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Cover: Photograph by Allen Freeman of the stacks of Orchestra Hall by Hardy Holzman Pfeiffer Associates and IDS Center by Johnson/Burgee and Edward F. Baker.

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The AIA JOURNAL, publication number: ISSN0091-7479, official magazine of The American Institute of Architects, is published 14 times yearly at 1735 New York Ave. N.W., Washington, D.C. 20006. Subscriptions: for those who are, by title, architects, architectural employers and to those in architectural education (faculty, schools and students), and to libraries, building construction trade associations and building products manufacturers: base rate $24 a year in the U.S., its possessions and Canada. For all others: $30 a year in the U.S., its possessions and Canada. $40 a year. Single copies, $3 each. Publisher reserves the right to refuse unqualified subscriptions. For subscriptions: write Circulation Department; for change of address: area Circulation Department both old and new addresses; allow six weeks. Quotations on reprints of articles available. Microfilm copies available from University of Minnesota, 300 N. Tech Road, Ann Arbor, Mich. 48106. Referenced in The Architectural Index, Architectural Periodicals Index, Art Index, Avery Index to Architectural Periodicals.

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EVENTS

April 1-3: National Symposium on Hospital Energy Management, Drake Hotel, Chicago. Contact: Paul E. Mehlt, Project Director, American Hospital Association, 840 N. Lake Shore Drive, Chicago, Ill. 60611.


April 1-6: Society of Architectural Historians annual meeting, Empress Hotel, Victoria, British Columbia. Contact: Rosann S. Berry, Society of Architectural Historians, 1700 Walnut St., Philadelphia, Pa. 19103.

April 2-6: Environmental Design Research Association conference, Iowa State University.


April 7-8: Structural Stability Research Council annual technical session and meeting, Conrad Hilton Hotel, Chicago. Contact: SSRC, Fritz Engineering Laboratory, Lehigh University, Bethlehem, Pa. 18015.


April 27-May 1: American Institute for Design and Drafting annual convention, Century Plaza Hotel, Los Angeles. Contact: AIDD, 3119 Price Road, Bartlesville, Okla. 74003.


April 30-May 2: Fabricated Structural Steel Industry national engineering conference, Sheraton Hotel, Dallas. Contact: Meetings and Convention Department, American Institute of Steel Construction, Inc., 400 N. Michigan Ave., Chicago, Ill. 60611.


May 8: Tour of ancient far eastern cities of China and Japan. Contact: Century City Travel Service, Broadway Store in Century City, Los Angeles, Calif. 90067.

May 17-21: AIA convention, Minneapolis.


LETTERS

'Postmodernism Puncture': Thanks for Arthur Cotton Moore's article "The Retreat Into Architectural Narcissism" (Dec. '80, p. 46). Whether the problem is termed "narcissism" or the "Little Jack Horner" syndrome, the bloated notice accorded the mislabeled "postmodernism" is overdue for puncture.

Given the business climate and attitude as typified by Mr. Swesnick, it is at least understandable that some have withdrawn into fantasy and promoted a small market for it. At the other end of the scale is the large architectural office reduced to tricky image-making for "real" clients, "unreal" clients and many that don't deserve an image. The recent New York Times report by Paul Goldberger on Skidmore Owings & Merrill's sponsorship of a seminar to help them become more "au courant" in postmodernism is a case in point and the AT&T building another. Luckily, there is a good deal of solid work being done in this country, though it isn't receiving much publicity.

Moore's statement that "The real world is being designed by businessmen, build-

ers, politicians, lawyers, bureaucrats, administrators and citizens groups—everyone but architects" is precisely the problem. This is where the power is! Our typical stance of waiting at "their" beck and call (or worse, standing in a lineup of architects, pulling our forelocks and begging) has to be broken.

Without a different approach to architectural education, that will ultimately redefine the profession and how it serves society, the architect remains a dancing bear. We must have more and better educated architects involved in business, building, politics, law, administration, etc., if our colleagues in "normal" professional practice are to have any chance of being effective. Those that choose to contribute in ways other than typical practice should not be denigrated but encouraged.

Robert L. Bliss, FAIA
Dean, Graduate School of Architecture
University of Utah

In regards to Arthur Cotton Moore's article, I feel that such a narrow view of gallery-only architecture goes beyond narcissism itself. It shows a denial of the history of architectural movements, especially that of modernism earlier this century, and a denial of just how developers and such function.

For example, Mr. Moore criticizes the recent "no program, no site and no client" projects. Is it not true that Wright, Le Corbusier, Mies and others did much to advance modern architecture to the public by just such means? On the other hand, is it not true that speculative builders buy off-the-shelf plans without consideration of site, program (except to make money) or the building's actual users? The gallery-only architecture at least gives people the opportunity to review, criticize, analyze, ponder and accept or reject a particular slant on architecture before it is put into practice. Developers do not give people that chance.

Michael Graves' Best store may be more or less naive, but so was Corbu's plan for Paris. I suspect that as in Corbu's case, Graves' exercise will prove influential. The new rhetoric may be more or less absurd but it does much to crystal-

continued on page 128

Corrections: The Marcel Breuer Long Chair, shown in our November Furnishings section, is not imported by Claude Bunyard Design, Inc., as we reported, but is being manufactured here by the Bunyard company.

In the January issue, Ballou-Levy-Felligraff was the architect for the Flat Rock Brook Nature Center (p. 57). Dan Scully of Total Environmental Action was the designer and TEA was responsible for the solar design.
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Circle 4 on information card
The Institute has bestowed its 25-year award on Mies van der Rohe's Farnsworth house in Plano, Ill. It was Mies' last residential design. With Arthur Cotton Moore, FAIA, as chairman, the jury described the Farnsworth house as a "paradigm of the Miesian idea which has so profoundly influenced American architectural thought and design during the last quarter century" and contains "virtually all the elements integral to the Miesian approach to building."

As Mies' one-time student Philip Johnson, FAIA, observes, "It is most important that this year Mies van der Rohe should be so honored at a time when the young people and reactionaries of all kinds, including myself, feel a slight boredom with the last generation, with the morality and purity of the International Style, with the father image. The father-son reaction is a normal one. The richness versus puritanism is also a recurring cycle in history and it may be natural that Mies is now at the nadir of his reputation."

Does Johnson see this award as a sign that Mies' reputation might soon be revived? "No, I see only an appreciation by the smart people, who never stopped admiring Mies, like myself, Bob Stern and Arthur Drexler."

In the opinion of Drexler, director of the architecture department of New York's Museum of Modern Art, "It is impossible to practice large-scale architecture anywhere in the world today without perpetuating what Mies did and taught. In that sense, his influence has never really declined; it's just been transmuted into something slightly different. People today are building Mies' glass projects of the '20s, updated according to the new technology. Eventually his reputation will come back. It's like Louis Tiffany."

Architect and author Robert A. M. Stern, FAIA, calls Farnsworth 'Mies' most poetic and powerful statement, but also a building that opened up the question of whether modern architecture had not become completely alienated from day-to-day experience. It was the kind of building about which one's mother said, 'Is this what modern architecture is coming to?' It's the most extreme statement and also the most difficult to cope with, for me. I would like to think the award is an act of chronology, but maybe it wouldn't be inappropriate to speculate that when one is troubled and confused by things, one goes back to the icons of one's youth."

As architectural historian, critic and author Reyner Banham says, "The building has all the virtues—and we'll say nothing about the vices—of a particular concept of architecture driven to its extreme limits, and, therefore, a kind of landmark demonstration of what that architecture could do. Like many extreme statements, it was made at the beginning rather than the end of the period that it represents, and it left other architects little to do except try to make even more perfect that which was already perfected."

The Farnsworth house is, indeed, "a very beautiful house," in the words of Myron Goldsmith, FAIA, a great admirer of Mies. Designed as a country retreat for Dr. Edith Farnsworth, the single-story glass and steel structure is elevated five-to-six feet above ground to prevent flooding. Both its interior and exterior living areas are contained within spaces created between two apparently weightless horizontal planes, roof and floor, suspended between exposed steel columns sheathed in a carefully proportioned glass skin terminating at meticulously detailed corners. Ludwig Glaeser wrote of it seven years ago, "While parts and details have been copied many times and entered into the vocabulary of contemporary architecture, the house itself has remained a singular case and—if one regards Philip Johnson's early work as a parallel development—without succession."

Stern, who much prefers Johnson's glass house, "because of its more utilitarian measure and its static quality that tends to allow other buildings to sit comfortably next to it," faults the Farnsworth as a "nonspatial composition of planes. It's just a kind of capturing in midpassage of a continuous flow of matter going..."
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AIA and ACSA Select Breuer For Education Excellence Award

Marcel Breuer, FAIA, teacher at Harvard of a generation of architects including I.M. Pei, Philip Johnson, Paul Rudolph and John Johansen, has been selected by AIA and the Association of Collegiate Schools of Architecture to receive their sixth award for excellence in architectural education.

The AIA/ACSA award is presented annually to a living educator who has taught at least 10 years and who has made "outstanding contributions" to architectural education. In addition to his tenure at the Harvard graduate school of design, Breuer was a celebrated master of the Bauhaus.

A native Hungarian, Breuer studied under Walter Gropius at the Bauhaus before receiving his degree there. He was in charge of the carpentry section of the school from 1924-28, and during this time designed the "Wassily" tubular chair. He began architectural and interior design practice in Berlin in 1928, emigrating to London in the early '30s where he became associated with F.R.S. Yorke. In 1937 he joined the Harvard faculty at the invitation of Gropius, where, according to one of his first students, he was "the model of what an architectural educator ought to be—concerned with the basic theory of architecture, with an understanding of students' needs and with optimism about their potential."


Medalists: Price, Rowe And Herman Miller

Recipients of 1981 AIA medals given to "individuals or organizations who have inspired and influenced the architectural profession" are lighting consultant Edison Price, teacher Colin Rowe and furniture manufacturer Herman Miller, Inc. (see Feb., p. 54).

Price is honored for his contributions to the lighting of buildings through his long career as consultant, lighting fixture designer and manufacturer.

"Edison Price's contributions to the lighting of architecture are unsurpassed by those of any other individual," the jury commented. "His brilliant ingenuity at
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The Institute from page 12

solving difficult lighting problems posed
to him is legendary. A man of consider-
able vision, he also makes his vision work.
... [His] interest is in light, rather than
lights, and he approaches this interest
with a complete commitment to quality.”

Price was born into the lighting busi-
ness. His father, William E. Price, founded
in 1907 the Display Stage Co., manufac-
tur er of theatrical lighting fixtures. Price
established his own manufacturing firm,
Edison Price, Inc., in 1953. In 1960, a
lighting consulting service was added to
the company, an activity discontinued in

Price has developed or refined several
lighting devices and techniques that are
now architectural standards. With Isaac
Goodbar he developed the first low-
brightness recessed ceiling lighting. He re-
 fined the incandescent downlight to pre-
cisely cover varied wall areas. He helped
civilize track lighting by incorporating aux-
iliary parts into the track itself. Throughout
his career, Price has strived to reduce
the number of different parts required in
lighting systems and to simplify assembly
and maintenance. And for the most part,
Edison Price fixtures are designed to pro-
duce their effects as unobtrusively as possible.

Price’s work has especially contributed
to the lighting of museums and galleries.
With other consultants he worked on the
lighting of the Yale Art Gallery, the Whit-
ney Museum, Philip Johnson’s wing of the
Museum of Modern Art, the Kimbell
Museum, the Walker Art Center and the
National Gallery east wing.

Colin Rowe is recognized for his influ-
ence on the architecture of this country
through his writing, teaching and lecturing.

“He has had a truly remarkable and
distinguished teaching career working on
the relationships between architecture, land-
scape architecture and urban design,” said
the jury. “Rowe is responsible for our current thinking about urban contex-
tualism, for much of our understanding
about the connection between modern ar-
chitecture and classicism and for our search
for conceptual clarity.”

Rowe received a B. Arch. from the
University of Liverpool and a M.A. in
art history from the University of Lon-
don, Warburg Institute. He also attended
Yale’s school of architecture in 1951-52.
He taught at the University of Liverpool
(1948-51), the University of Texas (1953-
56), the University of Cambridge (1958-
62) and currently teaches at Cornell.

His articles, which first appeared in
Architectural Review in the ’50s, related
modern architecture to the architecture of
the past at a time when no other author
made the connection. In the ’60s, Rowe
wrote on cubism and modern architecture.
In 1976 he authored The Mathematics of

A former student of Rowe is Jaquelin
T. Robertson, FAIA, dean of the Univer-
sity of Virginia school of architecture.
Says Robertson, “Wherever he was, one
always found the most provocative and
current discussion about ideas and archi-
tecture and culture taken together. He
was, in effect, a wandering guru who car-
rried his own ‘school’ with him and en-
gaged and provoked the very brightest
people. His influence, of course, at Cor-
nell is well known—the so-called New
York Five being essentially his ‘children’
—and he has continued, through his writ-
ing and teaching and conversation to in-
roduce a whole generation of young
American architects to a literate, rich,
complex, culturally related view of their
profession.”

Medalist: Kenneth Snelson,
Scultor of Aluminum, Steel

Sculptor Kenneth Snelson will receive an
AIA medal given to “artists and crafts-
men whose work is related to architec-
ture.”

The aluminum and/or stainless steel
with steel wire sculptures that he has
created over more than three decades are
“first and last organizations of forces in
space,” as he puts it. “Until a piece is put
together the forces are not there. The
forces are introduced as things are added,
piece by piece. Finally, when the last
cable is attached, the closed system of
forces is complete,” Snelson says.

He adds that his work has “something
to do with the way in which the universe
works, and it has something to do with
the deeper meaning of mechanics.” Snel-
son says he is trying to “understand how
space really is construction,” and to “find
out about the esthetic properties of pri-
mordial space.”

Snelson’s interest in sculpture began
when he was a child, when he “found an
affinity for open structures” as he built
model airplanes of balsa wood frames
covered with Japanese rice paper.

As a student at the University of Ore-
gon studying painting, he decided in the
summer of 1948 to attend Black Moun-
tain College in North Carolina, then a
leading center for avant-garde art.

Working in the company of Josef Albers,
Willem DeKooning, John Cage, Merce
Cunningham, Richard Lippold and Buck-
minster Fuller, FAIA, Snelson became
interested in sculpture and “discontinuous
compression.”

He began with a number of movable
small wire and wood sculptures. Soon
he replaced the swivel points on which they
moved with thread tension slings. Then
he removed the weights and substituted
additional threads, which restricted move-
ment entirely. Out of this resulted the
snail-like spiral or proportional growth
principal on which Snelson now bases his
work.

Some of Snelson’s work reflects his
studies of atomic structure. He, in fact,
holds two patents on models of atomic
form and is now at work on an exhibition
on atomic structure for the Maryland
Academy of Science. Snelson’s work has
been exhibited in the U.S. and Europe.

The jury commented: “Not only is the
work superb sculpture, but it is also re-
lated to architecture in several ways: It is
an interpretation of spatial organization,
an exploration and documentation of the
principles of structure, a demonstration of
fine detailing and a magnificently appro-
priate complement for the enrichment of
architectural space.”

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A Kenneth Snelson sculpture at the Inner Harbor, Baltimore.
How do you bring the sky down to earth?
SOLAR CONTROL DATA

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<td>White Translucent 7328 1/4&quot; Thick</td>
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*Colored Plexiglas outside, 1/4" air space and colorless Plexiglas inside. Large area enclosures of acrylic, a combustible light transmitting thermoplastic, are not provided for in building code regulations because they do not conform to area limitation and separation requirements. Therefore, they require special permits based on analysis of all relevant fire safety considerations. One important relevant consideration is the use of automatic sprinkler systems which were used in all of the installations shown in this brochure except for the bus shelter.

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The Institute from page 16

Medalists: Paul Goldberger and Nikolaus Pevsner

New York Times architecture critic Paul Goldberger and historian Sir Nikolaus Pevsner will receive AIA medals awarded to "illustrators and recorders of architectural accomplishments."

Goldberger has written widely for magazines and newspapers and has authored architectural books over the past decade. While studying art history at Yale University, he worked for the Wall Street Journal and contributed articles to the New York Times. He joined the staff of the Times Sunday magazine in 1972 and succeeded Ada Louise Huxtable, Hon. AIA, as Times architecture critic the next year. The Times now publishes two or three Goldberger articles weekly on current works of architecture, urban planning, historic preservation and general design issues, as well as features in the Sunday magazine and book review sections.


"As an architectural journalist, Goldberger communicates current issues in architecture through the mass media, while remaining a highly respected critic by the profession," the jury commented. "Today when architecture is oftentimes confusingly diverse, and arguing about it has become as important as doing it, Goldberger is remarkable for his ability to be broadly based and not stylistically inclined."

The nomination of Pevsner is based on "over one-half century of research and writing on architecture, embodied in some 20 publications, including the 46-volume Buildings of England, authored by himself and others under his direction. In particular his Outline of European Architecture has established the very foundation of architectural understanding for more than one generation of Americans."

Pevsner was born in 1902 and educated at St. Thomas School in Leipzig, Germany. In 1924 he received a Ph.D. in the history of art and architecture and was successively connected with the Universities of Leipzig, Munich, Berlin and Frankfurt. From 1949 to 1955 he was Slade professor of fine arts and a fellow of St. John's College, University of Cambridge, and from 1968-69 Slade professor of fine arts, University of Oxford. He is currently emeritus professor of the history of art at Birkbeck College, University of London.

Since its inception, Pevsner has edited the Pelican History of Art and Architecture volumes. His book on Italian Painting From the End of the Renaissance to the End of the Baroque is used as a standard text. Some of his other works are: An Inquiry into Industrial Art in England, German Baroque Sculpture, High Victorian Design, Sources of Modern Art, Pioneers of Modern Design (revised edition titled Pioneers of the Modern Movement from William Morris to Walter Gropius) and Some Architectural Writers of the Nineteenth Century. Many of his articles have been collected as Studies in Art, Architecture and Design. He is also coauthor of the Penguin Dictionary of Architecture.

"Pevsner has surveyed and commented on virtually every building worth looking at in England," the jury commented. "These volumes represent a work of reference of a magnitude that no other scholar is ever likely to have the courage, tenacity or the need to attempt again. . . . His works are never mere catalogues, but rather are alive with his knowledge, opinion and passion."

Medalists: Reynolds Metals and Smithsonian Associates

The winners of the 1981 AIA medals for "individuals or organizations responsible for a specific project related to architecture" are the Reynolds Metals Co. for its architectural awards program and Smithsonian Associates of the Smithsonian Institution.

The R.S. Reynolds Memorial Award, initiated in 1957 as a memorial to the company's founder, was one of the first major corporation-funded awards for architecture. Given annually for "distinctly aesthetic use of aluminum," the award consists of a $25,000 honorarium and one original piece of sculpture in aluminum.

During the past five years, the award has been presented to Shozo Uchii for the Treasury of the Minobusan Kuoni Temple; Norman Foster, Foster Associates, for the Sainsbury Centre for Visual Arts and for the Willis, Faber & Dumas building; Johnson/Burgee & S.I. Morris Associates for Pennzoil Place; Richard Meier for the Bronx Development Center, and Gustav Peichl for the ORF studio.

The jury on Institute honors for 1981 said of the program, "It has accomplished its original purpose of encouraging architectural excellence and has been an encouragement to others in the establishment of quality awards programs."

In 1961 the company established a second award, for architectural students. The $2,500 prize is awarded annually for the best original architectural design in which creative use of aluminum is an important factor. Another $2,500 goes to the winner's school. Both awards programs are administered by AIA.

The Smithsonian Associates, Washington, D.C., is recognized for its public awareness program—the tours, classes and symposia on architecture and related fields conducted by the Resident Associate program—and for Smithsonian magazine that features articles and book reviews on architecture, preservation, interior design and urban design.

The Resident Associate program was established 15 years ago. Recent offerings include symposia on the relationship of preservation and energy conservation and one entitled "Our Classical Heritage"; tours of Washington neighborhoods and houses; courses on the principles of architectural design and on the architecture of the American home.

Smithsonian was established in 1970. Articles have appeared in the magazine on New York City's World Trade Center, on underground architecture, Centre Pompidou in Paris, energy conservation in buildings, French preservationist Eugène Viollet-le-Duc, the Ecole des Beaux-Arts, preservation of cities, Marcel Breuer, FAIA, Philip Johnson, FAIA, Louis Kahn, Dr. William Thornton (designer of the U.S. Capitol), among others.

The jury commented, "The lecture program brings many of the finest architects, critics and architectural thinkers together to address a variety of topics before an informed nonprofessional audience." Of the magazine, the jury said, "By translating and illustrating architectural thinking to its two million readers, Smithsonian makes a substantial contribution to the public understanding of architecture at its best."

Honorary Fellows Named

AIA has selected eight foreign architects as honorary fellows, a title reserved for architects of "esteemed character and distinguished achievement" who are not U.S. citizens and who do not practice in this country.

The eight, who will be invested at AIA's 1981 convention in Minneapolis, are:

• Elissa Makiniemi Aalto, who is ac-continued on page 26
The right glass. More than ever, PPG glass is an indispensable tool for architects who wed energy efficiency to aesthetic power.

And one strength these three diverse buildings share—besides recognition of their design excellence by the AIA—is the choice of PPG glass to bring the architects' visions to life.

Look, for example, at the imaginative use of PPG's high-efficiency reflective Solarban® 550-8 (2) glass in the handsome, five-stepped international headquarters of Gelco Corporation outside Minneapolis.

Combined with an ingenious heat recovery system, the insulating power of Solarban glass helps minimize heat loss—and gain—even in the extremes of Minnesota's climate. It's also the right glass to help the building meld with and mirror the peaceful, wooded lakefront landscape.


The panels combine with a low-velocity fan system to capture and channel hot or cool air to where it's needed most, summer or winter. So energy costs are held down dramatically.

And even in the forward-looking architectural environment of Columbus, Indiana, the high drama created by PPG's reflective Solarcone Bronze glass helps set Bell of Indiana's switching station apart. The original building is hidden behind a handsome structural silicone curtain wall system. And the new addition sparkles with a combination of opaque and transparent...
Use low-e glass that helps redistribute heat from the switching equipment with maximum efficiency.

PPG makes just the right glass bring out the best in your new signs, too. All you need to prove is a look at Sweet’s 8.26/Pp.

Then write to PPG when it’s time to choose your glass. We can’t promise you’ll win awards. But we can guarantee you a broad spectrum of intelligent, beautiful choices.

And that one of them will be the right glass.

PPG Industries, Inc., One Gateway Center, Pittsburgh, PA 15222.

Winner, AIA Honor Award in 1980.

Bell of Indiana’s Columbus Switching Station was designed by Caudill, Rowlett, Scott of Houston, Texas.
MULTIPLE-CHOICE QUESTION:

Can you
(a) build an attractive, functional corporate center,
(b) boost urban renewal, and
(c) still cut costs?

FIRST-CHOICE ANSWER:

Yes, with reinforced concrete. And energy savings are part of the bargain.

Tandy Center, in downtown Fort Worth, Texas centralizes under one roof the corporate offices of the Tandy Corp., manufacturer and retailer of consumer electronic products (Radio Shack stores). It also expresses a commitment to the community, providing a stimulus for urban renewal, without the use of public funds.

Reinforced concrete’s versatility made the project feasible, with the attendant benefits of low cost, fast construction, and energy savings.

Tandy Center has two 20-story office towers, two 4-story retail buildings and an underground link connecting all buildings and supporting the city street above it. These five structures are all site-cast conventionally reinforced concrete using Grade 60 steel, totaling more than one million square feet.

The project includes an ice rink with atium and restaurants, retail shops, a major department store, a three-level parking garage.

People detraining from a free subway that serves a remote parking area enter the complex through an ice rink atrium with 85-ft. tall sloped ceiling. Exiting the ice rink, visitors encounter another five-level atrium, with free standing open-elevators. The focus of this atrium is a latticed concrete dome, filtering natural light to the bottom level.

All buildings were framed with pan joist construction, to give a uniform structural depth, hence making possible a simpler mechanical system. Repetitive framing increased the economy associated with form reuse while increasing construction efficiency.

Exterior shear walls on the East and West faces of the office towers provide lateral load resistance and form a sun shield to help cut heat gain and reduce air conditioning costs.

The North and South faces of the office towers were framed with deep spandrels. These deep beams diminish the exterior glass surface to further reduce energy consumption. And the beams, coupled with the exterior columns, provide the required lateral resistance.

The exterior shear walls, columns and spandrels, and the interior core walls were all formed with textured fin form liners for an excellent finish without architectural treatment or painting.

Thus reinforced concrete gave a simple, economical answer to complex design problems. And the use of local labor gave an impetus to the local economy and a sense of participation to the local building trades involved in the project – both matters of special pride to the owner.

Ask for Bulletin No. 18

Architect: Growald Architects, Inc.,
Fort Worth, Texas.
Structural Engineer: Mullen & Powell,
Dallas, Texas.
Contractor: Henry C. Beck Company,
Dallas, Texas.
Owner: Tandy Corporation, Fort Worth, Texas.

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A Report on Grassroots

Responses to questionnaires given to attendees of Grassroots last month indicate strong approval to having the program in Washington, D.C. Of the 165 returned questionnaires, 127 indicated that the Washington site was “excellent” and 32 answered “above average.” Nine called Washington an “average” site and none of the respondents rated it as “unsatisfactory.”

To the question “Would you like the Grassroots program to be repeated in Washington each year?” 100 said yes, 47 said no. News continued on page 31
Total Performance

Sunglas® Reflective.

Sunglas® Reflective by Ford blocks up to 65% of the sun's heat, while letting in over 40% more natural daylight than the closest competitor, at a cost that's surprisingly low.

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For more information call: 1-800-521-6346.

Ford GLASS DIVISION

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And, it is our commitment to our customers that these elements are to remain unchanged for the next 75 years.

Kawneer
SEAL UP PENETRATIONS IN HIGH RISE FIRES!

THERMAFIBER® Safing Insulation effectively cuts off fire at utility cut-outs in multi-storied buildings - keeps flames from spreading floor to floor.

A recent 2½-hour fire test employing THERMAFIBER Safing Insulation dramatically proved the remarkable capabilities of this unique fire-stopping material. THERMAFIBER Safing Insulation was used to seal openings of various sizes. These openings provided access for steel pipe, copper pipe, steel conduit, metal air ducts and power transmission cables run through a fire-rated floor.

For convincing test results, fire containment ratings and other specifics, call your U.S.G. Representative. Or write to us at 101 South Wacker Drive, Chicago, Illinois 60606, Dept.

UNITED STATES GYPSUM BUILDING AMERICA

Circle 15 on information card
Hotel Blazes Fix New Attention On Firesafety, Building Codes

The recent series of tragic hotel fires has focused the nation's attention on firesafety and on building codes and their enforcement. A total of 118 lives were lost in less than three months in blazes at the MGM Grand and Hilton hotels in Las Vegas and at the Stouffer's Inn in Harrison, N.Y.

The MGM Grand fire bore out recent studies that show that suffocation or poisoning from smoke released by burning materials kills an estimated third-fourths of the people who die in burning highrises. Fumes eminate from burning plastics used to coat electrical wiring and from plastic furniture, fiberboard tiling and carpeting. Ironically, some fire-retardant materials compound the smoke problem because plastic produces carbon monoxide, a particularly deadly gas, faster than most other materials do. Smoke and gases then race along the plenums, ducts and elevator shafts that honeycomb every highrise.

In the MGM Grand fire, 60 of the 84 victims probably died from the rapid spread of smoke and fumes, according to a preliminary report by a team of federal, local and private investigators. A duct above the first floor ceiling apparently began drawing in and widely distributing dense black smoke, carbon monoxide and other plastic-fueled toxins containing cyanide after the fire broke out in an overheated electrical box in a first floor ceiling. Blowers that continued to run drew smoke into hotel tower rooms unimpeded by disabled fire emergency dampers that were supposed to close smoke-filled ducts, according to officials. Smoke also traveled up through "seismic joints" in the tower designed to minimize the effects of earthquakes, investigators found. This happened when metal expansion bellows, not fire resistant, were consumed.

As investigators probed this and the other two recent hotel fires—both attributed to arson—"almost every city has begun to take a worried look at its highrise fire codes," according to Ron Coleman, the fire chief of San Clemente, Calif. In many cases, building code officials are getting heat, caught between developers and politicians on the one hand and what Dallas official Tom Jones considers "adolescent" reaction to fires. Says Jones, "It is like a guy yelling 'fire!' in a crowded theater. If you start that up enough, you'll have all your highrise buildings abandoned. To suddenly change codes in such situations is design by crisis."

But firesafety groups strongly disagree and have made a case against one particular complex of buildings in Dallas. The Plaza of the Americas is a downtown grouping of two 25-story office towers and a 13-story hotel that opened late last year. It is alleged that the city traded off several crucial safety features for an inadequate sprinkler system and that the complex therefore violates the Dallas building code. City officials and managers of the project contend that the sprinklers as installed, plus other protections, are adequate and that the buildings comply with the code, which allows equivalents to full sprinkler systems. Critics point out, however, that the Dallas code is unspecific about what constitutes equivalents to full sprinkler protection; in their opinion the substitutes are inadequate fire protection.

In some metropolitan areas, comprehensive building codes have resulted in developers moving their planned highrises to suburbs where fire standards are less demanding and where, ironically, firefighting equipment and firefighters are less sophisticated. It has been suggested that if the Stouffer's Inn conference center in Harrison, N.Y., had been built on the other side of the highway in White Plains, which requires a full sprinkler system, most of the 26 victims would have survived the blaze last December.

Nationwide there are an estimated 18,000 separate state, county and local firesafety codes, and they create a fragmented, sometimes contradictory pattern of regulation. Although many localities have strengthened codes in recent years, practically none has enacted "grandfather clauses" which apply the more demanding regulations to buildings that existed before the code.

New York City passed one of the toughest U.S. fire codes—Local Law Five—in 1973. Retroactively covering all of the city's office buildings taller than 100 feet, it requires fire walls to be built every 7,500 square feet. Building owners who elect not to install sprinklers in existing buildings must provide a package of wall dividers and pressurized stairwells that keep smoke out. Builders fought the retroactive aspect in the courts, but the law was upheld, although the timetable for compliance was extended. Currently, city attorneys are taking to court almost 400 owners who are behind the phased timetable that requires sprinklers installed by December 1983 and fire walls and pressurized stairwells completed by 1988.

Fire officials continue to press for retroactivity despite resistance. Martin E. Grimes, vice president for public affairs of the National Fire Protection Association, says: "If a code says new buildings should be sprinklered, then it really is setting the safety standard for all people using all buildings in that city today. You wouldn't think of allowing an airline to carry passengers in a World War I Fokker trimotor."

Meanwhile, there is some support for a national fire prevention act. In a recent national advertisement, a life insurance company urged the public to "shout to your Senator, your Congressman, your President..." for a national code. A company spokesman concedes that a national code would take some authority away from states and cities, "but we aren't interested in politics. We are interested in saving lives." A spokesman for the Fire Marshalls Association of North America, however, says enforcement by the federal government would be impractical. "It is a local and state problem," he says. "What you need is better enforcement on those levels."

One federal official, Gordon F. Vickery, head of the U.S. Fire Administration (a division of the Commerce Department with no enforcement authority), lays a lot of blame for highrise disasters on public apathy about firesafety, which he says allows hundreds of buildings throughout the U.S. to have the potential for fire of the MGM Grand. "Americans don't give a damn about fires," he says. But others see attitudes changing. "There is no question that these fires will have an enormous impact on the industry," says Edward Riley, president of the National Automatic Sprinkler and Fire Control Association. "But the building code process is slower. It will take five years before reaction to these fires works its way through the whole building code process." Riley foresees "hastily devised, amateuristic political solutions" in some cases, but feels that the long-term result will be better protection.

Building plans and materials are also being criticized, including the core design for highrises that concentrates elevators, stairways and utility shafts in one spot. Deficiencies of curtain walls and slab floors are being pointed out. For instance, aluminum and glass exterior walls are relatively ineffective in blocking fires from racing from floor to floor on building facades. And much of the glass used for highrise windows has little fire resistance and can withstand blazes for only a matter of minutes.

Curtain wall construction frequently leaves gaps of up to four inches between the panels and concrete floor slabs, an opening commonly filled with gypsum board or insulation that fire can easily

continued on page 34

Continued on page 34
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The beautiful way to save fuel

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penetrate to floors above. The metal-lined raceways for wiring imbedded in concrete slab floors are often placed in trenches so deep that little or no concrete protects the slab's underside. Raceways conduct heat in a blaze, spread the fire and sometimes cause the concrete floor to buckle.

Architecture TV Series Funded

The National Endowment for the Arts has announced a $700,000 grant for a five-part television series on architecture and design. The grant, the largest the endowment has made for arts programming on television, requires a match of $1.4 million from nonfederal sources.

WETA-TV, the Public Broadcasting Service in Washington, D.C., was selected from a field of 22 producers nationwide who submitted proposals. The series will be made in association with Guggenheim Productions.

Brian O'Doherty, director of the Endowment's media arts program, spoke of the series as "a grand experiment . . . the first step to bring a major series in the non-performing arts to broadcast audiences."

WETA and film maker Charles Guggenheim have collaborated before on endowment programming. "A Place to Be: The Construction of the East Building of the National Gallery of Art—1968-78" won critical and popular acclaim.

Host for the series will be Spiro Kostof, architectural history professor at the University of California, Berkeley. A board of advisers has been assembled for the project, including Stanford Anderson, architectural historian; David B littling, engineering historian; Lois Craig, specialist on public buildings; Everett Fly, landscape architect; Frieda Garcia, director of the Harriet Tubman House in Boston; Dolores Hayden, historian of familial and feminist issues in architecture and design; J. B. Jackson, pioneer in landscape studies; Kevin Lynch, writer on urban design; Charles Moore, FAIA; Rai Okamoto, urban designer, and Sam Bass Warner, urban historian.

Resort Competition Announced

AIA Research Corporation and Caltenocco Colorado, Inc., have announced a two-stage design competition for a major resort community to be built in Steamboat Springs, Colo. The 30.6-acre site, called Eagle Ridge, is situated at the base of Mt. Werner, a ski area.

Five design issues will be emphasized: esthetics, function-livability, energy consciousness, technology and cost effectiveness. Hotel facilities, retail, commercial and office buildings and residential and luxury condominiums are to be included. Total construction cost is estimated at $110 million. The site ranges from a 35 percent slope to meadowland. A mountain stream flows diagonally through a major portion.

Five competition finalists will each receive $20,000 and the chance to compete for a commission for the first phase of construction. Opened to licensed architects, the registration deadline is April 28, with entries due July 15. For further information, contact Mike Meinhardt, AIA, Foster & Meier Architects, Inc., 3603 Lemmon Ave., Dallas, Tex. 75219.

A Case of Indoor Pollution

Indoor air pollution has struck again. Late last year, employees of the National Broadcasting Co. in New York City complained of headaches, hives, scratchy throats or drowsiness. NBC called in seven experts, including dermatologists and other doctors, who concluded that the source of irritation was the office space that the network had just remodeled in midtown Manhattan.

In opinions that echo those of UCLA psychologist George Rand (see Oct. '79, p. 38), the consultants blamed several factors in the office environment, including the sealant used to plug air conditioner leaks and glass fiber particles shaken loose from the ceiling during remodeling.

Efforts to "tighten" the building to conserve energy were apparently worsening continued on page 37
In 1980, Wilsonart traveled the country conducting interviews with professional designers and specifiers. We wanted to know exactly what solid colors your designer's eye required.

You talked. We listened.

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ARCHITECTURAL DESIGN COMPETITION

TYPE OF COMPETITION: An open, two stage design competition, to be actually constructed.

ELIGIBILITY: Open to any Architect, licensed in the United States.

SPONSORED BY: Caltenno Colorado, Inc.

AWARDS: First Stage, Five finalists to receive $20,000 each. The Final Stage winner to receive commission for Phase I construction.


PROFESSIONAL ADVISER:
- Bill N. Lacy, FAIA

JURY MEMBERS:
- Moshe Safdie
- M. Paul Friedberg
- Charles W. Moore
- Ralph L. Knowles
- Gordon C. Gunn, sponsor
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ADDITIONAL INFORMATION:
Mike Meinhart, AIA
Foster & Miler Arch., Inc.
3603 Lemmon Avenue
Dallas, Texas 75219
Phone (214) 528-0070
See related news item this issue.

Circle 16 on information card
Practice from page 34
the situation by trapping the pollutants inside. Building engineers went to work eliminating the apparent causes and in subsequent weeks the complaints dwindled.
But one of NBC's consultants put the problem in a larger context. Dr. Alfred told the Wall Street Journal that damage from pollutants may be slow and remain hidden for years. "But it would be the same as if we put wax on bread and ate it like peanut butter. The chemical's in our bloodstream either way."

Office Occupancy Rate Drops
Office space occupancy dropped in most of the U.S. during the second half of 1980, according to a survey by the Building Owners and Managers Association International.
The opening of new office space, combined with slower than expected leasing activity, caused a drop in the overall rate of occupancy of over one and a half percentage points, from 94.32 percent in May to 92.58 percent in October. Only the Midwest, North and South showed gains in competitive occupancy. Certain cities such as New York and Washington, D.C., were unaffected by national trends. The survey covers 85 major cities.

Environment, Health Hazards Found in Solar Technologies
Although far safer than fossil fuels and nuclear energy, solar energy technologies present some potentially adverse environmental and health effects, suggests a report by the Washington, D.C., based organization, Citizens' Energy Project. "When all the potential hazards are examined, it should be obvious that many of the health and environmental impacts can be trivial—effectively nonproblems if they are recognized and ameliorated," says the report. Yet these problems "must be faced and dealt with if solar's credibility is to survive."
The report contends that even passive solar energy, which it calls the least environmentally harmful of all the solar technologies, has some drawbacks. One concern is the degradation of interior air quality resulting from poorly designed passive solar heating systems that don't incorporate air-to-air heat exchangers. Another potential is that air circulation passages in passively designed houses can allow fire to quickly spread. The manufacture of active solar collectors for hot water and space heating or cooling may contribute to air pollution emissions from such things as aluminum smelting. After installation, heavy active systems can adversely affect the structural safety of an older house. There are also potential water pollution problems associated with the flushing of collector fluids, especially ethylene glycol.
Extensive open-pit mining is necessary to secure silicon to manufacture photovoltaics, the report continues. Workers inhaling silica dust in the manufacturing process can contract silicosis. And there are discharges of silicon-oxide that can become a respiratory irritant.

First Mixed-Use State Building
Massachusetts has begun construction on a mixed-use office building in Boston's theater district that will be the first state government building in the nation to give its first floor over to retail space.
Special legislation was passed to allow use of 50,000 square feet for retail space, most of the ground floor, in the eight-story, 870,000-square-foot building. The commercial space is to be geared to restaurants and entertainment to serve office workers by day and theater-goers in the evening. Office space will bring together several state public works and transportation agencies. Architect for the $91.1 million building is Goody, Clancy & Associates, Boston. continued on page 40
New AMP Undercarpet Wiring System puts power in its place... between carpet squares and floor.
Here is AMP's answer to the high costs and complexity of hard service wiring in commercial office areas. The AMP Undercarpet Wiring System is just laid out on the flooring and covered with standard carpet squares. It can be easily rearranged as office layouts are changed. It's made to take the pounding of foot traffic as well as furniture moving.

By eliminating the problems involved with under-floor ducts, power poles and conventional poke-thru devices, adaptability to changing needs is tremendously increased. Desks need not be located near existing walls. New conduits and the need for core drilling are eliminated.

Installation is easy. Just lay out the system and cover it with standard carpet squares. AMP Undercarpet Wiring System configuration gives no hint that it's there.

Another plus is that you don't have to wait on construction schedules. What's more, only minimal training is necessary for installers.

The new AMP Undercarpet Wiring System is U/L Listed and will appear in the 1981 printing of the National Electrical Code (currently approved under Temporary Interior Amendment Article 328). For more information, please write AMP Special Industries, P.O. Box 1776, Paoli, PA 19301, or circle the bingo number.

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Parker produces stainless steel grab bars in standard lengths and special application configurations to meet the safety requirements of any architectural design. In addition to choices of diameter, mounting and gripping area finish, Parker also offers you one other significant choice when you’re specifying grab bars. Parker bars are available with a clearance of 1/16" between wall and bar to conform to the Federal Regulations. However, since many experts don’t agree that the 1/16" clearance is the safest for handicapped use, Parker also offers a wide selection of grab bar designs with a clearance between wall and bar of 3'. Whatever your opinion on this important matter is, at Parker we leave the choice up to you. See our catalog in Sweets General Building File 10.16PA.

Parker gives you a clear choice in grab bars

Practice from page 37

The mixed-use concept for government buildings has gained acceptance in recent years. In Washington, D.C., the two-year-old Federal Home Loan Bank Board building one block from the White House incorporates ground-level shops, and the old post office building on Pennsylvania Avenue, now undergoing renovation, will do likewise. Two other state government buildings still on the drawing boards, the Illinois Center in Chicago and one for Missouri in Jefferson City, will also include retail space.

Government

Reagan Would Cut Deeply into Energy, Urban, Arts Programs

The Reagan Administration’s economic recovery program to reduce the federal budget for fiscal year 1982 calls for cuts in the fields of energy, housing and urban development, the arts and humanities, land conservation, historic preservation and transportation.

The proposed changes in the Energy Department reflect the philosophy of relying on market forces “instead of bureaucratically administered programs to achieve national energy goals.” Programs relating to all types of energy sources—solar, renewable, fossil fuels, conservation—will face budget cuts and, in some cases, extinction. Nuclear power development is the only energy program in which no cut was advocated by the President.

Reagan proposes eliminating “excessive federal involvement in solar energy development,” by reducing spending by more than 60 percent in 1982, with cumulative savings of nearly $1.9 billion by the end of 1986. Yet, the Administration says that the total federal support for solar energy will “remain extremely high” due to continuation of the tax credits, which are expected to reduce taxes for residential and business investors in solar energy systems by $2.6 billion between 1981 and 1986.

The Administration suggests that because of the solar tax credits and increasing prices for oil and natural gas the “market for solar energy products is expanding rapidly.” In this “new environment,” the Administration wants to shift DOE’s focus away from “costly” near-term development, demonstration and commercialization efforts to longer-range research and development projects that are “too risky for private firms.”

The reasons for a decrease of 20 percent in federal support for energy conservation in 1982 are similar to that for solar deductions. “Motivated by rising energy costs and substantial federal tax credits, individuals, businesses and other institutions are undertaking major conservation efforts,” the budget report states. “Some federal conservation programs are, therefore, no longer necessary, while others may impede private initiative by imposing too great a regulatory burden on the public,” it continues.

The President is proposing no change in the current energy conservation tax credit (which is expected to provide at least $739 million in 1981 and $799 million in ’82), but calls for reductions in technology development, regulation and information programs and financial assistance to state and local governments.

Regulatory programs mandating building-efficiency standards would be eliminated. This would affect the building energy performance standards, although they are not mentioned by name in the report.

The solar energy and energy conservation bank would also be eliminated. Under the auspices of HUD, the program, which was to begin operating in ’82, was intended to promote residential energy conservation and solar technology investments by providing subsidies. The Administration argues that “substantial economic incentives already exist for such investments as a result of rising energy prices and significant tax credit for residential energy conservation improvements and solar technology measures.” More than $121 million was appropriated for the program’s first year.

For HUD’s urban development action grant and community development block grant programs, the Administration proposes “integrating” them “into a more efficient and flexible grant mechanism.” Current restrictions on the use of block grants funds for commercial activities will be liberalized. The UDAG emphasis on securing private sector financial involvement in local economic development projects will be reinforced.” By 1986, the combined programs would be reduced almost $1 billion over projected figures.

Other effects on HUD programs include:

• reducing the planned number of additional subsidized housing units in 1982 by 13 percent,
• a gradual increase in the maximum annual payment

continued on page 102
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Which is by way of announcing the JOURNAL’s first (in recent history) architectural photography contest. The contest is open to architects in private practice, education, government and industry in the U.S. and Canada. A second category of entrants, whose pictures will be judged separately, are students in accredited architectural schools and intern architects in the two nations.

Each entrant may submit up to five photos, black and white or color in any form. The subject matter must be architecture or some element of the built environment. The postmark deadline for submissions is July 10.

The jury will consist of the JOURNAL’s art directors and editors plus professional photographers. Winners will be published in the September issue. D.C.
Minnesota's Decidedly Unidentical Twins

They comprise one of the nation's most robust metropolitan areas. By Andrea O. Dean

Minneapolis-St. Paul is a freak. Fiscally and physically, it is a robust area, a maverick in the ailing Frost Belt. It is virtually free of the high unemployment, serious crime, extreme poverty and self-serving politics that plague most Northeastern and Midwestern urban areas. The Urban Institute of Washington, for one, has proclaimed the Twin Cities first in the nation for overall "quality of life"—and this despite severe handicaps.

The climate, for instance, is bitter, and resulting high energy costs make living and doing business in the area unusually expensive, as do taxes. Minnesota's income tax is third highest in the U.S. and only three states have higher corporate taxes. Because of its geographic isolation, moreover, Minneapolis-St. Paul is far from markets for its goods and services. How, then, account for the Twin Cities' robust, good health?

Minneapolis is, of course, the larger and more glamorous of the twins. It is more big city, big business, competitive and fast-paced. Appropriately, its cityscape is dominated by the Investors Diversified Services (IDS) tower, a monument to commerce. St. Paul, by contrast, is a government town where the state capitol dome vies with that of St. Paul's Cathedral for prime attention. While Minneapolis' population is heavily white collar, Lutheran and unusually homogeneous, St. Paul's is more diverse, with heavier concentrations of blue-collar workers, Catholics, minority and ethnic groups. As a group, its citizens tend to have more traditional values than Minneapolis'. As local disc jockey-philosopher Garrison Keillor once put it, "The difference between St. Paul and Minneapolis is the difference between pumpernickel and Wonder Bread."

Until the dynamic Mayor George Latimer came to office in 1976, St. Paul tended to make headlines just once a year when its winter carnival tried valiantly to convince people that 20-below weather could, after all, be fun. Minneapolis, by contrast, has long made headlines and continues to do so. It is the center of the region's cultural life, with its contemporary Walker Art Center, Guthrie Theater and Orchestra Hall and the Institute of Arts by McKim, Mead & White. And although St. Paul is now shedding its conservative stance toward downtown development, as illustrated by the recently completed Town Square complex (see p. 65 and 82) and Latimer's energy conservation program, Minneapolis was definitely first, preceding not only its twin but
most of the rest of the nation in launching a successful rescue of its downtown as early as the 1950s. It is now in the midst of a $600 million building boom in private construction, enjoys an AAA bond rating from both Standard & Poor's and Moody's and scored third best (after Dallas and Seattle) in a recent report by the Congressional Budget Office that ranked 39 cities by social need. It has, in short, more of the area's resources than St. Paul and fewer of its problems. And so, we too will give it more emphasis, first, in trying to understand what makes the Twin Cities such an anomaly among Midwest-Northeast cities.

The impression of Minneapolis is clean, orderly, quiet and, except for the IDS building, unspectacular. The usual cacophony of bustling cities is absent. Drivers don't seem to feel a compulsion to lean on their horns or shout in exasperation, nor do traffic cops toot whistles while flailing arms. Pedestrians in the center of town move efficiently, somewhat soberly, looking unostentatiously well-heeled. It's all very civilized. Yet, some aberrant behavior is obviously tolerated if the reading material displayed in the mayor's office reception area—which includes the local gay newspaper—is any indication. But the absence of a sizable minority population is obvious, and the apparent reason for it is that there was no industrial boom during and following World War II—as there was in such cities as Detroit and Cleveland—to attract rural Southern migrants. Nor was the area on a beaten path. Minorities comprise a mere 12 percent of Minneapolis' population, compared to 44 percent in Cleveland and 60 percent in Detroit.

The largely Northern European stock that settled these parts came equipped with both a Calvinist work ethic and a progressive tradition strongly influenced by 19th century socialist thought. The result has been a highly motivated work force. As St. Paul's Mayor Latimer, a transplant from Syracuse, N.Y., puts it, "If I felt like lying around for a few months, I wouldn't have chosen to do it in the Twin Cities in February." Because the Twin Cities are involved in neither automobiles nor steel, the

*Left, St. Paul with its namesake cathedral prominent on the skyline and Minneapolis' IDS tower on the horizon (architect Johnson/Burgee and Edward F. Baker). Minneapolis is having a downtown building boom (above) but IDS retains its dominance.*
A shared devotion to entrepreneurship.

two industries that have experienced the most severe ups and downs, Minneapolis-St. Paul has been spared the shock waves of cyclical economic swings and severe recession, and benefits from an unemployment rate always two points below the national average. As Thomas Anding, an urban geographer at the University of Minnesota, says, “Our growth here has been slower, more constant and diversified than is usual.”

Diversified is a key word. The area grew up as a regional business center, particularly for the food, transportation, mining and finance industries. Minneapolis now has two of the strongest and most profitable regional banking organizations in the country—the First Bank System and the Northwest Bancorporation. Its agriculturally based corporations, Pillsbury, Cargill, Land O’Lakes, International Multifoods and Peavey, dominate their industry. (The giant 3M is, of course, in St. Paul.) In addition, Minneapolis is a major transportation center and distribution point for the upper Midwest. In recent years, the Twin Cities have also become home, second only to Boston in national importance, for a new crop of so-called computer brain trust or high technology industries. Both Control Data and Honeywell took seed and are headquartered here, and each has spun off numerous, successful medium and small-scale computer-oriented businesses. Success has begeten success, the legacy of good business has been more business.

Minneapolis’ greatest asset, thinks Roger W. Staehle, dean of the University of Minnesota’s Institute of Technology, is the entrepreneurial spirit of its people. In the 1980 annual ranking of America’s 100 fastest growing small companies published by Inc. magazine, five Twin Cities area manufacturers were listed. No other part of the Midwest had more than two. John Borchert, another urban geographer at the University of Minnesota, credits Minnesota’s peculiar brand of practical, as opposed to ideological, liberalism with nurturing its entrepreneurship. John Cowles, publisher of the Minneapolis Tribune and Star, explains it in terms of “having a touch more confidence in the private enterprise system than some other parts of the country do. There’s a belief that if you work hard you ought to benefit from it. That may be a factor in why people are willing both to work hard and take risks.” And, in the face of risk, nothing works like success—successful examples to create a sense of optimism and confidence. In a nutshell, this may explain Minneapolis’ overall good condition.

One result of the Twin Cities entrepreneurial spirit is that the city now ranks eighth nationally in home-based Fortune 500 companies, even though it places 15th in population. The implications are several: Unlike absentee landlords, who feel little concern for their community, the businesses that took root and grew here show an intense interest in the welfare of their native area. As publisher Cowles puts it, “Most of the trustees of a corporation live here, so their judgment about things in this part of the country tends to be informed. There’s a strong spirit of putting your money back into the place you made it. Maybe this is part agricultural in origin, a sense of renewing the land from which you’re making a living.” Headquarters also tend to attract the best new people. As Cowles, again, says, “Headquarters are the nerve center of a company and the people working there are the best. So, we have available this pool of talent that other cities of comparable size just don’t have.”

True to their roots, the most talented in Minneapolis are heavily involved in good works. One example of the civic-mindedness of the city’s corporate giants is the record of Dayton Hudson Retailers, which recently dethroned Marshall Field & Co. of Chicago as the Midwest’s regional retailing pacesetter. Dayton Hudson’s profits have gone hand in hand with philanthropy, as have those of 3M, Control Data and others.

Last year the philanthropic arm of Dayton Hudson distributed nearly $9 million for everything from rehabilitating an aging neighborhood to shipping an elegant piano from Italy to the Minnesota Symphony. For 35 years, the company has been giving 5 percent of its pretax profits—the maximum portion of corporate income that is tax deductible—to civic improvements. The Dayton family is, in fact, credited with founding the Five Percent Club, an organization of 45 Minnesota businesses that has now adopted Dayton Hudson’s formula. Board chairman Kenneth Dayton’s explanation of how his family began investing in the community is revealing: “Many years ago, when Dayton’s was just one business—one store—we had such a large share of the market that no matter what we did we probably couldn’t have increased that share very much, so we decided that if we could spend part of our effort building a better environment in which to do business it would pay better dividends than just trying to increase our slice of the pie. Working to build a bigger, better pie in which to operate is becoming increasingly recognized as being an effective way here of conducting your business.”

Unusual is the fact that Dayton and other Twin City philanthropists tend to make contributions with no strings attached. Why? As Dayton explains it, “The independent sector cannot be independent if it is just doing the bidding of either the public
Selected contrasts in the Twin Cities: Far left, the recently completed Greenway Gables condominium complex by Bentz/Thompson & Associates gives to downtown Minneapolis a touch of postmodernism; near left, the 19th century carpenter Gothic 'three sisters houses' line Laurel Avenue close to St. Paul's core. Below left, glimpse of Minneapolis' two Yamasaki buildings reflected in and viewed under Birkerts' Federal Reserve Bank building. Below right, the solid forms of the Cathedral of St. Paul, derived from St. Peter's in Rome.
The new Minneapolis by Skidmore Owings & Merrill as seen from the top of IDS: Under construction are the Pillsbury Center’s twin towers (left) and the stepped-back Lutheran Brotherhood Insurance Co. building (closeup below) flanking Warnecke’s assertive 1960s Hennepin County government center. The metropolitan stadium is taking shape beyond the insurance building. Facing page, a musical mural and IDS.

A certain confidence in solving problems.

or the private sector. Modern businesses here recognize this, that it’s important, for instance, to have a great educational institution and that it can’t be great if you’re telling people how to teach, that it’s important to build great arts institutions without telling them how to conduct music or choreograph scenes. You can’t get good, talented people to do the job if you try to tell them how to do it. There’s long been a tradition in this community of what I like to call enlightened trusteeship. Good people command respect. We have good people running our institutions, public and private.”

Such “enlightened trusteeship” is abetted by the fact that power in Minneapolis is widely distributed. There are, as stated, 45 businesses in the Five Percent Club and there is a substantial flow of smaller growth companies whose entrepreneurs and managers provide new sources of wealth and giving. It’s not like Detroit or Kansas City where a couple or handful of powerful corporations exert dominant control. As one Minneapolis observer says, “The city has a series of never-ending plays and the cast always shows up. Roles are passed around. If you’re a star in one show, next time you may get a bit part. But, you’d better show up.” This kind of personal interaction is crucial in doing business and doing good, and would be all but impossible in a much larger city. As big cities go, Minneapolis is small. With a population of 372,000, it is 38th in the nation. As city Planning
Director Oliver Byrum says, “Minneapolis isn’t so big that you can’t comprehend it, so the problems are more manageable.” John Cowles raised $14.5 million for Minneapolis’ new sports stadium. Kenneth Dayton’s pet projects are the arts. (He was the driving force behind Orchestra Hall and is a major contributor to the Walker Art Center; he also happens to live in a house designed by Mitchell/Giurgola.) 3M’s McKnight Foundation recently gave $15 million for housing in the Twin Cities and another $10 million to stimulate a proposed $200 million redevelopment of St. Paul’s Lowertown. Weiming Lu, formerly city planner for Dallas and before that for Minneapolis (1959-71), has been brought in as director of urban design of Lowertown, a 75-acre area now being renovated and woven together with new construction to create a new town downtown.

Some 10 years ago, Control Data Corporation built an $8 million plant in a rundown Minneapolis neighborhood to provide jobs for residents. As city planner Oliver Byrum says of the project, “The plant was an integral part of Control Data’s operation, so they had to make it work. If it didn’t work it would have affected production and profits of the company. It was not viewed as a showcase-type, charitable operation. They added the best day-care center in the city, put in special training services. If someone didn’t show up for work, they went to get him; if someone went to jail, they’d get him out. The plant is now profitable.” About two years ago, Control Data formed a consortium with other businesses and two religious organizations to launch an inner city redevelopment effort called City Venture, which has ambitious projects started or on the drawing boards for blighted areas in four U.S. cities.

Urban geographer Aning explains: “The involvement of some of these corporations goes back into the last century. These were the same families that were involved in starting the Institute of Arts. Part of what spurred them was our isolation. We weren’t used to cultural things and if they were going to have them they’d have to create them. After World War II, the involvement in producing a high quality environment began moving over into the public sector.”

This move began in force in 1956 when a group of business leaders, worried about the general state of the Twin Cities’ economy, went to the University of Minnesota for help. The result was the largest regional economic study done up to that time in the U.S. Such collaboration between academia and business is rare. Aning, who worked on the project as a graduate student, speaks of the corporate community with a sense of respect unimaginable in professors in the Boston or New York City areas. Less singular, if no less impressive, is the high regard in which business is held by local government. Asked what is Minneapolis’ greatest strength, Mayor Donald M. Fraser unhesitatingly answers, “the progressive leadership from the business community.” The corollary, of course, is that the public sector, too, is regarded with far more respect than is usual. You can feel it in city hall where offices are more comfortably and cheerfully appointed than is customary, and where employees seem unusually efficient and productive. As Byrum puts it, “When you work in government in Minneapolis, there is some sense that you can, in fact, accomplish things. Partly it works because it has worked. There’s a tendency to think problems can be solved, because we’ve solved them in the past. Part of that is that some of our problems are less severe; they are, in fact, manageable. Those successes bring confidence. You don’t come into it feeling discouraged and overwhelmed. Being a public servant in Minneapolis is, I think, somewhat more respected than in other places.” Business, for its part, believes, as John Cowles says, that “the government here is clearly responsive to people’s wishes. People here still feel that they own the government; that it’s still theirs and not some monster that’s out of control, neither reflecting their wishes nor caring about their welfare. And government, in turn, doesn’t see the businesses as rapacious buccaneers. So we can work together.”

Business has led the government/business/labor triumvirate, however, as is evident from the story of Minneapolis’ first effort at downtown renewal. Like many other U.S. cities, Minneapolis in the ’50s was beginning to slide into neglect, downright seediness. Two events jolted the business community into action. First came the decision of Dayton’s department store to locate the nation’s first climate controlled shopping center in the silk-stocking suburb of Edina. Then General Mills announced that it was moving its corporate offices out of the city to suburban Golden Valley. “The business community decided to do something about it, to work with the public sector and go first class,” says planner John Burg.

The first step, in 1955, was formation of the Downtown Council, made up of executive officers of major corporations, retailers, banks, media, building owners, utilities and representatives of smaller businesses. The Minneapolis Star and Tribune, for their part, were among the first newspapers in the country to give good coverage to urban affairs, and played a vigorous role in the city’s redevelopment. One of the Downtown Council’s first acts was to commission the planning firm of Barton Ashman Associates to make a study of the city’s planning commission, and the city implemented its recommendations to reconstitute the commission with a large budget increase and to undertake a nationwide search for a new director. Within months, Lawrence Irvin was hired as planning director and launched a comprehensive city planning program and a specialized study of the central area. The decision was made to develop the retail area of Nicollet Avenue into a mall as a focal point for strengthening the downtown as a whole, stimulating office construction and, in turn, the retail trade. Donald Dayton, then head of the Dayton company and a behind-the-scenes mover of the project, laid down two conditions for his financial involvement: First, the
A somehow unexciting building boom.

mall would be of top quality construction or not come into existence at all; and, second, it would have to be designed to the highest possible esthetic standards, be urban, simple, uncluttered and free of commercial trappings. Lawrence Halprin & Associates of San Francisco was retained and the rest is known. Nicollet Mall is now an eight-block, sophisticated shopping promenade (being expanded at this writing to 12 blocks). It feels like a European street, with each block of elegant shops having its own distinctive flavor, handsome bus shelters, fountains and terrazzo sidewalks. Minneapolis' privately constructed skyways reinforced the pedestrian orientation of the downtown and the effort to concentrate the core into a compact area easily covered by foot.

Today, more than two decades after Minneapolis adopted its comprehensive plan, the city is undergoing the biggest building boom of its history. The city, for its part, is making sure that the overall design of new construction conforms to the plan adopted those many years ago.

The four largest projects will house five of the city's leading corporate and financial institutions: Pillsbury, First National Bank of Minneapolis, Northwestern National Bank, Lutheran Brotherhood Insurance and Northwestern National Life Insurance. The new buildings will bring perhaps 25,000 new employees to downtown, raise tax revenues, retail sales and lease incomes. They are being financed by a so-called tax increment method, whereby costs of improvements in a designated development district are paid for by tax revenues which result from increased value of land and buildings in the area. The new construction will be characterized by energy-wise construction, most buildings will have sky-lit atria, outdoor plazas or landscaped yards and underground parking. Because the city helped acquire the land for the new buildings, it insisted that all new structures in the designated core area have skyways, reviewed design and made certain changes to ensure an inviting feeling at street level.

Yet something is missing. While Nicollet Mall, the skyways and IDS Center all broke new ground in architectural and urban design, the only groundbreaking this new crop of buildings will produce is likely to be ceremonial. As Minneapolis Tribune reporter Dan Wascoe wrote in Minneapolis/St. Paul magazine, "Whatever economic vitality the new buildings bring—and most observers agree there will be a lot of it—themselves leave people shaking their heads." And as Mayor Fraser puts it, "There's nothing exciting about it. We could have done better."

Four of the major new structures are the work of Skidmore Owings & Merrill; Minoru Yamasaki, FAIA, was architect for the fifth. As designer of the slender-columned, temple-like Northwestern National Life Insurance building in 1964, Yamasaki was logically commissioned to create its sequel. If the earlier building is a debatable bauble, its younger, much larger sibling (24-story tower costing $35 million) is a white-faced lump of a fellow, squat and square, whose first words might have been "me first." The shape is a box on stilts perched on a tiny marble-and-glass lobby at its base. In form and scale it is an outsized misfit. But it is designed to be temperate in energy use, with its exterior broken only by a small grid of windows that take up less than 25 percent of the surface; parking for 400 cars is buried underground.

The most potentially interesting of the new structures is another insurance company building, headquarters for Lutheran Brotherhood. The architect is SOM/San Francisco. The structure is designed to make its presence felt, but bows to the dominance of John Carl Warnecke's massive government center high-rise and will serve as frame on the southeast for its grassy knoll. To make the building appear even more horizontal, it will be cantilevered with three slopes stepping progressively back so that the top half of the structure will be about half the size of the bottom. The surface of heavily insulated, copper-colored reflective glass will have a shimmering quality, an appropriate frame for the eastern edge of downtown. The project is to be completed this summer.

The largest of Skidmore's Minneapolis projects is City Center. Just northwest of IDS, it will be a $250 million, 50-story, two-and-a-half block complex with Oxford Development of Canada as developer. The first phase, to be completed in 1982, is the work of SOM/Denver; the second phase, with a projected completion date of 1985, was designed by the Chicago office.

SOM/Chicago also designed the $85 million Pillsbury Center, a complex with two angular towers of reinforced concrete and bronze-tinted glass linked by an eight-story atrium. Slated for completion this summer, it is respectable, though hardly extraordinary, architecture. Skidmore/Chicago is also designer for the domed stadium, several blocks east of the core. To be completed in 1982, it will be known as the Hubert Humphrey Metrodome.

The lackluster quality of the new commercial buildings stands in sharp contrast to the distinguished design of IDS and of many of Minneapolis' cultural institutions—the Walker, Guthrie, Orchestra Hall. The reason, John Cowles ventures, is that "the people responsible for a symphony hall know damn well they're not going to build another for a very long time and it may be the greatest accomplishment of their life. They tend to be determined to get the best, irrespective of cost. But you're much less likely to arouse much passion about corporate office buildings,
Around Minneapolis' core are sited no less than 22 lakes, with pleasant neighborhoods nestling their shores. Minneapolis means city of waters in the Indian language of its native inhabitants.

because very few of them are built as monuments to someone's ego. You want them to be mainly functional, watch your dollars and get a reasonable return."

An obvious question is why Skidmore Owings & Merrill was elected as architect for the major portion of Minneapolis' new construction. The consensus seems to be that SOM was a logical choice because it represents both status and status quo. Its repository is broad and comfortably familiar. Known for its efficiency, 'or churning out drawings quickly, being reliable and corporate-like, it is a firm with which Minneapolis' business leaders can identify, feel at home with. As city planner Tom Martinson puts it, "The corporate leaders here are impressed with people who are like them. The taste is conservative. They choose the firm that was and therefore probably will be stable, that was a leader, other than will be the leader. The average executive walking into Venturi's office would think it's a cottage industry."

Yet, it was to Venturi, Rauch & Scott Brown that the city planning commission turned for ideas to refurbish its down-at-heel Hennepin Avenue entertainment district, a small-scale version of New York's 42nd Street, lined with old movie theaters, striptease clubs, porno shops and an assortment of other somewhat seedy enterprises. As city planner Byrum says, "We want to retain a certain amount of titillation for people who like that sort of stuff. Our aim is to make Hennepin a more attractive pedestrian place, so that it will be less frightening, while retaining its nightlife atmosphere." The concept being worked out by Venturi's firm, with Minneapolis architects BRW as consultants, is to narrow the avenue, widen its sidewalks, extend vertical circulation and "do it all with a lively, quality entertainment quality," according to planner John Burg, who is client for the project. He adds that "they want to improve quality without sanitizing the district; it's a tightrope to walk. I think it's important that we don't lose the brashness, the neon quality that the avenue has." At this writing, the architects are still working on conceptual design; if funding is approved the hope is that renovations will be completed by fall of 1984.

It will be interesting to see what Venturi has learned from Las Vegas that will be applicable to Minneapolis.

And, one might ask, what lessons might the rest of the U.S. garner learning from Minneapolis? "I think," answers publisher Cowles, "the one simple thing that we have demonstrated here is that it is not hopeless, that, indeed, a sizable metropolitan area can be well governed, that there can be effective cooperation between the private and public sectors, that you can have a high degree of citizen confidence in their public officials and in business."

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Coping with a Legendary Winter Climate
Its impact on architecture, planning and construction. By Bruce N. Wright

The frozen black ends of several branches poke through a snow blanket on the rolling prairie. Ice coated tracery drops from trees, its cracking sound traveling quickly in the cold January air to be swept away on a blast of arctic wind.

These might easily be the images many people have of Minnesota in the wintertime. Though often portrayed as a snow-bound tundra, Minneapolis' and St. Paul's temperature and average snowfall are not nearly as severe as might be expected. For example, Boston receives an average 42.1 inches of snowfall per year; the Twin Cities get only about two inches more. By comparison, Chicago gets 51.5 inches, Rochester, N.Y., receives 86.1, Montreal, 100, and Syracuse, a whopping 109 inches (making it the snowiest major city in the U.S.).

True, it does get cold in the Twin Cities, but not like Bemidji or International Falls, Minn., (notorious for often reporting the coldest temperatures in the continental U.S.). Minnesota is a fairly large state and upstate is as distant from the Twin Cities as Washington, D.C., is from Canada or New York City is from central Maine. Minnesota weather does tend to change rapidly. It can go from 30 degrees to 20 below (at night) in a 24-hour period, a condition that has often caused trouble for roads and building projects and is a constant source of jokes. One that has been circulating for years has it that there are two seasons in Minnesota: winter and road repair.

Although no way has been devised to rebuild or permanently patch Minnesota's highways in winter, recent innovations in construction techniques have extended the state's building season. When huge projects for the Twin Cities worth hundreds of millions of dollars in construction costs materialized in the last few years, contractors devised ways to extend the acceptable working limits.

For reinforced concrete work, they set up temporary enclosures of sheet polyethylene around framework and heated the space with propane gas heaters to maintain a minimum air temperature for proper setting. This, of course, is nothing new, but the added techniques of wrapping all poured columns and beams in insulated blankets, using 8,000-pound, high-strength concrete and heating the concrete before bringing it to the site all helped to extend the periods when work could proceed. "With interest rates so high now, the high cost of winter heat is still less than the interest percentage," says contractor John Boshardt. Use of heated concrete and the natural heat given off by the chemical bonding that takes place during setting (called heat of hydration) seem to be all that is needed even in the coldest of winters. For a slab pour, Boshardt places the propane heaters under the metal decking used as form work, and lays insulated blankets on the partially set concrete during especially cold days.

Steel framing offers fewer problems than concrete in winter construction. The biggest concern is that field welds be properly done. If the outside temperature gets much below zero, crystallization of the weld may occur. In that case, the solution is to enclose the area where the weld is to be made with "poly" and heat the air up to the acceptable range.

But Minnesota architecture has responded less well to the cold climate. That is, until recently as architects, educators, engineers and legislators have leap-frogged Minnesota into the vanguard of energy-efficient building design and legislation. Only within the last five years has a significant amount of building activity in the Twin Cities addressed the problems of energy use and profligacy. There were isolated examples in early Minnesota history of buildings reflecting and responding to the climate found here. Not surprisingly, in every case they were the result of economic necessity.

In the early settling of the Minnesota territories, many who migrated here were from Sweden and Norway, with smaller concentrations from Finland, Germany and Poland. The first residential structures were sod-roofed huts and log cabins (a Scandinavian import frequently mistaken as an American invention). These were effective against the cold, but were always considered temporary solutions. As soon as people could afford to, they built homes and municipal buildings like the ones they had left behind. Even by the late 1800s, when architects began practicing in the area (the first Minnesota architect came from Maine in 1856), the local styles were the popular ones from the East. There was scant individuality and no conscious attempt to shape a regional style reflecting the climate.

It took nearly 100 years for the next major example of climate conscious architecture to appear. Again it was imported, and again for economic reasons.

In the fall of 1956 Southdale Shopping Center, designed by

A skyway into the IDS Center in downtown Minneapolis (facing page) and a 1950s view in Southdale Shopping Center.
A serpentine mall and pedestrian freeways.

Victor Gruen Associates, opened in a suburb of Minneapolis to much fanfare and acclaim. It had been envisioned by Gruen as "the crystallizing force for this sprawling suburban area... There will be places here for meetings and concerts and galleries of paintings to look at and rooms where classes can be held and places to eat. This is the town square that has been lost since the coming of the automobile. It should become the center of this civilization."

Southdale was the world's largest enclosed shopping center at that time and one of the few with two major retail department stores and two-level shopping (with corresponding parking levels). But the most significant "first" about Southdale and the reason it has influenced subsequent malls is that it was fully enclosed and climate controlled. This was a direct response to the local climate, and Gruen said at the time, "When we found Minneapolis has only 126 ideal shopping days a year, we planned to make our own 'fair and mild' weather in Southdale every day."

It was designed to conserve energy from the beginning. At that time, techniques to mechanically heat and cool such large volumes of space hadn't been developed. Gruen designed a system that collects heat given off by people's bodies and light fixtures, along with excess heat collected during summer months, and stores it in huge water tanks in the ground beneath the center. Southdale is cooled by using 50-degree water pumped up 400 to 500 feet from a Jordan aquifer directly below. The center uses no artificial cooling agents and no power to cool the water. The water pumps are powered by natural gas, not electricity, and any heat needed during the year is drawn from the pump engines. To this day, Southdale is 10 to 15 percent more efficient than other major shopping centers in the region that use more up-to-date and sophisticated methods of heating and cooling.

As documented in case after case across the country, for all the good that regional centers did for their immediate communities, they also helped, along with increased public mobility, to destroy or weaken the older cities and neighborhoods that spawned them. Southdale is no exception. A product of the automobile age, Southdale provided what downtown Minneapolis could not: a wide variety of stores in a concentrated area, adequate and free parking and, important in Minnesota, protection from the elements. Who could compete with year-round summer?

In 1967 Minneapolis tried to do just that by building Nicollet Mall, designed by Lawrence Halprin. The city saw the mall as a way of concentrating the rapidly dispersing business and shop-
ping district along a central spine. Although its somewhat Mediterranean flavor was intriguing and appealing to many, it alone could not do for downtown what Southdale and its progeny did for suburbia. For one thing, there was no protection from cold winds or rain. For another, the bulk of the buying population had shifted to the suburbs and exurbs by this time.

Through no conscious effort at first of attracting people back downtown, a partial solution to this problem was realized in 1962 when the first skyway (second story pedestrian bridge) was erected between Northwestern National Bank and the Northstar Center complex in downtown Minneapolis. It was an immediate success and was followed a year later by another one connecting the Northstar and the Baker buildings at midblock. It then became possible to travel through several buildings without having to worry about slushy sidewalks or street traffic.

Soon after this, a group of downtown executives, a spinoff of the chamber of commerce called the Downtown Council, took an interest in the concept of a network of skyways and actively promoted them to other businesses in the downtown area. Most stores were reluctant at first. The cost of a bridge alone is today well over $250,000 (three times that of the original skyway), but the real expense comes in extensive remodeling and reworking of the second floor spaces. And in hidden costs. When the skyway between Dain Tower and the Minnesota Federal building was completed in 1969, the owners soon found that one building was calmly sucking the heat and airconditioning out of the other. Hence, all skyways today have doors separating one volume from another. But in connecting the second floors of downtown department stores, owners found themselves dealing with a second set of entrances for an increased volume of pedestrian traffic. And, for their part, owners of other buildings plugged into the system found no problems renting shop space along the second level hallways. As the system grew, the skyways provided two of the amenities of shopping centers: pedestrians divorced from vehicles and protection from the elements. And in short time they reinforced another—that of binding the retail section of the city into a concentrated area.

If Minneapolis gave the modern American city the concept of climate controlled skyways, St. Paul made sense of it and developed it to its ultimate potential.

During the late '50s and '60s, downtown St. Paul found itself suffering like many American cities from declining business prospects and a deteriorating stock of quality buildings. Many blocks were cleared in the name of urban renewal and remained vacant for lack of interested developers. Through the concerted efforts of a group known as the Metropolitan Improvement Committee (composed of representatives from the business and labor communities, including several architects) and the St. Paul Housing and Redevelopment Authority, a master plan was produced for developing a 12-block core of the central business district. What distinguished this plan from any other urban redevelopment proposal at the time was the concept of a pedestrian concourse. St. Paul's active business district is a compact entity, so downtown could become a super Southdale—one large climate controlled shopping center. It was conceivable, once the projected housing developments were tied into the system, that one could eat, sleep, work—in other words spend a lifetime inside the skyways and connected buildings. Shades of Fritz Lang's 1926 film, "Metropolis."

Though the original rationale for building the skyways was civic minded, the reasons for their continued development and proliferation have been economic. In Minneapolis the skyways...
Contrasting 'living rooms' in the two downtowns.

have all been built and paid for by the adjoining businesses. For this reason, the Minneapolis system has a heavy commercial flavor, often routing the pedestrian past displays of high fashion merchandise, rare coin collections on sale or through the luggage department of a department store. One retailer sought to take advantage of skyway traffic by placing mannequins and large display islands in the middle of the pathway, obscuring the route so thoroughly that pedestrians could not find their way through to the next bridge. But the public tends to take the most direct course available, and most of the obstacles are now gone.

In St. Paul, however, the skyways take on a more public nature by keeping shops to either side of the pathways while allowing greater security to individual stores. The skyways are thus kept open until 10 P.M., and as a result bars and restaurants that serve dinner have opened along them. There are no bars, evening restaurants or entertainment on the Minneapolis system.

In St. Paul, all the skyways were publicly funded until early 1979. Now costs are split 50-50 between the city and benefiting merchants. A special “skyway patrol” of security policy stands guard at each bank or department store with a path carved through it. Minneapolis uses private security guards hired by the individual building managers. But, as each building closes down, so do the connecting skyways and security forces with them.

For the most successful expression involving the integration of public spaces with the skyways one must turn to the IDS Center. Designed by Johnson/Burgee (Edward F. Baker, associated architect) and completed in 1973, the IDS Center pulled together for the first time the confused network of skyways, shops, offices and public spaces and created in its Crystal Court one of the truly spectacular urban spaces in the country. Crystal Court acts as a pedestrian Grand Central Station for the city, a switching center for downtown's second level pedestrian flow from all directions. This is the heart of Minneapolis and expresses the same sense of community, of town square, that Southdale did for the suburbs. And again, the use of climate control has proven economically wise. Since completion of the IDS, downtown sales have increased substantially, several corporations have moved
back into the city from the suburbs and office space rents at premium rates. By proving that large-scale development projects in downtown areas can be successful, IDS has in recent years inspired other efforts in both Minneapolis and St. Paul. Notable examples include Butler Square (renovation by Miller, Hanson, Westerbeck & Bell in 1975), a turn-of-the-century brick and wood-beamed warehouse with an atrium of offices and shops carved into its core, and Town Square in St. Paul (designed by Skidmore Owings & Merrill), which attempts to tie together the extensive skyway system in that city much as IDS did in Minneapolis. Unfortunately, Town Square loses its impact by failing to create a focus. It consists of several shopping arcades and a separate “public park” perched high and out of the way of other activities. It provides a nice retreat from inclement weather, but fails to produce a sense of centrality. In the IDS you know you are in downtown Minneapolis. In Town Square, to borrow from Gertrude Stein, there is no there there; you could be in any of half a dozen suburban shopping centers in the outlying areas.

One shortcoming of both St. Paul and Minneapolis is a lack of adequate parking. Because of the high utilities costs, taxes and land, downtown parking is scarce and discouragingly expensive to a suburban shopper. But Minneapolis has a plan to ring the downtown with half a dozen municipal parking garages that will tie directly into both the freeways and skyways.

The skyways and glassed-over courtyards are adaptive, additive approaches to energy problems. Another approach increasingly practiced in Minnesota, earth-sheltered architecture, starts with the concept of energy efficiency and develops from there. The forms that result are at once more organic and expressive. Minnesota architects have earned a reputation as leaders in this field of design.

As before, economic necessity and Minnesota’s climate played major roles in earth-sheltering innovations. When the cost of energy rose in the mid 1970s, so did the demand for energy-efficient buildings. Underground buildings, with the earth acting as a huge heat sink, seemed to be one logical answer and Minnesota proved to be ideal for earth-sheltered design for several reasons. Earth sheltering is most effective in locations where the temperatures are very hot or very cold; Minnesota has roughly a 130-degree range during the course of the year. Good drainage is essential to providing comfortable conditions in earth-sheltered buildings; Minnesota’s overburden of granular sand provides the needed drainage and is easily excavated.

Much of Minnesota’s leadership in underground architecture has come from the University of Minnesota, where both the school of architecture and the school of civil/mineral engineer-
Sidewalks above ground and buildings beneath.

ing have played a major role in developing new techniques and concepts in earth-sheltered design. An early example of university involvement was the school of architecture’s energy studio conducted in 1973 by Dennis Holloway. In experimenting and questioning existing design philosophies, the class explored alternative methods of providing energy for a structure and, in cooperation with the mechanical engineering school at the university, pioneered techniques for energy efficient design. One mechanical engineering student even went on to start his own company after graduation, marketing a solar panel he had developed in the class.

A house was built by the group as a demonstration project to test the concepts evolved in the classroom. Named Oroboros (after the mythical snake that kept itself alive by consuming its own tail), it combined, for the first time anywhere, several methods of energy conservation and recycling: passive and active solar, wind generated electricity, recycled waste, sod roof and energy storage systems. The house went a long way toward raising the consciousness of the architectural community regarding energy efficient design.

Soon after this, the university found itself in need of both a new admissions records facility and a new bookstore. With available land at a premium on the densely developed urban campus, the university found a site that could accommodate both functions in one building and still be in proximity to necessary campus activities. Unfortunately, the site was between several historically interesting structures and was transversed by a major pedestrian route across campus. On the directive to minimize visual impact and disruption to the campus quadrangle, the architect Myers & Bennett (led by David R. Bennett, also of the university’s architecture faculty) designed Williamson Hall in 1975-76 to be 95 percent below grade (see Apr. ‘78, p. 46).

Williamson Hall was one of the first actual earth-sheltered buildings in Minnesota. A prototype for many others to follow, it started Myers & Bennett’s active involvement in the emerging field of earth-sheltered building design. Today the firm is perhaps the leading architectural authority on below-grade design in the U.S.

Also during the late ’70s, a separate series of events was taking place at the university. Although several faculty members in the department of civil/mineral engineering had been interested in the benefits of earth sheltering since 1980, it took the combination of Minnesota legislators with open minds and a 1977 international conference on earth-sheltered building in Stockholm, Sweden, for the efforts of the engineering professors to bear fruit. At the strong urging of Charles Fairhurst, head of civil/mineral engineering, and other professors, the state legislature sent a delegation to the Swedish conference (they were, as it turned out, the only group of governmental types at the conference) and asked that they summarize their reactions upon returning. The results of that enthusiastic encounter produced the state funded, university staffed, Underground Space Center, the appointment of civil/mineral engineering graduate Ray Sterling as director of the center, and a book, *Earth Sheltered Housing Design*, published in March 1978 by University of Minnesota Press and reissued in 1979 by Van Nostrand Reinhold. This book has now become the manual for earth-sheltered housing design. The center has since gone on to produce numerous studies of codes, costs and zoning for earth-sheltered residential and nonresidential buildings, including design manuals and financing issues.

On a larger scale than individual buildings, the City of St. Paul is studying an ambitious plan for creating a 250-acre Energy Park midway between downtown St. Paul and downtown Minneapolis. In a fully integrated urban community, five million square feet of residential, commercial, office and light industrial space will explore the feasibility of a small-scale district energy system in an urban context.

Like many communities through the country that are faced with dwindling energy sources, the Twin Cities are forced into being creative in solving their problems. And, although the climate has made it all the more challenging, there’s a stubborn streak in Minnesotans: If they can’t find a way to solve a climate related problem; it probably wasn’t meant to be solved. Calvin Trillin, in a *New Yorker* article describing his reactions to Minneapolis’ lightly dressed businessmen on a cold December day, wrote, “It occurred to me that one reason the skyway system has been developed only recently may be that Minneapolis people required 100 years to admit that it was cold outside.”
The Twins' Thriving Cultural Climate

As viewed by Mildred Friedman of the Walker Art Center. By Dan Wascoe Jr.
One morning late last spring, a few electronic notes bounced through an open office window at the University of Minnesota, near the heart of its Minneapolis campus. The young woman working inside could see nothing more than some students dancing on the front steps of the auditorium next door—apparently moved by the rhythms of amplified computer music.

On her lunch hour, though, she took a closer look and found that the dancers were making their own music; their movements activated photo-electric cells on each step, tripping circuits that produced the electronic tones. It was part of a new music festival that sprayed contemporary rhythms and sounds across the Twin Cities.

- A few months earlier, an express bus that daily plied the freeway between Minneapolis and St. Paul got a splashy paint job: a palette of bright splotches on a white background instead of the usual solid red. Object: to promote a huge Picasso exhibit at the Walker Art Center in Minneapolis—the show’s opening stop before moving to New York, then back home to Paris.

- In a darkened Minneapolis theater, Dr. Seuss’s story of Bartholomew Cubbins’ 500 hats came to life last season—the first time a Seuss story had played anywhere on a live stage. And yes, through bewitching stagecraft, a succession of hats indeed appeared on Bartholomew’s head. Among local theater critics, the Cubbins production, by the Children’s Theatre, won praise rivaling the kind you might expect for the city’s acclaim to Guthrie Theater.

- Last fall, Hennepin Avenue in downtown Minneapolis was blocked off one evening to accommodate a choreographed parade of 1,800 tap dancers, celebrating the opening of a new arts center in a refurbished 1890s Masonic Temple.

It’s hard to avoid the arts in the Twin Cities, and the question that begs to be answered is: Why?

Why do these cultural blossoms sprout on an urban island surrounded by fields of corn, soybeans and sunflowers? Why—in a metropolitan area where the nightly television news is sponsored by herbicide companies? Why—in a state whose cities are unlisted among the nation’s 30 largest?

You could well ask Mildred Friedman (friends call her Mickey), a Californian by way of New York, who came with her husband to a new job in Minneapolis in 1957, got off the plane one cold January day in a grungy airline terminal and asked him: “Are you sure?”

Nearly 25 years later, at age 51, Mildred Friedman is still here. After working for a well-known Minneapolis architect, she went to work at the Walker Art Center, where she is now design curator (helped present the Picasso exhibit) and editor of the museum’s Design Quarterly magazine. Her husband, Martin, is the Walker’s director. And though she can still talk with feeling about Minnesota’s “terrible climate.” She quickly adds: “I could never imagine moving to a place (just) because it’s sunny there . . . That’s not what interests me about where I live.”

What does interest her is the push to keep the Walker on the national cutting edge of the visual arts. And the Twin Cities cultural womb nurtures that goal: “I think that of cities this size, we are way ahead in terms of what we offer culturally,” she says. The Tyrone Guthrie Theater, for example, houses one of the nation’s most highly regarded repertory companies. The Walker likewise has earned a national reputation. Institutions like the Minnesota Orchestra, the Minneapolis Institute of Arts, the Children’s Theater and the St. Paul Chamber Orchestra also are known beyond the state’s borders.

The significance of this activity is more than esthetic; one local study estimated that 10 big arts institutions in the Twin Cities accounted for a primary economic impact of $29 million.

Mr. Wascoe is a reporter for the Minneapolis Star and Tribune.
In the end it’s still not quite New York.

Sir Tyrone Guthrie to establish his repertory theater in Minneapolis in 1963.

But when she speaks of education, Friedman has more in mind than schooling. She also means the growth of “brainy industry,” the research-using, computer-oriented headquarters firms that have diversified the area considerably from its specialized roots in milling and lumbering. Many people are drawn to the area, she says, because Honeywell’s here or Pillsbury or some other employer. That’s their primary reason. But when they’re recruited, they’re told about the theaters, orchestras, museums and so on. “People are willing to come to a place that is small because they know that the place offers certain things they want and expect from a city,” Friedman says.

For all the breadth of activity, relative to the area’s size, the most popular arts productions tend to be predictable. The Guthrie’s annual run of Dickens’ “A Christmas Carol” and the holiday production of “The Nutcracker Suite” by the Minnesota Dance Theater are bona fide sellouts.

But the profits from such well-produced chestnuts are not enough to underwrite the entire arts menu year-round. The support of private givers, from individuals to corporations and foundations, remains a crucial ingredient in keeping the arts groups’ body and soul together.

“The business community here, per head, in terms of our size, is super generous,” Friedman says. She traces the beginnings of that support to the Dayton family, which founded the area’s biggest department store. Other family businesses followed that example and are “equally supportive,” she says. The so-called Five Percent Club, for example, comprises firms that devote that proportion of their profits to philanthropic enterprises, including the arts.

In recent years, businesses have relied more on their own foundations—“that’s the tax mode”—to dispense such eagerly sought dollars. By employing professional dispensers, she says, the casualness that sometimes accompanied giving by wealthy families has given way to “much more even-handed” treatment. Such private generosity will become even more important as public funding for the arts feels the pinch of a budget-squeezing era. That could mean that institutions less prominent than the “majors” will find financial underpinning melting like ice during a thaw.

Earlier this winter, one such enterprise called the Cricket Theater in Minneapolis came within days of shutting down—just a year and a half after moving, amid hoopla, into a refurbished old building downtown. But, within 10 days, $150,000 was raised from 11 contributors to save the season.

All this is not to say that Minnesotans are beating their breasts over the plight of little theaters and struggling artists. Most people fill their spare time in other ways. The Minneapolis Tribune, the state’s largest newspaper, conducted a major study of Minnesotans’ leisure activity last fall, relying primarily on its statewide poll. Presented with a list of well-known visible sports and cultural attractions, Minnesotans were asked which ones they’d attended in the past year. The representative sample of 1,200 generally put the arts near the bottom.

In first place, mentioned by a third of those interviewed, was the Minnesota Zoological Garden; it was particularly attractive to people with young children. A variety of professional sports and the Science Museum of Minnesota came next. The highest ranking by an arts institution was 22 percent who said they’d visited the Walker Art Center—a reading undoubtedly inflated by the large crowds that visited the Picasso show. The Minneapolis Institute of Arts and the Guthrie Theater were mentioned by fewer than one-fifth, while the Minnesota Orchestra and the St. Paul Chamber Orchestra trailed with 14 percent and 3 percent, respectively.

The poll also asked—without prompting—what people liked to do in their spare time. Reading was mentioned by nearly one-
third, followed by fishing, needlecraft (nearly exclusively women), hunting and trapping (nearly all men), gardening, television watching, house and yard work, camping and travel or sightseeing (10 percent). All together, the poll’s interviewers recorded a list of 126 leisure activities.

A more casual measure of Minnesotans’ interests may be taken on weekends from May through October. Especially in the summer, Friday night traffic streams steadily northward from the metropolitan area to northern lake cabins and fishing grounds. And the reverse flow Sunday nights sometimes becomes bumper-to-bumper. There’s a heavy strain of outdoors activity in this low-density state—particularly among men and particularly among the young.

Those who do take an interest in things cultural are a breed apart. Not surprisingly, people with the most education and the highest incomes—$35,000 and up—were more likely to say they attended nearly every one of the well-known sports and arts attractions on the poll’s list.

Sometimes, though, something special happens to bring more folks within the arts orbit: the Picasso show, for example. “Lots of people who never entered our door before entered to see Picasso,” she recalls with a touch of wonder. “Don’t ask me why. I mean, they thought they needed to do that.” The show gave Friedman and others a chance to exercise their “pedantic side” for a much broader audience than usual. A conscious effort was made to cast out hooks to link the viewer and the artist. In the first gallery, for example, was a series of time lines that pointed out how the shifting styles in Picasso’s career corresponded to other events going on at the same time—in politics and science, for example. “We did that because we felt that even though Picasso is a kind of household word, still a lot of people wouldn’t know all that much about him or about the period of time in which he was important.”

The exhibit itself was laid out chronologically, using the Walker’s extremely flexible gallery space, designed by Edward L. Barnes. Frequently, new interior walls are built or rearranged for successive shows. “It’s marvelous, because the galleries themselves are really almost loft spaces. They’re very anonymous spaces. . . . We think that’s a big advantage. If you’re working in an older building or a building that is more aggressive, say, in its design,” then shaping the environment for each exhibition becomes more difficult, Friedman says, and she mentions New York’s cornucopic Guggenheim museum as an example. “Every time I go to an exhibition there, my heart cries out for the poor curator who had to install it. It’s impossible; it’s just awful. We’re very lucky. It’s fun to install here.”

Aided by heavy publicity by local businesses and the media, fallout from the Picasso show included the largest attendance in the Walker’s history, a sharp pickup in museum membership, and great expectations. Could that produce a letdown? “You’re not going to do Picasso again,” Friedman observes. “There’s only one Picasso. That kind of blockbuster doesn’t happen very often.”

Sooner or later, analysis of the Twin Cities’ cultural scene must face one obvious truth: The Twin Cities are not New York, Chicago or Los Angeles. For Californian/New Yorker Friedman, the differences are clear. “We have a (relatively) tiny population, which is much too homogeneous, which I think is key. Why don’t we have a lot of good restaurants? Why are we starving to death? There’s your answer right there.”

The influx of Vietnamese and other Asian refugees into both
‘Art has ceased to be a local phenomenon.’

Minneapolis and St. Paul has been a healthy injection of diversity, Friedman says. She’d like to see other injections “from south of the border, from Europe. . . . That creates wonderful things, culturally speaking.”

Besides the lack of cosmopolitanism, there’s also a minimum of artistic community—“having people to talk to who do what you do.” That dialogue “is something we don’t specialize in here.” By comparison, in a truly big city, “there are areas that are exclusively inhabited by artists,” and the dynamic mix attracts talented outsiders who “can galvanize a community.” The bountiful market for the arts cannot be overlooked either.

Such constant comparison of the Twin Cities with the Big Time has bred something of a Triple-A League mentality in parts of the area’s psyche. The baseball Twins once reached the World Series (1965) but didn’t win it. Four times the football Vikings have entered the Super Bowl but have yet to emerge as champions. The hockey North Stars have made the playoffs, but the Stanley Cup eludes them still. The University of Minnesota’s teams compete in the Big Ten conference, but in the high-prestige sports, they’re among the Little Eight, not the Big Two. (University hockey often is a different story.)

Perhaps to compensate—or perhaps to stress higher priorities—Minnesotans point to their “quality of life,” to a wholesome environment in which to raise kids. And to a capital-C Culture as part of that quality life style.

But look. How pretentious. How can a medium-sized metropolitan area in the American Midwest compare itself artistically with the older, bigger, more complex cities around the country? Friedman expresses two slants on that idea.

She acknowledges, for example, that for all the emphasis on education, those 13 local colleges, “may not be as broad in their scope as they might be.” Perhaps for economic reasons, they “tend not to bring in as many people from the outside as one would like to see.” Result: “The faculties tend to become rather inbred, and again, I say, I’m sure that is to a large degree a factor of economic problems.” The Walker does what it can to arrange for visiting artists and performers to conduct master classes and lecture at local schools, she says.

Geography is a problem, too: “If you’re a student at Yale, even though New Haven is an isolated little community, you have access to the whole New York scene. So that the students there are exposed to a very broad array of architects, painters, sculptors, you know. The schools here, because of their isolation, don’t have that advantage.” (The Friedmans’ own three children are pursuing careers and educations elsewhere. A 26-year-old daughter dances with the Merce Cunningham company in New York; a 24-year-old daughter is an art historian in Boston, and a 19-year-old daughter, a sophomore at the University of Wisconsin, plans to major in communications.)

On the other hand, Friedman says, there’s no such thing as isolation for the artist any more: “Even if you want to be obscure, it’s very difficult. . . . The media have just become too all-encompassing.”

And that’s one reason it’s hard to find much modern evidence of regional artistic expression in the Twin Cities, the rest of Minnesota or anywhere else, she explains. “Art isn’t local like that any more,” she says. “Art has ceased to be a local phenomenon unless you find a naive artist working off in the woods someplace. . . . Young artists are exposed to the arts, architecture, music on a national and international scale now.”

In her own native Los Angeles, for example, “Hollywood used to (project) a definite image . . . big studios, stars, starlets. . . . Now movies are made everywhere.” Not every city, she observes, can have an analogue to New Orleans and its jazz. “The regionalism is disappearing in this country; it’s disappearing everywhere.”

Disappearing, but not vanished. Switch on the radio Saturday nights and listen to “Prairie Home Companion,” a tongue-in-cheek reminiscence of old-time broadcasting. It originates from a former movie theater in downtown St. Paul but is flung across the country by National Public Radio. The host is Garrison Keillor, a writer steeped in Minnesota lore, who gently tells tales of gentle folk in legendary Lake Wobegone.

Another example of roots is the evolving concern for old buildings—the refurbishing of commodities exchanges, the recycling of grain silos into dwelling units. After a decade of effort by preservationists, for instance, St. Paul’s turn-of-the-century federal courts building opened in 1978 as the refurbished Landmark Center, a performing and fine arts center that is now a key element of downtown. And still other traces are the attempts by those threatened little theaters and artists and composers to synthesize their Minnesota origins and the flowing streams of current artistic style and technique.

Yes, the ethnic heritage remains. If you chance to visit the Twin Cities on certain days during May and July, you can glimpse the dances, languages, recipes and costumes of Scandinavia. And you can visit the American Swedish Institute, a striking castle-like building in Minneapolis that was built and lived in by the publisher of a local Swedish-language newspaper.

But to a degree, this Scandinavian reputation is a mythical cover for the fact that more Germans than Swedes, Danes, Norwegians or Finns settled the state. The myth is reinforced through such happenings as an exhibit this spring of Viking artifacts at the Minneapolis Institute of Arts. The Walker, too, is putting together an exhibit of Scandinavian photography in 1982; Friedman said there’s “no way” the project would have come about without the area’s Scandinavian background.

Except for that show, however, “I can certainly say for a fact that . . . we do not program with a local bias at all. We try to make our program an important national and international program. We don’t want it to be of interest just to local people.”

In the next breath, however, she recites the Walker’s role in promoting local performing arts, like last year’s new-music festival and Minneapolis performances of the St. Paul Chamber Orchestra. “And we have really built the dance audience here.”

Resolving those two streams, she concludes: “We bring the best things we can find to this city. And sometimes that’s local, and sometimes it’s not.”
Minnesota’s Architectural Favorite Son

He was Cass Gilbert, who went East to earn national renown. By Patricia Murphy

Cass Gilbert is best known today as an Eastern establishment architect of monumental Beaux-Arts buildings throughout the country built during the first decades of the 20th century. His most famous works include the Woolworth building and U.S. Customs House, both in New York City, and Washington’s U.S. Supreme Court building.

Before making his mark nationally, Gilbert cut his professional teeth in St. Paul, where he practiced from 1883 until 1910. (He opened an office in New York in 1898, leaving most of his Midwestern work to his St. Paul staff.) In the '80s and '90s, he earned a reputation as a skilled and prolific designer of buildings throughout the upper Midwest. One of the few professionally trained architects then practicing in St. Paul, he helped bring the latest Eastern architectural styles—Richardsonian Romanesque, colonial revival, Beaux-Arts and shingle—to architecturally provincial Minnesota. A wide selection of his early works in the Twin Cities still stand, including houses, warehouses, churches, commercial buildings and the Minnesota State Capitol, the Beaux-Arts masterpiece of his Midwestern career.

Gilbert’s formative period included a two-year apprenticeship to a St. Paul architect, a year at the Massachusetts Institute of Technology (when he spent considerable time sketching the works of Richardson, Ware & Van Brunt and Peabody & Stearns) and a sketching tour of England, France and Italy. He was especially drawn to contemporary English architects, such as Richard Norman Shaw. McKim, Mead & White hired him in 1880 as a draftsman, and for a couple of years Gilbert worked closely with Stanford White in particular.

In January 1883, Gilbert returned to St. Paul, the capital city of Minnesota, which was becoming the manufacturing center of the region. During the '80s, St. Paul’s population would more than double and create abundant opportunities for a young architect—opportunities not available on the East Coast. The natural rivalry between St. Paul and Minneapolis, the "Flour City," flourished during this period. In 1890, John Welborn Root, Daniel Burnham’s Chicago partner, noted the significance of this rivalry for architecture: “In cases like St. Paul and Minneapolis, every move of either city is watched by the other with the keenest interest, and every structure of importance in one city becomes only the standard to be passed by the other; not only is it their ambition to excel in matters of population and wealth but also in the splendor and prominence of the architectural movement.”

In this atmosphere, it was unusual for a St. Paul architect to design a building in Minneapolis or vice versa. Although Gilbert did obtain a handful of commissions for Minneapolis buildings, they were mostly for out-of-state clients. Gilbert wasn’t impressed by provincial attempts to emulate the East Coast trends. He wrote in his diary in 1890 that the Guaranty Building then under construction in Minneapolis, designed by E. Townsend Mix of Milwaukee, “is appalling. It has a great effect on the mind from its size, both inside and out, but the design throughout is stupid and in bad taste.”

Gilbert’s first work in Minnesota was on Northern Pacific Railroad projects, including numerous depots in small towns throughout the Midwest, for the McKim firm. Soon he was negotiating with the New York partners to establish a St. Paul office of McKim, Mead & White, but this never materialized and in 1884...
he formed a partnership with James Knox Taylor, a fellow MIT classmate and St. Paul native who had also worked in New York. Their partnership lasted until 1892. (Taylor would go on to become supervising architect of the U.S. Treasury in 1897.) In the mold of the McKim partners, Gilbert became the only architect among the incorporating members of St. Paul's prestigious Minnesota Club in 1884, and many of its members commissioned him to design their houses and commercial buildings. He also attracted clients in the neighborhood where he completed his own shingle style house in 1890.

Gilbert selected this style (unpainted shingles and clapboard, uncut stone foundations, long sloping gabled roofs, large porches extending around several sides and informal plans) for both resort and city houses. His summer houses, such as the one for A. Kirby Barnum at White Bear Lake, were often erected on hilly lakeside sites commanding fine views. Each had two principal facades, one facing the water, the other facing the main approach by road. Gilbert's drawings of the Barnum house were published in American Architect and Building News, and an editorial included remarks by a French architect: "See how pleasant life must be in that house; yet with all this, what gables on top of gables; what strange openings and curious balustrades! How an architect must have to torture his mind to invent such things!"

Ill-suited as they were to the harsh Minnesota winters, few of Gilbert's shingle style summer houses have survived without drastic alterations for year-round living. His city houses in this style have not fared well either. His own house, for instance, was covered with half timbering, applied over the shingles and clapboard, in about 1920.

His shingle style churches are equally imaginative, if less picturesque in outline and massing. The client for a chapel in a resort community on Lake Minnetonka was George A. Camp, a lumber baron and ex-Civil War officer. Camp had the chapel built for his daughter's wedding, described by the Minnesota Tribune as "the most elaborate affair of its kind that the West has ever given," and then donated it to the Episcopal Diocese of Minnesota. Domestic in scale and in feeling, its overhanging, steep roof of shingles hovers near the ground. The interior of unpainted Georgia pine horizontal sheathing creates an informal camp meeting atmosphere, befitting a resort community. (It is now St. Martin's-by-the-Lake Episcopal Church in Lafayette Bay, Minn.)

Gilbert turned to Richardson for inspiration in his substantial church buildings and city houses. For one of his first Minnesota commissions, he drew form, massing and even some detailing from two Richardson churches in Springfield, Mass. The Dayton Presbyterian Avenue Church in St. Paul was described by contemporary critic Montgomery Schuyler as a "studied and scholarly performance." For his part, Gilbert was disappointed that the congregation could not afford the specified Tiffany windows.

Gilbert's churches of the mid-'90s are more traditional than many of his earlier works. For St. Clement's in St. Paul, the donor stipulated modeling the design after St. Clement's in New York City, a flamboyant Gothic revival church, circa 1870. What Gilbert provided for the exterior is a simple, dignified Gothic revival version in buff-colored limestone of the English parish church.

Not surprisingly, Gilbert's designs for commercial buildings mirror many of the stylistic trends in his houses and churches. His most sophisticated commercial work in Minnesota and his biggest commission prior to the capitol is the six-story brick and

The capitol competition was his breakthrough.

Two 1888 churches show Gilbert's stylistic diversity: St. Martin's-by-the-Lake is a shingle style (above); Dayton Avenue Church in St. Paul exhibits Richardson's influence. The Woolworth commission in New York (facing page) came in 1910.
sandstone Endicott building in downtown St. Paul. Like many such McKim, Mead & White buildings, its facade is based on the studied formalism of the Italian Renaissance palazzo, with its distinct horizontal divisions. Burnham commended Gilbert in a letter, saying how “well studied and manly the planning seems as well as how satisfactory the interior is.” (Burnham considered taking on Gilbert as his partner after the death of Root in 1892, but selected Charles B. Atwood instead.)

In the early '90s, Gilbert submitted entries to several design competitions, including one for the Minnesota building at the 1893 World's Columbian Exposition in Chicago and another for the American Fine Arts Society building in New York City. (None was accepted.) And in 1892 he served on the national jury for architecture for the Chicago exposition, along with Richard Morris Hunt, White, Atwood and Dankmar Adler. Such experiences helped him realize that to become nationally prominent he would have to expand his horizons beyond the Midwest. He found the vehicle in his own city.

Gilbert had almost no previous experience in designing public buildings, but he was among the best-trained and most talented designers in the state and was well-known by men of influence in the capital city. Thus it is not surprising that he won the 1895 Minnesota State Capitol competition with his full-fledged Beaux-Arts design. He was 36 years old. This marked the triumph of Gilbert's Midwestern career and a breakthrough of Eastern architectural sophistication in the Midwest.

The exterior of Georgia marble is a masterful massing in the Renaissance style popular for state capitols of the period. The dome is modeled on St. Peter's. The interior incorporates local building materials in rich profusion, including granite, limestone, pipestone and white oak. Interior ornamentation depicts Minnesota grains and produce and the abundant paintings, sculptures and murals were specified as part of the original design. For these, Gilbert convinced the State Capitol Commission to let him import an army of Eastern painters and sculptors: John LaFarge painted four murals in the supreme court chamber; Daniel Chester French and Edward Potter worked together on the “Capitol Quadriga,” the most prominent exterior sculpture; Edwin Blashfield painted a scene of a Minnesota Civil War regiment at Corinth, and Kenyon Cox painted a representation of “The Contemplative Spirit of the East” in a main stairway.

Gilbert must have guessed that such commissions would bring national attention to the building. If that was his plan, it worked. For instance, a writer for Architectural Record came to see it and pronounced it “one of the most imposing and beautiful of modern classic buildings, sumptuous yet severe, a model of good taste and restraint.”

Commissions on the East Coast soon followed. Gilbert began a Boston office building, the Brazier Block, in 1896. Two years later he opened his New York office and moved there with his family, accepting progressively fewer Minnesota commissions. The competition for the customs house in New York came along in 1899, and he won over practically all the prominent Eastern architects of the day, including McKim, Mead & White.

Gilbert's last Minnesota commission before closing his St. Paul office in 1910 was to design the plan for the University of Minnesota main campus in Minneapolis, a project that appealed to him as it let him leave his mark on a major cultural institution in his home state. (Nonetheless, there was some grumbling when he won the competition because he was no longer a Minnesota resident.) Although he designed no university buildings, his master plan, with buildings grouped around a central mall, formed the basis for growth of the university and influenced the character of its buildings.

He served as president of AIA in 1908-09 and in 1910 F. W. Woolworth selected Gilbert as the architect of his Manhattan skyscraper. The Midwesterner with aspirations for Eastern acclaim had succeeded.
A Tradition of Clean-Scrubbed Local Governance

The city halls of Minneapolis and St. Paul are appropriately solid edifices of government, as you might expect in communities with large middle class populations of Scandinavian and German descent. Minneapolis has a turreted, turn-of-the-century pile influenced by Richardson; St. Paul's is a stripped-for-action Deco highrise.

In each there is an unexpected delight just inside the front door: a grand-scaled period sculpture. In Minneapolis, a jolly, giant "Father of Waters," a tribute to the Mississippi River, reclines on an Indian blanket, his back to a riverboat paddle-wheel. In St. Paul, the effect is more dramatic and didactic. A brilliantly lit onyx "God of Peace" dominates a dark entrance hall to rise from an Indian council fire and symbolize "conference" and "understanding."

Considerations of art aside, perhaps the significance today of such old-fashioned notions of civic place and purpose is the absence of irony that corrupt or inept civic government would lend them. But then, "clean" government is perhaps not so hard to come by in an urban area of low density and small minority populations, with a diversified economy and high median income, home-based corporations and a skilled work force, a metropolitan region with half the state's population, the state capitol and a thriving state university.

Architectural style is not the only dissimilarity between the two city halls. The people who set up the Minneapolis charter in the 1920s, wary of bossism in other cities, gave almost all of the power to the city council, not the mayor. Although small gains have been made by the mayor's office over the years, efforts at wholesale charter reform have repeatedly gotten nowhere and the city is still mostly administered by department heads who are appointed by the council and report to it. With 13 aldermen elected from wards and scant power in the mayor's office, there is no citywide elected official with power.

Two mayors, Hubert Humphrey and Arthur Naftalin, made more of the job than others by virtue of strong personalities and intellects. Humphrey, a young political science professor at Macalester College, led a watershed movement in Minnesota politics, the merger 35 years ago of the urban German, Irish and Polish Catholics of the old Democratic party with the rural Scandinavian Lutherans of the independent Farmer-Labor party. During his two terms as mayor, Humphrey pulled together the more moderate factions in the new Democratic-Farmer-Labor party (DFL) and in 1948 won his seat to the U.S. Senate.

Naftalin, also a university professor who served as executive secretary to Mayor Humphrey, was mayor during most of the '60s. He is credited with strong leadership in race relations, job training, urban renewal, health care, etc., and for changes that gave the mayor's office more voice in long-range budgeting. He also aided initiatives that finally resulted in metropolitan government in the Twin Cities area.

The mayor today is Donald Fraser, a lawyer, former U.S.
congressman from Minneapolis and a progressive liberal in the Humphrey-Naftalin-DFL tradition. His position is perhaps stronger than ever before by virtue of some organizational shuffling made, just before he took office a year ago, because the city coordinator's office had become too powerful in the eyes of the council. The mayor is now in charge of planning and has a bigger role in budget making, but the city hall remains council dominated.

Comments Fraser: "The mayor's office on the whole has not been enormously consequential until recent years. The good aspect of this is that it has been easier to develop and continue relationships from mayor to mayor without having major ruptures at election time."

Ten miles east, the workings of St. Paul's City Hall contrast markedly. Until recently, St. Paul had an old-fashioned commission form of government. It now has a small council with members elected citywide and a strong-mayor structure with an effective incumbent, George Latimer. Latimer is dedicated to revitalizing St. Paul while keeping it on a sound fiscal footing. His most visible accomplishment since becoming mayor five years ago is a newly strengthened downtown core, where average yearly spending for development has almost doubled compared with the five years preceding his first election. Latimer says he was the beneficiary of years of planning and land acquisition: "All we seemed to lack was a market or the ability to pull together the market and package what we had planned."

Latimer realized that, because of his labor background, he would have to woo downtown investors and the business community and assure them that he would support their investments. A measure of his success is the fact that the chamber of commerce joined local labor unions a couple of years ago to fete the Democratic mayor.

No matter what successes are achieved in the two big city halls, the fact remains that St. Paul and Minneapolis account now for only about one-third of the seven-county metropolitan region's population. Postwar suburban growth in the Twin Cities area was somewhat slower and steadier than that in other metropolitan areas, but the region shared many of the difficulties that prompted regionwide strategies elsewhere. These included a critical waste disposal problem, unregulated sprawl, "a disintegrating" public transportation system; failure to set aside open space in developing suburbs; financial shortfalls and disparities among communities that led to shortsighted remedies, and the need to set up a structure for receiving federal funds. (The federal government requires a local or regional review of applications before submission for funding. This so-called A-95 review is a requirement in literally hundreds of different grants programs.)

One set of problems particular to the Twin Cities—attitudes of home-town chauvinism and jealousies between the twins—had gradually yielded to cooperation as the two big cities and other local governments found common interests. There was a regional planning association as early as the '20s, a two-city sanitary district in the '30s, a metropolitan airports commission in the '40s, and, in the '50s, a regional mosquito control program, a metro sports commission and, importantly, a metro planning commission. The last had no implementation authority; its members served ex officio by virtue of positions in component governments. Nevertheless, the best COGs are aggressive and effective.

Long-time observers in the Twin Cities weigh performance of the local council against its potential. Former Mayor Naftalin, now a professor at the University of Minnesota, agrees with Mathewson that measured against what other metropolitan bodies have been able to do and are likely to do, the Minneapolis-St. Paul council has earned high marks. But considering its promise, he says, the council has slid backward. Naftalin's colleague at the university, urban geographer Thomas Anding, shares this view, saying "political realities have intervened. The council was born when we had been dealing with 20 years of rapid growth. We literally had suburbs sprouting out of farm land. Then in the early '70s, within five years of the council's birth, the whole thing turned around. The growth rate slowed, and all of a sudden there wasn't the list of five or six incredibly pressing issues. We discovered that we didn't need a second air-

Below, Minneapolis Mayor Donald Fraser. Facing page, St. Paul Mayor George Latimer and stadium, under construction in Minneapolis.
port, that the water and sewer problems were pretty much in hand. And other changes made planning easier to deal with.

The council then decided to tackle comprehensive land use planning, reviewing individual community plans while encouraging localities to create comprehensive plans for use of their land. Says Anding, "This has thrust the council into a direct confrontation now with local units over how land is zoned. Politically, the council has had to pull in its horns." Naftalin adds, "I think the council has also lost some of its enthusiasm. Movements like this undergo cycles. They get a big agenda on their books. Pretty soon they are worrying about consolidating their past instead of reaching out to contend with emerging problems."

Ted Kolderie has also kept a close eye on the council from its inception, first as a reporter and editorial writer for the Minneapolis Tribune and then as director of the Twin Cities Citizens League, an aggressive citizen-based research and problem-solving organization that virtually conceived the council. He observes: "In the early years, the council had to come up with proposals to the legislature on how to handle the problems of open space, sewage, land use development, transportation. In the course of that, it accumulated a lot of assignments from the legislature of things it was supposed to do, and it got to the point that it couldn't come up with new proposals until completing the last assignments."

He adds that the council moved so fast and so fast at first that it provoked a counter-reaction on the part of local government, particularly counties. Recent chairmen of the council have devoted a lot of their time to cooling that down and rebuilding bridges, meanwhile avoiding new controversies. Now they wait to be asked—or told—by the legislature. Then too, as old council members and state legislators have retired, "people who remembered why the council was created and needed were replaced by people who came in much more under the influence of the council's critics," as Kolderie puts it.

It is significant that in the metropolitan area's most recent major battleground, the construction of a domed stadium, the metropolitan council was essentially dealt right of the game. According to Naftalin, "There were enormous political pressures at the state level. The legislature should have assigned the stadium to the council, but the council recognized the political liabilities and didn't want it." Instead of following the established pattern of setting up a commission under the council, the legislature began by assigning part of the decision-making role on the stadium to the council, which the council discharged, but very cautiously. It never asked for any continuing role, according to Kolderie. In the end, the legislature created the "metropolitan sports facilities commission" and made it subordinate directly to the legislature.

One debate has continued since before the council was set up over the way council members get their jobs. The Citizens League and others have maintained steadfastly that members should be elected rather than appointed by the governor, the current setup, while proponents for elected membership say the quality of appointees started out high and has continued so. They point out that appointees have seldom sided on issues along party lines. Since 1973, the Minnesota House has approved legislation several times to make the council elective, with the Senate blocking the measures. At any rate, the question remains academic whether elected members would restore a more aggressive nature to the council.

In Kolderie's view, the governor holds a sure key to making it reassert its authority. "I could see the governor's office turning to the council more and saying 'I've got to know what to do in solving this [specific] regional problem. What do you want?' " The whole point with the council, he points out, is that in the long term, if you are not useful to the people, there is no reason for them to keep you around.

Perhaps that is a needed priority as the council begins its 15th year.  
St. Paul and the Uses of UDAG

A case study in the workings of an imperiled federal program. By Nora Richter Greer

As the federal administrations changed, no urban program was being more hotly debated than the one bearing the inelegant acronym UDAG, for urban development action grant. Launched in 1977 for three years at $400 million annually, increased in 1980-81 to $675 million, UDAG so far has been used in more than 1,000 individual development projects and has stimulated, as was its intention, private investment in the cities of around $11.5 billion.

UDAG was one of the early targets of Office of Management and Budget Director David Stockman, who said that it did not create new private investment but merely “compensates the private sector for shifting investment to high cost or less economically efficient areas.” Aggrieved mayors and other UDAG supporters countered that the program has created not just new construction but jobs, and in distressed cities where both are needed most. In his budget program announced Feb. 18, President Reagan proposed “integrating” the UDAG and community development block grant programs and reducing the combined five-year projected budget by $1 billion.

The workings of UDAG can best be described by example, and a particularly good example is St. Paul, which has received $30 million for seven projects ranging from neighborhood rehabilitation to a hotel renovation to development of an industrial park. UDAG's most visible contribution to St. Paul is Town Square, a mixed-use development in the downtown core.

As is the case with many UDAG projects, Town Square was conceived before the federal program began. In the early '70s a group of local businessmen formed “Operation 85” in response to the steady decline of business in the central city. The group first promoted office development. In 1975, they turned to the Town Square concept, borrowing from a 1920s plan for a major retail center on Seventh Street and the idea popular in the 1960s of a pedestrian environment separate from vehicular traffic.

The preliminary plan for a two-block mixed-use development gained the interest of the Radisson Hotel Corporation and the Oxford Development Group. Radisson, headquartered in Minneapolis and already operating a 400-room hotel in St. Paul, expressed interest in building a new hotel that could be linked via the skyway to the old facility. The chosen site was a long-vacant downtown urban renewal plot owned by the city. The Oxford Group proposed an office and retail complex with an enclosed mall near St. Paul's two major department stores, Donaldson's and Dayton's. Oxford's site was directly across the street from the one Radisson was considering.

To be economically viable, the complex needed a parking structure. But while both developers were able to arrange conventional financing for their own projects, neither could afford that extra cost. Nor would either finance the public park, which was conceived by the city to be the “hub” of the project. So the city turned to the St. Paul Port Authority to finance the parking structure, to HUD’s community development block grant program to finance property acquisition for the Oxford...
site, to tax increment bonds to cover part of the cost of the park and to UDAG to supply the balance.

The $4.8 million UDAG the city received was the final link that moved the project off the drawing boards. “The UDAG was critical, not only to get the project going, but to make it the quality project that was really needed,” says James Bellus, director of St. Paul’s department of planning and economic development.

The city has estimated that the project, completed in November, will create an $800,000 annual increase in property taxes, a $600,000 to $1.2 million annual boost in sales taxes and $15 million to $60 million yearly in new retail sales. Bellus says the response has been “tremendous. People have come from all over the metropolitan area to look at it because it is unique in terms of design. . . . We have gotten a lot of people here to shop and to look who never would have been here otherwise. . . . Sales have been far better than we expected for this time period.”

Even before the project was finished, close to $250 million worth of additional new construction had started in St. Paul’s business district. Bellus doesn’t credit all of this to the square, but he says it created “a new image for downtown . . . an image of action and that something is happening and that in downtown there is something to do and come back to.” Oxford has purchased lots on two sides of the development and a 225-unit condominium complex and parking facility is being built immediately to the north.

The rebuilding in St. Paul is similar to activity found in other cities. In Baltimore a $10 million grant is being used as a second mortgage for the Inner Harbor hotel and for pedestrian walkways to connect the hotel to the convention center and harbor-place market. UDAGs are being used for a comprehensive revitalization project in Denver’s oldest neighborhood and cultural center of the Hispanic community and in Kansas City to help construct 16 new housing units with passive solar energy technology. Chattanooga, Tenn., is receiving $83 million to aid in the construction of the new TVA office building. UDAGs are funding in part the renovation of the Seelbach Hotel in Louisville, Tenn., the former opera house in Van Buren, Ark., and historic woolen mills in Winooski, Vt.

Although not without its critics, the UDAG program is one of the most popular and successful HUD programs of the Carter Administration. Urban developer James Rouse forecasts that in a few years the center of the American city will have been more dramatically affected by UDAG than by any previous program. It is, says Rouse, “the most remarkable program dealing with the American city I have seen in my time.” Robert C. Embry, HUD’s assistant secretary for community planning and development in the Carter Administration, predicts that if the program continues, “it can turn some cities around. It’s a one-time grant that will continue to employ people and pay taxes for years to come, largely at private risk. Obviously, we’re not going to make New York City nondistressed by the action grants, although we can help. But there are smaller cities that we can make a significant difference in, and we already have.”

The idea of an urban program based on a public-private partnership was advanced by Jimmy Carter in his 1976 presidential campaign, and gained support from both Patricia Harris, Carter’s first secretary of HUD, and Embry. Says Carter’s UDAG Director David S. Cordish: “I think there was a general consensus early on that there wasn’t enough public money available to rebuild distressed cities of this country. If it were going to happen at all, it would have to happen with 80 to 90 percent private money and with a small dose of UDAG.”

Under the program, grants are awarded to distressed cities and urban counties to aid commercial, industrial and neighborhood development and rehabilitation. A firm private commitment to a project is a prerequisite. UDAG’s legislative mandate calls for one-third commercial, one-third industrial and one-third neighborhood projects, although the amount of money given to commercial projects is equal to the combined amount given to neighborhood and industrial projects. Concern has been expressed over the large amount of money going to hotel and hotel-related projects. Critics question if this is really helping the poor. HUD officials respond that because of the reliance on the private sector, projects respond to market demands rather than what the local or federal government believes will be good for a city. This is one reason for the surfeit of hotel/convention centers that receive UDAG funding.

The procedure, as illustrated in the case of Town Square, is for a city government and private developer to plan a project and then approach HUD for UDAG funding. There is great latitude in how the money is used—for public infrastructure, parking, relocation of businesses, demolition, land acquisition, equipment, interest subsidies on loans, subsidies to developers for extraordinary costs, real property improvements. Both the city and developer are investigated to determine if the project could proceed without the UDAG. Members of HUD’s review staff have worked in the private sector in financial institutions or construction/development firms. While most of the projects that receive UDAGs do in fact need the funds, a few projects inevitably receive unnecessary funding, says Embry. More often projects would have gone ahead without the funding but on a much smaller scale.

Other aspects of a project are given weight: the degree of the city’s distress, the amount of private contribution (the national average is six private dollars to one federal dollar), permanent jobs created, tax benefits to the city, commitment to minority participation, commitment to train hard-core unemployed, other public participation, feasibility of beginning all project components within 6 to 12 months, repayment of an action grant to the city.

Design, scale and compatibility with surrounding buildings are responsibilities of the city and developer. According to Cordish, “The federal government works in partnership with local and state governments and it cannot substitute its judgment concerning a desirable project for the judgment of the city officials.” Says Phyllis Myers, a senior associate with the Conservation Foundation, “Preservation and urban design planning for federally assisted projects is as good as existing local capacity now makes it.”

Although UDAG regulations call for consideration of a project’s “environmental sensitivity,” critics say considerations...
A mixed record on design and preservation.

of jobs, taxes and economic development disproportionately outweigh the questions of urban character and scale and historic preservation. This has led to projects that are "absolutely average" in design and environmental sensitivity, "a few that are quite interesting and unusual" and some that are "terrible," says one UDAG observer. Myers suggests HUD should ask the following questions: "Does the design respect and enhance cultural, architectural and social diversity? What are the impacts on the visual and physical environment, on the site and surroundings? And how is needed new development integrated with the scale and style of the existing development?"

Thomas Black of the Urban Land Institute argues that it would be "disastrous for the federal government to make design decisions or set up design review boards." Embry agrees. HUD only judges things that can be quantified because "what we might think is good design you might think is awful design," he says. But HUD could and should, observers say, provide guidance and give extra credit to cities for proposed UDAGs in which urban design has been carefully considered.

The lack of attention to design quality accounts for what Kathryn Welch of the National Trust for Historic Preservation calls UDAG's "double edged" character. "On the one hand,"

Quaker Oats silos (below) adapted as a hotel, Akron, Ohio, by Curtis & Rasmussen, Inc. (bottom). Uncle Sam Atrium, Troy, N.Y., by Geoffrey Freeman Associates, Inc. (facing page).

she says, "it is funding some of the most impressive urban development projects in the country, it is creating jobs and reclaiming existing and historic buildings and whole areas of cities. On the other hand, it is funding projects that in some cases have the potential to surpass some of the excesses of the urban renewal program."

It takes the UDAG staff 30 to 90 days to make funding decisions. The "fast-track" review process has brought a mixed response. The minimum amount of red tape is applauded. "One reason UDAG works is that it is not burdened with a tremendous labyrinth of processes," says Mathias J. DeVito, president and chief executive officer of the Rouse Co.

But critics say that by the time a community hearing is held, there is little anyone can do to modify a proposal. The city, developers and lenders are already locked into the project. "I think early community participation would help with the broadest design concerns of scale, location, overall appearance— the ambience," says urban planner Ann Satterthwaite. "Scale is frequently the major problem."

By law, UDAG applicants are required to determine if the project will have any adverse effects on the surrounding environment or on any properties listed on the National Register of Historic Places. If problems are found, the city must conduct a more in-depth environmental impact assessment or consult the Advisory Council on Historic Preservation. The fast-tracking process may preclude changes in a project that might result from these reviews. For one thing, the environmental assessment does not have to accompany the application to Washington. And even if HUD determines that a more in-depth environmental impact statement is necessary, "the projects are so far along that the procedure seems to encourage paper compliance or conflict rather than the negotiation and modification process," Myers says. And, too, at this point, it becomes difficult for the Advisory Council to say that a project would have an adverse effect on surrounding buildings or a particular building. Others argue that environmental assessors are unlikely to find any detrimental effects of a project since the assessors are the city officials who applied for the UDAG in the first place.

In Charleston, S.C., such a conflict arose between the city, developer and HUD on the one side and local community groups on the other over a hotel/convention center complex. The complex is to be located on a square block in the historic district. It will be a 13-story building surrounded by buildings of four or five stories. The community groups protested, saying that because the building was so out of scale it would destroy the fabric of the historic district; it would bring more traffic congestion. And, they argued, the building could be located elsewhere. But the city would not budge. The community groups have filed a lawsuit alleging that the procedural matters were not handled properly by HUD or the Advisory Council.

Yet, overall, controversial projects are few and mostly involve commercial redevelopment. A survey on the impact of UDAG projects on the urban environment, conducted by the National Trust for Historic Preservation, found that of the 105 commercial projects assessed, 60 percent were considered to be positive and nearly 40 percent were considered controversial. The controversial UDAG projects, the survey says, "involve not just the loss of one or more buildings with reasonable justification, but repeat a pattern of large-scale demolition, reject or lack consideration of economically feasible reuse options and in many cases, UDAG assisted projects represent a decline in architectural and urban design quality."

"The "positive" projects, the survey continued, "the majority of communities are bringing into balance careful planning, good design and economic revitalization and most are using preservation as a framework for revitalization." The program has, in fact, funded more preservation than demolition and is funding more rehabilitation than any other government program, including those specially geared to preservation activities.
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Neutra and Shindler: Their Careers and Correspondence


Fate tends to be fickle with reputations. Rudolph Schindler's death in 1953 brought little interest from the architectural and critical community. Scarcely known outside Los Angeles, he had the reputation of an eccentric emigré architect of only local and minor importance. In contrast, the reputation of his former Viennese friend and partner, Richard Neutra, was as a major shaper of the modern movement. Neutra continued to be internationally honored until his death in 1970, and in 1977 posthumously he received AIA's gold medal. But even prior to his death, questions had begun to appear about Neutra's work; in the past several years, the critical estimate of Neutra has clearly declined while, as time has passed, Schindler has begun to appear as a major figure whose accomplishments were only superficially acknowledged and rather cavalierly discredited at the time.

The reasons for this reversal of fortune are not hard to find. They concern both the historical-critical mythology that loves to discover "forgotten" or "lost" geniuses and also the preoccupations of contemporary architecture of the past 15 years. Schindler has been rediscovered and highly praised by a group of scholars such as Reyner Banham, David Gebhard and Esther McCoy, while Neutra has been almost devoid of significant commentary except for a small book by McCoy in 1960.

Always the romantic with long hair, sandals and open shirts, Schindler's dress obviously appealed to the late '60s and the '70s.

Architecturally, Schindler tended to treat each problem as unique; he delighted in juxtapositions of forms, complications of space, shifts in scale and in parodying the local vernacular, whether warhs or Spanish colonial revival. His work of the 1920s and '30s had appeared so different from orthodox modernism that the Eastern architectural establishment (i.e. Henry-Russell Hitchcock, Philip Johnson, the Museum of Modern Art and journals such as Architectural Forum, Architectural Record and Progressive Architecture) largely ignored him. Rejected from the epoch-making 1932 International Style show, Schindler subsequently received minor exposure through MOMA's 1935 exhibition "Modern Architecture in California." Consequently, by the late 1960s, Schindler appeared to offer a possible alternative to the stale orthodoxy modernism of the International Style.

Neutra, in contrast, always appeared as the traditional modernist, serious, with a tie and proper shirt and with a gift for publicity that Schindler never possessed. His work always held close to the rationalist aesthetic of the International Style, even before it was systematized by Hitchcock and Johnson, and he carried it to a logical conclusion with the elegant minimal pavilions of the '50s and '60s. Neutra summed up his own approach as early as 1921 when he wrote about post-World War I German architecture: "What interests me most in all the architecture here is just technique."

Critical consensus generally holds that their earliest work is the most important: For Schindler, his King Road house, Hollywood, 1922, and the Lovell beachhouse, Newport Beach, 1922-26, are the seminal works; for Neutra, the Lovell town house, Los Angeles, 1927-29. Neutra's Lovell town house with the tight skin of concrete panels and glass pulled over the steel frame and the absence of ornament ranks as not only one of the first (and finest) International Style buildings in the U.S., but is comparable to anything done in Europe. Neutra appears as the logical culmination of the rationalist esthetic of Vienna (and Loos in particular) and also post-World War I Germany (he had worked for Mendelsohn for several years).

Schindler, in contrast, knew Vienna and Loos, but came to the U.S. prior to World War I and worked for Frank Lloyd Wright for six years before setting out on his own. His work is structural—the tilt slab method for the Kings Road house, the shutter-marked reinforced concrete frame on the Lovell beach house, but containing elaboration of fenestration and ornament completely unknown to the rationalist movement.

Schindler's work always leaned toward the decorative, though in the early 1930s he attempted to become more doctrinaire (perhaps seeking acceptance from the Eastern critics) and went through a de-Stijl-International-Style phase before, in the later '30s, giving up the sterility and veering back to his more original and personal vein. Sorting out these shifts in Schindler's work is still a major problem; he does not show the consistent line of development of Neutra.

The difference in the early development of these two individuals and a close look at their contrasting personalities is the subject of Esther McCoy's book, Vienna to Los Angeles: Two Journeys. The book also contains the letters between Schindler and Neutra, as well as Louis Sullivan's letters to Schindler.

Schindler and Neutra were casual acquaintances in Vienna before the former's departure for a job in Chicago in 1914. Mainly at the instigation of Neutra, a correspondence grew up that continued intermittently until Neutra joined Schindler in Los Angeles in 1926.

The points of conflict between the two men can be traced back to the beginning of the correspondence. Neutra appears to have tried to draw information from Schindler concerning American building technology, but when Schindler wrote that he might write a book on the subject, Neutra swiftly replied, "Wait." In 1927, Neutra published a book, Wie Baut Amerika?, which utilized much of Schindler's information with little recognition.

While in Chicago, Schindler met Louis Sullivan and attempted to get the revised manuscript of Kindergarten Chats published (it had originally appeared serially in Interstate Architect and Builder, 1902-03). Schindler sent the manuscript off to his old mentor Adolf Loos in Vienna in hope of finding an European publisher. Neutra obtained the manuscript from Loos, but refused to acknowledge he possessed it or to return it until finally he gave it to Sullivan in 1924 literally on his death bed.

Then there is the issue of Neutra's coming to the U.S. From 1919 onward, he petitioned Schindler for assistance in forms of sponsors, money and work. Schindler responded generously, attempting to get Neutra work with Wright, offering a loan and having his wife, Pauline Gibling, and others act as guarantors. Neutra finally arrived on his own in October 1923, purchasing a ticket from proceeds from a prize he had won jointly with Mendelsohn. After a time in New York continued on page 90
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City and at Taliesin, Neutra arrived in Los Angeles and moved in with the Schindlers at Kings Road. Together they formed a typically "modern" (and Neutra) sounding partnership, AGIC (Architectural Group for Industry and Commerce) and entered several competitions.

Each was to retain individual clients. One day, Neutra, working out of Schindler's house and drafting room, turned up with a commission from Dr. Philip Lovell, the Schindler beach house client, for a house in Los Angeles. Then their joint League of Nations competition entry (which had substantial Schindler characteristics) was exhibited in Europe along with Le Corbusier's and Hannes Meyer's entries, with only Neutra's name attached. The break became complete.

Neutra's behavior, while questionable, has some mitigating circumstances. Schindler's Lovell beach house had come in 30 percent over budget and Schindler's relaxed artistic air proved difficult for clients. Neutra was serious and business-like.

One item that emerges from McCoy's detailed study of Los Angeles "modern" architecture in the 1920s is the close link it had with radical-liberal politics and that the clients for avant-garde architecture were limited. An architect had to be protective of his clients. Both Schindler and Neutra sensed the possibility of a new architecture in the U.S.—their letters reveal it—and each in his own way gave a new architectural expression.

Esther McCoy's book is a welcome addition to the history of early modern architecture in this country; although she has a slight bias toward Schindler, it is one of the most thoroughly detailed studies of an aspect of the '20s. Richard Guy Wilson, Chairman, Architectural History Division, School of Architecture, University of Virginia

Olmsted South: Old South Critic/New South Planner. Edited by Dana F. White and Victor A. Kramer. (Greenwood Press, 51 Riverside Ave., Westport, Conn. 06880, $27.50.)

This book is a fine collection of essays on the attitudes and activities of that indefatigable traveler and remarkable designer, Frederick Law Olmsted. What makes the volume so unusual amidst the many recent Olmsted related works is its focus on the South—the antebellum South explored and interpreted for anxious Northerners by Olmsted, the pragmatic Yankee, and the reconstructed South shaped by his plans and landscape designs.

Edited by Dana White of Emory University and Victor Kramer of Georgia State University, the essays encompass a wide range of perspectives—historical, literary, sociological, artistic—all of which merge so rarely in the work of a single person such as Olmsted. We learn, for example, of his religious background as it related to his views on slavery, a wasteful and inefficient system to him. We are introduced to the idea of travel literature, then often inaccurate, as a force in shaping perceptions of wide audiences. We see also the special characteristics of 19th century communication, reeling as it did on verbal reports, and then woodcut illustrations, engravings and, finally, photography.

The South as a locale held particular significance for Olmsted. As his landscape architecture practice evolved and flourished, he welcomed opportunities to plan for cities such as Atlanta the sort of parks, parkways and residential areas that he had so successfully produced in Boston, Buffalo and other Northern cities. This work is carefully documented in several essays, including one on Atlanta's Inman Park, known as Joel Hurt's "deserted village," built between 1885 and 1911. Rick Beard answers questions about why Inman Park failed to achieve its goals, why good design alone was not enough, how other market forces shaped the plan, and what the project reveals about the social and economic structure of Atlanta at the time.

In a most provocative piece, Frederick Gutheim, Hon. AIA, reflects on Olmsted's ultimate failure at Biltmore, one of his last and grandest commissions. Biltmore, the Vanderbilt mansion and property in Asheville, N.C., offered Olmsted a vast landscape to interpret and manipulate. Yet, Gutheim concludes, despite the successful forestry project, an opportunity to realize the uniqueness of the region through design was missed.

Good criticism and close analysis mark this book, which is the output of a symposium. As a volume it would benefit from numbered chapters for ease of reference. Way at the end are data on the varied contributors, whose backgrounds are in history, folklore and folklife, landscape architecture and English and American preservation studies. Their combined effort has produced a first-rate example of interdisciplinary work and can serve as a useful model for others. Jane Canter Loeffler, Washington, D.C.


In April 1980, a technical conference on earth sheltered buildings design was held in Oklahoma City. The proceedings contain 23 papers, half of which are authored by architects, a third by engineers and the remainder by contractors and researchers. continued on page 92

Old Washington, D.C., in Early Photographs, 1846-1932. Robert Reed. (Dover, $7.95.) Once, cows grazed within sight of the Capitol in Washington, D.C. (A photograph made in about 1890 by John Hiller, above.) This book reveals that in the last half of the 19th century Washington was not a great city, either esthetically or architecturally. The photographs and the captions give an insight into a past we need to remember, as we give thanks to the Commission of Fine Arts for its work in making the city more beautiful by far than it was when it was a muddy Southern town.
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It has been interesting to observe the development of conferences on earth-sheltered buildings. Early conferences attracted true believers, curious academics, do-it-yourselfers and a smattering of technical practitioners. More recent conferences have attracted increasing numbers of technical professionals. This has led to higher quality technical conference programs. Indeed, this set of proceedings is impressive in its depth and variety of technical information.

The book contains an excellent paper by Elbert M. Wheeler, AIA, on the design and development process for his own earth-sheltered house called "Underhill." In addition to revealing major design decisions and the factors that entered into the many difficult choices, Wheeler also covers trouble-shooting in the areas of moisture proofing, condensation and erosion control. Another paper by Buford W. Duke Jr., AIA, features three earth-sheltered buildings by his firm: the National Art Education headquarters, Reston, Va.; Los Alamos, N.M., laboratory support complex, and State Office Building, Sacramento.

On the last named project, Duke reports, "The power requirement for the 250,000-square-foot Sacramento office building has been calculated at 19,800 BTUs per square foot per year. This is 36 percent of the energy needed for the highly efficient GSA building in Saginaw, Mich., 29 percent of the ASHRAE [American Society for Heating, Refrigerating and Air-Conditioning Engineers] 90 standards and 8 percent of the energy consumed by conventional pre-1975 office buildings!"

The book is divided into six sections: passive solar environment, earth environment, energy conservation results, design/development process, livability/acceptance studies and innovative structures (examples). Fortunately, there are few poor papers in the proceedings. The technical information is generally good, which makes the volume a valuable reference for architects and engineers.

Finally, no conference on earth-sheltered buildings is complete without the wit and wisdom of architect Malcolm Wells, whom some call "the father of underground architecture." Wells says, in describing being subsurface, "There's the silence, and security, the in-tune-ness you feel, not to mention the reduced outdoor maintenance costs, so those of us in the earth-sheltered business tend to lose our perspectives just as easily as anyone else. We get smug. We think we have found The Solution. The fact that earth shelter has almost no measurable effect upon The Problem is swept away by our own self-satisfaction." Wells then describes "the problem" in terms of nuclear war, starvation, overpopulation, proliferation of harmful chemicals, destruction of the ozone layer, genetic manipulation, exploding crime rates and, finally, inflation. It seems appropriate for one of the most recognized boosters of earth-sheltered building to broaden the perspective. But maybe saving energy can actually assist in solving some of these mammoth problems through earth sheltering.

This set of proceedings should be included in the basic library of those interested in earth-shelter or underground construction. Michael B. Barker, AICP, Administrator, Institute Department of Design


This book was called to the Journal's attention by a member who recommended it so highly that she offered her own copy for review. Happily, she did not have to suffer the loss. She is correct: If the reader has a library building on the drawing board, or thinks one may be there in the foreseeable future, this book will certainly be of value. Written by a man who has helped plan many libraries, taught library planning and lectured and written books and articles on the subject, the book contains insights into the thousands of details that go into the complicated process of designing an efficient library building.

Despite the best of intentions and the work by all the committees usually involved, he says that "this multifarious process [of planning] is clearly a chore-prone to a high degree." Although he has been a consultant on the planning of more than 120 library buildings in the past two decades, the "major forces that make for good planning" have come together "right" only eight times. His book is devoted to making that process "right" in more instances, sharing with the reader his wide range of experiences for a better understanding of library planning. As he comments, these experiences are presented in "human terms" in order to show the shaping forces, "often unexpected but generally controllable through skill," that intrude on processes "that ought to proceed logically and smoothly."

In the first main section of the book, Mason gives an overview of library building planning and discusses the building program. He also considers the specifics in the crucial systems and interior design. He emphasizes the importance of interior design, saying that "if a library feels good to be in, it will be used even though the airconditioning freezes, and the lighting obscures, and the bookstock dwindles, and the staff offends. Though the architect lead the student through labyrinthine ways, yet will he follow if it feels good to be there." He calls it a "national failure," however, that so many library interiors are "poor in feeling."

The other main section of the book is a critical analysis of six library buildings, in which Mason points out the achievements and shortcomings. They are the Beinecke library at Yale, the Rockefeller library at Brown University, the Countway Library of Medicine in Boston, the Dalhousie University, Halifax, Nova Scotia, library, the Robarts library at the University of Toronto and the Sedgwick undergraduate library at the University of British Columbia. This section contains floor plans, elevations and photographs (of rather poor quality).

There is an appendix in which Mason evaluates 105 library buildings "from which something either positive or negative can be learned about planning a contemporary library." He rates such elements as size, layout, lighting and interior and exterior aesthetics. Another appendix is a demonstration model program for a new library building.


Large energy producing facilities can have both beneficial and disastrous effects upon a community, depending upon the kind of preplanning that is done by utilities, government agencies and civic leaders, says David Myhra in this study of the socioeconomic impacts of new energy projects upon a community. Among the beneficial results are increased employment, expanded retail and housing sales and substantial growth of tax revenues. These benefits are pitted against such negative effects as crowded housing conditions, congested roads and increased demands for public services.

Myhra says there are five reasons why small communities facing energy development projects have dim future prospects. First, developers have not paid much attention to socioeconomic impacts, having been interested primarily in the nuts and bolts of energy development. Second, "most Americans do not care much for planning," an attitude that is particularly strong in small towns and rural areas. Third, the impacts vary greatly among energy project sites, and many communities think it is just too hard to determine in advance what the benefits and disasters might be. Fourth, local public officials lack experience in energy facility planning and are unable to translate the needs for greater services into dollars for utility companies' response. And, finally, little attention has been paid to the possible socioeconomic impacts, with both utilities and communities shortsighted in estab-

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Books from page 92


In the early 1960s, the author notes, new styles of building construction often led to severe problems in environmental control. There were gaps in existing information regarding human requirements for comfort. But by the end of the '60s, research publications began to appear on thermal control. What is required now, he says, is sound quantitative information about the possible hazards of low level environmental pollution because some of the energy-saving methods now required “may unfortunately act to concentrate pollutants.”

A life sciences group to study the thermal environment was established in England in 1968, with the author as physicist and Ian Griffiths as psychologist. They worked together on experimental investigations. This book's purpose is to summarize the state of the art regarding the effect of indoor climate on human beings. Its emphasis is upon the thermal environment and air quality in the environment of home and office. The book is highly technical. The reader should not expect the usual survey material about how temperature affects performance, nor how the individual can build his own environmental cocoon, and all the formulas, computations and equations don’t make for easy reading.

McIntyre believes that physics, physiology and psychology have to be integrated to deal with the interaction “between ambient temperature, physiological state and sensation.” Chapters are devoted to the physics of heat loss, the physiology of thermoregulation and thermal sensation. Other chapters discuss comfort indices and heat and cold stress. There is also a report on field surveys of comfort in actual buildings. Among the other topics considered are the practical aspects of discomfort, ventilation and air quality and the design requirements for a comfortable environment. McIntyre concludes that “there is as yet little evidence to show that warm or cool temperatures, sufficient to cause only mild discomfort, seriously interfere with the ability to perform mental or physical work. However, discomfort may result in reduced motivation to work, with consequent fall in performance in work outputs.”

There are four appendices on radiation formation factors for the human body, summary of Fanger's equation, the two-node model of thermoregulation and formulation of standard effective temperature. The lengthy bibliography of 34 pages is impressive. Even at the hefty price of $65, the researcher interested in the effects of the thermal environment on comfort, health and behavior will want to read and study this book.

A Glossary of Construction Specifications Terminology. (Construction Specifications Institute, District of Columbia Metropolitan Chapter, 1777 Church St. N.W., Washington, D.C. 20036, $30.)

This glossary was compiled in recognition of “an industry-wide need” for the definitions of frequently encountered terms in construction specifications. The result is commendable. The CSI chapter recognized, says Vincent M. Spaulding, editor in chief of the volume, that for it to develop its own definitions would be a formidable task, so the course was taken of compiling terms and definitions written by nearly 100 professional organizations and trade and manufacturers' associations. At random, they include AIA, CSI, the National Association of Architectural Metal Manufacturers, the Perlite Institute and the Wire Reinforcement Institute. "The use of terms and definitions developed by members of the construction industry also assures the inclusion of construction terminology reflecting those interpretations most accepted and recognized by members of the industry,” says Spaulding.

The terms defined in the glossary are arranged in accordance with the CSI 16 division format for construction specifications and are compiled according to CSI preferred section titles. Thus, the specifier, architect, engineer, general contractor, et al., can find the term he may be seeking within the division and section of the glossary where that item of work would be specified in a project specification or manufacturer's technical literature, Spaulding explains.

AIA JOURNAL/MARCH 1981 95
In 1928 Le Corbusier and Charlotte Perriand designed the "Grand Confort" armchair of loose upholstered cushions packed within a chromium nickel plated tubular steel structure. Intended for a villa in the Ville d'Avray, it was introduced to the public at the 1929 Salon d'Automne in Paris. The updated version (1), produced by Barnaba Visconti of Milan, is somewhat less glamorous: fabric covered foam, with the famous structure simply stenciled on. These are hard times.

The annual furniture fair in Milan cannot be expected to introduce a "Grand Confort" every year, but it seldom fails to offer a few surprises, some delightful, some outrageous. The 20th fair, held recently, was no exception. Among the surprises were two designs by Lucchino Oltrona Visconti, "Ciripa" (2) and "D'Essai" (3), both simple wood folding chairs transformed by either tailored or heavily padded slipcovers into much more formal and elaborate objects, both also produced by Barnaba Visconti. In the same series is a folding army cot that can be costumed as an overstuffed sofa. From the "Le Illusioni" collection designed by Sergio de Michiel for the same firm are a chaise longue (4) and three-seat sofa (5) built of layers and layers of cushions; also available in the same series are a two-seat sofa, a chair and a double bed with snap-on comforter.

The model 1020 table lamp from Bianchi Bilumen of Milan (6) folds into a neat colored cube or accordions up and out as desired.
The "Wink" chair (1) designed by Toshiyuki Kita has a steel frame that adjusts to a great variety of positions, controlled by a side knob; with the base fully forward it becomes a chaise longue. The frame is covered with Dacron padding, and fabric or leather covers can be zipped off. It will soon be available through a.i. (Atelier International). From Créations an Eychenne of France is the folding chair (2) of beech, either natural or finished with tinted varnish, with removable canvas covers. A canvas pocket at the back holds a cushion. A child's high chair designed by Lars Norinder of Stockholm (3) is produced by Kalmarsundsgruppen, Kalmar, Sweden. Called a "semi-lounge" chair, the "Eleonora" (4), available through Stendig, is appropriate for use at continental height (26 inches) or dining height (29 inches) tables. It is on casters, and its small size makes it adaptable for public cocktail or lounge areas as well as for residential use. The "Thomas Alva Edison" lamp (5) was designed by Ingo Maurer to celebrate the centenary of Edison's light bulb. It is 15 inches long and available as a hanging, table or wall lamp through George Kovacs Lighting. Furniture designed by Walter Gropius for the vestibule of his 1911 Fagus factory in Alfeld, Germany (6), is now being produced by Tecta, represented in this country by Maximilian Sepp Ltd., New York City.
The “Twin Falls” fountain of steel, wood, plexiglass and galvanized ductwork (1), recently shown at New York City's Stefanotti Gallery, is by sculptor R. M. Fischer; it is 38 inches high. Recently awarded the “Roscoe” of the Resources Council is Jay Heumann’s “9300” conference table group for Metropolitan Furniture (2). The tables have polyester resin finishes in 18 colors and come in two widths and five lengths. Also from Metropolitan is a new tubular steel chair (3) designed by Charles Pfister. Upholstered seats and backs have recessed cord welting where the halves are joined, allowing easy reupholstering. Frames are available in any of 18 paint colors or in polished chrome. From Création an Eychenne of Daux, France, is a three-seat sofa (front view, 4; back view, 5) with a folding frame of varnished pine. Snap-on cushions are covered in washable cotton canvas. From C.I. Designs, Boston, is a folding chair (6) designed by Michael Kirkpatrick. It has a frame of solid ash members ingeniously joined in a pair of scratchproof black aluminum hinges. The seat is available in natural cane or upholstered in any of six colors of wool homespun.
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lowable rent contribution paid by tenants living in subsidized housing;
• slowing down the modernization effort for public housing;
• termination of programs for planning assistance, rehabilitation loans and neighborhood self-help development.

Proposals for the National Endowments for the Arts and Humanities call for severe cutbacks—budget reductions of about 50 percent. “Reductions of this magnitude are premised on the concept that federal policy for arts and humanities support must be completely revamped. For too long, the endowments have spread federal financing into an ever wider range of artistic and literary endeavors, promoting the notion that the federal government should be the financial patron of first resort for both individuals and institutions engaged in artistic and literary pursuits,” the report states. The Administration suggests that “more emphasis” should be placed on the “role of private philanthropy and state and local support for arts and cultural activities.”

For land conservation and historic preservation, the Interior Department’s programs would be substantially “re­focu­sed.” Reagan calls for cutting the $32 million that is now provided for the historic preservation funds for 1982 to $5 million. Urban park grants will be eliminated by ‘82. For federal land acquisition and administration, the current ‘82 budget calls for $335 million; Reagan would cut it to $45 million plus $105 million for national park restoration and improvement. “The government must learn to manage what it owns before it seeks to acquire more land.”

Included in the changes in transportation programs are a phase-out of mass transit operating subsidies by 1985 and reductions in mass transit capital grants and highway construction grants.

Initial Statements of the Reagan Domestic Secretaries

In their early statements, the newly appointed secretaries of the federal agencies closest to the architectural profession’s concerns hewed closely to the Reagan line of austerity.

• In his confirmation hearings, 58-year-old Samuel R. Pierce Jr. said that as secretary of HUD he would review all the department’s programs and cut needless costs, but would not “inflict pain” on the poor and elderly. Pierce suggested that cuts might occur in programs involving community development block grants, urban development action grants and solar energy policies. However, the best tonic for housing and cities, Pierce sug­gested, would be reduced inflation and lower interest rates.

As for the Section 8 rental subsidy program, Pierce said he favored rehabilitat­ing existing housing rather than construct­ing new units. He also said he would press for a stronger fair housing law.

Pierce, the only black cabinet appointee, is a partner with the New York City law firm of Battle, Fowler, Jaffin, Pierce, Khell, where he has worked since 1961. While he does not have any housing ex­perience, Pierce has been in and out of government service since the start of his career in the 1950s.

After graduating from Cornell University law school in 1949 and from the New York University school of law with a master’s degree in tax law in 1952, Pierce was named assistant district attorney for New York County. In 1955 he became assistant under secretary of labor in the Eisenhower Administration and then was associate counsel and counsel of the House judiciary antitrust subcommittee. In 1957 Gov. Nelson A. Rockefeller named him to the Court of General Sessions, which is now part of the New York Supreme Court. His other stint in government was as general counsel of the Treasury Department during the Nixon Administration.


• In a 1978 Senate hearing, former South Carolina Gov. James B. Edwards testified that “the only answer we have to the U.S. energy shortage is nuclear energy,” which he described as safer than oil, coal or natural gas.

Although the new secretary of energy considers himself a “problem solver” and not an energy expert, Edwards supports the reprocessing of burned reactor fuel, construction of breeder reactors and storage of nuclear waste in monitored vaults near the earth’s surface. Commercial re­processing of nuclear fuel was banned by Presidents Ford and Carter, based on the fear that the plutonium end product could be used to produce nuclear weapons.

At his confirmation hearing, Edwards ducked questions about repeal of the multibillion-dollar windfall profits tax on oil companies and continued subsidies to private firms seeking to produce synthetic fuels. He did state, however, that free market economics, not the federal govern­ment, should control energy production.

Edwards, a 53-year-old oral surgeon, was elected to the South Carolina Senate in 1972. Two years later he was elected governor. During his four-year term, Edwards created a state Energy Research Institute that studied ways to expand nuclear power. The institute recommended building a 12-reactor nuclear power park in the state to supply electricity for the region, but the controversial project was never built. In 1978 he chaired an energy subcommittee of the National Governors’ Association.

• One of Reagan’s more controversial ap­pointees is James G. Watt as secretary of the interior. For the past three years Watt has been president and chief legal officer of a conservative law foundation, the Mountain States Legal Organization, that has often challenged the Interior Department’s methods of administering public lands. The organization has fought at­tempts by the Bureau of Land Manage­ment to limit access to public land by a number of industries. It has challenged the government’s authority to limit graz­ing on over grazed land, to review na­tional forest lands for wilderness potential and to prohibit motorized rafts on the Colorado River in the Grand Canyon.

Environmental and conservation orga­nizations maintain that Watt is a “deter­mined developer” who would allow the despoiling of many sections of federal lands in the West. They also charge that Watt has a conflict of interest running the department because of his past relations with the foundation.

Responding to these charges, Watt promised at his confirmation hearings to disassociate himself from future as well as past legal actions involving the founda­tion. He said he would take a more mod­erate position than that of his former em­ployee. And he pledged not to try to change environment and land-use laws, but to better implement them to allow the orderly development of coal, oil, gas and minerals on federal lands.

“I want the federal and state govern­ments to strike a balance between the de­velopment and protection of our natural resources. We can have reasonable de­velopment of our energy resources and preserve our natural environment if we are given an opportunity to phase in, with proper safeguards, the expansion being demanded by the nation.”

Watt has called environmentalists “the greatest threat to the ecology of the West.” In a 1979 Wall Street Journal article, Watt maintained that by now pre­venting the orderly development of Western energy resources the environmental­ists would cause resources to be devel­oped later in a crisis atmosphere, result­ing in “ravaging of our land and the de­struction of our natural environment.”

Watt was graduated from the Univer­sity of Wyoming with a law degree in 1962. In 1966 he joined the U.S. Chamber of Commerce where he directed the continued on page 104
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Architects: Loebl, Schlossman & Hackl, Chicago, Illinois
Rooter: E.W. Olson, Chicago, Illinois
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Three types of certification are covered in the regulations: certification of historic significance, where a structure is either listed in the National Register of Historic Places or located within a certified historic district; certification of rehabilitation, where a structure meets certain standards with respect to the historic character of the property, and certification of statutes and state and local districts. The new regulations place greater responsibility on state historic preservation officers to review applications for certification. Also, the standards for evaluating structures within historic districts have been revised to define more precisely situations in which a structure proposed for demolition is considered not to contribute to the historic significance of the district.

The new regulations also state that if the rehabilitation of a building results in the loss of the historic or architectural qualities for which it was originally certified, it will be removed from the National Register.

Prescriptive Energy Codes Now Used in 42 States

As of this month, 47 states have adopted energy conservation standards for new buildings, reports the National Conference of States on Building Codes and Standards. All but five of the 47 states have adopted a component-based standard, such as the American Society of Heating Refrigeration and Air-Conditioning Engineers' standard 90-75.

Eleven states have adopted ASHRAE 90-75, although four of those have modified the technical provisions of the standard. Thirteen states have adopted the Model Code for Energy Conservation in New Building Construction, recommended by the Council of American Building Officials. This code is based on the ASHRAE 90-75 standard. Eight states use the energy code provisions of one of the three major model code groups—the Building Officials and Code Administrators International, Inc., the International Conference of Building Officials and the Southern Building Code Congress International, Inc.

Fifteen states have developed their own energy codes, although 10 of these use either ASHRAE 90-75 or the model code as a basis but with different technical provisions. Modifications include:

- more stringent provisions on moisture control, such as requiring vapor barriers and attic ventilation;
- increased minimum thermal transmission requirements for walls, floors and roof ceilings;
- provisions to account for thermal mass in determining required wall thermal transmittance;
- limited HVAC equipment oversizing;
- decreased allowable infiltration rates for walls and doors;
- gas heating equipment required to have electronic ignition and flue dampers;
- increased HVAC equipment and system efficiencies;
- deleted or revised lighting power budget requirements.

Five states have adopted their own provisions. California's nonresidential energy code is patterned on a total building energy performance approach. Design budgets are based on BTUs per gross square foot of conditioned floor area for 14 categories of buildings in 15 climatic zones.

The Florida energy code contains performance criteria. The "nonresidential tabular annual energy method" provides procedures and forms for calculating annual energy consumption for a building design and comparing that to allowable BTUs per square foot per year for 12 building classifications in nine climatic zones.

Maine has eliminated the prescriptive criteria found in ASHRAE 90-75 for thermal envelope design and requires maximum annual heat loss in BTUs per square foot of gross floor area. North Carolina requires all buildings over 15,000 square feet in gross floor area to comply with maximum allowable simultaneous load criteria. And the Wisconsin energy code contains envelope criteria specifying maximum allowable thermal performance values for envelope design, excluding infiltration and ventilation. The values are based on the number of stories in the building and are expressed in BTUs per hour per square foot of above-grade envelope.

Accessibility Standards Adopted Over Protests of U.S. Agencies

New minimum guidelines for accessibility standards for federal buildings were recently adopted by the Architectural and Transportation Barriers Compliance Board, despite protests by HUD, GSA and the U.S. Postal Service, the federal agencies most affected by the standards. The board's action was also criticized by AIA, the National Center for a Barrier-Free Environment, the National Easter Seal Society and the American National Standards Institute, among others.

The Architectural and Transportation Barriers Compliance Board is an independent federal agency established to ensure compliance with standards issued under the Architectural Barriers Act of 1968. Amendments made in 1978 to the Rehabilitation Act of 1973 called for the board to "establish minimum guidelines and requirements for architectural specific...continued on page 110.
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Government from page 104
cations to be used in federally funded buildings and facilities nationally. In effect, these minimum guidelines will become the federal accessibility standards. The guidelines apply to new construction, additions, alterations and leases. They provide requirements for parking, entrance doors, washrooms, elevators, tactile warnings for blind persons, telephones and telecommunication devices for deaf people and assembly areas, among other things.

It is the relationship of these guidelines to the American National Standards Institute's standard A117.1 ("Specifications for Making Buildings and Facilities Accessible to and Usable by the Physically Handicapped") that is being questioned by AIA and the Center for a Barrier-Free Environment.

Standard A117.1 was first approved by ANSI in 1960. In 1980 a revised version was approved after a $500,000, five-year research effort sponsored by HUD and involving 53 public and private organizations concerned with accessibility. The revised version differs from the earlier one in that it includes requirements for both residential and public buildings. The standard embraces both architectural features and site design. A major objective of revising the standard was to provide uniform regulations for public agencies. The 1961 version of the ANSI standard has been adopted by almost every state. Many states are revising the accessibility standards to include the changes found in the '80 version.

While the new guidelines issued by the compliance board borrow heavily from the ANSI standard, "there are enough changes that when an architect advises a client to build a federal building it would be very confusing," says William Rockwell, ANSI's general counsel.

And in a letter sent last October to the compliance board, former AIA President Charles Schwing, FAIA, said, "We are disappointed that the board has chosen to abandon the ANSI specification and has begun the process on its own of developing a barrier-free design standard. This can only cause further fragmentation and confusion defeating current efforts to bring uniformity to barrier-free design standards. . . . The situation can be easily envisioned where the ATBCB's guidelines and a local or state standard that uses ANSI will apply to the same building project. When an architect or a building code enforcement official has to compare the two technical portions of the documents, he will have some difficulty. The problem is not so much that the guidelines may be technically wrong as it is that they are different. Different wording and different dimensions cause confusion."

As explained by John Salmen of the National Center for a Barrier-Free Environment, the technical requirements of the two standards are different, the format is different, the scope is different. He in fact praises the board for clarifying the ANSI standard, for making the format easier to use and for taking "a step beyond the ANSI standard," since the minimum requirements are more demanding. "Almost everything has to be accessible," he says. Yet, Salmen too envisions problems in having two different standards. He also criticizes that fact that the board's standard was not developed on a consensus basis.

GSA opposed the guidelines because the eventual cost of complying with them is unknown. "We have a large constituency for the standard—federal buildings, any projects receiving federal money. We need to evaluate the cost and effect," says David Dibner, FAIA, GSA's design and construction coordinator.

At this writing, it is questionable whether the board's guidelines will ever be implemented. First of all, the program may be cut in the Reagan Administration's effort toward deregulation. The Rehabilitation Act of 1973 is up for review next year and hearings are to begin in June. Changes could occur then. Four senators, including Jennings Randolph (D.-W. Va.), one of the original backers of legislation to aid the handicapped, wrote the board suggesting that it was proceeding contrary to the intent of Congress. They may call for a congressional hearing on the matter. And ANSI may file a lawsuit against the board.

DEATHS

Lathrop Douglass, FAIA: Designer of many shopping centers, including the first in the East, Cross County Center, which opened in the 1950s in Westchester County, New York, Mr. Douglass studied at Yale University and at the Ecole des Beaux-Arts. His shopping centers were utilitarian, though they became more elaborate over the years. They included Tysons Corner in suburban Washington, D.C., and Boulevard Mall in Buffalo and the Parly II near Paris. He died Jan. 21, 1981.

During the 1930s, Mr. Douglass worked for several federal and New York State agencies as a site planner and designer. After World War II, he joined John W. Harris Associates and founded his own firm in 1947. He received first prize at the Festival International d'Architecture in Paris in 1956 for his design of the Creole Petroleum Building in Caracas, Venezuela.

Melvin Anderson, Dayton, Ohio
Waverly G. Batts, Raleigh, N.C.

Roy J. Cava, Newport News, Vir.
Philip Dworkin, Jamaica, N.Y.
Richard E. Jessen, Tampa, Fla.
H. P. Matthai, Baltimore
R. A. Yaeger, Rochester, N.Y.
Stefan H. Zachar, Miami Beach

BRIEFS

Richard R. Whitaker Jr., AIA, has become the dean of the college of architecture, art and urban sciences at the University of Illinois at Chicago Circle.

The deadline for entry forms for the Red Cedar Shingle & Handsplit Shake Bureu/ AIA 1981 awards program is June 12. Contact the bureau at 515 116th Ave. N.E., Suite 275, Bellevue, Wash. 98004.

The 32nd architecture and garden tour of Japan will depart from Los Angeles on Oct. 9. The 22-day tour is limited to 23 people. Contact: K. M. Nishimoto, AIA, 30 N. Raymond Ave., Suite 809, Pasadena, Calif. 91103.

Winners in the HELIOS 80 competition, sponsored by Helios Tension Products, Inc., for the design of a tensed membrane outdoor theater are: Mustafa Kaniskha of Salt Lake City, first prize; Peter H. Frink, Robert J. Beuchat and Stephen R. Mallon, all of Philadelphia, second prize; Susan P. Gill, Cambridge, Mass., third prize.

Historic preservation grants-in-aid, recently awarded by the Department of Interior's Heritage conservation and recreation service, total $32.5 million. Grants may be used for acquisition, restoration, rehabilitation and stabilization of historic and archeological properties.

An exhibition of the drawings of Andrea Palladio will be shown at the National Gallery, Washington, D.C., May 17-July 5. The show, sponsored by the International Exhibitions Foundation, will then travel to Chicago (July 18-Oct. 30); Chapel Hill, N.C. (Sept. 15-Oct. 30); Tulsa, Okla. (Nov. 15-Dec. 31); Cambridge, Mass. (Jan. 15-Feb. 28, 1982), and Memphis (March 15-April 30, 1982).

Engineers' salaries have increased 12 percent over the past two years, reports the American Association of Engineering Societies, Inc. Salaries paid to newly employed engineers (one year or less since graduation) increased 23 percent over the same period, AAES reports.

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For new runners and joggers doing relatively low mileage, there's a 2.5-mile prediction run. For speedier runners, or those simply doing more mileage, there's a 5-mile combination age group race/prediction run. (You can also enter the 5-mile race in three-person teams.)

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- 30-34 Women
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- 40-49 Men
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In both prediction runs, certificates will be awarded to the five men and five women coming closest to their predicted times. In the 5-mile race, certificates will be awarded to the first three finishers in each age-group category.

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In consideration of your accepting my entry, I, intending to be legally bound, do hereby for myself, my heirs, executors and administrators, waive and release forever any and all claims I may accrue against Owens-Corning Fiberglas Corporation, the American Institute of Architects and any and all officials and sponsors of this race, their successors, representatives and assigns, for all damages and injuries suffered by me while attending and participating in the Minnesota Architrek May 17, 1981.

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Products from page 120

ing. The Executive II central airconditioning unit has a two-speed compressor and a larger-than-usual outdoor coil to dispose of extracted heat. Two new lines of heat pumps are offered. One coordinates with the computerized thermostat; the other is designed for through-the-wall use. (General Electric Co., Louisville, Ky. Circle 187 on information card.)

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The knowledge business
ize philosophies and ideas. The architectural jokes may seem inappropriate, but the humor of Woody Allen is one of the few places in which I have found the quintessential and where to get a good steak effectively balanced. The discouraged young architect may appear to retreat, but like Wright to Taliesin, one may do much to reshape architectural thought and the built environment.

In Mr. Moore’s conclusion, I would like to key on the word “balance.” Those two things in the pans of the scale need first of all to be clarified, identified, before they can be placed on the scale as weights. Architecture, especially viewed as an element of social concern, is a process, and, like the ecology, the balance is, and should be allowed to be, a dynamic one, not static. The balance will never be the perfection Mr. Moore seems to call for. Almost as a footnote, I would like to comment on the quotes from Porphyrios and Swesnick. I hope that Mr. Moore’s intent was to show that both men show an attitude far removed from social concern. While Porphyrios may be a bit obscure, it is still a good exercise for architects to be able to see design from such a perspective and in that terminology. At the same time, I suspect that those who should be the object of social concern (along with all those remote architects) realize that Mr. Swesnick could give a damn about society in general, or in particular, for that matter, and that greed—excuse me, profit making—is not always the best and most effective way to promote positive change. If Mr. Moore is trying to say that architects should support Mr. Swesnick, then I suspect it is the remark of an architect who does not wish to bite the hands of the ones who feed him.

And yes, I am a young architect who fits Mr. Moore’s scenario of a blossoming narcissist, but with a difference. I make my living from commissioned projects, the vast majority of them commercial buildings done by members of the real estate development construction industry. I am trying to strike the balance, and couldn’t do without the help of those “narcissistic” exercises. I’ll just bet I’m not alone.

J.H.E. Johnston Jr., AIA
Round Rock, Tex.

Mr. Moore responds: I sense that Mr. Johnston has missed the basic notion of my article. I did not intend to oppose gallery shows of architecture, which I personally find entertaining and at times even productive. Instead, I wanted to note that the recent great popularity of shows of architecture that begin with premises that ensure no possible fruition, i.e., a priori sterility, might suggest to us some problems on the state of architecture and reveal certain attitudes and predilections that tend to increase that troublesome gap between architecture and society in general. Extrapolating from this phenomenon, I see problems for the young and academic professionals, but more importantly a tendency toward a flight from reality in an abdication of interest in the tough environmental problems that I labeled architectural ghosts.

Mr. Johnston’s reference to the Corbu plan for Paris is a singular historical example of this pure formal abstract thinking now again so fashionable that was also unfortunately monumentally influential and may rank as one of the most pernicious academic exercises to wreak destruction on our cities.

The contrast between the Porphyrios and Swesnick quotes was merely given to illustrate the gap between a writer addressing a rather intermural group of architects versus a man who, however unfortunately, is actually building a lot of our cities.

Finally, I have never worked for nor even met Mr. Swesnick. I am also fond of young architects, architectural history, gallery shows and Woody Allen; but I am not fond of the notion of a building profession willfully embracing impotence.

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