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UNUMBER



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PUBLISHER'S NOTE

Ellen Perry Berkeley's report on The New Thing in Washington, D. C., is not the first story of its kind she has done for us. Which is not to imply that her special sensitivity to the impact of new things on new forms taking shape in old ghettos limits the scope of Ellen's articles. The subject matter of other pieces she has written since she joined the staff in March 1967 ranges from Computers for Design (March 1968) to a provocative revisit to Yale's Arts and Architecture building (July/August 1967). Nevertheless, when a story calls for an ear tuned in on the increasingly louder, never-heard-before sounds coming out of the Shaws, the Lawndales, and the Harlems, Ellen, like her FORUM colleagues, is quick to hear it "like it is."

A small delegation from The New Thing was among the 14 ghetto youth groups from all over the country represented at Urban America's last annual meeting in Detroit, June 5-7 (July/ August, page 110). Due entirely to their presence, it was not the usual sort of association annual meeting. These youths had come for assistance on every level, but in the presentation of their persons and their work, they gave more in the way of education and understanding than possibly could have been repaid by their audience. It was predictable that The New Thing, bearing the descriptive tag line "Art and Architecture Center," would have attracted our particular attention.

It should have been predictable. too, to learn from Ellen on our return that she had been in contact with "Topper" Carew and his staff at The New Thing some weeks before. Her story about the group, whose staff averages 19 years of age (!) bears testimony to the remarks Urban America's past-president Rouse made in Detroit: "These youth groups were not born of any social welfare system. They've converted human erosion to growth. This is the highest kind of hope we can have in the American City."-L.W.M.

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LETTERS

POLLUTION AT ITHACA

Forum: The following is quoted from the bottom of page 47 of your issue of July/Aug., and refers to a photograph of the roof of the agronomy research tower of the School of Agriculture at Cornell University [designed by Ulrich Franzen & Assocs.]:

". . . four rectangular towers (topped by fans) are fume exhausts (fans expel noxious and radioactive fumes some 300 ft. into the air) . . ."

It is quite shocking, in view of all the current concern about protecting and cleaning up our environment that a school of agriculture, associated with one of our leading universities, should deliberately pollute its own environment in the manner described. It is also surprising that a magazine with your apparent concern for conservation and the better life should let it go without comment.

Is nothing being done to eliminate this pollution? STEPHAN A. KAUFMAN

Deputy Director Regional Planning Commission

MR. FRANZEN REPLIES

Cleveland

Although there is at present no total and practical solution to the problem of fumes originating from research buildings on campuses anywhere in the country, everything that can be done has been done at Cornell.

First of all, the radioactive material at the Cornell research tower is filtered to a point where it is harmless prior to ejection into the atmosphere. Secondly, the quantities of actual fumes that are exhausted with the building air are extremely small and occur intermittently.

In addition, the solution employed in the tower at the College of Agriculture represents, to the best of our knowledge, a big step over methods commonly employed. In the tower at Cornell the fumes are taken to the top of the highest research structure on the highest point of land available. and then are expelled by fans to an even higher elevation. This results in dispersal of fumes at a high atmosphere level without affecting the adjoining environment as might happen when building lowrise laboratories.

It is worthwhile noting that the air pollution originating from university laboratories is of a minuscule proportion compared to the pollution originating from industry and heating plants, as well as gasoline powered vehicles.

On another matter: a credit was given in the article where it was not intended. Mr. George Swanson was erroneously credited as consulting landscape architect for the Agronomy Building.

TRAFFIC AT GRAND CENTRAL

Forum: I note the following statement in your "Grand Central City" article [July/Aug.]: "... chances are that the new building, with its proposed improvements in access to existing transport facilities, may, in the balance, lighten congestion in the area, rather than increase it."

This is entirely possible and, if true, commendable. However, your author might well have expanded on his previous observation that the 10,000 employees accommodated in the new structure would "add to the local traffic load," by more specific consideration of the planning aspects which he claims have become "obscured." Included among the planning aspects which I would consider relevant are the relationships of a land-use proposal to surrounding land uses and circulation without restricting the analysis to the proximate area.

It would appear, in terms of the trend in space utilization in the office building market, that the number of employees in the Grand Central area is increasing, that new structures, with few exceptions, provide space for more bodies than are displaced by demolished or altered structures. Thus, overall densities are likely to increase, barring a planned program to limit employment and/or residence in this area. So, too, is the burden on traffic facilities - a prospect which can hardly be welcomed by New Yorkers.

It is theoretically possible to mitigate the traffic impact by numerous devices, among them the development of additional residential facilities in the area, or, perhaps, doubling the size of the tower to provide a "womb to tomb" type of existence! Improved land planning may even accommodate an increase in densities.

But none of this is established in the article, whose claim that congestion in the immediate area may be diminished ignores significant planning questions. What is needed is a broader consideration of land-use implications of the development plan. Pending such consideration, it remains a matter of conjecture whether the answers would necessarily support the implications of the article.

MAX R. BLOOM Professor Program in Real Estate and Urban Development Syracuse University

Not entirely. The firm of Wilbur Smith & Assocs. made a study of present and proposed traffic patterns within the Grand Central complex and concluded that the suggested improvements would actually reduce congestion. However, Prof. Bloom is quite correct in suggesting that the Grand Central complex cannot be studied as an isolated parcel of land.—ED.

SOUTH AMERICAN SLIP

Forum: With great surprise I found on page 67 of your Sept. issue, under the title "Brazilian Bank," a building by Sanchez Elia, Peralta Ramos, Agostini & Testa which opened a couple of years ago in Buenos Aires.

I am a native from Buenos Aires, Argentina, and during my eight years of residence in the States, I've had the opportunity to see how even educated persons have forgotten elementary school geography. Please, make the correction in the next issue....

Note: Mr. Testa's first name is Clorindo.

New York City

ABOUT THOSE QUESTIONS

Forum: In Mrs. Moholy-Nagy's witty summing up of the response she received to her eight questions on architectural education [July/ Aug.], she says that because her questions were largely disregarded by her correspondents, she in turn would disregard her own questions. Of course the debate could be continued in this way, getting ever more vague at each exchange of views. But they were good questions and deserve clear responses.

1. Are strikes the appropriate procedure for bringing about changes in architectural education? Yes, no other procedure seems to have the same advantages. It is the only way to make sure that democracy catches up with development.

The strike at Pratt started off as no more than a headhunt against the administration. But gradually students found themselves discussing curriculum, architectural education, then architecture and the profession. Students, unable in the past to explain even their own projects coherently, were defining their ideas on architectural education with energy and lucidity. The strike was an educational event in itself.

2. Can a substantial improvement of college training be effected by student participation? Yes, students are demanding self-determination. An expansion of the schools is needed, yet fewer instructors can be found because of expanding opportunities in the profession. Greater student participation in the whole teaching process is the only way to solve the problems and at the same time keep the cost within reasonable limits.

3. Is the present seven-year period of architectural education adequate? Seven years of professional training is enough. Culture is the only assurance we have that we will be able to solve the unforeseen problems of the future. This is often better obtained outside the school.

4. Should history of architecture be retained as a valid part of undergraduate training? Buildings should no longer be considered in isolation, outside the context of economics, politics, and sociology. History should no longer be taught as a "travelogue," but within this context. History should show clearly what is past and irrelevant in today's thought so that this can be eliminated.

5. Should there be a vertical studio organization? As any teacher knows, the teaching process teaches. Some structure should be found so that seniors could instruct juniors.

6. Is student involvement in community affairs desirable? There is no age minimum. We have associated learning with childhood, and in lengthening the years spent learning we have lengthened the years of childhood. Advocacy planning is not a fad, it is the organization of a planning "opposition," an essential part of democracy.

7. Is the current practice of short-term critics of any real value? Architectural criticism should be a painstaking business. A part-time critic rarely has time to do this correctly. Students should have a training in criticism. Greater student participation requires a teacher capable of criticizing criticism.

8. Will implementation of the Princeton Report create better architects? Its three major goals for education are excellent and selfevident: a student should be able to (1) work effectively within realworld constraints, (2) comprehend the continuing changes in our society, and (3) formulate a concept of a better environment beyond (continued on page 16)

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LETTERS

(continued from page 12)

present-day constraints.

These words should be written on the facades of all schools of architecture. Philosophically I would like to start with 3 and end with 1 —the head in the clouds and the feet on the ground of real constraints.

F. B. SCRIVEN

New York City.

Forum: Sibyl Moholy-Nagy's questions concerning architectural education seemed legitimate points for discussion. The replies themselves were readable and enjoyable (what a relief to see at last *some* sense of humor in our design professions), as well as fairly rigorous intellectually.

But what in the world can one say about Mrs. Moholy-Nagy's rebuttal? It is not only difficult to understand, it is almost impossible to read. She appears to be trying to cover up her own lack of serious thought about the questions she raised by cavalierly and sarcastically capsuling the replies of those who took her seriously. This is, at best, unnecessary. After all, the replies are published for us to read and evaluate. At worst, it might be some sort of put-on.

San Antonio CATHERINE H. POWELL Planner

Forum: Never has the generational gap in architecture come through more clearly than in the Yelton-Michels/Feild-Anselevicius versus Moholy-Nagy exchange.

The impossibility of communication across the gap needs no better demonstration than Prof. Moholy-Nagy's choice of monuments: *Guernica, Rites of Spring,* and the Ford Foundation Building. Can she really believe these excite anyone today but an art historian?

The real giveaway appears in Prof. Moholy-Nagy's continual use in both questionnaire and response of that lovely uptight word "training." Clearly students, some recent grads, and even a dean or two reject that role for education, even if "architecture" suffers in the process. I applaud them.

ROGER MONTGOMERY Professor of Architecture and City Planning University of California, Berkeley

MORNINGSIDE REBUTTAL

Forum: I applaud Mr. Starr's conclusion ["Letters," Sept. issue] that persons who have not made up their minds on the issue of using Morningside Park as the site of Columbia University's gymnasium are entitled to a precise statement of the various elements of the case

After rereading the lease and gymnasium agreements between New York City and Columbia, and the license granted by the Parks Department permitting Columbia to operate the Columbia-Community Athletic Field, I find there is some crow to be eaten. I hope Mr. Starr likes it. It goes very well with the selective misquotation, garnished with petite random errors, that seems so much to his taste.

Failing to quote the words "Under this deal," which indicate that total land use must be considered, Mr. Starr chastises me for a statement he characterizes as "partly wrong and partly misleading." The only thing "partly wrong" is that the original press release said "7 to 8 acres." The actual amount of land is, according to the least unreliable data, 7.12 acres: 5 acres for the playing field, and 2.12 for the building. The difference between 7.12 and 8 is not significant when considering vague data about a park that once was 31 acres. About 5 acres were taken for a school, reducing the park to 26 or 27 acres. Columbia's land amounts to more than 25 per cent of the remainder and would include the last remaining open area of the choicest part of the park. I said nothing "misleading."

Columbia does, in fact, have exclusive use of the field during the stated hours. Use by others after 3 p.m. on weekdays is entirely at Columbia's sufference during times it does not choose to use it. No one at all can, at any time whatever, use or get onto the field without explicit permission from Columbia-and there are fences, gates, guards, and policemen to enforce the restriction. According to the agreements it is Columbia, and not the Parks Department, who decides who else may use the field. The license was granted on December 29, 1955, and the field was opened on June 20, 1956.

As for weekend, holiday, and university vacation use of the field by the "community," I have never seen the field in use during any of my Sunday visits to the park. I have seen boys trying to play softball on rocky, tree-studded slopes while the lush, green, 5-acre field lay glittering behind a very high wire fence, unused except by a *(continued on page 22)*

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LETTERS

(continued from page 16)

patrolling guard. Community use from October 1 to May 31 is during a time when university use, public school hours, short days, bad weather, and snow on the ground make this unlighted field of limited use even to the few boys who are allowed upon it. Summer is a different matter.

Mr. Starr uses the word "community" as if it had some of the validity that the university's public relations department has been trying to pump into it. The fact of the matter is that only a few male teenagers, organized into teams and recognized by Columbia, ever get onto the field. These teams come from a huge area of central Manhattan, and perhaps from other areas of the city. This does not seem to me to constitute "community" use, as I understand that word. At least 90 per cent of the local residents cannot set foot on the field which is publicly owned parkland.

True, as Mr. Starr says, the community gymnasium (with its 20-by-75-ft. swimming pool, stands for 375 spectators, and lockers for 100 boys) would at no time be opened to Columbia. But it is also true, although he didn't mention it, that the university gymnasium (with its Olympic-size swimming pool for intercollegiate competition, indoor running track, rowing tank, seats for over 4,000 spectators, facilities for over 3,400 persons, its armory and military-science classrooms and offices) would not be open at any time to the "community."

It seems to me that having obtained total control and substantially total use of 7.12 acres of irreplaceable, and thus priceless, parkland, Columbia has gotten a rare bargain at a cost of rental of \$3,000 a year, giving 12 per cent of the total building space for a "community" gym, and the cost of providing a very small staff.

That valuation of \$300,000 (actually \$305,000) was not established by the Department of Real Estate but by Columbia's appraisers, William A. White & Sons. The Real Estate Department merely accepted it. It may be of interest to note that an unofficial Parks Department estimate was \$560,000. But it is ludicrous to try to place a dollar value on parkland which is beyond price.

Mr. Starr seems to have had no difficulty in believing Columbia's publicity about how much the university was "giving to the community." Looking into the mouth of this gift horse, we find that Columbia's generosity has resulted in a huge and nearly incalculable benefit to Columbia, and a minuscule, highly questionable "benefit" to the community. This latter "benefit" includes loss of their neighborhood park. Read the agreements, Mr. Starr. That "revocable" permit is not quite as revocable as it seems.

As to reversion after expiration of the lease which provides for an initial term of 50 years and five more ten-year terms: 100 years after losing the park the city will get a 100-year-old tombstone. Who needs it?

Given Mr. Starr's passionate devotion to "precise statements" of fact, I suggest that he do a little more homework and be a little more merciful to those of us mortals who have fallen into error.

New York City

CREDIT TO THE AUTHORITY

Forum: I read with interest the article entitled "Billion Dollar Client" by George A. Dudley in the July/Aug. issue.

You may not be aware of the fact that, of the State University Program, the Dormitory Authority of the State of New York has spent in funds somewhere between 46 and 48 per cent of the total expenditure. This includes the responsibility of contracting with architects, preparation of plans, supervision of construction, payment of all invoices, purchasing of all furniture and equipment, and overall responsibility of financing.

The only reference to the Authority in the article was a parenthetical statement that student housing is financed by the State Dormitory Authority.

CLIFTON C. FLATHER Administrative Director Dormitory Authority of Elsmere, N.Y. the State of New York

MR. DUDLEY REPLIES

The accomplishments of the New York State Dormitory Authority are indeed a very substantial part of the total program of providing public higher education facilities across the state. However, the thrust of the article was toward an explanation of the workings of the Construction Fund itself, focusing primarily upon its operation, objectives, and accomplishments.



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Concrete puts drama into Atlanta's new Robert F. Maddox Hall

The magnificent facade of this 4600-seat theater gives promise of the excitement of the performing arts to be experienced inside. Staggered, irregularly-shaped side and rear walls provide additional architectural interest both within and without. Part of the \$9,000,000 Civic Center, this building faces onto an expansive landscaped concrete plaza which it shares with the Exhibition Hall. The concrete in the entire complex was made with Lehigh Cements. Lehigh Portland Cement Company, Allentown, Pa.

The thin, graceful cast-in-place concrete columns that flare into unusual angular arches on the facade are 56' high. Inside, the seating area is practically surrounded by lobbies and wide corridors with many of them leading to small cantilevered outdoor balconies.

Cast-in-place concrete walls of the structure range as high as 84'. The auditorium stage area is 50' deep and 85' high—large enough for the bulkiest of scenery. 30,000 cu. yd. of concrete were required for The Civic Center which also includes the large Exhibition Hall.



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FORUM

We were, until a little more than a month ago, particularly pleased that the AIA had chosen Chicago as the site of its 1969 convention. It is, after all, a great city, and for architects it holds special significance as the birthplace of a design revolution that altered the course of architectural history.

But now, partly for those same reasons, we feel that the AIA should not hold its 1969 convention in Chicago. The events surrounding the recent Democratic convention have made it glaringly obvious that the city, under Mayor Richard J. Daley, does not grant freedom of assembly to citizens who wish to express dissent. The city that once tolerated, even encouraged, such famous dissenters as Louis H. Sullivan and Frank Llovd Wright, now brutally silences dissent with billy clubs, bayonets, and tear gas (photo below).

By refusing to convene in Chicago, the AIA has an opportunity to express its opposition to Mayor Daley's methods of dealing with dissent. It would be a simple and direct expression—and it could not be silenced by brute force.

WRONG PLACE, WRONG TIME

While we are talking about the AIA, there is another matter that should be brought up: a few days after the Soviets decided to kill dissent in Czechoslovakia, a delegation of the AIA payed an official visit to architects and planners in the Soviet Union.

The visit was not just a cultural exchange free of political overtones, though the AIA delegation no doubt thought so. The fact is that the Soviet architects and planners were officials of the Soviet state and, as such, shared the responsibility for depriving an entire nation of its freedom.

To pose a parallel: it would have been deplorable if, in 1938, a few days after Hitler invaded the Sudetenland, an AIA delegation had payed a call on Albert Speer, the official Nazi architect (who was later sentenced to prison by the Nuremberg court). The AIA's recent Soviet visit was, we feel, no less deplorable.

PROSPECTS

CANDIDATES AND CITIES

If Richard M. Nixon is elected president, private enterprise will solve our urban problems with the help of the federal government. If the victory goes to Hubert Humphrey, the federal government will solve our urban problems with the help of private enterprise.

These are the basic conclusions to be drawn from the urban pronouncements being made by the two candidates — if one accepts them at face value. Nixon's and Humphrey's proposed urban programs are not at all dissimilar in substance, only in where each places the emphasis.

"What we do not need now is another round of unachievable promises of unavailable federal funds," Nixon says. "It costs little or no government money to set in motion many of the programs that would in fact do the most . . ."

Among the Nixon-proposed cures: tax incentives to businesses for locating branch offices or new plants in poverty areas; a "New Enterprise" program under which businessmen and educators would help "black employees to become employers"; and a "Human Investment Act" providing tax incentives to corporations which hire and train the unskilled.







Humphrey also favors measures to encourage more involvement by private enterprise in urban problems, but his proposed programs place the major burden and responsibility on the federal government. "It will cost money," he says, "a great deal of it."

Humphrey's most ambitious urban proposal is one that he tried to promote more than a year ago, until his boss made him stop. It is "a Marshall Plan for America's cities," a mammoth effort that would stress federal-administered programs designed "to begin to control the forces of urbanization." Though he is vague about just what those forces are, or how they can be controlled, Humphrey says the chief elements of the program would be "local initiative, careful planning, coordinated policy, strict priorities, and massive commitment."

Humphrey's Marshall Plan would be financed largely through a new "National Urban Development Bank," which would be started initially with federal funds and then would draw on private subscriptions to keep going. One economist has estimated that the proposed bank would build up assets of \$150-\$300 billion over the next ten years. That is, indeed, "a great deal of money."

The third presidential candidate, George Wallace, feels that the breakdown of law and order is our one and only urban problem.

PROGRESS

CHANGING HORIZON

An amendment to Boston's zoning code has enabled the John Hancock Insurance Company to begin construction of its 60-story headquarters, designed by I. M. Pei & Partners (Jan./Feb. issue).

The \$75-million, rhomboidshaped tower (A on photo below) will be the first phase of a $5\frac{1}{2}$ acre total site development. The project will eventually include a $2\frac{3}{4}$ -acre landscaped plaza (B) linking the tower to the present headquarters (C), which will get a new plaza facade, and a \$10million parking garage (D), built on air rights over the Massachusetts Turnpike Extension.

The project, announced last November, had been stalled ever since due to local opposition. The erux of the controversy was the tower's excessive bulk—more than three times the volume allowed by the zoning ordinance for its 1½-acre site — which will loom over Copley Square (E). The 790ft. shaft will dwarf two important 19th-century landmarks: H. H. Richardson's Trinity Church and McKim, Mead & White's Public Library.

To circumvent the restrictions on bulk, John Hancock had originally asked the Board of Appeals for permission to include the 2%acre adjacent area as part of the total site.

Request for the zoning variance was approved by the directors of the Boston Redevelopment Authority, although it had been strongly opposed by the BRA's Design Advisory Committee and by the Boston Society of Architects, the Boston Society of Landscape Architects, and the American Institute of Planners.

The AIP then proposed a zoning amendment, which the city accepted in a modified form. The amendment established a new private development concept for Boston, under which sites in highdensity areas can be designated as special districts and developed according to overall plans that are not bound by normal zoning requirements. These areas, (which can be as small as one acre!) will be designated by the Zoning Commission.

The amendment stipulates that any proposed project will have to be consistent with plans for that area, and that the BRA will have to approve such a project. In exchange for this zoning exemption, owners of development projects will be required to submit their plans to a continuous review by the BRA's Design Advisory Committee.

In the case of John Hancock, however, the mandatory design review will be waived, and the building is allowed to rise with whatever discrepancies it might contain. This seems like a strange way of putting a new law into effect!



HUD'S OWN HOUSE

On September 9, exactly three years to the day after the Department of Housing & Urban Development was signed into being, the





new HUD building (above) was dedicated in Washington.

Designed by Marcel Breuer and Herbert Beckhard and associate architects Nolen-Swinburne & Associates, the building roused official Washington to its usual rhetoric and HUD to some extraordinary statements all its own. Said President Johnson: "The new America that we build must be more than bigger. It must be better. It must be more beautiful." The elegant double-Y building is the first GSA effort that has broken out of the rectangular mold. The building is also the first precast concrete building in government, and, as HUD tells it, "the first structure in modern times formed of 1,584 12ton precast window units which bear the load over W-shaped tree columns spaced on 40-ft. centers."

We began to wonder about all those other structures of 1,584 12ton precast window units when more pressing questions came to mind. Is this permanent, fixed, single structure the best answer to a department whose scope is expanding almost daily, and whose personnel will soon be crowding its flexible (but finite) space? Before another three years pass, HUD will probably overflow its 700,000 sq. ft. of office space (now occupied by 4,300 persons), and begin to spread out again into the 20 buildings it has just vacated. GSA has drawn the battle lines so that it cannot help but lose.

We heard much about the building's "urban obligations" at dedication time. The building is on a $5\frac{1}{2}$ acre urban renewal site at Seventh and D Streets, S.W., its long axis facing the massive NASSIF building by Edward D. Stone going up on the east, and soon to be wedged in on the west by the hotel of I.M. Pei's L'Enfant Plaza. To the south is a depressed skein of roadway, with HUD's on-grade parking overlooking it. The relationship between HUD and its neighbors does not speak to the problems of the urban situation in the 1960s although the double-Y plan undeniably gives maximum daylight to HUD's office spaces.

Still, the construction cost was



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Still, the construction cost was

less than \$17 per sq. ft., which included air conditioning and some underground parking. Total cost was \$26 million, which was less than estimated.

It was said, in triumph, that "the housing of HUD is the beginning of new housing for America," and we wondered what the late Catherine Bauer Wurster would have replied. A bronze bust of this pioneer in public housing executed by Architect-Sculptor Oscar Stonorov, was unveiled in the south lobby of the building.

COLONIALISM

DISCORD IN CONCORD

New England justice has come a long way since public flogging was banished from the village green as "cruel and unusual." That was progress. Now New Hampshire's Governor John King wants to give his state the Supreme Court building pictured below, and the state is without a punishment to fit the offense.

To be located in a commercial area of Concord where—local informants advise us—there is no question of "blending" into Georgian surroundings, this fusty anachronism does raise other questions: Why have Architects Royal Barry



Wills Associates and Theodore B. Hanna of Boston neglected to include that whipping post on the front lawn? And, quite incidentally, what does a supreme court do with a belfry?

INNKEEPER'S COP-OUT

Woodstock, like a good many Vermont villages, is a year-round resort for visitors, a modest yearround home for the vanishing Yankee, and a second, third, or fourth home for affluent transients. Among the latter is Laurence S. Rockefeller, builder of some very stylish resort hotels, such as the Mauna Kea in Hawaii. Among his many business interests in Vermont is the Woodstock Resort Corporation, builder of the new



Woodstock Inn (top) designed by William B. Tabler Associates.

The Tabler design might, with charity, be thought innocuous, given the town's intense pride in its colonial history (the village was first settled in 1768). But when the Woodstock corporation completes its new inn in 1969, its old Woodstock Inn (above) will be demolished—and so, need we add, will be all pretenses at historic continuity.

"The new inn," said Mr. Rockefeller, which will cost over \$2 million, "will make an even greater contribution to the preservation of the traditions of Woodstock . . ." We think not. But if, indeed, the charming old inn, which opened its doors in 1892, must go, then why not something truly new and innovative to take its place? That, too, is in the Woodstock tradition. The first ski tow in the United States went into operation on a Woodstock slope in 1935.

PHILADELPHIA WEST

On the other hand, we can't help but applaud the selectivity of Indianapolis Millionaire Harold P. Ransburg. When it comes to Colonial architecture, his admiration for the genuine, or copies thereof, will stop at nothing. Ransburg, chairman of the board of Ransburg Electro-Plating Corp., wants to tear down three acres of downtown Indianapolis and build a life-size replica of Philadelphia's. Independence Hall (below), complete in every detail down to the furniture, fabrics, and artifacts.

Abe S. Rosen, president of the Philadelphia Convention and Tourist Bureau, wrote to Mr. Ransburg: "Phoneyism is one of the problems we are combating in America today, so why encourage it?" Mr. Ransburg, in his own defense: "After a visit to Independence Hall, people cannot help but have a renewed spirit of patrio-



tism." Is Mr. Ransburg suggesting that his hometown (national headquarters of the American Legion) needs an infusion of patriotism more than other cities?

BOOSTS

PILOT APPRENTICESHIPS

An important pilot program in the training of black and Puerto Rican students for careers in architecture and the visual arts has been launched in New York City. An eight-week summer session opened the program that aims at putting students either into full drafting jobs or into architectural degree programs.

Fifteen architecture students have spent their mornings at Cooper Union studying drafting, drawing, and design fundamentals. (Primary design problem, for which students wrote the program, was the rehabilitation of a brownstone.) Afternoons were spent in remedial work in English, communication, and math.

During the current school year, the students will continue at Cooper Union for three evenings a week, spending their days in architectural offices throughout the city. The AIA chapter, through its equal opportunities committee, is seeking chapter members who will employ the students in positions equal to their growing abilities and at salaries of at least \$80 per week.

Guiding force behind the project is ARCH (Architects' Renewal Committee in Harlem) which wrote the original program and sought funds to launch it. (The Ford Foundation gave \$35,000; other contributors were the Rockefeller Foundation, New York Foundation, and the AIA's equal opportunity committee.) Actual costs are difficult to estimate because the space at Cooper Union was made available without charge through John Heiduk, chairman of the architecture department, and a series of six lectures-on the design process, computers, etc. -was offered without charge by the Riverside Research Institute. Students have received a stipend of \$35 per week, and under their system of self-government have given stiff penalties to themselves for lateness and absence.

Director of the project is Arthur L. Symes, a graduate of Howard's architecture school, who has spent five years with the Board of Education's Bureau of Design in New York. He will be following the progress of individual students; a psychologist is also part of the staff, helping to select candidates, develop curriculum, and counsel students. Major problem at presstime is the sluggish response from architectural offices — only four thus far. "We can't leave these students stranded," says Symes. "even if we have to hire them all at ARCH."

DRAFTING YOUTH

An equally laudable training program has been started by the New York architectural firm of Eggers & Higgins as a means of benefiting disadvantaged youth and helping to fill a crying need of the architectural profession.

The program consists of a 16week intensive course in architectural drafting for a group of highschool graduates from diverse minority groups of the city. Taught by a state-licensed instructor, the curriculum concentrates on graphics and other practical subjects, leaving esthetics, theory, and history to the students' future initiative.

The students receive \$80 a week, of which \$25 is paid by the U.S. Department of Labor. The program is offered in cooperation with Vocational Foundation, Inc. The agency, supported by private and federal funds, screens all applicants, according to criteria set by Eggers & Higgins.

At completion of the course, students will receive a diploma from the firm, qualifying them for fulltime employment as junior draftsmen. Since there is such a dearth of skilled technicians, employment should present no problem.

HOUSING

COMSAT FOR HOUSING

"Now the real building begins," said President Johnson last month as he announced his appointments of incorporators for the National Housing Partnership, the Comsatstyle corporation established by the 1968 Housing Act to stimulate private investment in low-cost housing.

Named by LBJ to head the agency was Edgar F. Kaiser, president of Kaiser Industries, chairman of the President's Committee on Urban Housing, and the man who originally drafted the proposal that led to the corporation's establishment. Kaiser said the new agency would differ from the highly successful Comsat (Communications Satellite Corp.) in that only private business, not individuals, will be allowed to hold stock initially. He noted that the corporation might later be expanded to include individual investors.

Kaiser said the permanent organization may be set up by the first of the year or early spring to permit the start of housing projects by participating sponsors by mid-1969. He said a target figure of \$200 million from private investors has been set to finance the agency in its early stages. It would have a borrowing base of \$4 billion, which would be used to encourage small local builders to construct low-cost housing.

Other incorporators named by the President included David Rockefeller, president of Chase Manhattan Bank's executive committee; George Meany, president of AFL-CIO; and John Wheeler, president of Mechanics and Farmers Bank, Durham, N.C.—all of whom are members of the steering committee of the National Urban Coalition.

JOHNSONVILLE

President Johnson is doing his own thing for low-cost housing. In Austin, Tex., 75 miles from the LBJ Ranch, the President has launched a small but promising experimental program aimed at producing quality houses for as little as \$4,000.

According to a HUD spokesman, the idea for the program sprang from the mind of LBJ himself. Last summer, he asked Edgar Kaiser, chairman of his Commission on Urban Housing, to gather up a number of low-cost housing proposals, pick the best of them, and try them out on a 1.3-acre piece of surplus property owned by the Department of Interior in Austin.

HUD quickly drew up a plot plan calling for seven houses around a small community green. The President said he thought ten would be a better number, and Interior obliged by increasing the site to two acres.

Now HUD is preparing to build prototypes of ten different lowcost housing proposals, ranging all the way from precast box units, to do-it-yourself panel systems, to a mushroom-shaped house on a precast concrete pedestal, to a house made of sacks of concrete that are stacked, sprayed with water, hardened, and then sprayed with cement plaster. "This project," said the President, "will move us

(continued on page 91)









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BERLIN, September 15, 1968 -At 11 a.m. this morning the most beautiful building ever created by Ludwig Mies van der Rohe was dedicated on a prominent site not far from the Berlin Wall. In attendance were some 1,200 men and women from all over the world-architects, artists, museum directors, and representatives of various echelons of government. Among the missing was Mies himself; 82 years old, and not particularly well, he had heeded his doctor's advice and remained in Chicago. But, as the director of the New National Gallerv put it, Mies's presence in Berlin was now permanently assured.

There was a slight drizzle, and then the sun came out. It is one test of the quality of a building whether it looks as good in the rain as it does in bright sunlight. The New National Gallery this morning looked magnificent.

What Mies has done here, with this huge hall of glass and steel, seems almost unfair: without intending to do so, he has made most of 20th-century architecture look nearly amateurish. This hall was built with so incredible a degree of professionalism that one must go to disciplines other than architecture to find its match.

It is, for example, a spectacular achievement in technology: a steel roof, prefabricated, weighing 1,250 tons, measuring about 215 ft. square, and raised hydraulically to a clear height of 28 ft. in a mere eight hours and 57 minutes. (Mies was driven onto the site in a Mercedes during the roof-hoisting operation one and a half years ago, and stood under the roof as it went up, leaning against his car. Someone found him there, watching those 1,250 tons poised over his head, and asked how it all looked to him. "Enormous!" he said, grinning and puffing at his cigar.)

And the hall is, also, a spectacular achievement in museum design: no experts complain more about their quarters than museum directors do, but even they seem to be slightly overwhelmed by this building. They do complain that the lighting in the downstairs galleries casts shadows on the walls, and they think that the upstairs hall dwarfs most of today's art. But museum directors always say things like that, and, in this case, and with regard to the upstairs hall, those who complain are simply wrong: artists like the late Jackson Pollock, who always wanted to paint "endless" canvases, were stymied by the exhibition spaces available to them. In this museum, a 150ft.-long, 20-ft.-high Pollock would have been at home. (It was a mistake, incidentally, to open the New National Gallery with a Mondrian show; the Mondrians are beautiful but too mediumsized-not big enough and not small enough for so grandiose a space; and, being fragile, many of them were covered with glass and had to be tilted forward to cut down reflections. The Mondrians should have been shown in the spacious galleries downstairs, which hold the "permanent collection" of the New National Gallery-and the upstairs hall should have been given over to great sculpture, primarily, like Henry Moore's fine piece on one of the peripheral terraces; or to giant or miniature paintings.)

But, above all, the hall is a spectacular achievement in architecture and urban design: the space is simply breathtaking-"enormous," as Mies put it one and a half years ago-comparable only to the wonderful structures produced by aerospace technology in recent years. Upon returning from the dedication this morning, I shared a taxi with a (clearly) envious museum director from West Germany. He described the great hall as a "wonderful design for a railroad shed"-and did not realize that he was paying Mies's building its highest possible compliment, and, moreover, pointing to precisely the one quality of this great hall that will attract the most creative artists of our time. (The only place in which they might prefer to be exhibited is, perhaps, the giant space at Cape Kennedy where NASA assembles the Saturn V rockets.)

In terms of urban design, the New National Gallery is equally impressive: its pedestal—a monolith of granite about 350 by 340







feet in size—neatly uses existing grades to permit direct access to both levels of the building. Although huge, this pedestal is quite unobtrusive — just high enough to raise the main gallery to a commanding height on this pivotal site.

Indeed, one of the great surprises, in seeing the New National Gallery complete, is that the "basement"-the stuff tucked away in the pedestal-is not just a basement at all: it is full of spacious, beautifully detailed galleries, more than 13 ft. tall, well lit (regardless of what some of the critics say), and open at one end to a lovely sculpture court. These galleries and the sculpture court house the permanent collection-much of which used to be referred to as the "Gallery of the Twentieth Century"-and, with a few minor modifications in lighting, they will turn out to be superior to anything of this sort in the U.S. or, probably, anywhere else.

The photographs on the preceding and following pages show what the New National Gallery is like. It is part of Mies's greatness that each of his buildings declares itself—once it is built, there is no further need for Mies, or for anyone else, to describe it. Elsewhere on these pages, there are facts and figures that will fill in some gaps.

There are also some obvious observations that can be made: the New National Gallery is a "classical" building, in the sense that it sits on a wide granite pedestal, and in the sense that it is a "universal space" of the kind that has long interested Mies. (Indeed, if and when Berlin hippies, who started a rather unimpressive demonstration outside the Gallery this morning, decide to abolish all museums, this building will make a smashing discothèque, as in fact it almost became during the pleasant frivolities following the dedication!)

It is also, one supposes, an "establishment building" in the sense that it is so enormously suave, polished, and monumental; and this fact, undoubtedly, infuriates the Berlin equivalent of our S.D.S.

But is not this another tribute

to Mies's fantastic professionalism? At the end of this morning's dedication ceremonies, some of the young Berlin radicals held another sort of ceremony, a few hundred feet away, on a site on the Landwehr Canal: it was the place where, about 50 years ago, the bodies of the murdered German Marxist leaders, Rosa Luxemburg and Karl Liebknecht, were found. In 1926, Mies had built a memorial wall not far from that site, and the Nazis later tore it down. The students proposed to have the wall rebuilt on that site-and their touching ceremony involved a clay scale model of Mies's original wall. (Mies would have scorned the person who made that model, by the way!) The point is, of course, that even the most radical of radical students in the world today continues to consider Mies one of his own. These students should have been admitted to the ceremony, to the exclusion of some of their elders.

When all the introductory speeches were made at the dedication—the expectable remarks by politicians and ambassadors a young man called Dirk Lohan spoke. He is Mies's grandson and close collaborator, and he told the audience to quiet down for a start, and then recalled some of the things Mies has said about this building.

At the groundbreaking ceremonies, three years ago, Mies had said that he hoped his gallery would be "an adequate framework for a noble endeavor"; and, a week ago, Mies had sent a note saying that he hoped his gallery would serve the happiness of mankind, man's spirit, and man's art. And, in a truly touching moment, Lohan said: "Among architects the saying goes that a building can only be as good as its client. If this museum has worked out to your satisfaction, then I would say that this is due to your efforts." As understated as the building itself.

Finally, Lohan presented the Golden Key to the New National Gallery to its director, Dr. Werner Haftmann. The director accepted the key with much grace—and then forgot to take it home. —PETER BLAKE











FACTS AND FIGURES

Neue Nationalgalerie, Potsdamerstrasse, Berlin. Owner: Stiftung Preussicher Kulturbesitz. Architect: Mies van der Rohe. Engineers: Prof. Dienst & Gerhard Richter (structural); Senator fuer Bau- und Wohnungswesen (mechanical). Engineering consultant: Prof. Roik. Contractor: Senator fuer Bau- und Wohnungswesen.

Location: West Berlin's new cultural center at the Kemperplatz, which also includes the old Matthaikirche and the Philharmonie by Hans Scharoun. In addition, five smaller museums and a state library are planned.

Exhibition facilities: two distinct interior spaces and a walled court. The glass-enclosed hall on the upper level is for temporary exhibits; its almost completely unobstructed interior, 177 ft. square and 28 ft. high, offers unprecedented freedom for exhibit arrangement. The galleries on the lower level house the permanent collection. The walled sculpture court measures 66 ft. by 306 ft.

Structure: reinforced concrete for the lower level, with column spacing of 23 ft. in both directions; steel for the upper-level exhibition hall. The steel-framed roof of the hall, 215 ft. square, is supported (through pin connections) on eight steel columns. (The latter did not require fireproofing, since they stand well outside the building envelope). The roof framing consists of 6-ft.-deep welded girders, spaced 12 ft. apart in both directions to form a grid. This frame is statically indeterminate to the 36th degree and could not have been designed without computers. One major problem was determining the amount of camber required at the center to counteract deflection. The entire 1,250-ton roof structure was assembled on the ground and lifted by hydraulic jacks.

Mechanical systems: all exhibition spaces air-conditioned, with a constant relative humidity of 55 per cent. A hot air stream directed upward just inside the glass walls prevents accumulation of condensation. Lighting: all fixtures as inconspicuous as possible. The upper hall has downlights for general illumination with outlets for spotlights as required. The lower galleries are lit by wall-washing fixtures.

Interior materials: The upper hall has a floor of granite slabs 4 ft. square. The two mechanical shafts are clad in Greek marble. Ceiling grilles of black aluminum are recessed into the structural grid. Special curtains along the glass walls protect exhibits from sunlight and separate the humidified interior air from the hot air streams along the windows. The lower level ceilings are made up of interchangeable wood panels 2 ft. square, some of which house lighting fixtures.

Building area: lower level, approximately 100,000 sq. ft.; upper exhibition hall, approximately 32,000 sq. ft. Cost: 20 million DM (\$5 million). PHOTOGRAPHS: Walter Sanders.





During the past 25 years two caravans have passed on the urban highway. Wealthier twocar families have picked up their freezers, power mowers, and barbecue pits, and left the central city for the green fields of suburbia. On the way out, they have passed the jalopies from the countryside crammed with scraps of furniture and bundles of patched clothing headed for the hand-me-down housing of the inner city.

These dual migrations have now produced a nation in which there may well be more slum dwellers than there are farmers. At the same time, we are for the first time a suburban nation; by many accounts, more people now live in the suburbs than live in the central cities.

Politically, this means that the central city has become the underdog, opposed by a combination of suburban and rural interests in the battle for a greater allocation of our national resources.

Socially, it means that the nation is developing an institutionalized system of apartheid. Within the metropolitan areas there are two cities—separate and unequal. The poor and minorities confined to the central city are segregated from the white middle class in the affluent sub-

Mayor Maier was elected in April to his third four-year term by the largest winning margin in Milwaukee history. He has a master's degree in political science and is the author of the book, Challenge to the Cities. A past president of the National League of Cities, he has led active campaigns for greater state and metropolitan assistance on the problems of the city. DISCRIMINATION IN FAVOR OF THE CENTRAL CITY

> BY HENRY W. MAIER MAYOR OF MILWAUKEE

urbs surrounding the city.

Economically, it means that the central cities are cut off from the metropolitan resources they need for survival. The money is segregated from the needs.

The money has moved out of the central cities even as the problems of poverty have moved in. In the Milwaukee metropolis, to eite one example, most of the families with incomes of more than \$10,000 a year live outside the central city. Almost *all* of those with incomes of less than \$3,000 a year live inside the central city; in 1960, these comprised one out of nine families in the city of Milwaukee.

In Wisconsin a portion of the state income tax is returned to the municipality in which the taxpayer resides — no matter where he earns his living. This means that suburbs with wealthier families receive a better return from the state. Suburban property taxes can be lower than in the city of Milwaukee even though suburbs may have higher per capita costs.

Poverty costs money. In the central city it means extra costs for health, for sanitation, for special school needs, for police and fire protection. These extra costs, under our present system, must be borne largely by those least able to pay—the lower income people of the central city. The poor must pay more because they are poor. At the same time millions of dollars of taxexempt property in the central city serves the needs of the entire metropolitan area. The local property tax is heavily overburdened because it was never intended to finance the problems of poverty, health, slums, and special educational needs in this age of a highly mobile population.

National studies show that the property tax in the central cities can account for about 20 per cent of the housing costs of both owners and renters. This is a consumer's tax. It hits hardest those renters with the lowest incomes. In the city of Milwaukee about 100,000 persons-one out of seven-live on fixed incomes, many of them on social security and moderate pensions. If they live in a \$14,000 house, property taxes alone cost about \$45 a month. That is the cost they pay whether they own a house or rent it. Housing is taxed at a higher rate than any other necessity.

Bootstrap efforts

The cities are struggling to lift themselves up by their bootstraps. In Milwaukee, for instance, we have the first community renewal program approved by any large city in the United States. We have a full-time city Division of Economic Development, a land bank to attract and hold industry, a continuing operations and methods committee to promote efficiency in government, a modern budget format to pinpoint costs and provide greater managerial control. In addition, more and more modern management tools, such as the computer, are being used.

Other cities are making simi-

lar efforts, and for the casual visitor the brightness of the new downtown centers often belies the basic fiscal crisis of the city.

Yet, despite those bootstrap efforts the cities are unable to meet their needs. They are faced with making up for years and years of deferred maintenance with inadequate funds. No one really knows the exact amount of the deficit between revenue and need, although one recent study showed a \$12 billion gap between spending and income in our major cities.

The time has come for a far greater sharing of the burden of poverty now concentrated in the central city.

To my mind, this requires:

• More money from the metropolitan area, the state, and the federal government to meet the problems of the central city;

• A national urban policy which consciously discriminates in favor of the central city, even if it is at the expense of the suburbs and rural areas;

• An end to restrictive zoning in suburbs, coupled with programs to make more low-income housing available outside the central city.

There must be wider recognition of metropolitan responsibility for the problems of poverty in the central city. The green ghettos of suburbia and the black ghettos of the cities are interrelated—in fact, interdependent. Indeed, the slums of the rich suburbs are located in the central cities of America because there is nowhere else the poor can go.

In Milwaukee as in other cities, we have put our water supply on a metropolitan basis. We've done the same with our freeways, our sewerage, even the animals in our zoo. Why not people? Why shouldn't we have metropolitan social districts to finance such things as relocation, slum clearance, the problems of poverty and special education? Why shouldn't we have metropolitan school districts to insure that the quality of education in the slum school is equal to that of the best suburban schools (where greater resources now provide the best for those who already have the best)?

Unless there is a true sharing of the burden, unless we have truly open metropolitan areas, then we can expect nothing less than an increasing apartheid in our American society.

At the same time there must be a greater recognition that the problems of the central cities are also the problems of the states in which they are located. We must get rid of the notion that the cities should take care of themselves while the state governments take care of the countryside. Unless the states measure up to their new responsibilities in the urban society, they will forfeit by default their traditional role as a strong partner in the federal system.

A policy in favor of cities

Above all, the time has come for the adoption of a national urban policy which consciously discriminates in favor of the central eity. This is the only way we can make up for years and years of policies which have discriminated against the central city even while pursuing ends worthy in themselves.

We have chosen the path to the "urban crisis" of 1968 by not choosing otherwise. Power has been exercised which has had a great impact on the central city. but the impact was largely a negative by-product of other aims. What has been good for rural America and suburbia has not necessarily been good for the central city, and in the long run it will not be good for our metropolitan areas. or for our nation, whose greatness ultimately depends upon the greatness of its cities.

To increase home ownership, for instance, national housing policy has insured home mortgage loans for many years. This policy has permitted many more Americans to buy homes than would otherwise have been possible; however, the negative impact on the central city has been that this policy subsidized the building of suburbia where open land was available and helped to speed the departure of the middle class from the city.

A national urban policy discriminating in favor of the central city could now help to build more low-income housing in the suburbs while stimulating more middle-income housing in the central city.

To provide housing for the poor, our national housing policy has fostered construction of lowrent public housing. This policy has provided decent housing for many Americans who would otherwise be living in higher-rent hovels. But the negative impact of the policy is that it has reinforced the concept that the only place for the poor is within the central city.

A national urban policy discriminating in favor of the central city—and its poor—would also stimulate publicly subsidized low-income housing outside the central city, and a dispersal of low-income housing throughout the metropolitan areas.

To save the farm, our national agricultural policy has over the years poured large subsidies into rural America. The negative impact on the central city is that this policy has replaced the marginal farm worker with the machine and speeded up the migration from the farm to the city.

A national urban policy discriminating in favor of the central city would try to make this process of change more orderly. Job information should be provided on a larger basis in the rural areas so that surplus manpower flows to the areas of surplus jobs. Relocation grants should be provided to guide the rural migrant to the less crowded cities and to provide special services for the rural migrant to help him more easily fit into the new urban environment.

To keep up with the needs of a nation on wheels, our national highway program has subsidized highways and expressways, making it possible for more and more people to live farther and farther from the eity and still use central eity facilities on a daily basis. The negative impact has been to speed up the flight from the central eity and to place an overload of traffic on eity streets, while making mass transit less feasible.

A national urban policy discriminating in favor of the central city would subsidize the costs incurred by the central cities as the result of servicing the surrounding metropolitan area.

Lack of metropolitan concern

Compared to the massive aid given to other areas of American life, the direct aids to the cities have been piecemeal. Urban renewal is helping to clear blight by the square mile while other national policy decisions are helping to produce blight by the hundreds of square miles.

While it is true that power can corrupt, it is also true that the lack of power can corrupt. No one within our metropolitan areas has held the authority to help prevent the combination of forces which is helping to bring about the deterioration of the central city. There has been no real metropolitan concern.

Decades of laissez-faire development within our metropolitan areas have built up walls of racial, fiscal, economic, and social segregation that are feudal in concept, inefficient in execution, and undemocratic in this age of metropolitan man. They have built a social atomic bomb in our central cities which can explode at any time and produce fallout far beyond the borders of the central city itself.

The need today is for open metropolitan communities where there is no segregation by race, creed, or credit card.

We should strive for balanced communities within our metropolitan areas—balanced according to income groupings. This can be done by changing housing patterns throughout the metropolitan areas. It can be done both by providing more low-income housing in the suburbs and also by eliminating totally restrictive zoning which in essence zones the poor out of suburbia.

In recent months, both the U.S. Congress and the Supreme Court have moved to make fair housing the law of the land. These are positions which I completely support since I have always held that, to be effective, fair housing laws must cover a much larger area than the central city alone. The goal now must be to give metropolitanwide open housing real meaning.

In the majority opinion upholding the civil rights law of 1866, Justice Potter Stewart noted that the 13th amendment would be a mere "paper guarantee" if Congress could not back up the amendment with specific laws permitting Negroes "to go and come at pleasure" and "to buy and sell when they please." If our national open housing law is to be more than a "paper guarantee" within our metropolitan areas, then it must become more possible than it is now for the Negro and other minorities to find housing within their means throughout the metropolitan area.

In most metropolitan areas, most of the poor are nonwhites. To exclude the poor from suburban housing has the same effect as outright denial based on color. Restrictive zoning practices are a fundamental declaration by the nation that the Negro must be kept in his place and that this place is in the congested central city.

The one-class, bedroom suburb —confined to single-family housing on large lots—in effect tells the world, "This town is for rich people only." While it may permit the poor or members of minority groups to work as yardmen or domestics during the day, is it really any different from those towns we've heard about with signs at their borders warning Negroes to get out of town by sundown?

Segregation by economic groups prevents minorities from moving into vast residential areas of our nation. It often excludes them from entire municipalities. It confines the poor and racial and ethnic groups to the central city. It frustrates the equal treatment of individuals guaranteed by the constitution. It is building a system of apartheid—American style. It represents a residential version of the separate and unequal treatment already struck down by the Supreme Court.

Action through the courts

We have gone beyond the point where this can remain an academic matter. The consequences are too grave. We have reached the time for action, and I believe that action can come through the courts.

In Milwaukee we are starting action which should have major meaning not just for our own metropolitan area but for entire urban America. The Common Council of the City of Milwaukee has authorized me to begin court action to test the constitutionality of restrictive zoning practices which bar the poor from suburban communities.

We fully realize that the road ahead will not be easy. The solid rock of the status quo is not lightly budged. A long-established system—no matter how unjust—is not changed without opposition. It should be made clear, however, that it is neither the people nor the living style of the people of suburbia which this court suit opposes. Rather it opposes the system of exclusion which, in the final analysis, is un-American.

While the legal basis for restrictive zoning is usually the "general welfare," in this age of metropolitan man it is time to ask "whose welfare?" or even better "how general the welfare?"—the welfare of a small exclusive enclave or the welfare of the metropolitan area as a whole?

One of the supporters of the Milwaukee action is an experienced student of restrictive zoning, Professor Norman Williams of Rutgers.

Professor Williams says that if restrictive zoning regulations continue, "the great mass of the

lower-income groups will continue to live in the existing slum housing, since there would be practically no place left where any substantial amount of new low-cost housing could be built on vacant land. Moreover, the cost of providing for the education and health of the next generation would be thrown more upon the already heavily burdened big cities, which are increasingly unable to provide adequate services for their inhabitants." He adds, "one may be permitted to doubt whether, all in all, this is a very effective way to promote public health."

The Milwaukee action against restrictive zoning in the suburbs is coupled with another action which is also of importance to urban America, because it can also strike a blow at the imbalance of housing patterns within the metropolitan area. I have asked the seven-county southeastern Wisconsin Regional Planning Commission for a housing inventory of the Milwaukee metropolitan area.

This survey will include not only an inventory of available housing, but also an inventory of present and future needs.

With this kind of information we can proceed to provide adequate housing for all on a metropolitan basis and further develop the goal of an open metropolis. For the first time we can establish the concept that the problem of housing resources and needs is a *regional* problem and that the problem of housing for the poor is not simply a matter for the central city alone. This survey coupled with the end of total restrictive zoning can have implications of the greatest importance for the orderly and democratic development of metropolitan America.

New definition of citizenship

Lewis Mumford has pointed out that citizenship is not merely a question of learning history and saluting a flag. Citizenship means the art of living together in a city. Today, that means living together in the metropolitan community and breaking down the walls of segregation between the central city and suburb.

It means a national urban policy committed to free movement by race and class throughout the metropolitan area, creating freedom of opportunity for all.

It means a national urban policy to maintain urban parity subsidies and other measures to insure parity of education, of revenues and quality of living in the central city equal to that in the suburb.

It means a national urban policy committed to correcting the imbalances of income groups and housing patterns within our metropolitan areas.

It means a national urban policy to develop a systems approach to the problems of the metropolitan community. Our urban problems are interrelated and must be treated as such.

It requires a coordinating body at the top, in close contact with the central cities, but at the same time enjoying a status on the domestic front at least equal in importance to that enjoyed by the Joint Chiefs of Staff.

If we cannot, as a nation, do everything at once, then let's at least do what needs doing now. Let's put the money where the problems are - in our central cities. Not just dribs and drabs of our national resources, but huge block grants to the cities to cure their fiscal anemia. Not just fragmented federal programs nibbling at the edges of city problems which increase at a greater rate than they can be solved, but a broad program with enough impact on enough fronts to make a difference.

Our need is to develop and carry out a national urban policy which provides a long-range, coordinated and concentrated approach to the problems of the central city—a national urban policy which discriminates in favor of the central city.

In this age of metropolitan man, the problem of the central city is one which affects all of us in the metropolitan community. Whether we live in the city or the suburb we are all citizens of the metropolis. We will sink or swim together.

In the words of the President's Advisory Commission on Civil Disorders: "We cannot escape responsibility for choosing the future of our metropolitan areas and the human relations which develop within them. It is a responsibility so critical that even an unconscious choice to continue present policies has the greatest implications."























THE U.S. AT OSAKA

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Concepts submitted to USIA by participating design teams: 1. Minoru Yamasaki & Assocs. (a traditional pavilion, with garden courts); 2. George Nelson & Co.; 3. Hellmuth, Obata & Kassabaum with Ronald Beckman; 4. Isamu Noguchi with Pavilion Assocs .: 5. Arnold Saks and James S. Ward with James Stewart Polshek; 6. William J. Mouton Jr. with Philip Johnson and Harper & George; 7. Myron Goldsmith, Skidmore, Owings & Merrill with Morton Goldscholl Design Assocs.; 8. Ulrich Franzen & Assocs. and Charles Forberg Assocs. (electronics events-represented here by a laser beam-in an unspecified enclosure); 9. Gruzen & Partners; 10. Chermayeff & Geismar and Rudolph De-Harak with Davis Brody & Assocs. (the selected team); 11. Paul Rudolph (skyscraper of prefabricated units),

There will be many large, lavish structures at Expo 70 in Osaka, but the U.S. Pavilion will not be one of them. Our contribution to the world's fourth "first category" exposition (and the first in Asia, where the U.S. now seems deeply "committed") may be tasteful, informative, engaging, even delightful—but it is definitely going to be modest.

Planning for U.S. participation at Osaka started off well, as such things go in this country. The U.S. Information Agency was in charge of the whole undertaking, as it had been at the Montreal Expo (but not at previous world's fairs). Early in 1967, USIA began the process of selecting a design team, with the deliberate care of an enlightened client. A number of potential architects and designers were interviewed, and the most promising were asked to develop preliminary proposals. Those invited were encouraged to work in teams-either with other invited participants or with collaborators of their own choosing.

There were no limitations imposed by USIA on the type of pavilion or the nature of the exhibits. The best possible concept, it was hoped, would come from architects and designers given free reign. The "program" consisted only of a site (a very prominent one) and an estimated budget—for both structure and contents—of about \$9.3 million.

Exhibition proposals

Eleven schemes were submitted to USIA last September. Each one was presented before an advisory panel representing government, the design professions, and the communications industry.*

The submissions they saw (opposite) ranged from Yamasaki's pointedly conventional scheme (1), which shunned all avantgarde concepts, to Franzen and Forberg's far-out proposal (8) which rejected the concept of a pavilion altogether. Eight of the more interesting schemes are shown in greater detail on the following pages—with notes on the panel's reactions to them.

The panel's job was to choose a design team, and it was unanimous in its selection: the team of Rudolph DeHarak and Chermayeff & Geismar, designers, with Davis, Brody & Associates, architects, which had proposed an inflated structure (10).

The pavilion's fate

Developments since the design team was chosen should make the other contenders feel relieved to be out of it all. The overall appropriation of \$17.75 million originally requested by the USIA (to cover administration, as well as design and construction) was first trimmed to \$16 million by the Bureau of the Budget, then slashed to \$10 million by the economy-minded 90th Congress. (The overall budget for the U.S. exhibit at the New York fiasco of 1964-65 was \$17 million.)

These budget cuts had the greatest impact on the portion allotted to structure and exhibits. For reasons best understood in Washington, the administrative budget (high to begin with because Osaka is so far away) could not be cut below \$5.2 million. Only \$4.8 million-less than half of the total-was left for the building and its contents. Of that, only \$3.2 million has been earmarked for the structure itself-about the cost of the U.S. pavilion at this year's HemisFair (page 84)-and we already own Texas

You can't just take a concept developed for a \$9.3 million budget and shrink it to one-third of its original size; attendance at the pavilion—estimated at 30 million —simply will not decline proportionately. When you can't shrink the design to fit the budget, of course, you start all over from scratch, and that is exactly what the design team for the Osaka pavilion has had to do.

*William Bernbach, President of Doule Dane Bernbach Inc.; Peter Blake, editor of THE ARCHITECTURAL FORUM; William N. Breger, chairman of the architectural design department at Pratt Institute; Howard L. Chernoff, acting commissioner general for Expo 70; Donlyn Lyndon, head of the department of architecture, MIT, and a FORUM correspondent; Jack Masey of USIA, director of planning and design for the exhibition at Expo 70; Robert Sivard, art director, USIA; Frank Stanton, president of CBS; William Walton, chairman of Washington's Fine Arts Commission; and Lloyd Wright (no kin), executive assistant to the director, USIA.

A GRAND SPAN

Like some famous pavilions of the past, this one would have been memorable as a structural feat - a 3-ft.-thick space frame spanning an area 400 ft. square. Like Fuller's dome at Expo 67, the system would have had potential urban uses. Exhibits would have been focused on a single subject, space technology, featuring a vast simulated moonscape. Concrete abutment structures would have housed smallerscaled exhibits. A major drawback of the proposal was its dependence on U.S. success in the "man on the moon" program. The sophisticated techniques required for climate control in an open-ended pavilion might also have posed problems.

William J. Mouton, Jr., engineer (invited); Philip Johnson, architect; Harper & George, designers.





A WEB OF CABLES

A transparent roof-260 ft. by 390 ft. and only 16 in. thickwould have been held in place by cables supported on six masts. Waiting lines would have been brought inside the pavilion, on a mezzanine overlooking the exhibit floor. Space below the mezzanine would have housed 20 or more small movie theaters, showing short films varying widely in technique and subject. Although undoubtedly elegant, the design seemed more appropriate for some other purpose, and it would cause unnecessarily severe problems of light and climate control.

Myron Goldsmith, Skidmore, Owings & Merrill, architects (invited); Morton Goldscholl Design Assocs., designers.





ABSTRACT MOONSCAPE

Instead of housing exhibits in an isolated building, this solution proposed placing them underground. Above ground, space would have been defined by undulations in the surface of the site -and forms projecting through it. The effect would be of an abstract garden, with all surface materials artificial and vividly colored -a garden in which children could play and adults rest in the shade of balloons. A single large space balloon, rising 240 ft. above a stone-clad mound, would identify the exhibit from a distance. Although the scheme was fascinating, the problem of visitor flow through the exhibits was thought to be poorly solved.

Isamu Noguchi, sculptor (invited); Pavilion Associates, architects and designers.





MOLDED EARTHSCAPE

In this scheme, cut-and-fill techniques would have been used to create underground exhibit spaces and a park on the surface. The exterior massing has much in common with that of Noguchi's scheme (opposite), but natural materials would have been used and water introduced. The hours usually wasted by waiting crowds would have been used to inform and entertain them through a series of color TV screens. The visitor's path through the pavilion (shown on plan) would have involved many changes of level and spatial character (shown in the section, which roughly follows the route). Much of the pavilion would have been freely accessible, "unprogrammed" areas.

George Nelson & Co., designers (invited).





STRUCTURAL UMBRELLA

A deliberate diversity of objects and events would have been housed under a unifying structural frame 384 ft. long and 248 ft. wide. Visitors would have been offered a choice of degrees of freedom, ranging from random movement at ground level through various programmed sequences passing through, over, and under the steel trusses. Since the scheme relied heavily on sheer size for impact, it would have been quite vulnerable in case of budget cuts.

Hellmuth, Obata & Kassabaum, architects (invited); Ronald Beckman, Research and Design Inst. (designers).



ELEVATED CUBE

The cubic building, 162 ft. in all dimensions, would have straddled a walkway passing through an earth mound. The structure would have been assembled of 18-ft. cubic modules, prefabricated of steel. In plan, they would have formed a ring one module thick, leaving a court 126 ft. square in the center. The visitor's exposure could range from merely passing through below the cube to exploring the uppermost modules. The compartmentalization of exhibit space would have been too limiting, and the facades too reminiscent of conventional multistory buildings.

Gruzen & Partners, architects (invited).



ASSEMBLAGE OF PODS

The "exhibits" in this case would have been instant TV transmissions of events and scenes in the U.S., relayed by satellite. The effect would have been a unique sense of immediacy and an emphasis on the open nature of U.S. society. The visitor would have been asked to choose the situations he wished to observe for a half-hour period; his selections, fed into a computer, would have yielded an assigned time and location among the 600 viewing pods, each of which would have seated six viewers. While waiting for his time to ascend, the visitor would have viewed other televised exhibits in the parklike area under the aluminum space-frame structure. The technical features of the scheme would probably have been feasible, and it was admired by all members of the panel. But the behavioral problems created by the 600 enclosed pods would have been formidable.

Arnold Saks and James S. Ward, designers (invited); James Stewart Polshek, architect.















SCHEME 2 PLAN

THE GREAT BALLOON

The vast air-supported pavilion (far left) by the chosen design team would have been outstanding for its economy of material, its appropriately temporary look, and its bold form-geometrically between a sphere and a cube. The double-walled inflated envelope, 275 ft. in diameter, would have served both as an efficient enclosure and as an enormous projection screen, Visitors would have entered by a spiral ramp, overlooking a platform for live performances, then ascended through a sequence of platforms, from which continuous films of U.S. scenes would be viewed. At the top, they would have passed through an enclosed space, with exhibits of real artifacts, then emerged on a vast plateau to view films of space exploration projected on the upper half of the structure. From the descending spiral, they would have seen aerial films shown on the bottom of the envelope.

. . . DIVIDED

Further investigation by the selected design team revealed that the 275-ft, inflated structure could not be constructed within the estimated budget for building and exhibits, which had declined from \$9.3 million to \$7.8 million. A new scheme was developed (near left), with four air-supported theaters (showing the same film program in rotation). The visual impression of unbounded projection surfaces would have been preserved, along with such features as the entrance spiral.

. . . AND DEFLATED

The pavilion that will actually be built at Osaka will hardly be visible to passers-by. Its vast roof—a cable-restrained, air-supported dome spanning an area 260 ft. by 470 ft.—will not be revealed until the visitor has entered the exhibition area.

This vast, unexpected canopy, sheltering two acres of heavily planted terraces, will have considerable impact. So, hopefully, will the movies and other exhibits in the pavilion. Not even a hint will remain, however, of what we might have built.

Chermayeff & Geismar Assocs., designers (invited); Rudolph DeHarak, designer (invited); Davis, Brody & Assocs., architects.





REHABILITATION ON A CITY STREET

In a neighborhood that is one of the centers of New York City's drug traffic, a courageous organization called Exodus House has built its new center for the rehabilitation of addicts.

The location is deliberate, coming from a belief that any rehabilitative program must be earried out as part of the real world. Opinions on the subject differ,

but on the basis of 12 successful years of operation in East Harlem store-fronts, Exodus House is convinced that its approach works. Its new center, by Architects Smotrich & Platt, adds an important residential facet to an expanded program of vocational training and psychotherapy. (The existing store-fronts will continue to be used—for referral service, research into drug addiction, community education, urinalysis and sale of work by the ex-addicts.)

The client wanted an old tenement for the new program, simulating a familiar and home-like atmosphere; and at an early stage in the planning, the program was to be fully met within the fivestory building that the architects helped to select. The renovated building now contains a meetingdining room, kitchen, office, and an all-purpose studio on the ground floor, with two floors of dorms above, and two private apartments above that (one for the family of the Rev. Lynn L. Hageman, founder and director of Exodus House).

The new concrete-block build-



Exodus House includes a new building for workshops next to a renovated tenement for dormitory space (left). Entry and stairs separate the two blocks (top right). The tone is purposefully noninstitutional-as open to the community as the store-front segments of the Exodus House program that have been functioning in East Harlem for years (and will remain in operation). Open space around the new facility is divided into three parts (bottom right), each ramped down from the next: a small parking area adjacent to the street, a playing field behind the parking and the new wing, and an area yet to be developed behind the tenement.



ing alongside has, from top to bottom: a roof terrace (from which residents do their girlwatching during the first two weeks when they are not allowed off the premises); a large studioworkshop which can be subdivided into smaller shops; and, on the ground floor, two additional workshops. The basement has a room that the architects were forced to designate for "mattress storage," to comply with Building Department demands.

A rehabilitation center for this purpose and with these facilities would be unusual in any city, but it almost floored the New York City Building Department, considered by many local architects to be among the most benighted and sluggish of such bureaucracies. The Building Department was at a loss to know how to classify the building—whether to call it a multiple dwelling, public facility, or boarding house. Smotrich & Platt estimate that approximately 10 per cent of their time on this job was spent on problems arising from Building Department matters — simply walking the plans from one desk to another, arguing when seemingly arbitrary rulings were handed down, and finally designing a building that has both belts and suspenders (the "mattress" room in the fully fireproof building, for instance, has a sprinkler line running in from the adjacent tenement).

Because of the low budget







(\$400,000 including the purchase of the old building and the neighboring lots, all furniture, and fees), the building is fairly rough and raw. Surfaces have domestic rather than institutional finishes (the Exodus House program includes maintenance by the ex-addicts).

The budget was not a limiting factor, say the architects; they

had originally wanted to stucco the exterior of the block building, however, because "it's impossible to get a good block job in New York City."

It is difficult to get this good a building anywhere — fresh in form, warm in tone, and fully responsive to an ambitious program that needs all the help it can get. This is a building reiterating what the Exodus House program says: someone cares what happens to the addict, and is concerned to help him into a better life than the one that sent him to narcotics. Surprising and shocking, then, to hear the comment from a prominent official in the city narcotics program: "It's too nice, they'll never want to leave."

FACTS AND FIGURES

Exodus House, 309 East 103rd Street, New York, N.Y. Architects: Smotrich & Platt. Engineers: William Atlas (structural); Wald & Zigas (mechanical). General contractor: Graphic Construction Co. Building area: 13,224 sq. ft. Construction cost: \$289,745 (includes estimated cost of painting and cabinet work perfomed by residents). Funds from New York State Division of Vocational Rehabilitation (\$70,957) and private sources.

PHOTOGRAPHS: Norman McGrath.

Twenty ex-addicts at a time live in the center for their first three months in the program. Then they go back into the community while continuing the intensive program of vertainal training and psychotherapy. Left: upper workshop. Bottom, far ieft: dormitory. Bottom, near left: ceramics workshop. Right: double-height lounge linking the two floors of dormitory space.



SECOND FLOOR









AMITY AND ART

To mark the opening of the XIX Olympiad, doves of peace will be freed this month in Mexico City's uneasy atmosphere, following nights of bloody rioting sparked by the army's seizure of the National University. At startling cross-purposes with this show of force is the Olympic Organizing Committee, chaired by Architect Pedro Ramírez Vázquez. It has responded to the Olympic ideal with the Herculean "Route of Friendship," part of a new peripheral expressway which links many of the Olympic sites (above). Conceived by Architect-Sculptor Mathias Goeritz, the route is lined with 18 concrete sculptures, brightly painted and illuminated at night. In the Pedregal, a largely open area of volcanic rock, the sculptures appear at approximately one-mile intervals. The massive "milestones" (up to 60 ft. high) are the work of artists from 15 countries. Opposite: Herbert Bayer, U.S. (born in Austria). Left to right, top to bottom: Miloslav Chlupae, Czechoslovakia; Costantino Nivola, U.S. (born in Italy); Olivier Séguin, France; Todd Williams, U.S.; Jacques Moeschal, Belgium; Joop J. Beljon, the Netherlands.



FORUM-OCTOBER-1968



STADIA AND STRUCTURES

Among some 20 Olympic sports facilities at widely dispersed locations in Mexico City (and as far away as Acapulco), the four pictured here are, perhaps, of most interest to architects and spectators. Two were existing facilities adapted for Olympic use: the Aztec Stadium for soccer (top left) by Pedro Ramírez Vázquez, and the Olympic Stadium at University City for track and field events (center) by Augusto Pérez Palacios, Raúl Salinas, and Jorge Bravo. The new Olympic Pool and Gymnasium (bottom), for aquatic sports and volley ball, are separate buildings treated as one by Architects Manuel Rosen Morrison, Antonio Recamier, Edmundo Gutiérrez Bringas and Javier Valverde Garcés. The two catenary roofs, formed by a cross-network of steel cables, are hung from three parallel rows of concrete columns which are braced horizontally with steel edge beams. The catenaries (spanning 367 ft. over the pool and 256 ft. over the gym) support a roof decking of precast concrete panels. Structural gold-medal-winner is Félix Candela's domed Sports Palace for basketball (right). Essentially a squared circle in plan, it is ringed by concrete piers and buttresses forming a series of tripods. These support the arched space frame, spanning 433 ft., which is filled in with plywood hyperbolic parabaloid sections covered with sheet copper (bottom right). Associated with Candela were Architects Antonio Peyri and Enrique Castañeda Tamborrel.







PLAN









SIGHT AND SYMBOL

It is not surprising that Olympic ceremonies should be so colorfully staged in Mexico City, ancient capital of the Aztecs. The XIX Games, like the Mavan and Aztec cultures, may well be remembered for their sculpture, architecture, and hieroglyphics-now called graphics. The graphics begin with a logotype suggested by the Olympic symbol of five interlocking circles and the number 68. Starting from this, Architect Eduardo Terrazas and designers Lance Wyman and Peter Murdock have made waves. Radiating outward, they engulf much of the city, setting the Olympic Stadium afloat in a dazzling plaza of orange and magenta (center left), and cascading down shop windows (bottom left), guide uniforms (near left), and 33-ft.-wide balloons (right). Curbs, center lines, and signs on thoroughfares leading to Olympic sites are painted and colorcoded to official maps. Thus, if one were to "follow the yellowbrick road," he would arrive at the Aztec Stadium where, high above, a vellow balloon signals the soccer events. Adding to the panoply are heraldic peace banners (top left) and multipurpose conveniences (near left) with self-explanatory symbols.

PHOTOGRAPHS: Page 66, Garay, Page 67, Garay; (bottom right), Peter Anderson. Page 68 (center), Keystone. Page 69 (top), Francisco Uribe; (bottom right), Garay. Page 70 (top, and bottom left). Peter Anderson; (bottom right), Hermanos Mayo.



NEW THING IN WASHINGTON

Although it was officially new more than a year ago. The New Thing is still vitally new today. An undiminished exuberance and an expanded program of continued relevance make this Washington, D.C., center one of the most successful "things" to happen in the black ghetto of this or any other city. Its full name is The New Thing Art and Architecture Center; its full meaning becomes clearer with a look at its origins, development, and hopes for the future.

The New Thing is the product of Colin ("Topper") Carew, who is himself the product of a ghetto upbringing (in Boston) and an architectural training of several years at Howard, plus five years with architectural firms in Washington. He saw the need for a "new thing" in the fact that although Washington is 65 per cent black, fewer than 1 per cent of its cultural institutions-museums, galleries, dance schools, concert bureaus, etc .are either owned and operated by blacks or are located in the black community. The New Thing is located in Adams-Morgan, an area that is still racially integrated, although whites are increasingly leaving. In this lowincome neighborhood the center occupies a renovated dry-cleaning plant and a four-story house on 18th Street, N.W.

At the outset, Topper Carew was primarily interested in architecture, hoping to develop a process whereby nonprofessionals could be involved in decisionmaking. "But architecture is too abstract, so we added painting, and drawing, and music." He believes that architecture can't stand by itself—either as an art or in The New Thing program.

The program, constantly growing, now operates on several levels—as a center for children and young adults from the immediate neighborhood (and soon from across the city, with the anticipated opening of a private high school of the arts), and as a central place for black professional artists from the entire city. In addition, The New Thing reaches out to the community at large through its several efforts in advocacy planning, and through various projects that bring outside attendance (a controversial photomural wall, a series of jazz workshops, a forthcoming photo exhibit).

Mainstay of the program for two summers (and continuing into the winter, after school hours) has been the children's workshops - in painting and drawing, photography, film-making, creative writing, dance, architecture, and music. All workshops are run by professionals (a staff of 50 during the summer is now down to 37). whose commitment is wholly professional toward their craft, but whose aim is also the development of cultural pride among the youngsters. Culture exists now in the community, believes The New Thing. "Our job is to make the elements of that culture something that young people will treasure and believe in, in the face of a society that tells them they are culturally deprived."

With this attitude, and as a good educational technique in any case, the staff begins with experiences that are real to the children. Thus when the photography group roams the neighborhood with 35 mm. cameras at the ready, they record images that are meaningful to them often with artistry, but always with honesty. "All our workshops are vehicles for developing our own standards," says Carew.

Creative writing is another workshop that starts where the children are-at levels of conceptual and verbal skills far higher than their reading and writing abilities. The children tell their stories to the staff (occasionally with a tape recorder); the staff then reproduces them for the children to read, talk about, and keep. A group of these vivid stories has been printed in a small book, and made available to the experimental Morgan School (about which more below).

Links to the community

The New Thing is very much of its community. The staff overworks a 12-hour day, on the average, and then goes home to find local people dropping in for further companionship and comfort. The community sees The New Thing at work in several ways. It sees the output of the workshops—in a painting show by the children, for instance, or in performances by the African dance and drum group. And Washington will soon be seeing a gallery show of work by The New Thing Flick & Photo Company, a group of teenagers who were official photographers for the mayor's office (in 35 mm. and movies) this past summer.

Highly visible to the Adams-Morgan neighborhood is the new photomural wall facing a busy corner near The New Thing. At first, the city's Department of Licenses and Inspections wouldn't allow it, calling it a commercial sign and not artwork, but they gave in when it became apparent that large numbers of people were ready to go to jail over the issue. "The city ordinance just didn't have anything to cover this kind of thing," says Carew. (As soon as The New Thing was allowed to go ahead with the wall, they were subjected to a top-to-bottom inspection of their own buildings. They passed.)

Advocacy planning

The community has also come to The New Thing for planning assistance, and the center is now involved in two projects that are establishing new precedents for Washington.

One is the proposed Morgan School, in which the local school board (itself unique—the only locally elected board in the Distriet) has spoken up against the school building proposed from downtown, has suggested an alternate site, is now writing the program for the new school, and will be allowed to select its own architect from a list drawn up by the local board itself.

The community raised major objections to preliminary plans when they were invited by the Board of Education last year to "come down and look" at them. The school would demolish housing of 49 families, would have not enough of the facilities needed in conjunction with a school in a low-income area, would make little recognition of advanced educational concepts already in





Originally intending to involve citizens in the architectural design process, The New Thing now includes many of the arts. Left: portion of a silk-screened poster for one of the weekly jazz workshops. Above: a painting workshop. Right: a teenager's 35 mm. view of his community. Below: The New Thing Flick Company, official photographers to the mayor this summer.





practice in the present Morgan School (it is the only elementary school in the district with ungraded classes and team teaching throughout). The community asked Carew and Tunney Lee (an architect who is chief designer at The New Thing) for an alternate plan; these two were joined by Jim Goodell of Urban America and Ken Jaden of Howard.

The alternate proposal (opposite) suggests that instead of demolishing residences, the site could take a telephone company garage, a used-car lot, and a storage warehouse (or at least use air rights over the car lot). And instead of facing 18th Street, the school could draw people in from four sides, along a pedestrian route of needed new community facilities.

The local board has been granted the short space of one month in which to write the program (The New Thing is assisting). And there are other problems: how the community will communicate with the architect, how they will check on him, and how the architect will even be able to engage in this kind of work, within the present fee structure. Would The New Thing want to mediate in some way between the architect and the "My conscience community? would bother me," says Carew, "and people would think we only worked with them to get a job like that."

The other planning problem is even knottier. The Housing Authority has proposed an additional 320 units for Anacostia, probably the largest concentration of public housing in Washington. Now, after protest from neighboring tenants that the area already has insufficient schools and other facilities, the Housing Authority has promised that nothing will be built until agreed upon by the community (and this, although the drawings are already out for bid).

The proposed housing is quite pleasant (recently featured in Brand Y of the architectural press, without mention of any controversy) and, ironically, Carew worked on the project several years ago when he did a

one-man study for Architects Brown, Wright & Mano on people's use of space. The controversy today is not about design but about community facilities. The ladies of the tenants' association have surveyed the tenants and come forth with a rudimentary program-a coop store, employment office, tutoring service, clinic, library. Originally, they wanted simply a larger community facility. Now, after obtaining inside information on the school population of the area (already almost double the capacity), they are standing fast for no more housing. "These are the best comprehensive planners I've run into," says Tunney Lee. "What they're saying is that you can't just build housing any more; they want an environment. (Not in those words, of course.) If the planners had done their jobs, this wouldn't have happened."

The project is now at a crucial point: at issue is whether a feasible program can be developed (by the ladies and their planners) and whether the city can respond. The Housing Authority may be ready to pare the project down to the 130 units formerly on the site, and they have hinted that they can build facilities to rent out to other departments. "There needs to be a real change in the way things get built," says Tunney Lee. "A site like this should be turned over to a Community Development Corporation, who would build it and then rent parts of it out to different agencies. Downtown would supply the money and establish performance standards as a check against abuse. . . . The best thing that could happen to advocacy planning is to be phased out in favor of community control."

New things for the New Thing

In November, The New Thing hopes to open Washington's first private high school of the arts, in a city that has no high school of the arts an no place for the rejected (the dropout rate is 55 per cent in a school system 98.6 per cent black).

The high school will seek to tap local talent and train them for jobs in the arts—jobs offering status, self-gratification, and good money. A staff of artistsin-residence will provide new models for identification. The only two criteria for admission will be artistic ability and low income.

There are many aspects of interest in the proposed schoolstudents will receive a weekly stipend (their job is to learn), and it is hoped that spinoff businesses will develop in several years, providing the school with income from the fashion design, performances, paintings, films, etc., produced by the students. Students will receive counselling suited to their severe problems of alienation, and help on practical problems (how to write a letter, apply for a job). Students will study African and Afro-American history, "because a man without a past does not know himself."

The first year will concentrate on subjects already done in the workshops, expanding in a year into the more abstract subjects of architecture and planning. One of the aims here is to study those institutions of the black community (stoop culture, storefront churches, pool rooms, carry-out foods) that are of such social importance that their destruction can mean the destruction of the community.

Carew talks of starting other New Things, perhaps in New Orleans. And this fall he is teaching a course called The New Thing in the architecture school at Yale. "We'll talk about institutional change and how architecture reflects it, and I'll be trying to sensitize students to the needs of the black community.

"Right now there is a need for black architecture. It'll change. But black people are creating their own institutions like the Morgan School, and monuments like our wall. The Black Power movement is questioning every institution, architecture included.

"At this point in history we need to find an architecture that is emotionally satisfying to the low-income black community given our history in Africa and America, and our need to develop our own culture, our own standards of beauty. Possibly we can take some concepts of communal living from Africa, bringing them together with concepts from America. We are non-Western in origin, and I'm looking to the other two-thirds of the world for inspiration. I may be going down a blind alley, but I don't think so. We are not rejecting Western culture, but to superimpose alien values on another group of people or nation is to engage in racism. We are anti-racist."

Learning from The New Thing

The youthfulness of the group at The New Thing may be one reason for its success. Carew is only 25; the average age of the staff is 19. This is a group that develops and changes with the times. And their own youth undoubtedly makes the young people of the neighborhood more at home among them.

But it is also an indigenous group, and when the community looks to The New Thing for "advocacy planning," it is with a trust that would be less complete if the advice were coming from outsiders, white or black.

Another reason for the impact of The New Thing is its belief in what it is doing. These are not people who are paid to do a job defined by someone else. They see the need for the job and then manage to find the money to carry it out. Carew has a special charisma, but he chooses to emphasize the group, likening its spirit to what a number of the staff members knew in the civil-rights movement. It is poignant that the staff seems less proud of its own performance than of the youngsters'. And when one staff member tells how five little boys were on the doorstep at 8 a.m. every day this summer, two hours ahead of the official opening, he seems less to take credit for this tribute than to exult vicariously in the eagerness of the children.

-ELLEN PERRY BERKELEY

PHOTOGRAPHS: Page 73, poster by Lloyd McNeill; photos (clockwise from poster) by Jim Black, John Paul Davies III, and Tom Zetterstrom. Page 75: clockwise, beginning with children's architecture, by Tom Zetterstrom, Steve Thomas, David Rector, and Tom Zetterstrom.







Above left: a policeman and Topper Carew (back to camera) at the photomural wall. Above: the controversial wall. Right: a music workshop. Below: alternate plan for the new Morgan School, which draws the community together from four streets, spares demolition of existing housing, and provides new facilities along a pedestrian street. Left: children's architecture.




BOOKS

A PLACE TO LIVE: THE CRISIS OF THE CITIES. By Wolf Von Eckardt. Published by Delacorte Press, New York, N.Y. 430 pp. Illustrated. 6 in. by 9¹/₄ in. \$9.95.

REVIEWED BY GEORGE McCUE

Recent books that have viewed the American city with forebodings, consternation, despair, and sometimes a gleam of hope now take up several feet of shelf space and about the same number of bibliography inches.

The rapidly burgeoning urban literature of the last decade teems with specialist material that digs deeply into the rapidly developing technology of citymaking. The city is treated as circulation system, rent and tax resource, goods-and-services center, culture generator, social pathology catalyst, design problem and, with appreciable hesitancy, as a human habitat. The impression grows that the metropolis may be too complicated and too unruly to be regained for the kind of use that historically has made cities a civilizing influence, that architecture is as superficial and transient as the fins, grilles, and chrome stripes of the automobile (and less important to our state of well-being), that we are stuck between some such alternatives as learning to endure immovable traffic, unbreathable air, and unlivable living, or abandoning the city.

The new urban literature made its first substantial impact outside the realm of specialists, it seems safe to say, with *The Exploding Metropolis*, by the editors of *Fortune* magazine in 1958. Then Jane Jacobs jolted the issues into the public arena in 1961 with her *Death and Life* of *Great American Cities*.

Mrs. Jacobs cast doubt and scorn on some of the most unquestioning assumptions of economists, politicians, and town planners, in terms that were sharply focused on the inhumane outcomes of some early urban renewal

Mr. McCue is art and urban critic of the St. Louis Post-Dispatch and author of The Building Art in St. Louis. This year, he received the AlA's first Architectural Critic's Citation. efforts. In doing so, she helped the city-dwelling layman to recognize his own areas of urban expertise—acquired by his own experience in living with professional mistakes and foibles, and in living, too, with urban qualities of the big American city that professional authorities had neglected and overlooked.

Wolf Von Eckardt, architecture critic for the Washington Post, whose column is syndicated in more than 70 other newspapers, offers more extended training of the city-dweller's urban awareness in this book. It addresses itself subordinately to The Crisis of the Cities in the subtile, and emphasizes, as the title indicates, that the city is A Place to Live.

Von Eckardt is not about to argue for abandoning the city. As a former suburbanite he finds the city, in fact, to be a wholly satisfying Place to Live. The city has faults, some of them the shortcomings of shallow personality as evidenced in tinseled design, others the character defects of rampant landlordism and real estatism. His important contribution is to spell out standards of urban quality, as expressed in form, finish, function, harmony, structural dynamics, the social graces, and that somewhat elusive bonus, the sense of place, that the perceptive layman can feel in his nerve ends but is likely to find a bit esoteric in the discussions of planners and designers. He establishes a basis for popular good taste that could help citizens to fulfill a more active role in urban reformation than merely voting bond issues and outrunning the bulldozers.

Von Eckardt argues that modern architecture has floundered in failing fully to harness modern technology, to provide historic continuity, and to gain genuine popular acceptance. His chapters support these contentions with telling instances from recent history of technology, new towns, project renewal and redevelopment, germinal architectural movements, virtuoso architectural devices, and, occasionally, a purely personal reaction.

No small part of Von Eckardt's persuasiveness is his willingness to backtrack and double-

check his own points of view. His first impression of Gaudi's Sagrada Familia (below) was a preconditioned shudder at "such a horrible manifestation of decadent Art Nouveau Expressionism." On another visit to Barcelona, he took a closer look and found it a work of "incredibly creative whim and daring." He even finds himself liking Washington's Federal Triangle, after a struggle with some Beaux-Arts prejudices. He deeply admired Edward Durell Stone's United States Embassy at New Delhi until the sense that this rationally romantic building made at New Delhi was diluted into nonsensical "marshmallows with Reddiwip" in subsequent projects, with colossal culmination in the John F. Kennedy Center for the Performing Arts. "At this point," he remarks sadly, "I am more than a little disenchanted with the New Delhi Embassy."

But the personal touches do not intrude on the objectivity of the background report, which is documented from authoritative records, interviews, correspondence, and personal visits to landmark enterprises in this country and abroad. The generous scope of Von Eckardt's presentation introduces the reader to the architectural and planning issues of provocative schemes that amount to prototypes of modern community problems. The attentive reader is thus offered the possibility of becoming, in his capacity of voter, building committee member, or whatnot, that extremely necessary instrument of good urban design, an enlightened client.



ON THE ART OF DESIGNING CITIES: SELECTED ESSAYS OF ELBERT PEETS. Edited by Paul D. Spreiregen. Published by M.I.T. Press, Cambridge, Mass., and London. 234 pp. Illustrated. 93/4 x 83/4 in. \$15.

REVIEWED BY DONALD HOFFMANN

As the proponents of city planning turn away from monumental vistas to neighborhood housing, from formal design to social and economic advocacy—meanwhile arming themselves with such terms as "environmental" it is a pleasure to encounter the essays of a man who wrote without cant, with a delightful wit, and with a true concern for civic art in terms of "an intellectually integrated space composition."

Elbert Peets, the American landscape architect and town planner, died in his eighties only last March, after ending his long career as a lecturer at Harvard and at Yale.

Peets had collaborated with Werner Hegemann in writing the classic *Civic Art: The American Vitruvius,* published in 1922. Paul D. Spreiregen has now collected 27 essays—nearly all of Peets's shorter writings—dating from a selection from *Civic Art* to an essay of 1954, with most of the pieces from the 1920s and 1930s.

In his foreword, Spreiregen pleads that the assignment of designing cities to experts "is not a surrender of responsibility, only a directive from the people," and he notes, somewhat wistfully, that Peets was a young man during the first quarter of this century, when America "was one of the most hopeful places for urban planning."

Peets had a point of view and he never sought to mask it. He believed that the acme of civic art was attained with the Piazza

Mr. Hoffmann is the art critic of the Kansas City Star and author of The Meanings of Architecture: Buildings and Writings of John Wellborn Root. He contributed an article to Forum (Dec. '67 issue) on the Kansas City Board of Trade building. del Popolo, in its great patted'oie, a symmetrical alignment of three monumental avenues radiating from a plaza, creating "the emotional power of those long balanced vistas deep into the crowded city . . . an art form alive with the very soul of the Renaissance."

Eleven of the essays discuss Washington, its plan, its monuments, and its Mall, "our grandest work of outdoor art." The esthetic driving force of the L'Enfant plan, Peets wrote, was the triangle to have been formed by the Capitol, President's house, and equestrian statue of Washington. If that triangulation had been realized (the White House is off the axis of Pennsylvania avenue and is blocked, anyhow, by the Treasury building; the Washington obelisk was built nearly 400 ft. southeast of the true intersection of the Capitol and White House axes) the spectator would have gained "a sense of order in, and of tactile command over, a large organism of space and solid."

The Mall was intended, Peets asserted, as a grand urban avenue suitable for parades of state, not as the park-like foil envisioned by the Commission of 1901. The irony was clear: "L'Enfant, when the site of Washington was a forest, dreamed of the Mall as a fashionable Parisian avenue, while the Commission of 1901, with a big city spreading all about them, dreamed of the Mall as a quiet sanctuary from the city's noise and bustle."

Peets of course knew the contribution of the motor car— "With true grief I say it: our enclosed cars are fatal to all but the crudest perception of that Titanic space modeling which is eivic art." His proposal (in 1935) was to ban the motor car from the Mall.

In his sympathies for the values of extended vistas, formal relationships, monumental terminations, axiality, managed emphasis of key buildings, pure proportions, and grand scale, Peets took a forthright stand against the followers of those whom he considered sentimental lovers of a man-made Nature







Peets's reconstruction of L'Enfant's design for Washington (top to bottom): Capitol grounds with street arcades (cross-hatched); Capitol grounds as of 1922; "esthetic structure" of L'Enfant's plan; Naval Column, intended for south end of Eighth Street axis.

and the picturesque—Frederick Law Olmsted, Humphry [sic] Repton, Ruskin, and one Edward Young, who declared that "nature was Christian."

Thus Peets, in a piece written, characteristically, for Mencken's American Mercury, could attack the ever-enduring notion of Central Park as the great psychological escape-grounds of New York. "Many passages in Central Park are not merely not quietthey are actually exciting," he wrote. "Why . . . should a public garden in an unusually unrustic city be contrived out of billowy meadows, rocky hills, labyrinthine lakes, and tufted shrubberies?" The park that "announces its hatred of the city in every line" should have been vastly formal, "the very area from which should rise the city's acropolis."

Peets had a wonderful eye. He could see the glory of Cleveland's underground reservoir (before they let the water in), the irony in the fact that "No architect ever lived who would not stand in silent wonder in the Hall of Six Hundred Columns. ... And we built it to cool our drinking water."

He could see that Baron Haussmann's slashing of new streets through Paris was "not exclusively humanitarian," because they could serve the government as lanes for quelling riots with cannon fire, but he could see nonetheless the beauties that had resulted: "...the harmony of dappled plane trees and shadowspotted gray stone, arrow-straight cornice lines disappearing into an evening mist, rows of street lamps reflected on wet asphalt."

He could find little planning in Chicago's Century of Progress fair of 1933 and 1934, but he could see at sunset its buildings drawn into harmony. "The paledark towers of tragic Chicago and the leaden lake," he wrote with stunning accuracy, "seemed more unreal than these meaningless but hypnotizing shapes..."

This excellent book comes at a time when visual design on the monumental scale may yet return once more as a method of achieving some sense of civic unity, let alone national unity, in days when the need for both is urgent.



MEETING PLACE ON THE CAM



The main volume of University Centre appears to float above the recessed, brick-walled ground floor (above left), part of which has been left open as covered parking area. Three tiers of "common rooms," with broad windows of frameless sliding sash, overlook the River Cam (above) and the meadows beyond it. Stairs and elevators have been carried high enough to provide easy access to the roof, where a bar and benches built into the parapets contribute to the enjoyment of the view. The University Centre at Cambridge by Architects Howell, Killick, Partridge & Amis, is a completely new kind of building for the ancient English university a social gathering place for graduate students, teachers, and senior members of the administrative staff—and their spouses.

Having grown for centuries as a body of semiautonomous undergraduate colleges, Cambridge had never needed such a facility; but the recent expansion of graduate schools and independent research facilities made the need urgent.

The site provided was an excellent one, with fine views of the river and the meadows. But it offered barely ¹/₄ acre of land for facilities requiring more than an acre of floor area.

The resulting structure is necessarily bulky, at least compared to old buildings around it, but the architects have succeeded in disguising its mass. Deep, dark recesses emphasize its division into stories and bays, transforming it visually into a series of smaller, hovering volumes. The ground floor and the stair towers have been, in effect, subtracted from the overall mass by the use of totally different structural systems and materials.

Preserving the context

Old cottages and a pub next to the new building were originally included in the site and could have been demolished, but the architects wisely urged that they be retained. These vernacular buildings contrast with the new structure in a way that is characteristic of Cambridge, where town and university are closely interwoven.

The architects felt that the pub, one of the few remaining ones along the river, was worth







A typical portion of the exterior wall (above left) shows the varied uses of the chamfered corner motif. The upper-story walls have a strong surface pattern of Portland stone slabs, with gaps between them. On the interior (top), the triangular indentations between bays are outlined with glazed strips; radiator enclosures on the angled walls-and recessed panels above them-are faced with mirrors. The series of indentations is duplicated on the interior walls of the common rooms (plan above). preserving in itself. In a sense, the new center is a universitysponsored counterpart of its older neighbor.

Razing the old buildings would not have eased the problem of fitting the required facilities onto the site. The larger site would still have been too small to permit the kitchen and the main dining hall to be on the same floor. Nor would it have allowed the kitchen to be on the ground floor, since most of that was given over to the 40 parking spaces required by the city.

The architects' response to this set of limitations was to stack the three functions that demanded large, unbroken floor areas at the rear of the site parking at ground level, kitchen above that, and the two-story dining hall at the top. Wrapped around this core is a four-storyhigh band of smaller spaces: service spaces along the **prop**erty line to the north and "common rooms" (for dining, games, or just relaxing) on the south and west fronts.

Articulating the parts

The structure of the building consists of a precast, prestressed concrete frame, locked together by poured-in-place floor slabs. The columns supporting the common room bays have been pulled inward and the corners of the bays have been chamfered, so that the division into bays is emphasized, both inside and outside.

The exterior surfaces of these bays are elad in Portland stone; the large slabs are fastened with prominent stainless steel bolts and washers to indicate—rather self-consciously—that they are not structural. The inner surfaces of these same walls ars occupied largely by air grilles and panels of mirror. The remaining solid areas are clad in precast, super smooth white concrete an unusual material for interior surface treatment.

The exposed framing system of the common room bays consists of two rings of concrete beams supported on octagonal hammerhead columns. The structural advantage of this system is that the maximum span of the floor slab is only 10 ft. Visually, the exposed frame helps to articulate the individual bays and reduce the large floor areas to the desired intimate scale.

The central kitchen-dining hall core has its own distinct structural system, with precast columns and beams incorporated in the walls. The main beams of the timber-framed dining hall follow the diagonals of the space, carrying most of the roof load to the corner columns.

Two things are apparent from an examination of University Centre: the architects are obviously aware-perhaps too aware -of major modern masters; at the same time they take a strongly humanistic position toward design. This is apparent in their insistence on personal scale and in the interplay of textures and the reiteration of shapes (the chamfered corner) for the sole purpose of engaging the observer's interest. Except where these visual devices threaten to overwhelm the underlying order of the design, they are welcome enrichments for a social environment .--- DONALD-DAVID LOGAN

FACTS AND FIGURES

University Centre, Cambridge University, Cambridge, England. Architects: Howell, Killick, Partridge & Amis. Engineers: Felix J. Samuely & Partners (structural); R. W. Gregory & Partners. Acoustic consultants: Engineering Design Consultants. General contractor: William Sindall, Ltd. Building area: 46,500 sq. ft. Cost: 320,000 pounds. PHOTOGRAPHS: John Donat.





The freestanding columns and the patterns of exposed beams help to subdivide the common room space visually (photo and plan above). The dining hall (above right) recalls the geometry of the common rooms on a larger scale. But the relation of enclosure to openings is different: the walls are solid concrete block, except at the corners; the main source of daylight is an array of skylights. The striking timber and steel roof frame is supported at the corners.







HEMISFAIR '68 PROLOGUE TO RENEWAL

By ROGER MONTGOMERY



World's fairs always have more than one reason for existence. But few, if any, have drawn together such a remarkable number of development potentialities as HemisFair '68 in San Antonio. Look at the list:

• Curative shot in the arm for the city's previously lagging urban renewal program.

• Generator of a modern arenaconvention center complex.

• Creator of a permanent Tivoli-type pleasure garden practically in the CBD.

• Extender of the Paseo del Rio, San Antonio's marvelously humane downtown riverwalk and one of America's most significant civic design works.

• Preserver of a characterful collection of 19th-century architecture.

• Focus for a long-range educational development essential to the uplift of a population still caught in the trap set by Spanish colonialism.

• Provider of right-of-way for a needed freeway link, appropriately used (temporarily) for fair parking.

• Justifying reason for a citybuilt services plant supplying cooling and heating to the central area.

• And rallying point for much civic energy hitherto fragmented and at odds with itself.

From conception to construction HemisFair took less than six years. With all the complexities inherent in this amazing development package it went faster than the average urban renewal project. Action began in 1962 when Congressman Henry Gonzalez called for a "Fair of the Americas." Within a year economic feasibility studies gave support to his dream, an organization was born, money raised, and a site selected.

At first no one put together the superb opportunities to link fair and central area renewal, to combine the rich mixture of major public works and private investments which were finally realized. But once people like local Architect O'Neil Ford

Mr. Montgomery, a Forum correspondent, is professor of architecture and city planning at the University of California in Berkeley. identified the rich possibilities downtown, all thoughts of openland suburban sites were put aside. San Antonio made the key decision that turned a big chunk of its dilapidated east side into, first, a world's fair and, at its close, into a permanent development dedicated to the amusement, edification, and education of both citizen and visitor.

The site finally selected for HemisFair had previously been earmarked for clearance and renewal in an overall planning study of the CBD. Situated southeast of the core, it was ringed by such central-area anchors as the largest department store, the horseshoe bend of the San Antonio River and its Paseo del Rio. and La Villita, a carefully preserved fragment of the original Spanish settlement. The Alamo, the city's biggest tourist attraction, stood a couple of blocks away. All downtown was not much farther.

The two things fit beautifully: the urban renewal process provided the vehicle that made possible the land assembly and clearance necessary to get the fair up on time; at the same time the fair provided impetus that picked up the pace of public development action. Now, with the fair going and a slug of new public facilities up and operating, private investment on a massive scale has started in downtown San Antonio.

Development boom

The Hilton Palacio del Rio Hotel, a \$7½-million, 21-story prefab concrete box built across the street from the site (April issue), marked the beginning of the development boom kicked off by the fair-renewal combine. The next big development promises to put a multifunction highrise complex a block or two from the fairsite. And several major central-area businessmen have reported knowing of plans for new private downtown projects in the \$10-\$20 million range.

The public works which, dovetailed together, made the fair possible, also made renewal possible. The convention center leads the list. Municipal bonds financed it and represent the largest chunk of development each involved in the project.

To link the site into downtown, Ford and others pushed from the beginning to extend the amenities of the Paseo del Rio into the fairgrounds. Urban renewal project improvement funds accomplished this.

Revenue bonds built the 622ft.-high Tower of the Americas; the city's public utility department put up a central heating and cooling plant; and renewal funds rebuilt and built anew the arterial road system.

The HemisFair corporation financed lots of things: the preservation effort, some of the permanent buildings on the site, and the initial investment in waterways and park development.

Texas built a permanent Institute of Texan Culture which doubled as the state's fair exhibit. The United States Government built permanently too, though the eventual use of the structure remains up in the air at this point. Soon the state may build some university facilities, and the city is committed to complete the central park area as a permanent Tivoli.

The state highway commission will build the freeway across the east side of the site on a renewalcleared right-of-way (foreground of drawing, page 84) which served temporarily for parking. (Selection of this right-of-way is a hotly controversial issue, largely because it cuts through the park area.)

Such a list demonstrates the scope of public initiative needed for an affair of this kind, and it implies the staggering scope of the required coordination.

New life downtown

Reuse for most of the Hemis-Fair ground seems pretty well set. About 30 acres remain uncertain. Indications at this juncture suggest that a local campaign may win a four-year college branch of the state university. If this comes to pass, the combination of public facilities should give San Antonio one of the liveliest central areas in America.

The plan of the fair (page 85) and of the eventual permanent

layout follows a simple concept: concentric triangles centered on the tower. Rides and amusements surround the tower in the first ring, the waterway comes next, then some smaller exhibition facilities, and the main pedestrian promenade with the large exhibition structures at the periphery. For HemisFair all this was laced together by lots of circulation systems: minirail 1, track-guided boats, a sky-ride on cables, an elevated pedestrian walkway on concrete bridge structures, and (after the fair opened) trackless trains on the groundlevel walks.

Despite its schematic clarity, the plan got muddied up in execution, mostly by these confusing overlays of circulation. The minirail, called Mini-Monorail to distinguish it from the Swiss prototype, goes nowhere discernible—it just loops around. The system of elevated walkways **2** has little apparent relationship to the plan diagram, and at places it is frustratingly difficult to get onto or off of. Overdesign perhaps?

HemisFair corroborated one lesson from Expo: though thousands of fairgoers use things like minirails for sightseeing amusement, few use them for transportation. At HemisFair, as at Expo, the management had to shift its operation to continuous round trips to accommodate this tendency. The minirail became useless as transportation.

Perhaps the planners are partly to blame. At both fairs they concentrated so hard on looping the track around to make the ride a more exciting experience that they made its route too complex to understand and thus illegible for transportation purposes. It became a puzzle whether it was an amusement or a circulation facility.

The site planners boldly put the rides and sideshow attractions right in the middle of the fairsite. Some odd relationships resulted when carnival features snuggled up to snazzy exhibit pavilions **3**. Actually it all would have worked out pretty well if the economics could have supported specially designed, artfully decorated amusements. This

the designers intended, but could not realize.

Food service clusters and the foreign exhibit area illustrate the realization of a three-point rationale that informed much of the planning: save every good tree on the site no matter what; preserve and reuse a maximum number of existing old structures; and thread water through the fairgrounds. This succeeded very well indeed, as the later discussion of the foreign area will demonstrate.

Taken overall, as a plan for a small world's fair, the scheme balanced out in a series of contradictions: simple yet confusing in organization; transport that did not transport; a central midway that looked out back. Longrange impact should be different. Convention center, entertainment areas, extensions of the riverwalk outward and the minirail inward-all promise much of benefit to the central city. If potential housing problems can be bypassed for the moment, it shows what urban renewal ought to do, but rarely does.

Designing with modules

HemisFair's best design lies just inside the main gate. Called Plazas del Mundo, it houses mainly exhibits of foreign nations. Here the designers took three crucial actions and made them pay off handsomely. They saved all the mature trees existing on the site; they preserved a number of picturesque old buildings and used them for restaurants, shops, and a theater 4; and, to cap it off, they restricted new construction for the foreign exhibit structures, fair offices, and a neat little theater to a handsome standardized "module" designed by Architects Roberts, Allen & Helmke. The resulting low-key, vet intricate, mixture functions and looks just fine.

The new units, built from offthe-shelf components, give continuity to the area while leaving plenty of room for color, stylish graphics, and exhibition pizzazz **5**. The modesty of the modules makes just the right humanscale foil for the trees, the old houses, and the fairgoers themselves.









The fair's visual centerpiece, the Tower of the Americas by O'Neil Ford, Boone Powell, and their associates, stands up elegantly against the San Antonio skyline. Highest in the West, its slim and uncomplicated shaft makes a vast scale shift from the fair's intimate groundlevel design. It proves that classical compositional ideas about axes and vistas need not govern the placement of such objects. Wherever it pops into sight it appears convincing, except right at its base 6.

Among the delights of Hemis-Fair's public spaces: festoons of colorful hand-printed banners by Judy Harrigan after Sister Mary Corita **7**, and a remarkable sculpture collection assembled by San Antonio Lawyer-Collector Gilbert Denman. Seattered a piece or two at a time, often in surprising spots, the collection would have been a knockout anywhere, let alone in Texas.

But some disappointments occurred. Originally, for instance, the graphic design held to a tough and tasteful line; but, as hard times eroded the designers' control, additions after the fair opened tended to look more and more like any old amusement park. HemisFair proved again the fragility of high design standards once economic panie sets in.

Disappointing extension

Another disappointment appeared in the design of the riverwalk extension. The original work on the Paseo del Rio followed the then fashionably correct eclectic lines. The result stands up very well, intricate yet direct, full of possibilities for change and action year by year as well as daily **8**. In recent years this promise has seen fulfillment in the rapid growth of restaurants, clubs (Texan for bars), and shops along the walk.

The new part, which extends into the fairsite where it terminates in a watersquare in the middle of the convention center, fails to match its predecessor. For one thing, (and this may have been beyond the designers' control) no possibility for action or significant change got built into it. Instead of fronting all sort of private "incubator" spaces on the riverwalk, the new part lines it with dull and inaccessible terraced parkspace. The public agency program may have precluded any other choice.

But the designers are to blame for the general overdesign which threatens the visitor. Boating through this extension of the Paseo del Rio seems like being under the ramparts of the Morro Castle 9. The terminating watersquare is just plain dull. 10.

A curious grassbank terminates the chief axis, Goliad street, which, incidentally, is frontage street for most of the carefully preserved old buildings. Behind the bank, lurking like a landlocked battleship protected by a great earthwork, lies the Texas Pavilion 11 by Caudill, Rowlett, Scott. Among the most ambitious of HemisFair's architectural efforts, it fails badly as urban design. Warning signs kept people off the earthworks, and visitors had to approach the pavilion through gates and drawbridge 12 that needed only a portcullis to complete the military image. (A public housing project lies just outside the grounds at this point. Could Texas have been preparing for a hotter summer than usual?)

Inside, Texas gave the fairgoers their money's worth with one of the most interesting and professional exhibits on the site. But this did not redeem the architects' undisguised hostility to the larger design of the fairsite.

The other two governmental anchors, the United States group 13 (by Marmon-Mok Assocs.) and the San Antonio Convention Center complex 14 (by Noonan & Krocker and Phelps & Simmons & Assocs.), showed no such strong tensions between architecture and urban design as those which compromised the Texas building and made surprisingly satisfying the Tower of the Americas. Neither the United States nor the San Antonio effort will be remembered as architecture, though that they fitted reasonably well into the overall plan stands as a testimonial, the observer suspects, to the tenacious daily pressures applied from Allison Peery's fair design office. 7

As for the rest, with one or two exceptions-IBM, for example, which predictably came up with a pair of graceful pavilions by Eliot Noves & Assocs .most exhibitor design at Hemis-Fair will be happily soon forgotten. Nothing reached the levels of Expo 67's splendid exuberance. Clearly a second-category international exhibition in the American Southwest could hardly have been expected to become a gallerv of advanced design. Wisely, HemisFair's designers decided to play it cool, push for modesty and good taste, and hope.

Catalyst for redevelopment

Did it work? It depends on what the intention was. As a world's fair it stands no chance of joining the list of great ones. But that was not really what it set out to do.

As a catalyst for redevelopment in downtown San Antonio it worked, and is working, splendidly. Its riches of planting, waterways, and artwork; the thoughtful husbanding of old trees and houses; the direct, selfeffacing architecture, combined to make HemisFair an environment remarkably pleasant to wander in. This great benefit remains. It makes a fitting addition to the unmatched Pasea del Rio.

Where else in America has as much been done to create humane public space in the center of a city? Where has urban renewal done more?

FACTS AND FIGURES

International Exposition HemisFair '68, San Antonio, Tex. Allison B. Peery. director, site development, design, and architecture. Robert M. Batterson Jr., manager, site development section. Norman Yarbrough, manager, architectural section. Mimi Peery, manager, design section. Robert Copeland, chief landscape architect. John Kriken, chief designer. Richard Wilson, chief graphics designer. Peter Geo. Robinson III, chief sign designer. Stewart King and James E. Keeter, landscape consultants. Robert P. Gersin Assocs., exhibit design consultants. Homer Matthews, structural engineer (site development, upper walks). Beretta Greenslade, mechanical engineer (site utilities). Olaf T. Lodal, electrical engineer (electrical distribution system).











FORUMCONT'D

from the drawing board into the arena of practical experience. It will test the techniques and the materials which we are going to need to reach our goal of six million housing units for low- and moderate-income families over the next ten years."

The project may well produce the weirdest looking subdivision in history, but the President and HUD actually intend to sell the houses to low-income families. The President hopes they will be completed by Christmas.

HOW WIDE THE GAP

Housing experts have long known that, as a group, large poor families are the hardest hit by the nation's shortage of decent lowincome housing, but the dimensions of the problem have never been documented. A big step in that direction has now been taken by the National Commission on Urban Problems, which recently issued a detailed report on "The Large Poor Family — A Housing Gap."

The report covers only seven cities (Denver, New Orleans, Philadelphia, Richmond, St. Louis, San Francisco, and Washington), but its findings are extensive enough to suggest that the national problem is enormous. In the seven cities alone, 103,000 large families (those requiring more than two bedrooms) had incomes so low that they were unable to afford decent private housing. Public programs provide housing for only 20,000 of these families, leaving a shortage of 83,000 units affecting 80 per cent of the large poor families-and more than a third of a million children. "If the deficit in the seven cities is typical of the 61 American cities of 200,-000 or more in population," states the report, "the large poor family housing gap in these largest cities would number 529,000 units."

To close the gap, the report recommends "a vastly increased housing construction program" and modification of laws and regulations which "tend to prevent large poor families from reaping the intended benefits of government-supported housing programs." The report also contains these observations on the subject of "architectural innovation":

"Imagination and innovation in providing bedroom space for large families should be encouraged. At present, small bedroom sizes make it imperative to describe standard housing in terms of two children of the same sex to one bedroom. This is an artificial limitation. Innovative design might include, as one alternative, dormitory-type bedrooms for three to six children. Very small bunk-bed niches are another alternative. Some public authorities have experimented with linking adjacent small dwelling units to make single largefamily units. Architects should be spurred to find the best solutions."

ONLY IN CHICAGO

Chicago's Mayor Richard J. Daley often uses his enormous political powers for the public good. A case in point is a new program launched by Daley to provide 20,000 massproduced, prefabricated housing units for Chicago's low- and middle-income families within the next ten years.

The program's first houses were put up in late August in a oneweek process that began with site preparation, including foundations and extensive landscaping (photo below), and ended with the completion of eight four-bedroom town houses—all of them centrally heated, air conditioned, and ready for occupancy.

The actual erection process took only 15 hours. It began at 7:30 a. m. when the first prefabricated box unit arrived by truck from the manufacturing plant of National Homes Corp. in Lafayette, Ind. The unit was lifted from the truck by crane (above, right) and set down on its foundation. By 9 o'clock that night, all eight of the two-story town houses were up.

A hundred other units are to be erected on 12 scattered sites in the next two months. After that, the city intends to increase the rate to 2,000 a year, and is even thinking of building a city-operated plant to produce them.



Sponsored by the nonprofit Chicago Dwellings Association, the town houses will sell for \$14,500 under the federal 221d3 program, which accommodates families in roughly the \$6,500-\$12,000 income range. Later, once the new homeownership program contained in the 1968 Housing Act becomes operational, families of much smaller means will be able to qualify.

Chicago's low-income housing program is the most advanced of its kind in the nation, largely because Mayor Daley wields the kind of political muscle that most mayors only dream about. To get the program going, Daley cut through miles of red tape and worked out an agreement that produced support from the powerful construction trades unions. In other big cities, both barriers have yet to be overcome.

VOGUE

MILL ON THE MERRIMACK

In Manchester, N.H., in the 1830s, a 19-year-old engineer named Ezekiel Straw designed an industrial community for the Amoskeag Textile Manufacturing Co. which, after more than a century of urban chaos, remains a simple and direct statement of what a city is all about. But its lessons in town planning, still largely unlearned in this country, will be lost as demolition begins this month on 90 of the 139 buildings in the millyard, to





Mobile unit-Like everything else, the shopping center is coming unstuck: this thing, known as the "Wienermobile," and made of reinforced plastics, houses four men who can cruise around and carry Mr. Oscar Mayer's hot dogs directly to the consumer. We asked Mr. Tom Wolfe, the author of The Pump House Gang, about the Wienermobile, and he said that it was "the greatest, real-love street vehicle" he had ever seen. In any event, it opens up some spectacular possibilities both for urban transport and for decentralized shopping. Where are you, Victor Gruen, now that we really need you? PHOTO: Sickles-Reporting Service.



make way for a latter-day urban legacy, the parking lot.

The community expanded from its first building in 1838 to its last in 1915 along the lines of Straw's master plan, which remained valid to the end, always adapting to and reflecting such innovations as mass production machinery, and providing for the community needs of its employees: corporation tenements, a commercial district, housing lots, public buildings, a cemetery, six public commons, schools, and churches. And despite 80 years of growth, its overall visual context is one of total design, cohesive and perpetually "modern" in its simplicity. It is free-except for an occasional accent in tower (above, right) or gateway-from the Victorian frou-frou of its day.

Those red-brick buildings which will be destroyed extend for more than a mile along the Merrimack River from which the mills drew their power. Their long unbroken lines parallel the gentle curve of the river and two canals which divide the Amoskeag millyard into three areas linked by bridges. In some cases buildings double as gateways. The areas between rows of buildings, now used by automobiles, provided railroad access for transporting the Amoskeag fabrics to market.

Perhaps most meaningful of its lessons in urban environmental design, the shaded canals provide a pleasant respite from the industrial



bustle of the mills (top photo).

The urban renewal demolition project will take place in stages to facilitate relocation of tenantssome 80 different businesses now occupy the complex. The canals will be filled in, and the large rectangular mill structures that remain will be surrounded by a sea of cars.

And, what is more, the people of Manchester don't seem to care.

TARZAN SWINGS AGAIN

In case you are wondering what ever happened to Johnny Weissmuller, High Camp counselor to the anthropoids, he's been scouting the American Indian jungles of Florida, where he will recreate for Americans the Louis B. Mayer concept of African culture.

Near Kissimmee and a scant six miles as the crow flies from an-

other Hollywood back-lot setting called Disney World, Weissmuller will construct-at a cost of \$10 million-a miniature Dark Continent called Tarzanland (below). And in case you are wondering what that is, we quote from Tarzan's press release:

"It is 'Tarzan's Tree House,' 'Jane's Lagoon,' 'Cheetah's Island,'



'Boy's Tree Slide'. . . . It is a ride on the safari train that takes you into big game country, with hundreds of animals roaming wild. It is a trek through the sacred elephant burial grounds. . . . There vou can overlook, Victoria Falls' from 100-ft. cliffs, or dine in air conditioned luxury deep inside the caverns of 'Mt. Kilimanjaro,' but beware of the death pit, for there is the 'Village of the Head-Hunters'. . . . It is a spine tingling ride down the 'Budunga Rapids' in native canoes. Yes, 'Tarzanland' is this and more. It is a 'Johnny Weissmuller Museum' with a trophy room and continuous Tarzan movies. . ."

Ungawa!



millions who consider Lotusland civilization's highest attainment to date, the idea would seem ridiculous, but it was offered in all seriousness last month by Dr. William Hildemann of UCLA.

Dr. Hildemann claims that Los Angeles' smog problem (sample below) is endangering the lives of its citizens, and that everyone who possibly can should get out before it is too late. He should know: he is professor of microbiology and immunology at UCLA-and his advice was seconded by 60 of his colleagues.

"Although some people are optimistic enough to think that Los Angeles' smog problem will be solved in ten years or so," Dr. Hildemann said, "I'm not sure we can wait that long. The harmful effects of smog, accumulating over another ten years, may be physically intolerable."

Intolerable or not, Los Angelenos probably will ignore Dr. Hildemann's warning. Where can they go?

SIGN OF THE TIMES

Twentieth-century air pollution is proving too much even for such a long-lived and much-abused, monument as the Parthenon in Athens.

Industrial fumes and winter rains are corroding the limestone foundations and cracking the marble columns; jets flying overhead are loosening stone fragments; and the ground is listing with the continual tramp of feet, causing the building to lean.

Experts at UNESCO and George Dontas, curator of the Acropolis Museum, are studying methods to preserve the 2,500-year-old monument, whose present erosion, they say, is largely the result of past indignities.



Defaced under Macedonian occupation in the 3rd century B.C., converted into a church in the 6th and a mosque in the 15th century, the ancient heathen temple was finally blown-up in 1687, while serving as an ammunition dump during the siege of Athens. The threatened ruins we see today were reconstructed in 1830, after Greece was liberated from the Turks.

To preserve the building, overhead supersonic flights have already been barred; rusted iron bars reinforcing the columns will be replaced by noncorrosible alloy bars; and ways of effectively coating the marble with a transparent film are being studied.

SETBACKS

A NOTCH BECOMES A CHASM

The AIA is back where it was four years and several design proposals ago in its plans for a new headquarters building in Washington, D.C.

Mitchell/Giurgola, competitionwinning architects, whose latest design for the headquarters was accepted last summer—unconditionally by the AIA's board of directors and conditionally by the Fine Arts Commission—resigned as architects of the building late last month.

Their decision was motivated by the commission's unyielding opposition to the "notch"—the recess in the main facade (Sept. issue). The architects say that this element is an integral part of the design, which cannot be eliminated.

The architects—who have already completely revised an earlier design to meet commission objections—feel that in this instance the commission was acting beyond the scope of a reviewing board, "substituting itself for the architect in the concept and details of design." Under such conditions, further collaboration could only lead to "a chain of weak compromises," they say.

The AIA Headquarters Committee, headed by Max O. Urbahn, has been asked to recommend a future course of action.

HAPPINESS DOWN BELOW

The pensive faces pictured below belong to newspapermen (who always look that way). The journalists are taking a ride on the London Underground's new Victoria line, which began operation on September 1.

Actually, the occasion was a happy one, since the new line is one of the most advanced, technically, in the world. Its five trains are controlled automatically by a single operator (below), who merely has to push a stop-go button and watch a closed-circuit television receiver to make sure passengers are safely inside the cars. An automatic fare collection







device issues coded tickets which are read electronically at entry and exit gates.

But the nicest part of the story is not the system's new space-age trappings, but the passenger cars. Happily, they are just like the cars that have been running for years on the rest of the system. They are comfortable, clean, well lighted, and handsome. Their seats are upholstered and covered with soft fabric, and every second car is reserved for smokers.

In updating the system, the officialdom of Loudon Transport had the foresight to recognize a good thing, and to leave well enough alone.

FUN & GAMES

It is a 6-ft. square, multicolored cube of plywood when it is closed, and anything a youngster's imagination wants it to be when its eight doors are open. For the kids pictured above, recently invited by the New York City Parks Department to explore the cube's possibilities, it seems to serve as a jungle gym. For others with a less active bent, it could be a house, a cave, a puppet theater, or anything else.

Lester Walker, the designer, calls it a playcube. It is made up of about 30 pieces of ¾-in.-thick plywood sheets; 80 linear feet of chrome piano hinges and assorted hardware; three gallons of paint; and a great sense of fun.

There is an 8-ft.-long rope to climb (attached to the peaked roof), a monkey bar to swing on,



panels that drop to make game tables, and benches to sit on. Adults can simply enjoy the interplay of colorful voids and solids. (The round and hemispherical shapes, incidentally, are functional, serving as diagonal bracing for the plywood panels.)

The cube can be used outdoors or in, provided there is enough space: 14 ft, wide and 8 ft. high is the minimum. It can be taken apart and moved like furniture, and anyone wishing to make one can do so. For one dollar, *House* & *Garden* magazine will send instructions telling how.

The playcube has been donated by its producer, U.S. Plywood, to the Parks Department. Its permanent home will be the Colonial Recreation Center in Manhattan.

Watter MiQuale

A WALK ON THE MILD SIDE

At noon today I went for a lunchtime stroll instead of eating, savoring the bright cool September day. The air was like beer on a sailboat. There had been nobody to meet for lunch who wanted to convince me of anything, and the inbox was empty for the first time since Labor Day. But actually it may have been that persuasive master of dynapolism, Constantino Doxiadis, who released me from the leash of conscience for the hour. I had been reading his monumental, new, lapstraining book, 527 pages about Ekistics. Page 186 said. "Lately people have started to walk more in centers of some very big cities such as New York." Why not?

In an hour you can savor quite a wide area of Midtown and see an immense number of pretty girls in spectacular early fall garb charging along to accomplish midday errands, everything swinging but their expressions, which are shaded impassive by round sunglasses. Sunglasses are emotional accessories to that shielded New York City expression; pale sunglasses, so you can still see the line of kohl around the eyes, and even the eyes themselves, but without trespassing.

Only the eyes are shielded. Half the girls seem almost 6 ft. tall (good for your own posture, straightening your backbone), and half of that height seems frequently to be legs, still tanned from the Long Island beaches, below those apron-length skirts. By apron, I mean carpenter's nailapron, or newsdealer's changeapron, of course. They make scale figures worth drawing again.

An hour's walk undams other minor musings as well:

1. The AIA in Washington must have an in with the Post Office Department in Washington. My AIA bill for dues always comes to the summer house, which is in a village named Baiting Hollow (Baiting means pasturing a cow, or horse, or used to) in a township called Riverhead. The bill always gets to me there, although the stencil address reads c/o General Delivery, Pinehead, N.Y. There is a



town called Pointed Head, Montana; maybe I'll try that.

2. Walking on upper Sixth Avenue, where all the buildings are quite new, is slightly confusing, partly because of the differences among the plazas which are the rule there. They have no common relationship, neither are they really strikingly irregular; perhaps as a result they are not very helpful to walkers. The plazas are more for bunching, as it turns out—which, at that, is fine on a sunny day.

The Sixth Avenue setbacks recall that exquisite piece of English architectural criticism, which, to my knowledge, first emerged into literature after the American Embassy by Saarinen had been finished in London on Grosvenor Square. Because the building did not completely occupy an end of the square, but left openings, the British critics said that the space of the square was permitted to "leak" down the side streets. And squares have been leaking ever since. There was another beautifully British criticism of that unfortunate Embassy design. About the gigantic Aluminum Eagle hung on the front wall over the main entrance, 35 ft. wing to wing, I think it was J. M. Richards of the *Architectural Review* who suggested the bird was perhaps not big *enough*. Let us hope there will always be a British critic.

3. Several months ago, Interstate Industries Inc. launched "a new concept in executive office desks" with built-in TV receiver, two-state remote TV camera control, tape recorder, AM-FM clock radio, high intensity lamp, telephone index, digital calendar, and memo compartment. Called the V.I.P. Electronic Desk, it has a suggested retail price of \$1,295, complete with pen and pencil set. But for all its electronic energy, it may have been the wrong approach to the real status office. Warren Platner's suave desk for Lehigh, selling at \$6,000, coolly omits all electronics. The desk drawer, however, works very smoothly.

4. Now, to get back to Doxiadis, and perhaps even to work. In the book (*Ekistics, An Introduction* to the Science of Settlements, Oxford University Press, \$35 per copy), he tells a story about civilization: when the aborigines of Australia are asked why they put their children in the river even as infants to make them swim, the aborigines reply that it is necessary to do that—before the babies forget how to swim.





PHOTOGRAPHS: Page 31, UPI, Page 32, UPI (top left). Page 33, UPI (bottom). Page 31, Terry's Photography (bottom and top right). Page 92, Randolph Langenbach for Smithsonian Institution, New England Textile Mill Survey (top and center left); Wide World Photos (bottom). Page 93, Central Press Photos, Ltd., London (center and bottom); Condé Nast Publications Inc. (right). Page 94, Ann Douglass (top).

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PORTMAN'S LATEST CORE

PREVIEW For his design of the Blue Cross Building in Chattanooga, Tenn., Architect John Portman has supplied a variation on his core concept, which produced a spectacular lobby for the Regency Hyatt House Hotel in Atlanta. Like the Regency's guest rooms, the Blue Cross's offices will surround a skylit central core running the full height of the building and containing a cluster of glass-enclosed elevators.

Portman has distributed the offices pinwheel-fashion around the central core and connected them to the elevators by "cross-bridge lobbies" on each floor. At the center, where the bridges intersect, a circular stairway runs the full height of the building.

The upper nine floors of offices are raised above a landscaped plaza on a colonnade of concrete cylinders, most of which are hollow and contain narrow slots to bronze-tinted, m

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PREVIEW

Patients visiting the East Nassau Medical Group's subcenter in North Babylon, Long Island, are likely to experience a smooth transition from reception desk to waiting room to doctor's office. Architects Henry L. Horowitz and Wei-Foo Chun have devised a plan that groups the center's diverse medical services (internal medicine, pediatrics, orthopedics, etc.) and puts them in close and easy proximity to patients.

They have accomplished this by providing four separate waiting rooms facing on a central, open court and served by a single reception desk inside the main entrance. A patient reports to the desk and is directed to the appropriate waiting room for the section containing his doctor's office. A fifth waiting room, separated from the others, serves emergency patients (lower right on plan).

A family of rooftop monitors

pop out of the steel frame and brick structure. The large ones carry light into the waiting rooms and to a triangular doctor's library (lower left on plan), the small ones into the corridors off the doctors' offices.

The natural grade of the site is midway between the building's two levels, permitting easy access to both floors by means of gentle ramps. The basement floor is reserved for future expansion.

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ABOVE—MENASCO MANUFACTURING CO., Euless, Texas; Wyatt C. Hedrick, Architect; Cadenhead Construction Co., Contractor. BELOW-THE PHYSICAL EDUCATION AND MILITARY TRAINING BUILDING at South-ern Illinois University, Carbondale, III.; The Perkins & Will Partnership, Architects; M. H. Wolf & Co., Contractor.



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