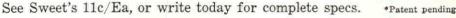
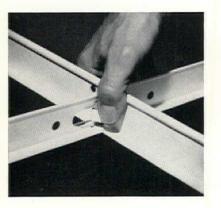


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Cover: Rendering of the Rockville, Maryland, Urban Renewal Project area (p. 44) by architects Geddes, Brecher, Qualls, Cunningham

LOOKING AHEAD TO OCTOBER

Graham Foundation Report: Blueprint for Education and Practice

Impressed by changes taking place in architectural schools and by a reexamination of architectural education and practice conducted by the AIA, the Graham Foundation charged a five-member team to evaluate the Institute's findings and to propose specific action. The resulting report, which presents nine recommendations formulated by the group-three educators and two practitioners-is expected to influence significantly educational requirements, registration laws and, ultimately, the entire face of the profession.

Project: Environment USA-A Shulman Portfolio

Now that the War on Community Ugliness has been put into proper perspective with the current 14-page section, the editors feel it's time to accentuate the positive. Kicking off a series of follow-up articles will be a selection of photographs from Julius Shulman's exhibition which opened at the Octagon House during the 1965 Congress-Convention. The display "does not pick at the ugly spots on the face of America; it attempts to show buildings and spaces that have tried to incorporate other values along with money, most of them successfully pleasant."

Computer Centers: The Client's a Machine in This Building Type

"The design of computer centers is no different than the design of any other building for an exacting, uncompromising client with expensive taste. The great difference is that the client for computer centers is an exacting, uncompromising machine." This succinct comment comes from H. Samuel Krusé FAIA as he covers the design and construction elements of these "peculiar computer spaces" in depth.

PHOTO CREDITS: Detroit Free Press—p. 30, p. 32; Louis Checkman—p. 39 (top); Atte Matllainen—p. 59 (top); Museum of Finnish Architecture—p. 59 (center, bottom), p. 60.

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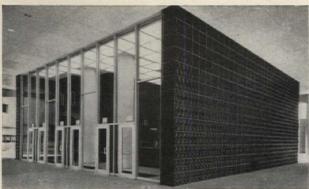
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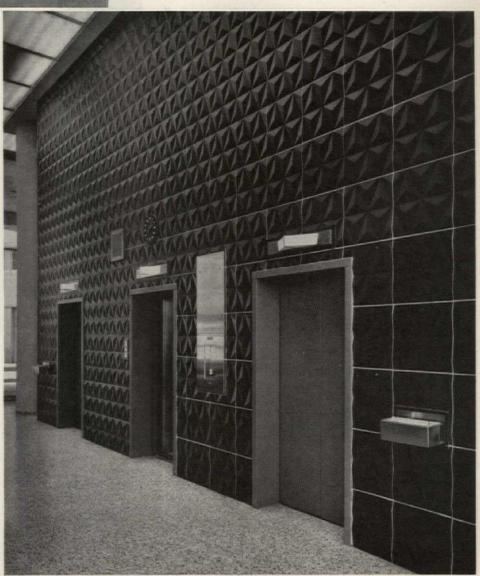
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A War Song for September

THE NEW YEAR may be the time for making resolutions, but it's only a formality really; September is the month when we sit back and take stock of what's behind as we prepare for a brand new season-in terms of education, professional and civic activities, cultural events, and football, of course.

This particular season also brings a concerted drive to make the War on Community Ugliness a toppriority item on the Institute's agenda. For, as the words of that wonderful ballad so simply proclaim, "The days grow short when you reach September."

The campaign has been going on for some time, but we would be less than candid if we did not admit there have been some doubts about its objectives, some confusion in the minds of the architects themselves. Surely they must believe in the crusade and their active participation in it if any kind of victory is to be expected. The current AIA JOURNAL attempts to explain the why and the wherefore.

Every such effort needs a catalyst, and the Texas Society of Architects produced one in the person of John Ely Burchard, dean emeritus of MIT and a newly elected Honorary Member of the AIA. Since publishing his memorable address in April, we have been flooded with requests for reprints. A sampling:

· From a member of the Sierra Madre (Calif.) Planning Commission, for each commissioner, councilman and the city manager. He says, "Currently we are developing legislative antidotes to ugliness in the areas of hillside development and R-3 multiple-family dwellings."

· From an advertising executive. for elected officials of San Antonio, which is in the midst of planning and designing its Hemisfair 1968. As a result, the article was given prominent play (a five-column headline at the top of the "Books and Art" page) in the San Antonio Express/News.

· From a senior planner for the City and County of Honolulu, for the Mayor's advisory Committee on Community Renewal Program.

To be successful, the program needs more than words, as the Oklahoma City Times explained in its excellent "War on Ugliness" editorial in mid-August. It said in part:

"Everybody endorses city beautification, but seldom is there much action beyond lip service.

"Thus the City Beautiful approach here and elsewhere has just about run out of steam.

"Now a new approach is being tried-a war on ugliness. President Johnson's efforts to clean up roadside junkyards and other blights on the landscape are part and parcel

"That is the significance behind Mayor Shirk's selection of a committee on Action for Community Beauty and Improvement . . .

"The difference between the old and the new approach is well described by Stanley Draper Sr. of the Oklahoma City Chamber of Commerce, a sparkplug in launching the new effort.

"Draper calls it the difference between cosmetics and surgery. One patches and covers up. The other seeks out the 'infection' to eliminate it.

"Draper hopes to enlist the architects of Oklahoma City to active 'combat' and not just lip service. The support of The American Institute of Architects is being sought."

That word "action" played a key role, too, when the Pasadena Chapter AIA held its Conference on Community Esthetics—the first in California—last December. It was in this frame of mind that James K. Carr, general manager of public utilities for the City and County of San Francisco and former Under Secretary of the Interior, made his overview comments.

He warned his listeners-30 community leaders who participated in three roundtable discussions and an audience of equal size and complexion-that "If you shrink from the bitter battles of necessary governmental action, then I must tell you, in all candor, that you are wasting your time."

Carr went on to suggest the establishment of a California Conservation Commission, and closed by reiterating his opening point: "I should like to remind you that in the final analysis any program of bettering community esthetics must be realistic and politically and financially feasible. The city is the challenge of the future."

Conference Chairman John Kewell, president of the Pasadena Chapter, concluded the one-day sessions with five directives for a program of action:

- Win the support of the existing groups such as the City Beautiful organizations, planning councils and others.
- · Win the support of governmental agencies which are responsible for urban planning, zoning, land use.
- · Apply good design to all street furniture.
- · Help the citizen develop a more critical attitude toward the design of buildings.
- · Preserve the older sections of our cities, not only in terms of architectural heritage but of a people's needs for roots and allegiance.

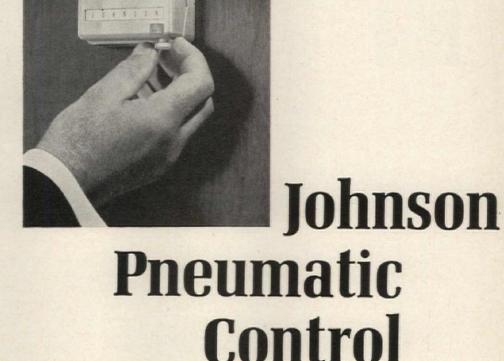
All across the land architects and decision-makers are joining hands to share the burden of the task. The story that is unfolding in Atlanta, for example, reveals that kind of cooperation and enthusiasm. The successes being achieved there and in scores of other communities will be reported from time to time; and the Journal pledges its support in this attack against ugliness.

It is a war we cannot afford to lose if we hope to uplift the soul and revitalize the spirit of men who not only work in the city but also want to call it "home."

ROBERT E. KOEHLER

AIA Journal

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September 1965

The Tree Will Branch and Flower



In 20 years (probably less) the Institute membership will pass 30,000. This is not a scientific projection but can be deduced from several indicators. A straight-line projection of our last 25 years' growth hits 30,000 in about 1984. Other factors argue for more sharply rising curve:

population growth; predictions for growth in the building economy; increasing success in making the public see the need for architecture; and the Institute's determination to welcome into membership all architects who subscribe to our Standards of Professional Practice.

What happens to an expanding profession? It can split into independent associations too specialized for any particular one to represent the whole profession. Or, as in medicine or law, a basic professional society is the unifying force and public spokesman for a large body of practitioners, many of whom also hold membership in tributary professional societies.

As the architectural profession grows numerically and at the same time expands its capabilities, two things will probably happen. There will be a tendency for increasing specialization in a variety of capabilities by substantial numbers of architects. There will be a tendency for those sharing mutual interests in fields of specialization to form associations.

Specialization is a sort of dirty word with us to this day. We are very fond of the idea that an architect is a generalist. Indeed, it is true that many, many architects may undertake any one of various building types for the first time and create a superlative design, better perhaps than any done by socalled specialists in the field. This is likely to remain true forever.

But still, there will be architects who become exceptionally expert in certain building types—expert in their functional planning, in their technical complexities, in their economic feasibility, and in their esthetic excellence. Because he becomes extensively experienced, and in the process does extensive research, many an architect will consistently produce superior design in a given building type and gain fame for it. Those who do likewise will gravitate together for their mutual improvement, as they already have done.

Specialization is not, however, confined to the design of building types. One architect may become an authority on specifications, structure, building finance and law or architectural education. He may be either a principal or an employee in a firm or engaged in other architectural endeavor. As the profession grows, there will be more of such experts, and they will seek each other out for the benefits of association.

And so it will be that the branching and flowering tree of our creative profession will produce other societies or associations like the Guild for Religious Architecture, the Construction Specifications Institute or the Association of Collegiate Schools of Architecture.

This will be all to the good, I think. A worthwhile association must have notable leaders. Its existence holds opportunities for the exercise of the energies and realization for the aspirations of those with the ambition to lead. There are not enough such opportunities in the Institute itself for a rapidly growing profession. Still, each opportunity for leadership is one more asset for architecture, provided that the leaders of all groups work in harmony for the commonweal.

In any event, the tree must branch from a sturdy trunk, the Institute itself. I have spoken here of architectural associations whose members and leaders are architects all sharing, from the point of college onward, a common love for architecture. Each group, each interest will contribute to the health of the root structure, the flowering and the fruition of the whole organic entity. This can be accomplished through collaboration and affiliation which unites all architecturally oriented associations with one national professional society, the AIA.

In his convention valedictory address, President Odell said, "To attain its full potential, the profession must remain an entity, unsplintered and undiluted." In his speech at the Northwest regional conference, President Ketchum said, "There is no room for the type of splinter group which can only divide and dilute our strength and weaken the unity of our cause in our dealings with business, industry and government." Let's grow as an oak, not as a banyan tree.

WILLIAM H. SCHEICK, FAIA

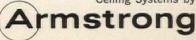
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OCTAGON OBSERVER

WAR ON COMMUNITY UGLINESS / From the Housing Bill Signed in the East to a Citation in the West

"This measure votes 'No' on America the Ugly-and it votes 'Yes' on preserving, for our posterity, America the Beautiful," declared President Johnson at the signing ceremony of the Housing Bill on August 10.

His entire speech, in fact, sounded like a campaign talk for the War on Community Ugliness being waged by The American Institute of Architects.

Representing the AIA in the large crowd assembled in the Rose Garden were Executive Director William H. Scheick FAIA and Kenneth C. Landry AIA, newly named administrator of Governmental Af-

Mr. Johnson noted that he was "happy to see so many members of the building industry and the trade unions and our free enterprise system-that have made us the strongest nation in all the world-here to honor us with their presence this morning."

The President referred to the legislation as "the single most important breakthrough in the last 40 years. Only the Housing Act of 1949 approaches the significance of this measure. And in years to come, I believe this act will become known as the single most valuable housing legislation in our history."

Mr. Johnson went on to spell out the provisions of the bill-officially known as the Housing and Urban Redevelopment Act of 1965-which "retains and expands and improves the best of the tested programs of the past." Among the points he

"It extends and gives new thrust to the FHA Mortgage Insurance Program so that millions of Amer-



Praise and a Pen: HHFA Administrator Robert C. Weaver receives one of the many pens used in the signing of the Housing Bill, "a monument to him," in the President's own words.

icans can come toward attainment of new homes in the future-as millions already have under that program in the past.

"It opens the way for a more orderly and cohesive development of our suburbs; and it opens the door to thousands of our veterans who have been unable to obtain the benefits of a Federal housing program.

"It extends and enlarges and improves the Urban Renewal Program so that we can more effectively challenge and defeat the enemy of decay that exists in our cities.

"It faces the changing challenge of rural housing. It continues the loan programs to assure the needed dormitories on our college campuses, and decent housing costs for the elderly and the handicapped and those of lower income.

"And finally, this legislation meets our compelling responsibility for giving attention to the environment in which Americans live. Grants are provided for the acquisition of open spaces, for the development of parks, for the construction of recreational facilities and for the beautification of urban areas."

An idea that was developed through the voluntary efforts of the members of the Southwest Oregon Chapter AIA has earned for Eugene the Institute's third Citation for Excellence in Community Architecture.

Three separate citations presented in late August honor the citizens of Eugene (Mayor Edwin E. Cone), of Lane County and of the state (Gov. Mark O. Hatfield) "for their vision in authorizing and supporting a comprehensive solution to present problems with bold anticipation of future needs for the Civic Center area."

The dual presentation was made at the Northwest regional conference at Glacier National Park and a few days later in Eugene itself.

In a report to the Dallas convention (see the AIA JOURNAL for July 1962), Donald H. Lutes AIA metropolitan area. The architects

talked about the idea, which up to date has resulted in the completion of a new courthouse and meeting hall-with the rejuvenation of surrounding park blocks and alleysa city hall, a state office building and a parking garage plus two banking structures.

"The chapter formed a local affairs committee to develop, as a public service, an analysis of the existing courthouse area, future needs and recommended sites for a county government center. This was an informal group of 20 people consisting of architects, landscape architects and designers calling themselves Architects' Collaborative," Lutes explained.

"As the majority of county residents lived within a six-mile radius of the existing courthouse, seven sites were examined throughout the

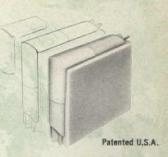
worked closely with the county planning director, who supplied population and traffic data, presenting this information graphically to the public. However, no one focused on any particular site until one member enlarged the scope of the problem and presented the idea which was to weld the diverse thinking of the group.

"The idea consisted of linking the natural beauty of the riverfront and adjacent butte with the new city entrance through a park and cultural center. This, in turn, related to the small bit of remaining civic open space—the courthouse square, to provide the core of a civic center.

"The architects for the courthouse were commissioned to refurnish the square and incorporate parking in the area adjacent to the

Cont'd on p. 84

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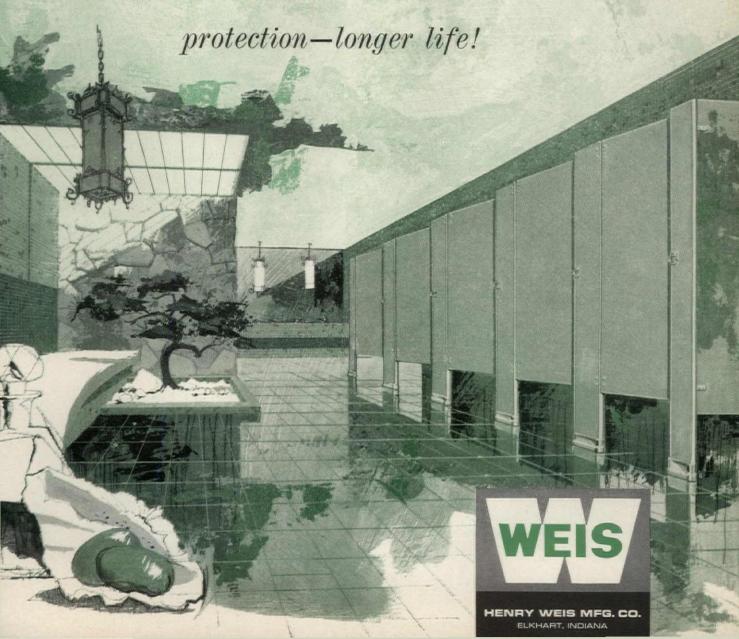
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CALENDAR

- Sept. 14-17: Producers' Council Annual Meeting, Brown Hotel, Louisville
- Sept. 15-17: ASPO and Northwestern University Annual Conference on Urban Planning Information Systems and Programs, Windermere Hotel, Chicago
- Sept. 17-19: Liturgical Art and Architecture Seminar, Atlantic City, N.J.
- Sept. 22-24: Conference on Cellular Plastics, Ann Arbor, Mich.
- Oct. 7-10: National Trust for Historic Preservation Annual Meeting, Sir Walter Hotel, Raleigh, N.C.
- Oct. 15-16: National Conference of Professional Engineers in Industry, Oklahoma-Sheraton Hotel, Oklahoma City
- Oct. 20: Architectural Expression of Medical Care Functions Session at American Public Health Association Annual Meeting, Chicago
- Oct. 24-26: Utilities Conference for Architects, Roanoke, Va.

AIA Regional and State Conventions

- Sept 8: Middle Atlantic Region, Essex and Sussex Hotel, Spring Lake, N.J.; North Central States Region, Radisson Hotel, Minneapolis
- Sept. 9-10: Minnesota Society of Architects, Radisson Hotel, Minneapolis
- Sept. 9-11: New Jersey Society of Architects, Essex and Sussex Hotel, Spring Lake
- Sept. 30-Oct. 2: Illinois Region, Sheraton-Chicago Hotel, Chicago
- Oct. 1-3: New England Region, Colony Motor Hotel, Providence, R.I.
- Oct. 6-10: California Region, Yosemite National Park
- Oct. 7-9: Louisiana Architects Association, Ramada Inn, Alexandria
- Oct. 10-13: New York State Association of Architects, Concord Hotel, Liberty
- Oct. 14-16: Ohio Region, Atwood Lake Lodge, New Philadelphia
- Oct. 21-23: Pennsylvania Region, Hershey; Western Mountain Region, Mountain Shadows Resort, Scottsdale, Ariz.
- Nov. 3-5: Texas Society of Architects, Terrace Motel, Austin
- Nov. 3-6: Central States Region, Des Moines, Iowa
- Nov. 4-6: Alabama Council of Architects, Auburn University, Auburn
- Nov. 17-20: Florida Region, Jack Tar Hotel, Clearwater

AIA Committee and Related Meetings

(At the Octagon unless otherwise specified)

- Sept. 14: Joint AIA-AMA Committee on Environmental Health
- Sept. 22-25: Executive Committee and Board of Directors, Yosemite National Park

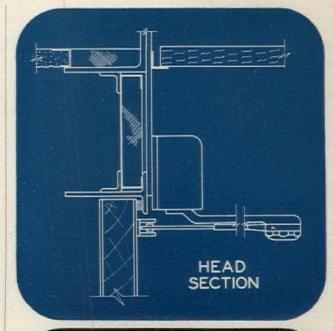
Oct. 1: ICED Task Force

- Oct. 1-2: Architect-Engineers Liaison Commission; School and College Architecture, Providence, R.I.
- Oct. 7: Building Construction, AGC Headquarters, Washington, D.C.
- Oct. 8-9: Documents Review; ACSA Board Meeting,
- Sept. 16: Joint AIA-NCARB Committee, Denver.

Competition

(With deadline for application and/or registration)

Sept. 15: Civic-Cultural Center for Freemont, Calif.; single stage, national. Professional adviser: Jacob Robbins, AIA, City Hall, Fremont, Calif. 94538.



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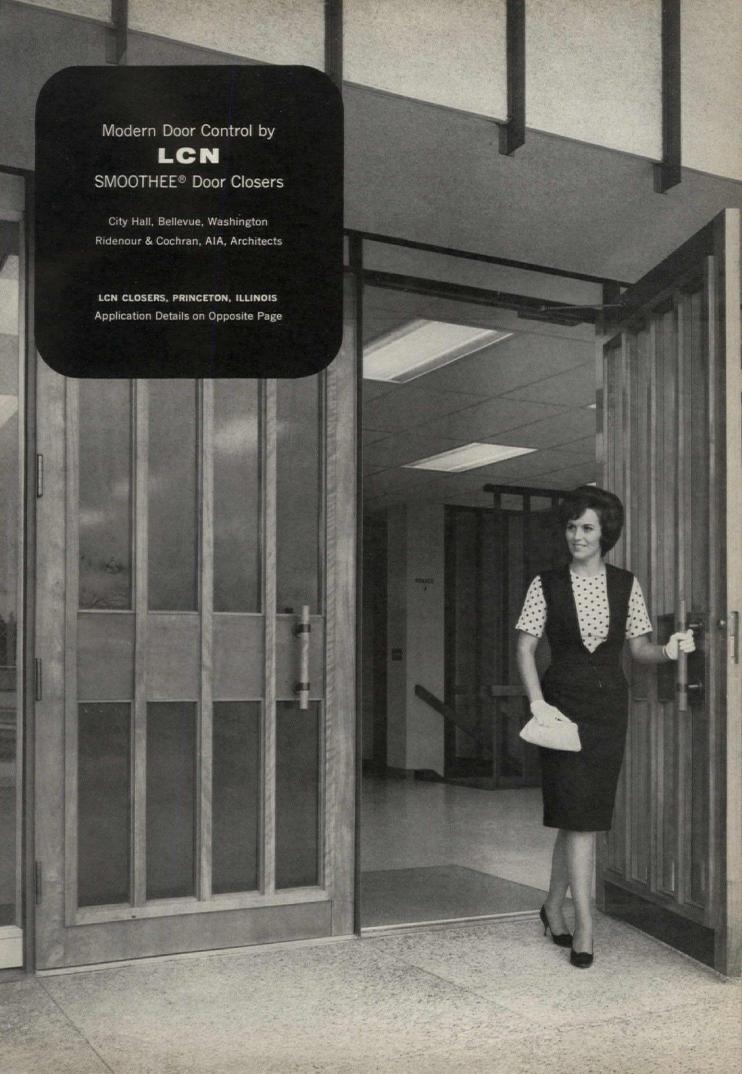
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RESEARCH PROJECTS

Pratt Institute

"Cost Reduction Methods for High-Rise Apartments": Continuation of previous study, leading to construction of a demonstration building free from building code restrictions by Department of Defense at Newport, R. I., Naval Base. John Hancock Callender, Robert L. Davison, Edward T. Shiffer, Paul Weidlinger, with student assistance. Sponsor, US Housing and Home Finance Agency. Budget, \$237,000. Begun, 1964; completion anticipated, 1967. First quarterly report submitted to HHFA.

Rice University

"Industrial Architecture/Fallout Shelters": Invitational design project in which five architects and specialists probed designs incorporating fallout shelters as dual-use space, in industrial plants located in five regions of the U.S. Bill N. Lacy, Coryl La Rue Jones, Harry S. Ransom. Sponsor, Office of Civil Defense. Budget, \$38,500. Begun, 1963; completed, 1964. Final report, "Industrial Architecture/Fallout Shelters," TR-21, 1963.

University of Southern California

"Study of Building Surface Responses to Environmental Forces": Study of action and control of sunlight, gravity, heat and wind on the surface of predetermined forms; development of structural systems to respond simultaneously to more than one environmental force with greatest economy of material. Ralph Lewis Knowles, William K. Turner, Stanley P. Steinberg and design class at Auburn University. Sponsor, Graham Foundation for Advanced Studies in the Fine Arts. Budget, \$7500. Begun, 1962; completed, 1963. Reports, exhibition at Chicago offices of Graham Foundation.

University of Michigan

"Experimental Development of New Kinds of Patient Care Space in Hospital Wards": Emphasis to be on structural flexibility to accommodate changing requirements of patients; services to be brought to the patient so far as possible; laundries and storage rooms to be eliminated through use of disposable furnishings and computerized daily supply deliveries. Minor Vandermade, C. Theodore Larson and John Griffith. Anticipated budget, \$300,000.

Howard University

"Teaching Aids Course in Protective Construction": Development of aids to assist Office of Civil Defense in teaching a course in protective construction; that is, ability of a building to protect occupants from gamma Jerome W. Lindsey Jr., Jack Patrick, Jose Mapily, Kamram Diba, Sponsor, Office of Civil Defense. Budget, \$10,630. Begun, 1963; completed, 1964.

As reported in the 1965 AIA Research Survey; additional projects in subsequent issues of the AIA JOURNAL.



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BOOKS

Hospital Design and Function. E. Todd Wheeler FAIA. New York: McGraw-Hill, 1964. 296 pp. \$13.50

As the author indicates in the preface, this book is addressed to all who have a serious concern for the design of our hospitals, and especially to the many qualified architects who do not concentrate on this type of work but nevertheless design most of those built in the United States.

The book's purpose is to aid hospital administrators, department heads, trustees and the architect in understanding the realities of hospital programming and the resulting planning process, and to guide them toward solutions which will function and still be beautiful.

Some of the topics described in detail in the book's 11 chapters include the hospital and its personnel; planning methods; adjunct diagnostic and treatment facilities; service departments; administration; teaching and research; the hospital plant; modernization and expansion; and housing. Current needs in these areas are detailed with emphasis on method rather than solution. At the end of each chapter the author discusses trends, current and future.

Quite often the author refers to a "rule of three" which asserts that a competent architect can design any space or combination of spaces if he knows the following: 1) What is to be done in the space? 2) What persons are expected to do it? 3) What special equipment and physical conditions are required?

There are areas in the book which will help the client understand how an architect works and help the architect maintain control of the project. Of particular value is the emphasis on the architect's relations with mechanical and electrical engineers, and the importance of maintaining budget control.

Typical of the abundance of common sense in this book is Wheeler's analysis of nursing department sizes and shapes with his admonition, "The circle offers little not obtainable in the square. It generates many problems."

ERNST L. SCHAIBLE, AIA

Housing and Society. Glenn H. Beyer. New York: Macmillan, 1965, 595 pp. \$8.95

The author, director of the Housing Research Center at Cornell University, wrote an earlier work "Housing: A Factual Analysis" (1958) in which he stressed that our complex society requires that man's shelter not only protect him from the elements but also satisfy economic, social and psychological needs. Using this book as a basis, Beyer now extends his study to take into account new developments and research in such areas as housing for the aged, cooperatives and condominiums, central city housing and mobile homes.

Such topics as residential financing, housing design and production, home ownership, pressure groups and the role of the government in housing are related to the social, economic and political aspects of contemporary life. Also, there is background material on the history of American housing, families and cities, as well as a look at future needs and housing research and a review of housing trends in Europe and in the developing countries.

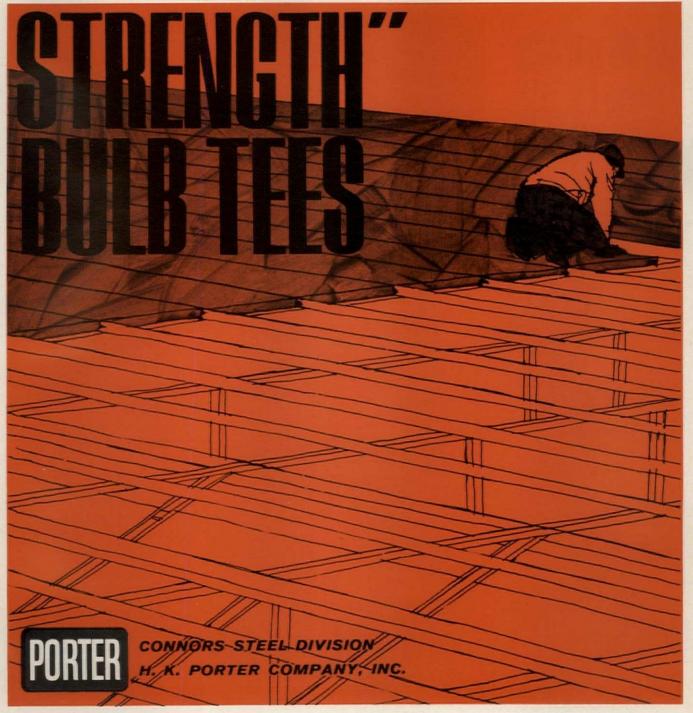
Modern Gardens and the Landscape. Elizabeth G. Kassler. New York: Museum of Modern Art (Dist. by Doubleday), 1964. 104 pp. \$5.95

"When men have had a strong shared sense of their place in the universe, their gardens too have tended to be strong and sure, for the making of a garden is always something of an act of faith." Modern man, however, is unsure of himself, and an engulfing blight of our own making seems about to overtake us.

In spite of this "creeping wasteland in which we have our being," this delightful book dramatizes how it is possible to get in tune with nature and with ourselves. Presented are gardens, both in a natural landscape and in constructed landscapes, as well as outdoor rooms, water gardens, sculpture gardens, flower gardens, playgrounds, urban squares, parks and plazas. If the landscape designer must create in terms of his own place and time, his own faith and vision, so must the architect of buildings. And this book is of concern to both.

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LETTERS

Billboards vs. Beauty

EDITOR:

After motoring across this vast country from New England through plains, mountains and deserts to reach the Pacific Coast, I want to add my voice as a landscape architect to those who have lately criticized the appearance of our country and the visual damage man has inflicted on its natural beauty.

There have been meetings on the responsibility for ugliness, many articles and several books have been written, and the President has spoken some encouraging words. However, few practical suggestions for immediate improvements have been offered.

The state of Vermont, some towns in Connecticut and the Monterey Peninsula in California (and probably others) have passed laws regulating billboards, with very rewarding results. Monterey, without billboards, was a joy to behold after

our billboard-marred transcontinental trip.

It seems to me that some wealthy foundation could do a great deal of good by publicizing what has been done and by showing the improvement derived from it. It could also investigate the legal aspect of the "captive audience" angle, used successfully to eliminate the loud-speakers from Grand Central Station in New York.

Signs do not have to be eliminated entirely. They should be regulated like housing and plumbing to protect the public, or like boxing and football to keep the fight from getting too rough. As a first rule, signs should be confined to their owners' locations.

Billboard removal would not improve architecture, but the latter is only one facet of the whole picture. What good would the best architecture be if it were covered by billboards? How would Fifth Avenue look if Korvette tried to outdo Saks with signs?

This does not preclude reserving certain areas like Times Square for the billboard amateurs. Such exhibits would remind everyone of the inherent danger of any relaxation in the regulations.

If we are incapable of controlling this last bit of unrestrained mercantilism, all the high-minded talk about art and civic beauty will come to naught, because one essential part of beauty is order; one can almost say that beauty is the highest order.

CHARLES MIDDELEER New York, N.Y.

Kudos: Parkin & Preservation

EDITOR:

The JOURNAL can rest on its laurels of publishing John C. Parkin's article in the June issue. A remarkable and brilliant evaluation of the profession and our terms.

JOSEPH AMISANO, AIA
Atlanta, Ga.

EDITOR:

Robert C. Weinberg's article in the July Journal was certainly worthwhile. The distinction he made between preservation of individual, separate buildings and of neighborhoods was very good.

We are fortunate to have a new

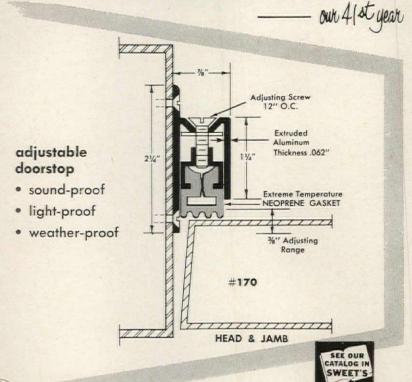
Cont'd on p. 82

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WAR ON COMMUNITY UGLINESS

FIVE PHASES ATTLE

Beautifying the community with trees and plants, while very desirable, is a small part of community design. We will have livable cities only if we take the same hard-nosed attitude toward the use of land that our forefathers did in many of our early towns.

-MORRIS KETCHUM JR., FAIA

The question for architects and landscape architects is not the topical one, "Who is responsible for ugliness?" but the everpresent one, "Who is responsible for design?"

-ARCH R. WINTER, FAIA

During the next year it is essential that our detailed plan for a long war be refined and made evident to the public as well as our own members. We have a popular crusade; we have the capability of sparkplugging a successful effort; and the good of the country demands victory at whatever cost.

—ROBERT L. DURHAM, FAIA Chairman, Commission on Architectural Design

Everywhere, responsible people believe things have gotten out of hand. But they look to New York as the symbol of what Western civilization is trying to do, as the modern city.

—JEAN GOTTMANN Author of "Megalopolis"

It [second Columbia Conference] opened up a whole new range of prospective *Atlantic* authors. . . . And, perhaps more importantly, it aroused me from an attitude of complacency and indifference to the enormous and continuing problems of the city.

-ALFRED HARRISON

Associate Editor, The Atlantic Monthly





What Is This Quest for Beauty?

THE American Institute of Architects is engaged in an all-out war to confront spreading ugliness of American cities, but what is the raison d'être? Outgoing President Arthur Gould Odell Jr. FAIA, at the 1965 convention's annual dinner, succinctly explained that objective when he told his colleagues: "Architects, of course, have always been the designers of our new towns and cities. They must involve themselves in political affairs, struggle against the makers of ugliness, and make it clear to the ordinary citizen that he can have a better city and a better life if he will just demand it."

The next question then: How do we translate "a better city and a better life" into a meaningful phrase? Let's take a look at Detroit, for example—a good case in point because the city, its mayor and its citizens received the first AIA Citation for Excellence in Community Architecture (see the June AIA JOURNAL) for "their vision in implementing a comprehensive plan for the central 30 square miles which will transform and revitalize this great metropolitan region."

On a recent visit to the Motor City, the writer had occasion to spend some time with a young minister who has heard about the war and the citation; he feels that architects and planners are often insensitive to human needs. The physical shortcomings are, after all, the most tangible and the easiest to correct.

But good planning and money alone will not remove human ugliness, this youthful man of the cloth reminds the profession. He knows of what he speaks, for he lives in and serves an inner-city neighborhood where people of varying race, color, creed, national origin, social, cultural, educational and religious backgrounds find themselves compressed. They live in homes and apartments owned largely by absentee landlords. We must find a way, he warns us, to motivate these people to want a great environment.

The young clergyman is convinced that driving a bulldozer through such neighborhoods, and building low- and high-rise apartments at rents that range from \$150 to \$300, will not solve this community problem either. Solutions do not come easily, he admits. Currently he is the president of the West Central Organization, an equally youthful, militant unit whose "purpose is to coordinate the efforts of civic, religious, business and other community groups and work together for the improvement and enrichment of life in our modern urban society."

One of its chief projects is aimed at the razing of abandoned houses, a campaign which reached an emotional peak when three small boys were burned to death in just such a structure. Said the *Detroit Free Press*, a strong supporter of the movement, in a recent report:

"Between March 6, 1965, when the city's Dangerous Building Ordinance was passed, and June 1, 1965, Detroit demolished 1243 unsafe buildings—not including urban renewal project demolitions. Twice that number—2401—are awaiting removal proceedings."

As one drives around Detroit, he sees the same chaos that dots the cityscape across the land. All the familiar ingredients are there: the used-car lots ablaze with multicolored banners; the shuttered theater with its "Post No Bills" declaration; the fire-sale "Best Deal in Town" announcement; and the companion selling-out "Save on Appliances" pronouncement.

But in traveling about town, one also sees concrete evidence of the urban design plan at work: in Lafayette Park, Detroit's first major effort at private redevelopment of blighted land for residential use, and in the cranes and hard hats on the

September 1965





scene at several other sites—the Medical Center, University City, West Side Industrial Project, Kern block renewal—in various stages of progress.

As AIA President Morris Ketchum Jr. FAIA puts it, "There is a 'hunger in the land' for orderliness and beauty, a hunger reflected in the deep interest shown by city, state and national governments in creating a better physical setting for the lives of our citizens. It is our evident and urgent responsibility as architects to help provide the answers to that demand."

The role of the professional, then, must be much more basic than planting trees and flowers, eliminating billboards and neon signs; these things are not enough. Last fall, in formulating a positive counterattack of architectural and urban design, the Institute emphasized five elements which are essential in any civic improvement undertaking:

• Citizen participation means the active support and involvement of the people of a city or town.

• Government action means that governments

must first of all care about civic improvement.

• Professional competence means that architects, planners, engineers, landscape architects, city managers, sociologists, educators—all those who speak out and act from professional platforms and address themselves to the problems of the city—must be up to the job.

• Competent city management means a good building code which is well administered, competent civic housekeeping and efficient administration of the city's building agencies.

• Proper financing means an obligation of the city as well as private enterprise to budget wisely.

The program, of course, must sift down to the regional and then the chapter (community) level. The challenge calls for a coordinated attack in such a way that the architect marshals the strength of allied professionals and enlightened civic leaders.

So, what about Detroit? President Louis G. Redstone FAIA explains that his chapter has not appointed a special committee for the war effort, but "several others have made it their goal to make our city a better place in which to live.

"The civic design committee has as one of its main objectives the creation of a Detroit Municipal Art Commission, which would have a legal status in planning of major public, civic and even private building projects. The commission, it is hoped, will be similar to the one established in Seattle (see the January AIA JOURNAL). The civic design committee is consulted on projects within the central business district and also on public projects throughout the city."

Redstone echoes the sentiment "that physical changes alone will not win the war; social and economic factors are just as important."

In the final analysis, it all gets back to the individual practitioner, acting for the community as a whole, as outgoing President Odell explained: "There are undoubtedly as many incompetent architects as there are incompetent lawyers, doctors, engineers or policemen. But there are many competent architects too. Some excel in design, some in administration and some at coordinating the specialized talents and activities of others.

"Fundamentally, the architect is a generalist. We have never needed competent generalists as much as we do now. Without them, the specialists—each assiduously working away at his limited task of laying concrete, building machines or stringing wire—will ruin us all."

President Ketchum has dedicated his administration and himself to that very cause. But even the azaleas which Mrs. Lyndon B. Johnson planted in the nation's capital have not thrived as they should, either because they did not take root or were not cared for properly. For the Institute, for the profession at large and for every architect, the moral is obvious.

ROBERT E. KOEHLER



Who Is Responsible for Design?

BY ARCH R. WINTER, FAIA

The author calls this a minority report, insofar as current views of urban design are concerned. The article dissents from much of what is being proposed for abolishing ugliness and achieving beauty in cities. Yet, instead of discouraging this new attention to city design or disparaging the campaigns to improve city appearance, it seeks a more substantial premise.

THE ISOLATION of ugliness as an evil in itself and the wide public interest in it is relatively new. It began in earnest about four years ago, with the New York Chapter AIA's "First Conference on Esthetic Responsibility." This one-day meeting was so lively as to receive the probing attention of the *New Republic* under the heading "Ugly Day at the Plaza."

Since then, ugliness has become a popular whipping boy. Professional journals castigate it; seminars are devoted to it; books are written about it. Is has reached the tabloids, where it comes profusely illustrated with pictures of billboards, electric power poles and wires, and usedcar lots. Schemes have been formulated to take down overhanging signs (though few have actually come down) or to fit them all into blocklong bands flush against the facades. Other schemes would cover the upper parts of old store fronts with terra cotta grills or anodized aluminum screens. This is a catchy Sunday-supplement sort of thing, particularly when it comes with smart sketches and retouched but recognizable photographs. These constitute, however, a small part of the remedy. Most of the time, the city scene would be ugly even without the claptrap. Beauty is not merely leaving out signs and power poles; nor is it produced by making old windows with sun screens or hiding automobile wrecking yards with facades of greenery.

Second thoughts suggest that visual chaos is the natural reflection of deeper confusion. It is not the result of lack of attention to appearance, but the consequence of neglecting design in city building, a far more sinful omission. It follows, as the aim is to reshape the urban environment, that this will have to be done, not by face lifting or superficial glances, but through design that is based on ideas and derived from concepts.

In 1924, under the chairmanship of Clarence Stein, AIA Gold Medalist, and with the help of Lewis Mumford, the AIA Community Planning Committee issued a monumental report on the state of town planning and the responsibility of the architect for it. Choosing between planning suggestions that "might be called superficially constructive suggestions and fundamentally constructive ones," the report did not hesitate to take the latter. It said, significantly, that this kind of fundamental planning, "Confronted by a congested traffic avenue . . . examines the alternatives between widening the roadway or creating, let us say, a new center of business which will divert the stream of vehicles." The illustration is so simply put, so understated, that one scarcely realizes that what is being advocated is nothing less than complete and comprehensive city design.

Today's AIA urban design effort is also concerned with the planning that gives shape and form to cities. Likewise, the American Society of Landscape Architects is more concerned with the place of design in planning than with screening unpleasant views, whether of bad architecture or of junkyards. As Grady Clay expressed this concern in a Landscape Architecture editorial last fall, "You cannot separate 'design' from 'plan,' nor apply good design like lipstick. The esthetic approach is a way of arriving at thoughtful decisions."

But the insistent urging to do something quickly and clear away urban clutter impels even trained designers toward that very superficiality which the AIA Community Planning Committee warned against. The decisions on whether to widen the street or divert the stream of traffic are left to highway engineers, while we draw a plan to close off streets, plant trees and install sidewalk cafes.

However much we deplore this kind of "urbanredesign," it has become high fashion. It's easy and it's fun. But enthusiasm for easy esthetic effect is blind to its fatal shortcomings: that it does not get at the real problem and therefore is unlikely to come to much beyond pleasant decorative frills. Worse, when it fails, it discredits the more fundamental design, the design that is—or ought to be—an integral part of planning.

Among professional planners too, urban design is being discovered with spell-binding fascination. Like a new-found ancient artifact, it is being deciphered, discussed and defined in planning circles. One lofty definition called it: "attention to the perceptual elements of the urban environment" but cautiously limited its scope to "the kind of experiences that enhance and enrich daily life rather than those which provide mundane information." This must have been a nondesigner's definition; for no designer is going to exclude the utilitarian from his interest.

A recent study suggests that a city's master plan contain a component called the "design plan" as a companion to the "land use plan" or to the "major street plan." Design is a part of what is termed "the planning process," but it has a separate identity. Focusing attention on design is important, but it cannot be divorced from its subject material. The whole problem is wrapped up in a single statement: "The making of the municipal design plan, like the making of the whole master plan, is a creative process requiring professional skills and techniques."

It is discouraging to turn and find planners, architects and landscape architects embracing, or at least accepting, that design, if not cosmetic, is at least a thing apart—a sort of icing or a dessert separate from the "mundane" staff of life. Nothing could be more false.

In Atlanta, members of the Georgia Chapter AIA studied a suburban section of the city, the Buckhead area, to see what a "design plan" could accomplish. What the study accomplished was a scheme for redeveloping a business center and a nearby residential district. But it went at once—and quite rightly—into questions of land use and circulation to demonstrate that if these elements are well organized, and if buildings are well placed and uncrowded, good design results. Inadvertently perhaps, but conclusively, the study demonstrated that design cannot be divorced for a single moment from its planning subject.

What, then, is the place of urban design, and how is it related to the other aspects of city planning? The answer lies implicit in the name. Its function is the same as that of design without the qualifying adjective: to organize the physical elements for the city's activities and its circulation. In a large city, this can be a complex and difficult task and one that extends from the first studies to the final stages of implementation. But in concept as in fact, the purpose and the place of design in the entire process remain simple. For instance, if design solves the problem of relating urban activities (land uses) to circulation and communication, it will very likely be successful urban design. There is a good chance that pleasing appearance will follow, not automatically, but because, at every stage, the three-dimensional end result will have been in mind.

Urban design, like architectural design, is also a pervasive force that goes beyond the boundaries of its own land. For instance, it should be uppermost in mind during such data-gathering activities as terrain and topographic studies or the "visual survey." The latter itself should be a part of the overall physical conditions and not an analysis of appearance segregated from its subject. Design lies at the very beginning of the process of industrial locations, say, or of street and highway placement.

Fluency is another earmark of urban design. It flows through the whole process of providing accommodations for the activities of the city and their linking circulation. Needless to say, it is present in any consideration of buildings and other structures.

Finally, urban design is a constant factor. It cannot ever really be absent. It is always there, good or bad and inescapable. The point is to realize this fact and, with equal parts of sensitivity and firmness, to draw its potentialities to their highest point of achievement. In this view, good urban design is no different from good building design. Both reject the notion of treating appearance alone and insist on concerning themselves with organizing the functions and arranging their accommodations. They reject the "superficial" solution in favor of the "fundamental" one.

While the nature of city planning is no different now than when the AIA Community Planning Committee made its diagnosis in 1924, the considerations that lie behind urban design and the activities to be organized today are vastly more complex. There is the apparently limitless increase in private automobile transportation and other important factors to be reckoned with: far-reaching power grids and instantaneous communication, home ownership and septic tank subdivisions, geometric population progression, industrial automation and installment living, government financing of private enterprise, especially

that unrugged segment so concerned with land exploitation.

City planning, even where it is well conceived and strongly supported, is finding it difficult to cope with these forces. Government financial aid abounds, but it does not buy the ideas that are needed. And, despite their mystique, those handy helpers, the computers, really do not have much originality.

The answers to many questions may be found outside design. Taxing policies, for example, might be used to promote the best use of land. Raising the income of poor families, whether through the Federal poverty program or otherwise, holds more promise for eradicating slums than any amount of land clearance.

There is one problem, however, that might find the major share of its solution on the drawing board of design. This problem is that of circulation, which in our time and for all but the largest cities means private automobile transportation. But a major difficulty has come up in this respect. Street planning has traditionally been a part and parcel of town planning. However, this part of planning became separated and responsibility for it transferred to central state and Federal bureaus. There, traffic counters and origin-destination surveys revealed the obvious: that the amount of traffic was heavy and getting heavier, while the surveys brought out the fact that 85 percent of motorists were going to, or returning from, the center of the city. What to do about this? The answer was given on a suitably grand scale. A glance at the map will show how well integrated the highway system is as a national transportation network and how poorly it is integrated with the cities through which it passes.

Freeways have not only fallen short of solving the circulation problems, but on the contrary, they have often intensified congestion. The fault and the failure of the urban freeways in most cases come from their having been planned not as streets but as highways, almost independently of the urban activities they were intended to serve. Urban highway location should be a part of urban planning and consequently a part of comprehensive city design. Up to now, it has not been.

The difficulty has by no means ended here. Another planning activity, in which design is either largely breach-honored or dealt with in a minor way under such headings as "street furniture" or "appearance control," is urban renewal. Yet, especially in the Federal urban renewal program, urban design could find one of its more rewarding fields. For, if renewal is to create permanently useful and attractive districts for city life, it must be done under the discipline of city planning—planning that organizes in a compre-

hensive design all the physical elements of a particular environment. In other words, renewal ought to be simply a means of carrying an ably conceived city plan.

Lately, urban renewal has been concerned with historic preservation in downtown districts. Hardly anyone will disagree with the motive of historic preservation, especially when it promises protection of important works of architecture. But just as urban design is sometimes reduced to mere appearance control, historic preservation is often distorted to mean architectural conformity. Too often, enthusiasm for preservation spills over into a reforming zeal for regulating style.

Take, for instance, a new three-story office building to be constructed in an upper South state capital. The architectural review board charged with preserving the city's historical and architectural heritage approved the plans only after they complied with its requirements. Among others, the board had required "real, rather than fake shutters." The newspaper reporting this quackery added that the colonial style office building with the real shutters would replace a landmark house built in 1816 and once the home of a distinguished U.S. senator.

Such perversions of historic preservation and design into the shallowest parodies of their intentions are not unusual. Like urban freeway planning outside the context of city planning, they are typical enough to be a warning to those who are seriously concerned with design.

It is possible to renew and rebuild without losing the feel of an era and without copying its architectural style. Philadelphia's Society Hill renewal project does just that. The townhouses clustered at the foot of a group of apartment towers announce frankly their newness. Yet in their use of materials and texture, color and form, and in their scale and setting, they fit congenially and with distinction into their 18th century surroundings. In buildings and cities as in people, individuality does not need to be arrogant, nor originality be coarse.

The place of design in planning for the foreseen urbanization is a tremendous issue. Some idea of the size of the demand for city planning and its critical component, urban design, can be gained from the growth projected for the nation, a growth that will call for city building equivalent to all that exists today. As the AIA has stated it, we must build a "second United States."

With this prospect, the question for architects and landscape architects is not the topical one, "Who is responsible for ugliness?" but the everpresent one, "Who is responsible for design?"

Adapted from an address given at the Senior Honors Banquet, Ohio State University, sponsored by its student AIA chapter.

AMMUNITION SUPPLIES

How Should the Community Be Involved?

WHEN THE City of Eugene, Oregon, was honored with a citation for Excellence in Community Architecture last month, it became the third to receive the newest, broadest and one of the most important Institute awards—certainly a potent weapon in the current war.

Within the next six months, 11 similar citations will have been made. Shreveport, Louisiana, and Detroit (see the June AIA JOURNAL) were the first two cities selected in the program established by the Institute's board of directors in January.

Like most professional organizations, the AIA has a host of awards it gives annually to outstanding individual practitioners and related design professionals. Chief among them is the Honor Awards program, the "Oscars" of architecture. Implicit in the recognition of the architect is equal credit to the client who insisted on outstanding design.

But the new program, administered on a regional basis, honors literally millions of clients, the taxpayers in cities having planned projects which "successfully realize the objectives of creating vital environments for the core of American cities."

Under terms set up by the directors, a project to be considered must be planned and approved, under construction or completed, so that "every valid step toward the realization of creative urban environmental architecure may be recognized and its sponsors encouraged to proceed with its completion."

The AIA Commission on Architectural Design, through its Committees on Urban Design and Esthetics, is responsible for searching out, evaluating and proposing suitable projects in each of the 17 Institute regions for citations. The regional director in each case makes the nomination to the national board after it has the approval of the AIA chapter located nearest the project.

In further specifications, the board has asserted that only projects which recognize the need for separation of pedestrian and motor traffic, integration rather than separation of human activities, and the need for overall traffic planning to serve the project and its surroundings should be considered for an award.

The public relations potential of such a comprehensive program is great indeed. Look at Shreveport, for example. The director presented citations to the president of Downtown Shreveport Unlimited, an organization of businessmen supporting the plan, and to the architect consultant (author of the preceding article) during the regional convention in Biloxi, Mississippi. At the same time in Shreveport, the director's partner presented the award to Mayor Clyde E. Fant at the annual banquet of the Louisiana Municipal Association, attended by some 900 officials from throughout the state.

In Detroit, Mayor Jerome P. Cavanagh, upon accepting the citation at the Michigan regional convention held in the Motor City, helped to focus attention on the award with a carefully thought-out statement, which said in part:

"We must plan and design for a people in a vibrant, urban society. The architect will continue to play a leading role in developing the Great Society, the city of promise, if he keeps in mind as all of us must, that the human being is the most important element in art and in science.

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"And a truly creative architect cannot turn from his fellowman—from his needs and aspirations—and expect to fulfill his own potential. Fortunately, for Detroit and for America, most of your profession are well-rounded men: men who recognize their responsibilities as well as their talents. The rest of us depend upon you. We need your help in making our cities and our world a better place in which to live. We appreciate what you already have done for us. We look forward to working with you even more in the future."

When one realizes that the same kind of enthusiasm is to be generated in cities in all parts of the land, the impact of the program becomes readily apparent. As Commission Chairman Robert L. Durham FAIA puts it, "A project so honored serves to illustrate John Ely Burchard's article in the AIA JOURNAL (see "Some Antidotes for Ugliness" in April) in which he pleads that what we need are better examples of urban architecture in this country in a number of different categories so that the populace can see the difference between the good and the bad."

The community citations program, however, is just one phase of the ammunition, material about which has been compiled in a "Weapons" book distributed to every AIA chapter president. Other significant items:

- "No Time for Ugliness" film—Now being distributed, copies of movie No. 1 already have been purchased by 60 chapters. Viewers at each showing will be given a brochure entitled "No Time for Delay," suggesting steps they can take in their own communities (examples below).
- Silent, 54-frame color filmstrip—Used primarily in social studies, history and art classes of secondary schools, "Our Alabaster Cities" is accom-

panied by an explanation and text. Estimated presentation time: 25-30 minutes.

- "No Time for Ugliness" brochure—The 11x14inch piece, also carrying the film title, has been
 prepared for government officials and other decision-makers. It closes with a plea for action:
 "What can you do? The situation isn't hopeless.
 The same dedication and ingenuity that built
 Greece 2500 years ago and is hurling tons of
 hardware at Mars today can surely eliminate the
 ugliness of the American city."
- Inventory of community environment—Good and bad examples are tabulated in a list which includes views and impressions, sidewalks, signs, billboards, public buildings, etc.
- Survey of historical buildings and sites—The objective is to preserve for posterity and to endow with new meaning and vitality as many structures, groups of structures or monuments as possible that have architectural and/or historical value.
- Design concept seminars—Conducted at the chapter level, these sessions give all members of the profession an equal opportunity to participate in this analytical and self-improvement program.
- Esthetic responsibility seminars—Sixteen have been held on the regional level in the past two years, but they are now being promoted on the community level so that the practitioners and civic leaders can get together to discuss what can be done to help fight the cause.
- Urban Design Worksheets—This series gets underway in the current issue, while the preceding 12 JOURNAL articles will be available in book form during the fall—all to help the architect achieve the "realization that his responsibility is not just to each individual client, but to the entire community and to all its people."

















September 1965



Where Are Some Signs of Progress?

THE URBAN PATTERN of New York is in a state of constant evolution. The magnitude of its problems in terms of population, deterioration of neighborhoods, shifts of centers and the magnificent scope of its building operations make it one of the most complex and contemporary cities in the world: a city, then, which surely is worth observing in terms of the current crusade. These operations appear isolated, being in the main, left to an initiative motivated solely by the laws of supply and demand, without subscribing to a coherent overview of the city.

The inefficiency of these operations is due, not so much to laissez-faire patterns as to programs expediently launched under diverse and independent controls. These controls, more often than not, are antagonistic and competitive; particularly within the current planning framework of the municipal government. Thus Traffic Commissioner Barnes will successfully bid for two city parks to provide the city with underground garages at the expense of the Park Department, while over the objections of the City Planning Commission, a police head-quarters building slated for the proposed civic center is assigned by the Site Selection Board to another location simply because the latter was available.

The multiplicity of controls, each with its own set of priorities, makes New York difficult to deal with in terms of urban design. New York is a series of submaster plans; its precarious unity is retained to a certain degree only by the rigidity of its gridiron structure.

These plans, these new centers, include municipal endeavors such as the creation of a civic center or the renewal of Manhattan's West Side; quasipublic projects such as the proposed World Trade Center; and audacious projects under private initiative of large corporations or labor unions such as new headquarters for General Motors or Litho City. Even within an unfavorable planning climate, these examples indicate the degree to which

progress is attainable by bold undertakings and planning experiments. These are the needed first steps in a logical progression toward a master plan for the future development of the city.

West Side Urban Renewal-In the planning stage since 1955 and launched in 1962, this program has become a 20-block laboratory to test new tools and try new approaches to urban renewal. Combined with the conservation of buildings in good condition and the rehabilitation of marginal ones, approximately 7500 dwelling units in four low-income projects and four middleincome cooperatives will be provided along with luxury-housing units. Known as "vest-pocket" projects because of their moderate size and relatively small sites as opposed to the superblock development used until now, these projects were scheduled for construction to avoid large scale relocation of the present inhabitants of the areathe first phase being the construction of the four Housing Authority projects now nearing completion.

The planned integration of various economic groups within the area bounded by 87th and 96th Streets, Central Park West and Amsterdam Avenue features a new experiment. A maximum of 20 percent of the middle-income units will have "skewered-rentals" in which low-income families will pay public housing rentals, the difference being subsidized by the city or state. These rentals will go up as the income of the family increases.

These two major innovations reveal an anxious search for new ideas and an attempt to soften the impact of renewal on the social and economic life of a community. The vest-pocket concept was an expensive experiment which has proved its practical feasibility. The deteriorated portions of a city block are replaced, but the block's still valuable private housing and commercial structures are retained or rehabilitated. Mass relocation is avoided and the positive features of a neighborhood and architectural diversity are preserved. Vest-pocket

sites have allowed the financial participation of local citizens, business groups and community organizations such as the Goddard Riverside, the Riverside Neighborhood Assembly and other philanthropic and religious groups.

A Civic Center for New York—Proposals for a cohesive civic center plan of approximately 60 acres were developed by a mayor's civic center committee assisted by traffic and architectural consultants (Max Abramovitz FAIA, Simon Breines AIA and Robert W. Cutler FAIA). An important part of the city's efforts to rehabilitate lower Manhattan, the ABC plan would consolidate various existing and projected Federal, state and municipal buildings into a unified center free of vehicular traffic. For convenience, the center was divided into three areas.

Plans for Area 1 currently being prepared by Edward Durell Stone FAIA and the firm of Eggers & Higgins propose a 52-story tower with 892,725 square feet of office space fulfilling the functions originally assigned to two buildings under the ABC plan. The open space of the new scheme is divided into landscaped perimeter parks, recessed courts, a mall and plaza with reflecting pools, a treatment criticized recently by various architects who feel that the new structure "should be handled less as a tower and more as a wall" to define a central open space.

Area 2 of the center, immediately north of the new municipal tower, was assigned to a 41-story Federal office tower and its U.S. Customs Court. In the ABC plan, the consultants had recommended the shifting of the tower west toward Broadway and the Court annex to Worth Street, the area's northern boundary. This shift was again requested recently by the Architects Council of New York in view of the extension of the old site to Broadway, but so far without success.

In Area 3, north of Worth Street, sites have been assigned for various civic buildings. This area would extend to the proposed Lower Manhattan Expressway.

The World Trade Center—In accordance with legislation enacted by the states of New York and New Jersey, the World Trade Center whose twin towers will soar 110 stories, 1350 feet, above a 5-acre open plaza will be built on a 16-acre site bounded by West, Barclay and Vesey, Church and Liberty Streets, on the lower west side of Manhattan. It is expected that 50,000 people will work in the Center, which will also accommodate approximately 80,000 daily visitors. The construction, the cost of which is estimated at \$350 million, will be financed by the Port Authority on a self-supporting basis.

The main objective of the Center is to consolidate into one headquarters all governmental and



Progression toward urban order: The Civic Center



Progression toward urban style: Kips Bay Plaza



Progression toward urban continuity: Litho City

private services essential to the movement of international trade and indispensable to the processing and financing of international commerce. This concentration will include government trade agencies such as the U.S. Bureau of Customs, transportation carriers, foreign consulates, commercial attachés, international banks and private concerns engaged in the import-export trade of world markets. In addition, a world trade institute and an information service, year-round exhibit and display facilities will serve as focal points for world trade education, promotion and research providing conference facilities and trade information on market opportunities and regulations. Of 10 million square feet of the center's rentable space, approximately 4 million will be available to business and industry.

Progression Toward a Human Measure—The undertakings illustrated above have a tendency toward monumentality, a new dimension and scale fully reflected by the great span of the city's recently completed gateway, the Verrazzano-Narrows Bridge. Yet there is a search to reintegrate the human scale in a city of inhuman dimensions. In recent years, much of the attack leveled at urban renewal and housing programs, has caused architects and planners to re-evaluate many of the concepts popularized in Le Corbusier's Plan Voisin or the Radiant City, Wright's Broadacre City, Clarence Stein's Radburn plan and more recently in Jean Gottmann's Megalopolis and Doxiadis' Linear City. Thus, the idea of the superblock as a sure-cure for urban ills-because it separates vehicular-traffic from pedestrians and provides sheltered open spaces in quasi-suburban privacy-was seriously questioned when placed in the context of mass relocation and disruption of a neighborhood's life. This re-evaluation is evidenced in urban renewal schemes such as Manhattan's West Side and in the hopes voiced at the Planning Commission's design symposium.

Progression toward urban amenity: Carver Amphitheater



The challenge to the superblock has come from such commentators as Jane Jacobs in "The Death and Life of Great American Cities" and from architects faced with the monotonous and unvaried repetition of salmon-colored blocks. Other architects have sought to remedy these inherent disadvantages, attempting to harmonize the volumes of new development with the older five- and six-story buildings in the old sections of the city. Architects such as Pomerance & Breines in their pedestrian mall proposal for midtown Manhattan, Kelly & Gruzen in their Litho City scheme have sought provocative ways to provide continuity to a city fabric otherwise interrupted by the island-like orientation characteristic of superblocks.

A new concern for the human scale and the need for amenities which transcend practical considerations are vividly demonstrated in an experimental program undertaken by the City Housing Authority. New developments unsoftened by the patina of age were hampered by a lack of variety in the pattern of human activity. These barren open spaces with fenced-in grass areas and asphalt parking fields are being gradually transformed into useful focal points indispensable to the social and recreational life of a neighborhood. Such an attempt was made in the East Harlem Plaza designed by Albert Mayer FAIA for the Authority's Jefferson Houses.

More recently, with funds provided by the Vincent Astor Foundation, the Authority undertook the revitalization of the inert spaces at the Carver Houses in East Harlem. In the new design by architects Pomerance & Breines and by land-scape architect M. Paul Friedberg, active play spaces for children and teen-agers and the recreational needs of adult residents were fulfilled in an imaginative sequence of levels, spaces and rugged materials. The success of the Carver Amphitheater has called for a repeat performance by the same team for the Riis Houses on the lower East Side.

The paradoxical quest for monumental grandeur on the one hand and a search for human scale on the other are symbolized by a special report issued last fall to launch the Planning Commission's comprehensive planning program. Among the major proposals for the development of the Port of New York, the report pressed for a rejuvenation of its piers, large industrial parks and other port facilities to cope with changing times and technologies. A large mid-town superliner terminal is envisioned; residential towers and recreation centers are placed in verdant parks by the water's edge. The recreational potentials of the Hudson River are further explored in such projects as Litho City where community facilities, restaurants, and student centers are placed close to CHARLES THOMSEN, AIA the river.



Why Is the Press Sometimes Wary?

"The American Press," a respected editor said, "has not kept pace with one of the biggest home-front stories in American history." And the story of urban building, George McCue of the St. Louis Post Dispatch went on to point out, "is breaking right at the doorstep of almost every newspaper."

The story, since McCue's assessment of nearly three years ago, has grown bigger, its dimensions made greater by a national government that has emphasized the herculean building and rebuilding job implicit in the population surge projected over the next four decades.

It is a story made bigger still by the new emphasis on qualitative considerations. The nation's architects and, indeed, its President have rescued beauty from scorn; no longer are community esthetics, environmental accommodations and human planning pathetic concerns of a remote idealism to be strewn helplessly along the path of "progress."

If the press is failing, why? McCue placed the blame on both newsmen and architects. Of architects, he said: "Some are aloof, some are poor communicators, some are so busy that they are hard to catch at the moment a newspaperman needs contact."

Press coverage demands a two-way line of communication. If future coverage is less than commensurate with the innate bigness of the story, architects will want the small comfort of knowing they upheld their end of that line. But vastly overriding all else just now, as the profession undertakes its War on Community Ugliness, is that this campaign, imperatively, must be conveyed to the people; its outcome depends on the people.

There is a temptation to suggest that journalism and architecture enter into a partnership toward a more humane and beautiful America, but something disdainful resides in the notion of the press being in league with anyone, no matter the loftiness of objectives. As Americans, we want the press to be a detached, bird-dogging force. We want it to continue its wary ways.

Its wariness is hardly mystifying. The press is baited and belittled, "used" and abused. Still, if it knew only fair play and praise, accommodation and caress, its skepticism would scarcely diminish.

The press is wary, mainly out of a sense of public responsibility—a responsibility it is continually being told about, which suggests the press may be a trifle weary as well as wary.

The press is mindful of its public responsibilities and cognizant that not everyone with whom it deals is equally inclined toward the public good.

The press is mindful of what it considers the typical reader: John Smith on Elm Street who watches televised ball games, frequently fails to make head or tail of the newspaper stories on the downtown redevelopment project, and is indifferent to terms like "community esthetics."

In working with the press, it is well to keep the public in mind, in both the general and the specific (John Smith) sense.

With this framework established, the next step is contact, architect-to-newsman contact, human-to-human contact. Establishing contact with the press is easier than it might at first seem, and it does not at first seem easy. But newsmen, the feverish atmosphere of their home base notwith-standing, relish the bearer of something worth talking about; and the architect, elite corpsman in the crusade for a better community, has a worth-while message, one that is directly tied to the public interest.

Maybe the architect's message will make a news story. Maybe it will open some eyes, as the eyes of Alfred Harrison, associate editor of *The Atlantic Monthly*, were opened recently at a three-day meeting on "Design and the City," sponsored by the AIA with an assist from Columbia University. Named for its site, Arden House in Harri-

man, New York, the conference "aroused me from an attitude of complacency and indifference to the enormous and continuing problems of the city," Harrison declared.

Conceivably, the architect might be let down hard. In any event, he was neither aloof nor too busy to recall George McCue's words, to try to uphold his end in the two-way flow of communication that is so vitally necessary.

Somehow a contact has to be made, says Charles Abrams, chairman of the Columbia University School of Architecture's Division of Urban Planning and a writer long familiar with problems of reporting on the environmental scene.

A panelist at the Arden House conference, Abrams told the assembled magazine editors and broadcast personnel that meager coverage is due neither to Mr. Typical Reader nor to the journalist's ability to interpret.

What is wrong, Abrams said, is that the "average journalist doesn't know the story." And so, he added, "a mine of interesting information" goes unextracted—because writers "can't establish contact with the field."

Someone in the meeting's final session—"Reporting Problems, Techniques, Opportunities"—said rather flatly that public interest in community design is a goal that defies realization. Not so, snapped Abrams. Look at the popular "city shows" General Motors presents at the World's Fairs. "GM has made the contact that the newspapers have not," he said.

One radio news executive led a press argument that limited staffs—"I've got three guys, chasing fires," he explained—add up to coverage confined to spot, easily tellable events with proved public consumption.

Action, he was inferentially saying, catches the public eye and the eye of the press. Could the speech, then, the slide presentation, the appearance before the city governing body, constitute the necessary action? Hardly sensational events, they nonetheless have movement. In the same vein, a carefully noted visual inventory of the community, taken by the architect to the editor, may be an excellent starting point.

Whether the news is "made," with press coverage as a legitimate and coincident objective, or prepared and furnished the press, newsmen by and large will welcome the architect's help in covering the physical environment—on some newspapers a regular assignment.

Magazine and broadcast participants at Arden House were advised not to "go to the experts because the experts confuse us." That advice may or may not be valid for an accomplished architectural writer, from whom it came, but it is certain that the workaday reporter needs all the help he can get, and would be the first to admit it.

The architect can and must help, and not inappropriately, for both architect and journalist are generalists in creative pursuits. Both are interested in the well-being of their community. There is good basis for their having a healthy working arrangement.

To help the newsman, the architect's words must be clear, layman-oriented but professionally couched; his evangelism must be earnest but low-keyed. His is a war of reason. He should forget the attributes ascribed to newsmen by most books and all movies, except that of skepticism.

The press is indeed wary; its members are wary. All the same, newsmen respond, sometimes with astonishing enthusiasm, to substance presented with sincerity, and sincerity involves actions as well as words.

If the architect, the person expected to care most about how his community looks and functions, appears less than passionately concerned, how can the newspaper feel any real confidence in critical environmental judgments it may have made? If the architect seems preoccupied with having his renderings published, how can the newspaper reasonably focus in on the larger matters of spaces between buildings—the architecture of the community?

If newsmen encounter "rendering quibblers" in the War on Community Ugliness instead of highminded, public-spirited combatants, the consequences for the profession of architecture could be devastating. More importantly, an innocent third party—the public—will suffer most.

To cover the assault on community ugliness, the newsman needs not renderings but rapport.

He doesn't want the architect to write his story; he needs help in appraising the subject.

He doesn't want to be patronized; he needs a solid basis of understanding.

He doesn't want to be impressed; he needs a set of impressions from the knowing.

He doesn't want to be exploited or deceived; he needs encouragement and guidance in helping the public to perceive.

He doesn't want to be cultivated; he needs communication.

Russell Lynes, managing editor of *Harper's Magazine*, said at Arden House that "our primary problem . . . is to get people to use their eyes. Basically, what we try to do is make people look at their environment."

This is not easy. The press needs the architect's help in developing a sighted public if final victory is not to fall to public unsightliness.

NEIL E. GALLAGHER

New Tool for the Practicing Architect

URBAN DESIGN WORKSHEETS

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As the original 12 articles on "Urban Design-The Architecture of Towns and Cities"will be made available in book form this fall, it is fitting indeed, that a sequel should begin in the AIA JOURNAL. This new, continuing series of worksheets will go beyond the background, elements and aims of urban design to concentrate on the practical working concepts in cities, large and small.

The worksheets will vary both in length and in format. Some will be mostly graphic; others will be in a checklist form or in the typical text layout; still others will be a combination of elements.

Varied in subject matter too, the worksheets sometimes will discuss minute urban design details; at other times, the design aspects of regional planning. In every case they will stress practical knowledge which can be put to work by today's architect.

The worksheets also will report on current projects which have possible relevance to other practitioners. The first in this series is precisely of that nature.

A supplementary dues project, the series will be prepared by Paul D. Spreiregen AIA, who welcomes comments and suggestions, particularly from readers who may have been involved in a project which merits presentation as a worksheet.

The original articles have been considerably revised and brought up to date for the book (McGraw-Hill), which presently constitutes the AIA's overall statement on the role that urban design plays today.

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URBAN DESIGN WORKSHEET 1



PREPARED BY PAUL D. SPREIREGEN, AIA, FOR THE COMMITTEE ON URBAN DESIGN

An Urban Design Contract

ROCKVILLE, MARYLAND, is about 15 miles north of downtown Washington. Once a summer community, its population soared from 2000 people in 1940 to 6000 by 1950, 26,000 by 1960 and 38,000 today. So sound is Rockville's financial picture that it can afford to rebuild 90 percent of its old commercial building stock. Progressive civic programs plus astute political leadership have earned it two "All-American City" awards.

As part of an overall civic improvement program, Rockville has a 46-acre renewal project downtown, covering the heart of the central business district. City officials wanted to supplement their initial planning studies—traffic, finance, renewal operations—with detailed urban design studies and plans. To do this they contacted a number of architectural firms whom they felt were capable of this work. They outlined the requirements for the urban design consultant in a letter which is an exemplary document (across page) and a statement of planning activity to date.

Their choice of consultants was the Philadelphia firm of Geddes, Brecher, Qualls, Cunningham (GBQC), with Robert L. Geddes AIA as partner in charge. They then proceeded to draft a contract for services. Actually, two contracts were developed, both of which are reproduced on pages 46-47. These two contracts clearly defined two separate aspects of GBQC's work: The first was for an overall design concept for the renewal project plus the preliminary design of the city-built elements of the project; the second was for consultant work with individual private developers so their designs would be in accord with the city's plans.

Spelled out more broadly, the first contract was for a design concept and the preliminary design of certain items of public work. These items include open spaces, parks, plazas, lanes, walks, parking structures and other details. This work is akin to the normal preliminary design work of an architectural project leading up to, but not including, working drawings and specifications. Depend-

ing on the results of the overall design concept and the preliminary design work, GBQC would write other supplementary contracts to do the working drawings for particular items of design.

In the second contract—the consultant's work with developers—GBQC's position would be somewhat akin to the architect's role during the construction phase of a project. GBQC would act as arbiter between the city and developers but in a creative and helpful way. GBQC, in assuring that a developer's proposal will fit the renewal project, will make many helpful suggestions, as well as clarify the design objectives of the entire project for the developer.

In both the first and second contracts, GBQC acted as architects working at a large scale, on the one hand as preliminary designers and, on the other, as design consultants. The justification for independent contracts is obvious. It allows flexibility as well as the opportunity to tailor subsequent contracts around requirements not foreseen at the early stages of work.

As consultants, GBQC could question some of the basic planning premises of the project as they transformed it into viable architectural form. They could also help determine the exact nature, form and construction scheduling of the key public actions for Rockville's redevelopment. All in all, this procedure amounts to a fluid modus operandi.

It should be stated that these contracts are only one example of urban design contracts developed for a particular kind of urban design job. Contracts for other types of urban design work would undoubtedly require other types of documents. It must also be stated that neither the Institute nor the architectural profession has any policy, other than that of the AIA Document B131, for architects' fees and general policies.

We now present the original letter from the City of Rockville to GBQC, contract No. 1, contract No. 2 and illustrations of the design work thus far produced under contract No. 1.

August 13, 1964

Mr. Robert L. Geddes Geddes, Brecher, Qualls, Cunningham 258 S. Van Pelt Street Philadelphia 3, Pennsylvania

Dear Mr. Geddes:

The City of Rockville is going to engage an urban design consultant to work with its Departments of Urban Renewal, Planning and Public Works on its 46-acre Mid-City Urban Renewal Project which covers the commercial heart.

The city is seeking a firm or an individual who has had urban design experience; a firm that can see beyond a single building and look at design for an entire central city; a firm that can relate buildings and open spaces to each other and, in turn, effectively relate these to the pedestrian; a firm that can objectively analyze the architectural designs of other firms and assist in making their designs fit into and be compatible with a general urban design for the whole area; a firm that wishes to play a major design role in the rebuilding of a small, progressive city and thus show that small-city-commercial urban renewal can result in a pleasing, lasting, satisfying and functional heart of a community. Specifically, the urban designer who is employed by the City of Rockville will:

- 1. Work with the city staff in expanding or modifying the existing urban renewal plan by preparing a detailed design concept and objectives which will serve as a basis for development controls and regulations, and which will guide developers and their architects as they design specific buildings.
- 2. Design the improvements for all the public areas—malls, sidewalks, streets, etc.—so they will play their proper and effective role in the total design concept.
- 3. Participate in the design of the parking facilities, service parking areas, ramps, garages and underground parking facilities, all of which will be built by the city.
- 4. Work with the city on a continuing basis to give advice on urban design as the project develops and to participate in the review of potential developers' proposals.

The attached statement "Rockville and Urban Renewal" and the accompanying documents describe the urban renewal project and the urban renewal plan as they stand today. There is much to be done to convert these documents, and the ideas contained therein, into physical reality.

We would like to further discuss our project with you if you have an interest in joining with the City of Rockville as an urban design consultant. We hopefully look forward to the possibility of hearing from you.

Sincerely,
PETER L. CHENEY
Director of Urban Renewal
City of Rockville

PLC:jb enclosure

September 1965

AGREEMENT

This agreement entered into this _____ day of ____ by and between the Mayor and Council of Rockville, Maryland, hereinafter referred to as the "Local Public Agency," and Geddes, Brecher, Qualls, Cunningham, Architects, 2101 Pine Street, Philadelphia, Pennsylvania 19103, hereinafter referred to as the "Urban Design Consultant."

WITNESSETH THAT:

WHEREAS, the Local Public Agency has, under date of August 20, 1964, entered into a Loan and Grant Contract with the United States of America providing for financial aid to the Local Public Agency under Title I of the Housing Act of 1949, as amended by all amendatory acts including the Housing Act of 1954; and

WHEREAS, pursuant to such Contract the Local Public Agency is undertaking certain activities necessary for the planning or execution of a Project, situated in the Project Area described below; and

WHEREAS, the Local Public Agency desires to engage the Urban Design Consultant to render certain technical advice and assistance in connection with such undertakings of the Local Public Agency.

NOW THEREFORE, the parties hereto do mutually agree to the following:

1. Scope of Services

The Urban Design Consultant agrees to furnish and perform the various professional services required for the Project Area known as the Mid-City Urban Renewal Project—Project No. Maryland R-16 as described in Exhibit "A" attached hereto—and shall do, perform and carry out, in a manner satisfactory and proper as determined by the Local Public Agency, the following:

a. Design Concept

In cooperation with the staff of the Local Public Agency, the Urban Design Consultant shall prepare a definitive design concept for the development and for the disposition and development of land in the Project Area. The Urban Design Consultant shall take into account, give consideration to and build upon previous efforts and information gathered, the expressed interests of the Local Public Agency and the City staff and needs of the area, and the expressed cooperation of all agencies, in establishing the urban design and schedule of the Project. This design shall set forth the urban design criteria and objectives for the Project Area and the necessary controls to insure achievement of the design concept.

Design criteria and objectives shall include but not be limited to the following:

- (1) Site plan
- (2) Interrelationship of buildings to open spaces
 - (3) Height and bulk of buildings
- (4) Pedestrian and vehicular traffic circulation
 - (5) Parking plan
- (6) General standards for control, architecture, landscaping, signs, amenities, etc.

The design concept for the development shall consider and relate appropriately the component elements of the Project Area to each other, to the surrounding area and to the community as a whole.

The design concept for the development shall include recommendations for changes in the Urban Renewal Plan, as may be necessary for establishing such design criteria and objectives.

The design concept for the development shall include only such schematic architectural plans and details for buildings as may be considered necessary to communicate the quality and character that is desired.

The design concept for the development shall be prepared in a form that will be usable to the Agency in preparing the documents necessary to offer, dispose of, and develop the land in the Project Area.

The Urban Design Consultant will submit to the Local Public Agency a final report (100 copies), containing a written statement, graphics and tabulations, as necessary, expressing the design criteria, objectives and controls for the Project Area. The written statement shall be accompanied by sufficient maps, drawings, elevations, and photographs to give a clear graphic presentation of the design criteria and objectives.

b. Public Facilities

The Urban Design Consultant shall prepare schematic plans and details of public work, including open spaces, parks, plazas, lanes, walks and the circulation ways when desirable to communicate the quality and character of the public work.

c. Use of Consultants and Special Studies

When, and as authorized by the Local Public Agency, the Urban Design Consultant in developing the design concept for the development may consult with or obtain special studies from appropriate persons or entities. Special studies will not be obtained without prior authorization from the local Public Agency and the cost of such studies shall be paid for by the Local Public Agency.

The Local Public Agency may retain, and contract for directly, Consultants and Special Studies, and the Urban Design Consultant will work closely with such consultants to insure the best results and protect the interests of the Local Public Agency.

2. Time of Performance

The Urban Design Consultant shall begin the performance of his service upon receipt of written notice by the Local Public Agency to proceed. The time of said performance shall comprise a maximum period of six (6) months from said written notice to proceed.

The schedule of work by the Urban Design Consultant will be established in conjunction with the scheduling requirements of the Local Public Agency.

3. Compensation and Method of Payment

a. The Maximum Compensation

Any terms of provisions herein to the contrary notwithstanding in execution of this contract, the maximum compensation to the consultants shall be in the amount of

b. Method of Payment

Compensation shall as hereinafter described be made by the Local Public Agency to the Urban Design Consultant on a monthly basis, as promptly as possible upon the receipt of a requisition for payment from the Urban Design Consultant specifying the work performed for the respective monthly period, as well as the work proposed for the coming month.

(1) The Urban Design Consultant shall submit to the Local Public Agency the names, qualifications and proposed compensation of all personnel and principals of the Urban Design Consultant's firm proposed to be employed.

(2) Robert Geddes, the principal designated by the Urban Design Consultant as Director of the professional services and work described in the Scope of Services above, shall be charged at an hourly rate of ______ per hour.

(3) Salaries and wages of professional, technical, secretarial and administrative staff required for services and work described herein shall be charged at a rate of two and one-half times actual rate.

- (4) The following fees and charges shall be directly reimbursable to the Urban Design Consultant in accordance with invoices rendered:
- (a) Consulting and subcontractor fees for contracting and subcontracting services deemed necessary which cannot be provided by the Urban Design Consultant, provided, however, that the employment of said outside consultants and subcontractors, if any, shall first have been approved in writing by the Local Public Agency.
- (b) Travel expenses for out-oftown services and subsidy costs relating to such services.

(c) Long distance telephone and telegraph charges.

- (d) Cost of reproductions of maps, charts, drawings, reports, all other data and materials required to be reproduced pursuant to the terms of this agreement.
- (e) Such other costs as may from time to time arise, provided however, that expenditures therefore which are not expressly provided for herein above, shall have first been authorized and approved by the Local Public Agency prior to having been incurred and made by the Urban Design Consultant.

It is expressly understood and agreed that in no event will the total compensation and reimbursement, if any, to be paid hereunder exceed

5. Terms and Conditions

This agreement is subject to and incorporates the provisions attached hereto as Part II-Terms and Conditions (Form H-621B, dated

IN WITNESS WHEREOF the Local Public Agency and the Urban Design Consultant have executed this agreement as of the date first above written.

	BRECHER, INGHAM	QUALLS,	
by:			

URBAN DESIGN CONSULTANT CONTRACT NO. 2

AGREEMENT

[Same as in Contract No. 1]

1. Scope of Services

When and as directed in writing by the Local Public Agency, the Design Consultant shall render services to the Local Public Agency in the disposition and development of land in the Project Area known as the Mid-City Urban Renewal Project-Project No. Maryland R-16 as described in Exhibit "A" attached hereto and made a part hereof. Such services shall be performed in a manner satisfactory and proper as determined by the Local Public Agency and in conjunction with the satisfactory progress or completion of the contract between the Urban Design Consultant and the Local Public Agency calling for the preparation of a "Design Concept" which contract is dated

This subject contract may include, but is not limited to, the following:

- a. Assistance in the preparation of the necessary procedures and documents.
- b. Review and analysis of the proposals of owner participants and developers.
- c. Advice and assistance in contract negotiations with developers.
- d. Advice and assistance in the control of the development of the sites under contracts for disposition and development.
- e. Consultation with owner participants and developers and their architects.
- f. Preparation of schematic and/ or preliminary design and plans for the development of all public work, including all open spaces, parks, plazas, lanes, walks and other circulation ways; all parking areas and structures; and related physical improvements.

The Local Public Agency retains

the right to approve the assignment for the Local Public Agency under of the Urban Design Consultant's key personnel to perform any of the services this contract requires.

In order to protect the Urban Design Consultant against excessive and unnecessary expense and time and to provide a reasonable cost control and cost anticipation to both the Local Public Agency and the Urban Design Consultant, all contacts, conferences and consultations by the Urban Design Consultant with owner participants and developers shall, in all cases, be at the written request and approval of the Local Public Agency.

When directed by the Local Public Agency, the Urban Design Consultant may incur such expenses for travel, telephone, telegraph, reproductions, printing, etc., as are necessary to provide services under this contract.

The Local Public Agency agrees to give thorough consideration to all reports and recommendations as made by the Urban Design Consultant.

2. Time of Performance.

The services of the Urban Design Consultant are to commence when authorized by the Local Public Agency after execution of this contract and in conjunction with the appropriate progress of the contract for preparation of an Urban Design Concept and shall be undertaken and completed in such sequence as to assure their expeditious completion in the light of the purposes of this contract, but in any event all of the services required hereunder shall be completed eighteen (18) months after the date of this contract. In the event that the Local Public Agency desires additional service, after the eighteenmonth period, the Urban Design Consultant shall act as consultant

the terms of this agreement, amended to reflect the extension.

The schedule of work by the Urban Design Consultant will be established in conjunction with the scheduling requirements of the Local Public Agency.

3. Compensation and Method of Payment.

[Same as in Contract No. 1]

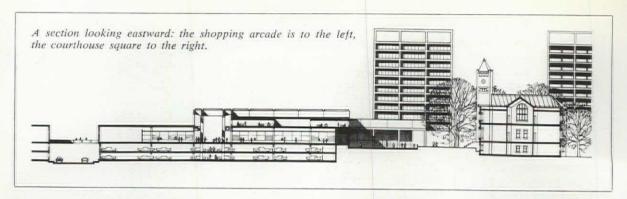
- 4. Terms and Conditions [Same as in Contract No. 1]
- 5. Other Provisions

It is the intention of the Local Public Agency to enter into an additional contract with the Urban Design Consultant to complete the final design and Contract Documents for the public ways, spaces and facilities.

Since there is more than one contract involved covering different stages of work on the Mid-City Urban Renewal Area, it is intended and agreed that the same item of work will neither be charged nor paid for more than once and, therefore, it is agreed that costs incurred by the Urban Design Consultant for the preliminary plans for public ways, spaces and facilities will be deducted from the charges for the preparation of final design and Contract Documents for the public ways, spaces and facilities.

IN WITNESS WHEREOF the Local Public Agency and the Urban Design Consultant have executed this agreement as of the date first above written.

CUNNIN	GHAM	
by:		



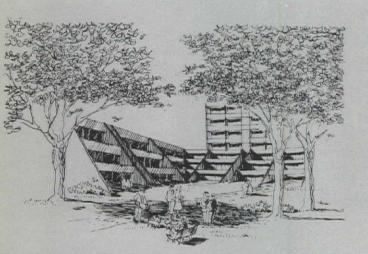
Design Studies Resulting from Contract No. 1



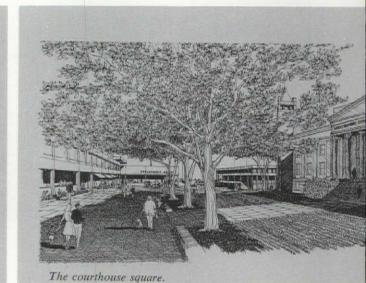
The region.

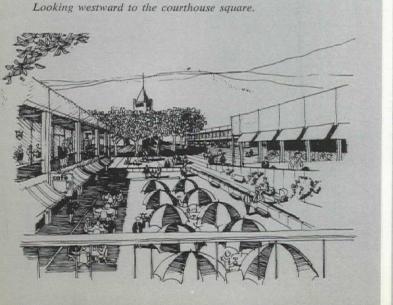


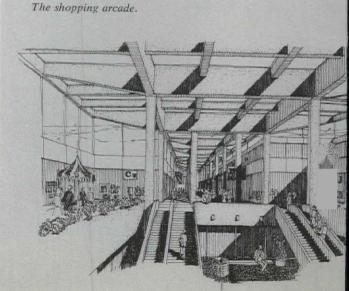
The city of Rockville.

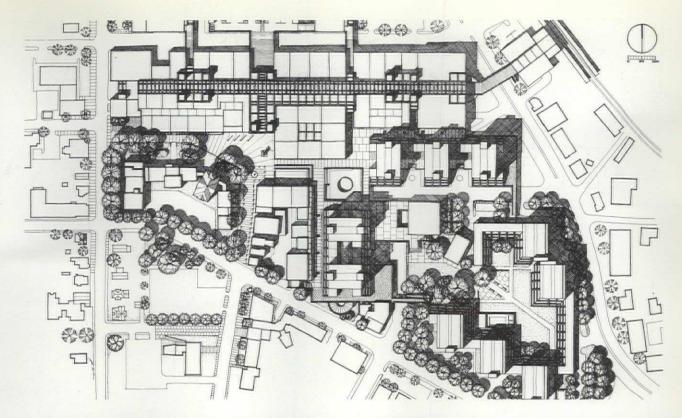


The residential area in the southeast portion.









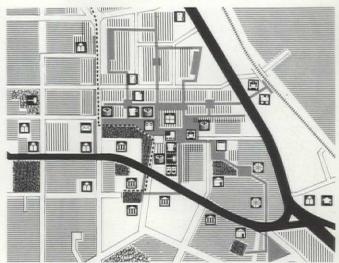
The illustrations on these two pages and on the AIA JOURNAL cover were selected from those prepared in fulfillment of contract No. 1. They will be published in color in a brochure.

The rendered plan, above, shows careful integration of the new with the old. The diagram to the right is a generalized land-use plan with special facilities indicated by graphic symbols. The diagram, lower right, shows the relationship between buildings and open spaces.

In the rendered plan, note the east-west shopping arcade with its eastern end terminating in a rail transit station for a commuter connection to downtown Washington. On the western side of the project area is the courthouse square through which parades will pass. The residential area is on the southeast side of the project. Note the variety of pedestrian areas and walkways. Automobiles and trucks enter at numerous peripheral points, generally below pedestrian level.

In the land-use plan, the parade route is shown as a dashed line. Horizontal shading indicates residential areas; vertical shading, commercial. Particularly important here is the intimate nature of complementary activities such as the post office, theater, fire station, library, neighborhood center, department store, banks, coffee shops, churches and gas stations.

In the lower plan, new buildings are indicated in black; existing buildings, white. Note the colonnades and covered shopping arcade, paved pedestrian open spaces and green areas. Note, too, the pedestrian links across project boundaries.





"That's what education means—

Educating the Exceptions to be

to be able to do

what you've never done before."

GEORGE HERBERT PALMER

In a middle-sized American community with a total school enrollment of 10,000, there may be several hundred children between the ages of 6 and 18 who have never gone to school. These are children who cannot, for one reason or another, cope with the school system, or with whom the school system cannot cope.

Some children are unable to attend because the school cannot accommodate their wheelchairs; some cannot negotiate the steps with their crutches and braces. Others can't go because they have defects of sight or hearing, and there are no special classrooms, equipment or methods to handle their problems. Still others are barred because, although their IQ's may approach the genius range, they have been emotionally damaged to the point where they are teetering on the edge of severe psychosis—and there is no teacher who is qualified to handle a severely disturbed child.

For whatever reason, these children stay home. Some are tutored by traveling teachers and complete a limited curriculum by home instruction. Some eventually get into "special" schools—where their living and learning experience is carried on in the exclusive company of classmates who are also blind, retarded or disturbed.

Some are placed by their desperate parents in residential institutions, where—often—a lid is clamped on their learning potential by the very philosophy of institutional care, which is aimed toward maintaining the child, rather than teach-

ing him to maintain himself. (Some accidents of heredity, metabolism or the birth process itself leave a child so severely damaged that institutional care is the only answer. But many could be salvaged who are not.)

Public education is now, belatedly, starting to assume its full responsibility toward handicapped children. Many of them who have never gone to school could go—if the school would accommodate its design, its curriculum and its educational philosophy to their limitations.

The AIA Committee on School and College Architecture recently sponsored a workshop on schools for exceptional children, at which architects and educational specialists conferred for two days on the problems of such children and ways their schools can help alleviate these problems.

Special education has taken giant steps, not the least of them semantic. Children with problems, which make it difficult or impossible for them to learn in a normal classroom environment, are now labeled "exceptional." Yesterday's labels—"crippled," "feeble-minded," "incorrigible"—have given way to "orthopedically handicapped," "retarded," "disturbed."

Although "exceptional" is not as cruel a designation as many of its predecessors, it has the disadvantage of imprecision. It also has the musty aura of Victorian euphemism: a throwback to the days when legs were "limbs," even when they were holding up the piano. (The professional patois of educators is peppered with such euphemisms; one workshop participant, chiding his colleagues for their semantic squeamishness, asked plaintively,

CSCA acknowledges the Educational Facilities Laboratories, Inc., for providing a transcript of the workshop and the Joseph P. Kennedy Jr. Foundation for the use of its photographs.



"Why do we write on Mary's report card that she 'has not developed a proper attitude in relating to the realities of her environment,' when we mean she's a nasty little liar?")

Who Is Exceptional?

Feeling that exceptionality requires definition, the Committee on School and College Architecture asked Dr. Kathryn Dice of the Pennsylvania State Department of Education to acquaint workshop participants with the nature and numbers of exceptional children with whom the public schools will have to deal, now and in the immediate future. For anyone who assumes handicapping conditions to be extremely rare, her first statistic was a shocker.

DR. DICE: At the 1950 White House Conference we were told that the proportion of handicapped-to-normal children in the United States was one in ten; by 1960, the ratio had risen to one in eight. It is now one in five. In other words, 20 percent of the children in this country have some kind of handicap that requires special attention from a medical and environmental, as well as educational, standpoint.

I do not say that one child in five needs a special class. I'm talking about the incidence of handicapping—many "handicapped" children do not need a full-time special class, or even a part-time one. Some need even more than full-time classes; they require residential care. But when you lump together the incidence of handicapping in children in the various types, this is an overall statistic, verifiable by census figures.

An increasing number of that 20 percent does need special education, because of the increasing complexity of society. The overlay of emotional problems which are not unique to exceptional children, but which affect all children—and all adults—has increased the complexity of these problems, so that the cutoff lines between handicapped and nonhandicapped are fuzzy. And within the framework of handicapping, there is more fuzziness. What about the child who is multiple-handicapped—perhaps he is blind and deaf; perhaps cerebral palsied and blind? What do we do for him?

FRANK GENTILE (Human Resources Foundation, Inc.): They're going to grow up and have to live in a world that is made for everyone. Therefore, I would strongly emphasize the need for integration with normal classes. Even if you have to place the children in separate classrooms according to their particular disability, allow them to have access to the other classrooms, the other buildings.

I think there should be an educational relationship between the handicapped child and his normal counterpart. This can be provided by having classrooms for exceptional children in elementary and secondary buildings, and in many other ways. The idea I want to get across is that exceptional children are first of all *children*; part of their growth and development depends on their association, as much as they can tolerate, with non-handicapped people.

The words "integrated" and "segregated" were frequently heard during the discussion, in a context entirely unrelated to race. Most of the educators seemed to feel that integration of the handicapped into schools for normal children would be beneficial to both handicapped and normal.

FRANK MATZKE (AIA-CSCA): I should think that integration of handicapped with nonhandicapped children would have other advantages. The figures you quoted indicate that 20 percent of the children fall into this category. I would think that their association with the other 80 percent would be advantageous to the larger group because they would learn to appreciate better the problems of the handicapped. It is often difficult for the nonhandicapped to know how to react to the handicapped person-when to give him assistance and when not. Perhaps it could be a two-edged sword in some cases, simply because children are competitive; and with a variety of degrees of handicapping, competition could have a negative as well as a positive effect.

DR. DICE: All this needs to be modified in terms of the age of the child and the degree of handicap. But I still feel they ought to meet with normal children on all the common denominators possible.

WILLIAM GALLAGHER (New York Association for the Blind): Too many times, for instance, blind youngsters are isolated in schools for the blind until they're 18 or 19. Then suddenly they must try to compete with sighted persons, and many times they end up sitting home reading a braille book for the rest of their lives because they have been made to feel uneasy with the sighted.

Others pointed out difficulties, however:

DR. HARRIET KOPP (Detroit School for the Deaf): I think we should remember that it takes a certain number of children in order to teach academic subjects at a grade level. If you give a teacher children of seven different ages, or seven different grade levels in a room, she is going to have much less time to devote to academic education. When we started our program five years ago, we had youngsters decentralized in the program for the deaf and the hard of hearing, on the theory that they were better off in neighborhood schools. I don't subscribe to that theory. I'm all for social adjustment and getting along and learning to in-

tegrate, but I think these youngsters have to learn to read and write to the limit of their potential.

But who gets integrated and with whom? Before any intelligent judgments can be made, it is necessary to define and delimit the kinds of exceptionality the public schools can be expected to accommodate.

Mental retardation came in for examination first. Dr. George Brabner of Yeshiva University and Arnold Gangnes AIA of Seattle provided some definitions.

DR. BRABNER: There are a variety of definitions, and sometimes as researchers, we use what we call "operational definitions." I'll advance the one to which the American Association of Mental Deficiency currently subscribes, which goes something like this: "Mental retardation refers to subaverage general intellectual functioning, originating during the developmental period and associated with impaired adaptive behavior."

It is important to make a distinction between the two categories of retarded children; they are educational classifications, since we will be talking primarily about these children in an educational context. In the public school, we divide the children whom we term "retarded" into the "trainable mentally retarded" and the "educable mentally retarded." There is another group, the "custodial mentally retarded" (or sometimes we refer to them as the "totally dependent retarded"), who are generally cared for outside the confines of the public school in an institutional setting. Very often they require full-time care.

But we're concerned with the first two groups. How do they differ? The "trainable retarded" are



children who have potentialities for self-care, self-help, socialization (even though this may be at a very rudimentary level), social adjustment and economic usefulness. It may be very limited in scope, but economic usefulness, in this case, is being able to perform various tasks around home, rather than merely sitting and looking out the window at other children playing—tasks that can lighten the burden of the mother. Economic usefulness can also be used in a little more advanced sense, in that many of these children are capable of acquiring certain vocational skills in a sheltered workshop setting. They can perform various tasks, sometimes on an assembly line basis, contributing to the production of a final product.

The "educable mentally retarded" children represent about two in every 100 children. Again, we can't take these figures too literally, they vary from one community to another and depend a great deal upon socio-economic and other factors. These children we sometimes refer to as the mildly or moderately retarded. Their I.Q.'s range from approximately 50-75, sometimes higher. They are children who, because of low intelligence, and sometimes other behavioral disorders, cannot profit from a regular class placement. Certainly they require special educational provisions that will aid them in developing greater social competency, personal adequacy and a higher degree of occupational adjustment.

They are children, again unlike the trainable, who are capable of achieving in the academic area to some degree. The majority of them can and do achieve approximately a third-grade reading level—some a little bit higher in the arithmetic computational area. There are some who can attain up to a fifth-grade level of reading, but not the vast majority. Hopefully, that may change, especially with some of the more recent techniques that are being introduced.

If there is such a thing as special education for the retarded, then there must also be special *planning* of facilities. This is the architect's role.

GANGNES: This broad picture of the mentally retarded certainly suggests avenues where we, as architects, must become interested. It is a very broad, deep field that involves substantially more than we generally think as the requirements of a normal public school. We're dealing with subnormal children from a very early age—preschool, 3 years of age, to a chronological age of 21 and sometimes more—still receiving training or education in a public school setting. This will involve training starting with the very basic motor skills and socialization right through advanced training in sheltered workshop programs. This, then, suggests a variety of spaces, some similar to those we have in public schools.

I think it is important that an architect fully understand the depth of education philosophy; if he doesn't, he sees only a superficial picture. A retarded child feels the impact of school more than the normal one. The environment into which he is inserted becomes a large part of his life, and the whole spectrum of life experience becomes important in the surroundings.

It's been my experience that the frame of reference of the school is a much more intense, happy relationship with the retarded than with the normal child. The privilege of being able to go to school like his normal neighbor is a unique experience and suggests a much greater design challenge for the architect.

For purposes of this discussion, physical handicaps were divided into "orthopedic" and "perceptual" categories, with recognition of the fact that the two are not necessarily all-inclusive, nor mutually exclusive. Dr. Frances Connor of Columbia University Teachers' College and Leon Chatelain FAIA of Washington addressed themselves to the problems of children who are labeled "orthopedically handicapped."

DR. CONNOR: I'm operating on the assumption that all of you have memorized the American Standards Association report on making buildings accessible to, and usable by, the physically handicapped.

I think we also have to consider, however, modified school settings in the regular schools. We must consider, in addition, the regular classrooms and resource rooms which are used for children with some handicaps: children who need remediation and who need the opportunity to progress so they can be in a regular classroom.

One major problem is the mobility factor which concerns youngsters who, because of physical deviation, cannot move around as easily or rapidly as the others. They may have heavy, cumbersome braces or chairs, or possibly uncontrolled muscular responses.

The second major category is unusual body responses: these would be seizures or epileptic fits, convulsive disorders; the youngster with diabetes, with whom we must be concerned about diabetic coma or insulin reaction, which could create problems in a classroom.

A third category would be communication—difficulty in receiving messages. This can be auditory, or it can be a visual or perceptual problem; but they're not receiving the usual messages in the usual way nor are they able to express themselves as most children do.

Therefore, from a very practical point of view, there is need for additional emphasis on provision of directions. There also might be need for additional types of warnings and clues in such school buildings.

Another question: To what extent has consideration been given to the prenursery child's learning? This is getting the youngster into a situation in which he can be provided with the multisensory stimuli, which we believe a child needs if he is to establish a functioning perceptual base. If he hasn't established a perceptual base by the age of five or six, he may never attain it. We could be creating barriers to his further growth by not letting him get around before the usual school age. CHATELAIN: I don't think the architect can design a building which can accommodate every type of handicap in one classroom, whether this facility be integrated in an existing school or be made a separate school. Again, I think it's one for the superintendent to solve, not for the architect. These are questions of teaching and training. The architect can, if required, design an integrated facility or, obviously, one that's separated from other schools.

Gallagher was paired with Christine Salmon AIA to discuss problems of the perceptually handicapped child.

GALLAGHER: Statistics show that, nationally, 54-56 percent of the blind youngsters are in public school settings. Some blind youngsters, of course, are in schools for the blind; others are in the same building, but in a resource or modified special classroom. There are other blind youngsters in regular classrooms with sighted children, who go to a private room once a day for braille lessons or other necessary tools to enable them to compete with sighted classmates.

We have miseducated the public about blindness. Using the legal definition of blindness—in the U.S., 20/200 vision in the better eye with correction—many children who are called "blind" can actually see. I think someday the definition of legal blindness may be "having no useful vision," and other persons would be said to have a visual impairment.

So it is important to know whether the students who will use a school are totally blind or have some residual sight.

It is erroneous to state that a blind person has a "sixth sense," as though he were endowed with some mystical perception which no one else has. He is working on four major senses, and thus, it is important for him to get full value from each one. Too often, we think of blindness as "darkness," which it is not; blindness is the absence of sight. The senses of touch and hearing, and the kinesthetic sense, can convey beauty and a sense of being comfortable in a building—but many

buildings are designed for beauty only as far as the eye is concerned.

MRS. SALMON: I think that if I had no eyes, and I were in this room, I would be extremely aware of the noise of the airconditioner. If I had no hearing, I would be very aware of the air currents. There are lights and vibrations coming from various directions; I would perceive these with or without ears. What can we do with spaces to assist children with various disabilities?

I think there is a real need for *order*, for space that you can find your way into, through and out of. There needs to be *integrity*—doors should look like doors; if something sounds like an airconditioner, it should *be* an airconditioner. I think, too, that any simple solution is better than any complicated solution.

To many people, the idea of mental illness in children is not only horrifying but grotesque. Sentimentalists who cannot conceive of childhood as anything but a time of innocent pleasure are apt to be incredulous when confronted with the incidence of disabling emotional disturbance in the very young. Mrs. Roselle Miller of the Maryland Department of Special Education furnished a statistic which ought to jolt the optimists.

MRS. MILLER: Two recent studies of third graders—one in California, the other in Maryland—found 10 percent of the total representative school population to be seriously emotionally disturbed. I should say that it is very difficult to define the term "emotional disturbance," since all of us, at some period in our lives, are likely to manifest the same characteristics as an emotionally disturbed child. But the difference is the intensity, the degree, the duration of the disturbance.

It is necessary to define or characterize these children in terms that we can all understand. First, these children cannot learn adequately. They may be achieving at grade level—sometimes these children have IQ's of 130, 150 or 160—and they are barely getting along. Some have severe learning problems and need special techniques geared to their special difficulties.

Another characteristic is the inability to build satisfactory interpersonal relationships. These are children who can't get along with people. They quarrel frequently with parents, teachers and peers. They don't want contact with the adult world, or even with their contemporaries.

The third characteristic is inappropriate or immature behavior under normal conditions. There is a general, pervasive mood of unhappiness or depression. Such children cry easily; they daydream; they are overly sensitive.

And finally, there is often a tendency to develop physical symptoms—stuttering, for examplepains, fears, which are usually associated with a frustrating experience at home or at school.

Now, in our program, we have placed some of these children in special classes, 10 to a class. Others, we have placed in regular classes of 30 children, with three of the disturbed children in each. We know that some of them have already shown progress—and those showing the most progress in control of behavior are those in the regular classrooms. So this is my proposition: How do we design facilities which will not only help the emotionally disturbed but promote better mental health for all children, and prevent some of the disorders that carry over into adulthood?

What Kind of Schools?

Mrs. Miller asked the question for everyone: What kind of schools are needed for exceptional children? Do they differ radically from ideal schools for all children? All kinds of answers came out during the discussion.

Asked to describe the classroom facilities—integrated or not—which they would like to see provided for handicapped children, the educators agreed on at least one point—size.

DR. DICE: The most frequent complaint of our teachers concerns the size of the classroom.

EDWIN B. CROMWELL (AIA-CSCA): Too large?

DR. DICE: No, too small. The usual kindergarten classroom would be closer to the right size.

CROMWELL: With an average class-size of 15?

DR. DICE: Fifteen would be a large class of handicapped children. But don't forget, you may have children in wheelchairs or other devices. I'm not thinking about numbers of children alone; I'm thinking about the variety of activities, the laboratory, experimental materials—they all take floor space.

MRS. MILLER: For a class of 10 emotionally disturbed children, 800 square feet is about right.

BERTRAM BERENSON AIA (Louisiana State University): You know this term "flexibility" is often tossed around rather lightly. I wonder if you have any notions as to what degree of flexibility might be necessary or desirable. If one assumes that a child—normal or exceptional—cannot adjust himself as rapidly to the environment as an adult who seems to have a sharper "pivot point," then is flexibility as important for the architect as we traditionally think it is?

DR. DICE: What I mean by "flexibility" is lots of room in which to move around. I'm thinking about people being flexible in freedom of movement, both the child and the teacher. I'm thinking about having as little [equipment] fastened down in a permanent place as possible. I realize that there



are some things that have to be fixed, like doors and windows and outlets, etc.

Suppose you have a class in which all the children are in wheelchairs. Now, is it going to be easier to move the wheelchairs or to move the library bookcases? This is a real problem to a teacher. This is what I mean by flexibility. Is it easier to move the children or the blackboard?

GANGNES: It seems that given a classroom environment the considerable amount of fixed equipment necessary to make this classroom function precludes complete flexibility over the long haul. Toileting facilities are a little difficult to move around, and a wet area in the classroom is always a demand. Observation areas pose a very difficult problem because the criterion is to get them more to the child's level, and this uses more of the wall space. One-way mirrors are certainly not a happy thing to look at in any classroom.

MARIO C. CELLI (AIA-CSCA): Assuming that each classroom must be cheerful, beyond that, must classrooms for the mentally retarded be stimulating? Must we have bright accents, reds and yellows, etc.?

GANGNES: There are several schools of thought on this. One popular concept is that any visual stimulus, particularly color, reduces the attention span and ability of the teacher to focus the child on the task. I think this is being disproved. Any environment which is cheerful—that, to me, implies use of color, and perhaps, strong color on occasion—any environment which is a happy one contributes to the educational process. We

shouldn't be afraid to use color if it's used judiciously, and there is an entire field involving the psychology of color that is, I think, totally unexplored with respect to the mentally retarded.

DR. CONNOR: I would say colored ornamentation would have to be mobile. It's got to be moved about. It must be dominant color at the spot where the teacher wants the child to focus.

GALLAGER: What about color in classes for the blind? I also feel that a room for blind children should have color. Remember that only one out of every 30 legally blind persons is totally blind; the others have light perception or better. But it's also important for the totally blind youngster to know that the blackboard is "black," the chairs are "brown" and the ceiling is "white." You cannot describe the color "red" to a person who was born blind, but educationally it is important for this person to know that the fire truck is "red" or the grass is "green" or the floor happens to be "white."

Plenty of light also is needed. It makes a sighted person feel uncomfortable, uneasy, to see the blind sitting in a darkened room.

Special educators seem to have a weakness for gadgetry. There were many remarks such as "I'd like to push a button and have that [piece of equipment] disappear into the wall," but there were constant requests for "simple, uncomplicated, uncluttered space."

DR. CONNOR: Are there ways of changing the amount of usable residual sensory ability? Can we highlight, by architectural design, objects to be noted?

For instance, lighting in a classroom: It might be possible to manipulate spots in some way. We use them in other situations; why don't we use them more in schools? And if we can visually spot the objects on which we want attention, why can't we do it in the auditory realm? Is it possible to turn on auditory amplification in various parts of the room (because teachers no longer stay in one spot) so that a teacher may highlight what a child is saying or what a teacher-aide or assistant teacher is saying?

Is there some way of highlighting the textures and the tactual sensory sensations these youngsters have so we can again reinforce experiences?

We cannot afford a menagerie of gadgets, but we do need to reinforce what children have and push ahead the learning process.

CROMWELL: Are there types of handicapped children for whom windowless classrooms should definitely be avoided?

DR. DICE: Well, if you were of my temperament you would avoid windowless classrooms for every-

body, me particularly! I couldn't give an unbiased answer. But remember, you're talking about children who are limited in contact with their environment. The classroom, therefore, becomes an important adjunct for growth and development.

JONATHAN KING (Educational Facilities Laboratories): Where does the problem of distraction come into the design of these facilities?

CHATELAIN: This depends upon the degree and type of handicap that the child has. A cerebral palsied child, for example, is often distracted by looking outside and seeing birds or a squirrel run across the grass, and it's sometimes difficult with the smaller ones to regain their attention.

There was some discussion about whether the facilities should have a homelike appearance or whether they should be more or less institutional. Again, this is something for the school officials to decide, but I really think the facility *ought* to look institutional, or at least like a school; I don't think they should leave home to go to another house and then go back home again.

SPENCER CONE (AIA-CSCA): Mrs. Miller, you mentioned the optimum-size classroom for a group and emotionally ill children.

MRS. MILLER: If I had my choice, I would want windows, looking out on a beautiful view. I'd have a library corner, which would be a privileged place to go; a nature corner with, maybe, an aquarium. I'd love to have the room carpeted with enough open space for playing.

CLYDE DORSETT AIA (National Institute of Mental Health): We have talked a great deal about anxiety, guilt, dread and all these other negative things, but we haven't once mentioned the word "joy." How can we help this room contribute to joy?

I think this is one of the keys to bringing the child out of his depression, his unhappiness: Design a room for him to be at home in, to be happy in. One of the nicest buildings that I have been in, one that gave off this type of feeling, was in Denver. It's a day school for mentally retarded and emotionally ill children.

The building looked as if it were built for children. The furniture was scaled to child-size. You found such things as little sitting benches in the corridor, underneath the windows, and there were very few steps within the building. Outside, the landscape architect had designed small mounds, and the kids liked to play "king on the mountain" and such games. I think this building did give the children a feeling of joy.

Who Pays the Bills?

There was considerable theorizing—but, constantly, the refrain "We need some research on this." Research on the physical and psychological effects of an educational environment obviously requires real, full-size classrooms for real live children, and such facilities aren't cheap. The educators frequently mentioned design features and equipment which any administrator might crave for *any* school if budgets and school boards would allow. Add to these the specialized features which are necessities for children with hearing defects, for example—and you can wind up with a fairly expensive package.

So the question: Who pays? Some Federal aid is available, under new aid-to-education legislation. Dr. Morvin A. Wirtz of the U.S. Office of Education, reported:

DR. WIRTZ: As you know, there's going to be a pot full of money going into education. Actually, it sounds like a lot, but it's about 1 percent of the total amount that's spent on education in the United States. So it isn't going to do everything that everyone may want it to do.

Under Title I, which has the most money, provision is made, of course, for disadvantaged children. However, handicapped children are included under all sections of the bill. This matter is up to local determination, and whether the superintendents will apply is a good question.

Under Title III, Supplementary Standards, there's not a lot of money; however, under this bill there are going to be some very creative things done on behalf of handicapped children. I think this is where architects and schools are going to have to get together because, believe me, the sky's the limit in terms of what is possible under this section of the bill. It's designed to bring all kinds of new ideas, experimental ideas, into schools—I can't even tell you the kinds of things that might be done, but I'm sure that if any school district wants to tinker with space for handicapped children, under this Title of the bill, it would have the greatest chance.

Whatever the price tag, more and better schools are necessary to meet the special needs of children with physical, mental and emotional problems. An architect summed things up:

BRUCE SMITH (AIA-CSCA): I wonder whether the problems we are talking about are really unique to special education? I'm stunned by what poor jobs we sometimes do for all education, because of the paucity of knowledge. I think much can come from this workshop-type of approach, and I hope it will help the particular groups, the "special children" we've been discussing. But I think much of it will be applicable to the whole field of education. We would be charlatans if we tried to provide educational facilities with a lack of knowledge of how children learn and what their needs are.

MARILYN E. LUDWIG

The Housing Problem—International Style

BY NEIL CONNOR, AIA

This coverage by the AIA representative to the UIA Commission on Housing is published under the auspices of the Commission on Public Affairs, Llewellyn W. Pitts FAIA, chairman, and the Committee on International Relations, Henry L. Wright, chairman. The writer is director of the Architectural Standards Division, FHA.



FINLAND is a lovely country especially suited for architectural conferences. Because of the large amount of housing being built in Finland, the choice of Helsinki for this meeting of the UIA Housing Commission was most appropriate. Most Finns vividly recall the des-

perate times of the Russo-Finnish war which resulted in the loss of the Karelia territory to Russia. The migration from that province caused the great housing shortage which to this day, 28 years later, is not completely resolved. This housing shortage provided what may be considered a housing workshop which our Finnish hosts took great pains to show us.

The working sessions were held at the newly completed Finnish Technical Institute at Otaniemi, in the suburbs of Helsinki. Alvar Aalto gave a guided tour of the campus which he had planned and the Sports Hall he had designed. It was in this beautiful setting that the conference got underway with 18 delegates present: G. Atkinson, United Kingdom, executive committee delegate; R. Malacara, Mexico (elected president at the first session); E. Azagury, Morocco; A. Brunisch, West Germany; N. Connor, United States; T. Csordás, Hungary; P. Grekov, Bulgaria; J. Guedes, Brazil; H. Le Même, France; H. Maicu, Rumania; B. Nestorović, Yugoslavia; W. Niehus, Switzerland; J. Nowicki, Poland; R. Paulick, East Germany; N. Pereira, Portugal; V. Revell, Finland; H. Stasková, Czechoslovakia; and M. Nicoletti,

In its five morning sessions, the Commission heard reports on liaison with international organizations and with the other AIA commissions. Concerned with improving housing in developing countries, the Commission reviewed the architect's changing role with increasing industrialization of house construction. The problems seemed to be the same in the various countries represented at those meetings.

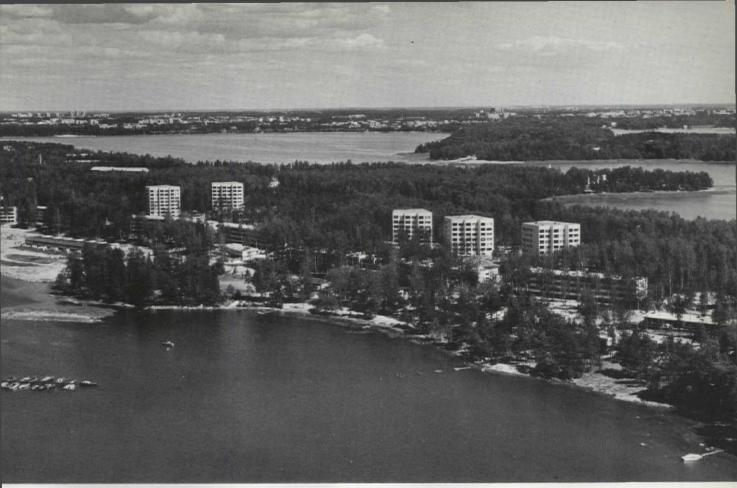
The architectural profession has gotten farther and farther away from house design. In the U.S., the use of stock plans is deplored, but most architects are not interested in designing houses which are under \$30,000. The Association of Finnish Architects has confronted the same problem; and because most houses in Finland are designed by people other than architects, the group feels it is better to publish "type" drawings made by architects than to leave their influence out of this branch of architecture altogether.

Although Canada was not represented at the meeting, it was learned that the Central Mortgage and Housing Corp.—the Canadian version of FHA—has taken much the same attitude. Making available plans and specifications for a large number of very well-designed houses has lifted design standards quite noticeably. In Canada, the designs are submitted by architects to the CMHC for evaluation. The resulting selection is a fine collection of architect-designed houses made available to builders on a royalty basis. These units must then be sited properly with respect to terrain and to each other.

A most important subject on the agenda was the training of the architect to specialize in residential construction. Since the training of architects was to be the theme of the 1965 UIA Congress in Paris, we spent considerable time on the subject. There was a sharp division between those who felt that the architect's education must be shortened, taking into account military service and earlier marriage; and those who felt that four years of college, four years in an architectural schools and two years' specialization in residential construction were needed. These last two years might encompass town planning, technology, economics and management. From these deliberations were formulated five general conclusions:

1) The design of housing and the planning of

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Forest and sea form the magnificent setting for the small garden city of Tapiola on the Gulf of Finland. As in its eastern section (above), a variety of residential buildings ranging from towers to private residences (next page), including the apartments by Viljo Revell (left) and the terrace houses by K. and H. Siren (bottom), are served by neighborhood centers complementing the administrative and cultural Town Center.

residential areas are central to the profession of architecture. They are among the most complete and socially important of the activities with which the architect is concerned. The Commission was therefore against specialization in housing and planning during the basic education of an architect.

- 2) Particularly in housing and planning, but also in many other fields of architectural work, an understanding of economic and social as well as esthetic and technological subjects is essential; therefore, the student entering professional training should have studied the humanities and social subjects as well as science and mathematics.
- 3) The study of social and economic subjects should be continued during architectural training, side by side with technical subjects. In particular, the student should gain an understanding of the way of life of those for whom he will have to design.
- 4) The architectural course should include at each stage studies relating to the design and construction of housing and the planning of residential areas. In some countries these are taught by specialists in housing, or set up as special units



Chain houses: Aulis Blomstedt.



Own house: Marjatta and Martti Jaatinen.

Apartment houses: Aulis Blomstedt.



for study of housing and for design research. These practices are welcomed by the Commission.

5) It is as important to ensure that students learn to work with those concerned with social, economic and financial problems as it is to cooperate with engineers and associated industrial technologists.

To further these conclusions against the background of the Paris Congress, the Commission proposed that experiences be exchanged on the part that housing plays in architectural education, the methods used and the ways in which theoretical training is related to practical experience. It was also proposed that there be further exchanges to ascertain the extent to which post-graduate courses exist to intensify and bring up to date the knowledge of practicing architects, and particularly to enable them to cope with situations where the housing problem is acute.

This would be, it was felt, a main area in which the national sections of the UIA, working in collaboration with national housing agencies, could play an important role in cooperating with the United Nations and its housing committees and in assisting developing countries.

Complementing these fruitful working sessions were the equally useful meetings with Finland's professional, political and business leaders at various receptions and tours arranged for the benefit of the Commission. These included a most rewarding visit to the famed garden-city of Tapiola which Heikki von Hertzen, head of the Foundation building it, estimated would ultimately accommodate 80,000 people. A visit to Aalto's studio, a trip to Lahti where Eliel Saarinen's city hall still stood the test of time were some of the events planned for the delegates. A short stop at Säynätsalo showed us Aalto's little town hall, one of his first undertakings.

Commission members also had a chance to examine the prefabrication techniques used for the building of the suburb of Pihlajamaki. Some of the prefabricated units weighed as much as 30 tons. It made one wonder why prefabricated multifamily projects have made so little progress in the U.S. and other countries with high on-site labor costs. Another construction detail was the use of floating concrete slabs for the purpose of impact sound insulation. About 2 inches thick, they are insulated from the reinforced concrete load-bearing slab by two layers of felt. The decibel-rating of this system is not known.

The only sad part of this Commission meeting was that Viljo Revell, the Finnish representative to the Commission and winner of the Toronto City Hall competition, was not well enough to meet very often. As we all know, he died shortly thereafter, a great loss to architecture.



Editor: Marcus Whiffen, College of Architecture, Arizona State University, Tempe, Arizona. Contents: One Approach to Building Science by Charles A. Tiers; The Kalundborg Invasion by Charles M. Sappenfield; Reviews by Abraham Rogatnick (Muschenheim) and H. F. Koeper (Hilberseimer).

One Approach to Building Science

BY CHARLES A. TIERS University of British Columbia

In past years this journal has published "participant's-eye views" of the AIA-ACSA Teacher Seminar at Cranbrook—by A. J. Diamond in December 1963 and by Donlyn Lyndon in September 1964. This year the place of this feature is taken by one of the series of papers presented at last June's seminar by teacher participants (as distinct from the guest speakers, whose papers will, as before, be collected in a book). These presentations, eight in all, formed a valuable part of the week's activities. In presenting a description of a course with which he has been working during the past two years, the author hopes to stimulate questions and responses, particularly from others who may have experience in this area of teaching.

OUR THREE-YEAR program at the University of British Columbia follows a minimum of three years in the faculty of arts or science. During these pre-architecture years certain prerequisites for entry into the School of Architecture are stipulated; these include two years of mathematics and three years of physics. The third-year course in physics emphasizes electricity, light and sound and is designed especially for architectural students. All the prerequisite courses are given outside the school, and all but the third-year physics course are offered as parts of the normal degree programs in other faculties and departments.

We have had our first graduating class this year under the new program. As is to be expected, many questions have been raised about this pattern, and most of them are as yet unanswered. Suffice to say here that our entering students have attained a fairly high level of academic accomplishment; in fact, roughly one-third have com-

pleted a degree program, usually in science or engineering. These points are mentioned because the background of our entering students, particularly in physics and mathematics, is relevant to the treatment of building science, technology and structures which is developing in our school.

Principles and Methods

My course, which our calendar inaccurately describes as "Construction of Buildings," is given in the first year of the three-year program and appears again in the second term of second year. However, the main concentration occurs in the first year and this is where I have developed my approach to building science. As a product of the traditional treatment of building technology in the old "materials and methods" courses, I have become increasingly dissatisfied with the quality of subject matter and methods of instruction in these areas. It seems abundantly clear that the pace of development in building technology and the challenge of the future makes it virtually impossible to pursue an educational pattern which treats the materials and methods of building as a package of accumulated practical knowledge and an empirical process. While practical knowledge and skill in this area is undeniably essential and is the mainstay of the building industry, I am sure that such future concern must in some measure be delegated to the architectural or building technologist, the product of an important new form of training which is receiving much attention in Canada and elsewhere, and which deserves the serious support and consideration of our profession. Architectural education must adjust itself to these changes and must seek to establish, as a matter of real urgency, a deeper awareness of scientific principles and a wider use of the methods and attitudes of scientific inquiry.

The application of science in building is essential if the challenge for more and better building is to be met. Already the architect's vital role of design leadership is threatened by an ever-expanding array of specialists concerned with narrower aspects of building design. Surely one of our most pressing needs is for a wider utilization of the large body of science already in existence which can be brought to bear more effectively on building problems. It should be recognized as a "building science" and consolidated in courses, textbooks and laboratory facilities appropriately arranged in respect of depth and breadth of coverage for architectural students and others who can make use of it in building. This idea is not new and, in fact, substantial progress in this direction has been made in architectural education in England and Australia, where building science or architectural science was introduced into curricula some 15 or 20 years ago. This development has been accompanied and strongly influenced by agencies for building research both inside and outside the universities. In Canada we have a governmentsponsored organization directed to the problems of building. In recent years this has become increasingly influential in the profession and in the schools, through its application of science in the investigation of significant problems of building and in the widespread distribution of information. Without the aid and support of our Division of Building Research of the National Research Council, my own efforts to introduce a more effective, meaningful, science-oriented approach to the technology of building would be infinitely more difficult.

The Emphasis on Why

I have endeavored to introduce this scienceoriented approach to the materials and methods of construction through a one-term course at the commencement of the first year. In general, the course stresses the principles of science related to various environmental forces and phenomena in an effort to convey understanding 1) of the nature and behavior of the forces and 2) the resultant performance of the materials, components and systems which comprise the fabric of building. In essence this approach emphasizes why a building may be expected to respond in predictable ways under the impact of these forces rather than how it may be constructed in conformity with the highly transient norms of practice, custom or style. I have divided the broad field of building technology into two areas, which I call building science and building practice. This distinction relates to the treatment of both the materials and the methods of building. In my view it is important to make this distinction and to realize the differences and the

connections between knowledge and skill, between theory and practice, both of which are vital in the truly professional education of an architect. At present I devote approximately equal time to each segment, which fits our two-term pattern in each academic year. The emphasis on theory and principle through building science precedes and thereby provides a firm foundation for the information and practical decisions which are necessary in design and construction. In time I would expect the aspect of building practice to change substantially in content and direction as we find more effective ways of dealing with it in school and during the period of office experience, while the concern for science and its role in understanding building functions and performance might be amplified.

Forces, Environmental and Otherwise

Thus, the first phase of my course attempts to identify the various "forces" which impinge on the building and to understand the response of the building as a whole and in its major parts as a kind of complex control mechanism. Most of the emphasis is placed on the nature and behavior of the environmental forces and particularly on those related to climate, but other phenomena exist which may appropriately be treated as "forces" in this context. Available time allows an average of about five lecture hours on each topic plus a four-hour session once each week (over a 13-week term) for a studio or laboratory exercise or a field trip. The topics which we examine are as follows:

Structural adequacy—Here I am primarily concerned with the origin and nature of loads, with a description of the various kinds of loads and with the statistical concept of load determination. Special mention is made of snow and wind loads, with the latter reappearing later in conjunction with the effects of air leakage, pressure distribution and chimney action in problems of thermal control. In this context, time does not permit consideration of matters which are typically included in elementary structural theory and which in our program are fully developed in a separate sequence of courses beginning with strength of materials.

Dimensional stability—Here we examine the causes and effects of deformation and cracking in buildings and of temperature and moisture movements in materials and components. The relevant scientific knowledge concerning the structure, properties and behavior of various materials is considered.

Exclusion of water—This topic is mainly concerned with rain penetration: the behavior of water on a surface, the means whereby it gains entry through the building envelope, and the forces which operate to drive it or draw it inward. Some

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recent scientific inquiry places this rather mundane and familiar problem on quite a different basis than was possible in the empiricism of the past and is suggestive of new and intriguing concepts in wall and roof design.

Thermal control—Considerable stress is placed on this and the following two topics, not from the standpoint of equipment and systems designed to produce and maintain an artificial environment but of the fabric of building, especially the external envelope, as a "selective filter" or control mechanism which modifies the inward and outward flow of these "forces." The operation of thermal phenomena is developed in terms of heat flow, water vapor flow, airflow and solar radiation. The significance of relative humidity, air leakage, condensation, thermal bridging and other key factors is discussed. The nature and behavior of each of these phenomena and their interaction is examined in some detail with particular regard to the response of materials and components which form the external skin of the building. Temperature gradients and vapor pressure gradients through various constructions have been examined as graphic exercises in the studio.

Sound insulation—In much the same way the behavior of sound is examined, and the criteria and means for its control are discussed. Here I am primarily concerned with noise control (transmission and absorption) and, to some extent, with vibration rather than with room acoustics. The latter aspect is not essential in this context and receives separate treatment at a later stage.

Daylighting and sun control—These topics are developed with reference to the modes of daylight penetration and the significance of window arrangements in obtaining specified levels of daylight illumination in rooms. The techniques of daylight measurement are examined, and a graphic exercise is explored in the studio. Similarly solar control is investigated in terms of the variation in the movement of the sun and the various graphic and model techniques which may be used in designing and evaluating sun control devices.

Fire protection—Here also is a field which has become increasingly science-oriented in recent years. Experiment and analysis has yielded a large body of knowledge regarding the behavior of fire in buildings and the combustibility of materials and components. The concepts of fire load, fire resistance and compartmentalization in buildings are the bases for understanding the design implications of some of the important regulations regarding fire safety in modern building codes.

This summarizes the principal topics covered in the first term sequence related to building science. I should also explain that although these topics are mainly concerned with the function of the building as a whole, the subject of building materials is covered concurrently and in parallel fashion. By this I mean that building materials in general are considered in terms of their characteristics and performance in relation to movements, thermal behavior, fire risk, sound absorption and transmission, mechanical properties and problems of weathering and durability. These considerations conform closely to the overall pattern and sequence of building science topics. In this connection, specific building materials and their production, forms and uses are less relevant and are left for later discussion under the heading of building practice.

Upon completion of this first phase of the pattern, the second phase dealing with building practice may be erected on a solid foundation of scientific principles and a more critical attitude of mind toward design and construction. Here also I have attempted some basic changes in a subject where change is long overdue, but these need not be described at this time.

The Resources Problem

My brief experience with the building science approach convinces me that it is sound, but I am well aware of deficiencies both in content and presentation which I hope may gradually be removed. Some of the more pressing difficulties concern inadequacies in the resources at our disposal in three principal areas.

First, there is a lack of good reference material and particularly textbooks in which the concept of a science of building is the underlying theme. There is much material dealing with the various topics, usually in much greater breadth and depth than can be encompassed in a general undergraduate course of instruction appropriate for architectural students. Such books are frequently the work of scientists or engineers and naturally reflect the depth of specialist knowledge. Very few such books even attempt to link together the various environmental phenomena and their intricate interaction in determining functional adequacy.

I see the architect's task in design as essentially a coordinative or integrative operation, and I feel strongly that the relationships between these "forces" and the resultant overall performance of buildings ought to be the central theme in the building science approach. Furthermore, I believe that the performance of buildings is significant for the architect ultimately in terms of the human being and his total response to environment. I find that most of the material I have encountered in formulating my approach to building science is notably unconcerned with man as the measure of the nature and behavior of these environmental forces and with building as a control device.

My own school, as I suspect most others, lacks suitable experimental and demonstration facilities with which to reinforce and clarify the scientific principles and performance factors which are developed in the classroom. I have improvised a few demonstration aids and I intend to devise others, but until the schools of architecture are able to provide space and equipment, modest though this may be, the growth of building science within the framework of architectural education is bound to be hampered and cannot realize its full potential. In this connection one cannot help but envy some of the laboratory facilities which are a vital part of instruction in this subject in many of the schools in Australia and in England but in only a handful of schools on this continent. Clearly, a higher level of knowledge or any degree of specialization at the graduate level or earlier-and I would submit that graduate study and research in this field deserves to be fully developed-would depend heavily on the availability of such facilities.

The Instructor Problem

Finally, there is the perplexing problem regarding qualified instructors in this subject area and the apparent lack of interest and initiative in this direction. We architects are notorious for our opposition or at least our indifference to the role of science in our education and practice. William Allen, in his inaugural address as principal of the Architectural Association School in London, expressed it well: ". . . it has become what some psychologists speak of as the art/science tension in which we architects are still involved, for we

sought the hand of the goddess Science for our creation of a new architecture, and then promptly proceeded to ward off the detailed implications of our engagement in a curious sort of love/hate relationship that threatened at times to belie all our early matrimonial intentions. I think we are probably fortunate that science is not sufficiently corporate to sue for breach of promise."

Perhaps this argument is merely academic. Whether it is will depend on how well we may be able to restructure our present patterns of architectural education, and, in particular, how well we are able to re-educate ourselves both as teachers and practitioners. Those of us deciding to embark on this approach in teaching must deepen our own understanding of science and its application throughout the full range of problems associated with design and construction. Right now there are some, fortunately, who may possess specialized knowledge and experience in one or two aspects of the field, but I think that for the foreseeable future most of us must be prepared to cope with all the topics which properly fit within the scope of building science. It is a tall order, but I cannot see any source for fully competent instructors in this area except from within our own ranks, and not from the sciences or engineering. It may be hoped that in the near future we shall be able to provide incentive and opportunity for students of architecture to select building science as a worthy direction for postgraduate study and research. Then we may begin to feel that the role of science in architectural education is receiving the required attention.

The Kalundborg Invasion

BY CHARLES M. SAPPENFIELD Ball State University

Many schools of architecture organize field trips for their students. Everyone who has had a hand in the business knows that proper preparation (of students no less than of schedules) is essential if a field trip is to be at all effective as an educational device; most will agree that the integration of the experience gained on a field trip into the curriculum is an ideal more often proclaimed than realized. This article describes how they manage these things in Denmark.

It was 8 o'clock—an hour before Denmark's October sunrise—when we entrained for our Kalundborg invasion. We were 90 third-year students from the Danish Royal Academy, 10 of the faculty, and a Fulbright representation which in-

cluded a professor, four architects and an architectural historian. The chartered coach was crammed with people, bags, notebooks, drawing equipment. Two hours across the rolling Danish countryside brought us to Kalundborg for the Academy's annual three-day study tour.

This fall tour—last year to a town on the isle of Funen—serves several educational purposes at once. It welds class and faculty into a unity, with training in group work as well as independent student work; it provides a basis for the year's design problems; it acquaints students with both old and new in building and planning; and it gives them a chance to be in the fresh air of a new environment and away from the "ivory tower" of the drafting room. In addition, it is a primer, so to speak, for advanced and extended trips which the students will take in future years at the Academy. Former tours have been to Portugal or Greece or

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Finland for periods of two to four weeks. The Danish building industry and grants help foot the bill. The objectives of these longer trips are similar to those of the Kalundborg trip, but their greater length and the totally different environments carry the educational process further.

Some means of unification is needed by this third-year group, for the students are concerned with different aspects of architecture and have widely divergent backgrounds. Some of them have had two years of instruction in Copenhagen at the Royal Academy. Others have had two years in technical high schools (equivalent to our American junior college training). Moreover, these 90 include students specializing in city planning, land-scape architecture and the restoration of historical buildings; the Academy awards degrees in all these fields. So the tour gave students and faculty—and the Fulbrighters in particular—a chance to meet and know each other in an exciting atmosphere of discovery and work.

The students were divided into groups under faculty leadership, but they were able, at the same time, to do individual work of their own choosing. Techniques employed could include photography, drawing, painting, measured drawing or any of the others available to an architect studying an environment. With their knowledge of actual site and environmental conditions, the students could gain more insight into housing, town planning or historical problems, which throughout the year, would be based on the problems of Kalundborg.

In character with the number of things to be accompanied with the Kalundborg invasion was the complexity of the city itself. Kalundborg is a city of 8000 inhabitants on the west coast of Denmark's largest island, Sjaelland. Its protected harbor at the end of Kalundborg Fjord makes it an ideal all-weather port. The land on the east and south ends of the harbor is relatively flat; on the north, the land rolls up to one high hill, down and up again to another long hill, providing a northern boundary to the city.

Around the first moundlike hill on the north was situated medieval Kalundborg. The site is dominated by the 12th century cathedral. At a lower eastern elevation stood the now-destroyed castle. Between the cathedral and the site of the old castle stand many fine houses dating back to the 15th to 17th centuries. On the long hill behind the city are several housing developments; the unused farmland is rapidly being destroyed by subdividers and speculative builders. As in America, the engineer with his bulldozer and law of cut-and-fill rules this new housing area; the agrarian background for the city and the natural contours of the land are rapidly disappearing. One of the present charms of Kalundborg is one's ability to look from

almost any location and see the Kalundborg Fjord, the cathedral or the surrounding farmland.

On all three sides of the harbor are many small new commercial structures. And radio antennas and a large grain silo now dominate the cityscape, which was formerly centered on the five spires of Kalundborg Cathedral. Opposite the city, on the south of the fjord, now rises the ugly bulk of a steam generating plant. In addition to smaller industries around the harbor, there is now rising one of Europe's largest oil refineries. This Americanfinanced enterprise, according to a special article in the Berlingske Tidende, will increase the economy and population by 20 percent. It will certainly increase the already rapid uglification of Kalundborg by an equal amount. So Kalundborg, with its medieval character, its fine cathedral and old houses, its unplanned growth in this century, its current problems of housing both new industry and new people, its 20th century realities, made an ideal subject of study for such a group as we were. In addition, we were to see Lerchenborg Castle with its 18th century manor house, farm buildings, and church, as well as the little peninsula town of Reersoe, 30 kilometers down the coast.

The trip, however, did not really begin on the train; there had been a three-hour briefing session in the Academy the preceding week. This session corresponds with the series of weekly briefs which are held for trips the following spring-one series for a group of students traveling to the West Indies for six weeks. So complete is the planning that a group going to Spain received special lessons in Spanish. The Kalundborg briefing began with slides and commentary by a city planner to acquaint us with the development of the plan of Kalundborg. Next, members of the buildings restoration faculty described Kalundborg Cathedral and the adjacent houses and their restoration. Finally, an architect explained Reersoe, Lerchenborg Slot and Kalundborg housing.

So we invaded Kalundborg that cold, rainy morning with a fairly good knowledge of the town's history and problems and an inkling of what there was to be seen. It was the week of Efteraarsferie (autumn vacation for the schools), and the local school provided sleeping quarters. After sleeping bags had been tossed into school rooms, we reassembled for lunch. This lunch at the headquarters hotel was banquet-style, as were to be all meals for the next three days. Local planning officials were introduced; there were several more briefings; and groups were formed for pursuing the three-day program. After lunch we made our various ways up the hill and through the old town to the cathedral. Here the head of the restoration department lectured on the development of the church. Then came a trip through the adjacent town museum with its model of the 16th century town. Finally we all piled into buses for a tour through the old and new parts of the town, to Lerchenborg Castle, and down the coast for a walk through Reersoe.

Reersoe is of great interest to architects and town planners because of its continuing and unspoiled medieval condition. It is almost an island, reached only by one very narrow road on a spit of land connecting the mainland. The smallness of the peninsula and its isolation have preserved it. When the great Danish land reforms of the 18th and 19th centuries were effected, Reersoe remained unchanged. Before reforms, Reersoe and other Danish farm towns consisted of a dense maze of houses, outbuildings and winding streets. Each farmer could have, perhaps, three or four different plots of farmland or grazing land, each suited to some different form of cultivation but within walking distance of the town. When the land reforms regrouped these lands to make contiguous farms, Reersoe in its isolated position maintained the

older system. Today it is a microcosm of the life of hundreds of years ago—its town planning, its scale, its architecture.

After Reersoe, the group met in the school auditorium to hear local planners explain future plans for Kalundborg. Here was an opportunity to inquire about things we had seen, as well as to prepare our thoughts for the next days. On the second and third days, faculty members distributed beer and coffee to the labors of dispersed painters, draftsmen, measurers and photographers. And the second night the rooms of the school echoed as never before with the noise and confusion of a beer fest.

A rewarding trip it was for the Fulbrighters; very few foreign students get the chance to be so closely associated with both faculty and students on a common project. And rewarding it was, too, for those 90 students who had seen that architecture is no mere paperwork but an activity which requires a real understanding of people, their culture, their environment and their future.

BOOKS

Elements of the Art of Architecture. William Muschenheim. New York: The Viking Press, 1964. 200 pp. \$6.50

We still show some uneasiness about teaching architectural history. The great revolutions against Victorianism and its inhibiting historicism and against the tyranny of Beaux Arts academicism have come and gone and have themselves become creaky topics of history. We have even come so far that we now have historians who are marching boldly into the miasma of Beaux Arts legend and beginning to dissipate some of the earlier clouded views of that institution seen through the bloodshot eyes of the passionate revolutionaries of the first half of the 20th century.

That we continue to reveal in our behavior the distant trauma of those revolutions, however, is indicated by the trouble we seem to take to avoid the embarrassing stigma of talking about the history of architecture in terms of comparative styles à la Bannister Fletcher. In our lectures we scurry through areas dealing with such things as "orders" and "multipartite vaulting" as if they were dark corridors on the way to other rooms, and we break into proud and knowing grins when we can talk about what we call "universal" devices of art and architecture such as rhythm, positive and negative volumes and all the other abstract, yet ultimately stylistic, concerns of this century. Of course, our intention is to demonstrate that the problems of history are the problems of contemporary life. It is a gimmick but perhaps not an

unfair one. After all, every age must see history within its own frame of reference in order to understand it and to be able to learn from it. However, legitimate or not, it is a favorite historian's game to prove there is nothing new under the sun.

William Muschenheim plays this game with a curious twist. In 81 double pages he arranges from three to six illustrations of buildings or parts of buildings which, at first glance, look like the same tired old reproductions by Alinari et al, covering the history of Western architecture from Paestum to Seagram. It is the second glance which reveals the little surprises, because it is then discovered that it is the curiously planned juxtaposition which counts. Each arrangement purports to demonstrate some principle, some too often ignored ideas or devices out of those which ultimately compose and give life to the great architectural works of history. And this is where Muschenheim slyly merges yesterday with today, for although the illustrations within each spread may range over thousands of years of history, there is nearly always present at least one example from the 20th century for comparison. There are only two exceptions to this pattern among the 81 sets.

Diligent teacher that he is, Muschenheim does not trust the photographs to speak for themselves, but with each grouping he provides an explanatory title as well as a short paragraph to indicate to the reader the particular point the author means to illustrate. Unhappily, too many of these titles, or headlines, are either heavy-handed, bewildering, in apparent conflict with the illustrations, or flatly uninteresting.

"Exploded building masses expressing each element separately as opposed to the classical approach to design" is perhaps among the less cryptic "explanations" for the three rather bad photographs it goes with: of Seville Cathedral, the Church of St. Étienne in Caen and Le Corbusier's model of the Palace of the Soviets. Without the aid of the text, one is struck by the startling similarity expressed in the illustrations of Seville Cathedral and of the Palace of the Soviets. In both pictures we see a dramatically horizontal explosiveness. Suddenly, Le Corbusier's radial trusses look like the curiously flat buttresses flying in all directions from the long, horizontally emphasized walls of the cathedral. In contrast, the badly cropped photograph of St. Étienne doesn't seem to have masses that explode at all. In fact, it looks very tight and "classical" here. The author's text below the title adds confusion by reminding us that "in medieval work the directional emphasis was vertical" while "in modern work, when a dynamic quality in building design is sought, the horizontal and the omnidirectional are stressed." Since it is necessary to go to the end of the book to peruse an incidentally well-written summary of architectural history in order to discover what the author means by "the classical approach," the boast that the jacket makes about the book filling "a great need for the layman" can be seriously questioned.

Other ideas such as "forthright controlled and expansive forms in utilitarian structure" or "vigorous, clear and direct architectural design concurrent with social revolutions" are obviously difficult to demonstrate in a handful of photographs, and so it is not a surprise that the demonstration simply does not come off. And what are we expected to make of the headline, "The spirit of the age of enlightenment shown in modest dwellings of the time (c. 1780), still taking effect in some contemporary designs"?

"Echoes of the Parthenon in various countries about 1800," announces the text near a battered old view of the Parthenon, the Brandenburg Gate—doesn't the loudest echo here come from the Propylaea?—and three other buildings flaunting not Doric but Ionic porticoes. One of these is Jefferson's Virginia State Capitol (Maison Carrée, no?). Why blame every reverberation on the Parthenon? And why, for that matter, is the arena at Nîmes included in a passage entitled "Fluidity achieved by undulating facades"? Why are we treated to an illustration of the statue of a kneeling woman at Olympia among a group of buildings intended to illustrate "Columns and steps connecting diverse levels in public building"? And why the

snippet showing a portion of the north frieze of the Treasury of Siphnos at Delphi under the heading "Groups of buildings related to planned horizontal surfaces"?

Incidentally, is each of these groups of photographs intended to illustrate one of the elements of the art of architecture? No. Muschenheim tells us these elements are only three: form, space and surface. (Whatever happened to commodity, firmness and delight?) Thus the book is divided into the proverbial three parts, and the 81 categories of ideas are parceled out as subcategories or extensions of the primal trilogy. Here, as in so many illustrated books on architecture, the dependence on a visual medium tends to imply a narrower definition of architecture and the senses through which architecture is perceived than the author would probably want his readers to infer. For instance, although the three categories of Muschenheim do not necessarily restrict the architectural experience to its visual aspects, the pictures illustrate only what can be seen with the eyes-rather, with one eye, looking through a small rectangular hole while the head is clamped in a single position. Movement, moods and time phenomena, let alone textures perceived through the hands and feet, temperature, acoustics, smell and what-have-you are ruthlessly ignored as elements of architectural vitality. ABRAHAM ROGATNICK

University of British Columbia

Contemporary Architecture: Its Roots and Trends. Ludwig Hilberseimer. Chicago: Paul Theobald, 1964. 221 pp. \$15

Ludwig Hilberseimer is among the many European expatriates who have enriched American architecture. After teaching city planning at the Bauhaus from 1928 to 1933, he settled in the United States in 1938, the same year as his colleague Mies van der Rohe, and likewise has been associated with the Illinois Institute of Technology. Clear-eyed and firm, he still holds forth in weekly graduate critiques under the suspended roof of Crown Hall.

As a young man in Germany, soon after his architectural studies at Karlsruhe, he was attracted to the problems of the city. In particular, he was struck by the daily flow of workers to and from factories. Transportation, housing and industry became his major themes and he set himself to reconcile them in a thoroughly contemporary manner. Characteristic are his clear aims and cool analysis. His city planning studies are set forth in such books as "Grossstadtarchitektur" (1927) and "The New City" (1944). It is in these earlier books that we are presented with his major interest and the full force of his creative ideas.

In his new book Dr. Hilberseimer takes a back-



ward glance to give us an historical review of those progressive experiments which he himself has witnessed: the work of Van de Velde and Olbrich, Behrens and Taut, Mendelsohn and Poelzig and others. His discussion of buildings is limited to their functional capacities and their structural expression. He is impatient with arbitrary forms. Of Berlage's Stock Exchange he says, "The tower of this building, however, is still the one irrationality he failed to overcome." Yet, Berlage, with Viollet-le-Duc and Semper, is cited as one of the three great theoreticians of the 19th century; this is indicative of the author's prevailing positivism. The historical coverage of this book is almost identical with that of Nikolaus Pevsner's brilliant "Pioneers of Modern Design." By comparison, Dr. Hilberseimer's comments seem narrow and his survey is abbreviated.

Throughout the text the author's prejudices are

never concealed. "Industrial production is based on standards and objectivity." He believes that architecture likewise should share this basis. Therefore, when one reaches the final portion entitled "Where Are We Heading?" the verdict is the expected one:

There seem to be no accepted principles now, no directions. Everyone is on his own. Everyone is trying to express only himself. The dominance of form leads to romanticism, and there is no end to it. Today's architectural romanticism is a product of alienation from reality. Architecture, like politics and economics, is in confusion.

Yet wandering from desk to desk in Crown Hall, one sees in the rigid geometry of black-painted structural models evidence that at least in one place in America clarity and order reign.

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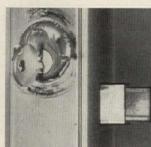
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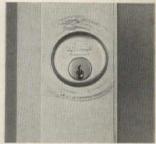
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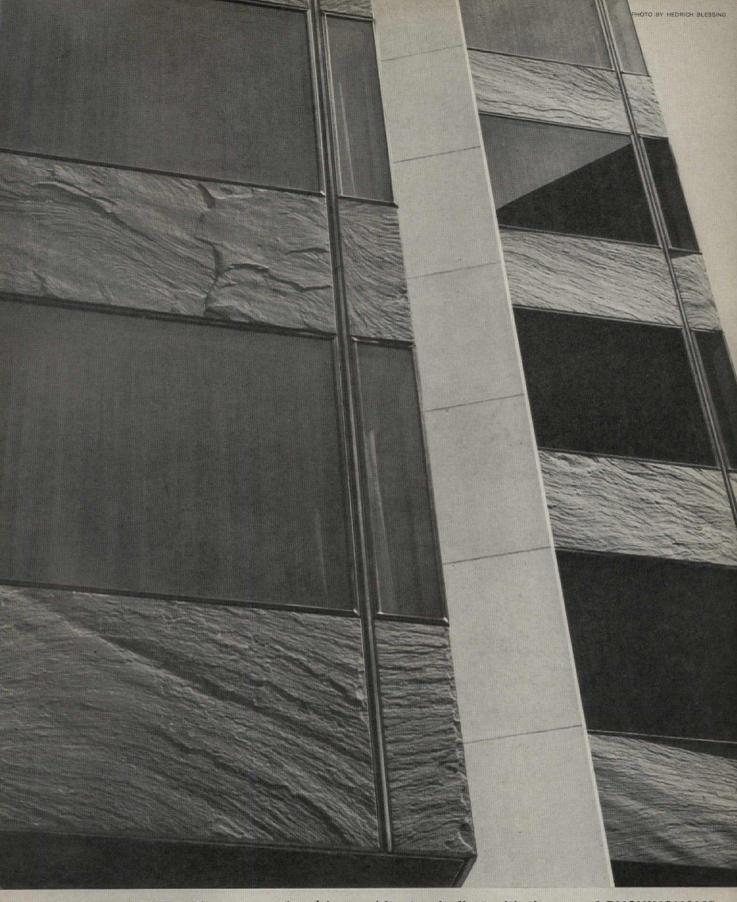
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- · Henry Adams Fund for fourth and fifth year undergraduate or graduate students in architecture, primarily for studies related to ecclesiastical architecture.
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Beyond the Urban Fringe

of the Housing and Home Finance Agency made some pertinent observations on "New Communities" in a Gotkin Lecture at Harvard University. A condensation follows. IN THE controversy over the relative merits of the suburb, each individual has to make his own choices. Apparently, this is exactly what the American people have been, and are, doing. From what one can observe, there is far from a universal, monolithic judgment. And for many persons, choices vary at different periods in an individual's life span, reflecting at that time the relative assets that suburbs and central cities afford.

There is, however, a by-product suburbia which indubitably exists and complicates our urban dichotomy in intellectual and political identification between the suburbs and the central cities, itself a lineal descendant of the traditional urban-rural conflict. (For as William H. Whyte observed, "Long before there were suburbs there was a rural-urban conflict. A persistent theme in utopian literature has been the basic immorality of cities and the coupling of the good life with rural virtues.") As a consequence, there is too little willingness to idenropolitan region. Neither growth cay in the older areas of the centhe matter of transportation. It, like so many other urban problems,

future. The issue we face, therefore, and uneconomic. is not a choice of whether we con-

nomic, and esthetically attractive manner.

Clearly, new communities are desirable and possible in this country. But in this nation we shall probably develop new communities which are an integral part of the metropolitan area and contain many of the desirable elements of the city. Here, as in Europe, the new communities will be large-scale developments, providing thousands of residential time advocate of open occupancy units. Included, in varying mixes, and economic diversification in will often be libraries, parks, housing and have repeatedly emtheaters and shops. Some will have phasized the importance of such offices, factories, and industries that patterns in suburbia, I cannot deafford opportunities for work close lude myself into the belief that new at hand. Unlike the European new communities will be a principal or towns, the residents in our new the exclusive means of achieving communities will not generally walk these objectives. As in other reor ride a bicycle to work; here the spects, they can provide demonstraliving. It finds expression in the more common mode of transportations of what can be done, but their tion will be the automobile, as it incidence will be of such relatively seems to be becoming in Europe. limited frequency that the numeri-However, in proportion as employ- cal impact will be slight. This, of ment opportunities are nearby, the course, is accentuated by the fact necessity for commuting will be re- that most private sponsors of new duced. Moreover, new communities communities are sufficiently affluent represent orderly growth, a most to secure financing from convenfavorable condition for the develop- tional sources which are not subject ment and extension of mass trans- to Federal standards. What is portation facilities linking central needed are direct inducements to city, traditional suburbs and new outlying communities to welcome communities.

tify the mutual problems of city planned and projected American vate developers to build for them and suburb as parts of a single met- new communities represent feasible (with adequate safeguards written in the metropolitan fringes nor de- life style for the middle- and upper- and effective enforcement of the tral city can be conveniently sorted our economic pyramid-more than tunity in Housing. out. The two components of the a third of the total population—is metropolitan complex are inter- usually excluded. This is the ele- of economic diversification in Eurodependent; and if one questions ment in our society which is necesthis, let him consider for a moment sary for the successful operation of addition, such as exists is hardly a industrial and commercial facilities, as well as for manning the multidoes not stop at the geographic plicity of local services such as janilimits of local governments nor can torial, domestic, retail services and in publicly assisted housing, and my its solutions fail to cross these pro- maintenance work. For new com- impression is that class diversificaliferated lines of political control. munities which are remote from tion is significantly less character-Regardless of the merits or de- concentrations of this man- and istic of European new towns than fects of our present suburbs, we woman-power, the lack of such in other types of subsidized housshall have more of them in the workers can be both inconvenient ing. The significance of new com-

struct more housing in the fringe will face three alternatives: 1) plan For here the need is to break an areas and beyond, but whether we for the inclusion of housing for this

Administrator Robert C. Weaver can do so in a more creative, eco- essential component; 2) occasion the development of unplanned shack towns nearby which will soon evolve into rural slums; 3) depend upon commuters to supply these labor requirements, with consequent high incidence of absenteeism and upward pressures on labor costs. The latter, in large measure, will reflect high transportation costs and inconveniences.

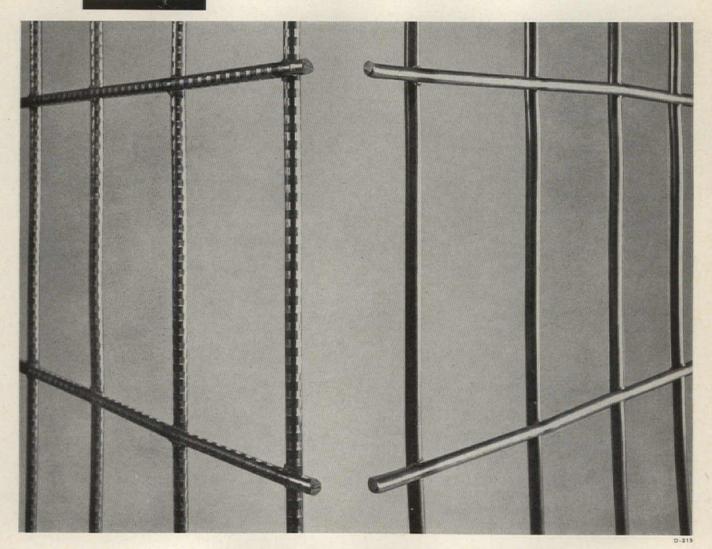
> Although I am a firm and longthe less affluent, financial assist-While the hundred-odd existing, ance to make it profitable for priexamples of an extremely attractive in the law), and wider coverage income family, the broad base of Executive Order for Equal Oppor-

I have suggested that the degree pean new towns is exaggerated. In unique attribute of them. Rather it is largely in the European tradition of including many economic classes munities in this regard could, how-Our new communities, therefore, ever, be much greater in this nation.

Cont'd on p. 76



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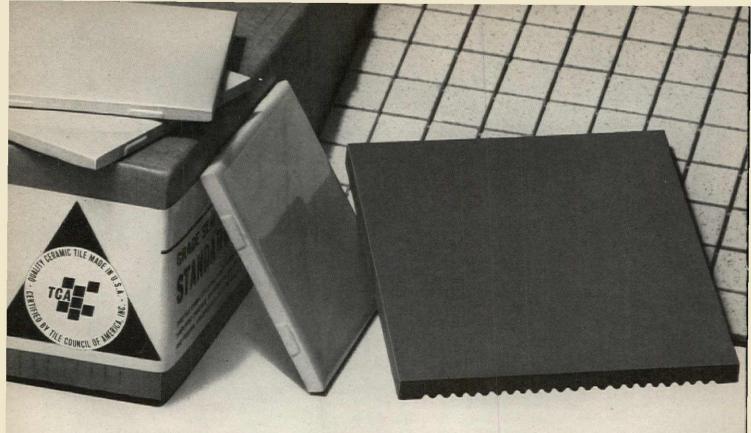
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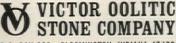
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Weaver Cont'd from p. 72

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entrenched suburban tradition of economic and racial homogeneity, and this can best be accomplished in a large, new development.

Logically, restriction of government financial assistance in suburbia to new communities which meet economic diversity, planning, and open-occupancy requirements would encourage a suburban environment which would satisfy the objectives of many critics of existing suburbs. Such communities would be open to nonwhites as well as whites, thereby serving as the instrument for breaking down ghettos in suburbia.

But legislation limiting Federal assistance to new communities and excluding more conventional subdivisions will not be enacted in the near future. Thus, our challenge for the present is to extract the maximum from new communities and influence, as far as possible, the nature of the other suburbs of to-

lated, described and, in a democracy, must achieve widespread support. It is unfortunate that the dialogue about these matters, save among a few of the most articulate persons in the field, has not been underway for a decade or more. The population explosion which will occasion another rash of suburban expansion is upon us. It is, no doubt, comforting to cite England's experience and suggest our taking it over, lock-stock-and-barrel. To me this is not only unwise but improbable.

Since, after all, we are a pragmatic people, I am convinced that before there can, or will, be a public acceptance or a public policy of adopting the new communities as the form, as contrasted to a form, for future suburban development, we will have to be surer than we now are that these communities will work. Some of us will recall that the suburbia which is frequently criticized today-a form and structure which, while not articulated in public policy was de facto public policy because of FHA mortgageinsurance support-created as many, if not more (in the opinion of some) problems than it solved.

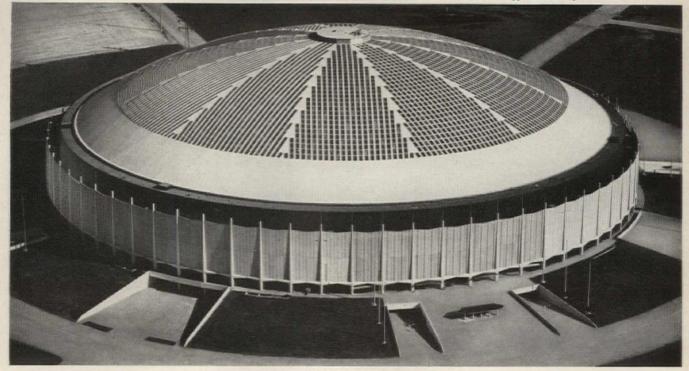
And most of the latter were unanticipated. Will not the electorate ask if similar by-products are also inherent in the new community approach? Will not overemphasis upon new communities militate against effective concern and action for better suburban development?

I am concerned, not only with the distant future, but with the remainder of this decade and the years immediately following. By 1970 we shall be at a level of 2 million housing starts a year. It is of crucial importance that the houses we then produce and those we build in the intervening years not have septic tanks that are wet and wells that are dry. We must act now to discourage the bulldozing away of contours and trees. We should improve the flow of traffic through encouraging, revitalizing, and initiating mass transportation. We need to act now to discourage culturally sterile suburban housing developments devoid of, or deficient in, shops, theaters, libraries and parks within easy A new pattern for suburbia takes access. Nor can we afford to countime to create. It has to be formu-tenance continuing scatteration and uneconomic utilization of land.

> Neither urban planning nor its distortion is new. Very recently, a group of archeologists discovered in Turkey the remains of a city believed to be over 8000 years old. Moreover, they uncovered evidence of a city plan, with houses and markets carefully laid out in ordered pattern. This is believed to be the oldest executed city plan in existence. But those who dwelt in the orderly arrangement it facilitated did not seem to have been concerned primarily with the good life. Instead they were preoccupied with fertility and death.

I do not mean to imply that such preoccupations might be supposed to provide the basis for city planning, although we are certainly much occupied by fertility, and unless we plan more carefully we are in danger of killing our chances for living decently. What I am saying is that fertility-our great growthshould not be viewed as a death sentence for our great cities or their metropolitan fringes. Rather, in my view, this growth offers unparalleled opportunity to achieve a standard and scale of living no society has yet devised.

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Any description of the Astrodome must, of necessity, begin and end in superlatives. For this colossal \$31 million amphitheatre, rising like a rare jewel from the broad Texas plain seven miles south of Houston, boasts a long list of credits beginning with "first," "biggest," and "world's largest" which defy the imagination. Here are but a few:

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September 1965

Letters Cont'd from p. 24

Committee for Historical Preservation in the Tidewater Section of the Virginia Chapter AIA to work with us in the Norfolk Historical Society. We are looking forward to the help and advice they will be able to give us in our plans for local landmark preservation. These plans will be rather modest as we do not have many old buildings left. A recent resolution passed by the Historical Society concerns preservation of Freemason Street.

CALVERT WALKE TAZEWELL

President

Norfolk Historical Society

Norfolk, Va.

Another View from the Road

EDITOR:

Since Carl Feiss clearly enjoys lively debate, we would like to reply to his review of our book "The View from the Road" * in May.

Countless people including the reviewer have talked about the potentialities of the highway as art, but with little apparent effect. Isn't it time we settled down to the hard work of developing methods that highway designers can use? Mr. Feiss may balk at this, but he suggests no workable alternative.

In rebuttal we offer these points:

To scorn all highways in the country except two is about as useful as calling San Francisco our only beautiful city. The environment we live in demands more discrimination than that.

- To insist on the inseparability of phenomena is like refusing to see that a building is constructed of steel and concrete. Without understanding the units, how can we know what to synthesize?
- To imply that analysis means acceptance of the state of the world is a gross misreading of the text.
- To be fearful of our "dead" symbols is a strange attitude to find among professions that use plans, sections, land-use maps and language as part of their operations.
- Regarding the shape of the book, we made a hard choice between reader understanding and bookshelf comfort. Vertical reading still seems to us the best plan simulation of the highway experience.

- The covers do bend. The type, however, is 10 percent larger than that used in the JOURNAL.
- Our ideas about the design of highways, the substance of the book, Mr. Feiss chose to ignore.

 DONALD APPLEYARD

KEVIN LYNCH
JOHN MYER
Cambridge, Mass.

Hungarians Respond

EDITOR:

It was a welcome surprise to read about "Industrial Architecture in Hungary" in the May issue. While several years have passed since I left my native land, some of my memories are vivid enough to be granted comment.

Here in the United States, we are the leading steel producers of the earth; such favorable market conditions, however, do not exist for steel construction in many parts of the world. Hungary par excellence, due to the fragmentation of an earlier economic entity, is obliged to import steel ingots from abroad. To save gold, economic preference weighs in favor of industrialized concrete construction.

Somewhat similarly, climatic conditions and availability of electric power throughout Europe tend to recommend natural lighting, though not necessarily natural ventilation.

There should be little doubt left that the scale of construction activity in America differs by an order of magnitude from that in smaller European countries. Nonetheless, as in the case of the Danish building crane, smallness is no bar to ingenuity. I do agree, therefore, with Louis de Moll that international architectural seminars held in the U.S. would assist the American architect to discharge his professional responsibilities, which in our century rapidly transcend the peripheries of our globe.

DENIS GELLERT Consulting Engineer New York, N.Y.

EDITOR:

Being of Hungarian origin and now living in this country, I feel that I should reply to Mr. de Moll who explained that "lack of sufficient skilled labor is in part the cause of the poor workmanship seen throughout Hungary. I had always thought of European craftsmanship as being far superior to most of the rest of the world... not true in the eastern European countries."

What the writer thought of good craftsmanship in eastern Europe had been true throughout Hungary until the Communists took over in 1948. Shortly afterwards a wage policy was established which necessitated workers to fulfill such high norms for the minimum sustenance that it is virtually impossible for them to carry out even a reasonably good quality of work.

Furthermore, as one of the architects living in Hungary today describes the situation in the Free Europe Committee: News from Hungary, Vol. XI, No. 25: "Confusion, contradictory instructions. Imagine that you are given a mud ball and from it ordered to build an apartment house in three weeks' time working under such circumstances, with bad materials and labor. In the meantime, we cannot express our opinion openly, in fear of accusations that we are not assertive enough to master objective hardship." EVA CSOBOTH

Designer Laramie, Wyo.

That Architectural Wall

EDITOR:

After having spent 15 years in the practicing field of architecture, including nine as a principal of a firm, I started teaching in the Department of Architecture at California State Polytechnic College a year ago September. Therefore, I read Benjamin Thompson's article in the April Journal with great interest, and I must say that I most heartily agree with his ideas concerning future plans at Harvard.

I would like to point out to Mr. Thompson and to the heads of other architectural schools that our department here at Cal Poly, under the guidance of George J. Hasslein FAIA, has been for the past 15 years following the methods and teaching concepts outlined by the author.

It is very heartening to me to know that Harvard and probably other schools are now beginning to shatter (and I quote from Mr. Thompson's article) "the enormous wall between the architectural schools and the profession."

> JOHN S. STUART, AIA San Luis Obispo, Calif.

^{*}MIT Press (Joint Center for Urban Studies, MIT and Harvard University, and Rockefeller Foundation.

montgomery moves people!



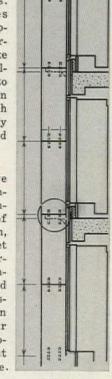
September 1965



In the National Geographic's new headquarters building, architect Edward Durell Stone employed Vermont Imperial Danby Marble throughout the interior and exterior.

To erect the vertical fins, horizontal shelf angles at each level support two marble courses. Matching holes drilled into the upper and lower portion of each fin take 34" hot-dipped galvanized dowels, to provide a hidden anchor, with each pair mated securely to those above and those below.

Should you have any questions concerning new or unusual methods of marble application, please be sure to let us know. The Vermont Marble Company is always glad to lend technical assistance and design counsel whenever possible. Write today for our latest technical literature.





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Octagon Observer Cont'd from p. 10 courthouse. The area was developed into large public open spaces, contrasting with small scale areas. Spaces for group activity as well as space for individual meditation were provided, utilizing native masonry materials and existing trees. Water was brought into play with its sounds and reflections; shelter constructed for passive activities.

"Public funds allocated by the County provided for the execution of art and sculpture. The square became a display place for historic items, skillfully related to the total scheme. Night lighting created an entirely different quality of experience—exciting, urban and playful. A parking structure was carefully introduced, providing car storage screened from the other functions of the open space.

"Using this new public open space as a base, private enterprise began to realize its economic as well as its esthetic values. Starting in 1959 with the courthouse, square and school district administration building, the surrounding area has virtually exploded with new and potential growth."

PEOPLE / Udall Names Architects

Joseph Watterson FAIA, former editor of the AIA JOURNAL, this month will assume his duties as a consultant on architecture and planning to the director of the National Park Service.

In making the appointment, Secretary of the Interior Stewart L. Udall said Watterson will work on various projects already initiated as a part of President Johnson's long-range program for improvement of the Capital City and the Potomac River Valley.

Secretary Udall also has named Nathaniel A. Owings FAIA to the Advisory Board on National Parks, Historic Sites, Buildings and Monuments for a six-year term. The San Francisco architect also is chairman of the President's Temporary Commission on Pennsylvania Avenue.

GRANTS / Brunner for Blessing

Charles A. Blessing FAIA, director of the City Planning Commission of Detroit, has received the \$6000 Arnold W. Brunner Scholarship grant, which he will use to develop

a book tentatively titled "Graphic Essays in the Search for Urban Form." In essence, it will present a study of the quality, character and spirit of great city building throughout the world during the past 6000 years.

Two Brunner grants-in-aid, each for \$2500, have gone to Dean Joseph Passonneau FAIA of Washington University, St. Louis, and Paul D. Spreiregen AIA, who heads the AIA's Urban Design Program. Dean Passonneau is making a study aimed at stimulating the past growth of cities as a basis for predicting future development. Spreiregen will compile the work of Elbert Peets, a distinguished American writer on the design of cities who, with Werner Hegemann wrote "Civic Art—The American Vitruvius."

NECROLOGY

ABBOTT, LEWIS B. Danvers, Mass. AHLSCHLAGER, WALTER W. Dallas, Tex. CHAMPNEY, GEORGE MATHER Bedford, Mass. CHASE, ROBERT S. Janesville, Wis. COFFIN, WILLIAM BALCH Duxbury, Mass. FETZER, JOHN, SR. Salt Lake City, Utah. FRY, WILLIAM ALVA Tulsa, Okla. GOULD, NATHANIEL O. Detroit, Mich. GRUSS, JACK Silver Spring, Md. HARRIS, NATHAN East Orange, N.J. HUTCHISON, JOHN GOODRICH

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