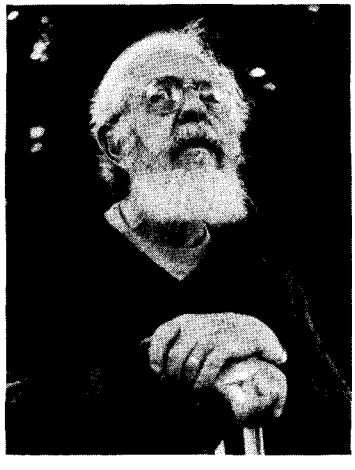
Still St. John's remains stunningly pure. Its rhythmic interior, stained a warm, reddish-brown and accented by wheel-shaped, wooden chandeliers studded with round bulbs has apparently withstood urges for inappropriate embellishment. The structure is sound, unaffected by rot or termite damage. Its major need is for a sprinkler system to meet fire code regulations. Twenty-two rows of pews, seating 600 persons, are ranged along its sloping floor. Additional structure was added behind the church for what in 1922 was the largest Sunday school in the State. And yet the congregation has resolved to move to a new church two blocks away on the same street.

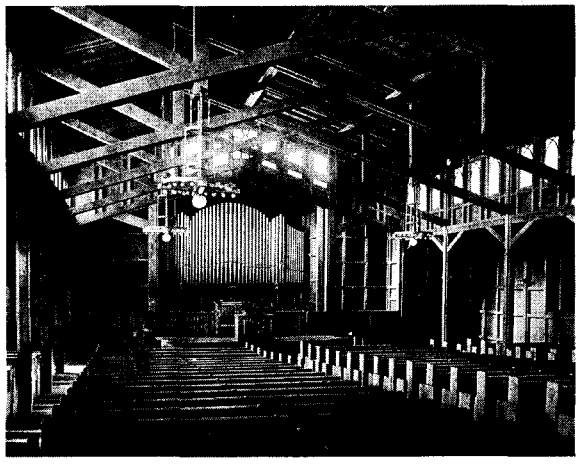
Why? The answer reflects, in part, the influence of the post-World War II building fever. During this restless period the rector found the building's stark expression aesthetically unsatisfying. A feeling grew that "the old barn" would not be attractive to the youth of the newly affluent times. So in 1965 the congregation decided to purchase land down the street for the construction of a youth center. A final link in the chain of events was a gift of money to be used solely for new construction. In 1965-66 the firm of Sotwald and Kelly designed a church for the new site.

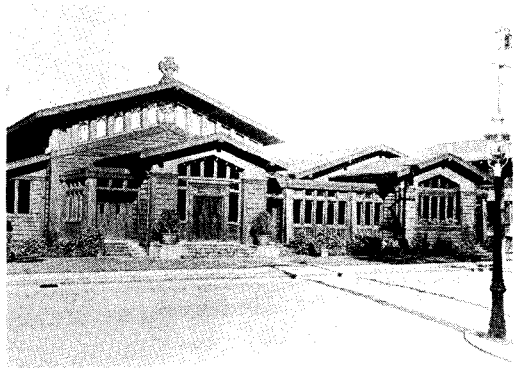
All this has not happened without protest. A portion of the congregation, composed of old and new members, argued vigorously for keeping the church even though not on the present site. A feasibility study was made for moving the 1910 structure, called the sanctuary, to the new site, but was rejected.

Although the congregation has decided to sell the building complex, they are determined at this point to find a buyer who will preserve it.

St. John's case would be hopeful if funds for the lively arts were not shrinking along with those for churches. A social repertory theater is interested but, at this writing, unsuccessful in completing plans for purchase. Perhaps similar interests will come forth. If not, St. John's fate will become more and more problematic. Should the congregation lose its resolve to sell to a conscientious buyer, the local community stands to receive, in place of St. John's, another of the ticky-tacky apartment buildings which are eroding the homogeneous, single residence character of the neighborhood. The larger community of those interested in the country's architectural heritage would also suffer a significant loss because, unlike much of St. John's broad company of shingle style buildings, it is a unique statement by a remarkable figure in the history of architecture. If it is destroyed there will not be another comparable example waiting to be saved when a more propitious time rolls around.







Walter Steilberg (left) checks St. John's Presbyterian Church. The other photographs show how the church looked in 1910.

CONTROVERSIAL COURTHOUSE

The Woodbury County Courthouse (1918) is, according to architectural historian H. Allen Brooks, the only major civic building built by architects of the Prairie School. William Steele, executive architect on the project, had been a draftsman for Louis Sullivan and was associated on the project with Purcell and Elmslie of Chicago. George Elmslie had taken Frank Lloyd Wright's place as head draftsman in the Sullivan office when Wright went off on his own in 1893. So the courthouse's antecedents are not hard to trace.

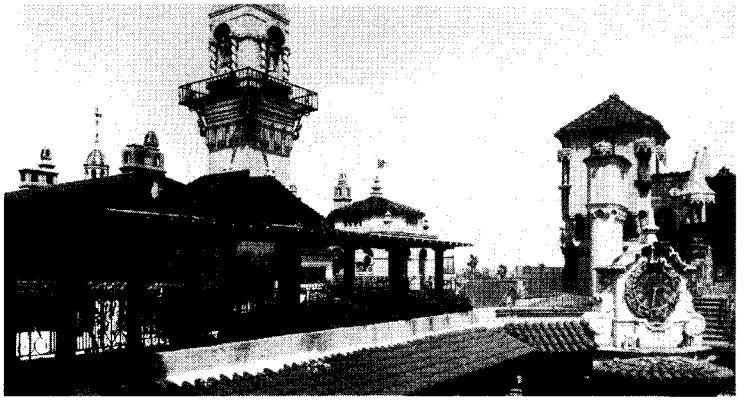
Brooks writes: "The Woodbury County Courthouse is a landmark which has never—due to its geographic isolation—received the notice it so richly deserves. In many respects, it summarizes the best in midwest architecture of the previous quarter century, harking back to Sullivan's Wainwright Building in St. Louis (1890), Wright's project for the Smith Bank (1904), and Purcell and Elmslie's own masterpiece, the Merchants Bank of Winona (1911-12)."

Over the past 55 years the courthouse has been patched, painted, and plastered, not necessarily in keeping with the original. On the top floor, a false ceiling now obscures overhead windows. Marble counter tops were replaced by Formica. Air conditioning units obtrude through leaded glass windows. The original front doors, changed by a contractor, were lost. A Roman water fountain was boarded up and in front of it a stainless steel unit installed. Plaster aggregate was sprayed over the arched ceiling in the Board of Supervisors room.

Despite these changes, the courthouse remains an exciting building, adequately housing courtrooms and public services (tax, registration and licensing offices).

Yet controversy surrounds it. The debate is not whether to tear down the building and start anew. It is a matter of whether to replace the structure's many leaded glass windows with bronze tinted ones. According to one source, the leaded glass leaks when it rains and several windows have already been replaced with clear glass. An architect engaged by the Board of Supervisors advised them to put in bronze tinted glass and is quoted as saying: "I feel that if bronze plate glass would have been available when the building was built, the architect would have used it." Neither the suggestion nor the statement delighted those who would keep the building as it once was. The Siouxland Council of Arts and Sciences has urged the Board to help prevent further deterioration of the Courthouse and has offered to set up a committee to give them advice on how to do it.

Just what will come of the offer is not now known. But the matter of the windows may be resolved by cost. New bronze tinted windows might cost as much as $250,000. Patching the old leaded ones would probably be much less expensive and it would keep what William Steele, son of the original architect, calls their "lace-work image."



Mission Inn Clock Tower.

MISSION PROBABLE

The 100-year old Mission Inn in Riverside, California, is outrageous, ornate, funky, spider webbed across an entire city block, full of memories, and in need of a face lift. (FORUM, March '72).

Though the Inn is a national, state and local landmark, it had been allowed to decay in recent years, and only 30 days before its scheduled demolition, the Urban Housing Company of Los Angeles stepped in to save it. A young firm with six years experience in rehabilitation work, Urban Housing began a two-year search for financing. Their plan was to convert the Inn into a sort of city—apartments, restaurants, shops, arts and crafts studios, exhibit rooms, a wine tasting cellar.

After interminable inspections the Connecticut General Life Insurance Company and the Riverside Redevelopment Agency agreed to put up $2,575,000 a couple of months ago, and work is underway. Urban Housing hopes to have a restaurant operating in the Spanish Garden by late this summer. The 1903 lobby will be restored, and a wing of hotel rooms adapted for 137 apartments. That's just a start. This September they will begin converting the romantic rotunda into 40,000 sq. ft. of office space.

Following that, the remaining hotel rooms will become more apartments, the art gallery and flyers museum will be restored, and the lower level will house colorful specialty shops. All of which is great news, considering how worn the old way-station had become. With its patina intact, and in the hands of a sensitive architect, Bruce Beebe, the Inn will now remain an indelible part of the Riverside scene—a small usable, money-making landmark.

FILMS

PLAYTIME IN PARIS

"Playtime" a newly released film produced and directed by Jacques Tati (and distributed by Continental Distributors of The Walter Reade Organization) should be required movie going for all architects, particularly those who like to design office towers. (Although the sense of *deja vu* may prove to be *de trop.*)

The entire film takes place in a complex of anonymous high-rises somewhere in Paris. They could be anywhere; and this commonly felt lack of orientation applies at a specific level: It is almost impossible to discern the various uses these buildings serve, whether airport, retail store or hotel. On top of this, Tati has made the film in color — although the predominant color scheme is grey—from the brushed aluminum surfaces of the buildings, to the sleek marble floors, to the grey tailored suits of men and women.

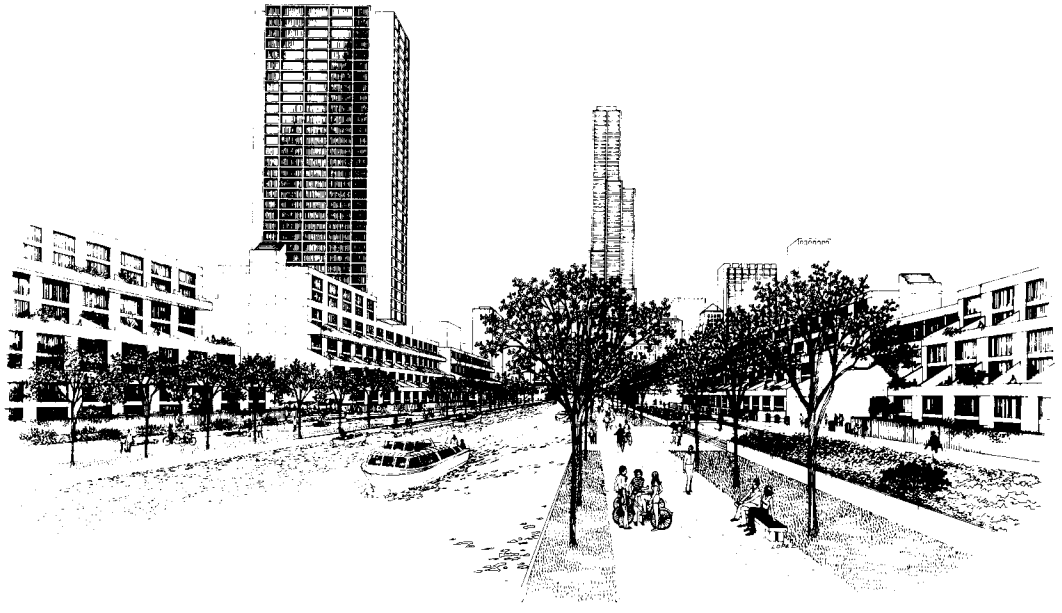
The film opens as a very middle-American tour group pulls up to the complex. One of the tourists appropriately asks "You mean this is Paris, *France?*" Indeed this is, since they never seem to leave the complex, and only catch glimpses of the other, older Paris in reflections on mirror-like surfaces, or by stumbling over a forlorn flower vendor outside one of the towers. Naturally Tati is also in the film, managing to slip into this antipathetic environment, looking very out of place. The puns and gags that follow in his wake are predictable. But nevertheless, photographed in such an overwhelming context, (using long shots and disorienting quick cuts with no center to the picture) the numerous jokes become serious and incisive statements.

Throughout the film, little of the old Paris seems to be left, and little humanity oozes out from any of the anonymous surfaces until the restaurant scene. A new terribly chic (also grey) restaurant opens to le tout monde of Paris (plus tourists) minutes after (actually minutes before) it is finished. Naturally during the course of the evening, the restaurant begins to fall apart, even with the architect still on the premises presumably overseeing construction, or cooking in the kitchen. Yet when the setting begins to collapse a human quality starts to emerge, encouraged by the energetic efforts of a brash corn-ball American. He takes over one section of the restaurant that has caved in to make it his bistro, and even the chic Parisians seem to enjoy the results. At this point, more and more French touches begin to sneak into the film, giving the environment a bizarre but still somewhat French identity. Yet the sense of disorientation never leaves, continuously under-

FACETS

scored by the depressing monotony of the modern milieu.

Surprisingly, Tati had to erect a set in a studio to film "Playtime." He could almost as easily have come to Sixth Avenue in New York—of which he's probably had enough: The film, made in 1967, was originally 70 mm, but the few theaters with a wide screen capacity were unwilling to show it, thus requiring Tati to convert to 35 mm. While the film is without doubt dated in 1973, so few direct commentaries exist about the psychic effect of the physical environment on its inhabitants, that one wants to overlook its weaknesses. "Playtime" is not the best Tati for a number of reasons. Nevertheless, its emphasis is in the right place.



Rejuvenated Chicago River will cut through South Loop Town.

BIG THINK

CHICAGO

What Daniel Burnham's 1909 plan did for Chicago's lake front may be done for its river front. At least that's the outward impression given in a plan prepared by Skidmore, Owings & Merrill for the Central Area Committee—a prestigious group of local businessmen including top executives of Sears, Standard Oil of Indiana, Marshall Field & Co., the First National Bank of Chicago and others.

Called *Chicago* 21, the plan is meant as a guideline for improving and adding housing, recreation and greenery to 11 square miles of the central city. The plan envisions a combined public and private expenditure of $1 billion a year for 15 years. Challenging as that may seem, it is to be noted that the plan already has the backing of the city's top businessmen and the endorsement of Mayor Richard Daley.

Nor is Chicago's remarkable track record in preparing and following city plans to be ignored. Largely as the result of earlier plans, Chicago has one of the most attractive, alive downtowns in the country. But it is not without its problems. Despite large scale office and residential construction during the past 15 years, the central area has lost 21,000 residents. And in the past three years alone the number of street level retail stores in the Loop dropped 10.6 percent. This plan hopes to reverse these statistics. Its backbone is concentrated along the north-south branch of the Chicago River. SOM's William Hartman explains, "The great rivers of Europe, the Thames in London, the Seine in Paris and the Arno in Florence are examples of what it can be."

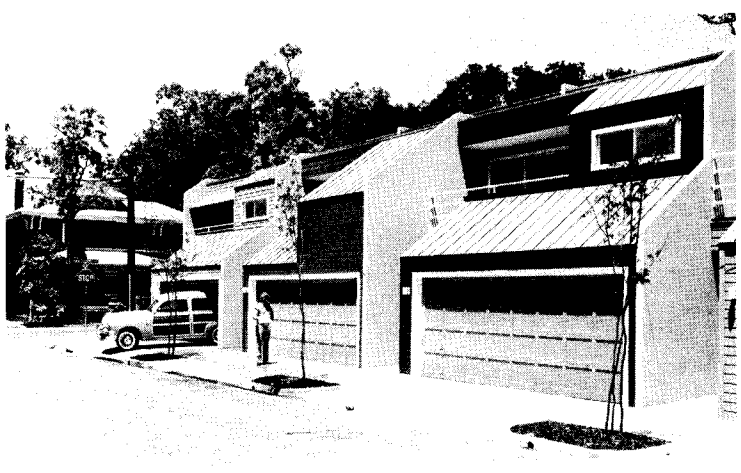
Along one stretch of the river, 650 acres of unused railroad land will be turned into a new town for an eventual 120,000 residents. This South Loop "new town" will be complete (we are assured) with schools, shopping, recreation, and with transportation ties to the central Loop.

In fact, the plan concentrates throughout on public transport—buses, subways, elevated trains tied into the second story of office and apartment buildings, and river "Gondolas".

It also concentrates (in too loose terms, we feel) on "a way of life," assuming that happiness, harmony, and efficiency will freely flow from public transport, allowing the various economic classes "equal access" to work and leisure, draining off large dollups of pollution in the process.

On the waterfront the old Navy pier would be refurbished with shops and restaurant. The Soldier Field area (near the new McCormick Place) would be revitalized by putting the massive parking area under ground, covering it with ball fields and tennis courts.

So Chicago may improve itself from an already impressive planning base. But to do so, much more attention will have to be given to the structure, meaning organization and integration, of basic communiity services—and not just the verbal tokenism now echoing among the would-be towers.



Tilt housing completed.

HOUSING

TILTING IT UP

Peter C. Papademetriou, our Houston correspondent and associate professor of architecture at Rice University, recently wrote us about a townhouse project in Houston. What made it worth writing home about is that it's that city's first residential use of tilt wall construction. Predictably, it went up fast.

Party walls, six inches thick, were cast on the foundation slabs, then lifted into place by a derrick in a day. Three more days were needed to put in steel joints and steel decking spans on which floor slabs were then cast. Finally conventional wood stick construction finished off the houses, which are located in Houston's old Montrose section, a neighborhood of large single-family residences. "The staggered floor arrangement admits a large amount of natural light," reports Papademetriou, also lauding the success by which Architects Donnelley Erdman and Winton Scott have accommodated the scale and mood of Montrose.

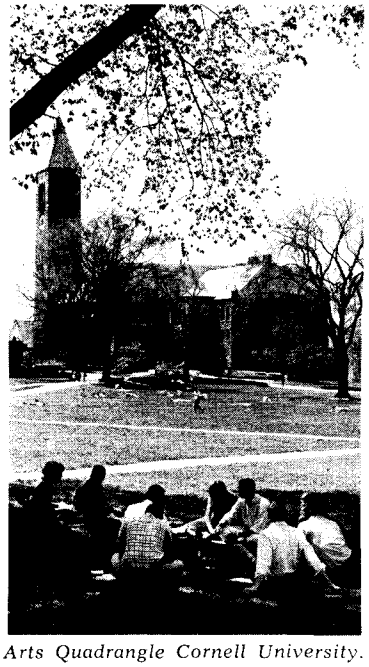
PLANNING ABOVE CAYUGA

Architect Philip Will, Jr., is on the Board of Trustees at Cornell University, where he schooled. Appropriately enough, he is also chairman of Cornell's trustee committee on buildings and properties.

When he read our treatment of San Francisco's Urban Design Plan (FORUM, April 1973), he wrote to remind us that though official policies to guide design are rare, they are not unique to cities. But Cornell, as Mr. Will points out, may be unique among universities in that it's had such policies in effect for almost a year. With advice from interested persons all over the campus, Cornell's policies statement was passed unanimously by the full Board, and, says Mr. Will, "will have more impact on the development of the campus over time than any number of long range physical plans."

We read through a copy of the statement and despite its academic title (Comprehensive Policies for the Physical Planning and Design of the Ithaca Campus of Cornell University) found it a lucid, wise approach to the future growth of that particular institution.

It starts with a quote from Morris Bishop that might bring a tear to the eye of a Cornell grad: "How inspired was Ezra Cornell to choose his ragged hilltop farm for his University. A hundred thousand Cornellians keep close in memory their gorge-gashed campus, looking afar over lake and valley."



Arts Quadrangle Cornell University.

That ragged hilltop is what the trustees hope to preserve by channeling the obvious pressures for future physical growth. Their design policies range from the more obvious to the less obvious: Maintaining the beauty of the environment, controlling costs, insuring comfort (air conditioning, or provision for it, should be in all new buildings).

Among the more obvious policies is the priority of keeping the campus's long views open—across the valley to the west, up Lake Cayuga, and down the valley to the southwest. Also stated is the need for landscape design, funds for which should be part of every building budget. "Like buildings well conceived," says the statement, "landscaping also contains and proportions space."

Space is what the trustees want to shape and preserve. One policy calls for vertical development, producing a campus profile that is low at the center and higher at the edges, the high buildings forming a sort of frame for the low.

Where they touch on actual design of future buildings, the policies become more complex and controversial. In an era of rapid change, spaces within individual buildings are, the committee found, remodeled many times to meet new requirements. Hence the policy: "Only for compelling educational needs should the personal and unique requirements of the first user take precedence over the flexibility required to extend the useful life of the space for the tenants who will follow." Moreover, facilities (whether built whole or as a segment to be added to later) should be given over to a single use—i.e., classrooms, rather than to multiple functions, such as classrooms and laboratories and offices—under one roof.

Finally, Cornell policy now calls for quality of materials and equipment in any building program. If buildings can be inexpensively maintained — goes the old argument, the savings will quickly pay off any added initial capital investment.

Already Cornell's policy statement is being sought by other institutions. Mr. Will says that by late spring the University had 40 requests for copies from outsiders.

"Interface" sketches of downtown Providence in the 1890's.

THE FIRST CARLESS CITY?

It's not so far fetched as it may sound. Providence, Rhode Island wants to be a place you can walk across in 15 minutes, despite the fact that the automobile and its so-called amenities now take up an estimated one third of downtown.

It quickly occurred to a student group at Rhode Island School of Design that banning cars could open up endless possibilities—but, of course.

In a class taught by Gerald Howes, a former head of the architecture department, the students worked out a scheme for a noiseless city laced with malls, outside cafes, water, trees and flowers, and they decided the plan was easy enough to implement by 1980.

With public and private grants of more than $11,000, some students stayed on this summer to do feasibility studies. Complementing this, they have been taking a slide show to the Chamber of Commerce, the statewide planning agencies, newspapers, the Bicentennial Commission, anyone else who will listen.

Briefly, their plan: Ban the car. Have workers (some 33,000 at present) commute into the city either by high-speed trains to Union Station, or some type of people-moving system carrying them from parking stations on outer ring road garages to 16 sites within. These ring road garages, having more parking than now found downtown, would be no more than a seven minute walk from the commuter's office.

What about freight distribution? All incoming freight would be unloaded at terminals outside the city, put on smaller vehicles according to destination and trucked in on non-pedestrian routes.

An important segment of the plan calls for rediscovering the city's waterfronts. The old Cove, filled in long ago for a parking lot, would be uncovered. Moreover, it could be connected to the Woonasquatucket and Providence Rivers, and lined with parks.

The *Providence Jounrnal and the Evening Bulletin* is backing the plan. Chief editorial writer, George Favre, himself a noted authority on urban affairs, writes: "It is a bold and visionary plan. Some will say an impractical one as well—because the planners are students of urban design, not men of affairs; because cost estimates are not available; because it has never been done before.

"But it can be done . . . with existing technology . . . What an inspiration Providence could be to those wondering how we will live during our third century."

(*Continued on page 76*)

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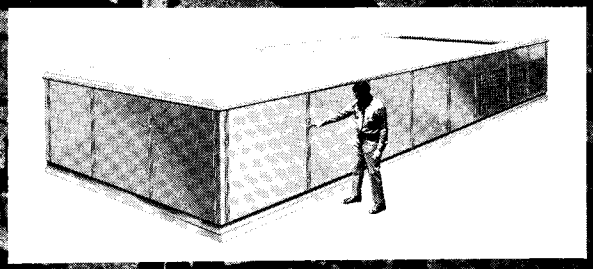

MODINE

Someone recently asked what, if anything, do I know now that I didn't know a year ago.

The answer is—quite a bit less.

I do know that The FORUM is still in ferment, as I wrote then, and had better never *not* be.

I know that architects are fun to lunch with, prefer French cuisine, get a *truffle* angry talking about each other, and sometimes pick up the tab.

I know they do not mind being criticized in the least, as long as we give them color, cover and 20 pages.

And I know they love issues devoted to one architect, especially if they are next.

Some other things: I know that an issue about the Energy Crisis causes one; that San Francisco is absolutely the best city to be overcome by; and that people who design prison facilities should be in them.

I know, too, that Philip Johnson is beyond monuments, hangs Andy Warhol likenesses of himself in the bedroom, is too clever for words and, nowithstanding the ones he has eaten, too profound for them.

As you can see, this is quite a bit less to know, yet quite enough.

Another thing, I know, is the incredible knowledge I have had access to: Your ideas, initiatives and concern, your faith in The FORUM, and because of that, your confiding in it, constructively criticizing it, and your taking The FORUM to task, but rarely for granted.

It has all helped us come to terms with the magazine's traditions and helped us to keep in keeping with those of you who have been part of these traditions.

When I came on as editor, several people said I should have had my head examined.

Being editor, I soon found out, was the same as having my head examined. So it seems, should being a reader.

We share a responsibility to analyze events, get to the essence of what brought them about, and what trends they represent.

It is a responsibility to discern the lessons which connect otherewise isolated efforts—a template of procedure or philosophy to lay over future ones.

It is a responsibility to know quite a bit less and a way of knowing quite a bit in the end.

After all, ferment means distillation, and it is a process we must take seriously as professionals, if architecture's role is ever to be made clear to those it affects. A sorting out never so much needed as today.—WILLIAM MARLIN

FORUM

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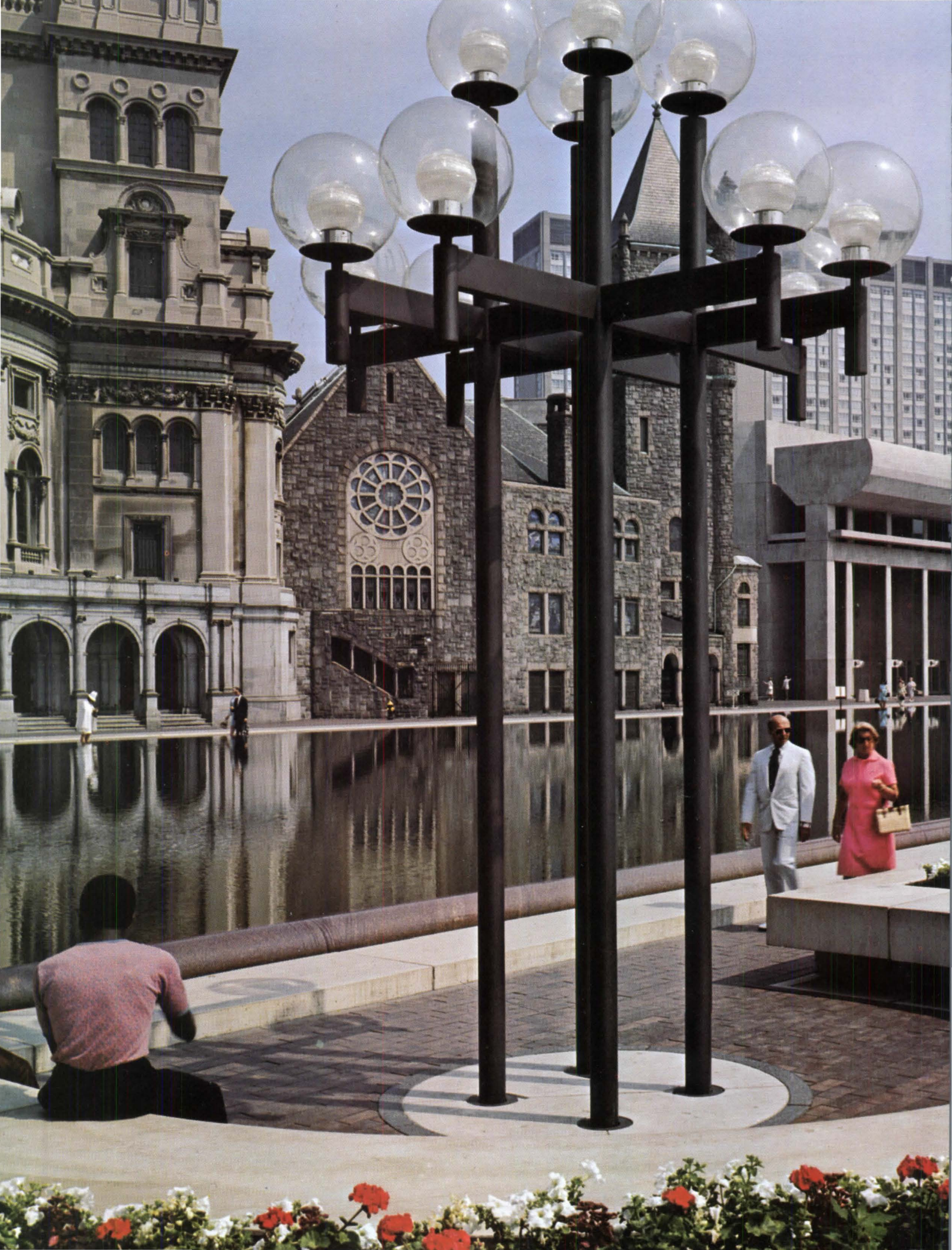


FORMED UP IN FAITH

THE CHRISTIAN SCIENCE CENTER
IN BOSTON'S BACK BAY
EMBODIES A REGENERATIVE ATTITUDE
TOWARD OUR SOCIETY AND CITIES

On the scale of centuries, Christian Science is a very new religion—founded in 1879. But if you are "into Science," as its younger members put it, you are into a way of thinking which is also very old—grounded in prayer, contemplation and common sense as sources of constructive action.

A new source, a summing up, has now been etched in the cityscape of Boston, counterpointing the vertical thrust of towers to the east, edging up from the row house scale of Back Bay and the South End. The way of thinking became the way of building this Christian Science Center—a timeless composition of old and new which lets you "into Science," and much more besides.

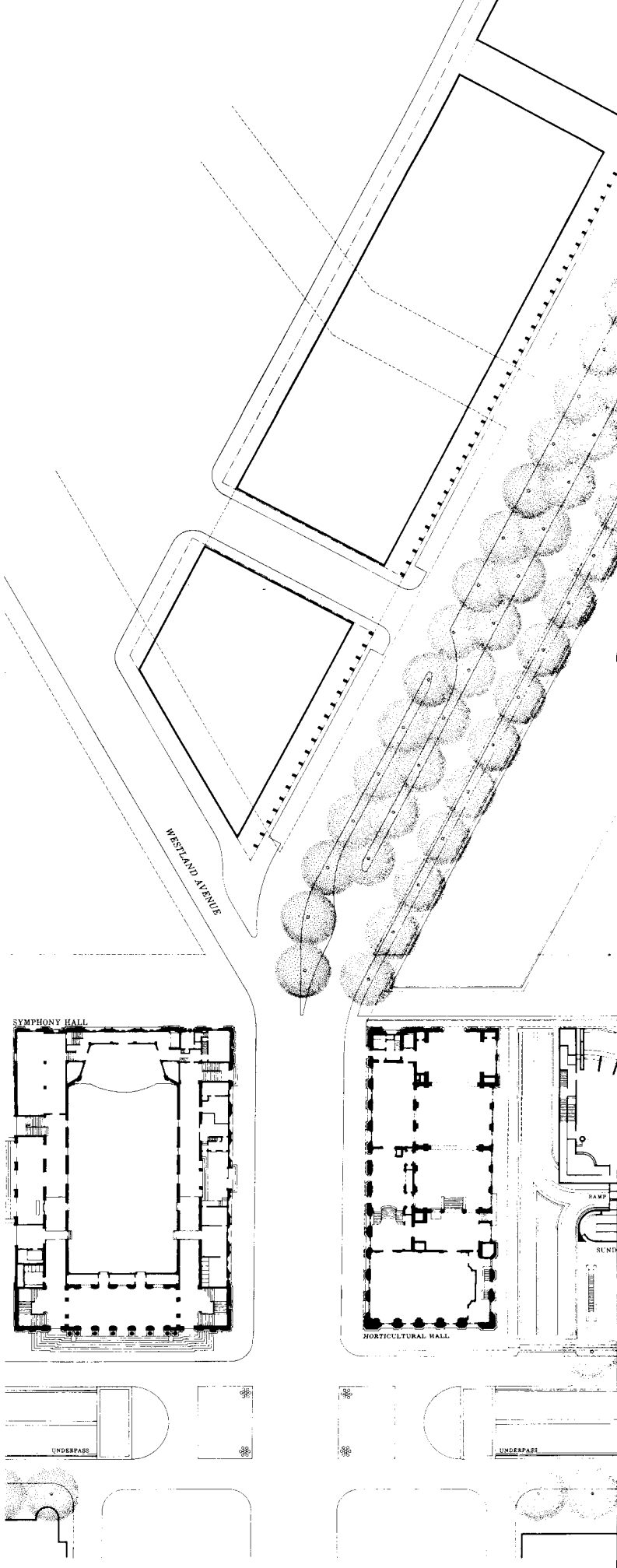
The Center was designed by I.M. Pei & Partners in concert with Cossutta & Ponte. Araldo Cossutta, until recently one of Mr. Pei's three senior associates, shepherded the project over a ten-year period—one in which the tenets of religion, science and art were rediscovered, made whole and symbolized by means of precision-poured concrete.

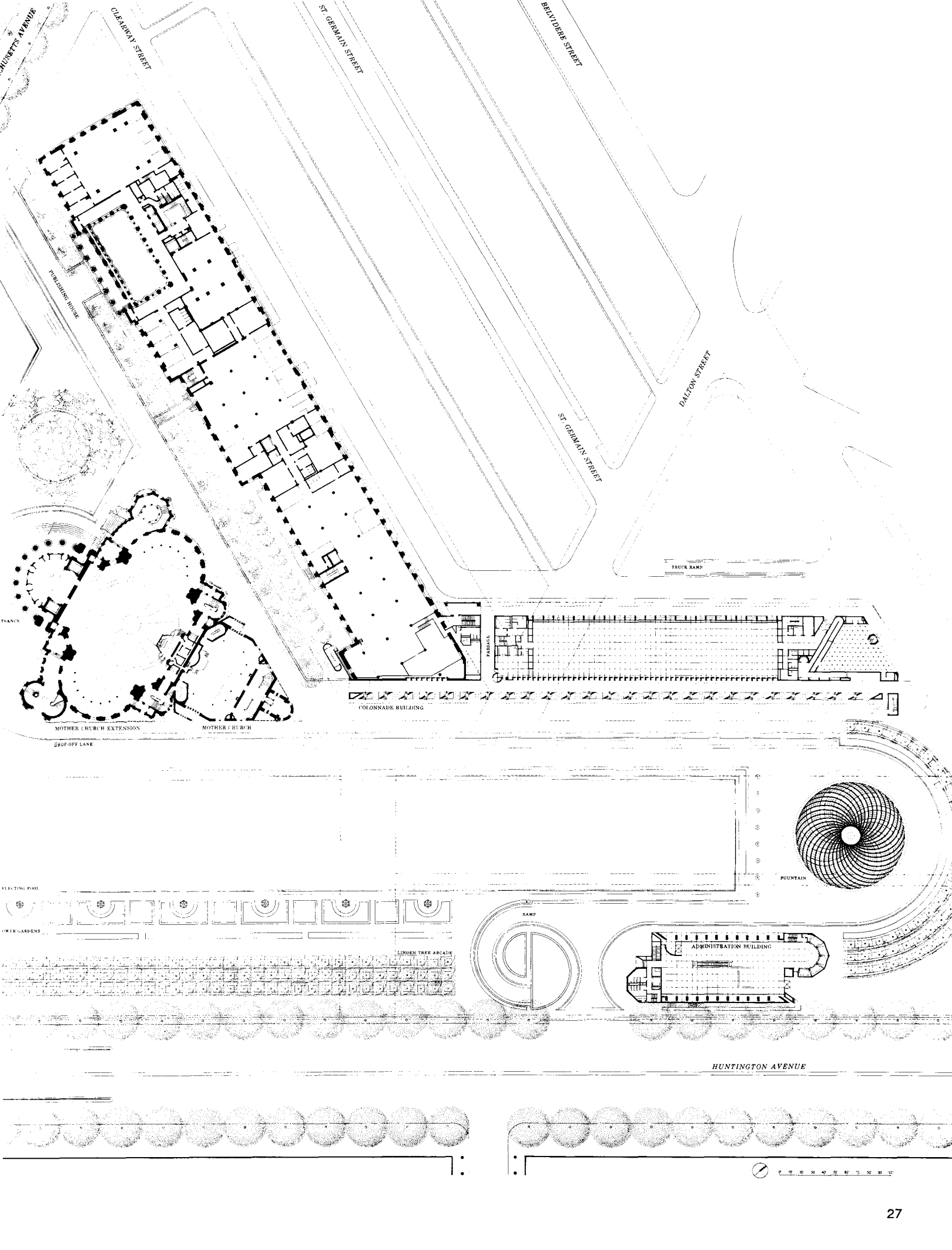
It is a work of repose, resolving structure and space into the unifying element: Architecture. On 15 acres, once hemmed in by blight, the Center's fabric consists of the Original Mother Church of Romanesque design (1894) and the powerful, domed presence of its Extension (1905). Across from them on narrow Norway Street, now a walkway lined with grown linden trees from the old Church park, is the neo-classical home of the Christian Science Publishing Society (1934). Newly woven, the fabric continues—spatially, structurally:

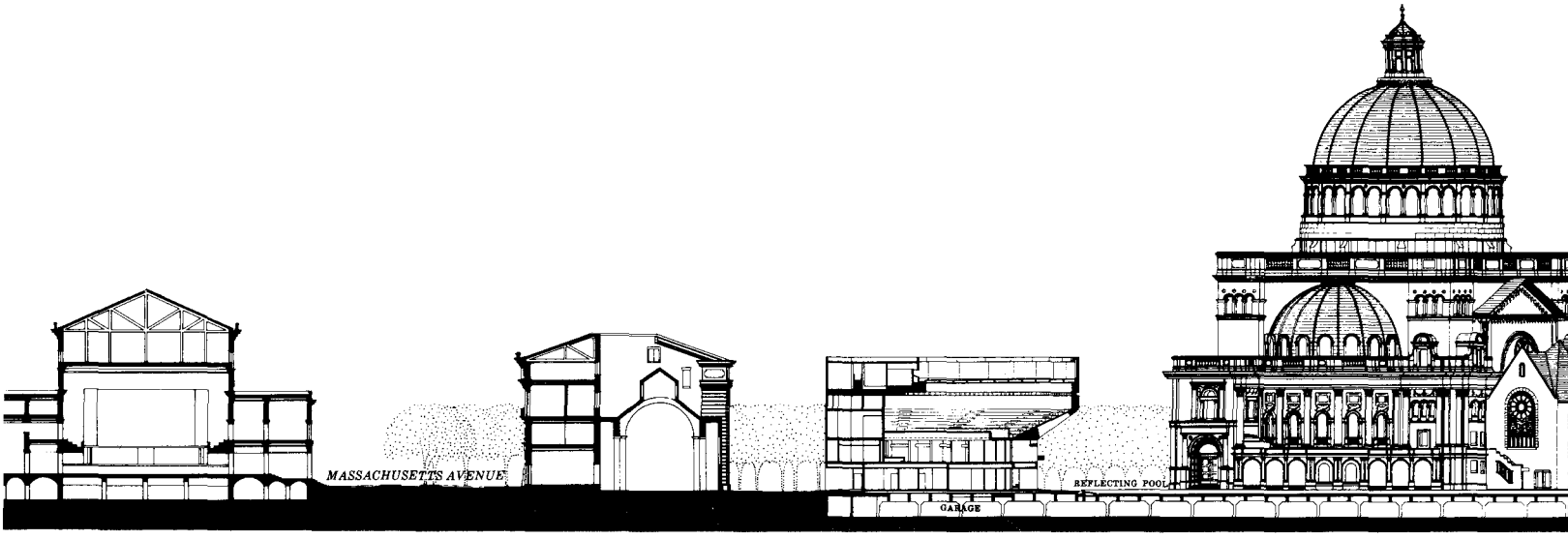
The Church Administration tower, 28 stories containing 275,000 sq. ft., announces the Center as you come upon it from Copley Square to the east. It houses the 15 general departments of the Church; information, reception and lounge areas on the ground floor; and the Directors' offices and Board Room on the top two.

The Sunday School, three stories containing 35,000 sq. ft., can house up to 40 classes of ten students each, has a nursery, teaching and office areas for a staff of 60, and a general auditorium seating 1,100. Whereas the Administration building announces the Center, the Sunday School is a gentle terminus—back to back with old Horticultural Hall, opposite the Mother Church and Extension. Attention is deflected to them by the School's quarter-circle cantilever.

Connecting the Administration building and School is a shimmering axis of water—a lake-size pool 670 feet long, 110 feet wide, two feet deep. The connection is further enhanced by rows of linden trees, flower beds and benches which enliven the axis. Beside the Administration building is an 80-foot-diameter fountain, springing a dome of spray 40 feet high. Opposite the tower, looking across the fountain and down the pool toward the older Church building, is the low-slung Colonnade, five stories containing 175,000 sq. ft., stretching 525 feet. The Colonnade houses maintenance shops in the basement, media studios on the top floor, a fourth-floor cafeteria, Publishing Society offices, exhibit galleries and, on its townside, a Christian Science Reading Room. The Colonnade columns range along the pool, providing rich cadence for the pool and promenade. The pool, in turn, contributes richly: Water is flush with, and spills over an elegantly rounded lip of Minnesota red granite. The brick pavers of the promenade reach over and into the new buildings. Concealed beneath all this is parking for 550 cars. The pool itself serves as a cooling tower for the Center's




CLEARWAY STREET
ST. GERMAIN STREET
BELVIDERE STREET
DALTON STREET
ST. GERMAIN STREET
PUBLISHING HOUSE
TRUCK RAMP
PASSAGE
COLONNADE BUILDING
MOTHER CHURCH EXTENSION
MOTHER CHURCH
DROP-OFF LANE
FOUNTAIN
RAMP
ADMINISTRATION BUILDING
LINDEN TREE ARCADE
HUNTINGTON AVENUE



SYMPHONY HALL HORTICULTURAL HALL SUNDAY SCHOOL BUILDING MOTHER CHURCH EXTENSION

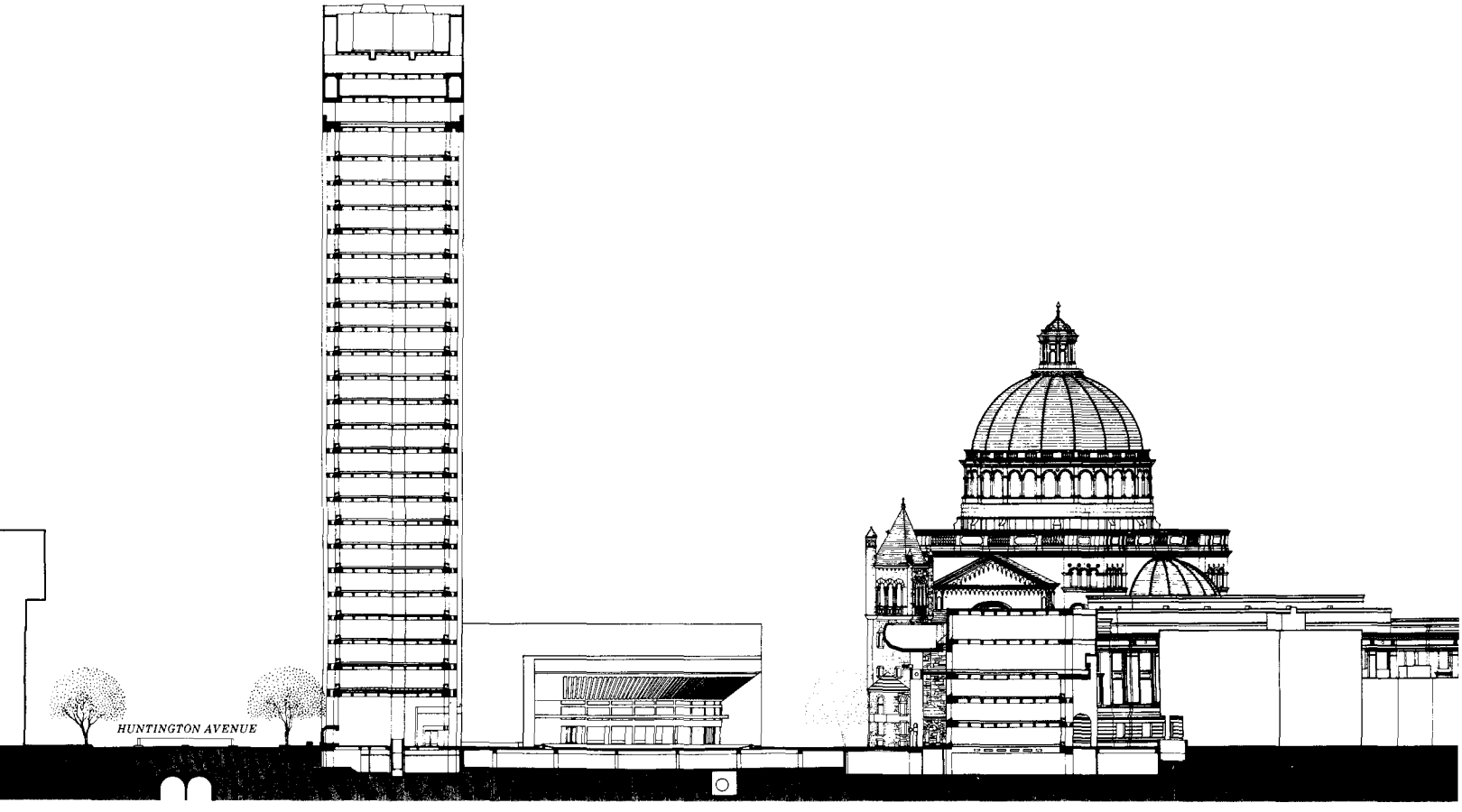
air-conditioning system.

The placement of the three new structures around the pool, along the axis, was practical as well as philosophic.

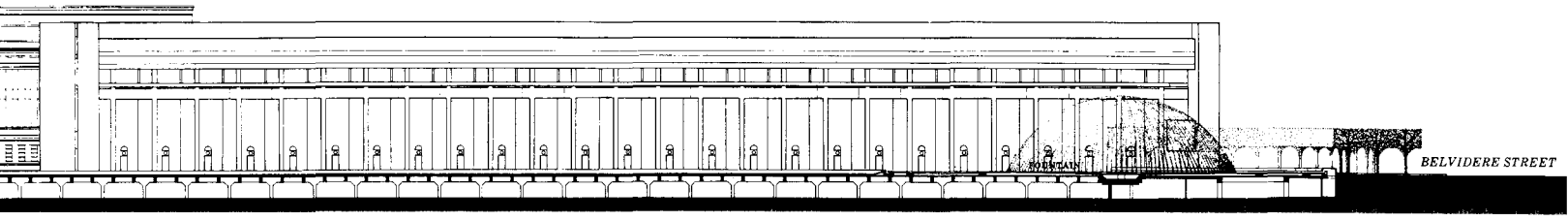
The Administration tower, on the east end of the site by Huntington Avenue, has a pylon effect and discretely picks up the vertical theme of the $200-million Prudential Center nearby; at the same time, you get the feeling that there was no effort to compete, for the tower is an element of transition from Prudential's 52-story office building to the lower profile of western Back Bay. In addition, the tower serves as a kind of "cropping frame" for the Mother Church at the other end of the pool, thus calling attention to the seat of Christian Science.

The Sunday School activities, as originally designed, were to have been consolidated in what is now the Colonnade. But this proved impractical from the standpoint of having to walk 600 feet or so from the Mother Church; the School's present siting cuts this down to 250 feet. Also, mid-way through planning, Horticultural Hall informed the Church that it had no funds to rebuild its eastern facade facing the Center. This would have meant having a rather banal, barn-like wall as the end of the axis. As pointed out, the Sunday School presents a congenial, curving touch, nudging the Hall's alley-side wall from view.

As for the Colonnade, its placement was determined by the need for having the Church's educational, media and publishing programs proximate to each other; hence, the way in which it wraps around the end of the older Publishing Society building, angling off from it to become an emphatically horizontal element parallel to the axis. Looking from the east end of the site, the Colonnade leads your attention to the Mother Church; walking



SUBWAY ADMINISTRATION BUILDING SUNDAY SCHOOL BUILDING COLONNADE BUILDING



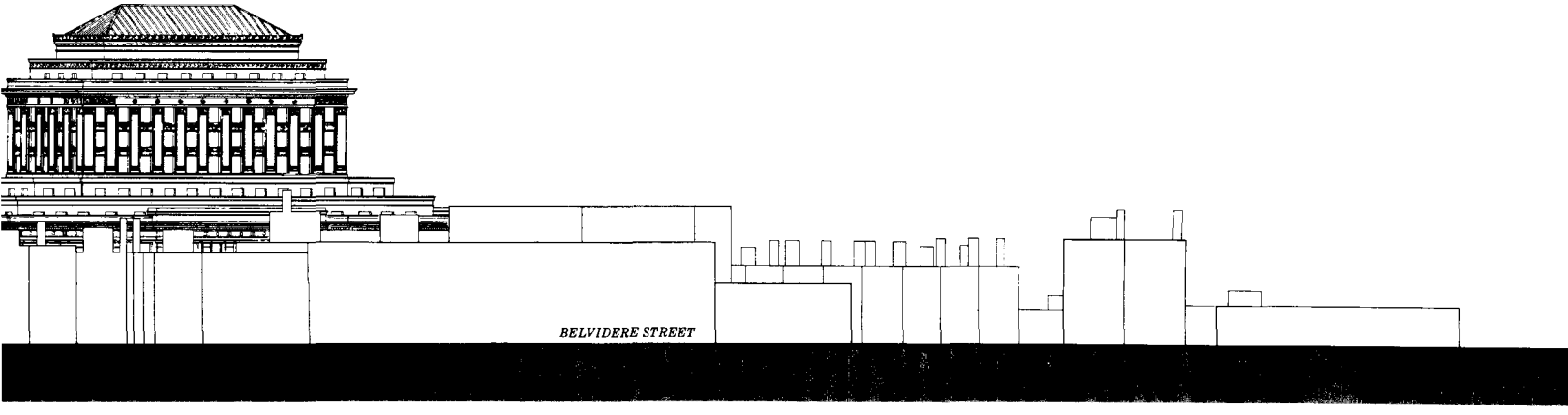
L MOTHER CHURCH COLONNADE BUILDING

alongside it, the columns endow your experience of the space with needed scale; looking out from it, across the pool and past the Administration tower on Huntington, the rows of trees and flowers opposite carry your view on to the Sunday School.

By way of becoming immersed in this composition, you quickly grasp how everything connects. The great sheet of water, besides having its traditional Christian connotations, *reflects*—for some, with a vengeance. Quite literally, the effect is one of suspension. Complementing this, the structures *deflect*, one to the other. And defer. As Mr. Cossutta explains, some are called on to be leading characters; others are called on to be the chorus. Nothing is diminished, for harmony results. "Harmony is the very essence of architecture," he says, "like weight is to gravity."

A true test of how harmonious this is rests with the fact that the elements of the Center change roles with great facility, depending on where you happen to be. On one hand, the leading character is the Administration tower; on the other, the Sunday School. A few steps further, they have changed roles, become the chorus—to continue Mr. Cossutta's analogy. Whatever element seems leading at any given moment is that to which the other elements deflect your attention. It is all a compelling exchange of views; everything is answerable.

This effect will be further enhanced when Phase Two of the Center is complete late next year: A semicircular portico for the Mother Church, facing Massachusetts across a stretch of tree-planted grass. Until recently, the old administration building and a row of old storefront buildings separated the Mother Church from the Avenue. These have now been demolished and, already, it is possible to envision how the curve of the



Sunday School and the portico of the Mother Church will complement each other. Moving toward them from the east end of the site, those elements will gradually release your view to the Massachusetts streetscape, across which are a continuous bank of new apartments by The Architects Collaborative. Standing across Massachusetts from the Mother Church, the effect will be one of your being drawn into the composition—again gradually. It is clear that this easy going give-and-take is a result of deeply principled planning. And one dividend of the ease is being put in a position, or a series of them, to contemplate and enjoy these essential dimensions of the project. While it is true that the walking distances between, say, the Publishing Society and Administration tower are abnormally great, it is also true that physical distance is rewarded with another kind of proximity—that of preoccupation with the Center's scale, its rhythms, that of noticing how those concrete elements take possession of light and shadow, that of respectful orientation to surrounding neighborhoods, that of engaging encounters with different people in an ecumenical setting. A thousand feet extra is not so far to walk, given the kind of distances that have so long separated society—distances which the Center symbolically spans.

In strict architectural terms, referring to techniques of construction, the tactic is similarly engrossing. Concrete is Araldo Cossutta's *forte*. And his "pours," to use a field term, are nothing less than poetic, but also nothing less than pragmatic. What makes poetry and pragmatism synonymous is that everything is structurally and mechanically integrated.

These elements interweave as gracefully as the buildings interweave with each other: An exposed waffle-like grid of concrete beams is, in fact, the ceiling of all interior space. Each module, measuring four feet and eight inches by six feet and two inches, has supply and return for air-conditioning, electrical, lighting and telephone connections, and is acoustically treated. In combination with the double plenum principle, this system drastically cuts down the inordinate volume usually given over to structural and mechanical requirements. With respect to the loadbearing wall system, Mr. Cossutta orchestrated his columns and beams in such a way that they serve as sun shields without demeaning the view toward outside. In all cases, glass is used, great polished plates of it; but the glass is also protected—recessed as much as six feet in some places, like the Administration tower. The result is an interpenetration of materials, shadows and light—each savoring the other.

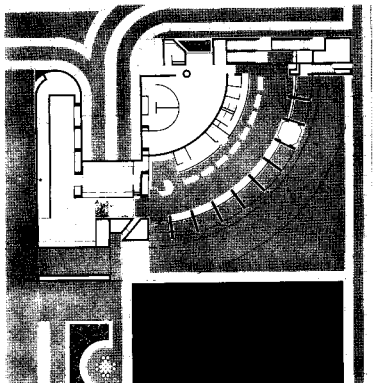
Given the vast amount of open space along the axis, between the buildings, the result is wholly suitable; for the materials help give that space identity and discipline—something a metal-mullioned curtain wall could not. It is strange, yet perhaps not so strange, that Mr. Cossutta's concrete configuration comes off looking much less heavy, far more "light," than curtain-walled buildings of comparable size. It goes back to his definition of structure as "the spring of clarity"—and that which is clear tends not to weigh heavy on the human senses.

Mr. Cossutta: "The clarity of the composition stems from the fact that our buildings are well-toned muscles in an overall anatomy. You don't see any stratification between architecture and structure; only synthesis;

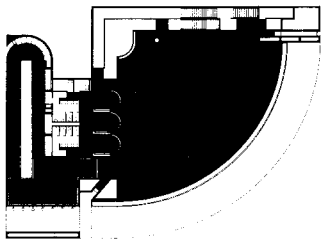
Sunday School building (left), opened since 1971, provides a gentle terminus to the reflecting pool, containing classrooms, nursery, office space and an auditorium for 1,100.

The ramp of the Sunday School building (opposite) is a study in three dimensional experience, leading up to the multi-use auditorium (above). Its mezzanine reads out as a curving cantilever over the ground floor entrance, and is seemingly suspended from an array of concrete spokes emanating from above the stage. The School's ground floor (near right) is typical of the interpenetration of structure and space characteristic of the complex. Note how furnishings are integral with the building and how deftly glass is slid into the concrete. Burned-brick pavers within pick up those of the plaza. The Colonnade and the Original Mother Church are seen through the window on the left; the Administration tower is glimpsed in the distance on the right.

GROUND FLOOR



TYPICAL FLOOR



only element leading to element without any apparent separation."

The synthesis he is speaking of is evident down to the minutest detail. The concrete for example. It picks up the color of the limestone of the Mother Church Extension and Publishing Society building. Those burned brick pavers, lined with black granite—they pick up the coarse texture and color of the Original Mother Church. And the glass—it slides effortlessly into the concrete, is mitered at corners, *sans* window frames throughout. All muscle, no fat.

The Center's genesis and unfolding is lesson-laden in other respects—certainly from the standpoint of a client-architect relationship but, more instructively, from the standpoint of how social, political and economic forces are orchestrated.

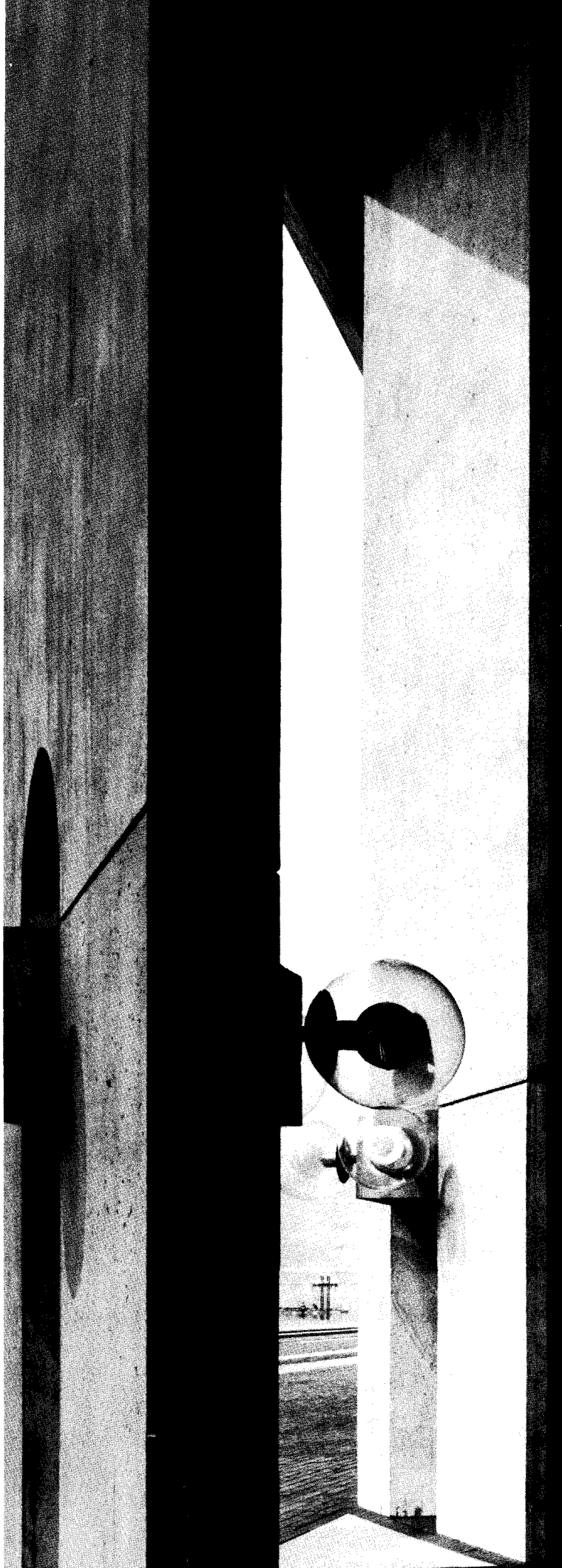
Early in 1962, The Christian Science Board of Directors, intent on a less-cloistered pace (and image) contacted Carl B. Rechner, then a prominent real estate developer in Kansas City, Missouri, and an active Christian Scientist. This was done at the insistence of Erwin D. Canham, Editor in Chief of The Christian Science Monitor, an international daily newspaper which has consistently advocated a more enlightened attitude toward architecture and urban planning.

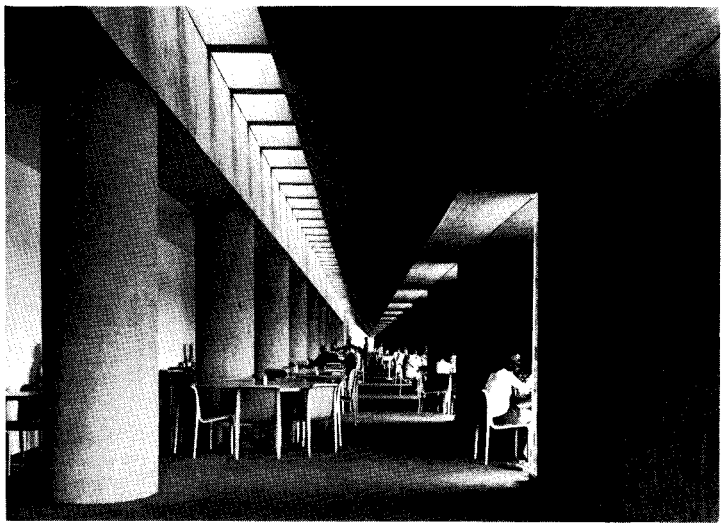
Mr. Rechner, in business since 1924, was about to leave for Europe with his wife. But on the way, he stopped off in Boston for a meeting with the Board, a review of its plans, and a look at its miscellaneous land holdings around the Mother Church. Upon returning from Europe that fall, he informed the Board (a five-member body with annual rotation of chairmanship) that he would be ready to undertake a full study beginning spring of 1963.

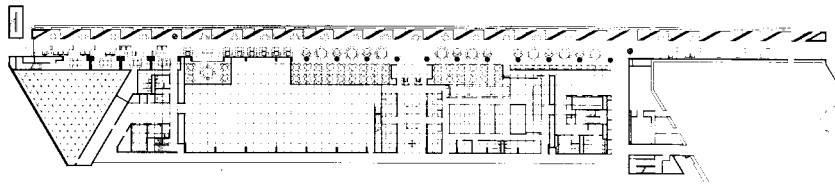
By April, it was clear to Mr. Rechner that a thorough professional planning study was needed. He had conferred with the Church Realty Trust, its Maintenance Department, the directors of its chief activities, and with Edward J. Logue, then head of the Boston Redevelopment Authority (now president of the New York State Urban Development Corporation). Preliminary checks had also been made into public transit affecting the Church area, traffic patterns, parks and recreation, and the rental market. All this was done during 16 trips between Boston and Kansas City; and by June 1963, it was grievously clear to the Board that it needed a full-time development director. The Rechners made the move.

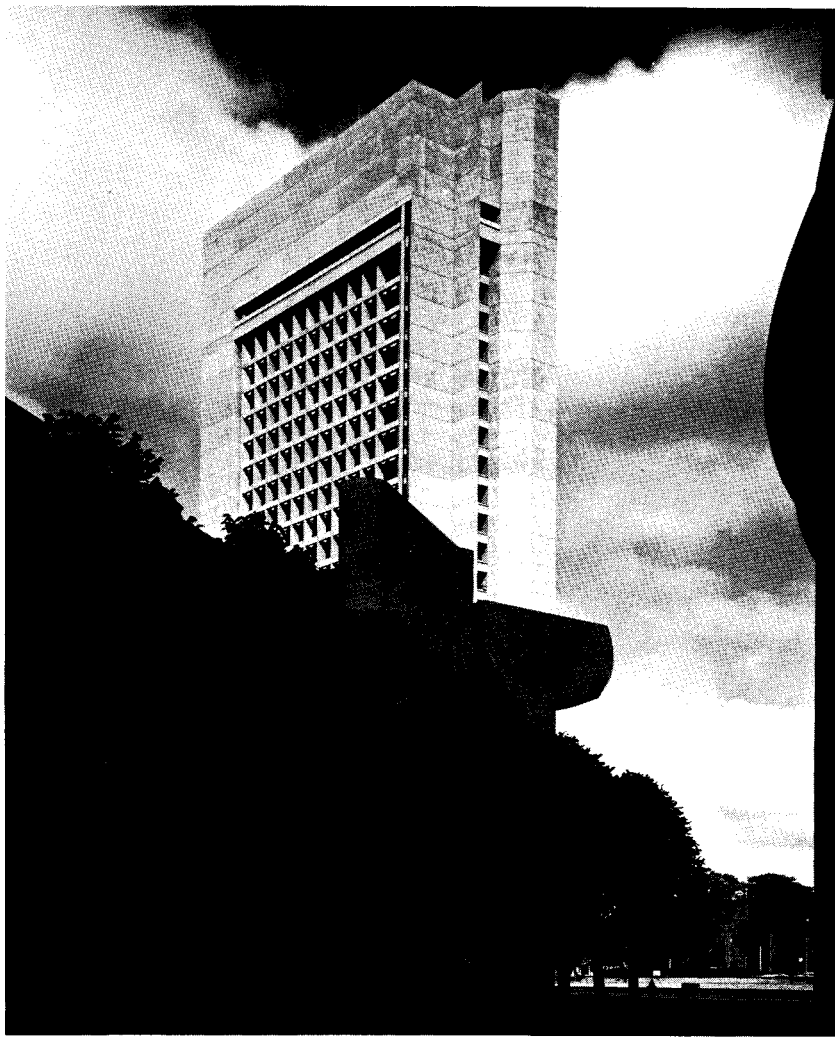
Resettled (barely), he set about interviewing a number of architectural firms around the country—finally meeting I.M. Pei, who had worked closely with Mr. Logue as chief planning consultant for Boston's Government Center and, before that, as chief architect for William Zeckendorf. A planning contract ensued, along with Mr. Pei's appointment of Araldo Cossutta, a native of Yugoslavia, well-versed in urban history and contemporary conditions, a graduate of the Ecole des Beaux Art and Harvard. At this decisive point, Vincent Ponte was brought in as planning consultant. Together, Cossutta and Ponte walked around the site, bundled up for Boston's winter, trying to get a handle on the problem.

The problems were legion: First off, the Mother Church and Extension had never enjoyed an open setting, having been locked in among one to four story buildings, most 60 to 80 years old—and, until Prudential came along, located next to a 31-acre railroad yard. The Sunday School and nursery, now consolidated, were





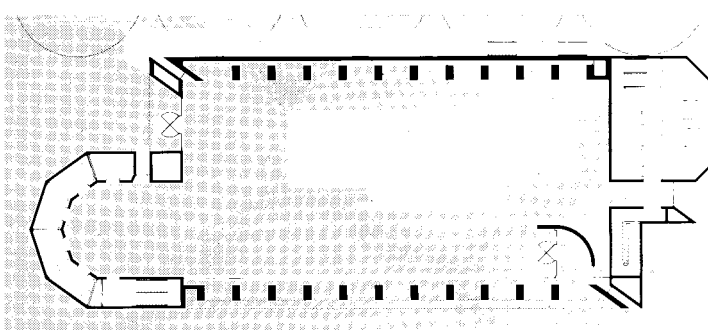




The Colonnade (left) ranges 525 ft. parallel to the Center's major axis, and contains five floors of publishing and educational activity, exhibit areas, media studios, and a fourth floor cafeteria (top photo). The building wraps around the end of the existing Publishing Society building where a narrow linden-lined walkway, formerly Norway Street, abuts the axis (above).

The lobby of the 28-story Administration tower (above) indicates the structurally spare nature of these buildings. A late, rather lyrical Matisse is seen hung from the waffle-like grid which is repeated throughout and combined with a double plenum principle, consolidates and condenses air conditioning ducts, electrical, lighting, and communications equipment. A typical office floor (left) photographed shortly after occupancy, dramatizes the three dimensional coffered effect of this system. In this way mechanical and structural elements are integrated, lending continuity and flexibility to office space in this and other buildings.

GROUND FLOOR



split up in three locations; administrative functions in six. Horse-and-buggy streets criss-crossed the site, often used by through traffic, adding to the noxious atmosphere.

But there were advantages, as Mr. Rechner points out: One of the more invaluable was, of course, an enlightened client which realized the meaning of architecture and its expressive role. Church accumulation of land, though incomplete at the time, represented what Mr. Rechner calls "the best urban ownership of a close-to-downtown area of a major city in the United States."

Further, Prudential Center, despite its subsistent esthetics, had become a definite shot in Back Bay's arm: A 52-story office tower, a plaza (where pools are hung with nets to catch people blown into them by the wind), shopping concourses, a 3,000-car garage, several 26-story apartment buildings, the 30-story Sheraton-Boston Hotel with 1,012 rooms; and adjacent to that, a $15-million civic auditorium. Now that the Christian Science Center is substantially complete, Sheraton is adding still another hotel tower, triangular in plan, 29 stories high, situated directly across the street from the end of the Church Colonnade.

Other advantages of the site included location of rapid transit stops—one for Prudential and the Symphony; another at the civic auditorium. In addition, the Massachusetts Turnpike, which Prudential bridges, has a Huntington Avenue interchange.

Responding to these conditions, the preliminary Master Plan was presented to the Board in April of 1964, addressing itself to 32 acres, and subdivided into three areas of study: The first dealt with the triangular parcel where the Christian Science Center has risen; the second, with seven development parcels along Huntington, across from the triangle, where the new Colonnade Hotel now stands; the third, with four parcels along Massachusetts Avenue, opposite the Mother Church Extension, where the TAC complex of apartments and arcaded shops was built, and recently opened. Taken together, the 1964 Master Plan represented a floor-to-area ratio of less than three and a half.

Between April of 1964 and the end of that year, negotiations for purchase of remaining parcels were underway, the Church Trustees and staff were briefed, the Master Plan was informally presented to then-Mayor John Collins and Mr. Logue; federal underwriters were consulted about the possibility of financing the private phase of the Master Plan surrounding the Center, and innumerable city officials, neighborhood groups and institutions were invited to study and comment upon the Plan.

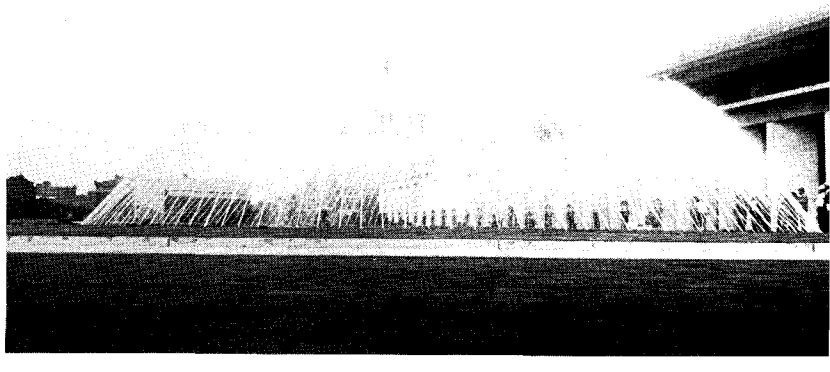
Excepting the understandable concern on the part of some tenants about having to move, the Master Plan received warm reviews—even from the tenants.

Perhaps one reason for this has to do with the way the Church paid for the Center's development: Its cost involves no mortgage, no temporary financing, no funding campaigns or pledges. According to present Board Chairman David Sleeper, the former Texas oil executive, "Just the need was made known." Indeed, he has announced that the full $75-million for the Center is in hand—all from members' contributions, branch churches and Church friends.

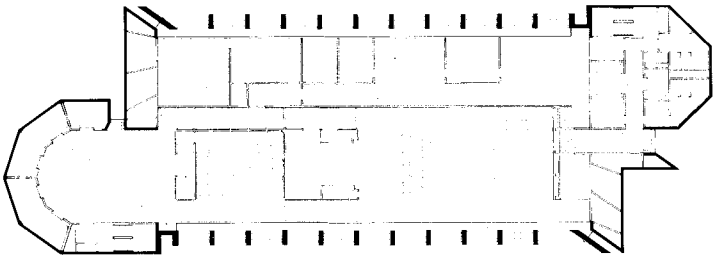
Another reason for the City's warm reception may have had something to do with the Church's attitude toward temporal responsibilities—including, not least of all, taxes. Only the Mother Church, the Extension and the new Sunday School are exempt. Taxes are paid on all other buildings, including the Publishing Society. In Boston, where something over 60 percent of all land is nontaxable, due to educational or religious use, that's saying something.

Still another reason for the warm reviews has to do with the Church's considerable influence in helping secure financing for perimeter development. These parcels will be leased to qualified, design-conscious developers on a 60-year basis; the architects of the Master Plan retain review and approval over anything done, which has already borne fruit in the case of the Colonnade Hotel.

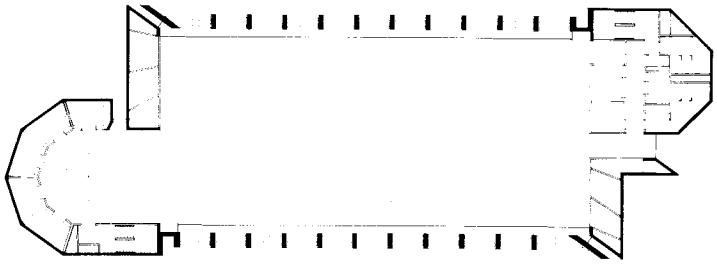
This perimeter phase called for new apartments along Huntington Avenue between the Colonnade Hotel and



BOARDROOM FLOOR



TYPICAL OFFICE FLOOR



the Massachusetts Avenue intersection. Scale-wise, these would be nine stories high and financed for low-income families. At the intersection, the Plan calls for two 34-story towers, ear-marked for the elderly, with possible mix of some commercial and office activity at the base. Another apartment tower, also 34 stories high, is proposed for the intersection of Massachusetts Avenue and Boylston Street. As noted, the low-lying TAC building, stretching from Symphony Hall along Massachusetts Avenue toward Boylston, is already complete—anticipating fulfillment of other perimeter development.

For the time being, this has been imperiled by a handful of South End residents who insist, ironically, that the Church's plans should be halted until assurances are given that the new apartment buildings are targeted for community-oriented uses, and low-incomes—a guiding factor in its perimeter development dealings all along.

Another factor which makes this recent problem even stranger is that the Church, as part of the Center's construction, undertook a voluntary training program so that minority, unskilled workers might move toward union apprenticeship; further, equal opportunity practices by the contractors involved were consistently checked by the Church.

Looking back, the Center established much more than a benchmark with respect to design and planning standards; it established one with respect to human and community values. This took two dramatic forms.

The first was the BRA's creation of a Fenway Urban Renewal Area, consisting of over 500 acres to the west and south of the Center. At the time, 1965, the BRA was eager to tap the federal credits then available for improving public and private property. Although there was some hot City Council debate—many Bostonians look upon BRA improvements as impositions—the Fenway plan was approved six to two late in December of 1965. This gave the green light for preparing full preliminary plans of the Center which were completed early in 1967. Review, refinement, schematic approval and preparation of construction documents went on to April of 1968, at which time contract bids were taken. Center construction began the following August.

The second dramatic aspect of the Center's birth concerned relocation of tenants—a good many not members of the Church. Instead of a 30- or 60-day notice, they were advised months in advance. Relocation expenses in line with BRA practices at the time, ranging from $60-110 a family—were paid by the Church. So was a reputable rental agent to assist those being inconvenienced. As a result, some 200 people, occupying 42 old buildings, found new quarters—and did so without the rancor so often associated with evictions brought on by "urban renewal."

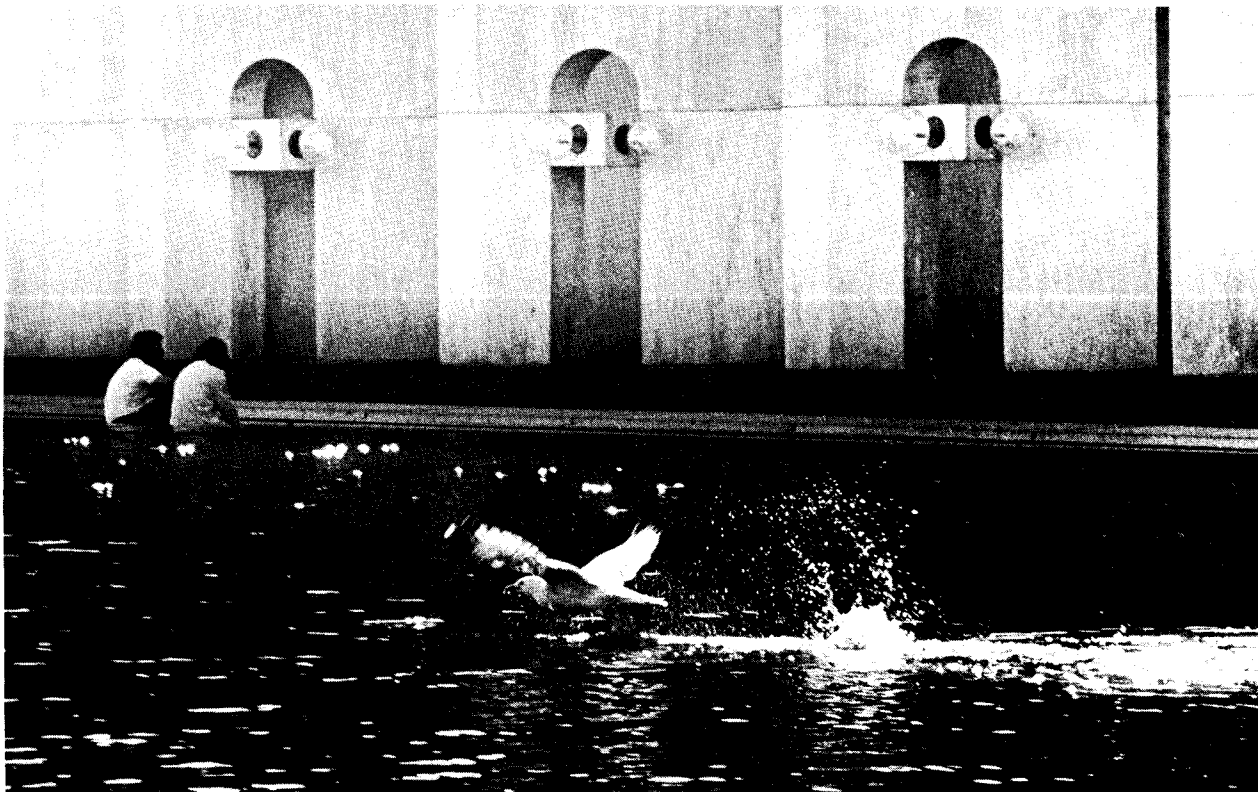
The Christian Science Center is urban renewal in a timeless sense—that which improves human and community attitudes about what is possible.

It is architecture as religion.

Or perhaps religion as architecture.

Both have become tangible elements in Boston's everyday life, becoming to the better instincts of its people. From its founding, the primary objective of Christian Science has been to restore the "lost element of healing." In far more than a metaphorical way, the Center found it.—WILLIAM MARLIN

FACTS AND FIGURES: The Christian Science Church complex, Massachusetts and Huntington Avenues, Boston, Mass., consisting of four buildings—the Center Administration Building, Church Colonnade Building, Sunday School Building and Open Space Building. Architects: I.M. Pei & Partners and Cossutta & Ponte (Associates-in-Charge: Joseph V. Morog). Engineers: (structural) Weiskopf & Pickworth; (electrical and mechanical) Syska & Hennessy; Landscape Architect: Sasaki, Dawson, DeMay Associates. Interior Designer: I.M. Pei & Partners. Consultants: (planning) Vincent Ponte; (traffic) Travers Associates; (graphics) Page, Arbitrio, Resen Ltd. Contractors: (general) Aberthaw Construction Co.; (electrical) Fishbach & Moore; (mechanical) Limbach Co. Building areas: Administration Building—275,000 sq. ft., or 25,548 m^2; Colonnade Building—175,000 sq. ft., or 16,258 m^2; Sunday School Building—35,000 sq. ft., or 3,252 m^2; Open Space Building—(paving area) 9.1 acres. Team: Araldo Cossutta, Joe Morog, Arvid Klein, Ronald Kolbe, Leonard Perfido, Ken McKenzie, Sid Goldstein.
PHOTOGRAPHS: Copyright Yukio Futagawa; except pp. 37 and 39, Barth J. Falkenberg, The Christian Science Monitor. Drawings: Ilona Rider.



RETURN OF THE MEGASTRUCTURE

A one-building campus counters contemporary thinking but has been warmly received by users and public

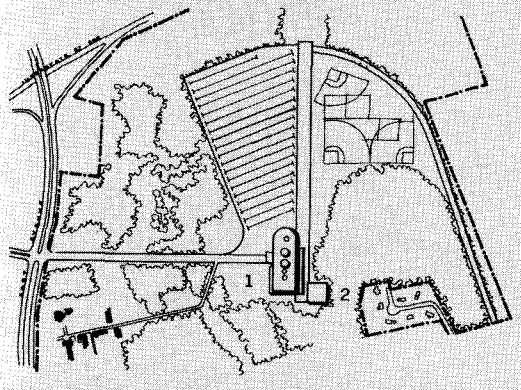
Rapidly changing educational, social, and architectural climates could easily discourage the most intrepid architect from designing campus facilities. Between design and completion, a total reversal in approach can take place, bringing about instant obsolescence. Accordingly, Rhode Island Junior College's Knight Campus, a "megastructure" on a hill in Warwick, conjures up the epithet "generation gap architecture."

At the time the building went into design, the "megastructure" —loosely defined as a monolithic building that is ideally open-ended, additive, modular and plugged into a service transportation framework—captured the imagination of urban designers and architects. Its actual application was rare, however, relegated for obvious political and economic reasons to new campuses, instead of cities. Scarborough College in Ontario by John Andrews, and Simon Fraser University in British Columbia by Erikson/Massey, became two historical models for a building type that has yet to truly emerge. Elsewhere in the mid-sixties, monumental forms of a brutalistic esthetic were dominant campus images, and university complexes still occupied hilltop sites, separated from the towns surrounding them.

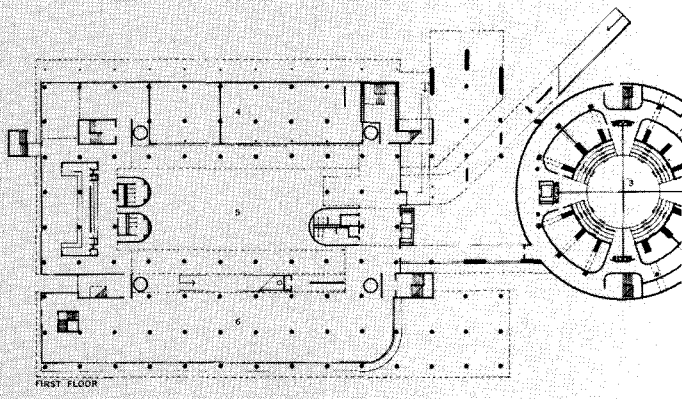
In the meantime, however, the too well-known uprisings of the following years prompted a decentralization of the isolated autonomous university; a dematerialization of the building as object; an emphasis on relating campus to town. If the

Knight Campus sits on a rolling hillside site outside of Warwick, Rhode Island. Large concrete piloti lift the building off a slope with a front to back gradient of five percent. Rectangular classroom/commons wing is separated from circular library and auditorium by a 65-foot high void so that the auditorium can accommodate community functions at night. Curved brow to right of entrance ramp indicates end wall of a double height space in bookstore. Inside the building, a 200-foot-long and four-story high central space (left) provides an analogue to the traditional university and college campus. Classrooms, labs and offices wrap around the commons which is used mostly for studying, socializing, eating or art exhibits. Two 40-foot-deep, 20-foot-diameter cylindrical skylights, constructed of plaster and painted an aluminum color inside, allow natural light to permeate the common space. The glass is tinted, unfortunately giving off an artificial cast, and is set in radial mullions.

The basic structure is reinforced concrete columns, slabs and roof, with concrete spread-footing foundations. At the west elevation (left), concrete block end walls, plastered over, will facilitate later expansion. A 1,700-car parking lot was mandatory for the 3,000 commuting students, but since it was too expensive to cover or conceal, it was concentrated at one end of the building (opposite) near the entry ramp and theater. The effect is similar to a shopping center.



1. CAMPUS
2. GYMNASIUM
3. AUDITORIUM STAGE
4. HEAVY LABS
5. COMMONS
6. LOUNGE
7. ENTRANCE RAMP
8. ADMINISTRATION
9. FACULTY
10. DATA PROCESSING
11. LABORATORIES
12. BOOKSTORE
13. CLASSROOMS
14. FUTURE LIBRARY EXPANSION
15. CORRIDOR/LOUNGE



Knight Campus were being designed now, the design architects, Perkins & Will of White Plains, New York, might just decide to take the factory the students were using previously in downtown Providence, and renovate that.

Ironically, while the campus could be typified as a mid-sixties solution, it does respond to present specific needs of the educational program. In terms of image, the school, the first in a series of three state campuses to be built for the Rhode Island Junior College system, had to convey a distinctive demeanor for a two-year commuter college in close proximity to ivy-covered Brown University. Renovating a factory just wouldn't do.

In terms of program, the initial master plan had indeed closely approached the campus model. Perkins & Will pushed for a "megastructure," not so much for the same reasons as the Canadian architects (climate, response to site and circulation, plus ease of expansion) but because of the need for a three-dimensional central organizing space that could bring the 3,000 students together.

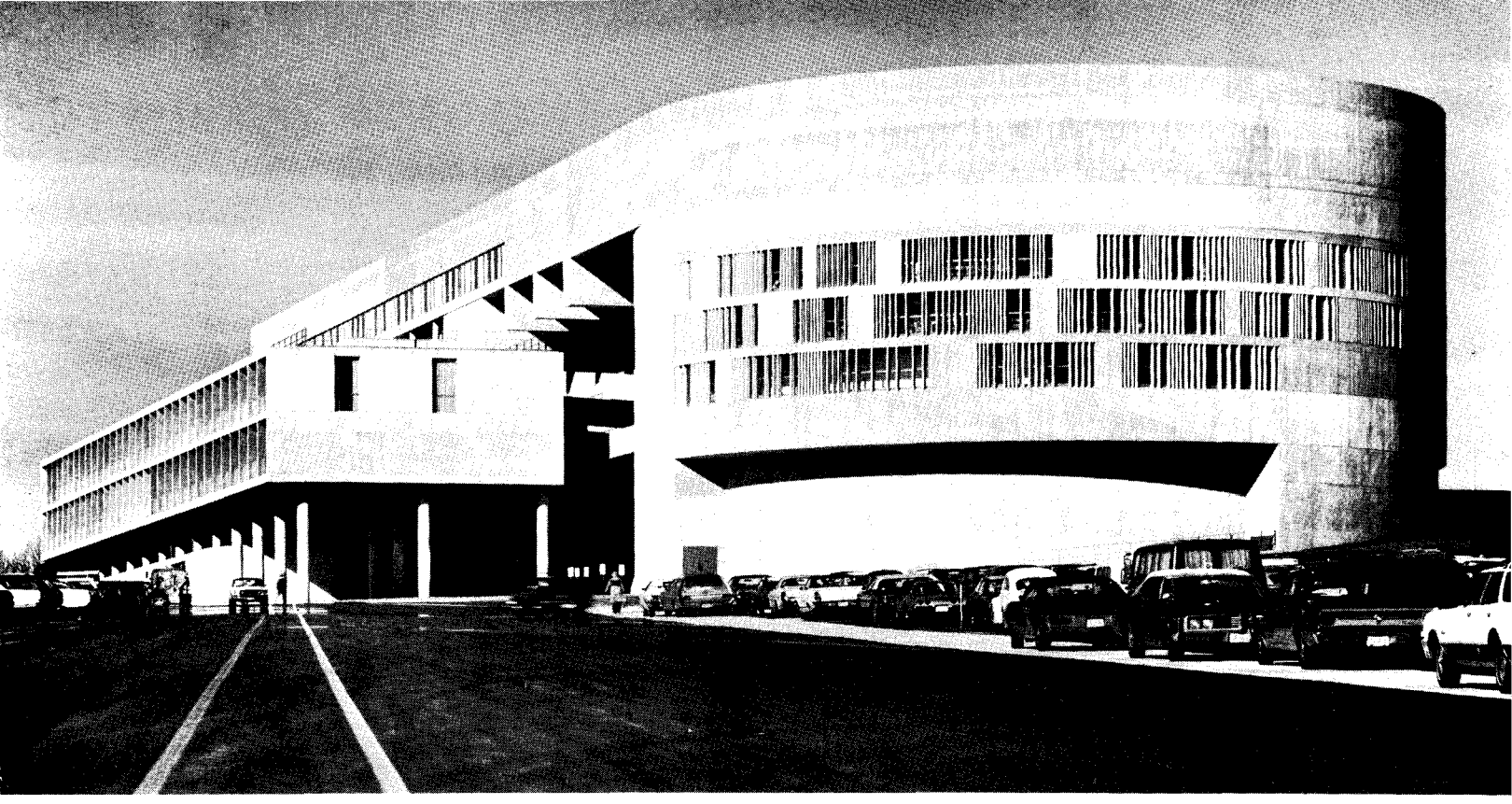
A junior college differs from a university in that it functions day and night, year round, with diverse activities, none being residential. Perkins & Will sought to reinforce this identity with a one-building solution promising an intensity of activity and interaction suitable for a short two-year program. Their proposal then was to wrap classrooms, labs and faculty offices around a four-story high central court, 200 feet long. Ramps are the primary means of circulation, including a 190-foot long entrance ramp slicing through the 65-foot high void separating the rectangular classroom wing from the circular theater/library wing.

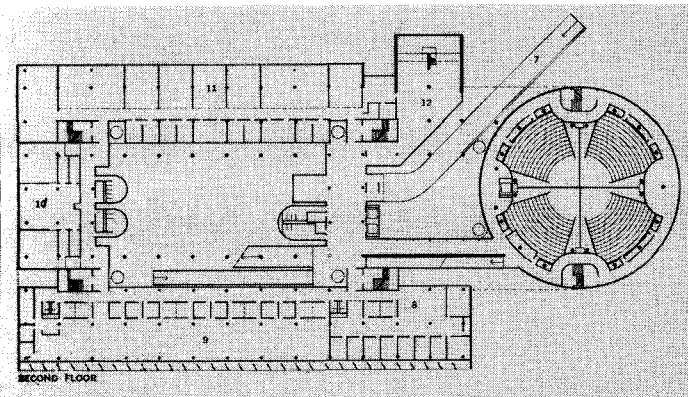
The concept of centralizing the school's academic, vocational and technical functions in one 380,000 square foot building appealed to both the President of Rhode Island Junior College system, William Flanagan, and to the Dean of Knight Campus, Robert Henderson. Their particular educational philosophy involves an understanding that students in vocational programs have been treated as "second-class citizens" by other students. Mr. Henderson thus viewed the proposed solution as a method of encouraging a mixture of pupils and disciplines, "a kind of rubbing of elbows between those who might later find themselves working side by side in the real world."

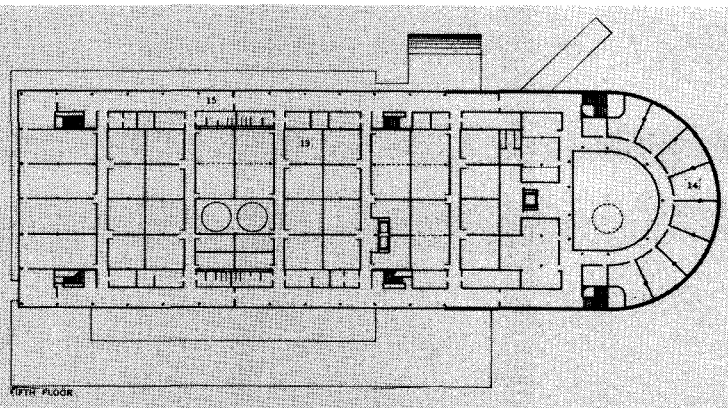
This constant meshing was reinforced in the architectural solution, not only through the commons space and the extensive use of exterior and interior glass partitions, but through a kind of layout overlap. For example, study and reading areas can be found not only in the library, but on the floor of the commons (where studying would also entail socializing) as well as in the first and fourth floor lounges.

According to Mr. Henderson, the intention of the program as expressed by the design solution is working well. Any visit to the school while it is in session reveals its stunning success as a social and spatial entity.

Aside from the question of the







design's relation to the program, questions remain regarding the desirability of the megastructure model, the success of the form in terms of image, and the building as a determinant of town-and-gown relations.

From a psychological viewpoint, the most obvious drawback of a megastructure is the concentration of all activities indoors. Knight Campus overcomes this problem to a large extent. Because of the variety of spaces and their differentiation from large-open to small-closed, students and faculty comment that they hardly notice they're spending most of the day indoors. Large quantities of natural light permeate the interior through skylights over the central court and the library—these being 40 ft. deep, 20 ft. in diameter. (The main mistake is in having tinted the glass blue, so that it gives off an artificial cast.) Additional natural light suffuses horizontally through the building because of generous fenestration and glazed partitions separating the classrooms and labs. Furthermore the panoramic views of the college's surrounding 204 acres alleviate a sense of confinement.

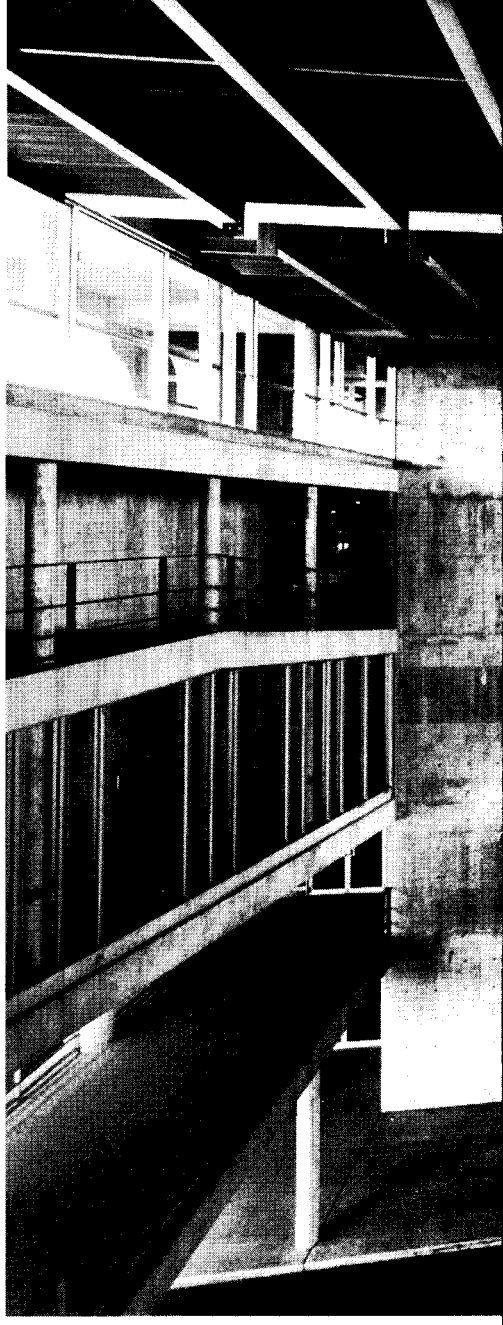
On the other hand, a total environmental control system, maintaining a steady indoor temperature year round, would seem to neutralize these advantages, particularly since the windows are not operable.

With regard to energy expenditure the electrically driven heating and cooling system is incontestably exorbitant at the outset, despite the fact that electrically driven chillers take excess heat from interior spaces to create hot water for heat elsewhere. And although some of the building's exhaust air is recycled for ventilation, it would appear that elaborate ventilation systems are really only needed for the laboratories. Other needed ventilation could well have come by way of windows. Since the mechanical system is mounted and exposed within the building proper, the "background" noise level reaches dramatic heights, and most serious complaints about the building derive from this din.

As it turns out, going outdoors is still the only way to experience a different environment thermally and acoustically. There are outdoor terraces, but at some level from the ground —sort of like ship decks. Actual accessibility to the wooded knolls requires exit down the gangplank ramp.

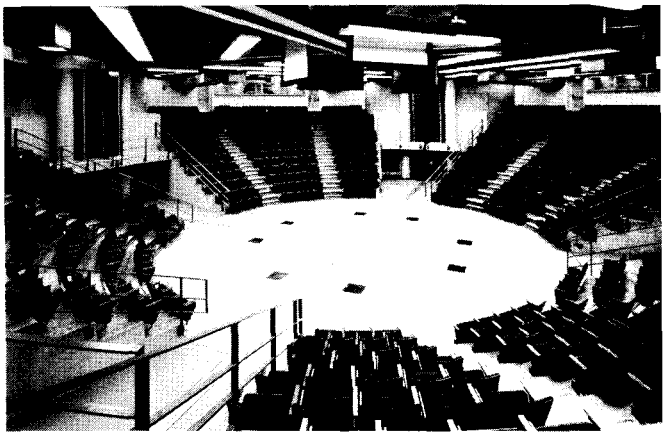
An unconscious extension of the ship analogy to the building's formal details aptly applies, since the building seems more like a gigantic land-locked vessel than an honest-to-God megastructure. (At least more so than the linear add-on kind.) Wide corridors or low-ceilinged lounges look out onto the countryside through expansive glazing, much like the passenger ships of the Twenties that Le Corbusier wrote about.

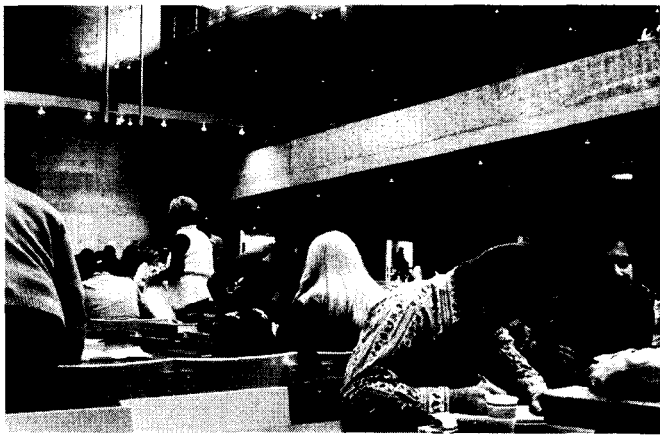
In fact thoughts of Corbu come awfully easily with this building. His common vocabulary is there; the *beton brut* (poured-in-place concrete)

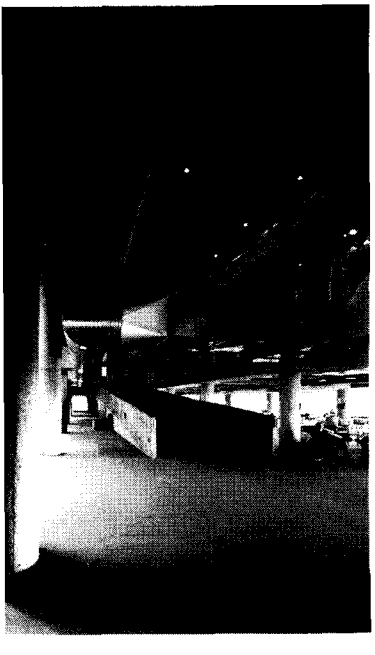


Ten-foot deep beams, (that were poured 55 feet in the air) span 72 feet to carry the classroom floor above the commons, and cantilever over exterior ramps (above). The beams, plus rough concrete, ramps and rounded elongated windows recall Le Corbusier, but the effect is marred by badly placed mullions and hand rails. A 190-foot-long entrance ramp leads from the parking lot at one end of the building (below) to the second floor where the bookstore and supply shop are located (above, right). Interior ramps give access to the four levels embracing the commons (opposite, bottom). Glass partitions, allowing visibility, acoustically separate faculty and administration offices from student traffic on ramps. Exposed mechanical equipment is hung within the building, and painted with chrome aluminum or bright yellow. Rigging and catwalks are also exposed, painted red.

An arena stage theater (below) has been incorporated into the cylindrical wing of the megastructure. Double-coiled wood screens roll on tracks and can divide the 1000-seat theater into four quadrants for various uses. This wing, connected to the classroom building by roof and a glass-enclosed bridge, can operate as a community center at night without the rest of the building being open. Poured concrete beams, ten feet deep, span 88 feet over the auditorium in a cross-arrangement to carry the library above.







structure, ramps, piloti, the *brise-soleil* fenestration on the southern exposure, the silo-like utility and rest room cores at the periphery of the commons.

Specific references come fast and thick: The closely spaced concrete mullions of La Tourette and the Carpenter Center for Visual Arts, the ramp/void/*round* form relation at entry of the Carpenter Center, the concrete entrance canopy recalling the brow of Notre-Dame-du-Haut at Ronchamp, or the Palace of Assembly at Chandigarh, the rounded windows of that city's Courts of Justice.

When former Perkins & Will project designer Robert Reilly (who conceived and designed most of the building) was asked about these direct allusions, his answer was straightforward. He screamed, clutched his heart, and confessed, "There it is, and I have to be prepared to live with it." But the interior space and plan "were not out of the book," Reilly felt. (Even so, don't the central court and ramps remind one a trifle of the Museum of Western Art in Tokyo, or a touch of the Museum at Ahmedabad?)

While the relation of some of the most Corbusian motifs lacks his complexity on a formal level, one hesitates to call it a pastiche or crib sheet. Watered down Corbu, maybe? Despite any blatant predilections for his sculptural forms of the Fifties and Sixties, Knight Campus has to be judged on the kind of space it creates, its workability and the appropriateness of its formal qualities. Taken not as an architectural artifact but as a building that can provide a unique kind of space, contained in a specific kind of envelope, for certain activities and certain persons, it works. The students and faculty have responded enthusiastically to the building; the desired mix is happening. The significance of aggressive, unpretentious but still formal design elements conveys the desired image. Trustees were afraid the building would look like a factory, too technical a tableau for the benefactors who had dreams of ivy-covered halls. And true enough, the exposed mechanicals—despite vivid colors—visible workshops and labs would reinforce the factory association were it not for the sculptural details. Forms that were hard for the lay public

The three-level library (above) receives natural light through a 40-foot-deep, 20-foot-diameter skylight, as well as through exterior fenestration. A fourth level (top photo) now contains classrooms, but can be converted into another level for the 100,000-volume library's future expansion. The school plans to fit all study carrels with audio-visual equipment. Fenestration and low horizontal lounges (above, opposite) recall the enclosed decks of large passenger ships. Much of the furnishing is relatively expensive, including the "Ball" and "Gyro" chairs designed by Eero Aarnio. But the school reports there has been little wear by students in the first year of operation. A corridor-like space on the top level of classrooms (right) is empty of furniture so that students can sprawl out on the floor. Inoperable windows are double glazed and set in anodized aluminum frames. Since most of the classrooms on the top floor occupy the interior, glass partitions set in metal frames have been used to create an open feeling (far right). The metal walls and ceiling have been painted bright colors.

to accept 15 years ago now become fascinating.

Image aside, there exists still another issue, the town-gown relations. Current thinking would find it a little strange that 3,000 students would come together under this hilltop roof to learn about going out into the "real world" in two years' time. The school could point to its work-study program with nearby hospitals, department stores and the like. But the school can't avoid its physical and symbolic isolation from the town, buffered as it is by all those trees.

Because educational *zeitgeist* is subject to vicissitudes (like anything else), it is no surprise that recent findings suggest that the physical form has little effect on town-gown tensions. As Robert Carroll, Hayden May and Samuel Noe, Jr., point out in *University-Community Tension and Urban Campus Form,* "The process of physical change and its rate are far more critical." Ironically the building, a creature of the mid-Sixties *zeitgeist,* almost an anachronism by the time of its completion, finds itself not only responding well to current needs but perhaps to the newest thinking.

It should be remembered that the needs of the Rhode Island Junior College system—both functional and symbolic—are specifically aligned with a certain educational program. Were this "megastructure," emphasizing centrality, isolation and image, used indiscriminately elsewhere, it would be, at worst, a "repressive" response to disorder and dissent and at best, it would be an architectural fad defying the fate that events (and education) impose.

—SUZANNE STEPHENS

FACTS AND FIGURES

Knight Campus, Rhode Island Junior College, Warwick, Rhode Island. Architects: Perkins & Will Partnership, New York; Howard Juster, A.I.A. (from design inception to construction); Robinson, Green & Beretta, Providence, R.I.; and Harkness & Geddes, Providence. Engineers: (structural) Wiesenfeld & Leon; (electrical and mechanical) Segner & Dalton; Landscape Architect: Carrier, Anderson & Geda, Hartford, Conn. Interior Designer: Joan Hilliers and Co., Inc. Contractors: (general) Dimeo Construction Co., Providence; (electrical) Crawford Electric Co.; (mechanical) Wallen H. Alsop. Building area: 380,000 sq. ft. Building cost: $10,701,000 (excluding sitework, furnishings, fees).

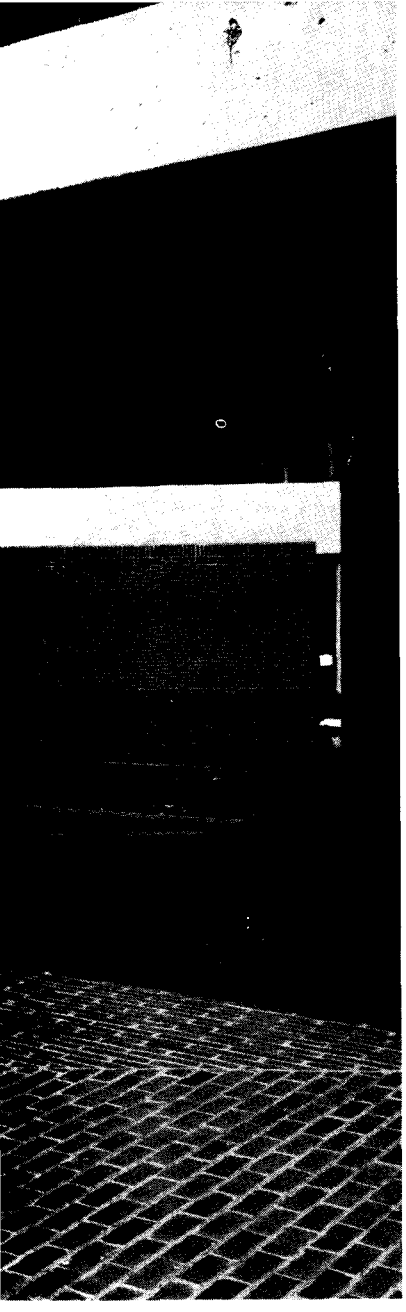
PHOTOGRAPHS: Nathaniel Lieberman, except pp. 44 (bottom), 45 (bottom right) Robert Reilly.

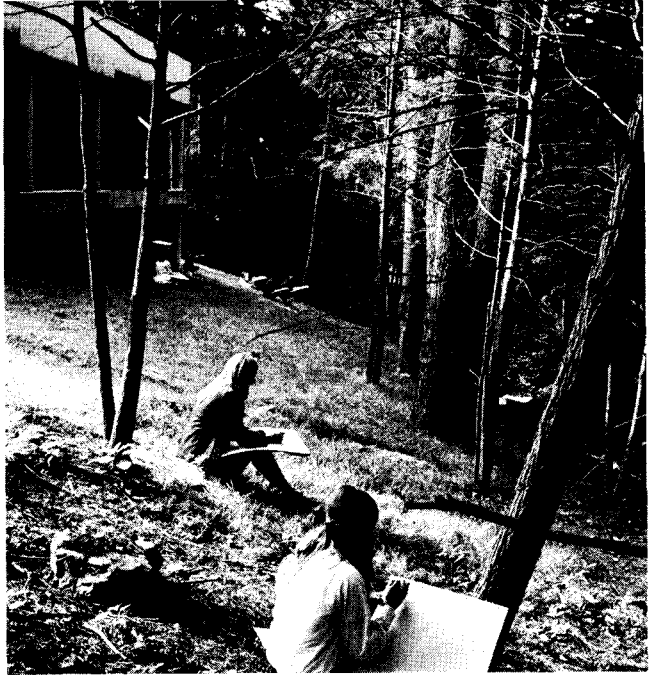
ROSEMARY AND TIME

Imponderables become instructive elements of this well-sited Connecticut school

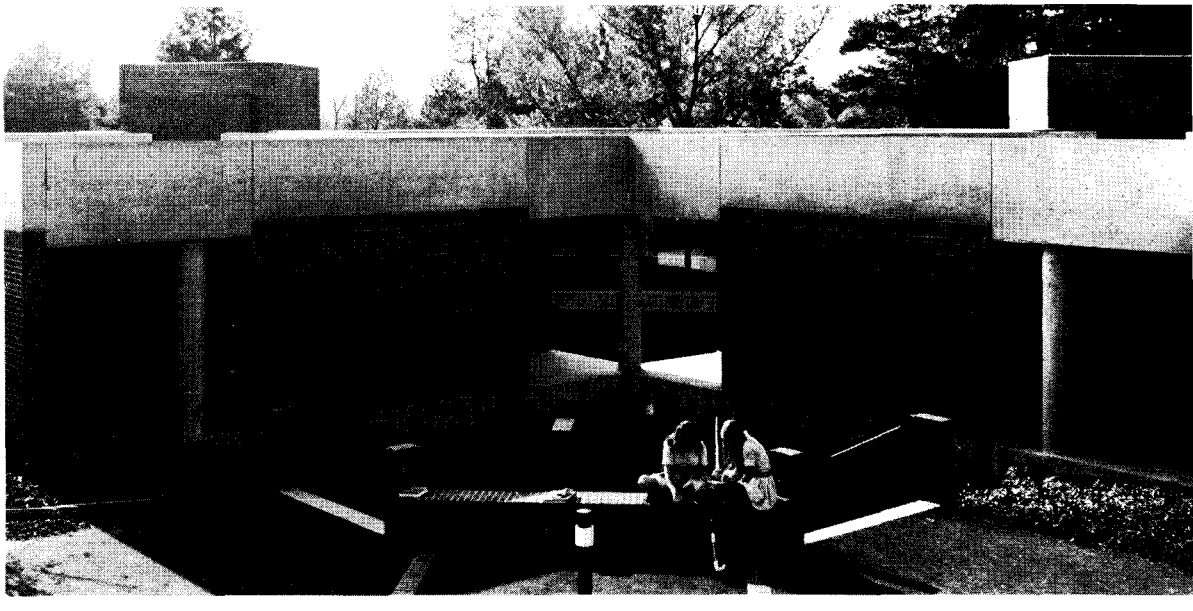
The delight was almost boyish. Architect James Stewart Polshek loped around the New England contours, his Rosemary Hall carefully folded into them. Already, the contours were beginning to reclaim the buildings; ivy had begun to grow. He pointed out every tree that had died, every place one was needed—"to break the formality"—and how fast the white pines would grow. He'd said at the very beginning of the project that someday the woods would come out and eat up the buildings, devour them. He was saying as much again: "The longer you wait the better it gets. In a couple of years it's going to be spectacular—all encrusted in wood. It's one of the nicest commissions I ever got. We did not want to build a monument, we didn't want something that one prays in front of, or throws flower petals on, but we wanted the buildings eventually to disappear entirely—which they will do."

The formal, vehicular approach to Rosemary Hall is a drive curving up and around several levels of girl's playing fields. For a long time, the buildings remain invisible. Then, nearing the high area, simple roof lines of concrete fascia appear, barely brimming the fields. Nothing intrudes above the tree line, nothing's in profile except one building—the gym, he explains. From this approach, one discovers the buildings of the academic complex cascading 50 feet down a hillside, forming a little amphitheater (above), used for outdoor classes, at the base





The academic complex of the Rosemary Hall campus cascades down from the administration building, viewed from under the headmistress's office towards the library (opposite), and filters into the surrounding woods (left). It culminates (below) in the crux of the classroom building.



of the undulating central court.

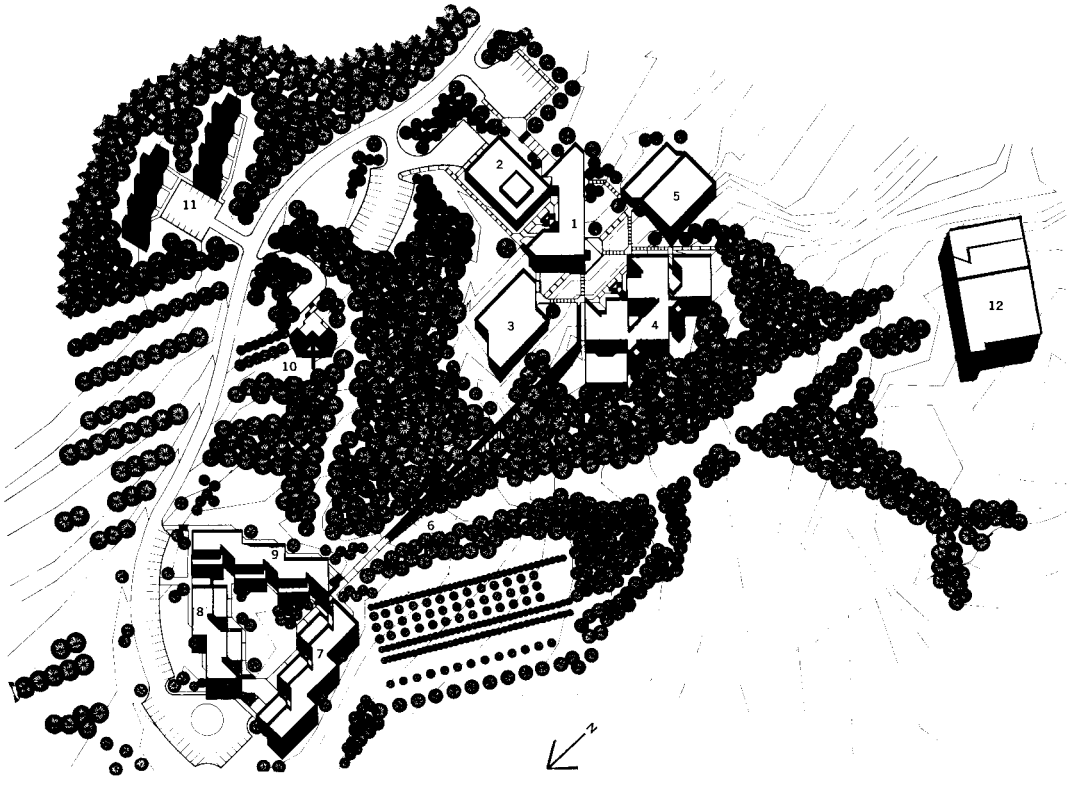
The passionate humility of his design is evident in its adherence to the hillside contours (minimum blasting was done) and the rigorous geometry of classroom buildings and dormitories.

"Perhaps by coincidence," Mr. Polshek says, "most buildings I have designed bear a relationship, in their geometry, to the human body. We are essentially symmetrical if you cut us back to front, but if you cut us side to side, we are totally asymmetrical. If you look at the plans of the academic buildings, you will see that one axis is quite formal. The other is very informal. It is symmetrical along a line drawn from the headmistress's office down to the classroom building. If you flip the sides, they are essentially the same. If you draw a line from the gymnasium across to the library and flip those sides over, they are quite different. Designing a complex of buildings this way leads to the creation of many accidents, *planned* accidents. Courtyards for instance, all of which are very different; the teachers' conference rooms —a very serious attempt to vary the treatment of these spaces, avoiding a sense of sameness and predictability."

In plan, the geometry may seem contrived. In fact, Mr. Polshek now feels he might have been a little less formal. But the surprises you come across—the odd shaped rooms and courts, a little white lion or cupid on an outside brick wall, gorgeous wooden carvings and furniture from the old school buildings—all create a quiet, inviting intrigue, one manifesting humility towards the contours of school tradition with a sentiment as strong as that for these old hills.

Mr. Polshek recalls, "I became less concerned about establishing an artistic and historical continuity between each job I did," showing an increasing concern for himself—and architects in general—as both a servant of and spokesman for client needs, enabling a client to define more precisely what those needs are, perhaps enabling a full understanding of what "needs" are.

This means being a social servant—making social definitions and social decisions—as well as being an able arbiter between conflicts of program, between the design alternatives which a program may suggest. His remarks to Rosemary Hall's 1972 graduating class carried this concern further as he encouraged the girls to redefine their roles: "The degree to which we accept the role constraints imposed on us from outside has created a kind of behavioral prison that inhibits our ability to become a creative force in bringing about positive change." In this, it is important to stress that he has not called for an end to constraints, but a scrutiny of where constraints upon us should really lay. In his own field, architecture, Mr. Polshek seems to be saying that the architect is increasingly *constrained* by circumstance, by conditions, by the tenor of our



The academic area is triangulated by paths in the undulating central courtyard (above), a geometry which relates to that of the dormitories (site plan). The library furniture (opposite, top left), designed by Polshek, including the card catalogue, is much appreciated, especially the fiberglass tables which are great for putting feet on. The dining room (opposite, top right) is ingratiating in the best way; a clerestory light; brightly colored old tables and new carpets; up and down, quiet and bright lights by Polshek; indoor-outdoor eating. The bridge (right) "triangulates" off from the classroom building towards the dorms. And the interiors of the administration building are a lovely combination of modern straightforwardness and accumulated grandeur (far right).

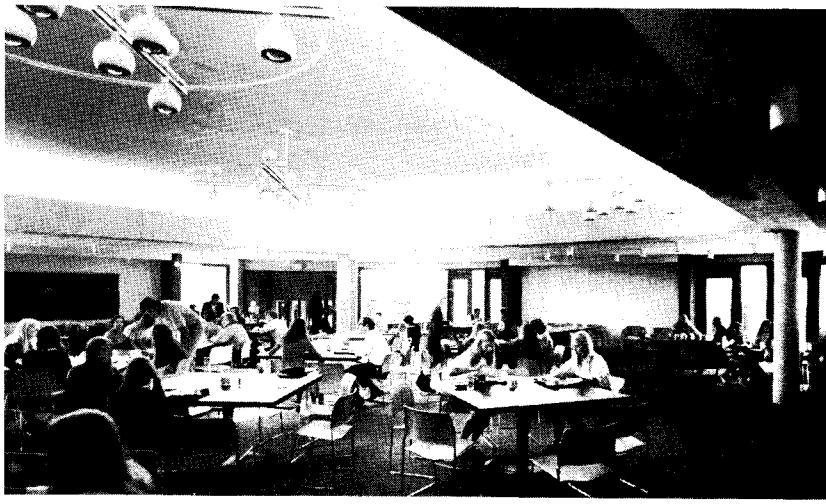
SITE PLAN KEY
1 ADMINISTRATION
2 DINING
3 LIBRARY
4 CLASSROOMS
5 GYM
6 BRIDGE
7 DORM 1
8 DORM 2
9 DORM 3
10 HEADMISTRESS'S HOUSE
11 FACULTY HOUSING
12 MELLON ARTS CENTER

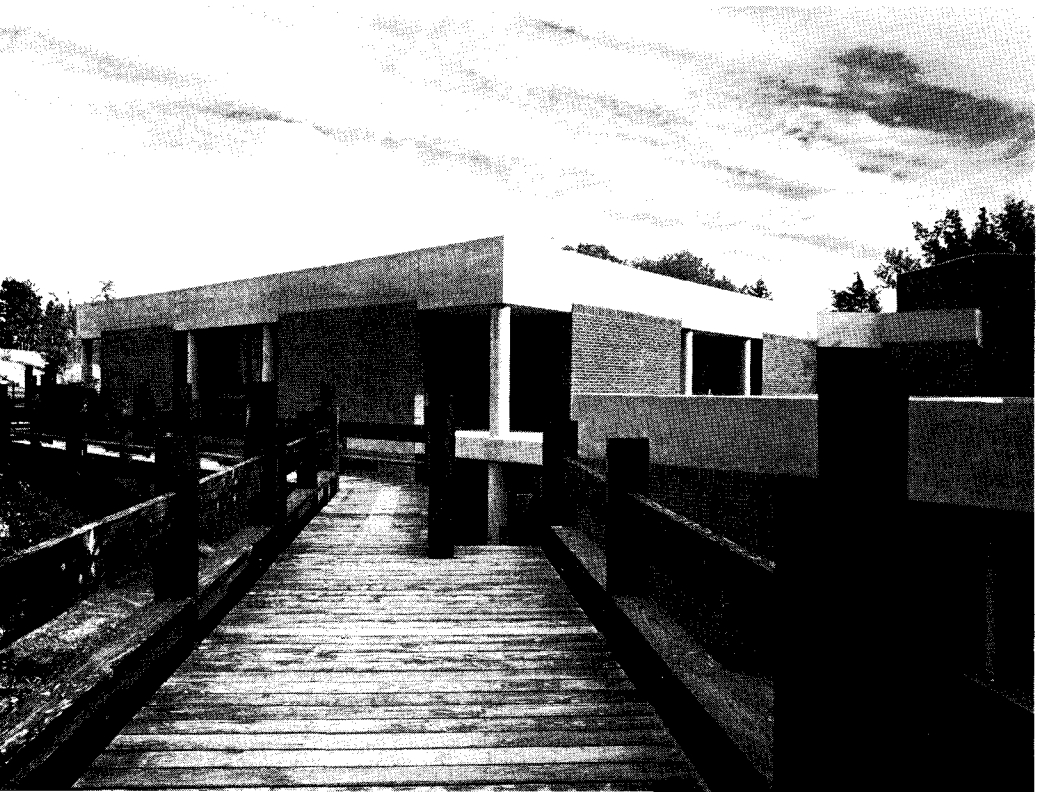
times, to adopt a new set of constraints, including—as he insists—the role of the architect as a social servant, as an arbiter, as one who can move beyond the concern for superficial consistency of style to a more intrinsic source of style.

Rosemary Hall was founded in 1890 at Rosemary Farm, owned by Judge William Choate, in Wallingford, Connecticut. It merged with Choate in 1970. The merger is referred to as "coordinate education" (to deter any possible alumni fears of coeducation, one presumes). And it was part of Mr. Polshek's job to sustain a sense of separate identity for Rosemary Hall. He was involved in a social and financial experiment, with both schools, the role of secondary, doubts, and with trustees growing and changing in their attitudes about education, boarding schools, the role of secondary, independent education in the U.S.—all relative to a "ruling class." An amalgamation like this, he told himself, might turn out to "be an important though subtle social factor."

Regarding the past, Polshek fondly describes the old Greenwich campus, where Rosemary Hall moved in 1900, a decade after its founding. He and his wife, then working in his office, attended school there for three weeks in 1969. "Some of the buildings were funny, happy, little ones; others were kind of elegant; some were very delicate; one looked like Hansel and Gretel. The whole campus was extremely charming with its little courtyards, the little objets d'arts, the variety, and chance for privacy." It had no stiffness, marvelous old trees, a lot of hidden places, a classroom students always entered by window, courtyards, medieval fake machicolations, Spanish grillwork and tiles. It was a melange of eclecticism, but not corny he recalls; and was built at a time when the "ruling class" could still afford "to school" (an old guard verb) among the niceties of life. "There really was a little nostalgia for it," Mr. Polshek continued. "It wasn't tacky, and it had quality."

He feels the principal generator of his design was "the translation of the spirit of the total school, which had been in one place for a very long time, to a new place with a new set of circumstances, without losing the spirit of the old, but at the same time not compromising the open-endedness of changing programs and a new, progressive spirit." He also feels the translation was successful in creating "something that was not sentimental, but possessed a sufficient romantic aspect to legitimatize itself in the eyes of the client. My responsibility was to help clarify potentially devisive issues between Rosemary and Choate—overlapping claims in the use of physical space, walking distances to classes—and to help interpret, without being maudlin about it, the possibility of maintaining their identities. At Rosemary, especially, he was challenged "to transmit the general spirit of that old assemblage of buildings, which was something of an ad hoc thing, to something planned in one fell swoop. Naturally, there were a lot of other things, such as rooms that work, buildings that were relaxed with the site and each other, ones you could walk through, not just around. And most important of





all, something which may be peculiar to a lot of buildings that I do—whenever it's possible—to see the building as a means to something else, not as just an end. Although in this case I had a client who clearly saw buildings as ends, as set pieces that meant immortality."

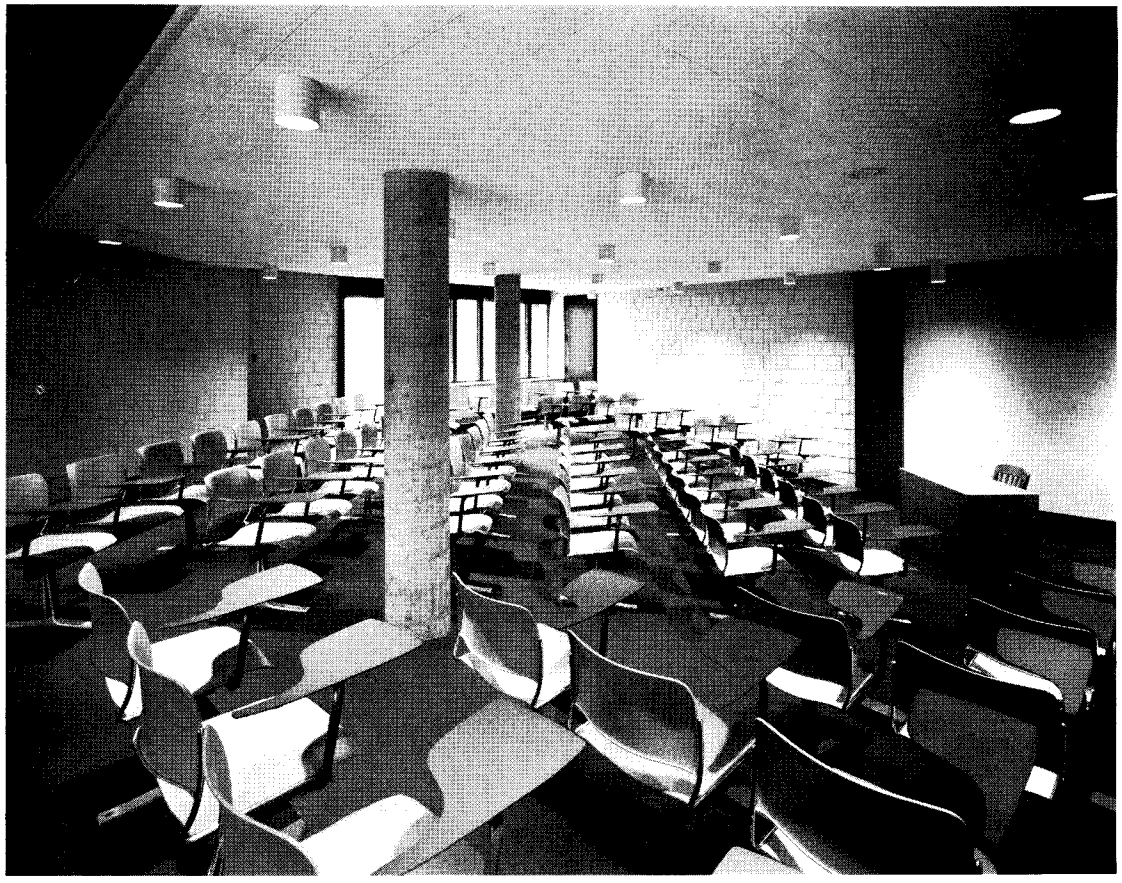
Mr. Polshek's sense of the site is similar, "I recognized the site as the single most important design determinant, because it was there first and will be there long after." Sure enough, in walking about Rosemary, there is the feeling that the buildings are a means to something else, including a sense of site which might not have been apparent, or compelling, had not these buildings been done.

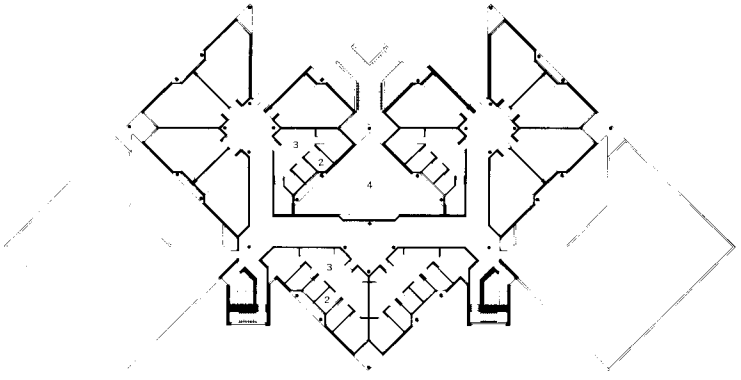
This sense of site, of tradition, contrasts with the assertive character of I.M. Pei's nearby arts center. According to the master plan combining Choate and Rosemary, Mr. Pei's building was to be a kind of gateway between them. This is one constraint Mr. Polshek deviated from, putting his buildings on top of the hill (now the high area of the approach road), instead of along the diagonal through the art center, as decreed by the master plan.

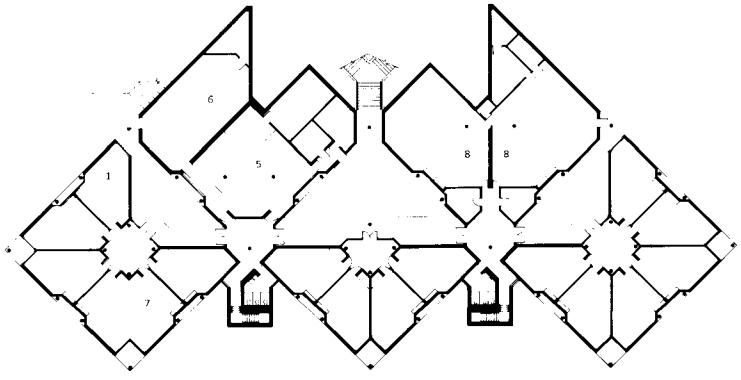
As a result of placing his buildings on the hillside, the preferred route to them from Choate is a casual short cut which weaves around the hospital, a pond and through some woods—not exactly the triumphal procession which would have resulted from the dramatic 45-degree cut, but much preferred even though there is a cafe in the arts center that was conceived as meeting ground between schools. The headmistress heavily hinted that the cafe is a problem, students shy away from it, and would love to have the new Rosemary library converted into the "meeting ground" they were supposed to have had in the first place.

In the gentle landscape, with a scattering of brick buildings, the arts center is a high-handed, if somewhat heady experience. After passing it on approaching the schools, one is aware that the campus is bisected by a high speed thoroughfare, and that any "gateway" should have related to bridging it.

Mr. Polshek, who once worked at the Pei office, has a high regard for the work, and didn't altogether flout the arts center: "I

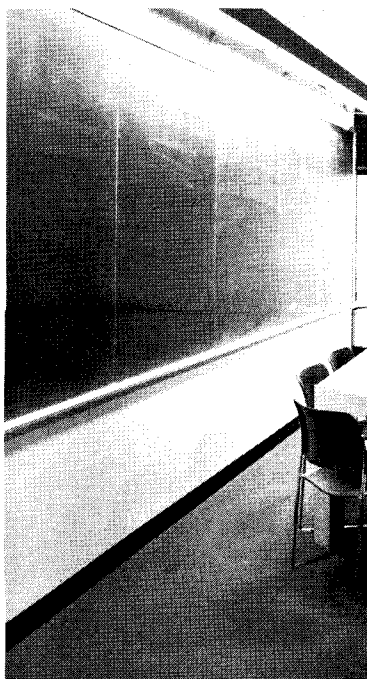




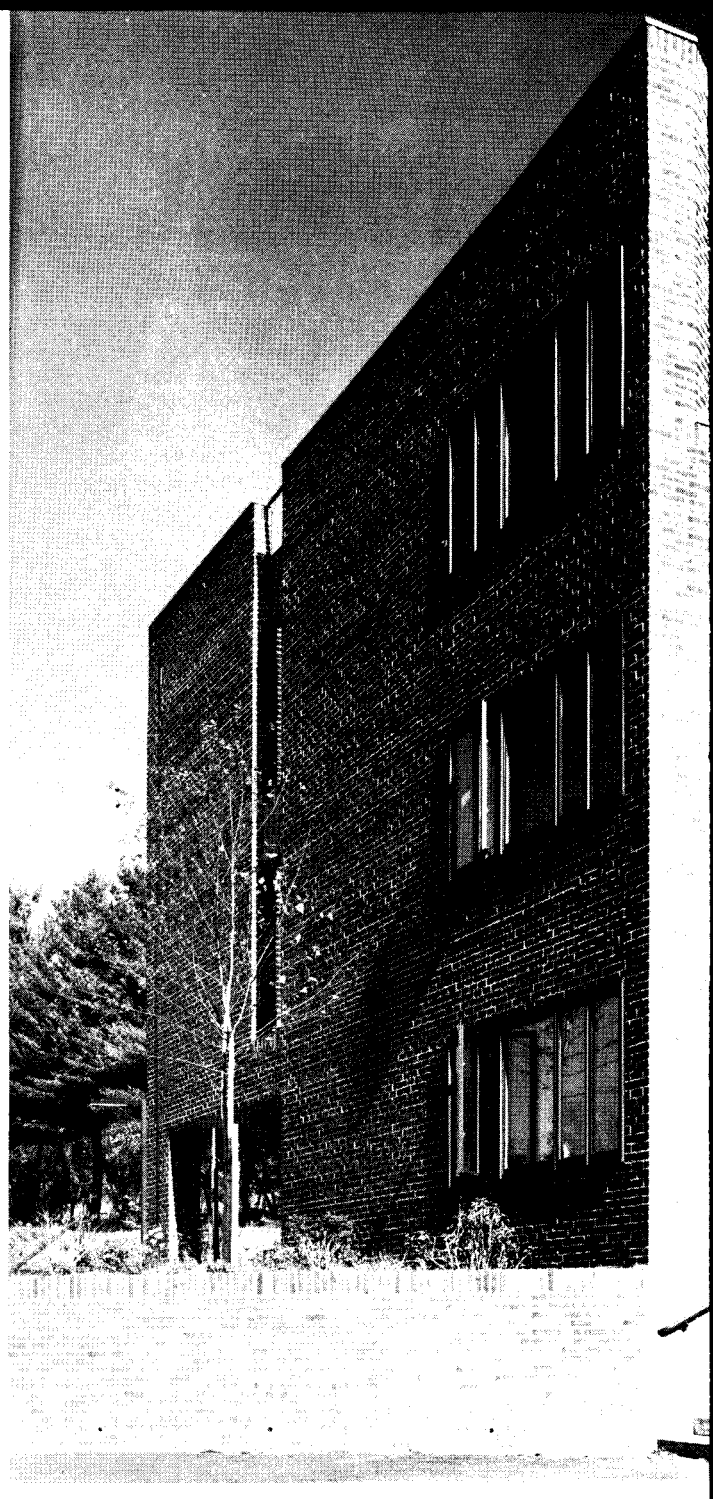


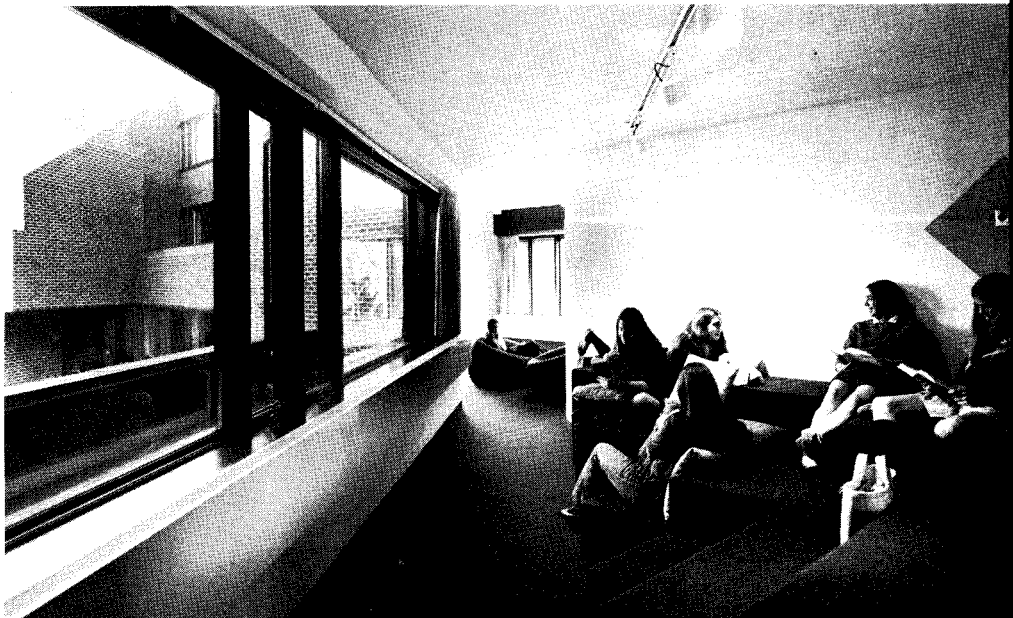
CLASSROOM BUILDING PLAN KEY
TOP LEVEL
1 CLASSROOM
2 TEACHER'S CONFERENCE ROOM
3 WAITING AND GROUP CONFERENCE
4 COURT
GROUND LEVEL
5 LECTURE HALL
6 CHAPEL
7 LANGUAGE LABORATORY
8 LABORATORY

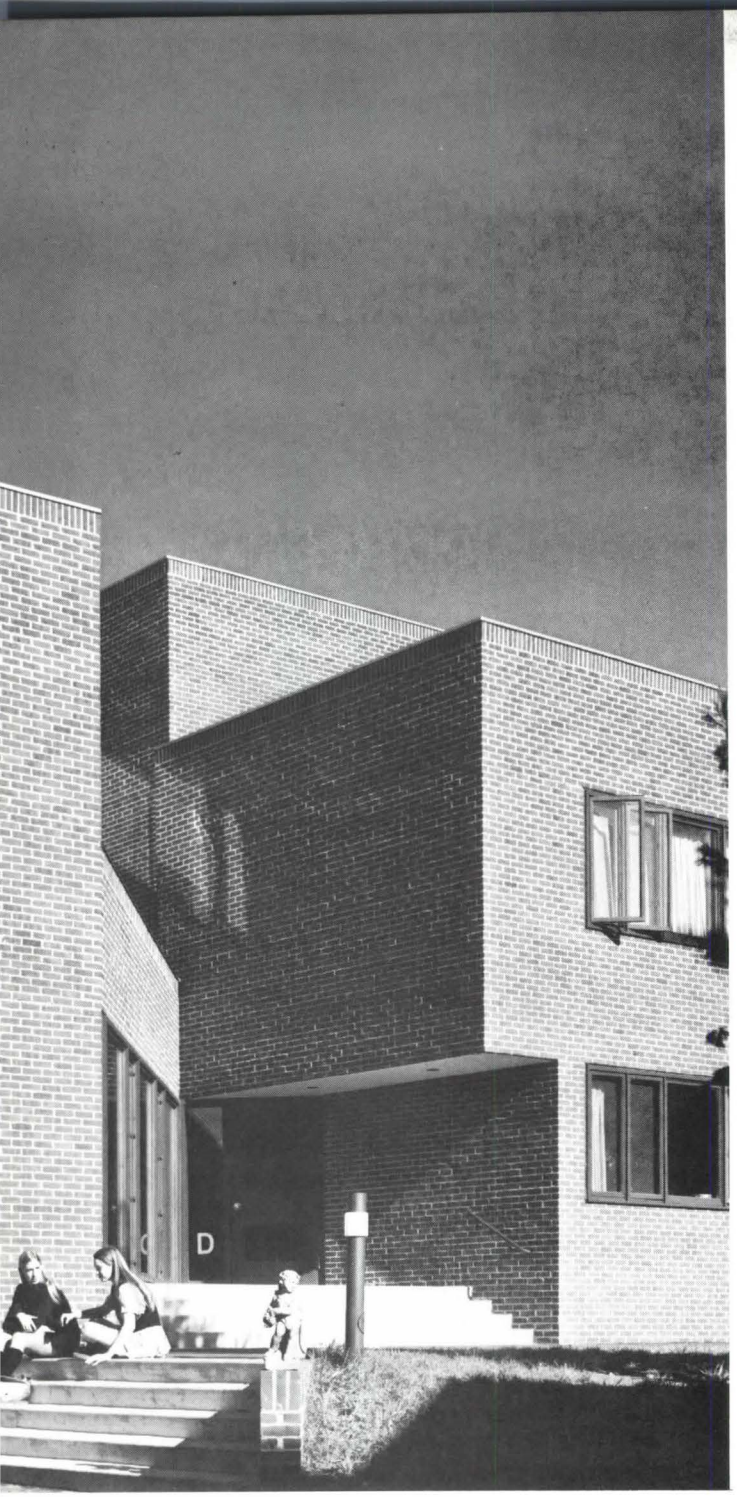
The lecture hall (above) is brilliant—suavely inclined and stunning in color with bright red seats and blue carpet. Polshek says the students' contributions to the school each year include planting which he hopes will fill the now gravel-covered courtyards of the classroom building (opposite, top). He designed the modular triangular tables for classrooms (below) which well serve the flexibility of the pie-shaped rooms (especially the controversiality and currency of the political science curriculum). The gym (opposite, right) is bright and airy because of the open gallery.

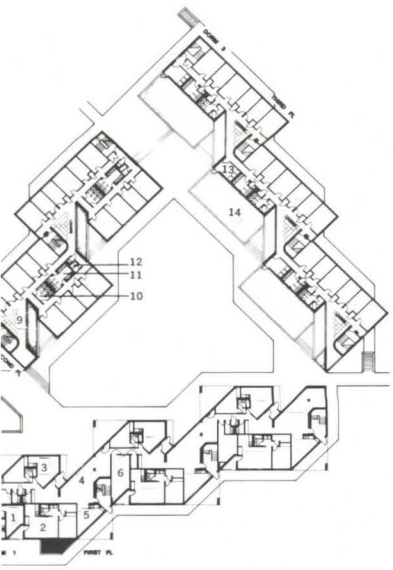


The bridge (below), piece de resistance of the campus, approaches the narrow entrance to the dorm plaza. The dorms (center) have bedroom furniture (bottom, left) easily turned into tunnels, sleeping bag hideouts; and upstairs lounges (bottom, center), with stepped "layouts," by Polshek, reiterating aspects of the whole campus plan. Dorm plans (bottom, right) are well conceived.









FIRST FLOOR
1 STORAGE
2 FACULTY APARTMENT
3 HOUSE ADVISOR'S APARTMENT
4 LIVING ROOM
5 STUDENT KITCHEN
6 MECHANICAL EQUIPMENT
SECOND FLOOR
7 DOUBLE
8 SINGLE
9 LOUNGE
10 SHOWERS
11 TOILETS
12 TUB ROOM
THIRD FLOOR
13 LAUNDRY
14 SUN DECK

consciously adopted, as general geometric guidelines, a kind of tone that would be at ease with Pei's building. The general geometry which is derived on a 45-degree angle, with respect to pedestrian movement also relates to the movements in this building. And we used exposed concrete on the academic complex which is closest to the Pei building."

Mr. Polshek points out, however, that he didn't put any effort or money into fancy concrete, just to be in keeping with the arts center, although he found its formwork so attractive that he used it to panel the walls of Rosemary chapel.

Next in importance to making the Rosemary buildings unobtrusive was providing variety of experience. Speaking of the classroom building, he gestured, "Every place you look you get views into trees or views into courtyards. Despite its overall organizational symmetry, which is really quite formal, formality is not the feeling one gets at all. Actually, it's extremely random.

In line with this is the separation of the dormitories from the academic complex, providing "a whole other world", as the headmistress describes the dorms, giving the girls a sense of independence if only by way of a trip over the bridge.

The people, the ivy, the forest clambering over the complex—all end up seeming more important than the buildings. "I don't want the building to fall down," Mr. Polshek cracks, "but it *does* mean that that which it contains is the reason why the building should be there." With these attitudes, and his nonsubmissive geometry, he has created intimate, idiosyncratic spaces which utterly defy institutionality, or institutionalized critical response. His view is neither non nor anti-architectural. He has served both the client and the contours as he found them, weaving into the complex a variety of seams between people, buildings and nature. He strikes balances among them rather than allowing or forcing any one element to dominate.

Both students and teachers were specific in their ease with Mr. Polshek's not-so-random randomness. The not-so-random reads out, as one would expect, in the form of impeccably detailed columns and slabs; quite literally, they caress each other in the academic complex. The gymnasium and dormitories are light, cheerful. Bright colors, especially in the dorms, carry over into the dining and lecture halls. The administration building is demure, suitably so. The teachers heartily indulge their private conference rooms, arranged in clusters by discipline and as the headmistress puts it, there is a sense of being in "a community of scholars."

The decision to separate the dormitories from the academic complex seems valid, even natural, partially because both groupings are derived from Mr. Polshek's "same set of coordinates." The dorms relate to the triangular shapes and movement patterns of the academic area and are impressively angular in form, but, compared to the academic buildings' exteriors, there is something nicely indeterminate in their effect. This may be a very personal reaction or attributable to some failings Mr. Polshek sees in the dormitory detailing, especially the windows. One can see that a switch to brick cladding follows from the decision to separate the two functions, but the exposed structure of the academic area is so handsome it was obviously hard to equal it. This, however, is small fault to find in a complex, on-budget job.

Rosemary Hall is a memorable example of how simplicity can redeem complexity—of how the constraints Mr. Polshek alluded to can be used to free up a building for richer participation by those learning in it, indeed *from* it. Appropriately enough, these are the emotions which loom large—large in proportion to the way these buildings deliberately do not.—JANET BLOOM

FACTS AND FIGURES

Rosemary Hall, Wallingford, Connecticut. Architect: James Stewart Polshek & Assoc. Owner: Rosemary Hall/The Choate School. Associate-in-Charge: Dimitri Linard. Project Manager: Michael Herlands. Engineers: Pfisterer, Tor & Assoc. (structural); Cosentini Assoc. (mechanical and electrical). Landscape Architect: Clarke & Rapuano, Inc. Interior Designer: James Stewart Polshek & Assoc. Contractors: George B.H. Macomber Construction Co. (general); Buckingham Routh (mechanical); M.B. Foster (electrical). Building Area square feet: 130,000. Land and Site Development cost: $652,600. Construction Cost: $4,499,700. Furnishing and Equipment Cost: $335,000.
PHOTOGRAPHS: Nathaniel Lieberman.

SENSUOUS SURFACES

Glossy materials and geometric forms dramatize a new headquarters for a savings bank.

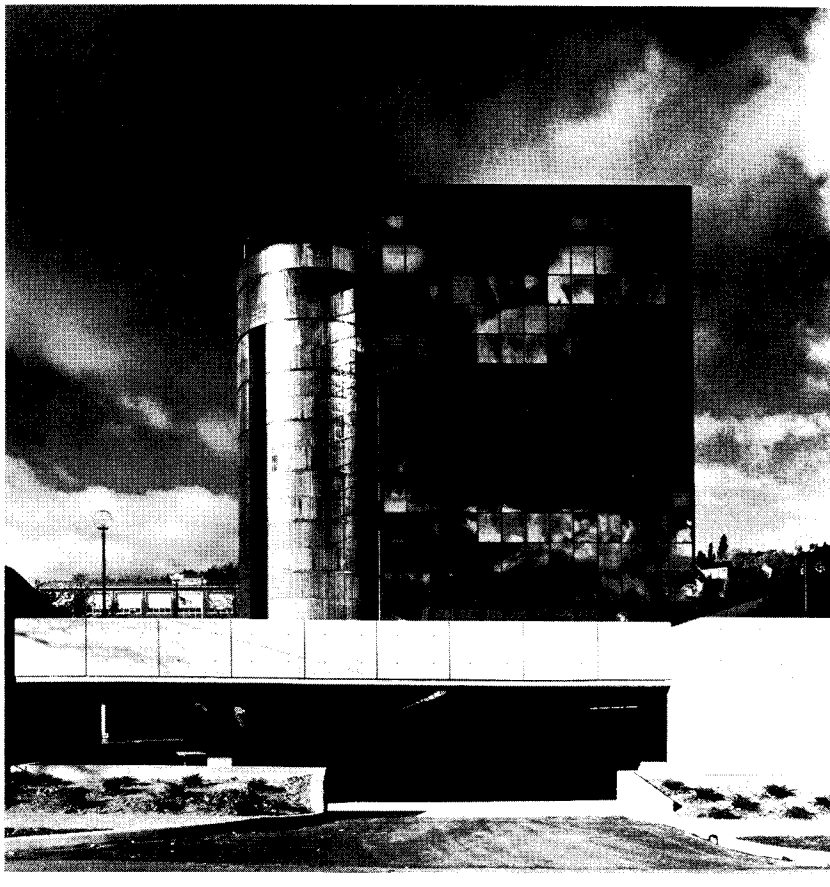
A rather striking apparition has appeared in an isolated setting in upper Michigan. Recalling in its formal qualities and imagery both the grain silos of the Midwest as well as recent Japanese architecture (e.g. Kenzo Tange's Shizuoka Newspaper Co.), the building will be the home office for Detroit & Northern Savings & Loan Association in Hancock, Michigan.

The structure is simply and subtly comprised of a 65-foot square cube for offices tautly wrapped in gold-tinted reflective glass, and a 40-foot diameter service elevator/lobby tower, sheathed in copper-bonded stainless steel. The bank's eight stories (118-foot high) guarantee its somewhat dubious achievement of being the tallest building in those parts.

But there are reasons for its size. The once prosperous Keweenaw Peninsula in northern Michigan has now fallen into depressed times, with only desultory iron, lumbering and copper activities left. When Detroit & Northern Savings & Loan Association, the third largest savings and loan bank in the state, needed new headquarters, it decided to build in the little town of Hancock, where the firm was founded during the copper boom in 1889. Rather than building in a large city, most of them 300 miles away, the Detroit & Northern people hoped that establishing a new headquarters in Hancock might spur some economic life in this remote spot. But they wanted a landmark—no difficult task, considering the size of a town with a population of about 6,000. For their part, the townsfolk seemed intrigued with this gigantic piece of metal and glass sculpture in their back yard. Five thousand villagers turned out for the dedication, and many have returned since, some just to ride the elevators.

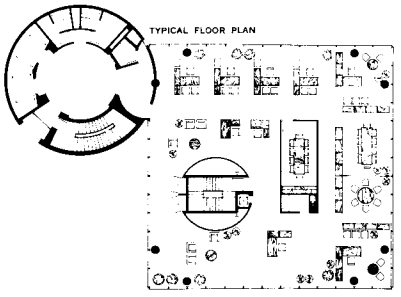
Besides the highly visible emblematic requirements, the building also had to provide a certain symbolic association with the glorious past. Thus copper, steel and wood materials were emphasized in the structure. However, since copper costs so much now, a composite of copper molecularly bonded to steel was chosen. The framing itself is steel, although the first and mezzanine floors of the office block are poured-in-place concrete—as is the parking level tucked beneath the bank's sloping site.

The structure of the office block, based on a five-foot module, was designed to permit large interior spans for the 54,600-sq. ft. building. Pairs of corner columns carry a perimeter girder which links to a north/south girder supported by an interior column. This girder in turn carries seven trusses

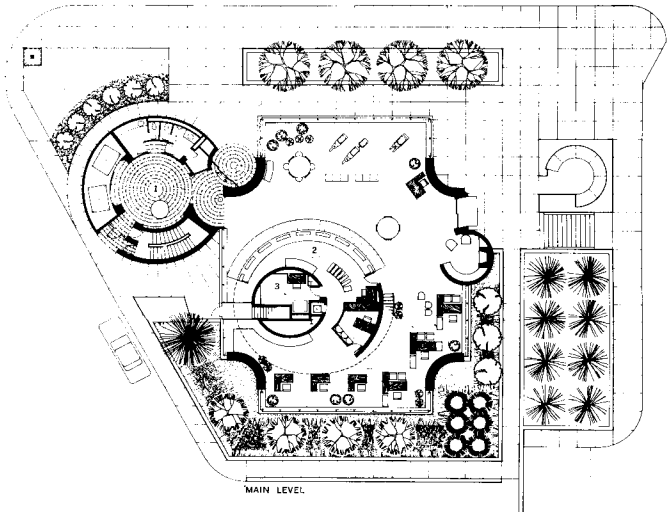


Copper molecularly bonded to stainless steel sheaths the cylindrical service core and street level columns, while gold-tinted reflective glass in a bronze anodized aluminum frame wraps tightly around the office block. The building sits on a reinforced concrete parking level that's been inserted into the 12-foot drop of the sloping site. On its roof a plaza was created, paved in native stone aggregate. Retaining and planter walls on the plaza have been sandblasted for textural effect.

Curved elements throughout the office building (above) relate visually and thematically to the form of the cylindrical tower. Thus a seating and fireplace niche is circular, as is the tellers' counter bound by spiral stairs leading to the mezzanine. Wood materials, seen in the stained oak ceiling design, were used extensively in the building, as a tribute to the region's historic lumber industry. Each of the eight levels in the lobby/elevator core contains photographic murals by regional artist Homer Mitchell (opposite). The subject matter of the murals depicts Keweenaw Peninsula's history.



1 LOBBY
2 TELLERS
3 VAULT



that span 40 feet on the east and 25 feet on the west, to support the concrete and steel deck floors. Air conditioning ducts have been placed within the three-foot-deep trusses, and the cellular steel decking accommodates electric raceways, and allows addition of electronic and communication circuits in the future.

In the cylindrical tower, the architects designed two rings of columns spaced 15 feet on center connected by diagonal braces to provide the cylinder with lateral wind-bracing. Thus, in effect, fabricated-in-place vertical trusses have been created. Rounded perimeter girders and wide flange beams comprise the rest of the framing.

While the bank is formally and structurally interesting, certain nagging inefficiencies remain. Since the building envelope uses reflective glass, 85 percent of the sun's rays are deflected, thereby reducing the size of the mechanical system needed for air-cooling the building. Nevertheless, considering the cold climate, one would expect that solar radiation could be useful for some heat in the winter, and that air conditioning in this northwestern lakeside site is the least of the office workers' problems. (The choice of reflective glass, one suspects, is, after all, primarily due to its sleek surfaces.)

In terms of space allocation, the elevator lobby core, whose size makes sense in terms of the proportion of cylinder to cube, is obviously greater than needed to serve the existing offices. The T.M.P. principal in charge of design, Maurice Allen, acknowledges the excess circulation, but points to the possibility of expansion facilitated by the separation of service core from office block. Thus, another office structure could be added onto the fenestrated section of the service core.

The building represents a costly investment for the bank. If it does succeed in restoring pride in Hancock, and spurs the lagging village economy, the expense may be well worthwhile.

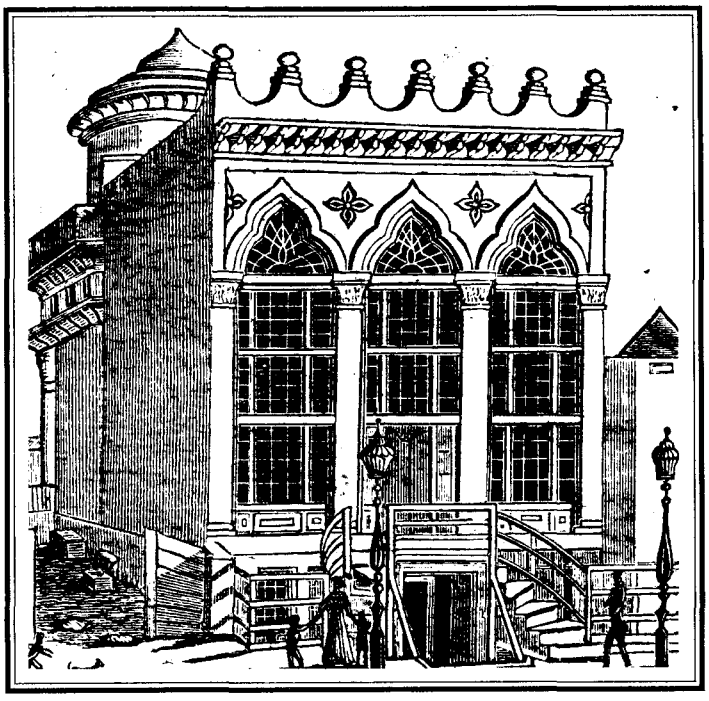
FACTS AND FIGURES

Detroit and Northern Building, Hancock, Mich.; Owner: Detroit & Northern Savings & Loan Assn. Architects: Tarapata / MacMahon / Paulsen Corp. Principal in charge of Project & Design: Maurice Allen, AIA; Associate Architect: Gordon Andringa, AIA. Engineer (structural, mechanical and electrical): T.M.P. Corp.; Landscape Architect: Prote/Krause Associates; Interior Designer: T.M.P. Consultants: Homer Mitchell (murals artist); Beverly Seger (art collection). Contractor (general): Herman Gundlach, Inc.; (electrical) M.J. Electric, Inc.; (mechanical) Industrial Piping Co. Building Area: 54,600 sq. ft., plus parking structure, 29,000 sq. ft. Construction cost: Withheld at request of owner. (For a listing of key products, see page 79.) PHOTOGRAPHS: Balthazar Korab.

EUROPEAN TRAVELERS

19th century visitors to America often made interesting and acerbic comments on its emerging architecture

BY MIREILLE T. AYOUB



Mrs. Trollope's Bazaar from Third Street.

Architecture is everyman's art. Unlike music, literature, sculpture or painting which are, by and large, private art forms meant to please a fairly select or exclusive audience, architecture is probably the only art form that directly influences the average man's life, and unfailingly attracts his immediate criticisms.

Our environment is an architectural one, and our appreciation of the art form, whether we actually recognize it as one or not, comes at an early age. Our earliest memories often hinge upon some landmark, barely remembered yet influential: a museum we were trundled through, a grandparent's home, a dark apartment which frightened us.

Architecture has become a status symbol: our wealth, social standing, past, present and future aspirations, all are mirrored in our dwellings, homes and offices.

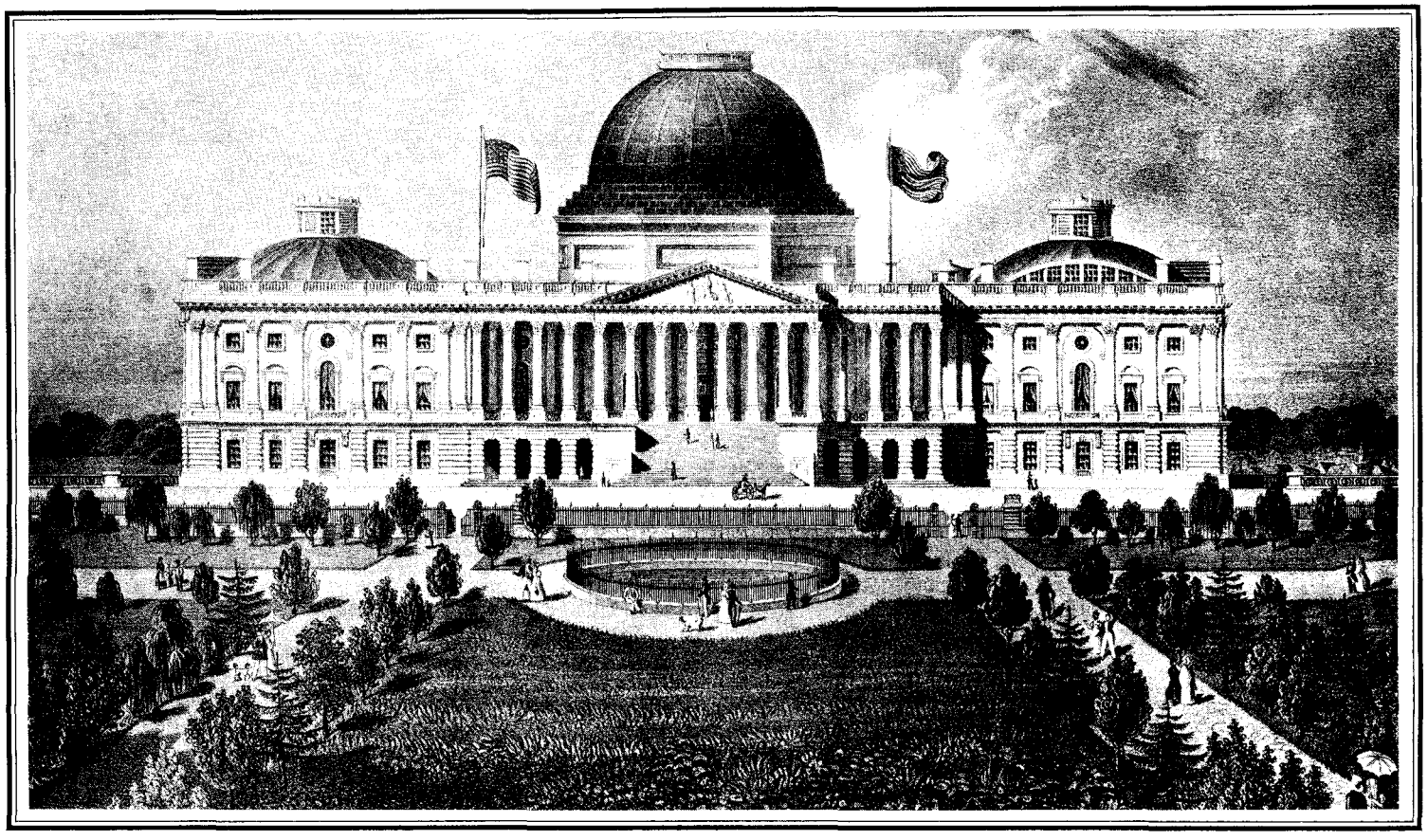
It's actually of little wonder, then, that the architectural art form has suffered so much criticism from the artistically ignorant, whether it was deserved or not.

Dr. Ayoub is an Art Historian now living in Maryland.

Professional architectural criticism is a fairly new field, dating from the turn of the century when Montgomery Schuyler wrote his first articles in the now-defunct *Herald Tribune*. Dilettante criticism is nothing new. Man is dedicated to his opinionated views, and some form of architecture has always been present, close by and therefore tempting. A person's inherent feeling of superiority, his unfailing certainty that his knowledge must be and is superior to that of his neighbor, has since the very beginning nurtured a veritable army of backseat drivers and sidewalk superintendents.

America, a land where architectural progress has in two hundred years surpassed and outclassed the rest of the world's achievement, has naturally enough drawn and mesmerized a plethora of critics from every nation. They come to inspect, compare and generally state their superiority.

This development is more than apparent in recent years. What is surprising is that it is by no means a modern phenomenon. Few countries have in their history been so plagued by cultural critics whose com-



The Eastern front of the Nation's Capitol in 1839.

ments have involved everything from foreign policy to internal politics.

Between 1836 and 1860, according to Berger's *The British Travelers in America, 1836-1860,* at least two hundred thirty British travelers came to the United States and tried to recuperate from the expense of their voyage by publishing, in their home country, diaries or commentaries of their trips. Some were rich, others poor, most middle class. They came to make their fortunes, for the most part, as tourism had not really established itself in the United States. They left, generally poorer than when they came, and often in their memoirs emphasized the unusual as opposed to the commonplace in hopes of creating a best-seller.

As such, their judgment should often be taken with a certain amount of skepticism. They were writing, after all, to sell, and often resorted to what might now be called "shock appeal" to please their readers. Yet some writers were honest, particularly after travel became widespread and popular. Still their honesty was often of a stinging variety, and their comments should not always be taken too seriously.

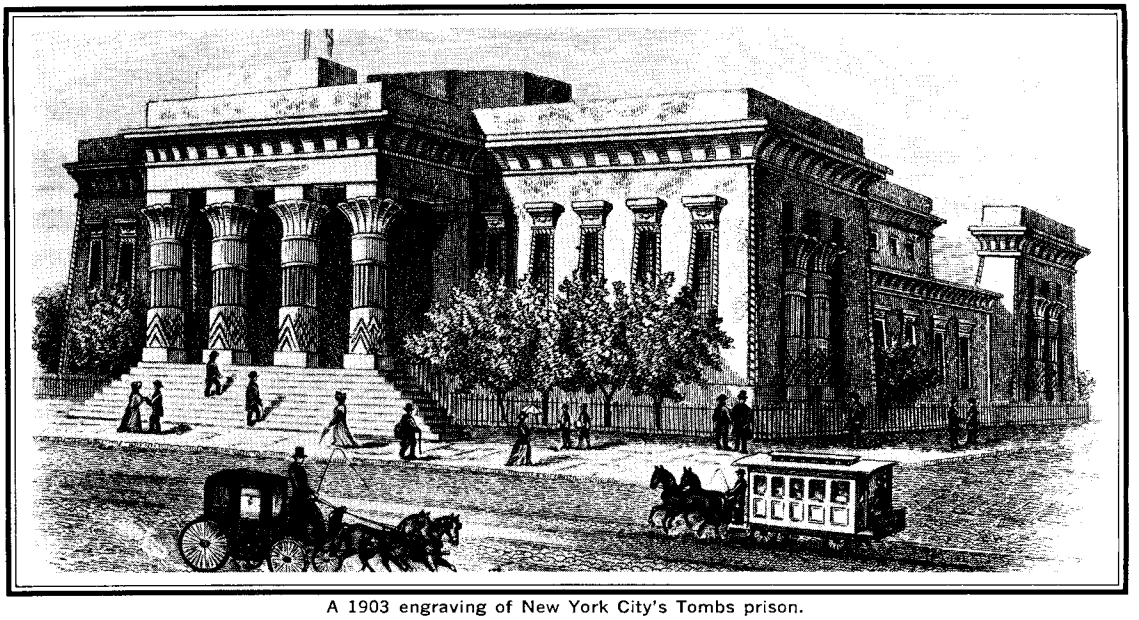
The architecture of nineteenth century America was much like the country itself: representative of a struggle both against the environment and the past; a yearning to break away from the tried and true forms of European thinking. America, it must be remembered, in the nineteenth century had almost no culture in the European sense of the word.

A British visitor with a virtually ingrained sense of custom and tradition would hardly find America civilized.

A French artist, with some fifteen centuries of artistic history and philosophy to bolster his opinion, could not find in the emerging country a Mecca for the arts, architectural or otherwise.

A French aristocrat traveling the country and particularly interested in the architectural development (an interest which in itself would be unlikely) would find little to charm him—little which, according to his particular standards, he could accept as genuinely beautiful.

France, for example, has been architecturally active for centuries. America has not. Americans, proud of their individuality, striving to break away from an already established environment and create a new one, had, quite literally, no time to learn.



A 1903 engraving of New York City's Tombs prison.

Most inhabitants were first- or second-generation immigrants, owning their first home. They did not really care to refine it. The fact that they owned it was enough.

An average house in Europe can be a few hundred years old. It has been lived in by any number of families, each of which has left its mark. America, in short, did not have the European patina of age upon its art.

American architecture, then, could be roughly divided into five spheres of unequal volume, the domestic, religious, governmental, recreational, and commercial and industrial.

The American people, in their haste to build, govern and inhabit a new and promising country, were not always too aware of the aesthetic. Functionality was the bylaw. There was little sense in building too ornately. Money, and more important, time and manual labor, could be put to better use.

A house, unless one was rich, was a house and not a castle. It might and often did have a garden, but again, a functional one.

Literature, painting and sculpture were considered to be not quite as useful as farming or industry. A weathervane, doorstep or even tombstone could be put to use. A fine piece of music, a masterpiece of painting, could not.

I have chosen as my first travelers two quite opposed tourists, interested in America for quite different reasons.

Mrs. Francis Milton Trollope's work, my first choice, is a classic, read, possibly, by a larger percentage of the population than any other "travelogue."

Charles Dickens must also be mentioned, if not for his literary fame, then for the fact that he dealt fairly extensively in criticism of the New World's architecture, and became therefore a particularly accessible source of information.

On the fourth of November, 1827, one Mrs. Francis Milton Trollope, largely bankrupt and accompanied by two daughters and one son, set sail from London to America in order to ostensibly view for herself "the influence which the political system of the country has produced on the principles, tastes and manners of its domestic life."[1]

She returned some three years and six months later to write an amusing book entitled *Domestic Manners of the Americans.* The book created a furor and probably helped to widen the already existing British-American gap. Mrs. Trollope's conclusions were many, the most notable of which was to warn all her British countrymen to "hold fast by the constitution" which blesses government by the few instead of by the many, lest they "incur the fearful risk . . . and universal degradation which invariably follows [the placing of] all the power of the state into the hands of the populace."[2]

Her literary efforts, highly critical yet imbued with an honest naivete, read like a travelogue: touristic impressions and subjective reasonings abounded. She seemed unable to write without comparing her present whereabouts to earlier and generally superior places.

Though she manifested no great knowledge of architecture, she was wont to criticize it as quickly and as easily as local religions, mores, entertainment or the quality of fruits.

Mrs. Trollope was not by nature a highly complimentary woman. The architecture of the New World, she thought, was in no way superior to that of her native country, though she admitted being impressed by the Capitol building: "None of us, I believe, expected to see so imposing a structure on that side of the Atlantic."[3] Indeed, she was so impressed that she categorically decided that "Washington [was] a more agreeable abode than any other city in the nation."[4]

Her comments were probably justified. Nineteenth century Washington did include some of the best architectural forms of the emerging nation. Like the capital of any new and young country, Washington was a showpiece, if one kept within the bounds of the good neighborhoods.

It was a city meant to impress foreign dignitaries and visitors with the grandeur and hopes of the United States. It housed heroes and leaders, presidents and congressmen in gracious gentility along the

New York's Broadway.

banks of a slowly flowing river and left nothing to be desired in its architecture. The Capitol building *was* an imposing sight: *From the base of the hill on which the Capitol stands extends a street of most magnificent width. . . . This street, which is called Pennsylvania Avenue, is above a mile in length, and at the end of it is the handsome mansion of the President.*[5]

Mrs. Trollope, amazed by this pearl of beauty in such a primitive country, gave the city the most generous of her dubious accolades: "[Washington] reminded me of our fashionable watering places."[6]

Georgetown, too, did not fail to please her critical eye: "It is a very pretty town, commanding a lovely view, of which the noble Potomac, and the almost nobler Capitol, are the great features."[7]

Mrs. Trollope's ebullience and generosity were soon lost as she traveled northward. Philadelphia, though a growing city, did not display the splendors of Washington. Its architecture was largely utilitarian and offered little to her discriminating taste: *There is no Place Louis Quinze, or Carrousel, no Regent Street, or Green Park, to make one exclaim "how beautiful"; all is even, strait (sic) uniform and uninteresting.*[8]

She did concede, however: "Nothing can exceed its neatness; the streets are well paved, the footways . . . are of brick, like the old Pantile walk at Turnbridge Wells."[9]

New York, it was decided, was a beautiful city, worthy of some praise, though, with a flash of insight, she foresaw the city's expansion—"Situated on an island, which I think one day it will cover"—and predicted suburbia even before the word or concept had been created: "The great defect in the houses is their extreme uniformity—when you have seen one, you have seen all."[10]

Possibly to combat the architectural conformity of the United States but more likely to ward off impending financial doom, Mrs. Trollope decided to build, in Cincinnati, a large building which would house a store, a barroom, private meeting and dining rooms, a ballroom, a picture gallery and an "exchange coffee house."[11] The design of the building was concocted by Mrs. Trollope herself, but she commissioned a local builder of "classical taste in architecture," Seneca Palmer, to supervise the construction.

The results can only be deemed to be poetic justice. It had Gothic windows, Grecian pillars, and a Turkish dome.

It was architecturally preposterous and economically a failure. Mrs. Trollope, broke and disheartened, returned to the longed-for shores of her native England, abandoned business and took up the pen which she wielded in a more satisfactory manner, it seems. Where her business acumen failed her acid comments succeeded. Her *Domestic Manners of the Americans* restored her wealth and social standing.

It's conceivable and entirely probable that Mrs. Trollope's caustic descriptions of the United States were no more than a vengeance meant to hurt a country which, she thought, had failed her. She came to make her fortune and found that the New World was not at all what she expected it to be. One gets the impression that she sought a land of plenty, a gentlemanly land where money was for the taking, where all comers would find streets paved with gold. More, she envisaged a regal treatment, for she considered herself far above the lowly mass of pioneers who had come before her. The fact that they, quite naturally, did not exert themselves too much to make her feel like a queen left her quite affronted.

It's interesting to note, in comparison, the comments of a man who had already made his fortune and established his fame as a literary artist.

Charles Dickens came to America in 1842, fifteen years after Mrs. Trollope's departure from her native land.

His comments are so dissimilar from his predecessor as to make a reader wonder whether both he and Mrs. Trollope are writing of the same country. Whereas she found little to make her exclaim, "How beautiful," Dickens, seemingly, could not restrain from often praising the beauty of the land, the people and the general idea of what America was.

Mrs. Trollope implored England to remain a monarchy, as all else would fail. Dickens, quite to the contrary, simply said: "I hope and believe that it [America] will successfully work out a problem of the highest importance to the whole human race."[12]

Dickens came to the United States as somewhat of a social scientist. He had already written numerous books which told of Britain's seamy side, and was now interested in seeing if the great promise of America had or could come true. No Trollope by any means, he strained to discover the country in a way which few writers have attempted and even fewer have succeeded in doing.

Dickens set sail upon the steam packet *Britannia* on the third of January, 1842. He stopped at Halifax, then traveled to Boston of which he wrote: "The city is a beautiful one and cannot fail, I should imagine, to impress all strangers very favourably."[13] He was enchanted by the shops he found in the merchants' districts, with the gaiety of the signs and houses, the cleanliness of the city itself. Dickens seemed particularly fascinated by hospitals, mental asylums and jails. He left Boston a short time after his arrival, after visiting the Home for the Deaf and Blind, the jail, and the hospital. He journeyed to Worcester, where he visited a local asylum, then traveled to New York.

The city was a revelation, though the metropolis was by "no means as clean as the city of Boston."[14] He found in New York a foul jail called the Tombs, which he described with evocative ire. The Lunatic Asylum did not escape his glance. He saw Sing-Sing, which he described as a "model prison," and harshly criticized the black neighborhoods which he described as "a kind of square of leprous houses, some of which are attainable only by crazy wooden stairs without."[15]

But nevertheless, for all his criticism of the squalid side of the city, he did find in New York at least one place which struck him as unique—Broadway: *Was there ever such a sunny street as this Broadway? The pavement stones are polished with the tread of feet until they shine again; the red bricks of the houses might be yet in the dry, hot kilns . . .*[16]

He found in the growing city a resemblance to London: there were as many by-streets, as filthy as the ones in his capital. "There is one quarter, commonly called the Five Points, which, in respect of filth and wretchedness, may be safely backed against Seven Dials, or any other part of famed St. Giles."[17]

Dickens' views of New York were not inaccurate. In his search for the other side of the coin, he found what, basically, resembled any port town in the world: beautiful buildings backed by slums, pauperism side by side with wealth.

The New York of the mid-1800's was a bustling city, site of the New York stock exchange, heart of the financial atmosphere of the new country. Well-paved streets were paralleled by knee-deep mud alleys.

In 1790, the population of New York stood at 33,131. In 1850, it was 515,390. What Dickens was witnessing was possibly one of the world's first population explosions. The city's

architecture could not keep up with its immigration. The problems of dealing with the influx of newcomers were taxing the city and its facilities to the limit, preventing any semblance of organization. The architecture was largely catch-as-catch-can. The Tombs resembled a "dismal-fronted pile of bastard Egyptian, like an enchanter's palace in a melodrama." It was, Dickens wrote, "a long narrow lofty building, stove heated as usual, with four galleries, one above the other, going around it and communicating by stairs."[18]

Yet a city capable of building and running such a dismal establishment as the Tombs was also capable of housing a three-story stone theater called the Park, which cost some $180,000. By 1840, there were more than five theaters and two professional opera houses operating.

And yet, beyond the residential center of Union Square were little more than open fields, until late in the nineteenth century.

New York, as Charles Dickens discovered, was a paradox of social structure, capable, as it still is, of great beauty and even greater ugliness, mixed and side by side in an uneasy peace.

From New York, Dickens went to Philadelphia, which he labeled a "handsome city, but distressingly regular."[19] He was particularly struck, naturally, by the Eastern Penitentiary but seems to remember, most of all, "a handsome building of white marble, which had a mournful, ghostlike aspect, dreary to behold . . . It was the memorable United States Bank."[20]

Philadelphia's straight and right-angled streets, all neatly aligned, made him feel after an hour or two's walk that: "I would have given the world for a crooked street."[21]

The Philadelphia waterworks, built and planned as a functional public garden, pleased his sense of the useful and beautiful. He praised its tastefulness and cleanliness though seemed slightly cynical in his description of the water "which is showered and jerked about, and turned on and poured off everywhere."[22]

What Dickens overlooked was the fact that Philadelphia was somewhat of an architectural pioneer in the United States. As the sometime-capital of the new nation, it sought, like Washington, to impress, with such standards of colonial architecture as the Old State House, built in 1732. It was a Mecca for the artistic class, distinguished by the presence of such notables as Gilbert Stuart, William Rush, Thomas Sully, and architects William Strickland and Thomas U. Walter. Though Dickens' visit came after the city's golden age, Philadelphia was still a worthy representative of the social, cultural and even architectural advances of the nation.

The British author's southern traveling expedition was bound to pass by Washington. Again, his opinion of the capital was far different than that of the notable Mrs. Trollope and it should be quoted in full: *Take the worst part of City Road and Pentonville, or the straggling outskirts of Paris, where the houses are smallest, preserving all their oddities, but especially the small shops and dwellings, occupied in Pentonville [but not in Washington] by furniture brokers, keepers of poor-eating houses, and fanciers of birds. Burn the whole down; build it up again in wood and plaster; widen it a little; throw in parts of St. John's Wood; put green blinds outside all the private houses, with red curtains and white ones in every window; plough up all the roads; plant a great deal of coarse turf in every place where it ought not to be; erect three handsome buildings in stone and marble, anywhere, but the more entirely out of everybody's way the better; call one the Post Office, one the Patent Office and one the Treasury; make it scorching hot in the morning and freezing cold in the afternoon with an occasional tornado of wind and dust; leave a brick field without the bricks, in all central places where a street may naturally be expected: and that's Washington. . . . It is sometimes called the City of Magnificent Distances, but it might with greater propriety be called the City of Magnificent Intentions; for it is only in taking a bird's eye view of it from the top of the Capitol that one can at all comprehend the vast design . . . and lead nowhere; streets, miles-long, that only want houses, roads and inhabitants; public buildings that need but a public to be complete, and ornaments of great thoroughfares, which only lack great thoroughfares to ornament . . .*[23]

The Water Works in Centre Square, Philadelphia

For a man who, in the preface of his works, stated: "Prejudiced, I am not, and never have been, otherwise than in favour of the United States,"[24] such a diatribe is hard to comprehend, particularly if one is to compare his impressions of the capital with Mrs. Trollope's earlier writings. It is strange to note that what she found breathtaking, and, I might add, the only thing she found breathtaking, was viewed by a pro-American author as such an architectural shambles.

George Washington envisaged a national capital eventually as large as most European cities. The fact that the city's planning and building was plagued by delays, that the original architect's concepts were modified after his dismissal and that, perhaps more important, money to back the construction of the Capitol was short, cannot fully account for Dickens' disparaging remarks.

True, Washington was an unfinished city. Niggardly federal appropriations made for great difficulties. There was constant talk from irate politicians of moving the capital back to less provincial Philadelphia. Yet the city was growing, and should not, I believe, have been subject to such harsh criticism.

In order to be fair, we must say that Dickens' criticism was somewhat tempered by his comments concerning the House of Representatives: *(It) is a beatiful and spacious hall of semicircular shape supported by handsome pillars. One part of the gallery is appropriated by the ladies, and there they sit in front rows, and go in and come out, as at a play or a concert.*[25]

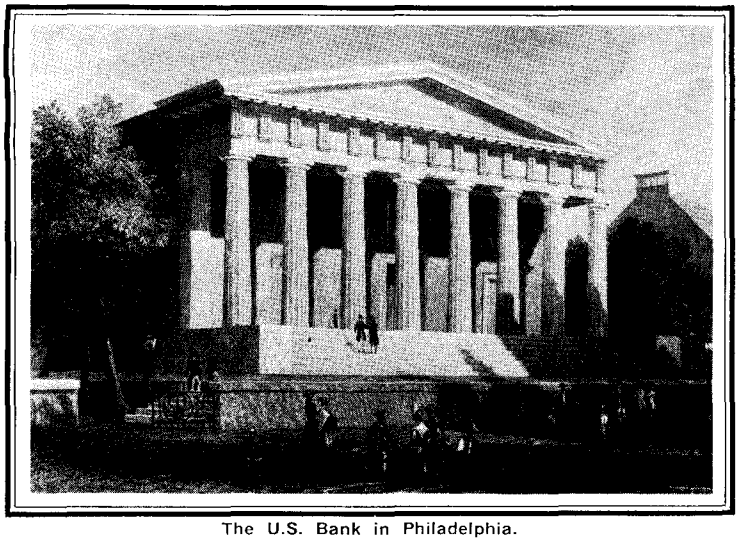
Dickens was referring to the Statuary Hall, which was originally built as the House of Representatives by Latrobe.

Like Mrs. Trollope, he appreciated the Georgetown area, as "free from some of the insalubrities of Washington."[26] The President's mansion left him unimpressed, as, incidentally, did the President. He described the residence as somewhat resembling an English club. Quite pleasant, all in all, but not really as "comfortable" as it should be. He was struck by the fact that the gardens looked as if they "had been made yesterday, which is far from favorable to the display of such beauties. . . ."[27] But it was pleasant. All in all, Washington, the capital, was not all it should have been. Dickens resumed his travels, heading for the "far West."[28]

Dickens' commentaries on the United States were those of an author whose professional writings often dealt with the socio-economic problems of the lower classes. His visit was punctuated by a mania largely centered around correctional or health institutes, never the best side of a society's standing, or, for that matter, of a society's architecture.

What was and should remain of interest to the traveler is not how or where the one percent live, but how and where the population as a whole resides.

Two other travelers to the United States should be mentioned, though neither actually had that much to say on the architecture of the country. Both were artists, though far



The U.S. Bank in Philadelphia.

removed in both their talents and personalities. One, the Vicomte Francois Auguste Rene de Chateaubriand, the French writer credited with originating the Ecole Romantique, once described the Indian pyramids he claimed to have seen along the banks of the Mississippi. The fact that no such pyramids existed, though they might have been Indian burial mounds, did not hinder the author, nor did it stop the selling of his fictional novel, *Atala*, written a few years before he came to the United States.

His *Travels in America* should not be looked upon as a source of reliable information. The author's imagination, added to the gleaned readings of some thirty years' worth of generally untrustworthy works, coupled finally with a certain amount of wish-fulfillment make the book wildly implausible.

What, perhaps, is interesting, is the fact that Chateaubriand's work, for many, *was* America. Maybe one lucid, accurate statement emerges from his book: *Philadelphia is cold and monotonous. In general, the cities of the United States are lacking in monuments, especially old monuments. Protestantism, which sacrifices nothing to the imagination and which is itself new, has not raised those towers and domes with which the ancient Catholic religion has crowned Europe. Almost nothing at Philadelphia, New York, Boston, rises above the mass of walls and roof.*[29]

The fact that Chateaubriand's visit was in 1791 makes this criticism ridiculous.

Jacques Offenbach, the famed composer, came to the United States in 1876, for the Centennial of the United States.

Offenbach considered himself the Darling of the New Society, and was certainly much more concerned with the impression he gave than with the impressions he received. His comments on American architecture are few, far between and generally uninteresting. He seemed highly fascinated and pleased with the mechanical aspect of the various houses he resided in:

Not only is there central heating in all the apartments, gas in every room, hot and cold water at all hours; but also in a room on the ground floor are lined up three little pushbuttons which have great importance . . .[30]

The pushbuttons of great importance called the porter, newsboy and policeman.

Offenbach also commented on the simplicity of the city planning, saying that "the Americans ordinarily do not give to their streets the names of the governing patronage nor change these names everytime the government changes. Our French custom would be too inconvenient for this republic which elects its President every four years. . . ."[31]

We have dealt with both French and British visitors. It is perhaps necessary, in order to get a fairer view of the late eighteenth century tourist's outlook and opinion on American architecture, to listen to a German visitor's opinion of the country he was seeing for the first time.

Johan David Schoepf was neither an artist nor a hopeful businessman. He was, by trade, a surgeon attached to the Ansbach troops which landed in North America in 1777. His hobby was America, and he seems to have devoted to this hobby a large amount of time and study.

He wrote, before his death in 1800, a number of books and scholarly treatises on the geology and ichthyology of the new country, but managed to see not only with the coldly scientific eye of the researcher but with the insightful look of the enlightened-tourist, unencumbered by the romanticism of an artist. His travels took him to many American cities, notably Philadelphia, the City of Brotherly Love, for whom he had this acid yet lucid comment: "Universal love may be easily imagined and preached, but, in a growing colony, may not so easily be practiced.[32]

The city struck him by its functionality: *It is easily seen that the Quakers drew the plans and dealt frugally with the space. . . . It is a pity that when the town was laid out, there was such a total neglect to provide open squares, which lend an especial beauty to great towns. . . . In Philadelphia, there is nothing but streets all alike, the houses of bricks, of the same height, mostly, and built by a plan that seldom varies. . . .*[33]

Dr. Schoepf's statements, though written some sixty-five years earlier than those of Charles Dickens, manifest the same irritation with the city's "regularity".

In fact, according to both writers, it seems that Philadelphia, though at the height of its power during Schoepf's visit, did not really change all that much. It remained clean, orderly and rectangular; functionality was supreme. Strangely, of all the visitors mentioned so far, it is Schoepf who seems to manifest the greatest interest in American architecture. Perhaps it is another proof that architecture was not yet an art in the new country, and therefore would appeal more to a functional man such as a surgeon than to an imaginative and artistically bent individual.

He tied architecture and history in his description of the Philadelphia State House, built in 1732: *The State House [is] a large but not splendid structure of two storeys. The facade is of tiled brick, with no particular decoration, but in comparison, regular and handsome. In this case, also, the providing of a large square in front has been neglected, and this would have lent distinction. . . .*[34]

He then described a number of landmarks of old Philadelphia, the Pennsylvania Hospital, which he noted was in a "very cleanly state,"[35] though unfinished. The New Jail was a "large but quite plain building where the British prisoners of war found no great cause to praise American philanthropy and magnanimity."[36] The College of Pennsylvania lacked "the distinguished and handsome appearance of the College of New York."[37]

His travels, after ten days spent in Philadelphia, led him to Germantown, which he describes appropriately enough as being "really fine,"[38] then to Nazareth, Carlisle, Ohio, the West, and finally Pittsburgh and Delaware on the return trip.

Schoepf was the only author I have found to devote such energy to the description and travel of such small towns: Allentown, Maguntchy, Kutztown, Hummelstown, Carlisle. All came under the good surgeon's scrutiny, though it must be mentioned to be fair that towns of German origin seem to have fared better than other non-Teutonic cities.

During his second trip, Dr. Schoepf, who had earlier limited his travels to the northern and western lands, decided to visit the southern portion of the united new country. He passed through Maryland, Virginia, finding nothing there to tickle his architectural fancy.

Jamestown, a Mecca now to visitors of the East Coast and a historical name to even the youngest students, did not fare well under Schoepf's pen: *Jamestown, or merely the rubbish of a town so called; for notwithstanding it is described here and there in the newer geographies as a place of 80-100 houses; one or two, and they are ruinous, is all the town contains at present.*[39]

So much for Jamestown. Indeed, both settlements seemed to be, by and large, uninteresting and undeveloped, as compared to the cities like Philadelphia. He was, as usual, fascinated by the flora and fauna

of both places and viewed the surrounding country as a natural scientist's heaven.

The southern states, in the end of the eighteenth and the beginning of the nineteenth centuries, were largely barren of architecture. Most towns were small, consisting of a hundred or less houses. The residents were planters and businessmen whose living depended on the trade routes earlier established between the North and the South.

Few visitors, strangely enough, ever made a complete tour of the United States, including the southern states. Max Berger, in *British Travelers in America,* 1836-1860, wrote that "No sooner was the Mason-Dixon line crossed than poverty, decay and retrogression stared the traveller in the face. . . . Unpainted windows, sloth, filth and inertia appeared on every side. . . ."[10]

Charleston, according to Berger, "resembled a West Indian port rather than an American city, with its wooden buildings painted white, its large verandahs and its venetian blinds."[11]

A contrasting judgment is Schoepf's earlier description of that city: . . . *the finest of American Cities, Philadelphia excepted. . . . The city contains a number of tasteful and elegant buildings . . . most of the houses have spacious yards and gardens . . . the chief streets are wide, straight and cross at right angles . . .*[12]

Charleston, during Schoepf's visit, was still considered to be and often called the "Lima of North America." It was the center of one of the most extensive and valuable Indian trades in the British colony, before the United States achieved its independence and later became one of the rare ports to carry on a still fruitful commerce in indigo during the war of the Austrian Succession.

It was a center of learning in the South already in 1770, site of a college, then later host to the Charleston Library Society, a museum and a historical society.

It was also the site of a handsome "state house and . . . two churches . . . all designed after good plans . . ."[13]

Schoepf's travels did not take him to the usual and oft-visited cities such as New York, or Washington. This in itself is unfortunate, as it would have been interesting to view and compare his objective if incisive comments with those of more romantic or subjective authors as Dickens, Chateaubriand, and Trollope.

As time passed and travels became easier, visiting America became commonplace and no longer the daring adventure it once was. More visitors came, for a multitude of reasons: preachers and politicians, scientists and quacks, diplomats, soldiers, matrons and fortune-seekers.

British civil authorities stationed in Canada took their holidays in the United States, letting their travels range to the far Western frontiers.

By 1886, European travelers were greeted by the Statue of Liberty.

The hotels became more opulent. W.E. Baxter, in *America and the Americans,* described the St. Nicholas Hotel, a New York City landmark, as being "more like the palace of an eastern prince than a hotel. . . . Every chimney piece and table slab is of marble, every carpet is of velvet pile, chair covers are made of skin or satin damask. . . ."[14]

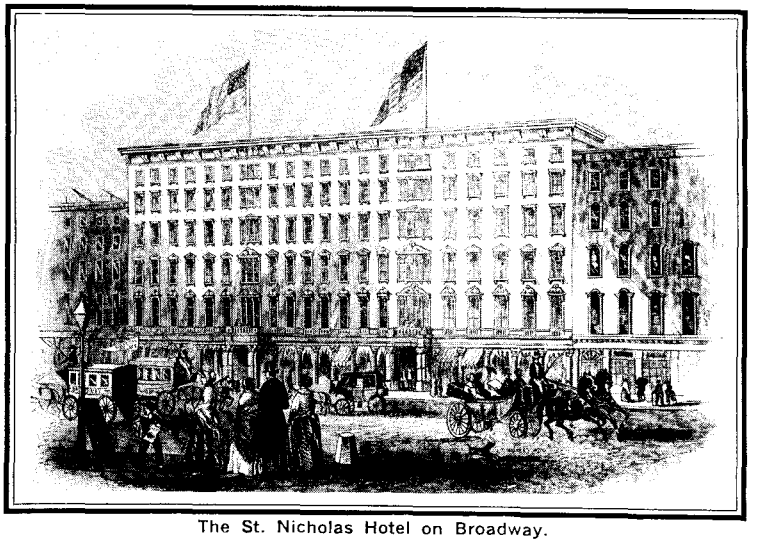
More books were written, some biased, some not, all with a certain degree of interest.

By the end of the nineteenth century, it took less than nine days to cross the Atlantic Ocean from Great Britain to New York. The country grew, added states and territories, grew richer and more educated and, slowly, began creating its own culture.

Architecture underwent an almost violent revolution, outstripping the rest of the world in a few short years.

Immigrants from Europe and the East grappled for land in the Midwest, largely aided by the ever-reaching fingers of developing railroads. Chicago, which in 1835 had only a couple of thousand inhabitants, suddenly was mobbed by land speculators who struggled to make one sale after another.

Cincinnati, where Mrs. Trollope had opened her ill-fated marketplace, is another example of this growth. In 1842 Dickens called it a beautiful, cheerful city full of neat, elegant, private residences. By 1850, it had become the pork capital of the United States and its population had more than tripled. Villages



The St. Nicholas Hotel on Broadway.

grew to cities, and the roads between them straightened, no longer forced to follow the curves of the hills, or avoid the mountains.

The covered bridges vanished, to be replaced by metal-cable suspension bridges which could more easily weather floods and bad winters.

Lewis F. Pilcher has written: *It has been the experience of all civilizations that a national art is not attained until there has been developed a suitable centralized authority, possible only with the establishment of a political and commercial independence.*

A nation achieves such a position after a long struggle, and, from the times of primitive conditions, each step in the formation of an effective national life is marked by architectural and constructive methods which punctuate the epochs of the country's advance . . .[45]

By the late nineteenth century, the United States had well established its independence and leadership.

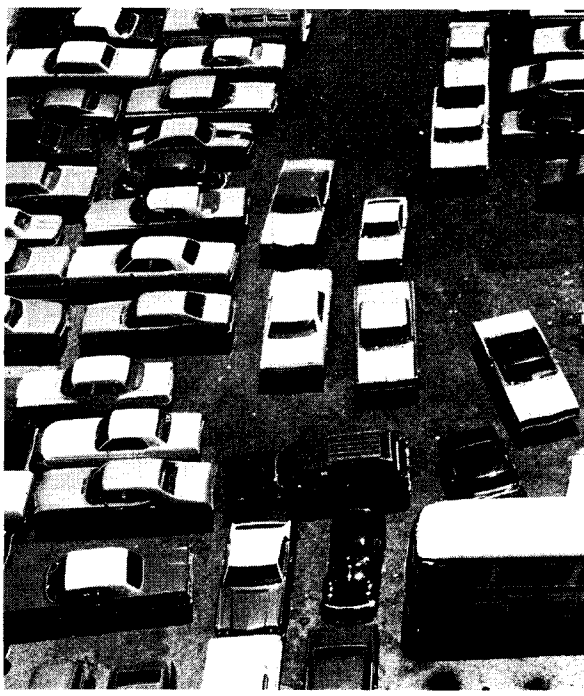
The demand for great commercial buildings in which height was a necessary component to house various enterprises in a restricted area caused the development of new architectural forms.

The United States had come into its own, and in so doing impressed the fact that it was architecturally independent and original on an often critical and unbelieving world.

The skyscraper, to many non-Americans, is now a symbol of the United States (whether we like it or not), and it is quite doubtful that foreign tourists, leaving America after having seen at least a part of it, will cease to be impressed by the architecture of the new land.

[1]Mrs. Francis Milton Trollope, *Domestic Manners of the Americans* (Barre, Mass.: Imprint Society), introduction.
[2]*Ibid.*, intro.
[3]*Ibid.*, p. 167.
[4]*Ibid.*, p. 168.
[5]*Ibid.*
[6]*Ibid.*, p. 167.
[7]*Ibid.*, p. 174.
[8]*Ibid.*, p. 205.
[9]*Ibid.*, p. 204.
[10]*Ibid.*, p. 269.
[11]David Van Zanten, Article, *The Journal of the Society of Architectural Historians,* October, 1970, p. 256.
[12]Charles Dickens, *Pictures from Italy and American Notes* (Pollard and Moss, 1885), preface.
[13]*Ibid.*, p. 219.
[14]*Ibid.*, p. 276.
[15]*Ibid.*, p. 286.
[16]*Ibid.*, p. 276.
[17]*Ibid.*
[18]*Ibid.*, p. 279.
[19]*Ibid.*, p. 296.
[20]*Ibid.*, p. 295.
[21]*Ibid.*, p. 296.
[22]*Ibid.*
[23]*Ibid.*, p. 314.
[24]*Ibid.*, preface.
[25]*Ibid.*, p. 317.
[26]*Ibid.*, p. 323.
[27]*Ibid.*
[28]*Ibid.*, p. 327.
[29]Francois Auguste Rene de Chateaubriand, *Chateaubriand's Travels in America* (Lexington, Ky.: University of Kentucky Press, 1969), p. 14.
[30]Jacques Offenbach, *Orpheus in America: Offenbach's Diary* (Indiana University Press, 1957), p. 53.
[31]*Ibid.*, p. 54.
[32]Johan David Schoepf, *Travels in the Confederation,* vol I (Bergman Publishers, 1911), p. 57.
[33]*Ibid.*, p. 59.
[34]*Ibid.*, p. 69.
[35]*Ibid.*, p. 70.
[36]*Ibid.*
[37]*Ibid.*, p. 73.
[38]*Ibid.*, p. 121.
[39]Schoepf, *Travels,* vol. II, p. 87.
[40]Max Berger, *The British Travelers in America,* 1836-1860 (New York: Columbia University Press, 1943), p. 43.
[41]*Ibid.*
[42]Schoepf, *Travels,* vol. II, p. 164.
[43]*Ibid.*, p. 165.
[44]Berger, *British Travelers,* p. 25.
[45]*Encyclopedia Americana,* vol. II, p.183.

ILLUSTRATIONS: Smithsonian Institution.



NOTES FROM A PASSING CAR

The problems of art in a mobile environment

BY JAMES WINES

"By the year 2000 it may be safe to assume that in Europe and the United States 75 percent of all families will have some form of private vehicle. Others will have two or more, and 25 percent will possibly have none."
—Brian Richards, *New Movement in Cities.*

". . . in a future perhaps remote (we shall see) the end of art as a thing separated from our surrounding environment, which is the actual plastic reality. But this end is at the same time a new beginning.

Art will not only continue but will realize itself more and more. By the unification of architecture, sculpture, and painting, a new plastic reality will be created. Painting and sculpture will not manifest themselves as separate objects, nor as 'mural art' which destroys architecture itself, nor as 'applied art', but being purely constructive will aid the creation of a surrounding not merely utilitarian and rational but also pure and complete in its beauty."
—Piet Mondrian, *Plastic and Pure Plastic Art—1937.*

Saul Alinsky, the late political activist, is reputed to have had little patience with most radical factions of our society—dismissing them because of their "refusal to begin with the world as it is." An unrealistic rejection of prevailing evidence is not peculiar to social revolutionaries alone. It seems to be the special malignancy of our entire civilization. Inclusive within its scope is everything from abortion repeal to anti-pornography legislation. Or, in point, any endeavor where solutions are pursued or decisions imposed without regard for the spontaneous course of human nature. Reality (if acknowledged at all) becomes an inconvenient obstruction interfering with aspirations for an instant and total reversal of the system. Also, reality is cumbersome, tedious, unromantic, and seldom merits TV coverage.

With respect to the visual arts, these delusions are indicated by rigid assumptions concerning the role of the audience. Vanguard activity continues to be predicated upon those changes of philosophy which affect the intrinsic content of art (and its relation to other art), but it is a content that has been conditioned by an assigned behavior pattern for the spectator. Art may change, yet it is tacit that the audience position remains the same. Superficially, an assessment of the growing volume in gallery and museum attendance offers reassuring confidence in the traditional spectator dutifully moving from station to station in order to view art from a fixed position. This brisk business at exhibition turnstiles pales to insignificance when compared to the potential audience cruising by outside in the passing automobile. The museum-goer is a dedicated participant in the art experience who is willing to channel his perceptual habits to fit conventional directives. However, in the comprehensive picture of urban life today, the relatively small percentage of ambulatory art lovers represents the prolongation of an outmoded ritual process. The real audience is locked in the traffic jam or speeding down the thruway.

With the exception of roadside advertising, the visual arts have paid only token attention to the motorist. The idea of art conceived to be read at 60 miles per hour is in direct conflict with the sanctity of contemplation (a traditional qualification) even though there is no substantial evidence to support the assumption that art is more accessible while standing still than perceived in transit. Quite obviously, retinal reception is different where motion is involved; the gallery object cannot be automatically translated for use in an urban context, and the dialogue between the spectator and the art is radically altered. The failure of art to address this mobile audience effectively may assign it forever to remain as an institutional commodity perpetuating old values, rather than suggesting new ones. The automobile—or some manifestation thereof—cannot be reasonably denied on any level without underestimating the very foundations of American (and now European) life-style.

A convincing thesis could be proposed on why the contem-

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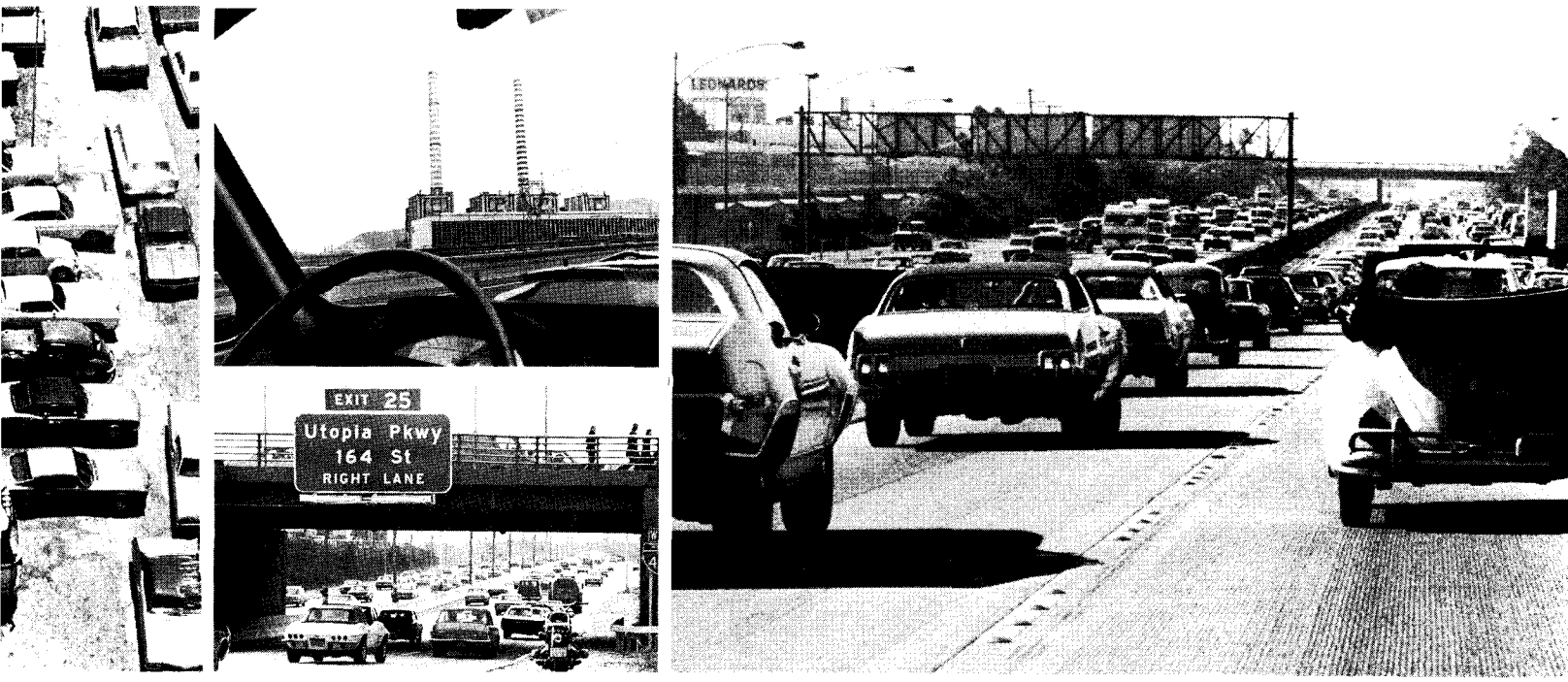


The automobile is the totally inhabitable womb where the unfettered ego can expand and where containment and acceleration become the direct extension of personal fantasy.

porary urban-suburbanite should never get out of his car. There are few who could deny that euphoric sense of security the motorist experiences upon the return to his waiting automobile after a few hours spent navigating hostile concrete on foot. And yet, security is only one of the multiple factors which contribute to this love affair. The sociological and psychological implications are so vast that only the sketchiest examination of the subject is possible, save full treatment in a volume or two. For the driver, mobility may be the raison d'etre, but IDENTITY is the obsession. To strip the urban dweller of his car is to leave him as a victim of total anonymity. The city today is built for service and the overwhelming mass to result from this "function" axiom has reduced man to insect dimensions. These perilous conditions for the pedestrian have left no alternative than escape into his mobile microcosm with its protective shield of glass and its provision of safe vantage from which the outside world may be cautiously observed.

The Automobile establishes the ideal scale reference, the totally inhabitable womb where the unfettered ego can expand, a cathartic condition where the world can show you while you show the world. Containment and acceleration become the direct extension of personal fantasy — erotic-virile-religious-economic - aggressive - escapist - masturbatory - maternal - parternal-patriotic—the essence of status and self-assertion in a detached environment. Under the circumstances, almost any activity requiring the motorist to leave the asylum of his car must be viewed suspiciously as unreasonable, unAmerican, and most certainly unrealistic.

Naturally, all of these speculations run into head-on collision with the rhetoric of ecological and social reformers who would have us denounce the automobile and resurrect those great congenial parks and walking spaces of the Renaissance. As we have observed, the refusal to accept formidable evidence to the contrary would suggest that these nostalgic piazzas might be impossible to maintain without a forfeit of the conveniences and reassurances offered by the present status of the automobile. The problem, in the face of vociferous arguments for public walking space, is precisely who would do the walking? Certainly not the eco-freak racing his engine en route to commune with nature; nor the Maoist-radical lamenting his parking problems; nor the two-car family about to become the three-car family; nor General Motors resisting the pollution-free time-table; not the political candidate who left his limousine idling; and certainly not the Federal Government with the largest auto fleet in the world and promises of cleaner air by 1982. Although each of these well-meaning factions pays considerable lip service to the anti-automobile campaign, their platitudes are barely audible above the roar of their engines.

The premise for this essay is the development of a case favoring art and all urban structures, for that matter, which are conceived for the motorist. To declare the pedestrian obsolete is not likely to sit well with the physical culture enthusiasts; but evidence against walking, as we have observed, is sufficient to discourage much optimism for its future (a footnote to this observation being the incredibly short time lapse between "the giant step for mankind" on the surface of the moon and the arrival of the Lunar Rover). Stating the conditions for this argument is one thing, dealing with the broad implications of a rationale is quite another. First it is necessary to examine the state of art in our time and some pertinent social and cultural influences which have generated the present climate of activity. A similar treatment must be given to the problems of designing new public spaces. And finally, the two fields of endeavor must be brought into focus as part of a common objective with examples and a program for the future.

Since the Renaissance, public art has been reduced to little more than a "handmaiden" to architecture, an irrelevant and superfluous intrusion into the cityscape, or something one leans against while waiting for a taxi. A commodity oriented value system has completely eclipsed the classical view of

Having psychologically crippled the pedestrian with overwhelming canyons of concrete, the architect provides token little anachronisms borrowed from antiquity and somehow intended to salvage the situation. These include potted trees, do-nut benches, geyser fountains, and works of sculpture.

urban design wherein art, architecture, and walking space were inseparable from city infrastructure. The objectification of art (and everything else), private ownership, and the isolation of the "masterpiece" have given us an environment composed of disparate and conflicting elements. The "work-of-art," as a thing apart, has become synonymous with the definitions of art and architecture.

Only more recent vanguard attitudes in conceptual and environmental art have begun to puncture holes in these unqualified hypotheses. The much earlier and fundamental breakdown of traditional references found in the work of Duchamp has provided two generations of artists with a liberation from the criteria of formal content. Unfortunately this influence has been manifested in all aspects of private art; but very little has been carried into the streets. Private art has asked all of the interesting questions and supplied most of the interesting answers, while public art has functioned as an outsized, but inferior, translation of the gallery aesthetic. All of those massive pseudo-minimal sculptures which pock-mark every metropolitan center are prime examples of this process in action. Gallery art is meant to be studied over a time span which allows the spectator a period of visual digestion. Art in the streets, on the other hand, must assert its identity in the face of urban confusion, establish a rapport with total space, and be legible to the rapid transit big city dweller.

Although inseparable from the gallery context, the work of Duchamp established certain attitudes which are indirectly applicable to a state of accelerated visual response. He recognized the merits of an art "idea" which could not be embodied in the conventional framework of painting or sculpture and by eliminating the study of art in terms of form, manual technique, and the artist's psyche, he suggested that art could generate a new kind of reaction by functioning as a semaphore of information. Accordingly, one does not contemplate a signal, but instead tries to decode its message. The continued presence of the object of *art* was no longer necessary as a reminder of the artist's personal evolution and the dialogue in the mind of the spectator became more significant than the reassurances of a magnum opus.

Current developments in conceptual and earth art have extended this position both inside and out of the gallery context. In concept art, the emphasis on philosophical content has led to a revocation of all media and procedure characteristic of the familiar definitions of art. The more physical work of the earth and process artists has been less concerned with polemics than with space, scale, incident, and non-focality. The proverbial ingredients of painting and sculpture—form, color, technique, style—have always been considered media in the service of "expressing" information. For new art sharing the Duchamp legacy, information *is* the media. Translated into urban art to be seen from the moving automobile, this concept is particularly appropriate. Retinal reception in a state of mobility must be instantaneous and spectator assimilation must be based on data retention which then becomes the substance of interpretation. By forfeiting the time-honored convention of careful perusal, immediate perception and memory determine the final effect of art on the roadway.

The United States is an *interior oriented nation.* The finest examples of architectural design are saved for the articulation of lobbies, hallways, offices, and living rooms. Exterior urban space, on the other hand, has always been treated as the hostile domain to be traversed en route to work or the safety of home. This attitude has probably been inherited from a combination of influences—including the Puritanical disapproval of pleasure, the obsession with service and economy, and the residual fears remaining as a result of the American conquest of the wilderness. As compressed into urban life the consequences of these motivations have resulted in the development of architecture and planning that ignores man's personal identity. Almost any aerial view of a contemporary city exposes the U.S. system of priorities. The largest blocks of space are allotted to service

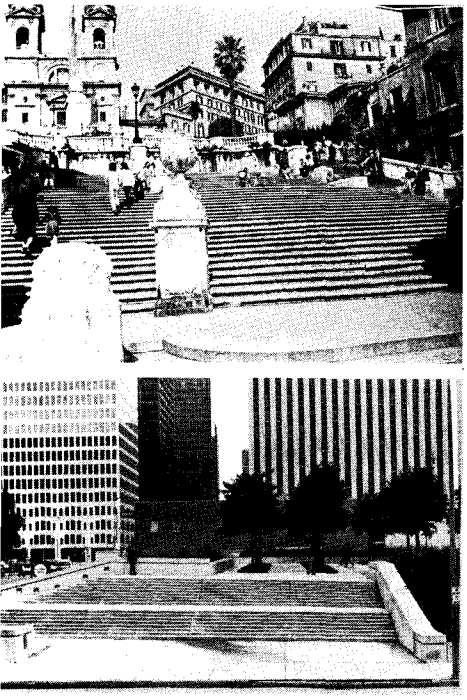
Views of the Piazza Signoria and Piazza Duomo in Florence, Italy—demonstrating perceptual differences in and out of the automobile. The piazzas were conceived for walking and all of the elements are meant to be seen to best advantage on foot. The frame of the auto window awkwardly defines the vertical and horizontal limitations of vision.

buildings (office towers, parking facilities, factories, etc.); the second largest percentage of land is given to roadways; and those cramped ribbons of concrete defining the base of every structure are for the people. The pedestrian sidewalk, like the peripheral edge of the wagon trail, is fraught with dangers both physical and psychological. The paving has improved since the Old West, but the chances of violence, loss of property, geographical confusion, uncharted byways, and lack of watering holes remain pretty much the same.

The field of architecture, sensing the precarious destiny of the city dweller, has provided its own brand of tokenism in the form of the "piazza-plaza." Having psychologically crippled the pedestrian with overwhelming canyons of concrete and glass, these little anachronisms are somehow expected to salvage the disaster and offer sanctuary for a communion with nature and one's fellow citizen. Inevitably these piazzas assume a typical format inclusive of paving, rock gardens, potted trees, do-nut benches, and a geyser fountain or sculpture or both. The elements are borrowed from the grand tradition of European public spaces; but lacking a genuine urgency, the contemporary counterparts are seldom relevant when juxtaposed with the traffic jam. There is the obvious problem of exhaust fumes and pollution. Also, most commuters consider the distance from air-conditioned car to air-conditioned lobby too long as it is. Then there is the problem of piazza concept.

The evolution of great community spaces has certain ingredients which, in addition to clean air, include a temporate climate, a cultural estate, a highly developed sense of community, an absence of hostility, and respect for leisure. The United States is universally noted for its dreary weather, philistine attitude toward art, suspicious temperament, love of violence, and distaste for idle dalliance. Aesthetically, as well, the plaza doesn't fit into the American urban pattern. The premise of a design solution for the city which does not accommodate the motorist's view of the world is erroneous to begin with. The much admired European plaza grew organically out of the needs of the people to communicate in the streets, to maintain open markets, to provide landmarks for orientation, and to sustain religious and cultural legacies. The piazza was conceived for walking and all of the elements intrinsic to its final resolution are meant to be seen to best advantage on foot. The frame of an automobile window, for instance, abruptly defines the vertical and horizontal limitations of spectator vision, the act of riding removes all contact with the stationary plot of land, and speed determines the nature of illusion and response.

Ironically, the advent of the automobile traffic in Italy has violated this initial purpose by creating a confusion of emphasis which neither the walking public nor the driver can reconcile. If navigated by auto, there is the dual frustration created by pedestrian congestion and a limited visual access. The alternative proposition, recently ventured in Rome and other European cities, has been to close these piazzas to automotive traffic and leave them with the appearance of preserved relics—as isolated masterpieces out of synchronization with the technological environment. Thus, a basic problem remains whether to resist the automobile, with awkward results, or to accept its inevitable cultural force and try to deal with it creatively. A true recognition of this phenomenon cannot be sustained under conditions of nostalgia. The piazza, whatever its historic virtues, does not lend itself to resurrection in the contemporary city. There are frequent attempts to do so, but most of these spaces are left dormant and unused. Some others are more frequented, but usually end up by providing fertile conditions for the growth of such anti-social behavior as drug pushing, molestation, and theft. Aside from the ever-present police in a waiting patrol car, most of these piazzas accommodate only the handful of pedestrians who have strayed too far from their cars, are waiting to be picked up by cars, or belong to that fading species who, for some inconceivable reason, have rejected cars and prefer to walk.



Spanish Steps, Rome, Italy (top).
Houston, Texas U.S.A. (above).

The basic formula for survival on the commercial strip has been the appeal of advertising. Without benefit of a successful display of roadway information any merchant is doomed to failure.

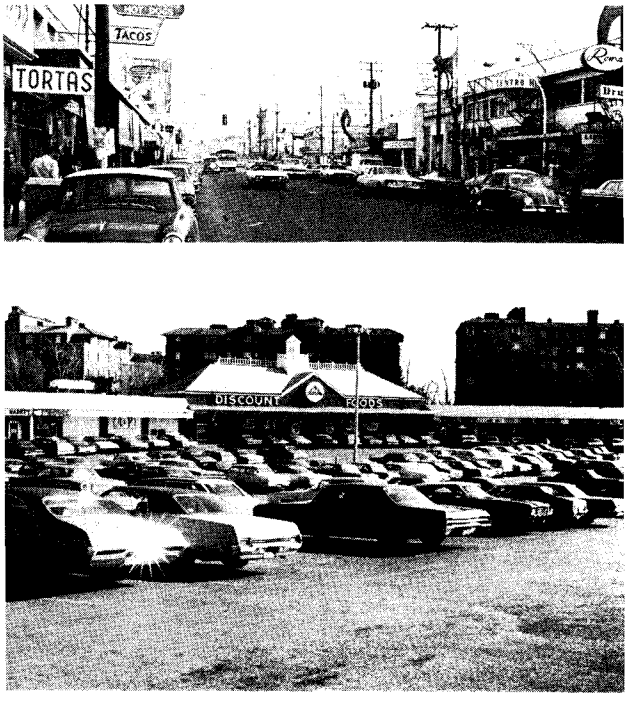
If the piazza is a dead issue, the suburban shopping center is very much alive and spontaneously providing the conditions and visual vocabulary of the future. So powerful is the magnetism to these roadway strips that the urban centers are being drained to the breaking point of people, services, and money. Unlike cities, which have usually been frozen into their infrastructures by obsolete planning systems, the commercial strip is fluid, readily expandable, and totally at the service of the automobile. The instructive potential of these sprawling market places is immeasurable. No considerations of art in the public domain can avoid the example of the "drive-in" syndrome. Although strip architecture has been completely pragmatic in its development, it is that very lack of artifice that makes it worthy of scrutiny and comparison to the less successful piazzas of the cities. As it stands now, the general appearance of most commercial strips is one of vitality, but appalling vulgarity as well. The fundamental key to the success of the shopping center has been its convenience to the motorist. Those commercial enterprises which have forced him to get out of his car (supermarkets, boutiques, hardware stores) are less representative of auto theory than the genuine drive-in context where traditional functions have really changed to adapt to mobility (drive-in banks, theaters, bars, and food services).

It is significant to observe which of the multiple drive-in services have evolved most naturally with the automobile in mind, and others, resisted dramatic change. Food markets, for example, still cater to a show-and-select process reminiscent of fruit and vegetable stands on the street. Their acknowledgement of the automobile has been to provide broad acres of land for parking, curb pick-up of purchases, and roadway advertising. But other functions have been modified more radically or designed from the outset with the motorist as premier consideration. At the top of the list is the drive-in movie, wherein technology has confronted reality with commendable results. Without ever leaving the security of his car, the driver can be inundated from without by seductive media, include a family of six at a moderate price, remain only a key-turn away from instant motion, and enjoy a physical freedom in his seat (not the least of which is sexual) forbidden in the rigid confines of a cinema theatre. Other services on this list which have become synonymous with auto transportation are the drive-in bank and the drive-in restaurant. In both cases the ultimate shape of service structures, mechanisms, and publicity has been predicted upon the theory that a customer is always right . . . in his car.

Perhaps the most laudatory triumph indicating the course of tomorrow is the advent of the drive-in zoo. It first made an appearance in Texas; but now has moved nationwide with new menageries opening in New Jersey, California, and Florida. Indeed, with the drive-in zoo, we have the best of three worlds: the ecological front meeting commerce and mobility in a condition of total harmony. The auto operator can take his entire family on safari, remain impervious to the attack of wild beasts in air-conditioned comfort, and make it back to McDonald's by dinnertime.

With respect to a new urban art, the four examples of drive-in facilities described above are particularly germane. Unlike those services which have begrudgingly "adjusted" to the automobile, the drive-in cinema, bank, car-hop restaurant, and zoo have undergone a complete metamorphosis to oblige the motorist. Similarly, if public art is to have any meaningful effect on the environment, it cannot remain as an inflated facsimile of gallery aesthetic; but must change fundamentally in terms of concept and resolution. The proliferation of monumental sculptures newly decorating our cities seems to suggest that a depressing and opposite situation prevails.

The basic formula for survival on the commercial strip has been the appeal of advertising. Without benefit of a successful display of roadway information any merchant is doomed to failure. It is a simple reality that strip enterprises, unlike the tra-



If the park and plaza are dead issues, the suburban shopping centers are very much alive and spontaneously providing the conditions and visual vocabulary of the future.

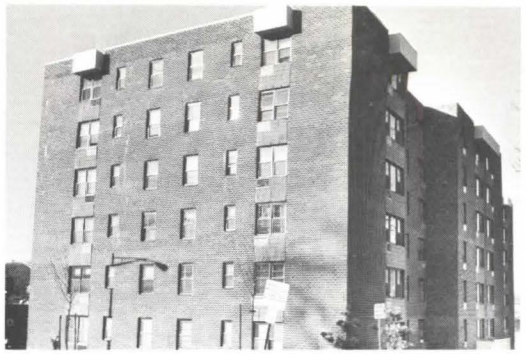
ditional marketplace, cannot rely on time-consuming product and service comparisons when the client is in a state of high velocity. All communication is, ultimately, evaluated on the degree to which the driver eases pressure on the accelerator. The lessons of strip advertising should be cautiously evaluated before application to art, for fear of succumbing to various seductive traps. Anything as urgent and gut-level as roadside publicity has an inevitable vitality—its somewhat less than exalted purpose notwithstanding. Somehow, the reality of popular culture is always a little better than art because of its ingenious quality. Case in point is the relative failure of a good deal of pop art to transcend its origins in vulgar source material which already exists as a kind of art. The esoteric and facetious posturing of pop only infrequently elevates the interest level above that of the original raw material. For this reason the effect of roadway conditioning on perceptual habits is more significantly worthy of study than specific imagery.

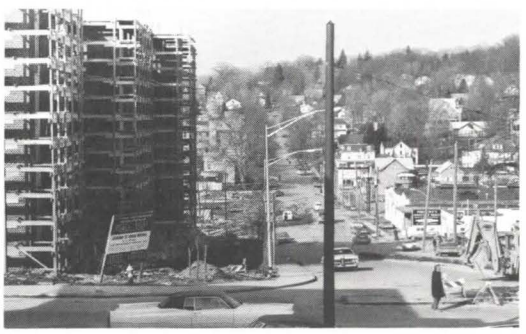
Another potential pitfall in designing for the roadway is the danger of inordinate distraction. The considerable difference between arrested interest and screeching brakes can literally mean the difference between life and death. The case of an X-rated drive-in cinema in Buffalo, New York, with its screen in full view of a highway is an excellent illustration of these hazards. Throbbing nudity on the nocturnal horizon sent at least two vehicles a night catapulting into a ditch, until the screen was finally turned in the opposite direction. Successful road art should establish a point of reference in the spectator's mind—an awareness of a change of pace in his visual surroundings—but not frustrate his curiosity to the point of inviting peril. As he drives by, there should be visible clues to engage attention. He may even turn his car around for a second look, but this should not be compulsory. The dialogue in his mind as he continues toward his destination is the real message.

The problems of art to be viewed from the passing car have been the concern of SITE Inc. since the group started three years ago in New York City. SITE is a corporation of artists, writers, and technicians organized with the purpose of exploring and developing new concepts for the use of art in an urban situation. Among the group's recent commissions, there are two projects dealing with roadside conditions. The first of these, in Peekskill, New York, is part of an urban development program and the second is also for urban renewal in Binghamton, New York. Each site is proximate to a major thoroughfare, production budgets were limited from the outset, materials had to be readily available, and construction services provided locally. Also, SITE was invited to consider each project in a trouble-shooting capacity as the areas in question had been destroyed by indifferent planning or oppressive architecture and it was the objective of the clients to remedy existting situations. In summary, SITE was asked to provide art for more-or-less abandoned spaces too dreary for most architects to consider.

The site area in Peekskill is a land parcel adjacent to a large brick apartment building at the corner of a main intersection, Academy and Broad Streets. The location was selected because of its proximity to a major point of entry into the city. The rather precarious relationship of the site to the roadway (a main intersection at the entrance to the township), precludes considerations for its development as a participatory space. Also, the area is dominated by outscaled brick walls belonging to the middle-income housing units. If the aesthetic was considered at all during the planning stages of this section of the community, it was an insignificant factor subjugated to functional objectives.

The solution for the Peekskill apartments is to relax the severity of a rectangular brick mass by "melting" the base of the building into the surrounding landscape. The effect is intended to achieve a release of tension in the static walls and to imply that the internal cohesion of the architecture has begun to respond to the forces of gravity and the burden of its own existence. This is not in-



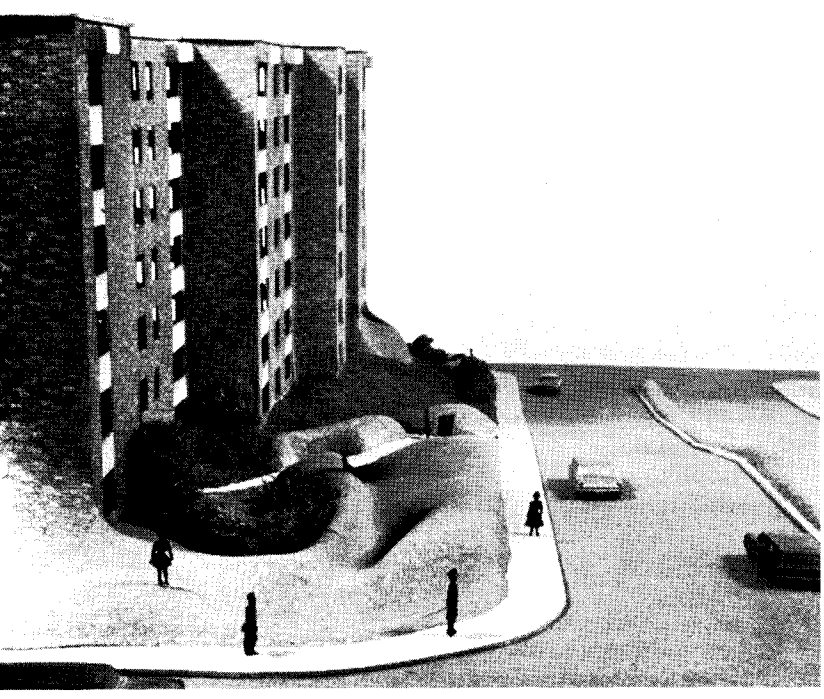


Two views of Academy and Broad Street site (above) with Crossroads Apartments—Peekskill, New York.

tended as a literal statement; but, more significantly as sculpture elements which become intrinsic to the site and still retain the essential character of the land and brick dwellings. When perceived from the roadway, the motorist must reconcile an inversion of process, and anarchy of materials, which intimates that things may not be routine or predictable. The project also challenges the categorical distinctions between earth as "left-over" space next to architecture and the completeness of a work of architecture as an object independent of context.

Questions arise concerning the right of the artist to utilize the work of an architect as the raw material for art. The historical precedent was certainly established in the work of Duchamp, whose province it became to equate life and art by using each as a metaphor for the other — without emphatic commitment to which is which. Hence, his *Bicycle Wheel* could be simultaneously interpreted as art, a utilitarian item, or neither, without being conditionally devaluated aesthetically during any stage of assignation. In some ways the work of SITE parallels these assumptions. By using function, phenomena, and architecture as media, it is inevitable that a considerable degree of subjective attitude will be reflected during the transformation into art. A bad work of architecture, for example, can become workable data when evaluated in the context of a total environment. The bad or good judgements become irrelevant after being recycled in the art making process. The spectator driving by the Peekskill project is confronted with existing structures and existing circumstances which must be rationalized from a standpoint completely contrary to the dogmas of architecture practice. The "melt" is not injected as an exhibitable work of art and not as a formalistic site improvement; but rather as an information basis requiring the urban-suburbanite to become involved in the entire question of meaning in his city environment. Although Duchamp's "assisted" readymades may have anticipated this kind of dialogue, it has been the arrival of a universally mobilized audience which has encouraged the extension of the idea on a municipal scale. By establishing the reasons for inverse reactions to familiar situations, to be perceived from the passing car, SITE has opened up broad potentials for a new urban art.

The Binghamton, New York site presented a more complex set of conditions than Peekskill. In this case SITE had to deal with a series of land parcels, each assigned to a different purpose. Also, the community has been radically disrupted by an urban renewal program conceived in complete disregard for the essential character of the early township. Binghamton is situated upstate in New York and the character of its central commercial property has been determined by casually spaced, turn-of-the-century, one to five story buildings. There is little evidence that the creative use of public space was ever considered important. The merging of two rivers, Chenango and Susquehanna, define the boundaries of the mercantile core and, at one time, provided an active waterway commerce. It has been the objective of the Urban Renewal Agency and the Valley Development Foundation (who jointly retained the services of SITE) to preserve local landmarks and prescribe guidelines to help maintain the integrity of the original city plan. These endeavors have proved to be somewhat futile in the face of omnivorous real estate speculation and a new master plan modeled along the standard business center format. All of the ingredients are present, including pre-cast concrete neo-brutalist high rise, watered down Miesian bank style, acres of oppressive concrete paving, lollypop trees, post card piazzas, and charm bracelet sculptures by famous artists. The particular areas allotted to SITE were, again, those peripheral refuse spaces considered expendable after the business towers were nearing completion. The only explainable reason for city agencies to award this terrain any attention is because of its proximity to the superslick central complex. Once this glossy vocabulary had been introduced, it could not be severed abruptly without creating an



The "Peekskill Melt" project (above) designed by SITE, Inc. suggests a series of melting corners coming from the existing buildings and fabricated in the same brick as the walls. The effect is intended to achieve a release of tension in the static walls and to break down the categorical difference between earth as "left-over space" next to architecture and the completeness of a work of architecture in itself.

awkward transition into the more modest older sections. SITE's role was complicated by municipal indifference, confused scale references, overlapping architectural styles, and a flat characterless terrain. The site itself, located behind the former city hall, is adjacent to State Street, a main thoroughfare. Included were a park, access alleyways, a street crossing, a pedestrian mall, and an end land site without particular purpose. An effective resolution to compensate for these multiple factors had to embrace both visual and participatory experiences.

In Binghamton, the existing premises for a design idea were diametrically opposed. The choice was to endorse the actively progressing high-rise core, or resist this decision and try to reaffirm the community's indigenous character and natural environment. The dangers of the first option ran the risk of subscribing to tedious modernism, while reiteration of "rustic" legacies was clearly reactionary. SITE responded instead to some regional influences. The most important of these are the rivers and surrounding mountains which, although clearly in evidence, have been completely ignored by the new city plan. Albeit, truck routes have stripped the Chenango and Susquehanna of their commercial urgency, but the waterways are still determining factors in any consideration of Binghamton.

The town also retains a strong utilitarian character by virtue of local industries which produce construction materials. Finally, there is the decisive effect of highway and street construction on the entire question of municipal orientation. It is a community which depends upon the state thruway for economic survival and most of its internal streets are designed to accommodate this traffic. State Street, in particular, is wide, fast, and uncompromisingly dreary.

The SITE concept for Binghamton involves a series of massive, undulating, dock-like, structures which roll through the length of State Street park, become overhead grids in the alleyways, reappear on the walls and floor of the shopping mall, and are finally resolved as vertical articulations of a wall three blocks away. The material to be used is fire-resistant, heavy beam, wood—14 inches wide, 4 inches thick, and 20 feet long. The beams will remain natural and untreated with color or varnish. The dock structure evolved for several reasons. Wood construction is synonymous with cities proximate to waterfronts and contributes a pleasant relief to the dominant use of concrete in the metropolitan area. The material offers cohesive and infinitely variable modules, so that the relative sprawl of the individual sites can be visually coordinated. The dock generates a kind of raw power which is directly associated with the construction process. This process becomes the key to aesthetic and serves to avoid the look of a "finished" work by retaining a complete visual biography of its evolution. When viewed from the automobile on State Street, the collective effect should present a dramatic change in elevations and the illusion of great distance. The individual lengths of wood will be seen primarily as a series of interlocking butt ends and as linear directionals exaggerating the horizontal perspectives.

The rolling dock is comparable to wharf structure only in its allowance for pedestrian passageways to building entrances and alleyways. It has been a principle of SITE to avoid those provisionary measures (benches, walkways, stairs, etc.) which tend to be additive and unresolved concessions to function in most public places. These practical features must be accounted for, but not as clumsy intersections. The wood beam modules supply endless variables for seating and walking, without the conformity that recognizable park furniture enforces. The main objective of the undulating dock is to create an intriguing vista for the State Street motorist. To heighten a sense of fluidity and kineticism, the beams open on the higher elevations to reveal the internal grid construction and close like a boardwalk on the flat surfaces to facilitate traversal. As a result, this proposal becomes moderately functional, allows the pedestrian a freedom of choice in terms of physical use,

Roadside house near Barcelona, Spain—author, anonymous

In the work of Duchamp, life and art became metaphors for each other. Hence his "Bicycle Wheel" could be simultaneously interpreted as art, a utilitarian item, or neither without being conditionally devaluated aesthetically at any stage.

and the unity of the concept is not sacrificed to an accommodation of utility.

It is important to remember that both SITE projects, Peekskill and Binghamton, are predicated upon urban information and that each serves as a place of special identity to the motor vehicle operator. When he drives past, he is arrested by, or has reconfirmed, certain clues to his immediate environment. The Peekskill melting building becomes a rather perverse metaphor recalling distant hills now severed from view by architectural bulk, and the land-locked dock suggests that the river cannot be too far away. Although none of these concepts is intended to be interpreted on such patently referential terms; the fact remains that, from the vantage of high velocity, these simplistic messages initiate the incentive for a more considered response.

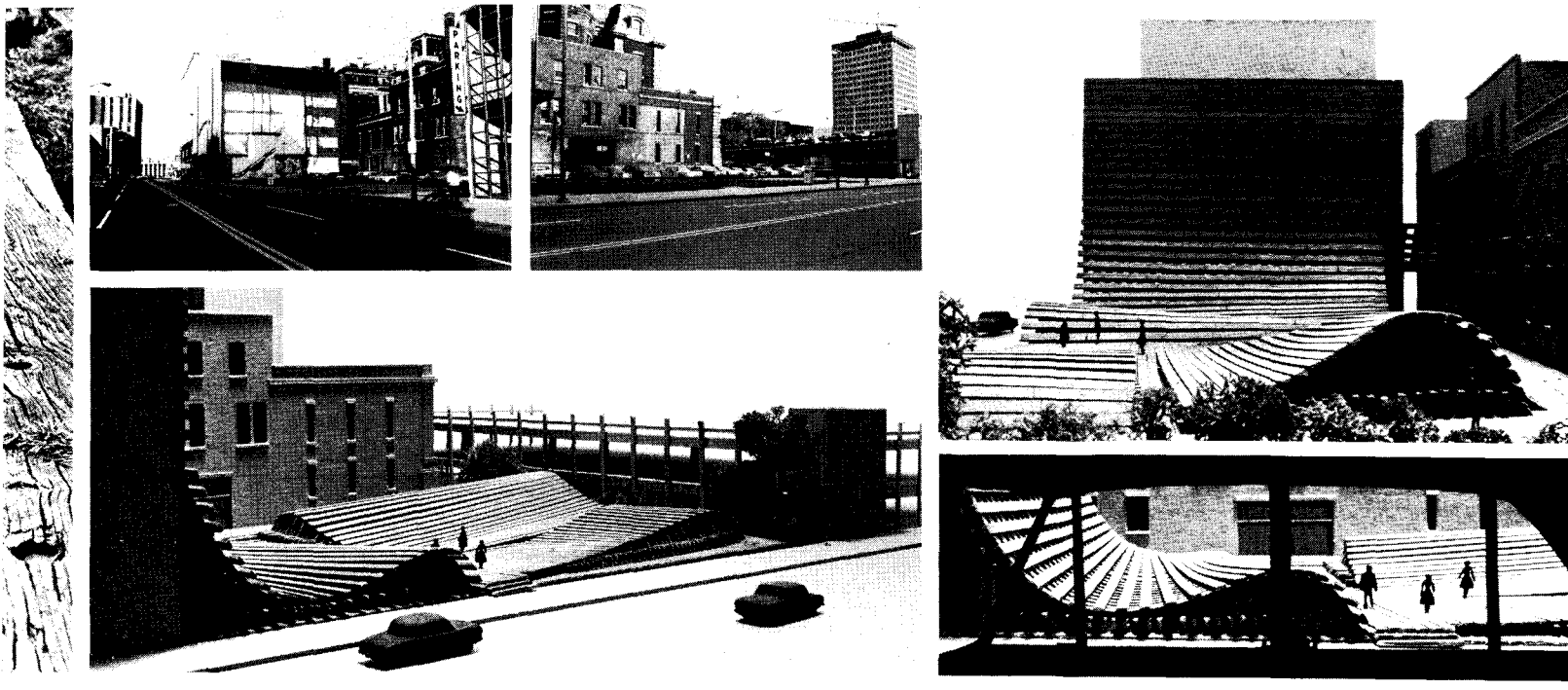
Art for the gallery and museum has the advantage of being showcased where the spectator is predisposed to absorb more slowly. Art on the highway cannot afford this luxury of time for contemplation.

The mails today are glutted with "ban the automobile" literature. Some of the most eloquent public appeals of our decade have been written in favor of a return to walking space in the modern city. So exhausting is the responsibility for this crusade, it is small wonder that the fatigued authors of anti-car rhetoric find the drive home at night exceptionally tedious. At this point in time, the suggestion of a total reversal which cannot be realistically implemented and does not recognize that the automobile is here to stay because people crave its convenience, is questionable as a serious proposal. Obviously pollution must be reduced, safety enforced, congestion relieved, public transportation improved, ecological balance maintained, and the pedestrian accommodated. The objective is not to find ways to eliminate a necessity which has determined the shape of the modern world; but, instead to rally the best cultural and scientific resources available to meet the challenge of dealing with the facts as they really are.

The visual arts cannot be excluded from this challenge. Indeed, the artist, since the 19th Century, has played only a minor role in the determination of environmental criteria. At best his function has been that of peripheral decorator, willing to forfeit the absolute security of a museum interior for the slightly less secure ambience of a public plaza. The transition has been relatively effortless and the effect on concept and aesthetic inconsequential. Although SITE has given the problems of civic art for the mobile age its considerable attention, the group feels that it has hardly scratched the surface of a compelling endeavor. The potential for future development is virtually unlimited and must certainly include innovational contributions utilizing the new wealth of technological media. Possibilities which come to mind are: synchronized illumination systems for highways which perform practical, kinetic, and aesthetic functions; earthworks to articulate miles of highway; computerized and serial information as street art; interchangeable parts for fixed environments to oblige a need for evolution; projections and supervideo as intrinsic to city walls; and structures which are built up and torn down in an endless continuum.

But ideas are in cheap supply and offered every day by the design professionals. The real problems are sponsorship and implementation. For the past 50 years, architects, developers, and construction companies have united in the creation of an urban ugliness unparalleled in history. Our cities have been totally founded on money and the condition that every square foot be accounted for as immediate cash dividend. Aesthetic has been completely submerged in that convenient Bauhaus catch-all "form follows function"—or, translated into the pragmatists' rationale, "service is good enough". The problem, therefore, is not the automobile per se; but the unimaginative and omnivorous way in which our cities have been constructed around it. The corporate interests responsible for this tragedy are in direct collusion with government agencies.

All concerned publish their



The SITE, Inc. concept for Binghamton involves a series of massive, undulating dock-like structures which roll through the length of the State Street Park, become overhead grids in the alleyways, and reappear on the walls and floor of the shopping mall.

periodic reports advocating improvement of the environment in the grand European tradition; but too often these communications are so lacking in viable programs for realization that the idealistic jargon becomes worthless.

There are also more sinister implications in all of this grandiloquence. The perpetrators are fully aware that the aspirations for splendorous parks and plazas cannot be achieved under the present system of priorities. But the platitudes read well in the press and the infeasible idealism insures that civic deterioration will continue for the profit of all concerned.

The automobile is the determining factor in the design of the contemporary environment. Its presence can be widely destructive when the negative influences are allowed to proliferate without control. If the state of mobility means only the fastest route to selfish gratification and profit, the world is doomed to acute emphysema and endless visual blight.

On the other hand, the car and its operator can be as gracefully absorbed into the fabric of civilization as the much-heralded, but fading, pedestrian.

Constructive action must be based upon a candid evaluation of the axioms:

- Walking space may be approaching the threshold of obsolescence.
- According to a recent survey published by *Citizens for Clean Air*, the car-owning commuter spends about 20 percent of each day in driving—and about 90 percent of his in-transit viewing time sacrificed to the interminable boredom of concrete walls and banal roadway advertising.
- Skyscrapers, whatever their virtues as space savers, do not provide in their height a panorama which is comprehensible from the interior of an automobile. The motorist sees best those structures which articulate a low horizon.
- Art in the cityscape which does not provide information about its environment becomes a sterile intruder, more at home in the private collection.

All of these components have been recognized for many years, but incredibly little has been done to successfully transform the postulates into imaginative solutions.

The architects and planners, by and large, have been willing to sell out to propriety and opportunism. The real estate industry has responded mainly to the lure of exploitation. City agencies have played along for convenience and the political advantages of accommodating big business. The art museums have encouraged the perpetual string of commissioned monumental sculptures in order to consolidate their invested interests in certain artists. And the Federal Government has been negligent in the enforcement of construction codes which require a percentage of each new building to be spent on art, (a catch-all easily circumvented by considering everything from powder blue urinals to lobby mirrors as art).

The course of architecture in the future is being clearly defined by the computer and soon only the most exceptional buildings will be "designed" by the individual. The massive standardization unquestionably precipitates the international tendency toward greater conformity and duplication of services. It cannot be too long before the fields of planning and design in the "master-builder" tradition will exist only as a part of quaint mythology.

If there are to be any communicative cultural forces at all (and many indications suggest the end of art as we know it) it will be the artist most capable of dealing with urban structure who will inherit the responsibility.

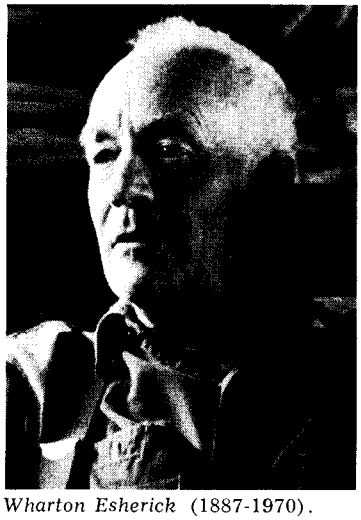
He can hardly expect to accomplish this feat locked into the privacy of his studio, producing isolated objects, and nourishing an ambulatory-elitist audience.

The challenge is out on the strip, the boulevard, and the sidewalk. The vanguard art of this century has redefined the nature of art many times over; but infrequently the role of the artist. It is a time of new definitions and, in all probability, the new visions are likely to come from the new artist with his foot on the accelerator.

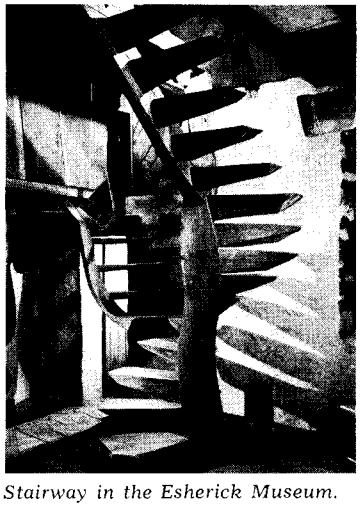
PHOTOGRAPHS: Michelle Stone.

FACETS

(Continued from page 21)



Wharton Esherick (1887-1970).



Stairway in the Esherick Museum.

LEGACIES

BEAUTY FROM THE BACKYARD

Wharton Esherick, who died in 1970 at age 83, didn't like architects much. "The east end of a horse going west," he called them. But in 1956, when building a workshop near his studio in Paoli, Pa., he went to his friend Louis Kahn for help. The result was three hexagonal units beneath three diamond shaped roof planes, covering 600 sq. ft.

Now Esherick's daughter Ruth, and her husband Architect Mansfield M. Bascom, are outfitting the workshop as a house for themselves. The old studio has been converted to a museum, and inasmuch as Esherick built it himself—carefully sculpting doors, hinges, windows, window sills, latches, lightswitches, cabinets, sinks, stairs—the museum is itself part of the art it is meant to display, holding some 500 pieces of his wide ranging work. This includes paintings, woodcuts, prints, sculpture—in wood, stone and ceramics, furniture, and utensils. Wood was his favorite medium. Initially, he used only imported ebony, rosewood and padouk, later switching to local woods—oak walnut, cherry. "If I can't make something beautiful out of what's in my backyard, I'd better not make anything."

The Wharton Esherick museum is open on Saturdays and Sundays by reservation only.

LAND USE

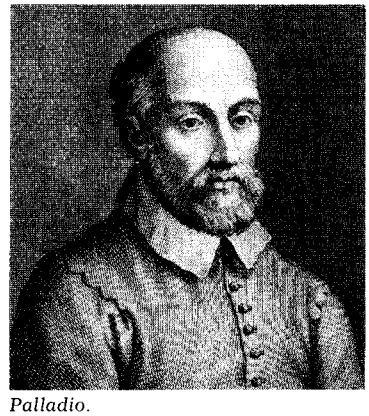
Dr. Joseph Picchi has something of a problem. Five years ago, he laid out $7,000 for a site at Sea Ranch, that potpourri of weekend retreats north of San Francisco. Since then, he's spent another $10,000 on architect's fees, water and power lines, and a septic tank.

Unfortunately, Dr. Picchi can't build his house. California voters, approving an end to developmental vandalism of the state's 1,072-mile coastline, have set up six powerful commissions to regulate all coastal construction. By 1976, each must submit a master plan to the State which will then approve or disapprove a statewide planning document.

Dr. Picchi is not the only one caught in the dilemma. If, in fact, it can be called such. *Any* structure costing more than $7,500 and to be built within a thousand yards of the shoreline must receive commission approval. While we have no quarrel with the objectives of the California plan, there is some reason for caution when six different commissions start applying six different sets of criteria in deciding what will be approved between now and the time the statewide plan is adopted. Furthermore, making such decisions on a case by case basis has turned out to be arbitrary, and time consuming.

Lest the concept of growth control and land use management die aborning, let's hope the commissions can get together on a list of points that can be applied equally and fairly to all cases. Otherwise, long before their master plans are handed over, the commissions may come off looking like a coercive, limiting instrument instead of the tool of environmentally sensitive development they were conceived to be.

As for Dr. Picchi, he couldn't be more sensitive to the idea of enhancing scenic views, and all the rest. That's the reason he wanted to build at Sea Ranch. One wonders what the local commission would have said if he had wanted to build a $5,000 snack stand a la the brothers Greene.



Palladio.

EXHIBITS

PALLADIO ON DISPLAY

Visitors to Venice this fall can make an easy side trip to Vicenza, where Andrea Palladio lived and worked. On display are drawings and models of his vast, influential output. At least a dozen of his flawless villas are nearby.

Perhaps the most copied architect of his time, Palladio was boldly innovative. He is said to have been the first to color stone with whitewash, to place columns high on pedestals, to put thermae windows with mullions into churches, and to employ optical devices to unify separate spaces.

Despite his classicism, Palladio was contemporary in opposing what he called "useless decoration," elements that served no function such as shedding water or holding something erect. At the same time he gave most of his villas a sort of hubristic pomp by fronting them with temple-derived porticos supporting triangular pediments. Hubristic or not, his lessons in proportion, spatial relationships and the use of light are an enduring achievement.

• "The Design Necessity" exhibit from the First Federal Design Assembly held last April in Washington, D. C., is touring nine states. It has already appeared in DesMoines and Milwaukee. The remainder of its schedule: September 15-October 7, Chattanooga; October 20-November 11, Kansas City, Mo.; November 24-December 16, Bloomington, Ill.; January 6-27, Minneapolis; February 9-March 3, Detroit; March 16-April 7, Columbus, Ohio; April 20-May 12, Lexington, Ky. Sponsored by the Federal Council on the Arts and the Humanities, the exhibit illustrates "ten" criteria of effective design.

SCHEMES

RURAL HOUSING

"Out of sight out of mind" applies to most of the nations substandard housing. Few of us see these dilapidated homes, bereft of plumbing or heat, tucked away as they are far from the classy, glassy, big-city exposures. But the latest census reveals that 56 percent of all substandard housing is located in towns of 2,500 persons or less.

This statistic is not surprising. Rural poor are not organized, have no collective voice and, with few exceptions, are unequipped to handle a problem so diffuse and mammouth. It matters little that the Farmers Home Administration or the FHA have subsidy money available if there is no agency or group to request and receive it.

To make a start at closing the housing gap, The Office of Economic Opportunity set up a private, non-profit agency known as the Housing Assistance Council. Its mission is to assist rural housing development corporations with money and guidance. It will show groups how to set up a housing corporation, and will loan money to put projects into motion.

Originally, in the fall of 1971, the OEC granted the Housing Assistance Council $4 million, half of which was set aside for a revolving loan fund charging no interest. Today the Council has programs under way in 40 states and Puerto Rico, and is looking for more.

The Council's board of directors has stated that funds are to be employed to meet the

needs of the poorest people in the most rural areas.

Eventually, it will make recommendations for an overall strengthening of housing programs for the rural poor.

UN

One unpublicized instance of our failure to face the problems of human settlement, reported by Narelle Townsend of the UN Centre for Housing, Building and Planning, is that there are roving bands of homeless teenagers and infants in Asia and Africa—half of them under 15 and unemployed; and children sleeping in boxes in Bogota. There are, or course, millions plagued by less sensational—or more accepted—problems.

The Executive Director of the United Nations Environment Programme (UNEP), Maurice Strong, estimates that by the year 2000 over 200 cities will have populations in excess of two million and many of these will have pitifully inadequate construction resources. Another way of putting this is that in the next 25 years world population will nearly double and for the first time in history the majority of mankind will live in urban areas of more than 20,000 inhabitants. Two-thirds of this population will suffer from poverty; malnutrition; inadequate shelter, health and transport services; and unemployment. The buildings required to accommodate them will have to exceed all construction ever undertaken by man.

Mr. Strong has also stated: "In the past, the overriding concern with the macro-economics of development has in many cases obscured one of the fundamental objectives, which is the satisfaction of human aspirations," which he lists as follows: "Safeguarding the identity of the individual within the community; equality of access to public services and facilities; social interaction and popular participation in community affairs; cultural stimulation and opportunities for personal development; creative recreation; privacy, peace and quiet; personal security; freedom of movement and choice."

If Confex '76 does nothing more than get more people thinking along these lines, it will have done much; but the planning now in progress promises action. A central part of the program will be the presentation of demonstration projects in a form which can subsequently be used world wide for educational purposes. These projects are to show what *can* and *is* being done under many different economic, political and physical conditions rather than what *might* be done under optimum conditions. Among the criteria for selecting demonstration projects: Offer solutions rather than define problems; show how public and private obstacles can be overcome; be capable of wider application; insure a balance between rural and urban projects and those presented by developed and developing countries; be endorsed if not conceived by their government; demonstrate imaginative, innovative use of local resources and skills; demonstrate multiple uses. It is estimated that 135 countries will produce over 150 projects of interest to architects. All countries are expected to have presented their suggestions for demonstration projects by June 30th, 1974.

Confex '76 will not be held in just a hall. It is projected that all of Vancouver become a classroom for conferees.

In outlining this and related UN efforts for The FORUM, Narelle Townsend described them as follow-ups of the historic Stockholm Conference on the Human Environment (June '72) where a 106-point Action Program was unanimously agreed upon by the 110 member states present.

The Conference recommended establishment of the United Nations Environment Programme with a 54-member Governing Council, an environment secretariat, and an environment fund to which governments would make voluntary contributions. The headquarters for this, as of October 1, will be in Nairobi, Kenya, with liaison offices in New York and Geneva. Mr. Strong, the Canadian Secretary General of the Stockholm Conference, was appointed Executive Director of UNEP for a four year term.

The UN General Assembly in December '72 gave its full endorsement to this program, and adopted resolutions noting the urgency of and giving higher priority to international efforts to improve housing and human settlements, especially in the developing countries.

A small preparatory group for Confex '76 is functioning in New York, headed by Senator Helena Benitez of the Philippines and Eric Carlson, former chief of housing of the UN Centre for Housing, Building and Planning. A May advisory group meeting of world experts, chaired by Lady Barbara Ward Jackson, a member of The FORUM's Board of Contributors, outlined conference themes and proposals for the scope and content of demonstration projects which are now being further studied and detailed. The six themes recommended by the group: Human needs in the environment of human settlements; the role of settlements in national development; the structure and quality of the environment of human settlements; special problems in human settlements; managing human settlements; international cooperation.

The first session of the UNEP Governing Council, held in Geneva in June, gave priority to establishing a fund or financial institution providing seed capital for human settlements in developing countries. Former U. S. Ambassador to the UN Economic and Social Council, Mr. Bernard Zagorin, appointed by Mr. Strong, is chief of staff for this study and began his assignment August 15.

ENVIRONMENT

LAND USE REPORT

It's an old story. Too many people in too little space. Not only are there more of us, but we've decided to crowd into or near the same kind of place—big cities.

It's not just architects who are hearing the cries of anguish, nor just the persons being crowded. In Orr, Minnesota (population 350), many residents are bitterly opposed to the new Voyageurs National Park which is expected to bring one and a half million persons a year into that previously unspoiled area of the north woods.

Across the country, cities and towns of all sizes are trying to put the brakes on development, at least to see that it becomes orderly and undestructive. It is probably a rare architect who has not run into a sewer or gas moratorium, a ban on building permits, new zoning restrictions, or hastily enacted size and height limitations. Can wise orderly growth come from action that is piecemeal, local and riddled with alarm?

To find out and to suggest solutions, President Nixon's Citizens Advisory Committee on Environmental Quality appointed a 12-member task force, chaired by Laurence S. Rockefeller, to undertake an eight month, privately funded study of land use problems associated with urban growth. In July the task force published its findings: *The Use of Land: a Citizens' Policy Guide to Urban Growth.*

The Rockefeller committee is cautiously hopeful. Mr. Rockefeller has summed up the problem as consisting "of learning to do what we have not yet successfully accomplished on any scale: The creation of communities that are socially open and environmentally sound."

How can the problem be approached? The report suggests a combination of governmental and private decisions. Policy guidelines for individuals and localities would be laid down by higher governmental authority. Vacant land, not used for recreation, would be held privately but subjected to governmental regulations to see that neither its beauty nor its ecological significance were harmed. Open areas within urban regions would be preserved and grouped if possible. Farmland zoning practices would be overhauled to preserve farms where essential, and to preserve them permanently, not just for a period of years.

The report is frank in pointing out that laws surrounding the preservation and control of land are far from exact. Some individuals feel that any regulation of land owned by an individual is an infringement of constitutional rights. Cases are pending on such regulations in several states but perhaps the most crucial regarding center city real estate involves the battle over the air rights above Grand Central Terminal in New York.

The owner of the rights and the Penn Central Railroad were prevented from building a 56-

FACETS

story office building above the Terminal by landmarks legislation, and they are suing the city for $8 million a year in damages.

"What is needed," says the Rockefeller report, "is a changed attitude toward land, not simply a growing awareness of the importance of stewardship, but separation of commodity rights from urbanization rights."

Some states are starting to take action of their own. In Florida, where the population has more than tripled in 25 years to eight million, the legislature earmarked $200 million to purchase environmentally endangered land. And plans are underway to set up regional planning boards to enforce density regulations. Most of Florida's growth has come on the east coast near Miami where Dade, Broward and Palm Beach Counties house a third of the state's population.

Harvey Ruvin, a Dade County Commissioner, sees good news along with the bad. "By 1980," he says, "the bad news will be that we'll be drinking raw sewage. The good news will be that there won't be enough to go around."

Last fall, Boca Raton, in Palm Beach County, became the first city in the country to set an upper limit to population. It did so by legislating a grand total of dwelling units allowed within city limits: 40,000.

Also in Florida, as the result of a statewide vote, the entire coastline is to be controlled within 1,000 yards of the shore. In California almost identical legislation is in effect.

Nor is land use legislation limited to the most populous states. Oregon, New Mexico and Vermont have land-use laws.

New York State passed a $1.5-billion environmental bond issue which sets aside $175 million for the purchase of open space. But the question persists whether such wholesale land acquisition by governments is really the answer.

"If the open space determination is framed for the public in terms of 'buy it or lose it', we would surely lose most of our scenic countryside," says William Reilly, staff director of the Rockefeller task force. "The answer has to be a mix of solutions that involves primary reliance on regulations, backed by property-tax assessments that reflect present use value. Sewer systems and roads, which attract housing, for instance, should be planned in such a way as to steer growth away from the lands that needed to be protected from development."

This December, The FORUM will go into the subject of land use management in depth with a report by Robert Cahn, the Pulitzer Prize-winning environment editor at *The Christian Science Monitor*. The same issue will also include a recount of "The National Conference on Managed Growth," taking place in Chicago, September 16-18. For conference information, contact Urban Research Corporation, 5464 South Shore Drive, Chicago, Illinois 60616.

PEOPLE

E. G. Hamilton of Dallas is the new president of the National Council of Architectural Registration Boards.

- Herbert H. Swinburne is now chairman of the Building Research Advisory Board of the National Research Council.
- William K. Reilly, former executive director of the Task Force on Land Use and Urban Growth Policy, is the new president of the Conservation Foundation.

ACADEME

APPOINTMENTS

Harlyn E. Thompson is the new dean of the school of architecture at the Newark College of Engineering. Thompson assumes his new duties in September, following five years as chairman of the department of architecture at North Dakota State University.

- Dorian Hunter takes over the duties of president of the University of Southern California's Architectural Guild, support group for USC's School of Architecture. Ms. Hunter is corporate president of Dorian Hunter Interiors, Inc.

FELLOWSHIPS

A. G. Juilfs Research Fellowships in Wood Construction have been established by Virginia Polytechnic Institute and State University in conjunction with Senco Products, Inc. The Fellowships, administered by the school's College of Architecture, are for "increasing the knowledge of continuing research in the mechanical fastening of wood and wood-base products and, specifically, for the support of one or more research fellows selected annually by the University to undertake studies in the wood research and wood construction laboratory of the College of Architecture."

CONFERENCES

"Design of Precast Segmental Bridges" will be the subject of a full day seminar offered September 25th, during the Prestressed Concrete Institute's annual convention, at Chicago's Palmer House.

- A seminar for architects in industry will be held October 1-3 at the new AIA headquarters, 1735 New York Avenue, N. W., Washington, D. C. 20006. It will deal with ways in which architects in industry work with consulting architects, engineers and contractors; and with new concepts and technologies such as systems building. For information approach Maurice Payne, the AIA's Director of Design and International Relations.
- A seminar in the Techniques of Noise Control will be held October 11-14 at the Shoreham Hotel in Washington, D. C. Information may be obtained from the Institute of Noise Control Engineering, NOISE-CON 73, NBS-233, AI47, Washington, D. C. 20234.

Araldo Cossutta . . .

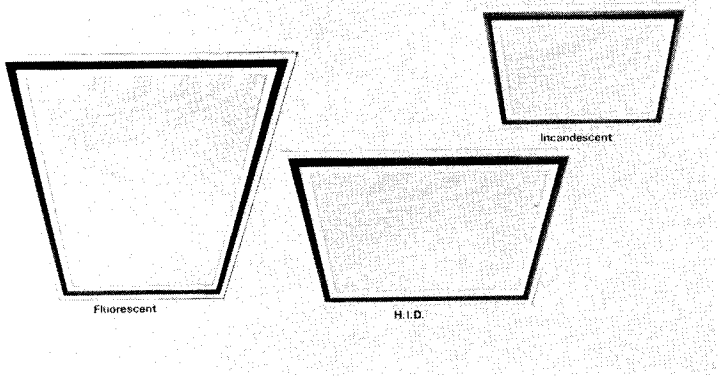
PROSPECTS

Araldo A. Cossutta, the architect, and Vincent Pasciuto-Ponte, the planner, have entered into partnership. The New York-based firm will be known as Cossutta & Ponte; and, if our hunch is right, known for a good deal more before long. Mr. Cossutta thus leaves I. M. Pei & Partners where, with Mr. Pei, Eason H. Leonard and Henry N. Cobb, he helped generate a sequence of work which may well be without parallel in Post-war America. Mr. Ponte's contributions in the field of city planning center on the design and redevelopment of major downtown areas in North America, Europe and Australia. Both men have worked closely on a number of projects; most pertinently, Boston's Christian Science Center (page 24). Each brings to the partnership several more, either pending or in process: Buildings in Paris, Lyon, Madrid; planning assignments in Winnepeg, Columbus, Ohio, Charlottsville, Dallas, Boston. So far as we know, this is the first time that an architect and planner have come together. It will be a heady, certainly instructive experience to watch.

. . . and Vincent Pasciuto-Ponte.

PHOTOGRAPHS: Cornell University, page 21 (bottom); Susan Sherman, 76 (top); William F. Howland, 76 (center); Culver Pictures, 76 (right); Bruno Barbier, 78 (top); Paul Gelinas, 78 (bottom).

PRODUCTS



FAMILY SIZE

Three new lines of fluorescent, incandescent and H.I.D. recessed lighting fixtures, identical in design and appearance, have been developed into the first "Modular Family" by Guth Lighting, Division of Sola Basic Industries. Aimed at uniformity and compatibility, with illumination requirements in mind, the "Modular Family" offers a complete line of identically matched recessed fixtures. It includes a complete line of fluorescent troffers, both static and air moving models in grid or flange mounting types, sized from ½'x4' to 4'x4'. Incandescent and H.I.D. square modules in static and damp location units are offered in 12", 16" or 24" square sizes. All units are available in identical flush or regressed "picture frame" doors and the fluorescent troffers also are available in "full frame" doors.

On Reader Service Card, circle 100

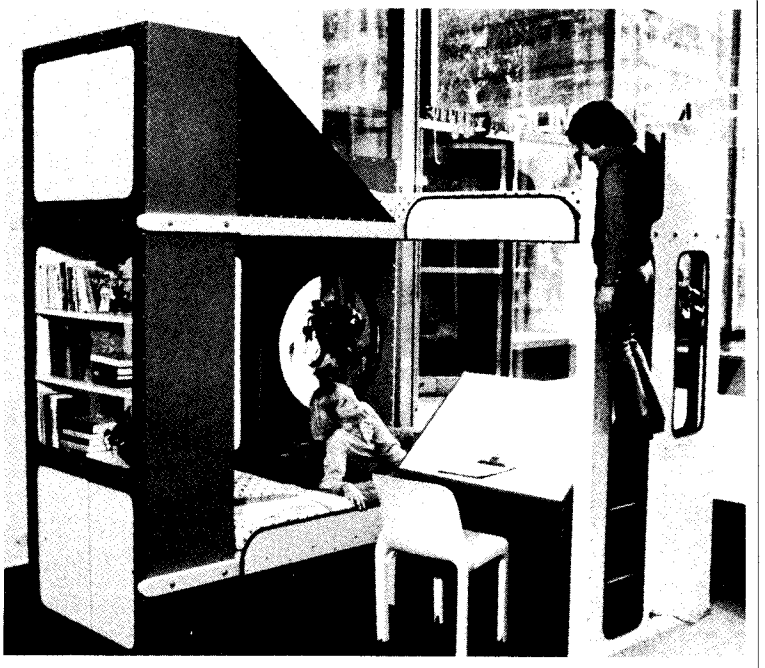
PACK UP YOUR TROUBLES

Owens-Corning Fiberglas recently completed an exhibit in New York called "Here Comes Tomorrow."

Pinpointing various trends in American life—increasing mobility, more time and money for leisure—the exhibit shows how these trends may influence the way we live in the next ten or 15 years. Exhibit designers Buchsbaum and Korensten of Design Coalition have created three modules resembling huge suitcases that completely furnish a multipurpose room. They open into furniture for sleeping, entertaining and dining. Also featured is a bathroom for tomorrow, called a revitalization room because of the added equipment and appliances for grooming, hygiene and physical fitness.

Pictured here is a solution to the space problem of two children in one small room. The unit includes two beds, two desks, storage, shelves for books and a built-in ladder to the upper level.

On Reader Service Card, circle 101



The following is a listing of the key products incorporated in some of the buildings featured in this issue:

CHRISTIAN SCIENCE CHURCH CENTER, Boston, Mass., including Administration Building, Colonnade Building, Sunday School Building and Open Space Building. ARCHITECTS: I.M. Pei & Partners and Cossutta & Ponte. (Materials and Manufacturers as submitted by the architects.) FOUNDATION WATERPROOFING: (Damp proofing), "Ironite": Toch Brothers, Inc. PILING (Deep piles): Franki Foundation Co., Raymond Concrete Pile Div. WATERPROOFING: Uniroyal, Inc. CONCRETE & CEMENT: Wrentham Special Red. BRICK, BLOCK & STONE: (Brick paving): Capitol Clay Products; ("Glazon" block): Plasticrete Boston Corp. STRUCTURAL STEEL: Bethlehem Steel Corp. (Fabricator): West End Iron Works and A. O. Wilson Structural Co. FLOOR & DECK SYSTEMS: (Coffered slab forms): Rudkin-Wiley Corp.; (Finish floor decking): Granco Steel Products. ROOFING, GUTTER MATERIALS: (Styrofoam "RM" Insulation): Uniroyal. THERMAL INSULATION: ("Foamglas"): Pittsburgh Plate Glass Co.; ("Fiberglas"): Owens-Corning Fiberglas Corp. ACOUSTICAL MATERIALS: (Simplex ceilings): Owens-Corning Fiberglas. FENESTRATION: Fiske Architectural Metals. GLASS: Pittsburgh Plate Glass. INTERIOR PARTITIONS: U. S. Gypsum. ELEVATORS & ELECTRIC STAIRWAYS: Stanley Elevator Co., Inc. and Westinghouse Electric Co., Inc. EXTERIOR & INTERIOR DOORS: (Exterior): Crane *Fulview* Glass Door Co. and Flour City Architectural Metal; "Alumi-line" by Fiske: (Interior): Williamsburg Steel Products. LOCKSETS, HINGES & CLOSERS: (Cylinders): Best Lock Co.; (Locksets & Closers): Sargent; (Hinges): Stanley Rixon. INTERIOR TILE & PLASTIC: U. S. Ceramic Tile Co.; Natural Linen by Scalamandre Silks. PANELING: (Cabinet work): Monarch Industries, Inc.; Loughman Cabinet Co.; John Langenbacher Co., Inc. PAINT: Glidden; Pittsburgh Plate Glass. ELECTRICAL SWITCHES, LIGHTING & BREAKERS: General Electric; (Standby emergency): Onan; (Lighting fixtures): Pemco, Devoe, Omega & Lightolier; and Westinghouse Lamps. PLUMBING: American Standard; Church. UNIT HEATERS: Trane. VENTILATORS, RADIATORS & CONVECTORS: Trane; Indeeco. PIPING, VALVES & CONTROLS: Sarco Valves; Johnson Service Co. AIR CONDITIONING: York. DIFFUSERS, DUCTS, PUMPS, etc.: (Diffusers): Mitco; (Pumps): Skidmore. FANS & VENTILATORS: York; Trane; Bayley. INTERCOM SYSTEMS: Executone. RADIO & TV SYSTEMS: Philip; RCA; Conrac; Ampex. AUDIO VISUAL EQUIPMENT: Kodak; Honeywell. PNEUMATIC TUBES & CONVEYORS: Pneumatic tubes, power regulator. SPRINKLER/FIREPROTECTION SYSTEMS: Carlysle Sprinkler System; Pyrotronics; (Pumps): Peerless, House & Fire; HVAC Weinman; Federal Sump Pumps. WATER COOLERS: Halsey Taylor drinking fountains. MOVABLE PARTITIONS: Mills Co. MAIL DISTRIBUTION: (Conveyor) Lamson Div.; Diebold Corp. KITCHEN, LAUNDRY, LABORATORY EQUIPMENT: Adamation; A. F. Underhill, Inc.; (Laboratory) Joseph M. Linsey Corp. FLOORING, CARPETING: Kewaunee Scientific Corp.; Roxbury Carpet Co. FURNITURE: Endicott Church. ARCHITECTURAL METALS: Fiske Architectural Metals. BRICK SEALER: Solarine Co. CAULKING & SEALANTS: Tremco Manufacturing Co. CEILING LIGHTS: Neo-Ray Products. CONCRETE FORMS: Concrete Accessories Corp. ELEVATOR CABS: Boston Metal Door. GLAZING: General Electric Silicone; Tremco "Mono." GRANITE: Canadian National Granite; La Croix Co., Canada; Cold Springs Granite Co.—all by Peter Bratti Associates. MARBLE: Bordesi, Italy. MISCELLANEOUS METAL: Potomac Iron Works. POST-TENSIONING: Stressteel Corp. PRECAST: Allied Building Systems, Inc.; Cambridge Cement & Stone Co. REINFORCING STEEL: Bethlehem Steel. ROLLING DOORS: The Kinnear Manufacturing Co. RUST REMOVER: Angler Chemical. SKYLIGHTS: Ickes-Braun; Glass Houses. TRAFFIC DECKS: Robson Corp. TRUCK DOCK LEVELERS: Kelly Co., Inc. TRUCK TURNTABLE: Macton Machinery, Inc.

ROSEMARY HALL. Choate School, Wallingford, Conn. ARCHITECT: James Stewart Polshek and Assoc. (Materials and Manufacturers as submitted by the architect). FOUNDATION WATERPROOFING: Asphalt Dampproofing; Minwax. WATER-

(*Continued on page* 82)

THE WHITNEY LIBRARY OF DESIGN

Watson-Guptill Publications has enlarged its publishing program to include these highly successful books on architecture and design.

PROBLEMS OF DESIGN

BY GEORGE NELSON. This is a book that brings understanding of those areas of the modern world having to do with architecture, the arts, and design. Its 26 essays offer factual information, appropriate illustration, and clear analysis of the world of modern design. Included are chapters on: problems of design; art; architecture; planning; and interiors.

206 pages. 8½ x 8½. 116 illustrations. Soft Cover. ISBN 0–8230–7440–4. **$3.95**

THE INTERIOR DESIGNER'S DRAPERY SKETCHFILE

BY MARJORIE BORRADAILE HELSEL. This book is a comprehensive collection of drapery designs that can be used as a working tool, catalog, or design idea book. Sketchfile tracings can be used to substitute for designer sketches. It contains an impressive selection of drapery designs you can "show" without time consuming sample collecting or expensive sketches.

188 pages. 8½ x 11. 292 illustrations. Index. ISBN 0–8230–7289–4. **$10.00**

INTERIORS BOOK OF HOTELS AND MOTOR HOTELS

BY HENRY END. The author, a leading professional in the field has chosen the survey as the format for this commentary on the design of hotels and motor hotels. Intended specifically for designers, architects, and hotel men, this book examines the design principles of in-town, resort, and international hotels and motels. Each of the chapters is accompanied by a photographic portfolio of the particular hotel or motel type.

264 pages. 9 x 12. 256 illustrations, 3 in color. Bibliography. Index. ISBN 0–8230–7280–0. **$16.50**

DRAWINGS OF ARCHITECTURAL INTERIORS

EDITED BY JOHN PILE. Only the realism of a sketch, perspective, or "rendering," showing a space in more or less realistic fashion, can become the basis for explaining a design proposal. For students and serious designers, drawings play a vital part. They give the first—and sometimes the only—true visual reality to design ideas. This handsome book, compiled by an architect, designer, writer, and teacher, contains a rare selection of sketches representing the work of 89 outstanding architects and illustrators, among them Le Corbusier, Florence Knoll Bassett, Frank Lloyd Wright, Walter Gropius, Mies van der Rohe, Richard Neutra, and I. M. Pei.

172 pages. 9½ x 13. 146 illustrations, 29 in color. Index. ISBN 0–8230–7155–3. **$23.50**

A GUIDE TO BUSINESS PRINCIPLES AND PRACTICES FOR INTERIOR DESIGNERS

BY HARRY SIEGEL, C.P.A. This book is a must for those who know much about designing but not enough about making money. The author explains everything from the mechanics of setting up as a professional to estimating job time, billing, and collecting. This guide includes actual samples of specialized work forms, letters of agreement, and contracts. Siegel sets forth the basic principles, procedures, and office systems designed to bring order out of chaos, to solve the financial and operational problems of interior designers.

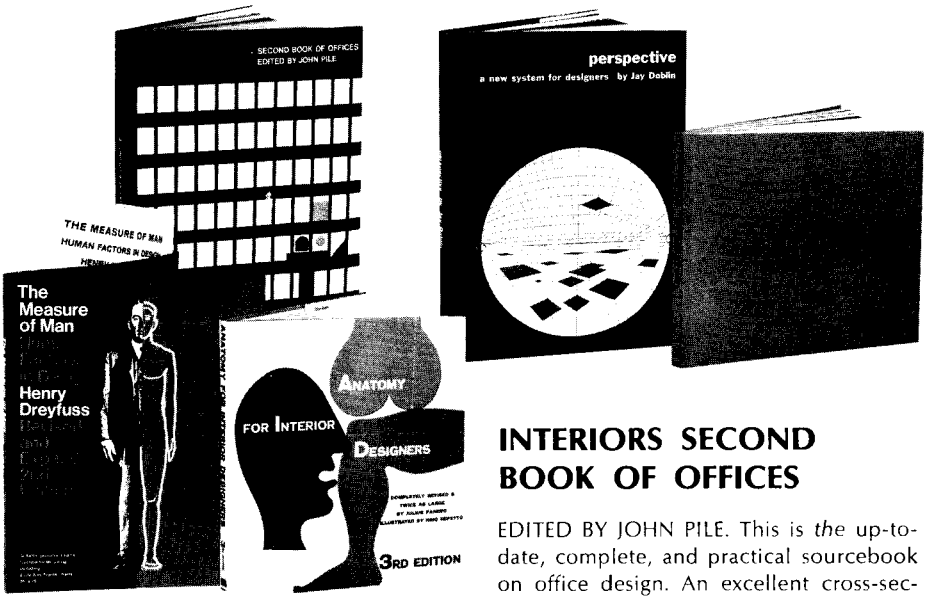
176 pages. 9 x 12. Over 40 illustrations. ISBN 0–8230–7251–7. **$13.95**

PERSPECTIVE

A New System for Designers

BY JAY DOBLIN. The serious designer, faced with the problems of solidifying and transmitting design ideas, finds no single tool more effective than skill in perspective drawing. This book is not just another text on the subject, it is a unique development, created by a practicing designer for his own use in the classroom, calculated to exclude error and develop freehand drawing skills. For designers it offers a simple method of visualizing any three-dimensional object accurately and quickly and eliminates complex mechanical drawing.

68 pages. 9 x 12. 150 illustrations. ISBN 0–8230–7419–6. **$6.50**



PENTAGRAM: THE WORK OF FIVE DESIGNERS

DESIGNED BY PENTAGRAM: This handsome book is a representation of the architectural, graphic, and industrial designs of five top-notch professionals: Theo Crosby, architect; Alan Fletcher, Colin Forbes, and Mervyn Kurlansky, graphic designers; and Kenneth Grange, industrial designer. These talented men have pooled their abilities in these areas to create a dynamic, creative organization, Pentagram. This book includes stunning examples of their designs, along with the strategy and methods they use in keeping up with the latest innovations in the field.

216 pages. 8¼ x 7¾. Over 150 black and white illustrations. 36 color plates. Text in English, French, and German. ISBN 0–8230–7415–3. **$7.50.**

ANATOMY FOR INTERIOR DESIGNERS

Third Edition

BY JULIUS PANERO. ILLUSTRATED BY NINO REPETTO. This third edition, with twice the amount of material as the first, is a comprehensive book of graphic standards for designers of interiors. It contains all the data the reader needs for designing around people, designing people in and designing things for people to use. This book is one of the most useful and informative handbooks for designers and proof positive that statistics need not be dull. There are chapters on the basis of design, residential and commercial applicaitons, and lighting.

160 pages. 9 x 10. Over 300 illustrations. Tables. ISBN 0–8230–7026–3. **$8.95**

PHOTOGRAPHING ARCHITECTURE AND INTERIORS

BY JULIUS SHULMAN. This is the basic "how to" book for amateur and professional photographers. The author explains the hand camera, the view camera, the principles of composition in general, and those of architectural photography in particular. The liaison between photographer and architect or designer is thoroughly explored as well as rates and rights for photographic work. All designers of buildings and interiors can learn from this book how to make the most of photography in recording and promoting their work.

160 pages 9 x 12. 175 illustrations, 4 in color. Bibliography. Index. ISBN 0–8230–7427–7. **$14.95**

THE MEASURE OF MAN Human Factors in Design

Revised and Enlarged Edition

BY HENRY DREYFUSS. This portfolio, compiled specifically for the special needs of the industrial designer, is the most complete source of human design measurement data in print. For anyone whose designs will be used by people, this compilation of design information is a useful, practical, informative, and time saving tool. The portfolio of anthropometric data is accompanied by a 20 page book of design specifications and bibliography. It also contains 32 charts, including two of life-size, standing human figures.

20 pages of design specifications and bibliography. 2 charts, 25 x 76. 30 charts, 9¼ x 12½. ISBN 0–8230–7370–X. **$13.95**

INTERIORS SECOND BOOK OF OFFICES

EDITED BY JOHN PILE. This is *the* up-to-date, complete, and practical sourcebook on office design. An excellent cross-section of office design today, this is a book of extreme usefulness for the client in planning as well as for the designer. Pile presents every detail of office plan and decor, materials, furnishings, and finishes.

288 pages. 9 x 12. 486 illustrations. List of data and standards. Index of designers, planners, and architects. ISBN 0–8230–7304–1. **$19.95**

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PRODUCTS

(Continued from page 79)

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KNIGHT CAMPUS. 400 East Ave., Warwick, R.I. ARCHITECTS: Perkins and Will. (Materials and Manufacturers as submitted by the architects.) FOUNDATION WATERPROOFING: Barrett. WATERPROOFING: Barrett, Tremco. CONCRETE: M.A. Gammino. CEMENT: Penn Dixie. BLOCK: Rhode Island Cinder Block. FLOOR AND DECK SYSTEMS: Navydek. ROOF MATERIALS: Barrett. THERMAL INSULATION: Owens-Corning. ACOUSTICAL MATERIALS: Simpson Timber. FENESTRATION: Alumi Glass Corp. GLASS: Pittsburgh Plate. ELEVATORS: Otis Elevator. DOORS: Roddis; Pioneer Fireproof Door Co. HARDWARE: Russwin. PANELING: Kayser Aluminum. PAINT: Kyanize. ELECTRICAL DUCTS & WIRING: Rome Cable; Jones & Laughlin Conduit. ELECTRICAL EQUIP.: Westinghouse. STANDBY EMERGENCY POWER: Onan. LIGHTING FIXTURES: Sylvan, Litecraft, Lite-O-Lier, Visa. LAMPS: Westinghouse, General Electric. PLUMBING FIXTURES: American Standard. HEATING BOILERS: Chromalox. UNIT HEATERS: Trane. UNIT VENTILATORS, RADIATORS, CONVECTORS: Vulcan Radiation, Trane. CONTROLS: Honeywell. AIR CONDITIONING COMPRESSOR: Trane. DIFFUSERS: Titus. SPECIAL FANS: Joy. INTERCOM SYSTEMS: Executone. TV SYSTEMS: Blohder Tongue. PNEUMATIC TUBES, CONVEYORS: Movable Partitions—Coil Wall Partitions; Newcastle. SPRINKLER SYSTEM AND FIRE PROTECTION EQUIP.: Automatic Sprinkler Corp. WATER COOLERS: Halsey W. Taylor. TRASH CHUTES: Wilkinson. LABORATORY EQUIP.: Southern Desk Co. KITCHEN, LAUNDRY EQUIP.: Jacob Licht. FINISH FLOORING: Ress Flintcoat. CARPETING: Lees. SEATING: Irwin Seating. FURNITURE: Lab-Southern Desk. DRAPERIES: Ben Rose Fabrics. DRAPERY: Graber Co. MASTER TIME PROGRAM & FIRE ALARM SYSTEM: Simplex. UNDER DOOR DUCT: Walker. ROLLING GRILLS: Kinnear. VALVES: Fairbanks. PUMPS: Allis Chalmers.

DETROIT AND NORTHERN BUILDING. Hancock, Michigan. ARCHITECTS: Tarapata/MacMahon/Paulsen. (Materials & Manufacturers as submitted by the architects.) WATERPROOFING: GAF. CONCRETE AND CEMENT: Trinity Buff, General Portland Cement Co. STRUCTURAL STEEL: U.S. Steel. CURTAIN WALL: H.H. Robertson—Cupples Products Division. FLOOR AND DECK SYSTEMS: Cellular OL Flooring—H.H. Robertson. ROOF MATERIALS: GAF. THERMAL INSULATION: Owens Corning Fiberglas. ACOUSTICAL MATERIALS: Keene Corp.; U.S. Gypsum. GLASS: Libbey Owens Ford. INTERIOR PARTITIONS: National Gypsum. ELEVATORS AND ELECTRIC STAIRWAYS: Otis Elevator. DOORS: Stanley (exterior); Holcomb & Hoke (interior partition). HARDWARE: General Lock; LCN. INTERIOR MATERIALS: Vermont Structural Slate, Romany Spartan. VINYL PANELING: Genon—Division of Dwoskin, Vicratex. PAINT: Martin Senour; Glidden; Pratt & Lambert. ELECTRICAL EQUIP.: Tork; M.H. Rhodes; Edwards; Murphy; I.T.E. STANDBY EMERGENCY POWER: Onan. LIGHTING FIXTURES, LAMPS: Lightolier; Keene. PLUMBING FIXTURES: Kohler; American Standard. PIPING: North American; Thrush. HEATING BOILERS: Bryant. UNIT HEATERS, VENTILATORS, RADIATORS & CONVECTORS: Trane. HEATING VALVES, PIPING & CONTROLS: Fluidtech Corp. AIR CONDITIONING: (Rooftop): Mammoth Div. DIFFUSERS, DUCTS, PUMPS, etc.: Keene Special 100 System. SPECIAL FANS & VENTILATORS: Environmental equipment. INTERCOM: Executone. PNEUMATIC TUBES & CONVEYORS: (Dumbwaiter): Otis Elevator. CEILING MATERIALS: Keene Corp. Special Module. MOVABLE PARTITIONS: Con Wed. KITCHEN, LAUNDRY, & LABORATORY EQUIPMENT: Dwyer Kitchen. FINISH FLOORING & CARPETING: Stratton Industries; Mort West. FURNITURE: Harter, Tri-Mark, Gunlocke, James Murray, Jens Rison, Knoll, Steelcase, Lehigh, Stendig, General Fireproofing, Vecta Contract. DRAPERY HARDWARE: Isabel Scott; O.B. Masco. FABRICS, UPHOLSTERY & DRAPERIES: Knoll; Isabel Scott; Design-Tex.

PRODUCTS

You'll find a new heading on our classified page.

Beginning with this issue, we are accepting classified advertising to be listed under the new **PRODUCTS** heading.

We hope you will find this service useful and helpful whether you are a buyer or a seller. In order to maintain the continuity and relevance of all editorial matter in each issue, there is a requirement that the products offered for sale be industry-related.

This advertising opportunity is being offered in response to many requests for a **PRODUCTS** category on the classified pages.

Rates per issue for **PRODUCTS:**
70¢ per word—$50.00 minimum.
Straight copy only.
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Remittance must accompany order.

Already included on these well-read pages are the classifications of Position Available, Position Wanted, Services. Please see Classified Page for these rates.

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Telephone _____

PRODUCT LITERATURE

To order any of the literature described, circle the indicated number on the self-addressed Reader Service Card on page 83

INDOOR LUMINAIRES
Data sheet from Holophane Co. describes two Prismpack II 1000W mercury indoor luminaires. Designed for wide variety of high-bay industrial, sports arena, and coliseum applications. Provides info on photometrics, dimensions, electrical characteristics, decorative and functional accessories. On Reader Service Card, circle 200.

PLYWOOD WALLS
32-page publication contains detailed sketches on uses of trim and millwork in producing walls free of visible joints. Entitled "Architectural Plywood Walls," brochure available from the American Plywood Association. Said to be useful as an immediate design problem solver or as a stimulant of new approaches to wall construction. Design concepts for application to wide variety of single and two-story structures. On Reader Service Card, circle 201.

BRASS LAVATORY FIXTURES
Artistic Brass, a division of Norris Industries, has introduced a new "Tomorrow Line" of decorative bathroom fixtures and accessories. Line presently composed of 4 basic designs—Pisces, Aquarius, Aries, and Libra. Each available in lavatory and tub sets; matching accessories included. On Reader Service Card, circle 202.

WASHROOM FIXTURES
Bradley Corporation introduces their 1973 catalog on their washroom fixtures. Following cost comparisons of lavatories versus wash fountains, each product group within the line is presented within a blocked area for clear definition. Color selections and specifications and layout drawings are included. On Reader Service Card, circle 203.

LAVATORY, HOSPITAL LINE
1973 Washroom and Hospital Equipment Catalog, issued by Bobrick Washroom Equipment, Inc., features line of more than 600 design coordinated products, many new, and several redesigned for improved performance. Photos of stainless steel and laminated equipment. Guide specification and listing units are included. On Reader Service Card, circle 204.

SUSPENSION CEILING SYSTEMS
Eastern Products Corporation announces new and updated literature on its line of suspension ceiling systems in demountable wall systems. The information can also be had in the form of catalogs for a quick, easy reference or as individual pieces for incorporation into bidding and planning proposals. On Reader Service Card, circle 205.

SEATING & TABLES
A 64-page Seating & Tables catalog from R-Way Furniture Co., encompassing a comprehensive view of traditional, colonial, and modern seating and table variations. Pictured and described are upholstered pieces, high and low back chairs with or without arms, metal and wood frames, lounge, side and colonial seating; occasional and restaurant tables to complement seating, described as to sizes, finished bases, leg styles. 230 pieces available. On Reader Service Card, circle 206.

ELEVATORS
Pre - engineered, pre - manufactured electric passenger elevators for high-rises up to 30 stories described and illustrated in publication from Otis Elevator Co. Completely automatic, maximum load of 16 passengers; speed of 200 ft./minute for rises to 16 stories, 350 ft./minute to 30 stories. Automatically coordinated for prompt response. On Reader Service Card, circle 207.

ARCHITECTURAL GLASS
Comprehensive guide to architectural glass products for windows and doors, "PPG Glass Products for Architecture," from PPG Industries. Full-color reprint of PPG's '73 Sweet's Architectural File insert, guide outlines performance, appearance, characteristics of firm's vision glasses—clear, tinted, and reflective in single and double glazing. Also describes PPG's new "Total Vision System" concept. Other features: Silhouette and Herculite doors and frames; stiles, rails, safety glass selections, glazed panels. On Reader Service Card, circle 208.

ALUMINUM PANELS
"Alcoa Alply Panels," a quick reference guide from Alcoa, provides up-to-date look at all-purpose prefabricated construction panels with finished interior and exterior facings. Lists available finishes, colors, and shows panel edging, joining, assembly methods. Also lists authorized Alcoa wall systems contractors. On Reader Service Card, circle 209.

VINYL RESIN COATING
A chemically resistant vinyl resin coating introduced by Subox Coatings, BASF Wyandotte Corp. Series VL-200 based on a non-hydrolyzable, internally plasticized vinyl copolymer resin, combining excellent gloss and color retention, plus high chemical resistance. Information contained in Bulletin #22 from Subox. On Reader Service Card, circle 210.

SLIDING DOORS
Folder of continuous ball bearing hangers to support heavier-than-average interior and exterior communicating doors, partitions, and sliding glass doors. Available from Grant Hardware Co. Photographs of applications, sectional view drawings, load ratings, minimum tolerances, related data. Indoor/outdoor. Doors up to 35 lbs., heavy doors, partitions, and walls up to 300 lbs. On Reader Service Card, circle 211.

GLASS FRAMING
A new four-page color brochure is available from Kawneer Company which describes Core-Wall, high performance, aluminum glass framing for one to three story buildings. The brochure illustrates how the shallow exterior metal face complements glass appearance, especially with tinted or reflective glasses. Economical, straight-in glazing uses and face and gutter mullion assemblies are discussed. On Reader Service Card, circle 212.

INSULATIONS
W.R. Grace Construction Product Division has issued an 8-page brochure describing Zonolite insulations, masonry fill, polystyrene foam, and thermostud system. In addition to photographs, the brochure includes various technical and specification product data. On Reader Service Card, circle 213.

STOCK COMPONENTS
4 bulletins presenting Julius Blum & Co. stock component line, containing condensed information on expansion joints, tubing, bars, shapes, screening, railing systems, and new Carlstadt Avrylic/Wood Handrailing. On Reader Service Card, circle 214.

MOSAIC TILE
Color brochure illustrating American Olean's line of glazed, quarry, and ceramic mosaic tile. Featured are both the silicone rubber factory-grouted Redi-Set ceramic tile system and the Redi-Set 200, ceramic mosaic sheets with polyurethane grout. Describes color co-ordination, architectural specifications, and commercial applications. On Reader Service Card, circle 215.

FILES
Brochure on Steelcase's 3000 Series file, detailing styling, construction, optional features of vertical file series; included are illustrations and "in-motion" photographs. On Reader Service Card, circle 216.

ROOFING SYSTEMS
Full color 4-page brochure demonstrates use of patented Kalwall Translucent Panel system as "skylites" and "skyroofs." Outlines applications; provides technical data, detail drawings, and short form specifications. Kalwall consists of two fiberglass reinforced face sheets permanently bonded to a structural aluminum I-beam grid core. "Sandwich" panel said to be shatterproof with insulation options. On Reader Service Card, circle 217.

WATERPROOFING
Illustrated brochure on TREMproof Waterproofing Systems for a variety of below, on, and above-grade construction applications available from Tremco Mfg. Co. Describes waterproofing security at low cost for occupied areas and gives application data for complete line of liquid polymers, masonry preservatives, transparent preservatives, all-level drains, and adjustable KingPin Pedestals. On Reader Service Card, circle 218.

FIRE SECURITY
12-page technical report on smoke detector location for automatic closing fire/smoke doors available from Rixson-Firemark, Inc. Report describes tests conducted at the "Project Corridor" facility, with the consent of the California Fire Marshal. Includes complete details on test procedures, facilities, results. On Reader Service Card, circle 219.

CARPET INSTALLATION
Architectural guide specification for glue-down installation of double jute-backed carpets, already in 15th printing, available from Jute Carpet Backing Council. Gives detailed installation instructions; explains why jute's porosity and affinity to standard adhesives allow no-pad glue-down installation. On Reader Service Card, circle 220.

WINDOWALLS, GLIDING DOORS
1973, 52-page Andersen Windowalls and Gliding Doors catalog, features Andersen Corporation's complete line: Prefinished Flex-Pac window units in white and terratone, Perma-Shield gliding windows, decorative Perma-Shield shutters for windows, entry doors. Lists unit sizes, glazing options, window/door combinations, and installation data for wood-framed, brick-veneer, and solid-masonry walls. On Reader Service Card, circle 221.

On Reader Service Card, Circle 313

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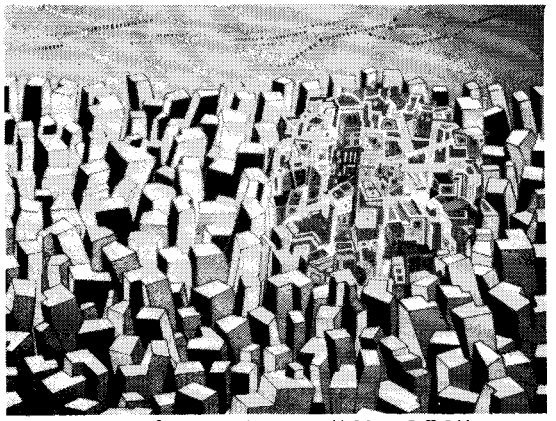

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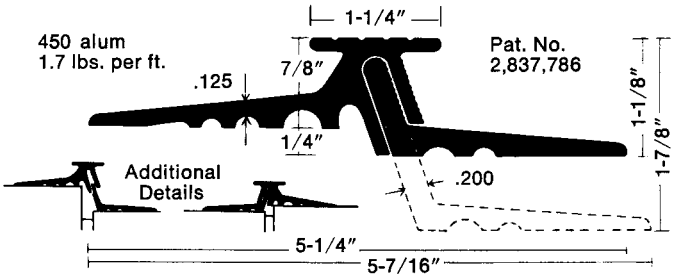

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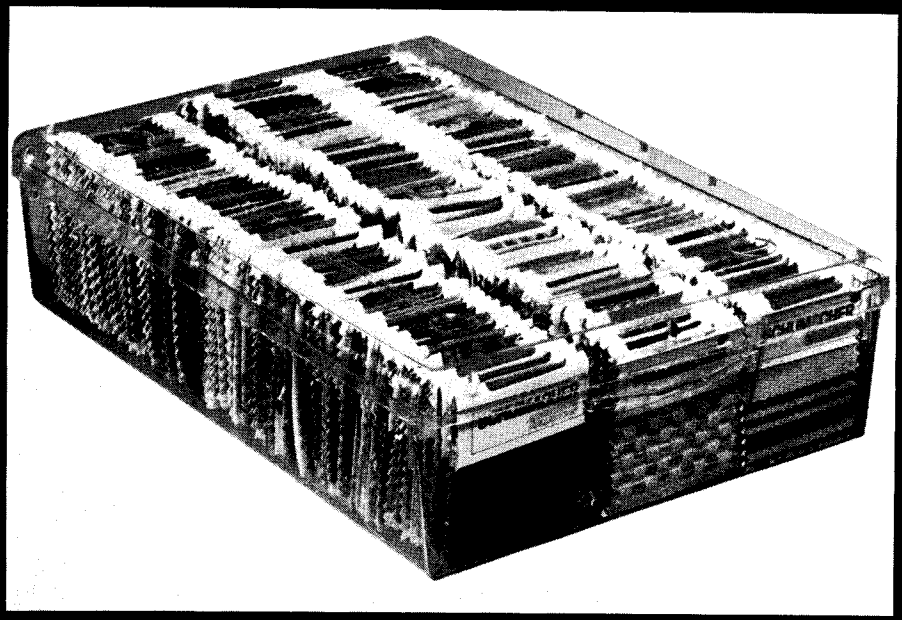

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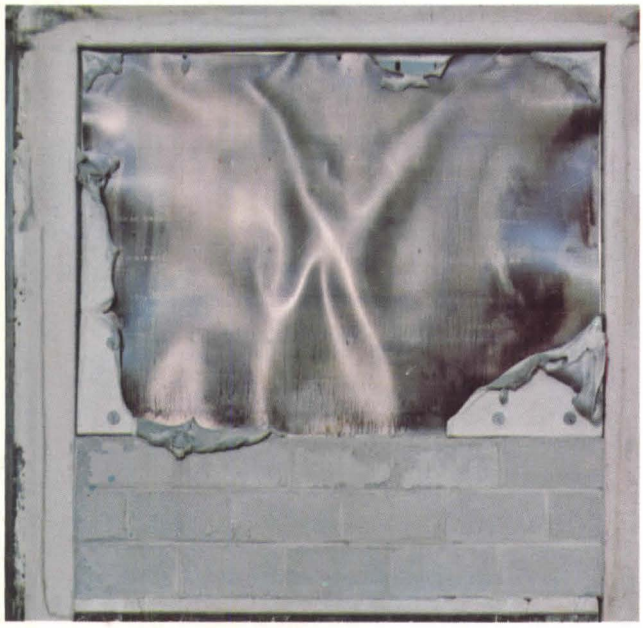

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THERMAFIBER Curtain Wall Insulation proved its effectiveness in recent 2 and 3-hour fire tests witnessed and certified by recognized consulting engineers. Temperatures were controlled to follow the ASTM E119 standard time-temperature curve. THERMAFIBER Curtain Wall Insulation protects spandrel panels, exterior column covers, window and track fillers. This quality fire-resistant product is available in regular blankets or foil-faced to eliminate need for separate vapor barrier. Attachment is mechanical using impaling clips or fasteners. See test pictures at left for the revealing results of this highly effective fire-safety system component.

THERMAFIBER Safing Insulation also proved its superior fire-resistance in a separate 3-hour fire test. Furnace temperatures conformed to the ASTM E119 time-temperature curve. Results showed a melt point of over 2000°F. The Fire Hazard Classification for unfaced curtain wall and safing, tested in accordance with ASTM E84, is Flame Spread 15, Fuel Contributed 0, Smoke Developed 0 (foil-faced: 25-0-0).

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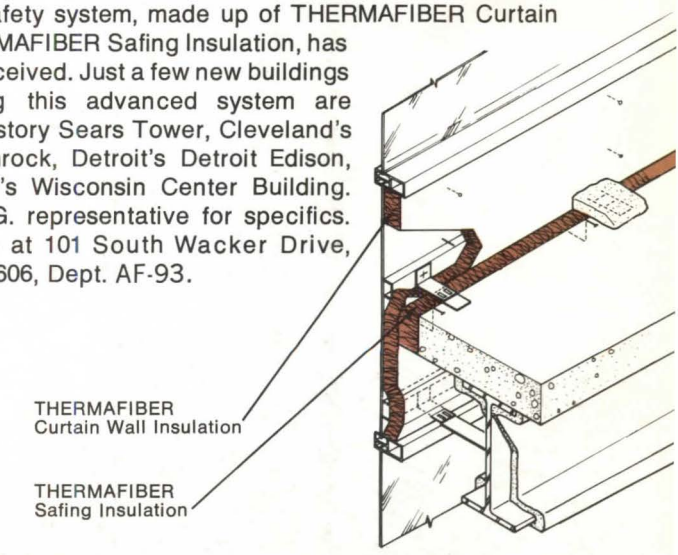

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