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of ultimate disposition should not be left to younger partners or bereaved spouses. The owner of such materials should ask himself, what will become of these documents when I am gone? Will my successors or heirs preserve them in the face of rising storage costs, or will they send everything to the dump? Am I adequately caring for them now, or might they better be in the hands of a qualified nonprofit research library?

I must take issue, however, with Dr. Krinsky’s suggestion that each architect “select up to five of his projects for preservation.” The danger in this recommendation has already been illustrated here in Philadelphia. Shortly after the article appeared, one of our most prominent architects notified me that he was selecting from his files five projects for preservation at The Athenaeum. The implication was that the rest of his archive covering a half century of work would be destroyed or left for an uncertain future. In his case, any of Philadelphia’s three architectural record repositories would doubtless accept his entire archive, no matter how large it might be.

I am forced to wonder how many architects will modestly assume that their files are unimportant and take the “five project” limit literally? While it would be valuable to know which projects an architect thinks are most representative of his career, I would maintain that these would not necessarily be the same five an architectural historian would select. Recently, The Athenaeum accepted a major collection of a deceased architect which contained a full set of drawings for an early 20th century gasoline station. The architect would probably not have selected this as one of his five projects, yet the drawings are of great historical interest. Such a limited selection eliminates the possibility of reconstructing the history of a firm and gives virtually no indication of developing maturity, influence of partners, clients’ changing taste, introduction of new materials, altered economic conditions and so on—all topics of interest to students of architecture.

Ideally, every document should be saved, regardless of how “significant” the building or design is believed to have been in terms of today’s aesthetic values. This is clearly impossible, but every architect, architectural historian or layman interested in architecture should pledge that no architectural drawing, office file, photograph or book from the office library will be destroyed until it has been offered to a professionally managed architectural repository with a trained staff and adequate facilities to store, care for and service the special needs of this type of document. This caveat should be engraved on every drawing case and file cabinet containing architectural documents.

It may be said that this is not practical in areas of the country where there is no active repository, especially in nonmetropolitan areas. But before any records are destroyed, the Committee for the Preservation of Architectural Records or one of the large repositories with a professional staff should be given an opportunity to suggest an appropriate institution. The Athenaeum, for example, accepts 19th century drawings from all parts of the country and regularly suggests repositories for materials not from the Middle Atlantic states produced after 1930. A library or historical society may not accept every item, but with the cooperation of the architect will usually accept more than five projects.

Roger W. Moss, Secretary and Librarian,
The Athenaeum,
Philadelphia

Architect of the Capitol: There are some oversights in the news article “Architect of the Capitol Issues First Annual Report in 47 Years” in the April issue (p. 31).

The article says that “the first architect of the Capitol was appointed in 1793. But it wasn’t until 1971, when White was appointed, that an architect served in that position.” The founding fathers of the Institute of Architects must be rotating in their graves! AIA’s first vice president (1857-1864) and second president (1876-1886), Thomas Ustick Walter, was also the fourth architect of the Capitol, serving from 1851-1865.

Although there was no AIA in the early 19th century, and no licensing of professions, the title of architect is usually conferred on the second architect of the Capitol, Benjamin Latrobe (1803-1817) and the third, Charles Bulfinch (1818-1829). Of course, the first architect of the Capitol, Dr. William Thornton, winner of the competition in 1793 for the Capitol’s design, was a physician by vocation, but like his good friend, Thomas Jefferson, was a talented and cultivated gentleman in many other fields, obviously including architecture. The ninth and incumbent architect of the Capitol, George M. White, FAIA, likes to include Dr. Thornton among the four architects who were members of the profession.

Incidentally, the last published annual report of the architect of the Capitol was for fiscal year 1947 (in the interim, the reports were collected but not published), so the fiscal year 1976 report described in the JOURNAL is the first published in 29 years, not 47 years. It covers a period of 15 months, not 14 as stated, because that was the year that the government changed the beginning of its fiscal years from July 1 to October 1. How’s that for trivia lovers?

Elliott Carroll, FAIA
Executive Assistant
Architect of the Capitol
Washington, D.C.
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"Steel gave us the design flexibility needed to sensitively match the new with the old, and do it at a cost that this subsidized housing development could afford."

The owners of this 151-unit housing project wanted a building that would be economical and functional, yet be sensitively designed for its elderly inhabitants. The 155,000-psf structure also had to satisfy HUD requirements. The prominent Boston historic site demanded that the new building be compatible with the neighboring buildings and Waterfront Park.

Steel offers lowest overall cost

"Structural steel was chosen for this project based on economics," explains Eugene W. Hamilton, P.E., Engineers Design Group, Inc. "Several structural alternates were compared, including a cast-in-place concrete frame and precast concrete floor units on masonry bearing walls. When factors such as foundation costs, parking requirements, and speed of construction were considered, structural steel was found to be the most economical choice."

Two-way steel frame

The structure consists of steel open-web joist supported floors and a structural steel frame. Lateral forces in the longitudinal direction are taken totally by the exterior wall frames. Full moment connections are required in this portion of the design. Lateral forces are taken into partial moment connections at the exterior columns and full moment connections at the interior columns of the transverse frames. Partial moment connections are adequate because of the multiplicity of transverse bents.

The fire-resistive floor system consists of 28-gage steel centering supported on H series steel open-web joists, spaced at 2 ft on center, topped with 3 in. (total thickness) of reinforced concrete. A gypsum wallboard ceiling is attached directly to the joists to complete the fire-resistive assembly.
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The exterior treatment of the new housing unit is designed to be compatible with the older buildings in the historic district.

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PPG: a Concern for the Future...
early last month, AIA's national design conference and Celebration of Architecture event—"Open House: Chicago Architecture"—began with a reminder that "experience architecture is the best way to understand it." The conference ended with a reminder that "we are surrounded by our lasting values. We are our lasting values. . . . We need to continue this process of discussion. . . ." Sandwiched in between had been two days of talking and touring, two days that produced no single statement or viewpoint of architecture other past, present or future, but two days that proved without doubt that simply being in a city as important to the development of American architecture as Chicago can be as important as anything that can be said about a city's buildings. This conference was a new approach to the design committee, which in October 1977 revived the idea of conferences with a much praised meeting in Washington, D.C. That meeting examined in broad strokes the current trends in design (see Jan. '78, p. 49). The Chicago conference sought instead to discuss the principles of design, using one city as a laboratory to illustrate the points. "Focusing through the lens of a city," said Robert L. Geddes, FAIA, introductory speaker, "is a very personal way of knowing what we're about." Although the city that hosts such a conference is bound to have an effect on focus and viewpoints, the approach, as the design committee hopes, can be applied anywhere: Four introductory lectures relating to Chicago (but not limited to the city) were followed by an afternoon and morning of tours and a closing session of four more lectures and a panel discussion.

The intellectual substance of the Chicago conference was in the lectures, the tours producing little discussion or reflection. Most of the 150 architects at the conference were from out of town, and for many the trip had the aura of a pilgrimage. Some of them had never been to Chicago before, and the architects played the tourist role to the hilt. On one tour, they clustered like paparazzi trying to get the best angle to photograph an ornament salvaged from Wright's Midway Gardens, now installed in the garden of Richardson's Glessner house. On another, they climbed to the top of Adler and Sullivan's auditorium and perched giddily in the gallery's last row (above).

Although much of the emphasis clearly was on being in Chicago, the architects had come to listen and talk as well as to look. Several speakers mentioned the pragmatic history of Chicago's architecture, but despite the fact that the structural and esthetic innovations born in the city were the result largely of architects who often did not stop to theorize but were swept up in the need to rebuild quickly after the great fire, it seemed important that the visiting architects met in such a "pragmatic" city to talk about ideas.

The stated purpose of the conference was to discuss design principles, not simply architectural history. So, beginning with an outline by Geddes of the "essential tension" between historicism and modernism and the underlying attitudes of each toward design (historicism as an attempt to create once again a style of the past, eclecticism as selecting freely from the past to create a new synthesis, modernism as an attempt to create a language of architecture addressed to current issues), the speakers presented what turned out to be personal reflections on the periods of history assigned them or on principles illustrated by those periods.

The Institute continued on page 15
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If Chicago is a "city of new programs," the technology is presented "uncelebrated," as it is in many modern buildings, not architecture at all. Architect Bertrand Goldberg, FAIA, provided the conference's only serious discussion of the International Style—not in praise nor condemnation, but questioning whether or not it was really a part of the modern movement. The question, he said, "is whether Henry-Russell Hitchcock and Philip Johnson (in their 1932 book The International Style) created a movement or whether they interrupted a movement that had begun 100 years before." Goldberg's position was that the International Style was an interruption. "We all agree that there was a very strong modern architecture of depth and purpose that preceded the International Style," he said, but in the creation of a rule book, Hitchcock and Johnson codified certain expressions into an art form, causing a stoppage in the creative development of architecture.

Diana I. Agrest of the Institute of Architecture and Urban Studies in New York City presented perhaps the most abstract and theoretical discussion of the meeting. To her, the important need is for reflection, for theory and criticism and for bringing theory and practice closer together. How that can be done is difficult. One problem of architecture is in its fixation on the individual building. Conversely, the city, with its context, history and institutions, serves to tie these individual expressions together. Here, the forces of intellectual development and of pragmatism come together to bridge their differences. As she explained later in a discussion period, "There is a lot of work in theory and criticism that brings back the concern for the city...because cities carry the institutions and symbols and all of culture. So I could see the architect being an interpreter" of the cities.

The next day, the architects returned for a different kind of meeting: lectures aimed more specifically at current and future affairs of architecture and a panel discussion aimed at pulling the entire two-day session together.

Architect George Baird of Toronto traced an undermining of modernism's principles through the 1950s and '60s as he showed a slide of the Piazza d'Italia in New Orleans. This "isn't something from the generation of Charles Moore, but it is something that has gone on within the architectural establishment," he said. Buildings like Kevin Roche's Knights of Columbus tower in New Haven, he said, "place us far from modernism... It is something that has nothing to do with current taste, but sets us up for it." But the greatest change, he said, is the re-emergence of "type," not just as it defines a building's function, but as it orders a structure according to front and back, served and servant spaces and the like. "You have to have a type to refine it," he said.

Indeed, the idea of refining work and moving forward in the development of architecture through that process was central to much of the discussion of the final day. Jacques Brownson, director of Colorado's state building division, and former practicing architect in Chicago, defined two major forces: science (which he defined not as technology, but the "spirit of inquiry prodding those minds who believe that knowledge is infinite") and economy (defined not as cheapness, but an efficient and concise use of resources). He urged architects to keep these ideals while remembering that "building is a natural activity not to be forced—not to be pretentious. Only what is needed. Materials and tools and construction methods change, but the principles remain."

Gerald Horn, AIA, of the Chicago firm of Holabird & Root discussed his firm's own work as a way to illustrate continuity and growth in architectural design. And Harry Weese, FAIA, of Chicago, in a rambling, off-the-cuff series of remarks, expressed pleasure that "the great power struggle of modernism is over... Now we have the opportunity to use anything we want as long as it makes sense." Like Brownson, he stated that "energy and economy of means" will be constant influences on the development of architecture.
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Three violinists serenaded the architects and office workers who came down to the ground floor entrance court to see what the fuss was all about. The musicians broke into "Chicago" when Mayor Jane Byrne arrived. AIA President Ehrman B. Mitchell Jr., FAIA, presented celebration proclamations to the mayor in recognition of her city's contributions to the development of architecture and to Louis Sudler Jr. for his efforts in preserving the Rookery.

Mayor Byrne drew an enthusiastic round of applause from the crowd when a group from the Chicago Chapter/AIA, dressed as their architectural ancestors Holabird, Burnham, Root, Sullivan and Wright, spoofed the development of Chicago architecture, when "Frank Lloyd Wright" declared, "They tell me there are women architects now. And even women mayors." But there was a message in the skits for the out-of-town architects. Many of the architects responsible for developing the Chicago school were from other parts of the country, too, and each had a different idea of the forces behind the development of his work. Sullivan: "Poetry." Wright: "The Prairie." Burnham: "One hell of a fire and a lot of work." Said John A. Holabird Jr., FAIA, as his architect grandfather, "I think what we're trying to tell AIA is that the Chicago school was all America."

That spoke to the essential fact of the conference: that architects from all over were drawn by a single city to look at buildings and to talk about design—and that they would be taking their experiences back home with them. And that at its most meaningful level the 1979 Celebration of Architecture will be more than just proclamations and skits but, instead, experiencing architecture and thinking about architecture in order to make better architecture in the future. Ernest Wood, editor of "North Carolina Architect"

Music and awards at the Rookery building (1886) by Burnham & Root.

A Report on the Future of AIA
And the Profession

The eagle (above) poses in noble haute couture before the Ionic capital known so well to AIA members. He turns his head to the other side, flaps his wings and then takes flight. Takes flight into the future, one presumes, for the sketches are from the recently issued "1979 Long-Range Planning Report" of AIA's long-range planning committee, which early on quotes F. L. Polak: "Thinking about the future is not only the mightiest lever of progress but also the condition of survival." The report "thinks" about the future of the practice of architecture, education of the profession and the public, the government and the economy and AIA's effectiveness.

In 1977, AIA's board of directors resolved that a continuing committee be appointed "to develop a three-year master plan describing the Institute's long-range policies, programs and services." The 1979 committee, chaired by Charles E. Schwing, FAIA, the Institute's president-elect, says in the report's preamble that the planning process "had no guidelines to follow when it began in 1978" and that the process "had to build from the ground up." The 1979 committee's first action was to study the 1978 report closely, "with an eye toward learning as well as revision, refinement and updating." The committee says that it has set no priorities on its recommendations since that is the prerogative of the board.

In the first section of the report on the practice of architecture, the committee reaffirms its belief that the "traditional breadth of the field of architecture as the art and science that bridges both humanistic and scientific values to develop facilities that will enhance the life style of all society is expected to become more visible in future practice."

Among its several recommendations this section are that:
- AIA strive to increase public awareness of the architect's role in society through awards programs, public presentations, conferences and publications.
- A strong emphasis within the profession be placed upon design.
- An evaluation be made of current programs and publications for the development of an overall plan for future practice aids. It is pointed out that joint venture practices, for example, "will significantly expand in the five-year future as a mean continued on page
The GE Silicone Seal. The difference between stopless flush glazing and glazing with stops.

Now it's possible to flush glaze windows without mechanical stops or fasteners and, at the same time, meet extreme wind load and water penetration standards. All you need is General Electric Silicone Construction Sealant 1200.

That's because high-modulus silicone sealant, and only silicone, has the strength and resiliency to keep its bond to glass and aluminum without mechanical aids. And GE silicone forms an unobtrusive, weathertight seal that holds even after years of joint movement, temperature extremes, wind, rain, ozone and UV.

That's why GE silicone sealant is used in tough structural glazing jobs, like Ernest W. Hahn, Inc.'s executive offices (above left) near Los Angeles. GE silicone 1200 was the only sealant able to pass rigorous performance tests, exceeding all wind load and dynamic water penetration requirements established for this installation.

For more information, write: Section 448, Silicone Products Dept., General Electric Co., Waterford, NY 12188.
Announcing the downfall of the built-up roof.

Coreroof.

In a current survey of 1,000 bonded, built-up roofs, one-third were in trouble within a year or so after completion. Today there is a better answer. Coreroof.

Coreroof is a new, complete, one-step roof system that does everything the built-up roof does. Except give you trouble.

A factory-finished insulated panel $2\frac{1}{2}$ inches thick, Coreroof is so lightweight (only 2$\frac{1}{2}$ pounds per square foot), that primary and secondary structural can be lighter.

Yet Coreroof gives you insulation so effective that it exceeds the ASHRAE 90-75 energy code (already adopted in 45 states).

Lowers your overhead.

Coreroof has a calculated "U" value of .050, which is just about the lowest available today. Thanks to just $2\frac{1}{2}$ of urethane foam bonded between exterior and interior steel facings.

And the exterior facing of aluminum coated or aluminum-zinc coated steel is so effective in resisting corrosion that we provide an extended warranty. In addition, its bright surface reflects 85% of the solar heat. Inside, the galvanized steel facing is factory-painted to provide a highly reflective (65%) ceiling.

We beat the system.

The built-up roof system has been one of the most complex field-assembled sub systems of a building. Thus it presents a long list of exacting requirements to succeed.

Requirements that are often difficult, if not impossible, to meet under jobsite conditions.

Manufactured under controlled conditions, field-assembled Coreroof is vastly simpler. Yet results are vastly superior.

With building inflation and rising energy costs, Coreroof is the roof whose time has come.

Whether you're building or replacing, find out more. Write, or send the coupon for complete information.
The Institute from page 18

dealing with 'expanding' and 'multi-
ciplinary' services' and that tools to
the practitioner and to keep him in-
formed regarding sound business princi-
ples and new techniques have appeared
refore in a "piecemeal fashion,"
out the benefit of an overall plan.
AIA monitor and evaluate the various
areas of technology related to architec-
ture practice and continue "to study
methods of improving the architect's per-
formance in providing project cost and
control, two of the major deficiencies
traditional project delivery systems."
AIA study the economic condition of
profession, including salaries of em-
pee, compensation of principals and
ns, business techniques and those firms
ich use AIA's management system,
formation being current and made
ilable to the membership, providing a
is for action where appropriate.
AIA build "within its ranks a
ousness and acceptance of account-
liity to the public for our architecture,
ign quality and performance in all
as of practice in our profession." Fur-
er, AIA should take the initiative in
king its ethical code known to the
rs of architectural services.
AIA develop "effective measures to
the client and the public regard-
the realistic role of the architect and
limitations of the profession" in view
increased liability. If architecture be-
"legally indistinguishable from the duc of any trade or business,
the "will be held increasingly liable
results rather than the perform-
within the 'traditional standard of
e" and will "increasingly bear the
nt of consumer protection laws in such
as warranties, disclosures, plain
lish contracts, truth-in-lending, em-
ment practices and code compliance,
urther recommended that AIA "join
es" with other professional groups "to
om solutions and increased
icipation in the legislation process."
In the section of the report on the edu-
ion of the professional and the public,
mittee points out that AIA's com-
ent to education "goes beyond the
ds of the profession." The committee
ommends that priority continue to be
en to environmental education and
ultural appreciation programs for
school and school children; that AIA's
ponent affairs department assume the
ossibility for becoming a clearing-
use about successful programs by AIA
pters in the architectural education of
adult nonprofessional; that AIA "en-
se its ability to actively support the
ese in the number of women and
orities in the architectural profession
ugh expanded or more effective public
ation, college student information
and scholarship programs.

The committee says that the training of
an architect is not the sole responsibility
and obligation of architectural schools.
In recognition of the importance of the archi-
tecture office and its role in the training of
compotent architects, AIA joined with
the National Council of Architectural Reg-
istration Boards in the establishment of
the intern-architect development program.
The committee reports that "questions
have been raised" about the program's
effectiveness and recommends that prior-
to the adoption of a policy that would
mit further resources and acceptance
of responsibility that the program's effec-
tiveness and cost be determined and that
the relationship of the intern and school
be studied, "as well as the long-term
implications of this relationship."

The committee reports that it has "no
preconceptions" regarding a first-rate
continuing education program but that it
is concerned that such a program "be
effective and provide the greatest benefit
to the membership and ultimately to the
public served by the profession." There-
fore, the committee recommends that
AIA "继续 support actively a con-
tinuing education program that is respon-
sive to the needs of the membership" and
that such a program include opportuni-
ties to respond to a changing marketplace.
It recommends that the board appoint a
task force to evaluate the current contin-
uing education program "in terms of its
effectiveness in terms of its cost, development
and delivery."

Turning to concerns outside the profes-
sion that greatly affect architecture, the
committee discusses government and the
economy. Pointing to the fact that archi-
tecture is a profession "where the practi-
tioner and employees are largely compens-
ated on an incentive basis," the commit-
te asks how the architect can protect
himself "against voluntary and possibly
mandatory wage determinations that do
not account for productivity and incen-
tive compensation." It recommends that
AIA collect compensation data "that
would permit quantification of the incen-
tive participation in business by employ-
ers and employees."

In the important matter of energy con-
ervation, the committee recommends
that AIA "expand significantly the flow of
information to the public and the profes-
sion concerning the opportunities for
significant energy savings not only in new
construction but existing buildings
through conservation and related passive
solar techniques."

Looking to the future, the committee
predicts demographic changes in the
population and economic trends, saying
that inflation "will continue to be a prob-
lem because achieving both a significant
reduction in the budget deficit and an
increase in the money supply will be
politically difficult" and that in the next
year or two there will be a downturn in
the volume of architecture provided. It
suggests that economic downturns "are a
fact of life." With regard to economic
conditions, the committee says AIA
should have "on-going strategy" to
provide the membership with "viable pro-
grams . . . irrespective of economic con-
ditions." It recommends that AIA pre-
pare for the downturns "by studying in
advance what types of specialized Insti-
tute assistance can be provided the prac-
ticing architect."

Architects need to "speak with one
voice" to a variety of audiences. How can
AIA respond to issues in ways that lead
to coherent, concerted action of benefit
to both profession and the public, the
committee asks. In its final section, the report
calls for development of a workable
means for promptly evaluating the effec-
tiveness of AIA's programs and services
for membership recruitment and retention.

Five Communities to Receive
AIA Urban Design Citations

Five communities have been selected by
AIA to receive special citations for com-
community development at the Institute's con-
vention this month. Nominated by the
urban planning and design committee, the
communities "illustrate the proper rela-
tionship between the architect and the
public and private sectors," the committee
said, offering "models for other commu-
nities to follow."

Citations go to:
• Boston, "for involving citizens and pro-
fessionals . . . in a continuous planning
process to develop the environmental,
social and land use impacts of transporta-
tion corridors and their nodes."
• Birmingham, Ala., "for its restatement
of the basic privileges of a free society by
making itself accountable to its citizens on
a neighborhood by neighborhood
basis . . . ."
• Charleston, S.C., "for its daring and
constraint as it evolves its unique process
of economic development in order to con-
serve and re-energize its distinctive his-
toric and regional urban setting."
• Baltimore, "for its comprehensive city-
wide policies for reconstruction within
which it recognizes its historic neighbor-
hoods as the thresholds between its heri-
tage and its future at human and com-
mmunity scales."
• Cincinnati, "for its pioneer departmen-
t of urban development in which the design
professions act so effectively as the cata-
ysts and entrepreneurs of public and
private investment in urban and neighbo-
hood revitalization."

News continued on page 25
AIA JOURNAL/JUNE 1979 21
Milliken creates Prestigious Patterns...
with the enduring elegance of Anso® nylon

Anbul® from Milliken’s Custom Designer Collection™; drawn from an original 19th century knotted carpet design. The elegance of the design reproduced for today and tomorrow with design precision via Millitron®, the world’s most advanced color application system. But elegance is only one of the many options open to you when you design from the twenty-two soil and static protected patterns available in Anso Nylon. Whether your needs are traditional, temporary, or modern you’ll find what you need and love what you find in the Custom Design Collection.

Milliken gears every handsome design for unparalleled performance, using Anso Nylon to lend in that performance right from the start. Anso nylon withstands the steady onslaught of untreated, careless feet. Auto-clave heat setting ensures superior appearance retention and “bounce-back” after repeated foot traffic. Anso nylon accepts dyes more readily, making it the ideal fiber for patterned carpet, then Anso Nylon’s “Designed-In” soil hiding qualities of patterned carpet to make certain the colors stay bright between cleanings. Cut pile carpet absorbs sound as conventional level-loop never will, adding luxury to the commercial installation. Milliken technology and tough durable Anso Nylon assure years of trouble free life in high traffic installations.

The real beauty is that all commercial carpets made with Anso Nylon are engineered for superior performance.

- Anso “reduced soiling” fibers for outstanding appearance retention.
- Rigorous performance tests, including a 100,000 tread floor test for every cut-pile style.
- The strongest wear guarantee in the industry; free replacement if any portion of the carpet wears more than 10% in five years. That’s the Allied Chemical Guarantee™ . . . the guarantee with teeth.

Is it any wonder that Anso is Milliken’s first choice for patterned carpet. For more reasons why it should be your choice — see the whole collection . . . write for free specifiers guide to: Allied Chemical Corporation, Fibers Division, 1411 Broadway, New York 10018 (212) 391-5079 — Ask for a Commercial Carpet Specialist.

ANSO means enduring elegance for MILLIKEN

Circle 13 on information card
Owens-Corning sound dividers. Designed so your design gets noticed. Not ours.

We don't expect people at work to appreciate the classic lines of our sound divider system. They may not notice the handsome fabric covering. Or how beautifully the dividers fit together. They may never see the electrical raceway hidden in the base or the shelf-hanging capability. And they can't possibly know that their privacy comes from our special sound-absorbent Fiberglas® core inside each panel.

What they will notice is what really matters: the total landscape you've created.

For a free sound divider catalog, color selector, and booklet, “Speech Privacy in the Open Office,” write D. F. Meeks, Owens-Corning Fiberglas Corporation, Fiberglas Tower, Toledo, Ohio 43659.

*T.M. Reg. O.-C.F. © O.-C.F. Corp. 1978
The Sainsbury Centre for the Visual Arts, a massive structure of aluminum, was completed in December 1979. The building was designed by the London firm Foster Associates and is the winner of the 1979 R. S. Reynolds Prize, which is awarded for the highest achievement in concept, design, construction and use of natural stone. The award is given every two years to a practicing U.S. or Canadian architect whose work demonstrates "the qualities of craftsmanship, inside and out." The award was first given in 1951 and is sponsored by the International Union of Bricklayers & Allied Craftsmen.

The award winners were selected by a three-man jury: John Morris Dixon, FAIA, editor of Progressive Architecture; M. Paul Friedberg, landscape architect and planner, New York City; and Hamilton Smith, FAIA, Garden City, N.Y. The jury said that the East Building by Pei "recalls the classical approach to stone's use, emphasizing sculpture, curves and ornamentation." The Folger Shakespeare Library, dedicated on April 23, 1932, was praised for the architect's "departure from the classical toward the modern." The stonework, the jury said, "is as magnificent today as it was then, almost 50 years ago."

The Scaife Gallery was commended for the "richness and sensuously beautiful" characteristics of natural stone, while the Mecklenberg County Courthouse was praised for its "elegance and high-quality craftsmanship, inside and out."

Barnes Given Louis Sullivan Award by Brick Industry

Edward Larrabee Barnes, FAIA, whose architectural practice is headquartered in New York City, has been selected as the 1979 winner of the Louis Sullivan award for architecture sponsored by the International Union of Bricklayers & Allied Craftsmen. The award is given every two years to a practicing U.S. or Canadian architect whose work is deemed to best exemplify the ideals and achievements of the late Louis Sullivan, the father of modern American architecture.

This year's jury was chaired by Lewis Davis, FAIA, Other members were John H. Burgee, FAIA; Donald Singer, AIA; Arthur Erickson, Hon. FAIA; Alton Parker, associate AIA member, and Jonathan Foster, student at Harvard University. The awards program is administered by AIA.

The jury said that Barnes' buildings over the years "have been uniformly sensitive to their surroundings, restrained in their use of materials, thoughtful and clear." The award, based on the submission of at least three projects, "recognizes design excellence over a long period of time" and is not based on the design of a single building or complex. Previous winners have been Ulrich Franzen, FAIA; Hartman-Cox; Philip Johnson, FAIA; and Davis, Brody & Associates. Barnes will receive the award and the accompanying $5,000 prize at the International Union's general board meeting in San Diego in September.

The first Pritzker architecture prize has been awarded to Philip Johnson, FAIA, by the Hyatt Foundation (Jay A. Pritzker, president). The award consists of a cast of Henry Moore's "Architectural Award" sculpture and $100,000. A Pritzker prize will be awarded annually to an architect or firm whose work demonstrates "the qualities of talent, vision and commitment."

Jurors were Kenneth Clark, J. Carter Brown, Cesar Pelli, AIA, J. Irwin Miller, Arata Isozaki. Johnson commented, "I know exactly why I got it. It's very simple. I'm very old."

Awards continued on page 29
We've got a new name for insulation.

Knauf.

Knauf Fiber Glass. It's a new name for the products you know.

Products like fiber glass air duct systems. Like insulation board for industrial use. Snap around pipe insulation. Duct wraps. Duct liners. And insulation blankets for metal buildings and original equipment manufacturing applications.

Knauf is a new name for insulation. But its products have already earned their good reputation.

The premium quality continues. So does the research and development for better modes of fiber glass insulation.

Our future depends on product and service. Without a commitment to both, we wouldn't have put our family name on the door.
THE DETAILS BEHIND THE DETAILS.
A SERIES FROM ACME BRICK.

These structural details are made possible by Acme’s Engineered Brick Design. A technology which has opened bold, new solutions in today’s architecture. Solutions which were unthinkable only a few years ago.

The real beauty of Engineered Brick Design is in how it provides maximum function and design with minimum cost. Walls are not only structural, but are also energy-conserving, fire resistive, sound attenuating, and finished both interior and exterior with no “hidden” costs.

All this, with little or no maintenance. And at an initial construction price which, according to a 1979 analysis by the American Appraisal Company, is dramatically more cost efficient than comparable steel or concrete systems.

Whether you consider cost, flexibility, or beauty, no other system can match the total performance of Acme Brick and Engineered Brick Design. It’s the best all-around choice for your next building commission.

For more details, call collect, 817/332-4101, ext. 36 Or write Acme Brick Technical Services, P. O. Box 425, Fort Worth, Texas 76107.

ACME BRICK, THE BEST ALL-AROUND BUILDING MATERIAL

- Brick Rowlock Course
- Steel Reinforcing Rods
- Steel Bracing
- Brick Panel (High Bond Mortar)
- Concrete (Poured in Place)
- Brick Form (Laid in Place)

Hung soffit panels constructed of Acme Brick and bond mortar produce deep, shadowed recesses below the parapet.

- Vertical Steel Reinforcing Rods
- Horizontal Steel Ties
- Concrete Beam (Poured in Place)

Acme Brick laid in place is the concrete column form and becomes a part of the structural section.

- Stacked Rowlock Sill
- Brick (Laid in Place)
- Concrete Beam (Poured in Place)
- Special Brick Shape
- Brick Soffit (Laid in Form)
- Brick Column

Concrete forms are lined with Acme Brick separated by foam spacers. After concrete beams are poured, face joints are then pointed.

Circle 16 on information card

Architect-Engineer: Geren Associates, Architects Engineers Planners, Fort Worth, Texas
General Contractor: Thomas S. Byrne Inc., Fort Worth, Texas
Masonry Contractor: Dee Brown Masonry, Dallas, Texas
Genius Docking Scheme

The American Consulting Engineers Council has awarded its first prize for engineering excellence in 1979 to URS/Adigan-Praeger of New York City for the firm’s design of an intricate docking system for a massive $300 million paper mill/power plant. The mill and plant were constructed in Japan and towed to a remote jungle in Brazil.

Drydocking was considered prohibitively expensive, so the engineers dredged a basin formed by dikes around a timber pile support system. They floated the barges into the flooded basin, then emptied the basin and left the mill and plant resting on the piles.

According to ACEC, the docking design permitted the project to be completed two years early and at a cost of $6 million less than would have occurred under the next most economical approach. ACEC also gave 14 other honor awards to consulting engineering firms for an array of projects, ranging from a plan to convert sewage sludge and refuse into steam to the design of a restored 1841 aqueduct.

Design Professions Protest Plan For Federal Profit Guidelines

An economic research organization’s suggestion that the federal government establish profit guidelines for professional service contracts based on a percentage of cost has brought protest from architects and engineers.

Researchers for Logistics Management Institute (LMI) were hired by the Office of Federal Procurement Policy (OFPP) to develop a uniform federal policy on professional service contracts based on a percentage of cost. A profit formula based on cost was suggested, with the profit range from 5.7 to 9.7 percent, which the median, for professional services. A range of 14.1 to 20.7 percent with a 16.6 percent median was commended for construction and manufacturing companies, based on both cost and capital investment.

COFPAES (Committee on Federal Procurement and Engineering Services), in response to the LMI report, said that “there is no evidence of widespread ’excessive’ profits to A/E firms on government work. On the contrary, several studies indicate a long-term trend of declining profit of A/E firms...”

COFPAES argues that the proposed policy would not encourage the design of cost-effective government facilities; does not consider the impact of related procurement policies on the actual profits of A/E firms; will not provide a competitive return on capital employed by consulting engineers and architects; does not consider the assumption of risk by A/E firms, and that the data used by LMI include a combination of government and commercial work and therefore do not represent commercial equivalent rates of return.

Two alternatives were suggested by COFPAES. One would exempt A/E firms and other professional service firms from strict application of quantitative guidelines. The second would be to develop a comprehensive profit policy for A/E services that meets all the criteria set forth in the LMI study.

An analysis of the LMI study by Deloitte Haskins & Sells (for COFPAES) points out that A/E firms in the 25-75 percentile range achieve from 3.8 to 14 percent return on cost. “It is difficult,” said the analysis, “to believe that a firm earning a 14 percent return on costs would actively seek the opportunity to achieve a 7.2 percent return from the government.” In addition, the analysis suggests that the LMI study was inaccurate as to the true nature of profits and that under LMI’s guidelines profits would not be 7.3 but 2.7 percent.

It does not seem likely that OFPP will make any definite decision on profit margins this year. Lester A. Fettig resigned as administrator of OFPP in April, and no replacement has been chosen at this writing. Also, under President Ford’s “sunset laws” the authority of the five-year-old OFPP expires Sept. 30. A bill to extend its authority for three years has been introduced by Rep. Jack Brooks, (D-Tex.), but it would sharply limit the agency’s authority. The bill would also require OFPP to submit to Congress within one year a proposal for uniform set of procurement policies. In addition, Sen. Lawton Chiles (D-Fla.), introduced a bill that would simply extend OFPP for five years. Nora Richter

Competition Proposed to Develop Alternative Plan for Les Halles

The French Syndicat de l’Architecture is seeking international support in a competition for the urban renewal of the Halles quarter in Paris. The move is in reaction to a proposal for the site by Mayor Jacques Chirac, a plan the syndicate calls “scandalous.” According to the syndicate, the technical decisions are “vague and incoherent,” the economic decisions are based on a “shallow theory of quick profit,” architecture has been “banished” and the Parisian spirit of democracy has been “eliminated.”

The aim of the competition is fourfold: to re-establish the role of architecture in the building of a public space; to provide a “realistic appraisal” of an urban center; to give consideration to the symbolic importance of the site (represented by the white space in the map below), and to...
Back to nature with Franciscan New Naturals.

Inspired by Nature, four new colors have been added to the Franciscan Terra Grande palette. The "new naturals" have been designed to work equally well with each other as well as individually. Popcorn, a clean, clear white and Vanilla, a warm creamy white are subtly neutral. Mesa is a rich, red clay color and Chocolate is a deep warm brown.

The "new naturals" available in both 3" x 6" and 6" x 6" work beautifully with other natural materials such as wood, stone and woven fibers. They also coordinate with the newest kitchen appliances and bathroom fixture colors. The naturals are suitable for floor as well as counters and vertical surfaces.

The new naturals... a natural choice for today's living and years to come.

For further information see Sweet's Architectural or Interior Design Files or contact Franciscan Tile, 2901 Los Feliz Blvd., Los Angeles, California 90039.

Circle 17 on information card
"My clients ask a lot of the flooring I specify. That's why I ask for Azrock."

"I'm always looking for ways to help my clients keep costs down. I count on Azrock Thru-Onyx to let me design more floor for the dollar."

Azrock Thru-Onyx easily outperforms carpet and other types of resilient flooring in heavy traffic areas. The pattern won't "walk off," because it's distributed through the full tile thickness. Thru-Onyx is a non-asbestos tile that meets or exceeds all performance requirements for vinyl asbestos tile without using asbestos. Colors are cleaner and brighter, and the dense, non-porous composition makes a Thru-Onyx floor easy and economical to maintain.

Specify the low-cost floor with beauty that lasts. Ask for Azrock Thru-Onyx.

The name to ask for in resilient floors.

Circle 18 on information card
The conceptual competition will require of the entrants a general plan; an axonometric or/and a perspective view; longitudinal and transverse sections, and text to explain the architectural and urban choices. The competition is open to all architects and architectural students worldwide.

The registration fee is $60 for practicing architects and $30 for students. First prize will be approximately $11,500, with honorable mentions receiving about $2,300 each.

The closing date for registration is July 31; the final date to send projects is Oct. 17. The jury will meet on Nov. 12-15, with announcement of results made on Nov. 15.

According to the proposal, the following have agreed to serve on the jury:
- Roland Barthes, Francois Barré, Henri Laborit, Henri Lefebvre, Philip Johnson, FAIA, James Stirling, Giancarlo de Carlo, Diana Agrest, Bruno Zevi, Marc Emery, Haig Beck and Tomas Maldonado. Other jury members will be selected among local residents and members of the syndicate.

The proposal states that many architects from several countries have expressed their support or desire to participate in the competition. Architects from this country listed are Peter Eisenman, AIA; Philip Johnson, FAIA; Cesar Pelli, AIA; Stanley Tigerman, FAIA, and Robert Venturi, FAIA.

For further information, write or call Association pour l'Organisation de la Consultation Internationale pour l'Aménagement du Quartier des Halles 50, rue de l'Arbre Sec-75001 Paris, France; 260-26-94.

National Trust Announces Historic Preservation Awards

The National Trust for Historic Preservation honored the 1979 winners of awards for achievements in the field of historic preservation in early May during ceremonies marking national historic preservation week.

The following received the David E. Finley award for "outstanding achievement" in the preservation, restoration and interpretation of sites, buildings, district and objects of state or regional historic or cultural significance:
- Christopher "Kit" S. Bond of Kansas City, Mo., a former Missouri governor (1973-77) who led efforts to preserve the 1892 Wainwright Building, the first steel-framed skyscraper designed by Dankmar Adler and Louis Sullivan.
- The Camden District Heritage Foundation and Historic Camden, S.C., for developing a total preservation program in volving more than 60 privately owned houses and a Revolutionary War park and museum.
- Lloyd Thomas Smith, president of S/Tool Co., Newton, Kan., for the restoration of the 1879 Monarch Steam Mills to house his company's corporate offices, as well as dental offices, legal and other firms. This project sparked the rejuvenation of adjoining commercial areas.
- The Viscayans, Miami, for the "exemplary restoration" as a house museum of the James Deering estate (Vizcaya) and its surrounding extensive formal gardens.

For outstanding achievement in the preservation, restoration and interpretation of sites, buildings, districts and objects of historical or cultural significance by an individual or organization not necessarily professionally engaged in the field of preservation, the Gordon Gray award was given to:
- The Colonial Dames of America, Chapter Three, and the National Park Service, both of Washington, D.C., for restoration of the Abner Cloud house, a great room shape the whole edifice. Why shape? Well, the answer lay in the material. Concrete was cheap. Why not make the forms so concrete could be cast as separate blocks and masses, these groups about an interior space? Inside, the center ceiling between the four great posts became skylight, daylight sitting through between the interesting concrete beams, filtering through amber glass ceiling light.

Contributions to the Unity Temple Restoration Foundation are tax-deductible, and membership in the foundation may be gained by making a contribution of $25 or more. For more information, write the foundation at P.O. Box 785, Oak Park, Ill. 60303.

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For outstanding achievement in the preservation, restoration and interpretation of sites, buildings, districts and objects of historical or cultural significance by an individual or organization not necessarily professionally engaged in the field of preservation, the Gordon Gray award was given to:
- The Colonial Dames of America, Chapter Three, and the National Park Service, both of Washington, D.C., for restoration of the Abner Cloud house, a
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Preservation from page 32
late 18th-century miller's house in the C & O Canal National Historical Park.
- Corning Glass Works, Corning, N.Y., for revitalizing the main street of Corning by restoring the late 19th and early 20th century brick and terra cotta decorated commercial buildings (below).
- City of Oakland, Calif., planning department for publishing the "successful" manual, Rehab Right: How to Rehabilitate Your Oakland House Without Sacrificing Architectural Assets.
- The Old-House Journal Corp., Brooklyn, N.Y., for publishing a monthly newsletter of renovation and maintenance tips.
- Franco Scalamandre, chairman of the board, Scalamandre Silks, Long Island City, N.Y., for providing advice, research and materials to more than 500 historical societies, museums and government agencies over the past 50 years.
- Steward Title Co., Houston, for restoring the facade of an 1882 building in Galveston that stimulated revitalization of the historic Strand area.

The National Trust's president's award for outstanding achievement in the preservation, restoration and interpretation of sites, buildings, districts and objects that have historical or cultural significance to a local community was presented to:
- Delaware Trust Co., Wilmington, Del., for restoring the first floor of the 1853 Wilmington Customhouse.
- Junior League of Corpus Christi, Tex., for acquiring from the city and restoring the 1893 Sidbury house, the last remaining example of "high Victorian" architecture in the city.
- Rose Josephine Boylan of East St. Louis, Ill., for her 52 years of active involvement in the research of the history and preservation of important historic structures, including a log church and mansion.
- The Maritime Museum Association of San Diego, for its 52 years of preserving and displaying historic vessels and maritime artifacts.

The public service award for outstanding achievement by municipal, state or federal officials who have demonstrated significant support for historic or cultural preservation was given to the City of Evansville, Ind., for committing itself to and appropriating funds (more than $500,000) for historic preservation.

News/Education

Florida University Introduces Architectural Bubble Gum Cards

Children and architecture buffs in Florida have a new hobby—collecting architecture trading cards. The cards haven't hit the corner drugstores yet, but the school of architecture, Florida Agricultural and Mechanical University, Tallahassee, is promoting architecture through "architecture bubble gum, with cards." Collectors can trade the Eiffel Tower for Mendelsohn's Einstein observatory, or Le Corbusier's Unité Habitation for the Parthenon or Venturi's mother's house for Mies Van der Rohe's Crown Hall. Presumably, any could be traded for Reggie Jackson. (Parthenon card below.)

The cards were first used as "grand finales" at two architectural conventions for children, organized by Florida A&M's architectural professors Grant Genova and Linda Searl. The conventions, in themselves, are worthy of mention.

In conjunction with the Arts Council of Tampa-Hillsborough County, Geneva, Searl and a number of A&M architectural students sought to open the world of architecture to children. The conventions, centered around the concept of the house, opened with an introduction, "house as a system," and a puppet show describing the process of designing a house for a family. The children then attended one of three workshops: airship to the moon with a moon architect, energy efficiency game and "building your own house." The conventions ended with a skit showing how children feel about their house spaces. And the finale consisted of presenting the children with bubble gum/trading cards and models. (The team from A&M is now applying for a grant to make the convention's game for classrooms.)

The children at the conventions chewed and blew the gum and held onto the cards. Left-over supplies were used for public relations for the school. The cards have proved popular enough to require a second edition.

Education continued on page 38
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Aga Khan Funds Program On Islamic Architecture

His Highness the Aga Khan, leader of some 20 million Ismaili Muslims and a graduate of Harvard University's class of 1958, is providing a sum of money to exceed $11.5 million for a joint program at Harvard and the Massachusetts Institute of Technology to further knowledge of Islam's architectural past, its contemporary architectural expression and its future directions. The aim as well is to give teachers and architects insights into the relationship between architecture and the values and traditions of Islamic culture.

To be known as the Aga Khan program for Islamic architecture, the project will be governed by a faculty council and will be carried out through the two institutions' Ph.D. programs. In addition to developing increasing numbers of scholars of Islamic architecture, another major goal is the creation of a resource center for the gathering and dissemination of information. It is anticipated that the program will go beyond the boundaries of the two campuses to scholars in related fields everywhere, to professionals in architecture and planning and to teachers in schools of architecture in the Islamic world. Specifically, the program will support four professorial positions at the two universities, create a fellowship program for Ph.D. students, enlarge and coordinate the centers at MIT and Harvard which collect visual materials on Islamic architecture, develop a sophisticated retrieval system to make documentation readily available throughout the world and provide funds for summer institutes.

AIA/AIA Foundation Scholarships Go to 76 Students

The AIA/AIA Foundation scholarship program has awarded 1979-80 scholarships to 76 undergraduate and graduate students from 49 accredited U.S. and Canadian schools of architecture and one architectural educator. The 77 recipients of scholarships, totaling $98,500, were selected from 263 applicants.

The recipients of scholarships were selected by the AIA scholarship committee, chaired by Richard Dozier, AIA, of Tuskegee, Ala. Other members of the committee are Leon Bridges, AIA, Baltimore; DeVon Carlson, FAIA, Boulder, Colo.; Jean Young, AIA, Seattle, and Mary Beth Permar, student at Clemson University and vice president of the Association of Student Chapters/AIA.

The scholarship program gives awards annually to students in accredited first professional degree programs in the U.S. or in programs recognized by the Royal Architectural Institute of Canada. Awards range from $500 to $2,000, with selection of winners based on the committee's evaluation of each applicant's academic record, financial need and on recommendations by deans or department heads of accredited architectural schools. Professional applicants' scholarships are given on the basis of proposals for study and research beyond the first professional degree.

Funds in the scholarship program are generated through endowments to the AIA fund and annual donations to the AIA Foundation. Several of the scholarships, administered by AIA through the AIA Foundation, are funded by annual gifts from private corporations in the building industry.

For further information, write Ray Charity at AIA headquarters.

News/Government

GSA Reports on Growth of Art-in-Architecture Program

Thomas Jefferson instituted a national tradition when he sought successfully to integrate artworks in the design of the U.S. Capitol. And from Jefferson's time until now, there have been many efforts to create public art that would express the aspirations of the American people. As Andrew Forge, dean of Yale University's school of art, has said, federal artwork should be for everyone, "not just art lovers and collectors; it should strike a response with the tired and the lively, the idle and the harassed."

The nation's first body of public art probably came during the Depression when the New Deal came to the rescue of thousands of artists, commissioning them to design artworks for the nation's public buildings.

A more recent source of inspiration for federal art was President John F. Kennedy's ad hoc committee on federal office space of the 1960s, which issued the widely acclaimed report "Guiding Principles for Federal Architecture." One of the messages enunciated in the principles was that "where appropriate, fine arts should be incorporated in the design of new federal buildings. . . ."

A response to this challenge came in 1963 when GSA established policy allowing a percentage of the estimated cost of construction of each new federal building to be expended on artworks. This policy ushered in GSA's art-in-architecture program, and from 1963 to 1966, 44 works of art were commissioned. This policy is not federal law, however, and any GSA administrator can order it stopped. This happened in 1966 under President Lyndon B. Johnson. GSA's ad hoc committee on federal office space of the 1960s, which issued the widely acclaimed report "Guiding Principles for Federal Architecture." One of the messages enunciated in the principles was that "where appropriate, fine arts should be incorporated in the design of new federal buildings. . . ."

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It seems particularly appropriate in this year of the celebration of architecture to honor—and celebrate—the recipients of the Institute’s highest award, the gold medal, as was done at the Kansas City convention. This issue of the Journal is both devoted and dedicated to the gold medalists (listed at left). Much of it deals with the two most recent, whose careers have been parallel in time but fascinatingly divergent in approach. But first, on the following two pages, is a report on the current activities and thoughts of the other five living medalists.
Marcel Breuer, FAIA, was awarded the gold medal in 1968. He was a member of the original Weimar Bauhaus, a teacher at the Bauhaus in Dessau from 1924-28 and then joined Gropius Harvard's graduate school of design to become mentor for a generation of students, including Philip Johnson and I. M. Pei.

The building Breuer worked on just before his retirement three years ago was the Atlanta public library, now 70 percent complete. Until his recent illness, Breuer, now 77, had been sculpting, designing tapestries and "we hope," says his longtime partner Hamilton Smith, FAIA, "working on his memoirs."

Breuer was too ill to be interviewed for this article, and Smith was reluctant to speak for him, saying, "He spoke so well for himself." His feeling about Breuer, however, is "that he has always been a man impatient of labels, feeling that you just can't put things in neat packages. He is also a tremendously tolerant person. He was plenty well enough to have entered the current design controversy, but he chose not to. I don't think he is filled with concern over forebodings about architecture. He welcomes new shoots growing off the plants, but thinks that the roots are still in pretty good shape."

Pietro Belluschi, FAIA, dean of the school of architecture at the Massachusetts Institute of Technology from 1951 to '65, was awarded the gold medal in 1972. In announcing the award, AIA said, "His churches are known for their elegant spiritual feeling, while in the design of residences he was a leader in the development of a regional style—a Northwest architecture—which is perhaps the only such style in this century."

Belluschi will be 80 this August, lives in Portland, Ore., and remains active primarily as a consultant. As he says, "You name it. I've been involved in so many things. I was consultant to the Chiang Kai-shek Memorial, Taipei, Taiwan; for the University of Jeddah, Saudi Arabia; a University in Ancona, Italy, where I was born, and then on various large projects in America—one in Boston, one in Miami, one in Charleston, symphony hall in Baltimore, symphony hall in San Francisco, two or three churches in Oregon and some houses."

Belluschi is concerned today about the tendency toward "elaborate intellectualizing and fashion" in architecture, and says, "I think a lot of people feel as I do, but are afraid to express it. We should realize, " he says, "the damage that a fashionable mind can do in killing the spirit and reality of our lives. We see only the make-believe and the fashionable thing, and once fashion has too much influence on architectural thinking then we debase architecture to a fashionable art."

He goes on to say, "Venturi makes fun of integrity as something for dull people. But I do think that no matter how dull it is you have to have certain principles to go by or else you fall into complete disarray. If the young look at everything as being somewhat phony, they will never be able to think seriously about the social implications of architecture."

Kenzo Tange, Hon. FAIA, now 65, is the Institute's only Japanese gold medalist. At the time of his award in 1966, AIA stated, "He sees architecture in its social relationship always, and he has been responsible for much of the excellent architecture designed for the new community life of Japan which has emerged since the war." If anything, Tange's recent work—in Nepal, Sicily, Mecca, the U.S. and elsewhere—shows an increased concern with the social implications and responsibilities of architecture. He has focused his attention on the third world and "the need for harmony between the natural and the man-made environments and between the contemporary and the historical." Recently, he wrote: "By the year 2000, it will be necessary to build the habita for 4 billion population. . . . In the face of this need, the advanced nations of the world are adopting the luxurious position that construction destroys the environment. Three quarters of the 4 billion habitas that will be needed in the next 25 years will be for the oil producing nations and the developing nations. . . . Obviously a gradual buildup from a firmly established basis—the process the English followed—will not serve their needs. They will have to adopt a top-downward process of borrowing skills and knowhow first and building a firm basis later. . . . At no time has it been more necessary to transfer the knowhow of architecture and building industry to all parts of the world. . . ."

He concludes: "For the very reason that our age is what it is, the architect must be aware of his role as the bearer of the burden in environmental and cultural formation. Of course, the participation of governments, enterprises and the people is indispensable to such formation, but the time has come for us to give deep thought to the situation and to the significance of the architect in this process."
R. Buckminster Fuller, FAIA, was awarded the gold medal in 1970 for his Dymaxion houses, cars, maps and ways of living, especially for his geodesic domes, of which 10,000 in 50 countries had already been constructed in 1970. He says there close to 300,000 today scattered around the planet.

At 83, Fuller is still working overtime, at full steam, in a littered Philadelphia office resembling something left over from the counter culture of the '60s. Few of his staff are over 30. "I'm gaged primarily in what I started to do 52 years ago," says Fuller. "That was to see what a little, unknown, penniless individual with a dependent wife and child might be able to do effectively in behalf of all humanity, corporations and nations."

Fuller is also working on what he describes as "air deliverable, energy harvesting, self cleaning on and weather forecasting, while sending solar energy back to deploy to remote autonomous dwelling machines." Among all kinds of information exchange, from which they are going actions of space satelлитes, including earth resources observa­tions, with the second volume of Synergetics. And he has three more books "that have to be written plus enormous amounts of letters to be answered and my archives to keep." He describes his archives as "a record of a human being born eight years before the Wright brothers, of a man coming out of the Victorian world where everybody was inherently divided from one another to one in which we are incompletely integrated."

Wallace K. Harrison, FAIA, won the gold medal in 1967. Charles M. Nes, FAIA, then president of the Institute, cited Harrison for "his demonstrated ability to lead a team in producing significant architectural works of high quality" and for exemplifying the "highest order of architectural statesmanship." Among the fruits of that talent for diplomacy are Rockefeller Center and the United Nations building, New York City.

At 83, Harrison still works full time for the firm of Harrison & Abramovitz, which he founded (originally as Harrison & Fouilhoux) in 1935. "We just finished up the mall at Albany and are still working on it a bit. We're also working on buildings at Lincoln Center," he says. In his spare time Harrison paints.

He is concerned, these days, that society is not making use of the architect's traditionally human approach to environmental problems. "The architect has been protective in his role throughout the ages," he says. "He built the pyramids and the fortresses. And today, I think, he could do a great deal in the area of atomic energy plants, for instance, that engineers cannot do, because the architect's approach is a human approach, not a mechanical one. We've wasted our resources because we haven't thought of things in the human context. I think that's part of the architect's job," he says.

About postmodernism he says, "I think it's just another generation coming along and wanting to know all about everything. Maybe the young can find methods of bringing out some of the things we've missed. But the fundamentals don't change. Choisy was as modern as anybody today. We live in the modern world and people are beginning to question whether we're going backward. Of course not. The times are modern, the people are modern, the children are more modern than we are. You can't go backward; you've got to go ahead." A.O.D.
By Andrea O. Dean

Conversations: Philip Johnson

For many of the same reasons that he is highly controversial, Philip Johnson, FAIA, is also a conundrum. For almost 50 years now, he has been at the eye of storms that have transformed architecture. During the late 1920s and early '30s, when modern movement was viewed by most as a foreign and heretical, Johnson became its chief apostle in America, propagating the new faith with missionary zeal through his work as director of the architecture department at the Museum Modern Art in New York City and through his book, *The International Style*, written with Henry-Russell Hitchcock. No one had modernism become the prevailing orthodoxy than Johnson turned apostate, abandoning first the Bauhaus, then his mentor Mies, embracing first the past, then modernism of a more eclectic stripe and finally anything goes attitude, saying "It is absurd, life is chaos. There are no rules—enjoy it."

With each shift of ideas came, of course, a parallel change of faction in his architectural work.

The response of critics has been predictably extreme. Most tended to either elevate Johnson to position of seer or relegate him to self-seeking publicist. So, one argues that "Johnson habituates his fellow professionals because he is always (roughly) quantum leap ahead of them." Another is convinced that Johnson may well unite contemporary architecture again and did it out of both the glass box and the concrete sculpture to a new ecumenical gentility. From the opposing team come such outbursts as, "If Philip Johnson has a talent, it is a taste maker's talent: He jumps on a trend with the best of them." "His work has no discernible core of esthetic theory. It is all taste." "Johnson's preoccupation with originality is obsessive." "Johnson, the man, reveals as many apparent contradictions as does Johnson the writer/lecturer and designer. He is always glibly articulate and outspoken, always elegant, brilliant, witty, is usually outgoing, full of fizz and as energetic as a young mountain goat, despite his 73 years. But then, at rare moments he retreats, answering questions cryptically, taking every opportunity to deprecate his accomplishments and talents. No one now of devilish twinkle in his eyes. He looks downward, not morosely, drumming his fingers on the tabletop—except of annoyance, fatigue, perhaps nervousness. Not long ago, Andy Warhol painted a very sober looking portrait of his friend Philip looking far into the distance, eyes hooded, brow furrowed, mouth clamped shut in silence. "Andy made me look like a combination of U-boat commander and FDR in decay," says Johnson.

The most interesting source on the subject of Philip Johnson is Johnson himself, though he claims not to understand himself at all well.

"Where did my interest in architecture come from? My mother taught me history of architecture and Greek before I went to high school, and when I was 13, I went to school in Switzerland and traveled in Europe. I remember mother dragging me out of Chartres Cathedral when I was 13. I didn't see why everyone couldn't want to stay there all their lives. Then in 1928, I read an article by Henry-Russell Hitchcock and visited Egypt and Greece. And I realized I was seeing entirely different things from the rest of the travel group. I couldn't understand why the others would always yell at me from a temple and I would always yell at them when they were looking at museums. Then I realized it was architecture. I thought it was impossible to become an architect because I couldn't draw, and still can't. But the sight of the Egyptian temples and the Parthenon was the real turning point. I couldn't believe such a thing could be so emotional, more emotional even than music. So, naturally I had to get into architecture sooner or later."

"Then in 1929, I met Alfred Barr through my sister, because he taught at Wellesley and she was studying there. I was at Harvard studying philosophy and Greek. Never took a course in history of architecture or art. Barr said he was starting a museum [the Museum of Modern Art] the next year and would I head the architecture department. Well, since I didn't even know anything about architecture, I said, 'Yes.' He gathered my enthusiasm and, hopefully, my ability and the fact that I didn't need to be paid, which was very important."

Johnson was the only son of a well-to-do Cleveland lawyer, who divided his estate among his three offspring while they were still young. On his only son the elder Johnson conferred Alcoa stock, which he reportedly thought had little value. Alcoa, of course, flourished, and by the time Philip was graduated from Harvard in 1930 he was a rich young man.

"Then in the summer of 1930," continues Johnson, "I met Russell [Henry-Russell Hitchcock] and we visited every modern building that was available in Europe. I got my interest from his seminal book of 1929, but the idea of doing our book, *The International Style*, was mine."

"I was interested in the propaganda, the presenting of the International Style. It was a religion that we all shared and we thought the world would be a better place for it. It wasn't in our case a socialist aim, the way it was in Germany. The crowds that I knew were all Marxist. But, it wasn't that. We thought pure art, pure simple art without decoration, would be a great salvation, that since this was the first real style since the Gothic, that it would become worldwide and would be the norm of the period. That was our idea in presenting the modern architecture exhibition at MOMA in 1932. And that's exactly what happened. There were, of course, other things going on that we closed our eyes to."

What kind of young man was Johnson? "At Harvard," he says, "I was lonely and reserved, had no friends. My only friend was my tutor, and I didn't enjoy anything."

Didn't he undergo a change, then, even before meeting Barr and Hitchcock? "I wonder," he muses. "Of course, my father was very extroverted, which I've now become. But, no, I never see myself as energetic. And until modern architecture became sort of a religious enthusiasm on my part, I didn't have any focus." "I'm a hero worshiper type. Always was and still am. I believe in the great man theory of history—still. I mean people like Napoleon and Mohammed interest me. It seems to me the way
Why be an architect 'if you don’t want to design?'

history is counted. I know it's wrong, but that's all right. Everyone should have certain illusions.

"In the late '20s, Mies and Oud, among the architects, were my heroes especially, but never Gropius. Le Corbusier was a rather distant figure. He wasn't afraid of history, while all the other moderns thought that architecture was only invented by them and Karl Marx, you see. Mies was much broader than the functionalists of the day. And so most of our time was spent talking about — against — the other functionalists. That was the big battle of the '20s and the whole aim of our book. Now it's all so perfectly clear that architecture has nothing to do with functionalism that nobody bothers to argue. Architecture is art. But in those days, that was a revolutionary thing to say."

In 1934, Johnson suddenly abandoned his museum career for a foray into right wing politics. It is a period of his life which he discusses only partially. As Calvin Tompkins wrote in a New Yorker profile of Johnson, "[This] mistake seemed to propel him into the one decision he should have taken at the start, which was to become a practicing architect." How so?

"I was childish," explains Johnson. "I ran for the Ohio state legislature and had a lot of fun. But, I'm very poor with people, I don't judge them properly and I don't handle them properly. I'm much too impolitic and too direct and crude. I don't really understand the way other people's minds work. I miss that very much; it's something my colleague, Mr. Pei, has in abundance. He's a wonderful person. Nobody ever said I was a wonderful person."

"But, anyway, I was no good in politics. So, that was a dead end and I was sitting here in New York twiddling my thumbs and said, 'That's a damn fool thing to do with the rest of your life.' So, I went back to Harvard to study architecture. It was the hardest decision of my life, because I would be 15, 16 years older than the rest of the kids. That seemed awfully hard to take but it wasn't hard at all.

"At the GSD I had a battle with the faculty. They were younger than I, some of them. And they resented me because I was a Miesian already and they were all little Bauhaus people. So, when I was asked to make a design, I would make two, one to get the mark in the class and one because that's the way it should have been. It was a ridiculous battle.

"What did I have against the Bauhaus people? Functionalist and poor designers.

"Did he have much to do with Gropius? "No. I had no respect for him and nothing to do with him. Breuer was my teacher. He was very, very good."

"Didn't Johnson at one time call Breuer a "peasant mannerist?"

"Yes, something like that," he answers. "I always make the nastiest remarks. But he was a very sensitive artist, extraordinarily original and sensitive in planning and materials. So I learned a lot from him."

"Did he know Pei at Harvard? "By the time I got to Harvard, he was at MIT. So I didn't see much of him, except I knew him well enough to know he was the smartest man around. He and his wife came to dinner, the first meal I had in the little house I built as a thesis project on Ash Street in 1943."

"What possessed Johnson to build a house as thesis project? "I wanted to test out Mies' theories and build this crazy thing. It didn't fit the site, according to the neighbors, because it had a wall around it. In New England a wall is considered a spite fence. Neighborliness was not one of our virtues in those days. Just the opposite today."
The glass house, New Canaan, Conn., brought Johnson instant fame in 1949 (across page left). All completed in the first four years of the '60s were Munson Williams Proctor Institute Museum, Utica, N.Y. (left); 'roofless church,' New Harmony, Ind. (below), and the Museum of Modern Art, east wing, New York City (right).

In 1945, Johnson opened his own firm in New York City, consisting of one room. Did he ever think of joining an established firm rather than starting on his own? "Oh, no. Why should I?" he says. "That never crossed my mind. Well, not if you have money, you don't. I was lucky, I never worked for anybody. I don't think I would have been very good at it, because my concentration would not have been on what they wanted me to do."

The single room is now many rooms on the 37th floor of theagram Building and employs some 50 professionals. How is it done? "John Burgee really runs the office," replies Johnson. "We don't have a special design staff. John Burgee and I are responsible for everything. We have been together for 12 years now, and he came with a vast amount of experience which I never had. He's a marvelous businessman, aside from being a fine designer. And he's of another generation, so I don't annoy him as much as I would someone else. Before him, I had Richard Foster, you see, who was also very strong. Until John came, the sign was pretty much me. But now, I don't design anything he doesn't check with each other. We don't have other designers, because that's what we're here for. What would you want to be an architect for if you didn't want to design?"

In 1946, Johnson returned to the Museum of Modern Art as director of the architecture department, and for a period, the bulk of his design work was private residences, commissions he received mainly through contacts at the museum. The residence at New Canaan, Conn., on a five-acre estate, which grew to 32 acres as Johnson bought adjacent land to ensure his privacy. "People used to tell me that my glass house was just like a bad copy of Mies' Farnsworth house," says Johnson. "But it was really quite different, and mine was built first."

Peter Eisenman in his introduction to the recently published book Philip Johnson Writings, claims that "the Glass House is Johnson's own monument to the horrors of war." He found a caption written by Johnson in 1950 that reads, "The cylinder... was not derived from Mies but rather from a burnt village I saw once where nothing was left but the foundations and chimney of brick." Eisenman concludes that the glass house is a symbol of personal atonement and rebirth, "at once a ruin and also an ideal model of a more perfect society; it is the nothingness of glass and the wholeness of abstract form." He considers it "a fitting requiem for both a man's life and his career as an architect!"

What does Mr. Johnson think of that? "Oh, him and his brick chimney. So silly. It didn't have any relation to those things. It was an architectural device to pin the house down. The circle was a circle because then space would flow around it and not make it like a Mies thing that differentiates or defines rooms. It was a flow instead of a stoppage thing. That's why it was done. But I'm always impressed by anyone who wants to find a symbol where I don't see it. Besides, no one knows one's unconscious."

In 1954 came the Seagram Building in New York, and Johnson was hired to help the elderly Mies who was based in Chicago. "Seagram is all Mies," says Johnson. "I didn't do it. All the copies of Seagram I've seen, not one has copied the only point that made it so great, the double skin. To me Seagram looks just like Mies. It's broad and sits there. It's the calmness, the thinness. There are no frills, no gesticulation. There's a certain presence that Seagram has without fuss or feathers. There's no compromise. Through Seagram, Mies and I became close again, though I had already gone in a different direction."

In publicizing his "different direction," Johnson was, as always, very direct and outspoken. In 1954, he had resigned his position at the Museum of Modern Art, impelled in part by Frank Lloyd Wright, who advised him to "stop carrying water
Early feelings that ‘you have to use history.’

on both shoulders.” He lectured at universities in the late 1950s and early '60s, serving for a time as visiting critic at Yale University. His talks to students, informal “seminars” held at the glass house and writings replaced the museum as a forum for Johnson the propagandist—a role he threw himself into, especially since commissions were scant during these years. All his didactic efforts were aimed at puncturing cherished modernist beliefs. “Architecture is art,” he proclaimed, “Form follows form, not function (always has and always will). . . . You cannot not know history. . . . Structural honesty is one of the great bugaboos that we should free ourselves from very quickly,” and much more in the same vein. The students loved it.

Johnson’s design work from the late 1950s to mid-'60s was, as he told the Architectural Association in 1960, “terribly scattered.” It ranged from Miesian, through various aberrations of modern, to neoclassicism. The neoclassic work especially is regarded by most critics as a low point in the body of Johnson’s work. Johnson, himself, says, “I felt that modern architecture was too rigid and that you have to use history. As a matter of fact, I always did that. The first designs for my glass house had Syrian arches. But, it was a dead end. They weren’t very good buildings.”

How “terribly scattered” his work was is seen in Johnson’s museums of this period. For a while he was considered the museum architect. His first, the Munson Williams Proctor Institute, Utica, N.Y., was what one might call industrial esthetic sheathed in granite; the Sheldon Memorial Art Gallery, Lincoln, Neb., was neoclassic, and the addition to the Museum of Modern Art was—modern.

“Museums have always been a fascination to me,” explains Johnson, “because that’s where I started. I’ve never built a big museum; these little regional museums were a lot of fun, because they’re like churches were in the past. They represent the only thing that our culture does as a civic symbol. At Utica, for instance, I wanted to make a place to which people would take their Aunt Mathilda when she visited from another town. Some of my museums are criticized for that, for being more civic centers than places to hang pictures. But many of these museums I built had no pictures to hang in them anyhow.”

By the late 1960s, the times had changed. Johnson’s ideas were considered, especially by students, to be “irrelevant” and with them, architect Johnson. Though he never repudiated his commitment to art, Johnson’s unfailing curiosity and empathy for the young impelled him into the fray. Johnson and Burgee spent time planning and designing a number of large, never-to-be-built urban complexes, one in Philadelphia, another in Harlem, a third in the Bedford-Stuyvesant area of Brooklyn. His plan for Roosevelt Island, though, has been completed in part. “We had very little work at that time,” he explains, “But urban design is a dead end, because nothing gets built—just more pile of paper. I like to build, not just make schemes. I was terribly envious of Pei—Kips Bay, I thought, was a really fine group. I would have been interested in doing that sort of thing, but nobody asked me. That’s why when we started doing IDS in Minneapolis, it seemed like a brand new world.

“IDS was the eye-opener for urban statements that could still be connected with the profit system,” he says. “We could get to the heart of a city—unlike museums—and affect the lives of millions. Naturally, that’s very heady stuff. And we could make a building that from 100 miles away was a symbol of the town, at the same time that we could make a gathering place like an old-fashioned market. It was the turning point of all our work.
We lucked into a city where the middle was empty. We lucked into a city that already existed on two levels, which is wonderful for the Piranesian movement of people. The great age of my youth, of course, was Eisenstein’s “Potemkin” where the pie came down the hill and crossed over at the same time. We tried to do that at IDS by having people come down the escalators and still be going out the door; we tried to give a feeling of being surrounded with active people.”

DS was completed in 1973. Three years later Pennzoil Place in Houston was in place, and with it began Johnson/Burgee’s taking out of the glass box by changing the tops of buildings,” Johnson puts it. “Our client said, ‘I don’t want an upended box.’ And we said, ‘Why should he have it? How ridiculous, top of a tower is always important.’ So that means we started having fun. I get letters all the time saying, ‘How can you take serious art of architecture so lightly?’ Well, it seems to be a or art if you do have fun.

What struck us at Pennzoil was two things. One was the way it worked, the other was sociological. The populist, popular, pop whatever word would fit—the idea of people moving, the pr- rional changes, the view of the street when you taxied by.ericans really don’t like public squares, so we don’t have to hit anymore. Hitting the ground on pilotis gives things a x and pee-placey feeling. The whole idea was to have a more bal approach.”

then, just last year, came the design of the AT&T headquarbuilding in New York, lauded by some, excoriated by others appearing on the cover of Time magazine in model form aloft by Johnson sporting a long black cloak and looking a cross between Count Dracula and Mephistopheles—e dapper, of course, than either.

AT&T is a sport,” says Johnson. “It’s the only thing like that we’re ever likely to do. In the first place, it’s simply too expensive. The essence of the skyscraper is the pilaster, and the body of AT&T is those pilasters that join all the windows in a vertical stripe. But nobody can see it, because all the models are so small. The irregular rhythm is taken from the ’20s; the top is our own. I don’t know where it came from. People think it’s Chippendale. I suppose it comes from late Roman broken pediments. You have to have a hole there for the steam, so we did it that way. The essence of AT&T cannot be seen. No one has ever done a building that’s 60 feet in the air; this is like Karnak with the columns so close together. It’s going to be a forest, fascinating to wander through. There will be a galleria that makes Milan’s look small. We enjoyed every second. Still do. The building will really be two buildings, as the Empire State is. The top is a recognition statement, but unlike the Empire State the bottom will be a statement all in itself.”

With AT&T and his complex of buildings for the Dade County civic center in Miami, Johnson is more and more blending allusions to history and allusions to indigenous architecture. How does he prevent such designs from dissolving into kitschy recreations? “There’s a fine line,” he says. “Dade County isn’t Spanish. It doesn’t look like any building that I’ve ever seen. The spirit of the plaza I got from [Karl Friedrich] Schinkel. The use of the tile roof and the stone I picked up around Miami. But I didn’t work on the proportions by looking at the proportions of other arcades.”

Johnson has always wanted to be “l’architecte du roi”—architect of the king. At Lincoln Center, his only large public monument to date, he was one of several “architectes du gouverneur,” and Johnson says, “I should have done the whole ‘pomme’ [apple]. In a way, that’s why Dade County is better,” he continues. “It’s much smaller, but I do get a chance to make an assemble
Confidence that 'history will straighten things out.'

of buildings. And he says, somewhat wistfully, "Yes, l'architecte du roi. Pei is l'architecte du Teng Hsiao Ping. That's as good as any 'roi' I can think of. The nearest I can get is being the architect of AT&T, which is as near a king as we have under this particular form of democracy."

Apart from Dade County, he has several projects underway, and speaks about them excitedly. "I'm having such fun. I'm doing a theater in Cleveland, with 19th century overtones, massing of roofs, different shapes, towers. We're working on a headquarters building for PPG Industries in Pittsburgh, using faceted glass. There's a headquarters building for ITel Corporation in San Francisco, where they don't like flat buildings. So it's round with a perfume bottle top. We're finishing a trio of buildings for Post Oak Central in Houston. The completed one is an adaptation of Art Deco. And right now I'm working on a building that's an adaptation of the houses of parliament—19th century perpendicular Gothic. But I can't talk about buildings in design stages. That $40 million suit against Hardy Holzman Pfeiffer [for allowing publication of their design for the Purdue Corporation before, claims the company, permission was given] doesn't exactly encourage it."

As in the past, Johnson is keeping his "finger on the pulse," by involving himself with "the kids," as he calls them. "Right now it's the institute I'm closest to," he says. "It's called a silly name [the Institute for Architecture and Urban Affairs, New York City]. I call it the Eisenman Institute, but they don't like that. I always want to keep the connection with the kids. Yes, 'the kids' are now mostly almost 50. It's easier to talk to someone that's from another generation, because then all those jealousies and rivalries don't occur."

How does he view so-called postmodernism? "What they mean," he says, "is what I've been talking about: freedom, freedom from the moralities of the do-goodiness and the dullness flat top boxes. A very important thing to remember, which people accuse me of not remembering, is that modern is one of the things you're post, as well as being post revivalism and so on. The point is that modern is as much a thing to look at as Lutyens or neoclassicism or Rome or the Gothic. I don't think the changes are as dramatic as the press has it. I haven't not known history since early in the '50s. There was no great Saul and Paul shift in my thinking. I probably exaggerated the changes myself at Dal for dramatic purposes, and, of course, Goldberger and Jencks exaggerate it. That's just the kids making noise and God bless them. What the enduring influence of 'the kids' will be, who knows? They haven't built enough yet."

Which firms or individual architects does he believe made the most indelible contribution to architecture during the '50s and '60s? "The contribution of SOM was vast," he says. "The magazines of the period were practically brochures for SOM. They had a series of brilliant designers and they deserve everything they get. Naturally, they were in danger of becoming stereotyped and commercially minded. Bunshaft's most recent direction is a new vein—fresh and original."

Does he feel volume of work is important in evaluating an architect's contribution? "Not as important as people with big offices think it is and not as unimportant as the people who envy them think it is. What counts is quality."

The most important influence on other architects, believes Johnson, was that of Lou Kahn. "It was his total dedication to his vision that influenced us most. At Salk he gave reign to some shapes that are just unimaginably great; they freed up all of our imaginations. People say he influenced me. I don't feel it in any way, but I always lie about such things out of innocence, so maybe he did."
Johnson/Burgee's work of the 1970s is marked by celebrated highrises such as the sleekly sophisticated Pennzoil Place, Houston (across page left); IDS Center, Minneapolis (following ages), and ITEC Center, San Francisco (left), in design stages. How is Johnson's current involvement with historical allusions are the neoArt Deco Postak Center, Houston (below); T&T (right), and the PPG industries headquarters building, Pittsburgh (far right).

What does he now think of Frank Lloyd Wright whom herogated as "the greatest architect of the 19th century" during his lectures of the 1950s? "I have vast admiration for him, for his revolutionary method of handling interior space—the living room at Taliesin, the lobby at the Tokyo Hotel, the Guggenheim exterior. Everywhere he had a chance to modulate interior space did so to lend excitement. The Larkin building—nobody can handle space like that. People think Le Corbusier's lobby at Chandigarh is good. I don't think so. The shapes are good. Le Corbusier was a shape man. The real room boy was Frankie. My reception of him was one of the first things to change, and fortunately that happened before he died."

How does Johnson explain the seemingly dramatic shifts and changes in his own work? "I'm scatterbrained and I'm a historian," he says. "I see too many sides of things. And that's not odd. It's not good if you want to be Richardson or Wright or mies."

Was that his ambition? "Of course, I wanted to be all three and more, but I never was. I don't think I'm a much worse architect than any others around. It's just that we don't live in a roic age anymore. We live in an overly self-conscious, ecletic, split, directionless, religionless world. So, our architecture shows that. Peli's work is varied in another way than ine. He has enlisted Cossuta's work, Cobb's work, Muchow's work and so on. It's a different way of being different, isn't it? Buildings don't look alike. Mine are even more different. Arinen's, though were more different still. At the same time he is doing the bird, he was doing Homedale. I used to think that is terrible and now, of course, I have Gothic going in one om, Spanish in another—much as Schinkel did. He did a classical church and then a Gothic one for the same program. You say he is more consistent than I, but how about the new Palladian plan for General Foods? Sert? His building down by the river in New York, you'd never know it was the same architect who did the married students' housing in Cambridge.

"It would be nice to be recognized: 'Oh, that's a Johnson.' But you couldn't have told a Schinkel building, and my buildings might not look so different in the future."

How does he want to be remembered? How doesn't he want to be remembered? "It's funny how little one gets interested in that, since I won't be there to object. We're all interested in immortality, but I don't think the type of it can interest us. Look, all the history books there are in architecture, there are so few good architects. Nobody's going to be a Michelangelo for quite a while, or a Frank Lloyd Wright. So, just what the picture of today's decade will look like, I don't know. It depends on who writes the history books."

Whom does he want as a biographer? "I like the people who like me. I have confidence that history will straighten things out. But it may take a long time. Look at how long the 19th century took to get itself even recognized as a decent period of architecture, and before it was sorted out that Lutyens was a great architect. It took 40 years after his death. Now Mies is right at the bottom of reputation; there isn't anybody who's in the slightest bit interested in him. That isn't going to last, because he was the great contributor of the highrise as it was. When Wright will come into his own, heaven knows. They're still writing such bilge about his being a great democrat when he was the greatest dictator of any architectural school in the world, and all his talk was sheer bilge. 'Til that's all drained out, we won't be told what his fantastic achievements in architecture were."

"During all these changes I've lived through, the desire to do art has been permanent. That's the only thing I've had to keep going. And the kick you get out of making a shape and a space. It may not be good, but we always think it is at the time, of course, or we wouldn't go on doing it. So, you keep going."
Evaluation: Single Complex City Core

Philip Johnson's IDS Center, Minneapolis. By Donald Canty

With completion of the IDS Center in 1973 (Philip Johnson and John Burgee, Edward F. Baker, Inc., associated architects), Minneapolis acquired one of the most elegant glass towers anywhere and the beginnings of its first real skyline; until IDS, the building next to it in the photo at right was the city's tallest. But Minneapolis acquired much more: a tightly knit and fully integrated core. Many elements of this core already were in place. But IDS, a block square complex of four buildings surrounding a glazed court whose roof is shown at left, was like the missing piece in a puzzle which, when put in place, makes it whole.

To begin with the tower, it rises 57 stories, six of them service cores, and it has become "the focus, the symbol, not just for Minneapolis but for the upper Midwest," in the words of John Berg, chief of urban design for the city planning department. The tower's great height is not universally admired. Berg himself acknowledges that it had the effect of "shrinking" downtown by making everything around it seem smaller.

Weiming Lu, downtown planner for Minneapolis when IDS was conceived and later urban design chief of Dallas, who has returned to an urban design post in St. Paul, recalls that there was concern about the scale of the development from the start. Even now, he says, "I feel I cannot escape from the tower. I don't like to go to the Lake of the Isles and see it peeking out from beneath the trees." Indeed, there is scarcely a point in the Twin Cities from which the tower cannot be seen peeking over smaller, and far less distinguished, downtown neighbors.

Despite his problems with size, Lu terms the tower "one of the best of the mirror glass buildings." It was one of the earliest ones, and Johnson approached the material with some trepidation. In a highly articulate relating of the design process in Architectural Forum, Johnson recalled his fear that "by not seeing through the glass but only at it we would get a monolithic, windowless effect," a building "more boring and tiresome than the usual speculative skyscraper."

To guard against this dread possibility, first the architects used as transparent a glass as we could afford (20 percent daylight transmittance—the material was available with a transmittance as low as 8 percent). Second, we designed deeply projecting mullions and muntins combined with small panes of glass 10-inch on center verticals instead of the more usual 60-inch) to create a network of lines—more the aspect of a birdcage than glass box."

Finally, the architects carved away at the corners of the tower's basically rectangular plan, creating a series of notches which Johnson calls "zogs." As he says, "The 90 degree zigzag of the all surfaces results in a range of self reflections which make trk vertical bands on the tower, relieving the great mirror surfaces. The zogs also have the delightful dividend of making a tisscross of spandrel bands at dizzying angles to each other."

Johnson's hopes for all of these devices have been realized. This is a tower of strength and character that carries on a marvelous conversation with the sky. It is a giant but not a monolith. It also works very well as an office environment. Johnson's "zogs" have the executive-pleasing side effect of providing no less than 32 corner offices per floor. And the narrow panes of glass combine with nine-foot ceilings to give even small spaces a clinging of loftiness.
Penetrating ‘funnels’ and spreading skyways.

Having said all this, it may seem surprising to say that the tower is far from the most significant part of IDS.

Minneapolis was ready for IDS (and Johnson) in a variety of ways. There was a shortage of first-class office space downtown. The city is home to more corporate headquarters than any in the Midwest on a per capita basis. Yet in the 1950s and '60s it had been “driving companies to the suburbs,” in the words of a local planner, by its inability to offer competitive amenities and facilities.

The city had an enlightened business community which in 1955 formed the Downtown Council to do something about the core. The first thing it did was to bring in Barton-Aschman Associates to draft a plan. This led to the creation of the famed Nicollet Mall by Lawrence Halprin in 1967. It also led to the concept of “skyways,” second-story pedestrian bridges linking downtown buildings, pleasant if not downright essential things to have, given the Minneapolis winter.

The business leaders also were well represented in cultural circles, as witness Ralph Rapson’s Tyrone Guthrie theater and the new Walker Art Center building completed by Edward L. Barnes just before IDS. Notable among the businessmen so inclined is Kenneth Dayton of Dayton-Hudson, Inc., the reigning local department store firm, who is widely credited with bringing Johnson into the IDS project.

Johnson describes the situation he walked into as “an architect’s dream.” He had receptive clients and they had the absolutely crucial block of the core to build upon. It was smack in the center of the growing skyway system, right alongside Nicollet Mall, between two very large department stores.

The four buildings of IDS Center are the tower, an eight-story office building with a garage below it, a 19-story hotel and a two-story Woolworth’s. The other three buildings all have notched edges like the tower’s but theirs are more irregular. In the hotel, the notches provide pleasant corner windows in many guest rooms and give the long corridors a zigzag that lessens boredom.

The buildings all are arranged around the perimeter of the site. If some find the tower’s height oppressive, it would be hard to make the same charges against the bulk of the complex at street level, given its million-plus square feet size. To the pedestrian the tower disappears and he is circling a block of buildings of similar cladding but interestingly varied height and setbacks.

At four irregularly spaced points the pedestrian encounters two-level entryways: skyways passing overhead and at his own level what Johnson terms “funnels” leading into the complex. These are narrowing shafts of space with jagged edges created by the buildings’ notched walls. There is a direct entrance to the tower from the sidewalk but access to everything is through the skyways and funnels.

The complex thus keeps a firm if jagged street line. The openings at the funnels are not really big enough to be called (or used as) plazas, with the possible exception of the one facing Dayton’s department store.

Instead the public space which IDS gives to the city (and pay:
Far left, Nicollet Mall with the edge of the hotel building projecting into it. Left, the skyway and entrance to the complex from the Dayton's side, largest of the four spatial 'funnels' that lead into the Crystal Court.
Frozen space in a soaring central court.

as much taxes on as some entire wards of Minneapolis) is inside—at the heart of the complex. And it is spectacular.

It is called the Crystal Court. It is a roughly pentagonal space rising to an apex of 121 feet, capped by a pyramid of metal-framed glass and plastic cubes. The two levels of entries—skyways and funnels—lead to two levels of shops and restaurants lining all sides except where the tower penetrates. On the floor are cubes for sitting, planters and an informal sidewalk cafe.

It is a highly practical alternative to an open plaza especially, once again, in the Minneapolis climate. And it is, much of the time, a magical place. The cubes overhead act as a kind of rectilinear ectoplasm, giving physical embodiment to the soaring volume— as if space had been frozen. And their geometry against that of the building walls, and their reflections in the walls, create fascinating patterns.

The court is the making of the skyway system, which has been spreading steadily since IDS was built and will continue doing so into the 1990s by present plans. Soon after completion of IDS, Dayton's moved much of its impulse merchandise from the first floor to the second and others stores have followed suit. If anything, Minneapolis' second-story downtown is livelier and more prosperous than ground level—at least during weekdays. It is a shopping environment fully capable of holding its own with anybody's suburbs.

What the court does for the skyways is to give them a point of convergence. It is a kind of Grand Central Station of a two-level pedestrian railroad network. At noon on weekdays, it is as crowded as Grand Central during the busiest of rush hours. People pour through the skyways and into the court (the older skyways, considerably narrower than the ones that came later, can be actually hard to push one's way through at these times). The court is full as life so long as the stores are open (see "A Tale of Two Spaces," Aug. '78 issue).

Unfortunately, when they close it does too, for all intents and purposes. There are two second-level restaurants run by the hotel and a cafe with live music projecting out into the court a level above. There are people in these establishments into the evening and on Sunday, but they look down onto a nearly empty space much of the time.

The hotel and the court have a slightly unsettling relationship. The hotel has no real lobby, no shops of its own and, as noted, shares its restaurants with the court. This guest was delighted with his room, but felt a certain loss of transient territoriality in sharing the public spaces with so much of the public (whereas, in a normal hotel situation, one feels that the lobby, restaurants, newsstand, etc., are, for the duration of one's stay, somehow
A landmark for Johnson as well as the city. (partly one's own). This visitor also arrived at dinner time expecting to find a wider variety of restaurants and entertainments available in the court and in the nearby skyway network. Instead, there were just the three places to eat, none offering anything transcending most hotel food.

More varied offerings and things like movies (there was one but it closed) are needed to keep the court—and the skyways—alive by night as well as by day. As it is, they are lonesome and slightly threatening places when the workers and shoppers depart. One Minneapolis mother deeply involved in the city and its cultural life warns her daughters away from there after dark.

This is, of course, not the architect's fault. But it is something that needs attending to before the Crystal Court can fulfill its marvelous potential as Minneapolis' communal living room.

Still, it may be that no single complex has done more for the core of an American city since Rockefeller Center than IDS. Weiming Lu recalls that at the time it was built “the downtown was by no means sure of its future. I think there was a lot of skepticism about why one should actually invest in downtown or revitalize or plan for downtown. I think that IDS provided an anchor and made a statement that downtown was worth saving.”

D. Gay, executive director of the Downtown Council, says that IDS “had a tremendous impact. It doubled retail space on the skyway level. It has become the focal point of downtown. That's it. Period. All roads lead to Rome. All skyways lead to the IDS Center.”

Bernard Jacob, AIA, of Team 70, the only architectural firm with offices in IDS, says that “the center is a manifest success. It has all the drama of people watching. It has access to all of the city. The way it fits into the city is just magnificent.”

IDS Center's owners (the initials stand for Investors Diversified Services) were stung recently when a local newspaper termed the complex “one of the last of the big energy spenders” and pointed out that the current state energy code might prevent its replication today. Indeed, IDS is vulnerable to all of the charges of energy waste brought against sealed glass towers. The newspaper did note that total energy consumption in the building had dropped a third since 1973 because of conservation measures, and IDS chief engineer Clint Hedsten has studies to show that its performance stands up well in relation to other recent highrise buildings.

If IDS was a stimulus to downtown business, it is only now that it is stimulating any downtown development of comparable scale. Part of the reason may have been early financial problems. The complex was a costly one, some say because of its architectural ambition, others because holdouts drove the cost of the land out of sight. At any rate, the space took a while to fill up at premium prices and the client suffered.

IDS is now solidly occupied in the upper 90 percentiles and the overall vacancy rate downtown is almost equally miniscule, so two new multibuilding complexes are now in progress: Pillsbury Center by the Chicago office of Skidmore, Owings & Merrill, between IDS and the city's government center; and City Center, directly across from IDS, by SOM, New York City. Both will have towers in the 40-story range. If nothing else, they will make the IDS tower look less lonely at the top, and will modulate between it and the rest of the skyline.

If IDS has played a significant role in the development of Minneapolis, it also has a pivotal place in the work of Philip Johnson. It remains his largest work to date, and it followed a rather uneven group of buildings (see pages 48-51). It belongs with Pennzoil in a series of inventive towers that could be called variations on Miesian themes. Two others, shown at left, sadly never were built. It would have been quite a string.

This was Johnson building upon, rather than rejecting, his personal architectural past, to wonderful effect. It would seem that just as Johnson got to Minneapolis at just the right time, Minneapolis got to Johnson at just the right time.


Conversations: I. M. Pei

By Andrea O. Dean

e consider him old-fashioned. For in the midst of today's
inging architectural theories and sensibilities, I. M. Pei, FAIA,
ins a self-avowed second generation modernist. "You can-
tain an architectural revolution every 20 years," he has
. "Architecture is not a matter of fashion." Yet, in Philip
son's opinion, "Pei's National Center for Atmospheric Re-
ch in Boulder was already a postmodern building.

or most of his professional career, Pei has avoided the time-
. He worked behind the scenes as director of architecture
veloper William Zeckendorf (Webb & Knapp) during the '30s and '60s. And while the majority of respected architects
day regarded developers with contempt, Pei used his al-
Zeckendorf to revolutionize our concepts of urban

gn. In such far-flung places as Denver, Montreal, Melbourne
, he succeeded in carefully weaving into the existing
brix large urban spaces of quality and variety. As one
c put it, "What the Pei firm has done so impressively is to
ade the often warring merchants in a capitalist society to
of their own free will, what is usually done elsewhere, in-
severely managed societies, by government fiat—and to
luce first-rate architecture to boot."

or such urban diplomacy Pei was suited by temperament as
as conviction. He is a gentle man, straightforward yet so-
ten, without airs or quotable quotes, tactful, charming, hum-
—and yet—as Hugh N. Jacobsen, FAIA, has said, "He's no
yet when it counts." Pei is also a consummate pragmatist,
orroaching each new situation by weighing the economic, legal,
and political problems surrounding it and letting solutions
ge through a constant give and take with his partners and
nts. Style, he says with some derision, "is not something you
off the rack. Its source must be in the nature of problems.
promise, far from selling your values and visions short, is
aps the most creative challenge."

he fruits of Pei's unusual talents have been office towers and
rtment towers, university buildings and museum buildings,
arch centers and civic centers—distinguished in the main
for their design and technical daring.

He refined the vocabulary routinely employed in urban hous-
pioneering in the use of precast and poured-in-place con-
e. And in the opinion of a prominent critic, "At this point,
... Pei & Partners probably know more about the detailing of
is and metal walls than anybody in the U.S. or anywhere
..."

Another has said that Pei "may very well be America's
architect."

I. M. Pei was born 62 years ago in Canton, China, and has
arked in the U.S. since coming to America to study in 1935.
spent my early childhood in south China," he begins, "and
my father moved the family to head up the Bank of China
Hong Kong. We stayed there for about seven years and then
ved to Shanghai, where we lived until I went abroad. My ar-
citectural training was almost entirely American or Western,
from a technical side, I would say China had almost no in-
ce at all. But since architecture is very closely related to
, my early years in China must have had some effect on my
architectural work. But if you ask me in what way it did, I
would find it very difficult to answer."

Two decades ago, Pei made his first attempt to bridge con-
cepts of Western and Eastern design with his Luce Chapel at
Tunghai University, Taichung, Taiwan. "It was a very self-con-
scious attempt," he explains. "I had not witnessed the changes
that China had undergone during the 20 years since I had left.
My perceptions of China were already obsolete."

Today, Pei is working for the People's Republic of China.
'They asked me to design a small hotel in Peking, and I accepted
because it gives me an opportunity to once again get involved
in a search for synthesis. Again, I think that whatever I do can
just point the way to other architects, the architects in China
who will eventually be the ones to find the synthesis. So, I think
my role is going to be like a bee spreading the pollen."

But wasn't his family considered "an enemy of the people" by
the Communists? "In the class sense, I suppose so," says Pei,
because my father was a banker. But he was not a politically
active type. He was more an economist than a banker. So, we
don't have a strong political tinge in our family. As a matter of
fact, many of the prominent bankers in China today were once
my father's employees. It is rather natural, in a way, for the
Chinese to once again recognize my father's work and make it
easier for me again to be accepted. The Chinese today are very
pragmatic and they consider the overseas Chinese as a resource."

Was it the Chinese who took the initiative? "Well, I guess so,
indirectly. They don't do it very directly. A group in Hong Kong
expressed an interest in helping China to develop its tourist
trade. Building hotels is one of the prerequisites of developing
tourism. So, my name was suggested."

Is the hotel likely to lead to more work in China? "If I wish, I
suppose it would," says Pei. "But I'm not going to China to do a
lot of work. I'm going over there really for two reasons. One is
to try to persuade China not to make the same mistakes I've
seen made in the U.S. and the Middle East. A city like Peking is
essentially a one-story city. But that doesn't mean it's a small-
scale city, because it is a city of walls, which knit it into a whole.
I was very outspoken while I was in Peking trying to persuade
responsible officials not to adopt Western methods and styles of
construction without some reference to Chinese cultural and
historical traditions. I also mentioned the need for preservation
of the existing fabric of the city. Fortunately, I have done
dough tall buildings in my life to make my concerns credible.
There will be a need for highrises in Peking, but there should be
a master plan for the future of the city so that they can group
high buildings at a respectable distance from Peking. I consider
the entire inner city of Peking a landmark and it would be a
great pity to destroy it. The second reason for my going is that I
am interested in searching with Chinese architects for a new
architectural vocabulary. Neither of the two alternatives open to
them search for a third way."

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The differing influences of Gropius and Breuer.

How did Pei become interested in architecture to begin with?
“During my last years in high school in Shanghai, there was a tremendous amount of building,” he explains. “The 25-story Park Hotel was then under construction. I was fascinated by the idea of a building of that height. It was as exciting to me then as the idea of going to the moon is to youngsters of today. I decided that was what I wanted to do.

“My perception of architecture was rather limited at the time, and to me, anything that had anything to do with building was architecture. It wasn’t until I came to the U.S. that I realized one has to be a specialist. I was accepted by the University of Pennsylvania. Before the term started, I decided the school was not for me, because I wasn’t sure that design was my forte. I thought that perhaps building engineering or civil engineering would be more to my liking. So I went to the Massachusetts Institute of Technology instead. Dean William Emerson of MIT—a great educator—was responsible for my change and commitment to architecture. He was not only my dean, but my guardian as well. He treated my very specially. When he said, ‘I’ve seen enough of your work. You will do well.’ I took his advice to stay in architecture. But in terms of design, he had little influence on me.

“When I graduated from MIT in 1940, I was offered a traveling fellowship, but Europe was already engulfed in war and Dean Emerson persuaded me to stay in Cambridge where I worked as a research assistant at the Bemis Foundation. After six months, I joined Stone & Webster where I worked until 1942. That was the year I married and we settled in Cambridge. After graduation from Wellesley, my wife enrolled at Harvard to study landscape architecture. It was through her that I met some of the professors at Harvard who persuaded me to make application to the graduate school of design. When I decided to go to Harvard to study under Gropius, Dean Emerson was very unhappy. He felt almost betrayed. He was deeply committed to the Beaux-Arts method of education and genuinely felt that the modern movement was mistaken.”

Before enrolling at GSD, Pei volunteered for service with the National Defense Research Committee and worked for two and a half years with an intelligence unit in Princeton, N.J., and Washington, D.C. He returned to Harvard in the fall of 1944, “still hoping to return to China, but my father,” he explains, “had become governor of the Central Bank at a time when the country was in economic shambles. He advised me to stay on the U.S. What happened to China afterward is history. I am forever grateful for his advice.”

What was Pei’s response to Gropius and Breuer who were his teachers at Harvard? “All architectural schools in the U.S. at that time were trying to free themselves from the Beaux-Arts, he answers. “There was a general lack of sense of direction. Gropius and Breuer, under Dean Hudnut, brought considerable excitement to Harvard. I was attracted to it as were Johnson, Noyes, Barnes, Rudolph and many others. There is no question that Gropius and Breuer helped shape my thoughts on architecture.

“In those years ‘form follows function’ was not just a slogan. It was almost a moral imperative. I understood Gropius’ need...
Robert Damora Robert Damora George Cserna

he doctrinaire position in order to bring about the change that some of us who were in school then thought his functionalism was perhaps overly simplistic. Gropius was really a great teacher. He encouraged discussions in the studio. On one occasion, I took issue with him on the subject of the International Style. I thought the differences in cultural and historical traditions would result in a variety of architectural expressions. To prove my point, I chose as a design problem a museum for Chinese art in Shanghai, which attracted considerable attention at the GSD. I remember well that Breuer defended my position strongly to the jury. That was the first time I realized there was a difference of opinion on fundamental issues even among those who were involved in the making of the modern movement.

"From Breuer," continues Pei, "I learned that to understand architecture, one must understand life. There was much empathy between us and we have been close friends to this day. I also think that Breuer was much more influential than he's been given credit for. A whole generation of architects was influenced by his early work, particularly in the design of houses. When he first came to this country, Breuer was very interested in the use of wood. At that time we had shingles, we had clapboard. But he said, 'Why not use vertical boards and tongue and groove and get completely flat surfaces?' Breuer started that. You could see it in Barnes' and Franzen's work and you can even see it in Richard Meier's and Charles Gwathmey's work today."

Pei knew Philip Johnson at Harvard and describes him as having been "sort of iconoclastic—and a gadfly. He was the most provocative and exciting person in the school. He shocked many of us by saying over and over again that he would much rather do a bad Mies than a good Johnson. My wife and I were among his first dinner guests at the house he designed and built as a thesis project. We knew and admired the Barcelona Pavilion and the Tugendhat house but simply did not know enough about Mies. Johnson was clearly ahead of us at that time. Mies' importance became more manifest after a retrospective exhibition of his work at the MOMA in 1947."

What was Pei like as a young man? "I was impressionable to the point of being naive, but very curious. I think curiosity was an important trait, because of curiosity I always inquired, and when you inquire, you find different kinds of answers. No, I was not taken in completely by any one dogma."

In 1948, Pei accepted Bill Zeckendorf's offer to create and head an architectural department for Webb & Knapp. Zeckendorf felt, according to his memoirs, that "it was about time the modern Medicis began hiring the modern Michelangelos and da Vincis." Pei, at the time, was not ready to open his own office. "I might at any time decide to return home," he recalls. "And Zeckendorf was willing to hire me though I made it clear that my stay might be only temporary." But there were other reasons why Pei accepted the position.

"Real estate developers," he explains, "are responsible for the built environment that we see. Rather than hold them in contempt I thought there was a great potential in trying to work with them. One could learn something from them, and I learned a great deal. The way a real estate developer looks at a site is a wonderful lesson for an architect. He looks at the surrounding properties—who are the neighbors? He looks at the
From Miesian grids to Corbusian plasticity.

transportation systems, since people have to get to the site. The contextualism in the design of buildings was never more powerfully gotten across to me than in association with developers like Zeckendorf.

"The noted architects at the time usually didn't involve themselves in this type of work. The budget was low and constraints many. But I found it extremely exciting. I wouldn't want to do anything differently if I had to start my professional life over again.

"Zeckendorf was a very imaginative person. He never looked for the obvious and had only scorn for conventional solutions to problems. In a way, I find myself approaching architectural problems in much the same way he did in his real estate ventures. He was an idea man, making his mark through ideas, and so are we."

Zeckendorf for his part regarded Pei as "probably the greatest site planner alive... a perfectionist, but practical, a pleasant guy to have around."

While with Webb & Knapp, Pei and the 70 designers working for him planned and designed, among other projects, Denver's Mile High Center, the Place Ville Marie, in Montreal, and Society Hill, in Philadelphia. What were the principles guiding their work? "If you build in an existing city," Pei explains, "particularly an old part of a city, you have to respect the existing fabric of the city, as in mending a piece of cloth or tapestry. The opposite to that is what Le Corbusier proposed in the Ville Radieuse in Paris, carving out a piece of Paris and then super-imposing onto it his radiant city. That is wrong. And we all knew that."

How was this idea applied in Montreal? "The site for Place Ville Marie was once the marshalling yard for the Canadian National Railroad, a 40-foot deep, gaping hole in the middle of Montreal dividing the retail center to the north from the transportation and finance center on the south. Place Ville Marie was the multilevel complex of pedestrian ways unified the once divided city into a whole. As a result, many other projects followed."

Did he have reservations about planting highrise buildings in old residential areas like Society Hill? "I think you must understand that Society Hill was an urban redevelopment project involving city, state and federal participation. The determination on density was made on the basis of the economics of the costs of land acquisition and the amount of write-down permitted by law. I believe there were six architect-developer teams competing for the right to develop the properties. We won the competition because our scheme respected the design forces impinging on the site from the outside as identified by the Philadelphia city planning commission. By concentrating the bulk of density in three highrise towers along the waterfront, it made possible the development of the remainder of Society Hill with town houses—and so preserved the scale of 19th century Philadelphia."

During this period, Pei's work was strongly influenced by Mies, yet the town houses he designed for Society Hill have arches and other allusions to the past. "Yes," explains Pei, "that was intentional, the use of brick and arches was characteristic of the townscape of old Society Hill. Also, the builder wanted two
very units, because he thought people wouldn't want to walk up more than one floor. The rest of Society Hill, however, was at least four stories high, so we persuaded him to let us go up three levels. There are certain times you have to be insistent with your client, because if we had built two-story houses, they would be much less sympathetic with the older town houses."

In the mid-1950s, Pei began taking some independent commissions. "We did the Earth Science Building for MIT which had nothing to do with Webb & Knapp. We weren't fully independent until 1962. The break was a gradual one. I expressed my restlessness to Mr. Zeckendorf around '55, '56 and he was very understanding, saying, 'You can take some outside commissions, but don't forget us.' By 1961 or '62, Webb & Knapp was having financial difficulties and the very large architecture department was a heavy burden for the company. So when I decided to do more outside work, he agreed."

Of the senior staff members who are with I. M. Pei & Partners today, about 90 percent go back to the Webb & Knapp days, according to Pei. How does he run the office? "It really consists of a number of small firms," he says. "We have different project teams and each is independent. My role, because of my seniority and presumably I bring with that seniority a certain amount of experience—is to oversee a number of teams and make my contributions when I think they are needed. My other partners are gradually doing much the same thing, taking on first one project and then one or two more. We have a staff of 140 today; we were 55 back in 1971. But with 140 we are doing more work and I think better work than we did eight years ago.

"Some of our early buildings look as though they were done 10, 15, 20 years ago. But that's good. It is a healthy sign of growth. When one is satisfied with one's work done 10 years ago, then there is cause for worry."

How have Pei's ideas about design changed over the years? "The machine ethic of Mies, because of its great simplicity, was very applicable to our work of the early '50s," he says. "We were trying to solve urban housing problems at the lowest possible cost and yet, at the same time, develop something that was esthetically satisfying. I found much that I could draw on from Mies for Kips Bay here in New York, Society Hill and University Plaza at New York University. Where Mies used steel, aluminum and glass, we used concrete and glass.

"But I found Mies' approach somewhat rigid. 'Skin and bones' architecture does not offer the kind of volumetric and spatial possibilities I was seeking. So we looked into Le Corbusier's work and to a lesser extent, Aalto's and Frank Lloyd Wright's. I think the influence of Le Corbusier was the stronger for we found in his work sculptural possibilities. Our interest in the use of concrete started about that time as it is a material that permits one to express volumes."

This sculptural quality is very apparent in Pei's National Center for Atmospheric Research in Boulder, which he began designing in the early 1960s. "Before Boulder," he says, "I had always looked over the shoulder of the architects working with me, and I would participate in the concept and occasionally draw a little to test out an idea or to help someone consolidate his own direction." Boulder was for Pei an intensely personal expression, his first.
Part of ‘a generation of builders, not theorists.’

“When we got into public buildings, a new kind of concern entered into our work, and that is the symbolic one,” he continues. “Take the Kennedy Library. It’s a small building. Yet the building cannot give the appearance of being small because it represents not just Kennedy himself, but the importance of the Presidency during the years when Kennedy was President.

“Similarly, Dallas City Hall had to be more than just an office building. We had to be concerned about people’s perception of what the building should be. We chose to make it long and low, because we felt it should contrast with private institutional buildings. There was another reason for making it low. A public building has to have a public space, just as in front of a cathedral there’s always a square. If you put a tower in front of a plaza, the plaza leaks everywhere and you end up with no enclosure. A low building embraces the plaza and makes it its own. So the search for the symbolic is very important in this context.”

Looking back at the 1950s and ’60s, Pei says that “it was a period of great opportunities. We had almost continuous building activity for almost two decades. This created a generation of architects who had little time to reflect. It was a generation of practitioners, putting the ideas of Le Corbusier, Mies and others into practice. It was a generation that said, ‘The revolution is won. Now let’s roll up our sleeves and get something done.’ I belong to that generation.”

What architectural firm or individual does he think made the most significant contribution to design during these decades? “I would have to say Skidmore, Owings & Merrill, because they were able to create a very large amount of work of very high quality,” answers Pei. “In the process they set standards. They have gained acceptance for the profession in the corporate world. I think some architects of today tried to make light of contribution. I believe they will be proven wrong.

“During the ’60s, I consider Louis Kahn an important influence. Because his background was Beaux-Arts, he was steeped in the history of architecture. He created his own forms by adapting forms of the past. He went beyond the first generation of modernists. In my opinion, Salk Center comes close to being an ideal building.”

Did Kahn influence Pei’s work directly? “Yes, in a formal sense, he and I were probably equally concerned about form. Though, I think Salk Center is much better than the National Center for Atmospheric Research, the formal concerns were the same.”

Like Kahn (and Johnson), Pei has designed a number of museums beginning in the late 1960s. The first was the Everson Museum of Art, Syracuse, N.Y. (1968); the most recent is the National Gallery of Art, East Building, Washington, D.C. (1978).

Does he feel that there have been basic changes in approach and form during this decade of work? “Yes,” he says. “Both the Everson and the East Building are exercises in form and space, I think, however, the East Building is more successful contextually. Its space is more whimsical in character, while at the same time more complex because of its multiple vanishing points.”

How does he feel about the recent criticisms of the East Building? “They were bound to come, for no building is perfect. Frankly, I was happy to see that architectural space can stimulate the visual perceptions of people. The East Building is essentially a place for special exhibitions. With the opening of the study center for visual arts this summer, the East Building will be complete. It has been criticized for not having enough exhi
The Des Moines Art Center (top left) and The Everson Museum of Art (bottom left), both completed in 1968, are characteristic of the Corbusian character of much of Pei’s work at the time. Left, a detail of his enormously celebrated East Building of the National Gallery of Art, and above, the Dallas City Hall with its Henry Moore sculpture; both were completed in 1978. At right, model of the Raffles International Center in progress in Singapore.

This is, in fact, untrue, for there are 90,000 square feet of exhibit space, roughly eight times the special exhibition space in the west building.

Paul Richard of the Washington Post said, ‘Isn’t it a pity there isn’t more daylight?’ It’s very easy to say that. But were they have daylight, curators are now trying to dim it, for light can be a problem. And controlled daylight runs into economical costs; so we opted for daylight in the three major galleries on the top floor. There is also criticism that the temporary exhibition gallery is on the lower level. It had to be there to near the loading and storage areas. Mounting a major show in Dresden is both noisy and time consuming. This gallery can shut off without affecting the rest of the museum.

‘But criticism,’ he continues, ‘is always constructive, even if it is unfair. However, I believe good architecture will withstand the test of time.”

Pei is so much the humanist. How does he respond to critics who say that by removing scale elements some of his buildings lead to overwhelm visitors? “I assume critics were referring to public buildings such as the Dallas City Hall and the East building. Frankly, I am not aware that either building overwhelms visitors. Scale perception is very subjective. To me, a public building needs to have a scale that is appropriate to its importance to society.”

How important to Pei is the idea of architecture as art? “I agree with Philip Johnson that architecture in its highest form is great art. It must also pass another test; namely, how well has it satisfied its social purpose?”

And how does he view so-called postmodernism? “I think it’s just another name,” he answers. “But it does do one thing that is good. It makes many architects look back and say, ‘Now let’s be so upright. Let’s have a little fun. The battle is won, now let’s search further; let’s relax a bit.’ That’s good. I’m certainly not one to belittle previous generations. I owe a great deal to them, just as the young today owe something to us.”

Pei continues, “In perspective, the change taking place today is minor when compared with that brought about by the modern movement, which was not a change in style but a break with tradition. In my view no building can stand alone without reference to its surroundings. I would like to make clear, however, that I recognize the importance of the individual building. Ville Savoie and the Barcelona Pavilion are two such examples that come readily to mind.”

On the subject of Philip Johnson, Pei goes on to say, “Philip is an architect with wit, taste and style. I think his important contribution lies in creating a climate for questioning. We architects tend to be somewhat set in our ways. We need a little stirring up and he is doing just that. I must confess, however, that I find it difficult to follow his many twists and turns. To me, design is a painfully slow process. I think there is too much concern for style and not enough concern for substance today. Architecture is serious business. It is not fashion. In this respect I am a conservative.”

Would it be correct to say that Pei’s work is characterized by a sense of almost classical orderliness? “Yes, I think that is the way I look at life,” he answers. “Life is kaleidoscopic and heterogeneous. I tend to seek order in life. I like to simplify, not make things complicated.”

What, finally, does I. M. Pei want to be remembered for? “I believe in continuity and change. I believe architecture is an important art form mirroring life. As an architect I want to build beautiful buildings that are respectful of their environment and, at the same time, satisfy social concerns. I want to be remembered as an architect of my time.”
Evaluation: From Context to Form

I. M. Pei's National Center for Atmospheric Research, Boulder, Colo. By Bernard P. Spring, FAI.
When it was dedicated 12 years ago, the National Center for Atmospheric Research (NCAR) headquarters building provoked the curiosity of the general public as much as it provoked the architectural profession. What was the purpose of the unfamiliar forms and shapes which were so widely shown in magazines and newspapers? The official explanation for the complexity of the rosy-hued building was that the jagged towers and their asymmetrical features were the direct physical expression of a most complex program essential to the kind of scientific activities generated by research on the atmosphere. Today, the activities of the people who work in the building are but a small portion of a worldwide scientific network (much of it electronic and invisible) which circles the earth and reaches from the depths of the oceans to the surface of the sun. The building itself is, more than anything else, a tangible, visible symbol of this unseen web of scientific research.

In 1961, a committee of seven architectural school deans chose I. M. Pei & Partners as architect for the NCAR project. The site selected was one of awesome beauty, atop a 6,200-foot-high mesa in the eastern foothills of the Rocky Mountains on the outskirts of Boulder, Colo. By 1964, the Pei office was to send out to bid a set of contract documents that marked a major turning point in Pei's career as a designer. Up to that time, his substantial reputation had been earned by fitting buildings with familiar programmatic demands such as offices and housing into the context of a dense, urban environment with great sensitivity and refinement.

Recently, I. M. Pei, FAIA, recalled the sense of profound humility he felt in dealing with that vast, open mesa and the superhuman scale of the Flatiron Mountain range, the backdrop for the building he agreed to design. Added to the challenge of the site was an unusual set of program demands developed by NCAR's then director, Dr. Walter Orr Roberts, and his colleagues. Roberts went well beyond his training as an astrophysicist to become a statesman of the scientific community. Almost singlehandedly, he created a new, interdisciplinary field of re-

Mr. Spring is dean of the school of architecture, City College of the City of New York, and a former editor at Architectural Forum.
Inspiration from the towers of the cliff dwellers.

search, atmospheric science, and brought it legitimacy and substantial funding. His unique ability to conceptualize both the philosophical and practical aspects of innovative science proved transferable to architecture.

As Pei puts it: “It was more like having a new partner than a new client.” Roberts asked for a building that would reflect the inherent complexity of atmospheric science yet remain flexible enough to accommodate changing research programs. He wanted the design to represent the organization with pride yet fit with respect into its glorious setting. Because the timing was right, he got what he asked for.

If NCAR had been started just a few years later, Pei would have been obliged to wait for a different commission to bend his earlier thinking about issues of context toward issues of form, his main challenge on this project. The population of Boulder has quadrupled from about 20,000 in 1950 to some 80,000 in 1979. It is a prosperous, research-oriented city, still dominated by the main campus of the University of Colorado (which recently had its student population “capped” at 20,000). Boulder’s voters have moved decisively to limit further growth and to preserve its most beloved visual asset, the unspoiled mountain backdrop.

The NCAR towers were the first and will very likely be the last man-made objects to be built against this backdrop above the 5,500-foot elevation (about 200 feet higher than the city’s center). Before the NCAR site could be used, a public referendum was needed to permit a building above the so-called blue line, the highest elevation to which the city would supply public services (such as water). After NCAR was completed, another referendum created the bonding authority which permitted the city to purchase and preserve forever in its natural state all of the mountainside land not already in public hands. With the passage of time, however, most of the people of Boulder have come to see the towers of NCAR as a familiar incident in the sweep of their mountain view, no more out of place there than the Devil’s Thumb, an unusual beak-like natural rock formation that juts up at the southern end of the Flatiron range.

This sense of fitness to the landscape was precisely what Pei set out to achieve. The design approach, however, did not come to him easily. There were many false starts. At first, he tried designs using his accustomed vocabulary which articulated structure and skin and achieved a sense of scale in the size and proportions of the windows. These designs created buildings that
ld have looked like toys in the grandeur of this site. Pei spent out day and night on the site, then called Table Mesa, h Roberts (in 1975 the name was officially changed to Walter Roberts Mesa). He toured the state searching for inspira-1. At Mesa Verde National Park in the southwestern corner of orado, he found it. There he came upon the 13th century 1s of the Anasazi Indians, built in immense caves in the walls he canyon cliffs. The indigenous masonry towers of the Inns were not the least bit intimidated by the gigantic scale of ir surroundings. Thus the seed was planted for his concept the shape, color and texture of the NCAR towers. The non-iculated, somewhat monolithic forms of the NCAR design own on these pages reveal how Pei reinterpreted the principles Mesa Verde’s architecture using the best available concrete hnology and radically different uses.

The transformation of the meaning of the NCAR complex in 12 years it has been in use is no less radical. When it was conved, the programmed activities and the building itself were ought of as a discrete unit (as was usually the case throughout history of architecture). Yet no program or building could ve been made flexible enough to anticipate the changes that re to take place in atmospheric research. At first, for example, was expected that much gathering of scientific data would take ce on the large roof deck at the third level of the structure. d for a few years, some measurements were made on the cost-promenade deck provided there. Presumably this was a major ivation for siting the building high above the dust and smog the rapidly urbanizing center of Boulder.

Now the most significant data are collected and recorded in imaginable quantities by satellites, by a specially instrumented set of four NCAR airplanes, by 900-foot-high balloons that send messages back from an altitude of 100,000 feet, from instruments of oceanographic ships and more. What really s all this widespread work together is the pair of computers
A variety of spaces for people—and computers.

housed in a 15,000-square-foot addition to the original first basement tucked beneath a level, grassy corner of the mesa. The newest and most powerful of these computers, the Cray-1, is the size of three phone booths and looks (ominously) like a close relative of "Hal," the domineering intelligent machine featured in Stanley Kubrick's film, "2001." This instrument, which began to operate in 1978, cost as much as the entire original building complex. Scientists at 63 locations across the nation have remote job entry equipment which makes it possible for them to use NCAR's principal facility as easily as the people working in the building.

Yet, the mesa building still houses about 500 of NCAR's 800 employees and a substantial and varied set of scientific activities. It is extremely overcrowded (it was designed for a population of only 300), particularly during the summer when up to 75 additional visiting scientists and students are somehow squeezed in. The shortage of space is ameliorated somewhat by the 48,000 square feet that NCAR rents in four buildings on the university campus below to house some 200 people. Had Pei's and Roberts' original program been built, there would have been 50,000 square feet more office and laboratory space on the mesa. The so-called south towers were cut from the budget by the funding agency, the National Science Foundation. Pei feels these towers were very important to the overall site design concept (see previous pages). They also would have been the most dramatic portion of the structure, growing out of the back slope of the mesa in a way that emphasized the connection of the building to the natural formations around it.

In its present form, the building on the mesa has some of the characteristics of a ship. The well-known "superstructure" of tower-like forms contains only 57 percent of the assignable floor space. Below the main entry level is a vast podium or "hull" that holds 43 percent of the assignable space and an even larger portion of the building's cubage (because of the large, nonassignable boiler room and fan room). Almost 200 members of the staff are stationed "below decks." Here we find the rooms filled with the clutter of instruments, wires, vials and pipes usually associated with traditional, bench-related research. Above decks by contrast, we find mostly desks and bookshelves piled high with papers and punch cards together with racks holding electronic equipment tied to the computer system.

Because it is a facility funded by the federal government, NCAR welcomes visitors, including science classes from near schools, who can view exhibits there or descend to a glass-walled room where they may have a look at the central computer equipment. A visitors' map and the limits of the dark brown terrazzo flooring are supposed to keep outsiders from wandering into areas of research activity. Only the computer space has the locked up security that has done so much in recent years to constrain the atmosphere of public buildings, particularly those in large cities. Other work areas are protected from intrusion only by the complexity of the circulation system which would take most visitors a few days to comprehend.

The large lobby area created for visitors is not one of Pei's favorite spaces. Only later in his career, he claims, did he come to understand fully the way to design large interior spaces. And indeed, the lobby is the least impressive area in the building. It quality has been further damaged because the incandescent downlights are turned off in daylight hours to conserve energy. This makes the small, punched window openings glare harshly, although they are supposedly protected by concrete hoods outside and contain tinted glass.

There are unexpected patterns in the use and popularity of the spaces in and around the building. The fountain courtyard and the tree plaza are the most conspicuous and attractive space for the visitor. Yet, they are little used by the staff. The mesa catches a downdraft as the wind often spills briskly over the Rockies (sometimes at speeds between 100 and 150 miles per hour). The fountain had to be shut down not only because it spewed a stinging spray in such winds, but because it developed some unconquerable leaks. The open scuppers which drain the balconies on each side of the fountain court are still in operation. As with scuppers used in other parts of the building, they build up huge, deadly icicles overhead in cold weather and spray water against pedestrians and the building's walls and windows when the high winds blow in warmer weather.

In contrast, the terrace outside the dining area and the bridge leading to the mesa from the second level, outside spaces of no
one of the 'crow's nest' offices at the tops of the towers. Top, the crucial pair of computers that do much of the center's work. Above, a lab. Top right, the spacious Damon lounge. Above right, the less than spacious lobby. Right, an office with protected corner windows.
The tree plaza (right) is on the chilly north side of the towers. The fountain court (below) has had its fountain covered over because of leaks and the play of high winds. Bottom, the little known University Corporation for Atmospheric Research, which shares the NCAR site and was also designed by Pei.

A 'masterpiece of symbolism' and a new sibling. particular distinction, are filled to capacity in good weather and are occupied by some hardy folk even when the temperature is in the 50s as it was during my visit. Both of these areas have dramatic views and a southern orientation. The lovely tree plaza, unfortunately, lies to the north of the towers and there are very few days when shade is appreciated in the Boulder climate.

Two other staff spaces, the library and the double-height commons room (the Damon lounge), are most attractive to a visitor but get very little use. The library reading area also seems troubled by glare from the large windows facing southeast. The tinted glass is not dark enough to overcome the brilliance of light outside in this crystal clear atmosphere. The Damon lounge is so noble in proportion that any group of less than 20 people may well feel intimidated there.

The very special offices, with wall to wall glass under a giant hood of concrete at the top of each tower, are called "crow's-nests" by the staff. Each can be reached only by an individual circular stairway from the floor below. The crow's-nests are the subject of some controversy. Designed to give deep-thinking theoreticians a breathtaking view of the atmosphere they work
Understand through the use of abstruse formulas, the towers said by some administrators to be difficult to assign. Yet, 1/3 of the occupants are glad to endure the howling winds and tely controlled heating of these spaces and are delighted to work in them.

A strong impression produced by the overall design and detailing of the building is that all the glass areas are carefully shielded from the bright sun. A closer look reveals an anomaly. One tower has large corner windows, totally without protection from the sun. The south-facing office I used during my visit had a window. It became terribly hot in this room when the sun shone, even though it was pleasantly cool outside. The tyrannically dual-duct airconditioning system with its individual room controls was unable to compensate for the overheating. Because inherently wasteful of energy, the dual-duct system is being laced section by section as building alterations occur to provide a more energy-conserving, variable air volume system.

The planning and design staff at NCAR estimated that about 20 percent of the assignable area of the building has had some substantial alterations between 1972 and 1979. This is about normal for an active research facility. These alterations did not take place in the kind of simply shaped modular space that conventional wisdom tells us is necessary for such a building. Yet, with a few minor exceptions, most of which are the product of overcrowding, the spaces of the building still work well for rapid-evolving uses. The groupings of scientists, originally planned in teams of three or four, have grown with the complexity of research to groups of 30 to 40. The informal, personal contacts which were expected to take place following the strong tional relationships of spaces in each tower seem to spread horizontally, by floor level instead. Still, the people working in the mesa building are clearly pleased with their work spaces. In spite of, or perhaps because of, all its quirks, the building sustains a unique personality, a special sense of place. This seems more supportive of good morale and camaraderie than all the conveniences of a modern scientific laboratory factly in place.

An almost unknown and unpublished building by Pei was added to the mesa site some three years after the completion of the main complex. It is an extraordinary, tiny gem with a gross area of only 4,300 square feet. It proves that Pei’s command of interior space was not long in coming. The Fleischmann building, needed for the private foundation which funded it, is a further ample of the use of the built form to underline the structure of an organization. The government-owned NCAR facility is actually operated by a private corporation, a consortium of participating universities (initially 14, now grown to 47 member institutions).

Roberts, when president of this University Corporation for Atmospheric Research (UCAR), wanted to symbolize its independence from government control. One acre of land in the midst of almost 500 on the mesa site was deeded back to the corporation by the NSF. There, a stunning architectural concept is realized by Pei to house the offices and activities of UCAR. But, when Roberts left the organization to head the program in ence, technology and humanism of the Aspen Institute, his successor, Dr. Francis P. Bretherton preferred an office at the center of the action in the main building. Since that time, even in the face of the overcrowding there, it has been difficult to find one who wants to move from the NCAR building to the CAR addition just a few hundred feet away.

A visitor several years ago noticed that the pictures on the walls of most offices included at least one view of the exterior of the structure in its dramatic setting. That exterior image is so strong that it continues to inspire the people who live with it every working day. The forms that I. M. Pei created on the mesa no longer reflect exactly the activities that go on inside the building. Nevertheless, they endure as a masterwork of symbol that projects the political and social importance of atmospheric research.
I should probably explain that both Philip Johnson and I. M. Pei are among my closest friends. So you will understand, I am sure, that everything you are about to read has been colored by prejudice.

Philip Johnson is, quite simply, the most infuriating architect and critic this country has produced in the 20th century. For one thing, he simply knows too much—he is so incredibly scholarly that he can wipe the rest of us off the stage any time, with a quip. He is absolutely maddening. His wit is acid, and his stilettos are honed to perfection. I suspect he is probably evil—but not quite as evil as he would really like to be. He is more devil’s advocate than real devil.

He is an intellectual of formidable accomplishments: a first-rate historian, a first-rate critic and first-rate debater. His interests (unlike those of most architects of my generation) encompass music, literature, politics, philosophy and all the visual arts. I don’t know of anyone in our field today who possesses so large a bag of tricks.

He has done some extraordinarily beautiful buildings, and some that I would probably prefer to forget. This is better than par for the course. I suspect that his spectacular intelligence—his cleverness, really—has sometimes led him astray. For a very long time, he was trying, with each new building, to resurrect a significant historic precedent—a Palladian villa, or monument by Schinkel. Even his Miesian buildings were often inspired by Miesian precedent—which is not meant to sound as silly as it does: He really tried to reinterpret Mies, not to copy him. The IDS building, in Minneapolis, for example, is a reinterpretation of Mies’ prismatic glass skyscraper projects of 1919 and 1921, not a copy at all.

I recently learned, with some amusement, that Philip Johnson remembers my comment—a good many years ago—that his glass house was really very European, and that the Farnsworth house by Mies was much more “American.” You see, Philip, a very gentlemanly American, tried, for a long time, to be as European as—T. S. Eliot! Whereas Mies, a native of the very heartland of Europe, the place of Charlemagne, was trying to leave all that behind him in a determined search for avant-garde technology. He was looking for someone like Henry Ford; and Philip Johnson was (and possibly still is) looking for Charlemagne.

In that search, Johnson occasionally does a silly building. But even when the result is a little embarrassing, it is so much better than most buildings don by his contemporaries. And the ideas that generated the embarrassment are often enormously stimulating. For example, I am not entirely certain about his Corpus Christi museum—but it did resurrect Spanish stucco as a building vocabulary, at a time when everybody else was doing high-tech guts-and-strut.

Philip Johnson, now (incredibly) in his 70s, is perhaps the most successful architect in America—not in the quantity of his work, but in the visibility, the media exposure and generally the quality of his work. His original idol, Mies van der Rohe, used to say that you cannot, or should not, invent a new style of architecture every Monday morning. Philip Johnson, in fact, does exactly that. He is incredibly facile, always a step or two ahead of the rest of the passing parade.

Serious critics accuse him of being a charlatan, or worse. I must confess the serious critics often bore me; and charlatans rarely do. Fortunately, Philip Johnson is a frivolous critic, and a very serious charlatan.

I. M. Pei, who greatly admires Philip Johnson (I suspect the admiration is mutual) shares one or two attributes with Johnson: He is a collector of modern art; he is totally devoted to architectural quality, and he is very much aware of what is going on in the think tanks of architectural theory.

Beyond that, I.M. is a very different sort of architect. What impresses you most about him is that he is a superb diplomat—an architect totally attuned to his client’s problems and aspirations within the constraints of the real world. I.M. is capable of translating an architectural vision into reality, bypassing all the predictably tedious roadblocks, and—ultimately—producing a significant work of public art.

Mr. Blake, editor in chief of Architectural Forum in 1964-72 and of Architecture Plus in 1972-75, was recently appointed chairman of the department of architecture and planning at the Catholic University of America, to assume his new duties in September.
The way he does all of these things is not simple: For instance, he may
think all the political and economic and social options—and then, very diplo-
"matically, propose a solution that is, invariably, much more than the sum of
parts.
By this I mean that I.M.'s projects start out as individual buildings in a typi-
"cally urban setting; and then, by "gradual degrees," turn into strategies
for urban regeneration.
Wherever I.M. has been active, the impact of his work has gone far beyond
the presence of a single building: In Denver, he translated the commissions to
three or four isolated, downtown structures into a long-range strategy for
urban regeneration. It has worked. Ditto in Montreal. Ditto at Kips Bay, in
Manhattan. An so on. In some instances (e.g., with his master plan for the
Vernon Center in Boston) the generating urban idea was powerful enough
to make wing without the design or construction of a single I.M. Pei building.
Though he is, quite clearly, a superb artist, interested in the thing that is sup-
posed to interest artists (i.e., art), he is at least as much interested in the urban
domination. Each of his buildings tends to become the entering wedge in the at-
mament of some greater, public goal, such as the renewal of a significant por-
tion of a city, or the welding together of previously antagonistic neighborhoods.
I., one feels, is at least as much interested in the diplomacies of architecture,
in the strategies employed, as in the final result. He is a kind of Chinese
patron, let loose on the urban, American scene (the melting pot is clearly
boiling over tonight!); whereas Philip Johnson is the designer and maker of
artifacts, of would-be (and often actual) architectural jewels that affect
environments primarily by setting standards of excellence for others to
itch. While Johnson is almost exclusively interested in the art of architecture,
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itch. While Johnson is almost exclusively interested in the art of architecture,
His personal/professional styles underscore their differences. Although
Johnson would, in all probability, be lost without John Burgee (and
would have been lost, in earlier times, without Landis Gores or Richard
Herzer), he does function exceedingly well as a one-man generator of archi-
tural ideas.
I.M. Pei, on the other hand, is a superlative team-player; and the members
of his team have often received abundant credit. While there are occasional
missions, such as the East wing of the National Gallery of Art, that are
purely I.M.'s own work (and reflect his own, individual preoccupations),
ny of the projects built by I.M. Pei & Partners have received considerable
ut from the "partners"—often decisively so: The 88 Pine Street Building in
New York City, near the South Street Seaport, is largely the work of Jim
ed—a building of pristine, white, Miesian purity. The Christian Science
Center, in Boston—that latter-day Vatican—is largely the work of Aldo Cos-
ca, a former partner (now independent) with ideological ties to the Ecole
Beaux-Arts. And the shimmering John Hancock Tower, just to the east of
Christian Science Center—the greatest work of minimal sculpture since the
shyton Monument—is largely the work of Henry Cobb.
In every one of these buildings, I.M.'s input was probably decisive at a cer-
n moment. But while Philip Johnson's office might be in a certain amount of
able if Philip were to decide to retire to Kuala Lumpur, say, I.M.'s office
ould function reasonably well if he were to take a sabbatical. The output of
office might become a bit more diffuse than it is now, but not much more so.
Perhaps the best way to compare Philip Johnson and I.M. Pei (as architects)
so imagine what each might do—might have done—for the Convention Cen-
on Manhattan's West Side, a $350 million complex for which both firms
were being considered recently. (I.M. Pei & Partners won out, as everybody
ows.)
Had Philip Johnson and John Burgee got the job, the chances are that they
would have produced the last and most magnificent palace of our century—a
19th century Crystal Palace, a dazzling structure that would, almost certainly,
be a major shift in the artistic center of gravity of Manhattan Island,
probably broken the bank.
And what I.M. Pei & Partners are likely to produce is a project designed to
create a more gradual, a less flashy shift—a project designed, eventually, to
make all of Manhattan's West Side, and all of Manhattan, a center for the
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The book has more than 200 photographs and candid shots, with 32 pages in full color, most of them previously unpublished. **Paul Grotz, AIA**


At the end of this book, the author says: "Frank Lloyd Wright's last book, *A Testament*, was published in 1957. In it he mentioned Fallingwater as his first dwelling in reinforced concrete, and one which established a new grammar true to the material. He died on April 9, 1959, in Phoenix, at nearly 92 years old.

For several years more, Edgar Kaufmann Jr. continued to use the house on Bear Run. In September 1963, he announced his intention of giving the house to the public in care of the Western Pennsylvania Conservancy of Pittsburgh. The house and 1,543 acres surrounding it were formally accepted in a ceremony on Oct. 29 as 'The Kaufmann Conservation on Bear Run, a Memorial to Edgar J. and Liliane S. Kaufmann.' That day, Edgar Kaufmann Jr. looked back on his year with the house:

"Its beauty remains fresh like that of the nature into which it fits. It has served well as a home, yet has always been more than that: a work of art, beyond any ordinary measures of excellence. . . . House and site together form the very image of man's desire to be at one with nature, equal and wedded to nature. . . . Such a place cannot be possessed. It is a work by man for man, not by a man for a man. . . . By its very intensity it is a public resource, not a private indulgence."

"As a work of art, the house on Bear Run reveals itself slowly, and never once and for all. . . . There was never any house quite like it before, and there has been none since."

This spirit has been captured by Donald Hoffman in his book, which is not merely a catalog of the structure, but the complete story of Fallingwater. Although the house never received an award or commendation during Wright's lifetime, more than 70,000 people from all over the world visit it each year. (In this magazine's poll of architects (July 1976) for opinions on the nation's most significant works...continued on page 84
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Books from page 81 of architecture in its 200 years of history, Fallingwater tied for second place with Dulles International Airport, designed by Eero Saarinen. Ed.

Hoffman's volume faithfully relates the nature of the land, the forces that brought client and architect together, the design, the building process and its problems.

Wright loved Fallingwater as one of his children and he embued that spirit of love and warmth in us all. It is remarkable that all of us apprentices who worked on the project were only in our mid-20s at the time of its design and construction.

Hoffman has interviewed in depth most of us who were involved and has sorted out the varied reports on the memories—40 years later—of the people. Through a careful juxtaposition of these interviews and mention of letters Wright wrote his clients, Hoffman has shown how a lifelong friendship developed between artist and client. They valued and enjoyed each other.

The volume is well organized. It is basically intended for the visitor to the house and admirers of Wright. There are 100 photographs, sketches, elevations, floor plans and perspectives. The photographs alone could stand as a pictorial essay on the chronological development of the house, emphasizing the marriage of the building to the site and the masterful follow-through of interior design.

This is an invaluable addition to the documentation of Wright's work. If you can't visit the house, or even if you can, read the book. Edgar Tafel, AIA, author of "Apprentice to Genius," reviewed on page 81.


Readers will be stimulated—and possibly enraged—by this book, which offers balanced, systematic and devastating survey of Chicago's subsidized housing. Bowly, an attorney for the Legal Assistance Foundation of Chicago and an architecture buff, has put together a remarkable collection of facts and photographs, letting them speak eloquently for themselves except for brief comments and an overview at the back of the book. The effect is bleak, discouraging, almost nauseating, for what he has assembled clearly amounts to a catalog of failures.

Bowly makes no attempt to apply quantitative tests in evaluating the overall outcome of Chicago's long involvement with subsidized housing. His responses are subjective and personal, a style appropriate to his casebook approach but unlikely to reap much applause among housing scholars. For those who feel, as I do, that these matters are best dealt with by inspection rather than by generalizations and statistical analysis, this will come as no disappointment. Bowly suffers from a good eye for design, understands marketplace realities and carries with him a social conscience both deepened and made practical by years of experience as a lawyer in one of Chicago's most depressed areas. The combination makes his judgments unusually cogent and telling.

The failures Bowly recites are economic, social and political, as befits the subject matter, but the most glaring deficiencies underscored by the Chicago experience are those of the architects and planners who designed the buildings and

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continued on page 8
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ful, the single paragraph on spelling is gratuitous. The discussion on project records is fine, that on efficient drafting station unnecessary.

The chapter on drawings and sheet organization is blessedly short, covering paper, sizes, borders, title blocks, organization and the author's systems for identification and referencing. The one on dimensioning shows conventional and modular approaches. That on the metric system is a fine introduction to what is coming, but I disagree with any suggestion of dual dimensioning during a transition period.

The longest chapter deals with detailing and scheduling. Here may be found the author's standards for simplified drawing, schedules, indicators, logs, abbreviations, symbols and similar elementary material. And his last chapter contains various references and checklists.

Thomas's book is carefully thought out and has consistently good and clear graphics. While it has limited use because of the author's single bias toward his own standards, it is professionally done and is a useful addition to the literature. Robert Allan Class, AIA, Director of the Institute's Practice Division

The Mormon Landscape: Existence, Creation and Perception of a Unique Image in the American West. Richard V. Fran

The author of this book—a geographer—says that as a rule geographers close their eyes to landscape. Hence, we know little about the "visual heritage" of cultural groups. "And we know next to nothing about the concept of religion as a motivating factor in the creation of landscapes." Most studies of religious groups by geographers, he says, tend toward "spatial analysis," giving no more than isolated clues to the way in which the groups create landscapes.

Franaviglia's study, which involved traveling more than 3,000 miles into that portion of the West known as Mormon country, begins with a discussion of whether a really distinctive landscape can be associated with the Mormons. He finds the Mormon landscape to be a "unique entity, a conscious transformation of the geography of America."

Franaviglia then gives his attention to the motives and methods of the Mormons in achieving this landscape and how the landscape has been portrayed in art and literature. His final discussion concerns whether the contemporary Mormon is aware of the differences between his landscape created by his predecessors and the landscape of others. "Mormons see everywhere the strengths and weaknesses of their way of life vividly imprinted in bold and striking patterns: fine, solid religious and domestic architecture stands opposed to the run-down quality of almost everything else. And yet, everything is related to their culture and persists because of it."

In chronological order, the illustrations and commentary trace the development and technology of lighting fixtures used: many 19th century public, commercial and residential buildings. The guide may be ordered from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402 (stock number 024-016-00094-3); make check payable to the U.S. Government Printing Office in the amount of $5.25 per copy.


With pleasant prose and handsome photographs, historian/scholar Nigel Nicolson guides the reader through 39 properties owned and managed by the English National Trust for Places of Historic Interest or Scenic Beauty. First published in 1965 and long out of print, this book is a reissue in a revised format, with new textural and pictorial materials. Nicolson says houses were chosen to "form a panorama of British domestic architecture from the early Middle Ages until the last century." Each house is a masterpiece, and the architects include such famous names as Inigo Jones, Robert Adam and Sir John Vanbrugh. Nicolson gives much information on architecture and landscaping, but he also tells delightfully about the social history of the houses and the people who once lived in them. The book, too big to be lugged about as a guide, should certainly be read before a visit is made to any of these incomparable houses.


This is a glossary of building design and construction terms, developed and published jointly by the U.S. and the Soviet Union. It is the first joint publication of these two countries. Indispensable for Americans involved in construction work in the Soviet Union, the glossary is divided into two parts. The Soviet-American portion gives the term in Russian with one or more literal translations, the American equivalent or an Americanized equivalent and the definition. The American-Soviet portion gives the American term in English with the best Russian equivalent followed by the definition.

Project leader for the U.S. side was Robert R. Ramsey, vice president of Leo A. Daly Co., Omaha. Work is already underway, he says, on a second edition, to be published in about two years. Comments and suggestions about the glossary are welcome and may be addressed to the Office of International Affairs, HUD, Washington, D.C. 20410. The glossary is available from the Superintendent of Documents, Government Printing Office, Washington, D.C. 20402 (stock number 022-000-00175-2).
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Government from page 38

Don B. Johnson when unprecedented inflation in the construction industry increased construction costs.

The art-in-architecture program remained dormant until 1972 when GSA Administrator Arthur Sampson reinstated it. And when Jay Solomon became GSA administrator in 1977, he placed increased emphasis upon the arts. He announced early in his administration that funds for artworks would be raised from three-eighths of 1 percent of construction costs to one-half of 1 percent and that existing federal buildings would benefit as well as new structures. At the time, he said that the expanded program would be “more people-oriented, concentrating on humanizing the total design of the working environment.” He also said that federal buildings completed within the past few years, where the architect had requested artworks but had been denied for one reason or another, would be reviewed.

During 1978, 37 commissioned artworks—murals, sculptures and craftworks—were completed and 26 new contracts were negotiated. All this and more is discussed in a recent GSA publication called “Art in Architecture Program.” The document depicts many artworks in federal buildings completed between 1974 and 1978. Among them are Al Held’s “Order/Disorder/Ascension/Descention,” 1977, acrylic on canvas, in the lobby of the Social Security Administration Mid-Atlantic Program Center, Philadelphia (above); Robert Mangold’s “Correlation: Two White Line Diagonals and Two Arcs with a 16-Foot Radius,” 1978, porcelain enamel on steel, on the Federal Building and U.S. Courthouse, Columbus, Ohio (above right), and Ned Smyth’s “Reverent Grove,” 1978, Venetian and ceramic tile on concrete, in the courtyard of the Federal Building and U.S. Courthouse, Charlotte Amalie, St. Thomas, Virgin Islands (right).

continued on page 94
"Increasing energy costs prompted us to consider a change in the lighting system at the Sears' Town Mall in Leominster, MA," said Ray Costello, Project Manager of the development firm that operates the facility.

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Applications, quoting reference number 78/1/20, in the light of present needs and trends, bearing in mind the possibility that some students may go on to careers in areas other than architecture. The introduction of a two-tier structure with first and second degrees is a possibility to some students may go on to careers in areas other than architecture. The University permits members of academic staff to undertake a limited amount of private practice. The appointment will be made for a period of up to three years. Current salary is $A33061 per annum.

Personal enquiries may be made to the Vice-Chancellor or to Professor Roy Williams, Dean of School of Engineering and Architecture in the University.

Applications, quoting reference number 78/1/20, including a curriculum vitae, the names and addresses of three referees and a recent photograph, should be sent to the University Secretary, Deakin University, Victoria, 3217, Australia so as to arrive by 22 June 1979. Applicants resident in North America, Europe or Africa should also send a copy of their applications to the Secretary General, Association of Commonwealth Universities (Appts), 38 Gordon Square, London WC1H OFP, from whom further details about the position can be obtained.

Government from page 92

Under the direction of Donald W. Thalacker, architecture director of GSA’s art-in-architecture program, for the first time GSA in the past two years has installed works by photographers, ceramists and quilters, as well as commissioning earthworks, lightworks and collages. According to Solomon, who since has resigned as GSA administrator, one of his most satisfying efforts in the art-in-architecture program was a pilot project in Oklahoma City to incorporate more than 30 works throughout the entire building. They were dedicated in June 1979, with the participation of Mrs. Joan Mondale, wife of the U.S. vice president, whom Solomon calls “one of the nation’s most articulate and dedicated arts leaders.”

According to the GSA publication, plans for the future go beyond past accomplishments, although much will be determined by the new GSA administrator, Rear Adm. Rowland G. Freeman III. American artists probably hope for attention paid to the words of President Carter at the dedication of four murals by Jack Beal in the lobby of the Department of Labor building in Washington, D.C., on Mar. 4, 1977. The President said: “The arts are a cherished part of the American experience and an important medium of communication in public buildings—they can effectively be used to depict the vitality of our cultural heritage as well as the continuing ability, resourcefulness and imagination of our people. . . .” Mary E. Osman

News/Energy

Energy Department Develops Solar Design Computer Program

A solar design computer program called SOLCOST, sponsored by the Department of Energy, gives the architect, HVAC engineer, contractor and others information on the design and evaluation of residential and light commercial solar heating and solar hot water systems. The program calculates heating loads and predicts the annual fraction of heating that could be provided optimally by a solar system. The computer printout gives a cost analysis, including cash flow and payback time based upon projected fuel and utility rates, energy and tax savings, insurance rates and loan data, says the International Business Services, Inc. Solar and weather data for more than 300 cities are included in the computer simulation.

Access to SOLCOST is now available through three methods: by mail through the SOLCOST Service Center, by remote terminal on four national computer networks and by purchase of the FOLTRAN IV software.


Four national time-sharing networks give access by remote computer terminals to Boeing Computer Service Co., Control Data Corporation’s CYBERNET, General Electric Information Service and United Computing Systems. User’s guide to each of these networks is $5 each.

For the user’s guide and for information on the purchase of the software and questions about SOLCOST, contact: IB Service, SOLCOST, 1010 Vermont Ave. N.W., Washington, D.C. 20005; (202) 628-1450.

NBS Builds Test Center for Saudi Arabia Design Prototype

In Saudi Arabia, daily temperatures range from 79 to 116 degrees Fahrenheit in summer and from 60 to 85 degrees in winter. Such temperature extremes are generated and are contained in a three-story test chamber constructed at the National Bureau of Standards in Gaithersburg, Md., to validate computer models developed by Skidmore, Owings & Merill for the prediction of how the prototype building and its thermal systems will react in real life conditions of the Saudi desert. SOM, under contract to design a number of buildings for the King Abdul Aziz University, wants to determine the ability of thick walls to moderate temperature swings and cut down on peak periods of air conditioning needs.

The experiment, a joint effort by SOM and the Saudi university, also has as participants NBS’s center for building technology, the Concrete Masonry Association, the Brick Institute of America and several manufacturers.

The prototype masonry building has wall sections consisting of 0.25 inches of plaster, eight inches of high density solid concrete block, three inches of urethane insulation, an air space and an outside brick face. The roof is of precast concrete panels with four inches of urethane insulation and concrete pavers over a waterproof membrane. It is expected that the experiment will give architects and engineers information on such matters as heat transfer in massive and heavily insulated structures.

The test will also be used by NBS to measure air and surface temperatures, humidity, heat flow and air leakage under a variety of outdoor temperatures, window shadings, lighting conditions and solar heat gains. Infrared pictures will be continued on page 95.
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used to show the researchers relative hot and cold areas. The project is conducted under the NBS research associate program set up to enable technical specialists from U.S. firms and professional organizations to work at NBS temporarily in carrying out project of mutual interest. For information about the program, write: Industrial Liaison Officer, Administration Building A402, NBS, Washington, D.C. 20234. NBS has seven test rooms that may be used for the evaluation of the thermal performance of buildings, building components and materials.

U.S. Oil Use Increased Only Slightly in 1978

During 1978, the U.S. consumed 77.7 quads of crude oil a day, the equivalent of 36.7 million barrels, an increase of 1.8 percent over 1977, says the Department of Energy. The term quad is used to shorten a cumbersome unit—quadrillion BTUs. Other figures released by DOE are:

• Total domestic energy production in 1978 was 61 quads, or 28.8 million barrels of oil a day—1.3 percent higher than in 1977 and 1.6 percent higher than production in 1976.
• Energy imports in 1978 totaled 18.5 quads, down 7 percent from 1977 but up 10 percent from 1976.
• Imports satisfied 23.8 percent of the country's energy needs in 1978, compared to 26.1 percent in 1976. In the three-year period prior to 1976, dependence on imports stayed relatively stable at 19.8 percent.
• Of the energy used in 1978, consumption of refined petroleum products accounted for 48.3 percent, with natural gas use constituting 25.5 percent of the total, a decrease of 0.8 percent.
• Nuclear power and hydroelectric power satisfied 7.9 percent of domestic energy requirements.
• Domestic crude oil production in 1978 was 6 percent above the 1977 level; natural gas production dropped by 1.6 percent; coal production was 5 percent lower.
• Crude oil imports were down 7.4 percent from 1977; refined product imports were down 8.6 percent.
• The value of energy imported by the U.S. was $42.1 billion in 1978, down from $44.5 billion in 1977.

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L. Bowyer, Charleston, W. Va.

R. Buettow, St. Paul, Minn.

E. Christensen, Dallas

D'Agrosa, Dobbs Ferry, N.Y.

R. De Vere, Seattle

E. Doran, Scottsdale, Ariz.

L. Bowyer, Charleston, W. Va.

H. Buetow, St. Paul, Minn.

E. Doran, Scottsdale, Ariz.

W. Foster, Indianapolis

J. Gillen, Lexington, Ky.

J. Humbrecht, Fort Wayne, Ind.

Henry Jackson Jr., Nashville, Tenn.

J. Hultz, Columbia, Mo.

H. Jost, Pekin, Ill.

G. Krause, Los Angeles

J. B. Ledbetter, Anderson, S.C.

R. Leslie, St. Louis

R. Livergood, Decatur, Ill.

S. Loewenberg, Chicago

S. Loftus, Trenton, N.J.

J. Lyons, Bridgeport, Conn.

E. McMullin, Drexel Hill, Pa.

N. Merwin, St. Petersburg, Fla.

B. Miller, Santa Monica, Calif.

V. Wessinger, West Columbia, S.C.

Whitten, West Medford, Mass.

J. V. T. Wilking, Casper, Wyo.

Arthur Winebaum, Boston

Richard N. Wingerston, Ossining, N.Y.

W. G. Wuehrmann, El Paso, Tex.

Leon Chatelain Jr., FAIA: President of the Institute in 1956-58, Mr. Chatelain also served as AIA's treasurer in 1954-56 and as a member of many committees. He was a founder and past president of the Washington, D.C., Building Congress, president of the Washington Metropolitan Chapter/AIA in 1935/36, chairman of the National Commission on Architectural Barriers to the Handicapped and a member of the President's Committee for Employment of the Handicapped, receiving a citation for his services in 1962.

Mr. Chatelain, who died on May 6 at the age of 77, also participated in many other civic and professional activities. He was a past president of the D.C. Society for Crippled Children and the National Easter Seal Society. Also, he was chairman of the Benjamin Franklin Foundation and the D.C. Council on Human Relations. He was cochairman of the National Conference on the Rehabilitated Disabled, and was a trustee of George Washington University, as well as a director of several businesses.

In 1930, Mr. Chatelain began his architectural practice in Washington; in 1956, he formed the partnership of Chatelain, Gauger & Nolan and organized, in 1970, the firm of Chatelain, Samperton & Nolan, retiring in 1974. He participated in the design of many buildings in Washington and elsewhere. In Washington, his work included headquarters for the Washington Gas Light Co., the Equitable Life Insurance Co., and the Retail Clerks International Association, as well as the Westmoreland Congregational Church and the Eisenhower Capitol Hill Center.

Mr. Chatelain was a fellow of the Construction Specifications Institute and held honorary fellowships in the Royal Institute of British Architects, the Royal Architectural Institute of Canada, the Royal Institute of New Zealand Architects, the Philippines Institute of Architects, the Mexican Society of Architects and the Colombian Society of Architects. In 1957, he was awarded the French Superior Council's gold medal.

Herbert Winthrop Waldron Faulkner, FAIA: Before his retirement in 1968, Mr. Faulkner designed many well-known structures in Washington, D.C., including headquarters for the Brookings Institution, the Evening Star newspaper build-

News continued on page 102
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In case of fire

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News from page 99

ing, the American Chemical Society head-
quartes, the WTOP Radio & TV Broad-
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for the Advancement of Science head-
quartes. He also participated in the de-
sign of the Suburban, Providence and
Georgetown University Hospitals and the
remodeling of the Old Patent Office Build-
ing, which was recycled for new use as the
National Portrait Gallery and the Na-
tional Collection of Fine Arts, winning an
AIA honor award in 1970.

Mr. Faulkner, who died on May 11 at
the age of 81, earned a bachelor of fine
arts degree from Yale University's school
of architecture in 1924; following studies
in Rome, Italy, he worked in New York
City, and in 1927 established his own firm
there and in Washington, D.C. In 1934,
he moved to Washington, establishing in
1939 the partnership of Faulkner & Kings-
bury, which expanded in 1946 to become
Faulkner, Kingsbury & Stenhouse and in
1966 became Faulkner, Stenhouse, Fryer &
Faulkner.

Mr. Faulkner was president of the
Washington Metropolitan Chapter/AIA
in 1942-43, of the Washington Urban
League from 1938 to 1941 and of the
Washington Housing Association from
1947 to 1950. He was an associate mem-
ber of the National Academy of Design
and a member of the board of architec-
tural consultants of the Commission of
Fine Arts from 1957 to 1960. For a time,
he was AIA's delegate to and chairman of
the Inter-Society Color Council, contrib-
uting articles and books reviews on the
subject of color and architecture to this
magazine. Among his many other con-
tributions to the Institute was his chair-
manship of the library committee from 1954
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Tuido Piirimae, AIA: Director of archi-
tecture for Rockefeller Center Inc., New
York City, Mr. Piirimae was formerly as-
sociated with the firm of Harrison &
Abramovitz, where he was actively in-
volved in many of the expansion pro-
grams of Rockefeller Center. He joined
the center in 1978 and was also director
of architecture for the center's subsidiary,
the Rockefeller Center Construction
Corporation. Mr. Piirimae died on April
21 at the age of 45.

He attended the College of the City
of New York's school of engineering and
earned a bachelor of architecture degree
from Pratt Institute, where he later served
as an instructor in the school of interior
design. He was associated in the past with
the architectural firms of Wank Adams
Slavin Associates, New York City, and
Ben & Bentel, Locust Valley, N.Y.

Beryl Price, FAIA: A graduate of the
University of Pennsylvania in 1933, Mr.
Price was registered to practice in nine
states and the United Kingdom, having
offices in Philadelphia, Loveladies, N.J.,
and Fort Lauderdale, Fla. Among his
works were buildings for Harcum Junior
College, Bryn Mawr, Pa., the United Air-
craft Vector Division Plant, Trevose, Pa.,
and the Airport Motel, Philadelphia. He
died on Dec. 18, 1978, at the age of 68.

Mr. Price was one of the principal con-
tributors to the success of AIA's conven-
tion in Philadelphia in 1976. A fellow of
the Royal Institute of British Architects,
he was also a member of the board of the
Anti-Defamation League, Middle Atlantic
Region; the Reconstructionist Rabbinical
College, Temple Beth Zion-Beth Israel,
and the Albert Lawrence Savings and
Loan Association.

He was a former president of the Gray's
Ferry Community Council and a member
of the Long Beach Township zoning board
and the Architectural League of New
York.
The Society of Architectural Historians presented its Alice Davis Hitchcock Award for 1979 to the Architectural History Foundation, Inc., and to Myra Rosenfeld for the text of Sebastiano Serlio's *On Domestic Architecture* (see ar., p. 106). The book was cited as the most distinguished work of scholarship in the history of architecture published in the two preceding years in North America.

The Washington, D.C., Metropolitan Transit Authority Metrorail System has been selected by the American Society of Civil Engineers as the "outstanding civil engineering achievement of 1979." Some 6 miles of Metro are now operational, carrying about 300,000 travelers each weekday.

Want to borrow for free a film on New Mexico passive solar energy buildings? Ideas to show an adult group on how to save money through insulation? A video tape on solar house design? A free catalog from the National Solar Heating and Cooling Information Center, "Films/Slides/Videotapes: Solar Energy for Heating and Cooling Buildings," lists more than 50 films, 45 sets of solar slides and 30 videotapes, with rental fees ranging from free to $35 and for purchase to $350. Write for the catalog: Solar Heating, Department M, P.O. Box 1607, Rockville, Md. 20850.

Margaret Taylor, who had served as executive director of the Rochester Chapter/AIA and director of the New York State Council on Architecture's public awareness program, died in late January at the age of 33. Recently, she was director of marketing for Offices Limited Inc., consultants to architects. At the time of her death, she resided in Manhattan.

Louis de Moll, FAIA, a former president of AIA and currently president of the International Union of Architects, has been elected an allied professional member of the National Sculpture Society.

The National Inventors Hall of Fame has issued a call for nominations for 1980. Selection for induction is made on the basis of U.S. patented inventions which have benefitted the people of this country. The selection committee is made up of representatives of 31 technical societies across the country. Submissions should be made before July 31. Information and nomination forms may be obtained from Arthur R. Whale, Eli Lilly & Co., Indianapolis, Ind. 46206.

Among the continuing education courses offered this summer by Harvard University's graduate school of design and the Massachusetts Institute of Technology's school of architecture and planning are the following: "Human Behavior and Housing Design" (July 16-20); "Management of Design and Planning Firms" (July 6-13); "Open Space Planning for Offices" (July 25-27), and "Financial Management of Design and Planning Firms" (Aug. 6-8). For additional information, contact: Continuing Education, Gund Hall L-52, Cambridge, Mass. 02138.

The 1979 Rotch scholar is Glenn Matsumoto of Belmont, Mass., who holds a master of architecture degree from Harvard University's graduate school of design. The second winner is Robert W. Hoye of Wellesley, Mass., who also holds a master's from Harvard. Marvin J. Maclecha of Claremont, Calif., is the alternate. The Rotch scholar receives $13,000 for nine months of study abroad; the second winner receives $7,000 for five months of study abroad.

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