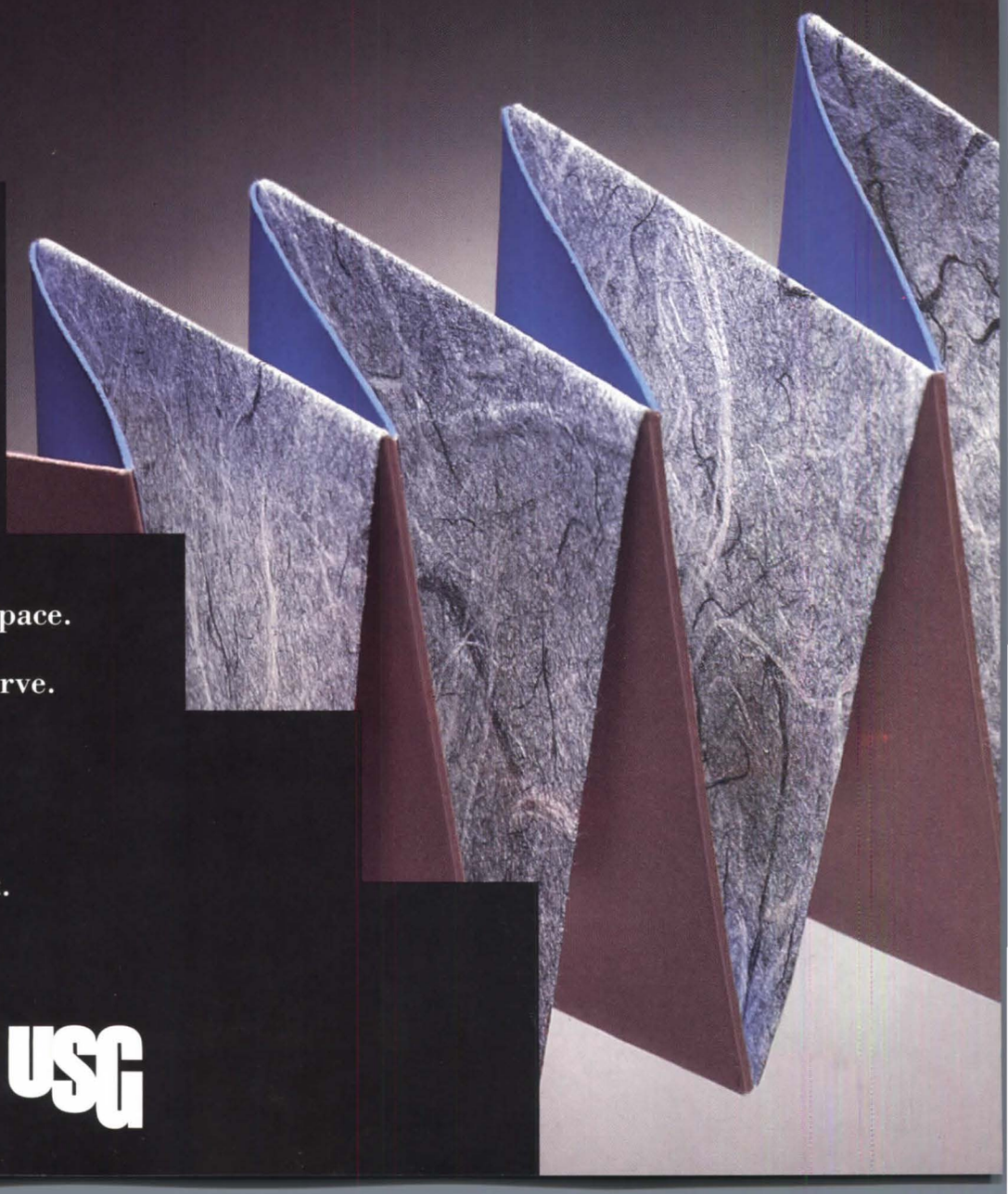
ARCHITECTURE

Incorporating Architectural Technology April 1988 Five Dollars

Interiors from every angle.



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Where the best lines meet.

USG


USG Interiors, Inc.
Circle 2 on information card

Don Bauman. Loves to fish.

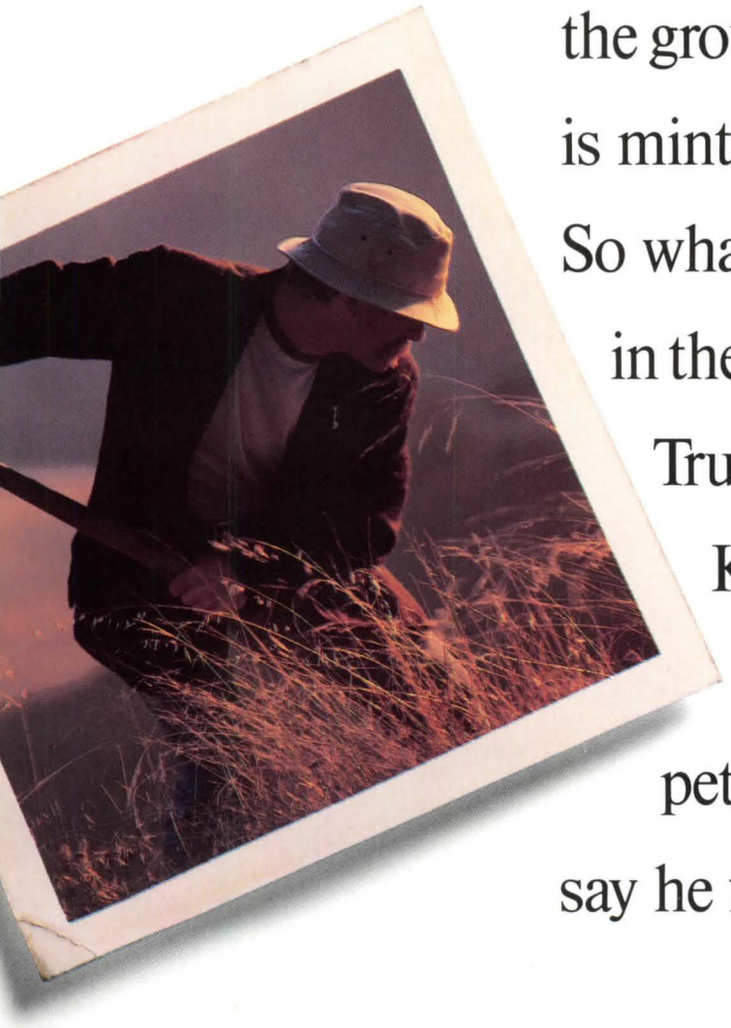
One spring day back in '69, right after he moves to the country, some 40 miles north of Grand Rapids, Michigan, he buys a two-drawer lateral filing cabinet at the company store. 800 series. Garden variety. Nothing special. Lugs it home, digs a big hole, sticks it in the ground. On its back. Fills it with potting soil, throws in some good 'crawlers, starts farming his own worms. Local trout go crazy for Bauman's worms. All his fishing buddies hate him.

A fish story.

Eighteen years go by. The potting soil is water-logged. Bauman figures the file must be shot, too. Spends a Saturday morning digging it out of the ground, hosing it off. Darn thing is mint. Barely a spot of rust.

So what does he do? Puts it back in the ground. Starts all over again.

True story.



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New Yorkers On New York

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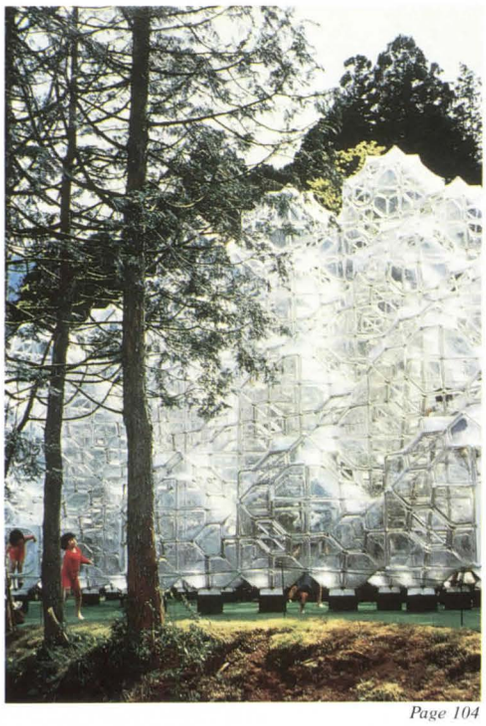
VOL. 77, NO. 4.



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Cover
The Empire State Building. Photograph ©Timothy Hursley/The Arkansas Office.

Page 118

Make The Great Outdoors A Little More Civilized.

Things that work outdoors have to be rugged. However, that doesn't mean they need to be boorish or unimaginative.

Haws drinking fountains are the toughest you can buy. Constructed of heavy-gauge steel or vibracast-reinforced concrete, they stand up to whatever abuse humans give them. Special options like freeze-proofing let them stand up to the elements as well.

Select one of our lean, striking, post-modern designs, or one of our elegant natural-color aggregate models. With over 100 styles and finishes to choose from, it's easy to find Haws fountains that will make the most pedestrian setting come alive– and help all your projects go from urban to urbane.

For more information on how to incorporate the world's most popular drinking fountains into your outdoor designs, contact your Haws representative, see Sweets section 15455, or phone the Sweets BUYLINE®

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Model 3180
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To fully understand why red cedar shingles and shakes are so often an excellent choice, send for a copy of the Architect's Cedar Library. It tells you everything you need to know regarding insulation, ventilation, product selection, specifying and more. Simply address your request to: Cedar Library, Suite 275, 515 116th Ave. NE, Bellevue, WA 98004

These labels on the bundles of Red Cedar shingles and shakes are your guarantee of Bureau-graded quality. Insist on them.

Ryder Office Building, Walnut Creek, California.
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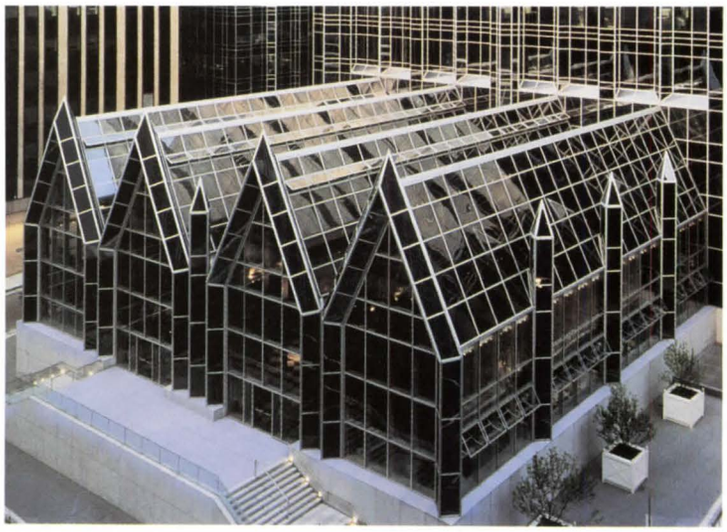
Since 1945, Naturalite has been working to build its reputation as designers and builders of fine quality skylighting systems. Over the years, one of our most formidable competitors has been EPI Architectural Systems, Inc. ■ Now, EPI and Naturalite have merged to become America's premier suppliers of skylight systems. ■ Among the more notable projects our companies have completed in recent years are: Trump Tower • The Kimball Museum • PPG Place • Akron City Center



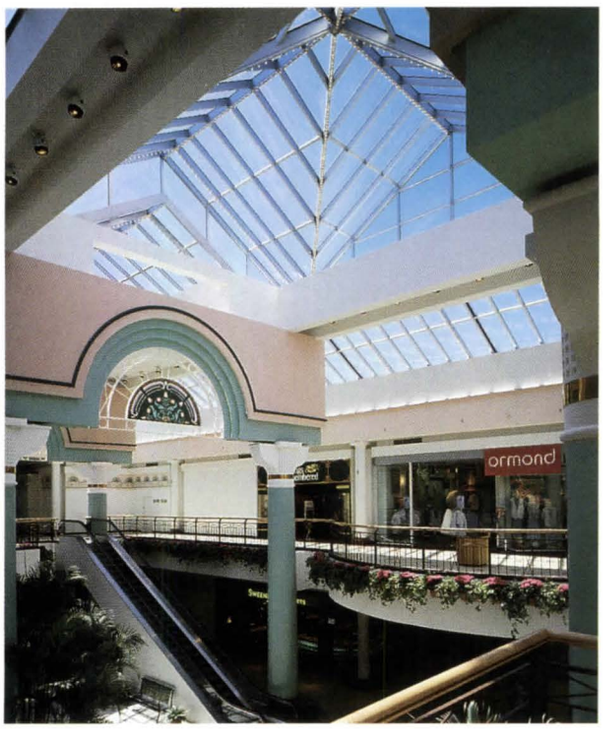
PPG Place, Pittsburgh

Trump Tower, New York

Collin Creek Mall, Dallas

We've grown from two companies to one!

• Momentum Place, Dallas • The Philadelphia Stock Exchange • Esplanade Mall, New Orleans • Los Angeles' Beverly Center • Xerox Corporation Headquarters. ■ Now, the design, engineering, manufacturing and installation expertise of these two companies have been combined into one team ... one exciting resource. ■ For your next design, we invite you to explore the possibilities now available from Naturalite/EPI — your single source for the *finest* in skylighting systems.



Esplanade Center, New Orleans

Philadelphia Stock Exchange

Penthouse

NATURALITE/EPI

For more information, please contact:
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Circle 8 on information card

When beauty is as important as performance

Built-in refrigeration for homes of distinction.

Offer your customers and clients a new elegance — the new Sub-Zero 500 Series featuring an exciting new Eurostyled molded white and glass interior, combined with the exterior beauty of true built-in refrigeration and reliability of a high performance system. ☐ Including the new 500 Series, Sub-Zero has over sixteen models of full-size and undercounter built-in refrigerators, freezers and icemakers available. ☐ All models feature a 24″ depth which enables them to fit flush with most standard base kitchen cabinets and affords easy accessibility to all stored items. All models are designed to accept decorative exterior panels of virtually any material, providing complete flexibility in the kitchen design. ☐ Features include an outstanding refrigeration system, automatic icemaker, easy glide crispers, self-venting, automatic defrost and adjustable storage flexibility. Every Sub-Zero unit is completely test run at the factory for total performance before delivery.

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Model 532 combination refrigerator/freezer with new optional panelized grille

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Model 501R refrigerator and Model 501F freezer

Model 561 combination refrigerator/freezer

For more information contact your Sub-Zero distributor or contact Sub-Zero.

All 500 Series models shown feature new Eurostyled interiors

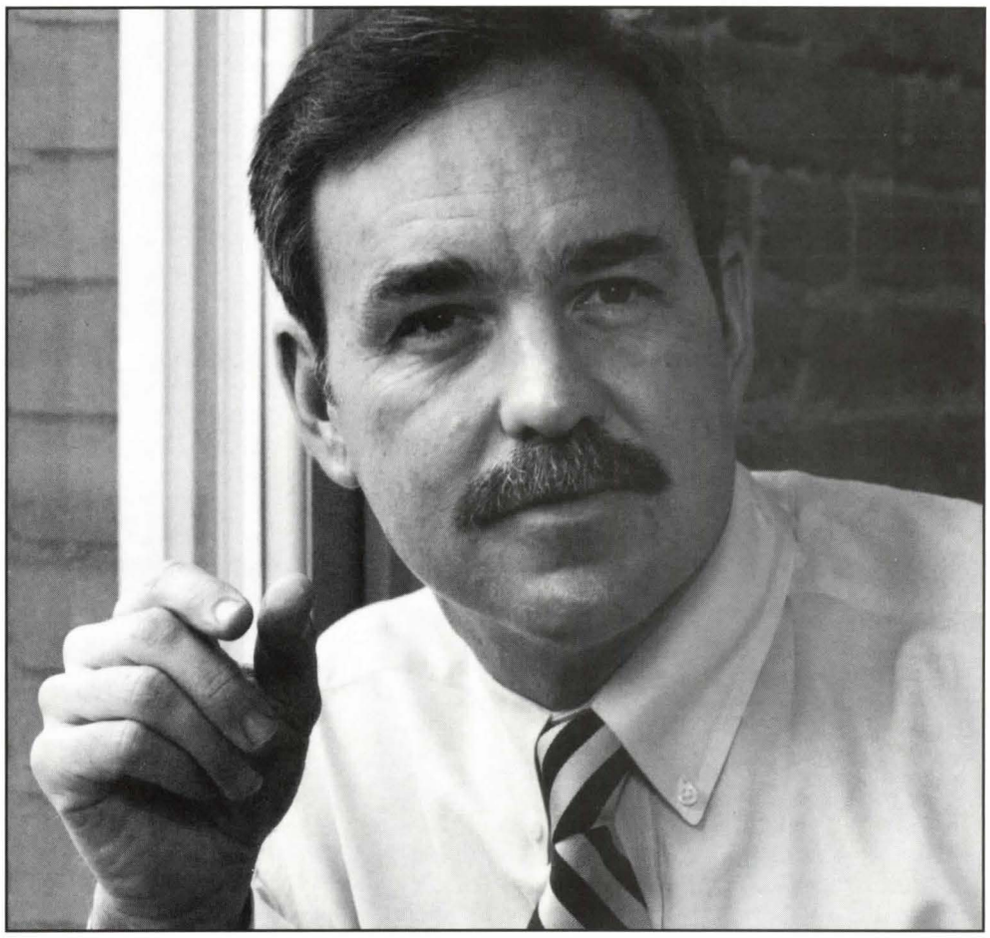
Circle 10 on information card

"The DPIC education program has caused us to do continuing education, at the most basic contract level, that we probably wouldn't have gotten around to doing as a whole group. There may have been a person here or there that would have been enthusiastic about it, but their premium credit program requires all partners and technical staff to participate and take the exams. So, without the program, I think it would have been unlikely we would have gotten 100% participation. But because it is required, we do get it. In fact, we are considering making the DPIC tests, including reading the book, a requirement for all staff.

I can't imagine anybody not participating in the educational program, because of the cost savings aspect of it. I mean, let alone the fact that it can help your practice.

I think we've saved on the order of $30,000 over two or three years. We've found DPIC's premiums, with and without the education program, to be generally competitive, so we do regard it as a savings.

You might find another carrier that could provide the same insurance for that net amount. But I think DPIC has been conscientious, in not saying, 'OK, we'll lower our price and forget about the educational program', and I think that speaks well for them."



Jack Corgan is a principal of Corgan Associates Architects, a 65-person firm based in Dallas, Texas. He is also a former Assistant Professor of Architecture at Oklahoma State University. We value our relationship with his firm, and thank him for his willingness to talk to you about us.

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EVENTS

May 2-5: A/E/C Systems '88 International Computer and Management Show, Chicago. Contact: Sharon Price, A/E/C Systems '88, P.O. Box 11318, Newington, Conn. 06111.

May 2-6: Annual Technical Meeting and Equipment Exposition, entitled "The Visions of Yesterday Are the Realities of Today," King of Prussia, Pa. Contact: Institute of Environmental Sciences, 940 East Northwest Highway, Mount Prospect, Ill. 60056.

May 4-7: Urban Land Institute's Spring Meeting, Atlanta. Contact: Maura Hughes, Marketing and Public Affairs, ULI, 1090 Vermont Ave. N.W., Washington, D.C. 20005.

May 11-14: International Seismic Isolation/Historic Preservation Symposium, Salt Lake City. Contact: W. Dee Halverson, Salt Lake City Corporation, Office of the Mayor, 324 South State St., Salt Lake City, Utah 84111.

May 13-15: Seminar covering the 1988 NCARB Architect Registration Exam, Miami. (Repeat seminars May 20-22, Washington, D.C.; May 27-29, Atlanta). Contact: Registration Institute Inc., 2600 Bantry Bay Dr., Tallahassee, Fla. 32308.

May 15-18: AIA Annual Convention, New York City. Contact: John Gaillard at Institute headquarters, (202) 626-7396.

May 15-18: First International Facilities Exposition, New York City. Contact: International Design Center, 919 Third Ave., North Plaza, New York, N.Y. 10022.

May 15-20: International Conference on Supercomputing and Second World Supercomputer Exhibition, Boston. Contact: Lana Kartashev, ICS, 3000 34th St. South, Suite B-309, St. Petersburg, Fla. 33711.

May 17-18: International Appliance Technology Conference, Madison, Wis. Contact: United Engineering Center, 345 E. 47th St., New York, N.Y. 10017.

May 24-27: Pacific Coast Builders Conference, San Francisco. Contact: PCBC, 605 Market St., Suite 600, San Francisco, Calif. 94105.

May 24-29: International Woodworking Machinery Show, Milan, Italy. Contact: John Honey, Italian Trade Commission, 1801 Avenue of the Stars, Suite 700, Los Angeles, Calif. 90067.

LETTERS

Single-Ply Roofing: I have just finished reading the article titled "Longevity and Single-Ply Roofing" by Douglas E. Gordon and M. Stephanie Stubbs in your January issue.

It is a recurring theme in many single-ply articles that PVC products are inferior and have a shorter life expectancy than membranes based on other polymers. The facts do not support *the allegations*. Seal-Dry, Sarenafil, or Fibertite membranes, which all rely on PVC, can be expected to last well beyond the 10 years mentioned in your article and, based on the EMMAQUA tests, should outlast both CPE- and Hypalon-based membranes.

It is inaccurate and wrong to issue a blanket indictment of PVC products. The fundamental characteristics of PVC make it a better membrane building block than either CPE or Hypalon. However, as is the case with any membrane based on any polymer, the final formulation determines its physical properties and ability to withstand the rigors of the roofing environment. It might be likened to baking a chocolate cake. A chocolate cake is a chocolate cake but some are better than others based on the recipe. Single-ply membranes are the same, and within polymer groups our testing indicates a broad range of performance characteristics. The formulation is the key.

The bottom line is that properly formulated PVC-based products offer resistance to a wider range of chemicals, acids, oils, and greases than CPE, Hypalon, or EPDM. They offer better resistance to ozone and ultraviolet. They are easier to weld and remain weldable throughout their service life. And, unlike CPE and Hypalon, PVC membranes are not susceptible to attack by red algae.

John K. Givens, President
Seal-Dry USA Inc.
Pontiac, Mich.

Ah, Technology!: The Jones Mah Gaskill Rhodes firm of Memphis has developed a computer program of design components "so that a design firm that wins a post office commission is able to produce construction documents within three weeks." (See Feb. News, "Research and Development," page 28.)

These gosh-darned computer systems never cease to amaze! My secretary tells me that her word-processing system could "produce" Melville's *Moby Dick* in two days! Alas, Herman M., that you could not have lived to see it. With you at the keyboard, we could have had literary masterpieces to last well into the next century.

Mark C. Holley, AIA
Stockton, Calif.

CADD Differentiation: Differences among CADD systems affect functional utility of the systems and the manner in which they should be managed. This topic is not addressed in the journals or reviews.

When I refer to the "structure" of CADD software, I am referring to the fundamental design of factors that vendors make at the beginning stages of software system design. I would like to see more discussion of the comparative attributes of software systems with respect to file, layering, symbol, and data base structuring, as well as memory management and system self-management.

With file structure, for example, how are the drawing information, the building data base, "public" symbols, and so on stored and manipulated? I know, for instance, that Cadvance version 1.2 stored drawings as files and symbols as files. If the drawing needed to be transported to another machine, symbol files need to be transported also. The newer Cadvance version 2.0 has had its file structure modified to include a new class of "private" symbols that allow the incorporation of public symbols into the drawing file. This seemingly minor change can have a major (in this case positive) impact in the management of the CADD system.

Layering structure refers to how information is filtered and accessed in a manageable fashion. Cadvance and Autocad have graphics attributes of color and layering. Versacad has those plus the ability to manipulate by named groups of objects. Arris (by Sigma) allows layers to be saved as individual files, thus giving multiple access points to a single building data base.

Symbol structuring involves such issues as globally updating a symbol while still providing protection of private symbols. Autocad has private symbols (blocks) that can be converted into public symbols that are actually editable drawings.

As to data base structure, I think ARCHITECTURE readers would be interested in answers to some basic questions. How much information is stored for each data item? How are nongraphic attributes implemented? How is the data base sorted or searched? What is the impact of different decisions of this nature?

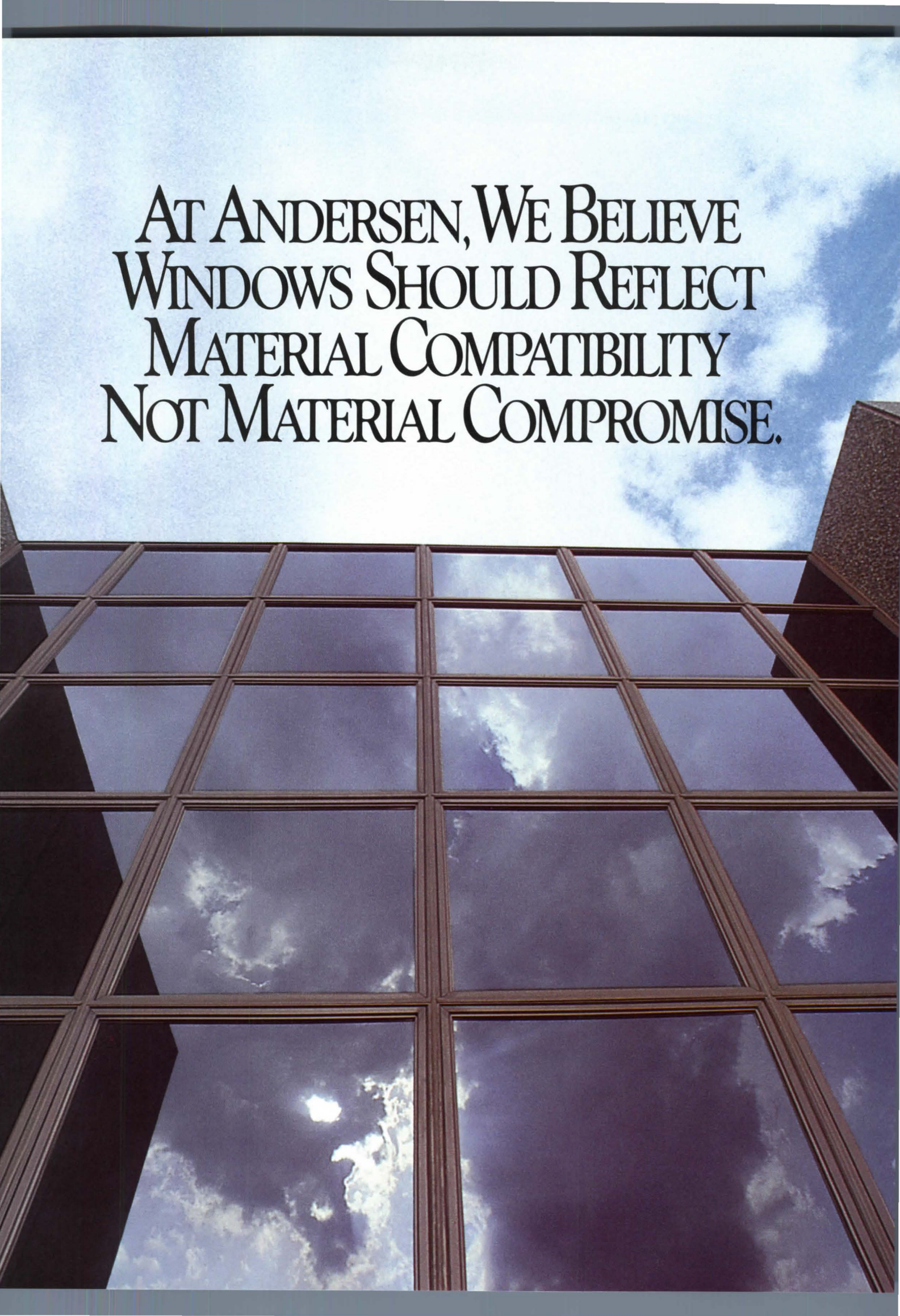
Memory management is especially critical with the PC-based systems, where storing drawings and program attributes in RAM and virtual RAM greatly affects operational speed. But it also may mean shuttling program modules in and out. And, of course, a program's provisions for handling a system memory disaster are very important to know.

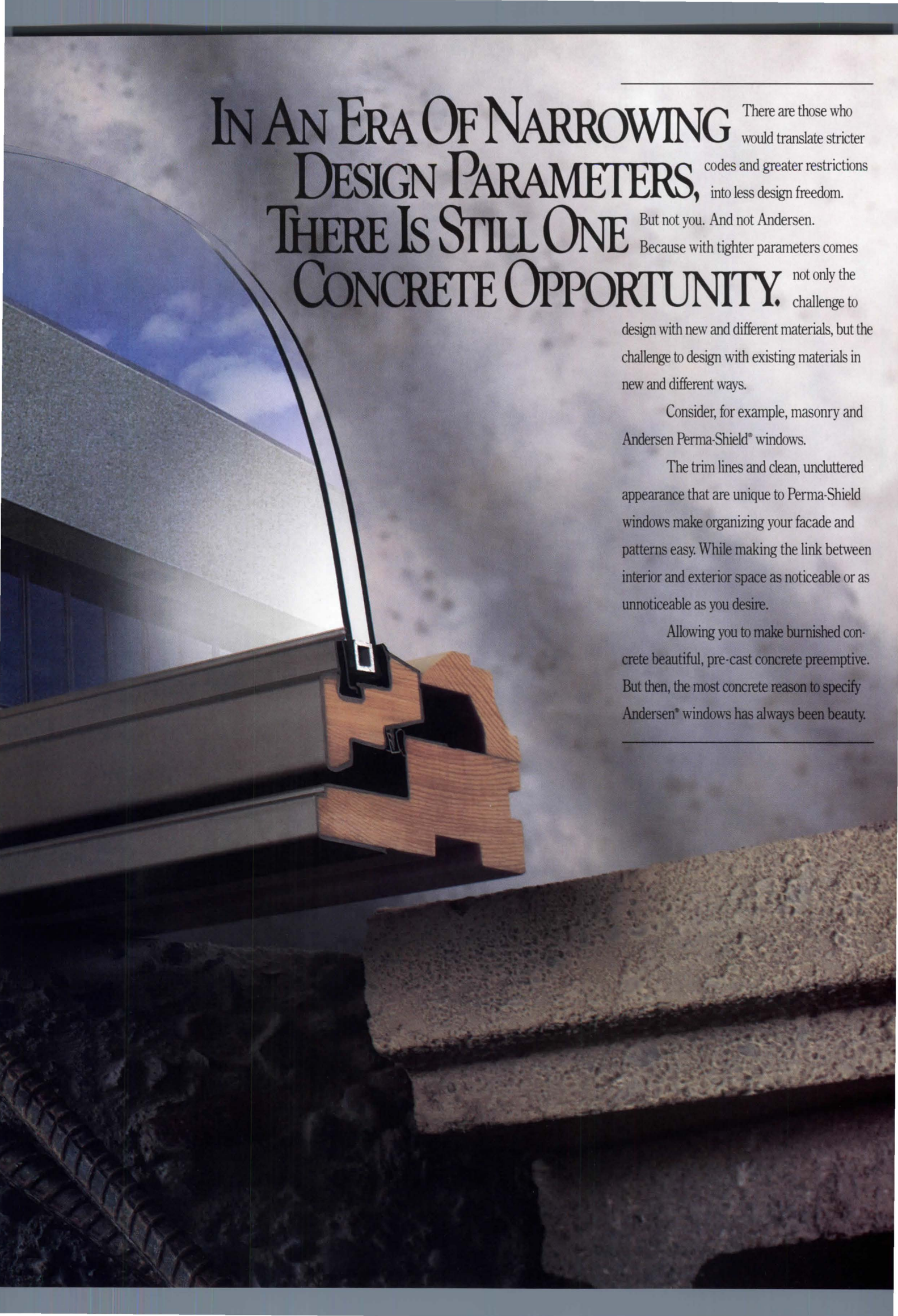
Systems also have self-management capabilities. These dictate how a system manages files, layers, and symbols, how it controls multi-user environments, and how it keeps track of lockout/access levels and time spent working on projects.

W. Bradley Holtz, AIA
Bethesda, Md.

Amplifications: Credits for the Amherst College campus center (Feb., page 82) should include the following: Project staff: Thomas G. Hess. Landscape architect: Morgan Wheelock Inc. Lighting consultant: Jules Fischer/Paul Marantz Inc. Acoustical consultant: Bolt, Beranek & Newman. Graphics: Maxwell Design Associates Ltd. General contractor: RNC Construction Corp. Construction manager: Daniel O'Connell's Sons.

For Gilmer Hall at the University of Virginia (Feb., pages 58-59), Wank Adams Slavin Associates was associated architect and consulting mechanical, electrical, and plumbing engineer to R. M. Kliment & Frances Halsband. Also consulting were Severud-Szegezdy (structural engineer) and Howard Brandston Lighting Design.


AT ANDERSEN, WE BELIEVE
WINDOWS SHOULD REFLECT
MATERIAL COMPATIBILITY
NOT MATERIAL COMPROMISE.



In An Era Of Narrowing Design Parameters, There Is Still One Concrete Opportunity.

There are those who would translate stricter codes and greater restrictions into less design freedom. But not you. And not Andersen. Because with tighter parameters comes not only the challenge to design with new and different materials, but the challenge to design with existing materials in new and different ways.

Consider, for example, masonry and Andersen Perma-Shield® windows.

The trim lines and clean, uncluttered appearance that are unique to Perma-Shield windows make organizing your facade and patterns easy. While making the link between interior and exterior space as noticeable or as unnoticeable as you desire.

Allowing you to make burnished concrete beautiful, pre-cast concrete preemptive. But then, the most concrete reason to specify Andersen® windows has always been beauty.

When Your Structural Support System Is Steel, Steal Some Beauty From Andersen.

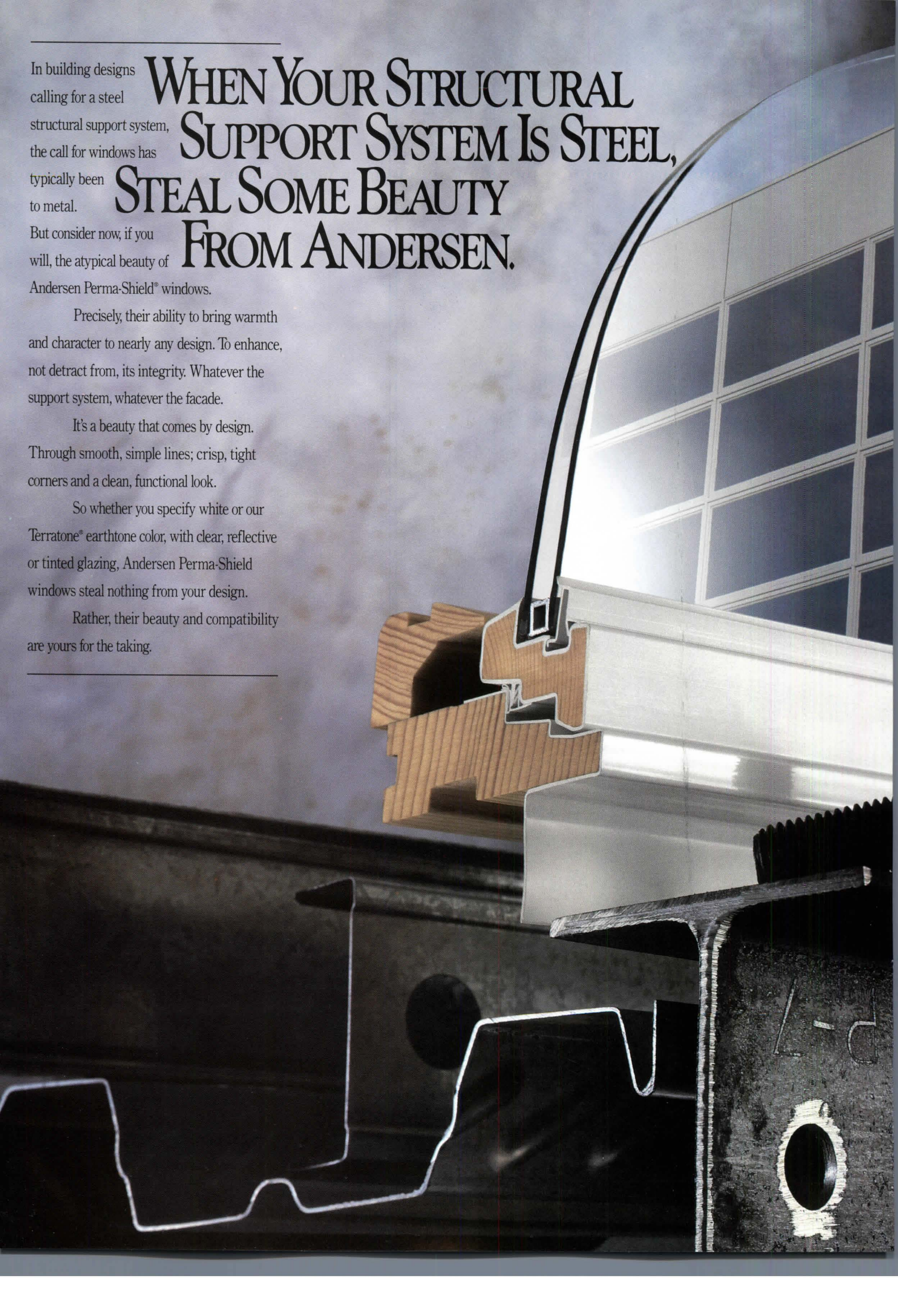
In building designs calling for a steel structural support system, the call for windows has typically been to metal. But consider now, if you will, the atypical beauty of Andersen Perma-Shield® windows.

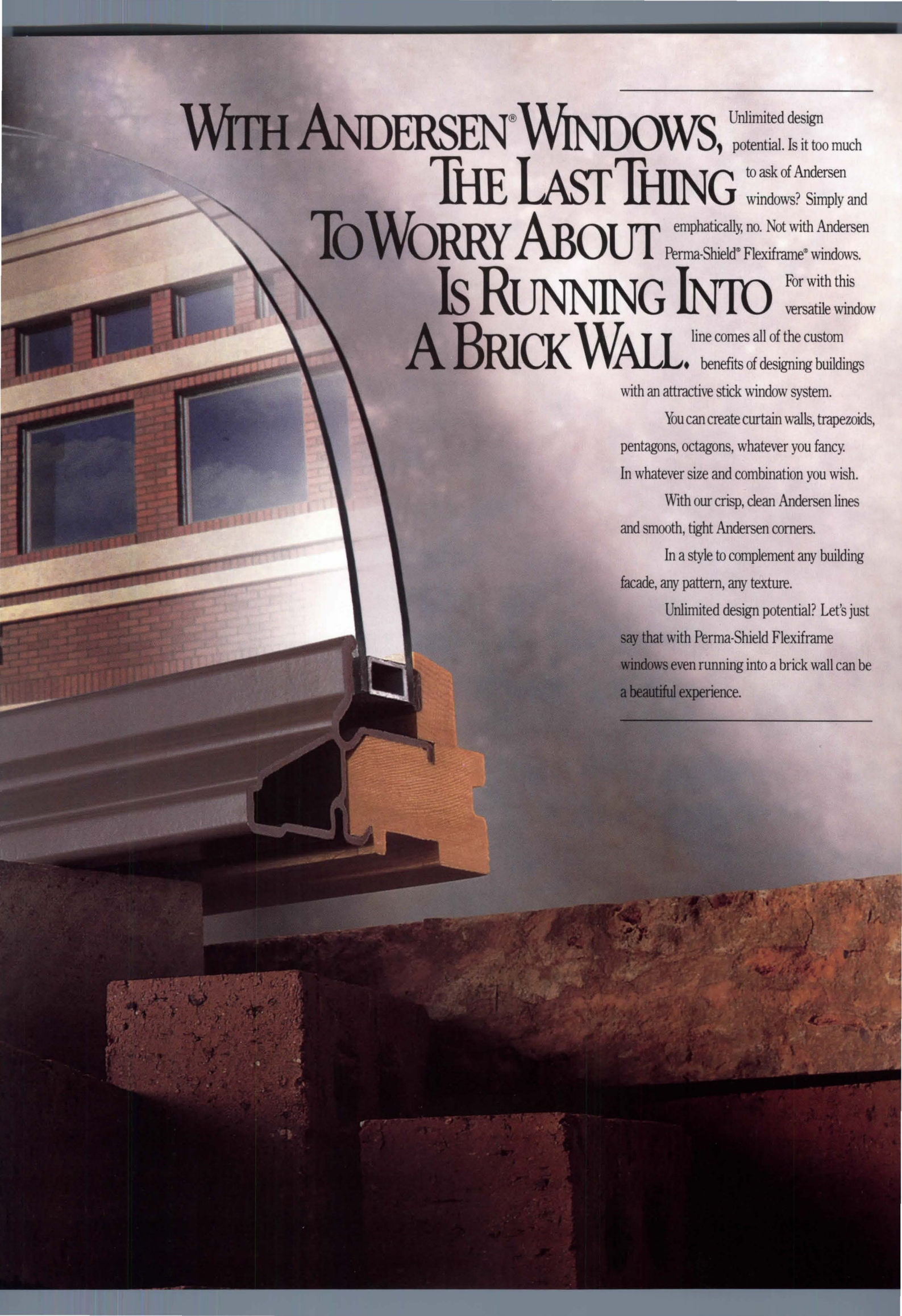
Precisely, their ability to bring warmth and character to nearly any design. To enhance, not detract from, its integrity. Whatever the support system, whatever the facade.

It's a beauty that comes by design. Through smooth, simple lines; crisp, tight corners and a clean, functional look.

So whether you specify white or our Terratone® earthtone color, with clear, reflective or tinted glazing, Andersen Perma-Shield windows steal nothing from your design.

Rather, their beauty and compatibility are yours for the taking.





WITH ANDERSEN® WINDOWS, THE LAST THING TO WORRY ABOUT IS RUNNING INTO A BRICK WALL.

Unlimited design potential. Is it too much to ask of Andersen windows? Simply and emphatically, no. Not with Andersen Perma-Shield® Flexiframe® windows. For with this versatile window line comes all of the custom benefits of designing buildings with an attractive stick window system.

You can create curtain walls, trapezoids, pentagons, octagons, whatever you fancy. In whatever size and combination you wish.

With our crisp, clean Andersen lines and smooth, tight Andersen corners.

In a style to complement any building facade, any pattern, any texture.

Unlimited design potential? Let's just say that with Perma-Shield Flexiframe windows even running into a brick wall can be a beautiful experience.

If We Haven't Already Done So, Permit Us Now To Color Your Opinion.

No matter how colorful your design and no matter what your design considerations, you'll find Andersen Perma-Shield® windows beautifully compatible. They're available as Andersen High-Performance and High-Performance Sun glazings. Both are designed to detect heat and keep it where you want it, permitting the use of large glass areas for bigger views and maximum light.

There are other options available, too. Your choice of tinted, reflective, safety, spandrel, decorative or double-pane glazing.

In short, no matter how you color it, there's a Perma-Shield window to complement any commercial design.

So if your opinion of Andersen windows until now has been otherwise, perhaps we have kept you in the dark too long.

Andersen High-Performance (above) and High-Performance Sun insulated glass (below) are just two of the many optional glazings we offer.

THE ANDERSEN COMMITMENT TO COMMERCIAL DESIGN ISN'T NEW. IT'S RENEWED.

At Andersen, we have always viewed windows as a design tool. Which is precisely why we put so much thought, research and development, not to mention creativity, into their design.

And to make Andersen® windows an even more effective design tool, we formed the Andersen Commercial Group.™

It exists solely and uniquely as a resource for architects who use Andersen products in commercial building applications.

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So from manufacturing through testing to product backup, you'll find Andersen a company committed to crafting commercially compatible windows of exceptional quality.

But then to us, that's nothing new. It's a commitment to quality we at Andersen have been renewing every day for more than 80 years.

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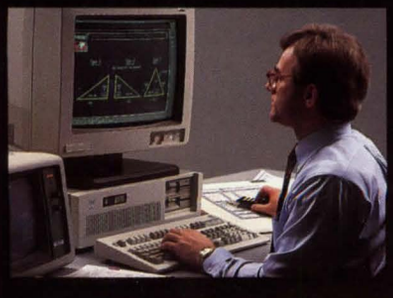
We sponsor Distributor Architect Representative Roundtables to openly discuss new product and service ideas.



Developed by architects for architects, the Andersen CADD-I™ Computerized Detail File draws windows so you don't have to.

Because Beauty Is In The Eye Of The Beholder, We At Andersen Let Nothing Hold You Back.

Andersen Commercial Group℠

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Andersen AW Windows Gliding Doors

Or write Andersen Commercial Group,℠ P.O. Box 12, Bayport, MN 55003.

Circle 14 on information card

AIANYC88!

Business by Day... New York by Night!

The 1988 AIA National Convention and Design Exposition in New York City will *definitely* be good for your business.

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But nights in New York City should be reserved for pleasure!

Toward that end, we've reserved the best tickets for Broadway's hottest shows: "Les Miserables," "Me and My Girl," and the new smash hit from London, "The Phantom of the Opera."

We've researched the finest restaurants in New York City for your culinary enjoyment.

And you're already invited for cocktails in the offices of New York City's best-known architects, hors d'oeuvres among the showrooms of The International Design Center/New York, and an exclusive gala in Manhattan's glittering new Winter Garden at Battery Park City.

So plan to spend a few highly profitable days at the 1988 AIA National Convention in New York City this May.

But keep your evenings open. After all, architects cannot live by business alone.

Art in Architecture
The American Institute of Architects
1988 National Convention and Design Exposition

May 15-18, 1988
New York City

Attach business card or fill in below and send to:

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The American Institute of Architects
1735 New York Avenue, N.W.
Washington, DC 20006

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☐ Please send me information on how to register for the 1988 AIA National Convention and Design Exposition, May 15-18, in New York City.

☐ Please send me the official 1988 convention poster designed by Vignelli Associates and printed in five vibrant colors. My check for $5.00 to cover handling

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That's why Georgia-Pacific developed new Dens-Glass™ gypsum sheathing, a unique panel with fiberglass faces front and back on a water resistant core. This design makes Dens-Glass the only gypsum sheathing panel offering a six-month limited warranty[1] against the damaging effects of weather. And no paper means improved fire resistance. In independent tests Dens-Glass produced zero flame spread and zero smoke developed.[2]

Superior dimensional stability and resiliency make Dens-Glass the smart choice for a variety of exterior applications—sheathing, soffits and exterior ceilings.

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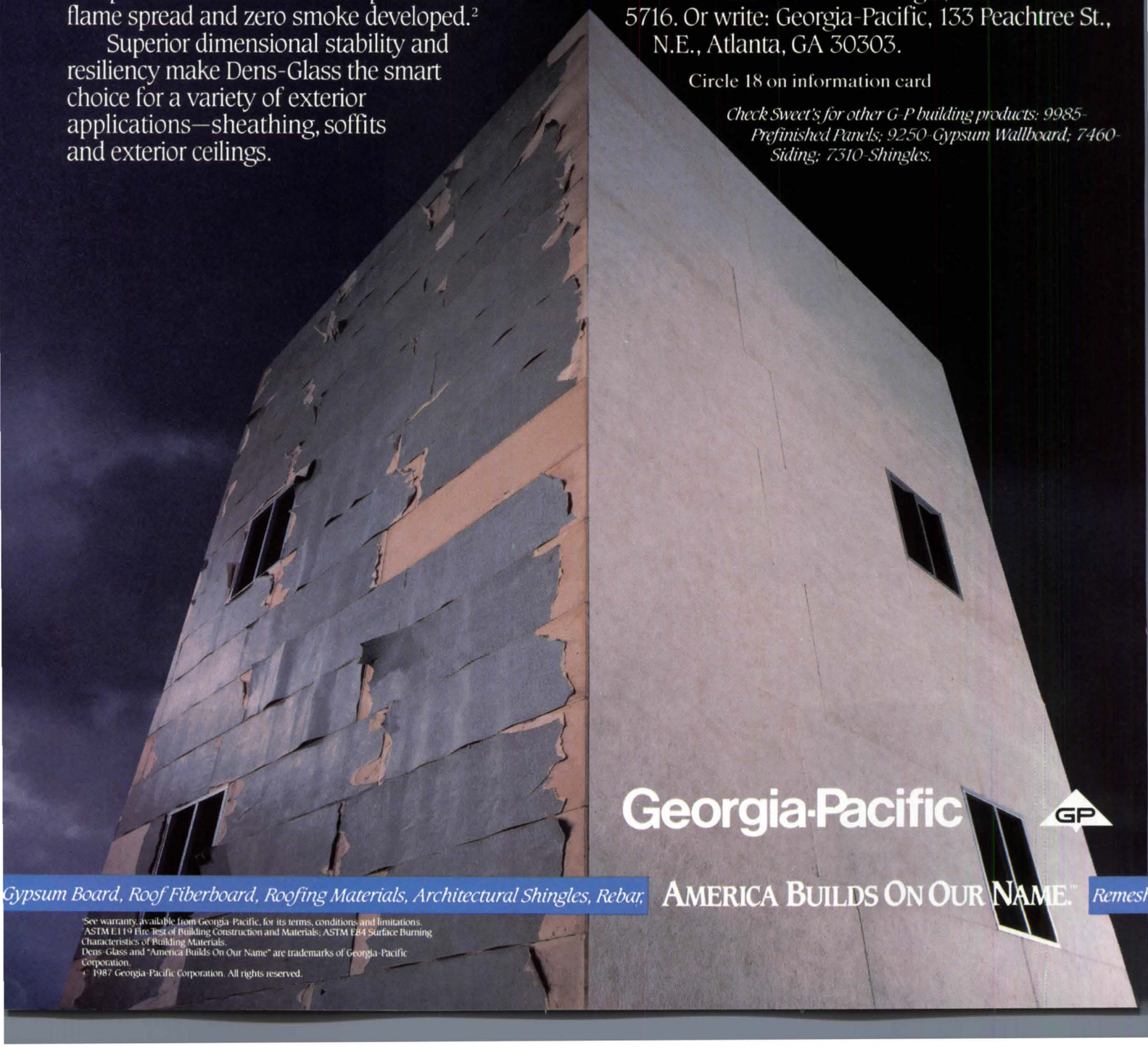
New weather-resistant Dens-Glass. One of the many commercial building products available through over 140 Georgia-Pacific Distribution Centers and Sales Offices nationwide.

For complete Dens-Glass exposure test results, product information, warranty, samples and the location of the Distribution Center nearest you, call 1-800-225-6119—in Georgia, call 1-404-521-5716. Or write: Georgia-Pacific, 133 Peachtree St., N.E., Atlanta, GA 30303.

Circle 18 on information card

Check Sweet's for other G-P building products: 9985-Prefinished Panels; 9250-Gypsum Wallboard; 7460-Siding; 7310-Shingles.



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[1]See warranty, available from Georgia-Pacific, for its terms, conditions and limitations.
[2]ASTM E119 Fire Test of Building Construction and Materials; ASTM E84 Surface Burning Characteristics of Building Materials.
Dens-Glass and "America Builds On Our Name" are trademarks of Georgia-Pacific Corporation.

Planning

Third Comprehensive Plan Unveiled For Center City Philadelphia

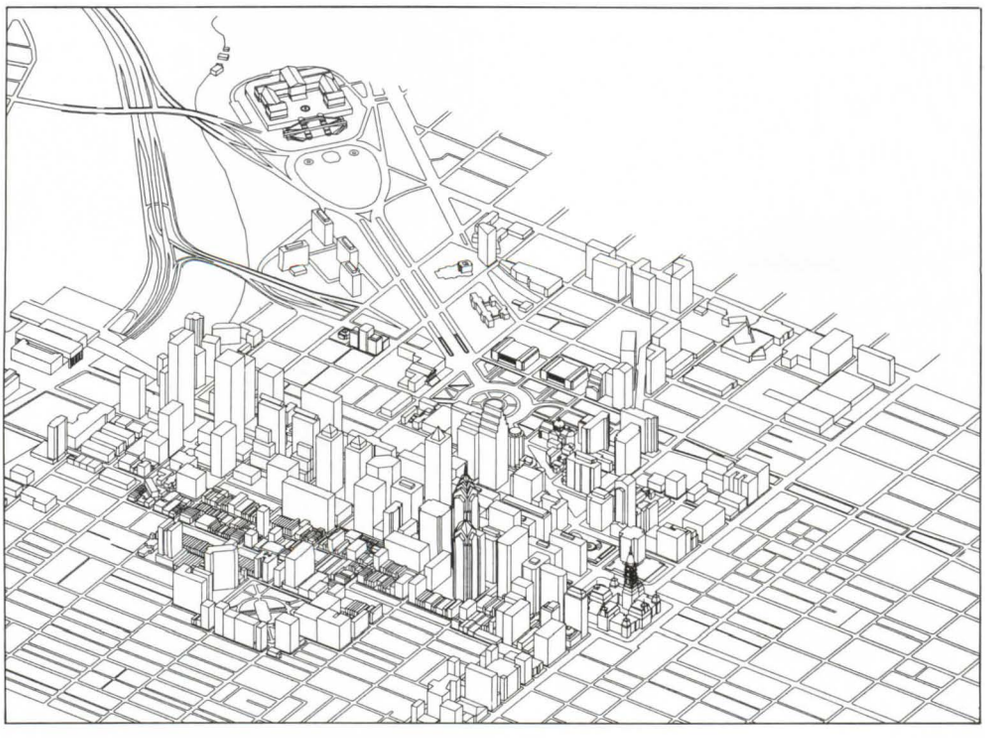
Philadelphia has a new city plan, its third. Released this month, the plan comes 25 years after Edmund Bacon's famous Center City plan and 300 years after William Penn's proposal for "a greene country town." The new plan for Center City Philadelphia does not deal in grand visions or sweeping acts of urban design; it is a guidance document that addresses the livability and workability of the city.

Developed by the Philadelphia City Planning Commission with Robert L. Geddes, FAIA, and Robert F. Brown Jr., AIA, as design consultants, the plan explores urban design issues and provides a direction for the city's development; it also addresses social issues, economic development, housing, downtown retailing, and historic preservation. Barbara J. Kaplan, executive director of the Philadelphia City Planning Commission, said, "The new plan is a statement about the future of Center City and where we want to be in the year 2000, but it's also 268 recommendations on how we want to get there."

In describing the planning commission's approach, Kaplan said, "You can talk about all the grand visions you want to in a long-range plan, but many of the issues that were really on people's minds with respect to Center City concerned the details of the downtown environment—things like keeping the streets clean, parking, regulating vendors, attractive and legible signage, and providing commerical services for residents."

The 1963 plan, albeit controversial, was among the most influential postwar plans for major American cities. However, by the early 1980s the city's formerly powerful planning commission had lost much of its clout, and its staff had determined that Philadelphia needed a new plan. According to Kaplan, the city had transcended the Bacon plan, in the sense that many of the ideas had been endorsed and components had been implemented, while other ideas had been discarded as impractical or undesirable.

Computer generated axonometric of the west half of Center City, which shows existing and potential office and commercial development. Drawing courtesy of the University of Pennsylvania, the Vitetta Group, and Stephen Lauf.



In 1984 the newly elected Mayor W. Wilson Goode encouraged the city planning commision to begin developing a new city plan. That same year local developer Willard Rouse proposed a pair of office buildings (by Chicago architect Helmut Jahn, AIA) taller than Alexander Milne Calder's statue of William Penn atop City Hall. No building had ever gone higher than the statue, which, rising to a height of 548 feet, is the heart of the "city of brotherly love." The city's informal height limit of 491 feet had never been legislated but had come to be known as "the gentlemen's agreement."

Although the new city plan was not developed in reaction to the Rouse proposal, in an indirect way the proposed towers served as a catalyst for generating public interest in a downtown plan that would be much more than a new policy to regulate the city's skyline.

The new plan builds upon the tradition of the existing city structure as a means of envisioning the future. Planning Commision Deputy Executive Director David A. Baldinger emphasized the influence of Philadelphia's history. "When we decided to do a physical development stragegy for the next 20 years, we knew we couldn't forget about all the things that happened in the last 300 years," he said. "Some of them occurred by happenstance, but a lot of them were very specific actions that individuals or groups deliberately took."

The new plan has a dual goal, according to Kaplan—to stimulate growth while at the same time preserving what is unique and valuable about Center City Philadelphia. "We think we can have our cake and eat it too, by directing growth to the areas where it is appropriate and by restricting it or regulating it in those areas where unchecked growth would have a negative impact on the delicate fabric and distinctive quality of a particular neighborhood," said Kaplan.

In comparing the new Center City plan with recent downtown plans for other major cities, Kaplan said that one of the problems with the San Francisco plan is that it was created in response to growth that people felt was already out of control. "We feel that we were fortunate in that we were able to see what was happening and to do a plan while there was still an opportunity to influence the direction of growth," she said.

continued on page 32

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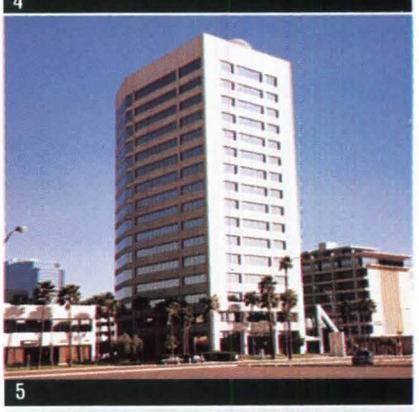

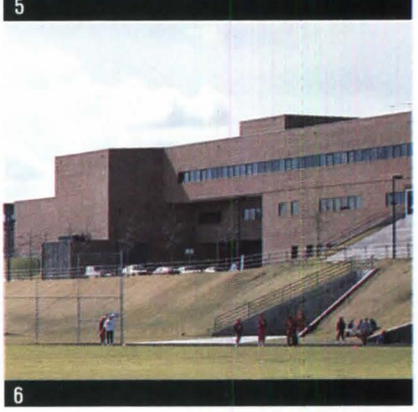

1. Psychiatric Center of Michigan Hospital, New Baltimore, MI **2.** YMCA of Raleigh, NC
3. Barnett Bank, Tampa, FL **4.** S.E. Louisiana University School of Nursing, Baton Rouge, LA
5. Southwest Financial Plaza, Phoenix, AZ **6.** North Central High School, Spokane, WA

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Planning *from page 27*

This public mandate to do a new plan came right when the market forces were changing. "We are riding the surf of this wave of development," said Geddes.

The city planning commission developed eight specific strategies for directing the physical development of Center City:

- Reinforce the office core.
- Protect the existing and emerging residential neighborhoods. These diverse areas range from the affluent Society Hill and Rittenhouse Square neighborhoods, to Chinatown, to the converted lofts in abandoned cast iron factory buildings in the Old City. The plan also addresses different concerns of Washington Square West, Logan Square/Parkway, and Franklin Town.
- Preserve the scale and the mixed land use of east-west streets Chestnut and Walnut as a buffer zone between the commerical core and the residential neighborhoods.
- Exploit the development potential of "new frontiers," including the Delaware riverfront and the air rights over the 30th Street Station railyards.
- Strengthen the transportation links within Center City.
- Protect the views of City Hall from the Benjamin Franklin Parkway, the northeast, and Interstate 95.
- Allow tall buildings along the Market Street corridor both east and west of City Hall.
- Establish five development districts and set more specific planning for each of them.

Rather than limiting urban design to one chapter in the plan, Kaplan said, the goal of the commission was to think of urban design as an integrating force in conceiving the whole plan. "For example, a major focus of our work has been to try to think of revisions to the city's zoning code that will affect the high-rise commerical development as a tool for implementing some of the urban design recommendations of the plan," said Kaplan.

The planning commission is not trying to change the ground rules in terms of how much density a developer can get for a site. "We are not looking to downzone everything," said Baldinger. "We are questioning the existing bonus system for increased density." The goal of the new plan is to identify the elements of a building's design that relate to the public and develop specific performance standards for those elements.

The plan does not provide for a design review board. "We did not want to get ourselves in a position where we have to negotiate everything that is being built. We wanted to set things down in a code so that a developer approaching the city with a concept or a project has a sense of what is acceptable," said Kaplan. The plan, she continued, is saying to developers, "in exchange for meeting our standards, we will leave you alone to do what you want to in terms of ornament. It's your business what you want to put on top. That's between you and your architect."

Geddes echoed the opposition to a design review board for Center City. "After serving on the San Francisco design review board," he said, "I knew we had made the right decision. In fact, I went out there undecided, but it's a total disaster. If you can't set the guidelines in terms of performance standards you can't have a design review based on whether Philip Johnson does a corny cornice."

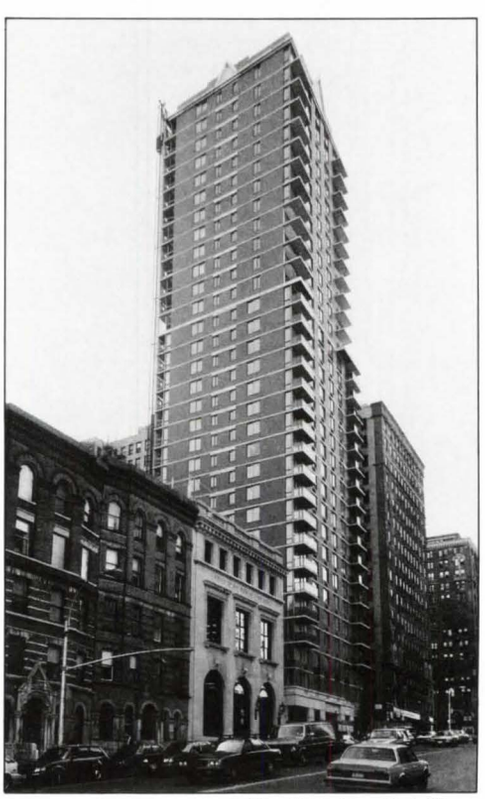
—Lynn Nesmith

N.Y. Courts Rule Building's Top 12 Floors Must Be Removed

Despite New York City's issuance of a building permit based on its own zoning map, which erroneously allowed construction of a 31-story condominium tower, the city's decision to stop construction and demand removal of the upper 12 stories of developer Parkview Associates' building at 108 E. 96th St. was upheld recently in the state's highest court. The New York State Court of Appeals found that the $7.2 million high rise violates zoning laws that restrict building heights in the area near Park Avenue, one of Manhattan's well-to-do neighborhoods.

The condominium apartment building is partially sited within a special zoning district that extends 150 feet east of Park Avenue and has been in effect since 1973. Any construction within this district is limited to a height of 210 feet or 19 stories, whichever is lower. In 1983, the city changed the boundary between the special zoning district on the Upper East Side and the adjacent Harlem neighborhood in order to allow taller buildings nearby, but the new boundary left part of the condominium tower site—about 50 feet—still within the special district.

Tower in its uptown Manhattan context.



Peter Freed/The New York Times

When Parkview Associates began construction of the tower in 1985, plans had been approved by all the necessary government authorities. Then, in 1986, a citizens' group from the more affluent side of the boundary (a group that never approved of the building) brought the city's mistake in granting the permit to the attention of the city department of buildings.

By this time the building had been topped out and wall construction had started. The city went back to its zoning map and supporting documentation, acknowledged its error, rescinded Parkview Associates' permit, and issued a stop-work order. The developer went to court and did not stop construction.

The problem stems from the city's granting the developer a building permit based on an inaccurate zoning map published by the city. The lower courts found, and the State Court of Appeals upheld, that the dotted line indicating the boundary in question was in the wrong place. The courts agreed that at the time the permit was issued the department of buildings misinterpreted the boundary line; that the original resolution, with its metes and bounds description, was never changed from 150 feet east of Park Avenue; and that the written regulation took precedence over the map. There can be little quarrel, said the court, that the department of buildings has no authority to issue a building permit that fails to conform to applicable law. Although the city was at fault in issuing the original permit, the court said the developer could have prevented the mistake through reasonable care in researching the zoning requirements.

"This does not bode well for architects," says Michael Parley of Development Consulting Services, a firm that specializes in zoning matters. The result of this court decision is to place even more responsibility on the architect's shoulders for checking and research and to erode confidence in zoning information published by the controlling authorities. In New York City, according to Parley, the metes and bounds descriptions are not readily available. They must be specially requested and can take weeks to obtain.

It is the applicant's responsibility to bring plans to the city that conform to applicable law, contends a city spokesman. The city is not responsible for the accuracy of building permits, although it does review them and look for mistakes. It is the responsibility of the applicant—who must be a licensed architect or engineer—to be certain that submitted plans comply with all regulations and laws.

The case of the building at 108 E. 96th St. calls into question the customs

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Planning *from page 32*
and practices of the real estate and design communities in relying on documents, says Barry LePatner, Esq., with the law firm of LePatner, Gainen & Block. The legal issues involved are important to architects all over the country. One question is who should check zoning regulations. It is important to spell that out clearly in the contract between the architect and the owner, he says. If the owner is responsible for zoning information, then, as with the results of soil tests, for example, the architect should be entitled to rely on the accuracy of the owner's information. Indeed, says LePatner, that is stated succinctly in AIA's Standard Form of Agreement Between Owner and Architect.

However, LePatner continues, the question still could arise as to whether the architect has a duty of care to check out all applicable documents affecting design, or whether failure to check documents could constitute negligence. That depends on interpretation of a specific written agreement and on the normal standard of care for architects in a specific area. It is in the architect's best interest to have the owner provide exact descriptions of what each party to the agreement will be responsible for, says LePatner.

After the first court decision in favor of the city, Parkview Associates halted work on the condominium project, which has a completed shell and lower 19 floors but little interior work on the 12 floors in violation of height restrictions. The developer has been carrying the building empty and also may face a hefty demolition bill before a certificate of occupancy can be issued. But the greater cost is the loss of close to one-third of the salable property, representing an investment of nearly $10 million, a spokesman reported.

Parkview Associates has applied to a city board of appeals for a hardship variance, claiming it was a victim of a series of mistakes made by the city. The appeal is pending. Should the variance be approved, it would retroactively allow a 31-story building on the site. In the meantime, the developer has offered concessions —such as low-cost housing off site or reservation of some condominiums in the 108 E. 96th St. building for the elderly—but so far to no avail.

If the variance is denied and there is no other course but demolition, experts estimate that nearly 3,000 tons of construction materials will have to be cut out and dragged away. And one of the the biggest problems could be removing the debris—it cannot be thrown down the elevator shaft, and New York City prohibits throwing it over the side of the building.

Environmental impact statements on the proposed demolition are being prepared by the departments of city planning and environmental protection for Parkview Associates' pending hearing.

—Elena Marcheso Moreno

News continued on page 36

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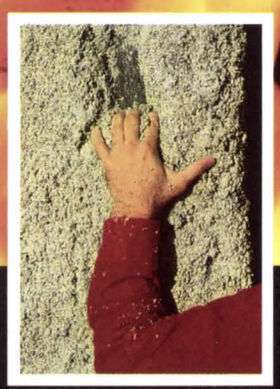

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The Institute

Eleven Selected to Receive Honorary Membership in AIA

AIA has named 11 individuals honorary members of the Institute in recognition of their "outstanding contributions to the architectural profession and the allied arts and sciences." The honorees work in a variety of fields, but each has effectively promoted and enhanced quality in the built environment. The honorary memberships will be conferred during the AIA convention in New York City.

The honorees are:

• James W. Bidwell, vice president for marketing for the Merchandise Mart in Chicago. As the organizer of the original NEOCON show as an adjunct to the 1969 AIA national convention in Chicago, Bidwell established "an event that is one of the largest design-oriented expositions in the world," according to his nomination. In addition, Bidwell has assisted the American Architectural Foundation with its long-range planning for a national traveling exhibition program; and he influenced Chicago's successful bid to host the 1993 convention of the Union of International Architects.

• Dominique de Menil, art and architecture philanthropist of Houston, who with her husband has collected more than 10,000 paintings, sculptures, and art objects. Their collection is now housed in a new museum in Houston, the Menil Collection by Renzo Piano with Richard Fitzgerald & Partners (see May '86, page 84). In nominating de Menil for the honor, her sponsors wrote, "She is not only a patron of architecture, she is an active participant in the designing process that represents the finest tradition of patronage."

• Jorge Glusberg, art and architecture critic and writer in Buenos Aires. In the late 1960s, Glusberg organized a nonprofit institution that promotes a wide range of interdisciplinary activities for architects, artists, critics, and academicians. He also serves as cochair and a frequent lecturer at the International Center for Advanced Studies at New York University.

• Donalee Hallenbeck, executive director of the San Diego Chapter/AIA. Over the past 10 years Hallenbeck has been instrumental in the chapter's threefold growth in membership. She has directed a residential design awards program with *San Diego Home and Garden* magazine and an educational program for local grade school students.

• George Watts Hill Sr., chairman of the board of Central Carolina Bank, Chapel Hill, N.C. As founding secretary of the Research Triangle Foundation, he was central to the acquisition of 5,000 acres of land between the participating universities and was influential in assuring the quality of its development.

• William Houseman, journalist and design and environmental consultant. Houseman wrote for *Life* and *Look* magazines and later served as executive editor of *House and Garden* for 12 years before becoming editor of *Architecture Minnesota.*

• William J. LeMessurier, engineer and chairman of LeMessurier Consultants Inc. in Cambridge, Mass., cited by his sponsors as "a peerless contributor, strengthener, and advocate" of architecture and architects. Among the engineering inventions he conceived and developed are a precast concrete high-rise housing system, the staggered truss system for high-rise steel structures, and the tuned mass damper system used to reduce motion in tall buildings. He was also a founding trustee of the Boston Foundation for Architecture.

• Shirley J. Norvell, executive director of the Illinois Council/AIA. Active in state and local issues relating to design, Norvell established a computer-based monitoring

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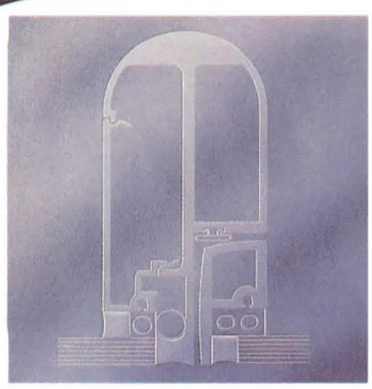
C R Y S T A L I N E

Entrance and Framing System



A glass smooth exterior.
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The Institute *from page 36*
system for pending state legislation and helped organize the Illinois Architects Political Action Committee.

• William G. Reynolds Jr., vice president for government relations and public affairs of the Reynolds Metals Co., Richmond. Reynolds was cited for his role in continuing the company's interest in architecture and the environment through innovative aluminum products and applications for the construction industry.

• Carl Sapers, a Boston attorney who for nearly 30 years has represented a substantial number of architecture firms. He has served as general counsel to the AIA chapters in Massachusetts and in 1969 was appointed general counsel to NCARB. An adjunct professor at Harvard, Sapers developed and continues to teach a course for engineers and architects on legal problems in the construction process.

• Deborah Sussman, graphic designer and founding partner of the Los Angeles design firm Sussman/Prejza & Co. Inc. After several years as art director in the office of Charles and Ray Eames, Sussman opened an office with her husband, architect and planner Paul Prejza.

• Linda Ervin Young, executive vice president of the Kansas City Chapter/AIA, who helped organize the Kansas City Architectural Foundation and now serves as chair of the Council of Architectural Component Executives.

Sixty-Four to Be Invested as AIA Fellows at Convention

Sixty-four members of the Institute will be invested in the College of Fellows May 16 at the AIA convention in New York City. Fellowship is conferred on members of 10 years' good standing "who have made significant contributions to the advancement of the profession in one or more of the following areas: architectural practice, construction, design, education, government, industry, historic preservation, literature, public service, research, service to the profession, or urban design."

The AIA jury of fellows was chaired by Jack DeBartolo Jr., FAIA, of Tucson, Ariz. Other jurors were Melvin Brecher, FAIA, Philadelphia; Robert Harrison, FAIA, Jackson, Miss.; Robert Jones, FAIA, Tulsa, Okla.; Samuel A. Anderson, FAIA, Richmond; Ellis W. Bullock Jr., FAIA, Pensacola, Fla.; and William H. Kessler, FAIA, Detroit.

The new fellows are:
Stephen N. Abend, Kansas City, Mo.
Jon P. Andrews, Pittsburgh
James H. Anstis, West Palm Beach, Fla.
Royden S. Bair, Houston
Gregory S. Baldwin, Portland, Ore.
Ronald G. Bowen, Madison, Wis.
Charles S. Braun, Maitland, Fla.
Michael P. Buckley, Hartford, Conn.
Charles E. Burgess, Houston

Allen Freeman

Approved last year by the AIA board of directors, the fellows' pin, available to all fellows who make a $50 minimum contribution to the College of Fellows.

John J. Castellana, Bloomfield Hills, Mich.
John J. Conroy, Houston
Richard B. Cook, Chicago
Daniel J. Coolidge, Boston
Raniero Corbelletti, State College, Pa. (to be honored posthumously)
George M. Crandall, Portland, Ore.
Martin W. Crennen, Helena, Mont.
Arthur Duerschner, Lincoln, Neb.
Stanton Eckstut, New York City
James E. Ellison, Washington, D.C.
Kenneth John Filarski, Providence, R.I.

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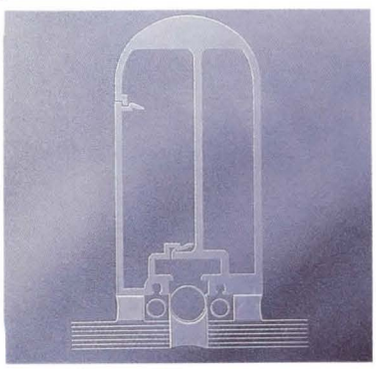
C R Y S T A L I N E

Entrance and Framing System



A softly sculpted interior.
Inside, new Crystaline from Kawneer presents the rounded profile of radiused horizontal and vertical framing members only 2″ wide and 4″ deep. Snap-on head/sill members facilitate installation of interior trim, carpet, and ceilings. A full palette of color finishes including the traditional anodized makes Crystaline the choice for versatility. And the visual drama increases with through-the-glass mounted Architects' Classic Hardware from Kawneer for single-source aesthetics. Crystaline. For a great look that depends on where you're looking.

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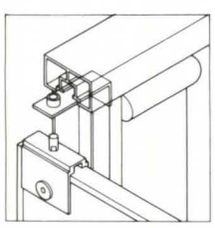
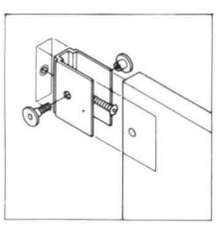
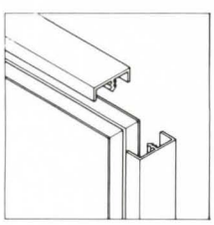


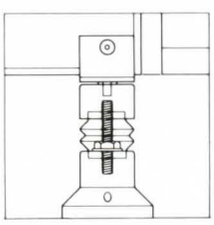
The top hinge incorporates a hinge pin which locates with a nylon bush in the hinge bracket. The hinge is factory fitted. Black rubber bumpers are fitted to the top and bottom of door jambs.



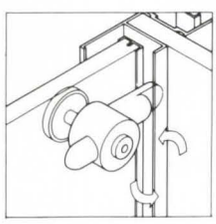
A pre-drilled epoxy coated aluminum wall bracket which is plugged and screwed to the wall.



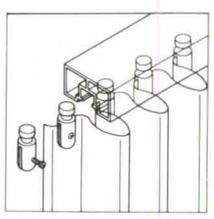
The non-removable extruded aluminum edge trim is available in anodized or epoxy powder coated aluminum. Plastic laminate panel facing or to specification.



Adjustable foot with screw adjuster hidden by bellowes-type sleeve. Made from black glass-filled nylon, it also acts as the hinge pivot.



Black glass-filled nylon Lotus lock body with a red rubber bumper incorporating an emergency release facility.



Black glass-filled nylon curtain runners which are non-removable *once the headrail* is fitted.

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AIA's Vision 2000 Program Attempts to Chart the Future

The United States is entering an era of rebuilding, suburban areas are becoming urban centers in their own right, American life runs in roughly 30-year cycles and is entering a renewed phase of idealism, and over the next few decades women architects will become commonplace although still in the minority, according to AIA-sponsored research.

In pursuit of a clearer picture of what architects would like to see in their profession in the coming decades, AIA has identified more than two dozen trends in six general areas as the beginning phase of Vision 2000.

Vision 2000 is a multiyear program intended to "define the architectural profession's goals and develop a strategic plan to implement these goals," according to the 1986 AIA convention resolution launched by the New York State Association of Architects/AIA.

Three corporate sponsors have committed financial and technical resources to the research, which will be supplemented by two subsequent phases: a survey by pollster Louis Harris, and a roundtable of distinguished professionals.

With help from Cahners Publishing Co., IBM, and The Merchandise Properties Inc., AIA research consultants have identified social, technological, esthetic, economic, environmental, political, and professional trends that are likely to affect the profession in the early years of the 21st century. The findings are expected to be available this June.

The second major information-gathering effort was started last month by Louis Harris & Associates. The polling firm, famous for its forecasting of Presidential elections, will survey 200 persons identified as experts influencing the development of architecture: architects, government policy makers, educators, corporate executives, institutional clients, economists, AIA award winners, developers, and anthropologists. Harris will present the preliminary results of this poll May 18 at the AIA convention in New York City.

The last phase of Vision 2000 for this year is a conference of architectural educators, AIA regional directors and officers, national AIA committee leaders, allied professionals, and representatives of collateral organizations, to be held in September in Alexandria, Va.

News continued on page 44


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Design

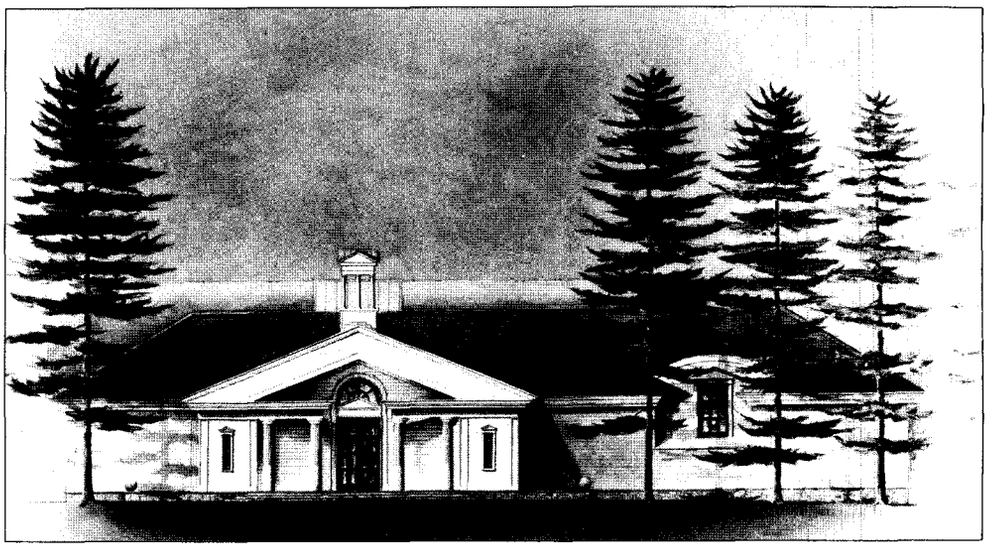
Stern Wins Limited Competition For Norman Rockwell Museum

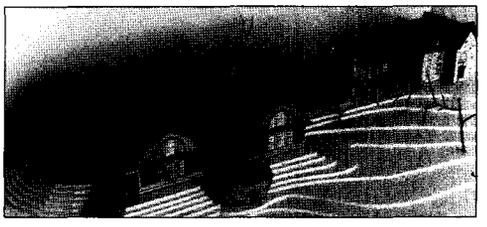
Robert A.M. Stern Architects of New York City has been selected in an invitational competition to design a new building for the Norman Rockwell Museum in Stockbridge, Mass. The other participants in the limited competition were Hardy Holzman Pfeiffer Associates of New York City and Thomas Gordon Smith of Chicago.

Stern's winning proposal (with William Georgis as project architect) has a white clapboard exterior with green trim and a simple, classically inspired pediment announcing the main entrance. The new museum is set partially into a sloping hillside with the south side opening onto a wide terrace and garden. The scheme also includes a series of gable- and hip-roofed pavilions in Vermont mottled green natural slate. The lighting system incorporates both natural and artificial lighting, and interior finishes are oak and slate floors with painted and natural-finish trim and moldings.

Hardy Holzman Pfeiffer's scheme, with a series of peaked roof wings accented with dormers and cupolas, recalls vernacular farm buildings of the Berkshire region.

In the proposal by Thomas Gordon Smith, classical forms are combined with early-American architectural elements, and interior gallery spaces are diverse, including an elaborate rotunda, small, intimate galleries, and a basilican gallery.

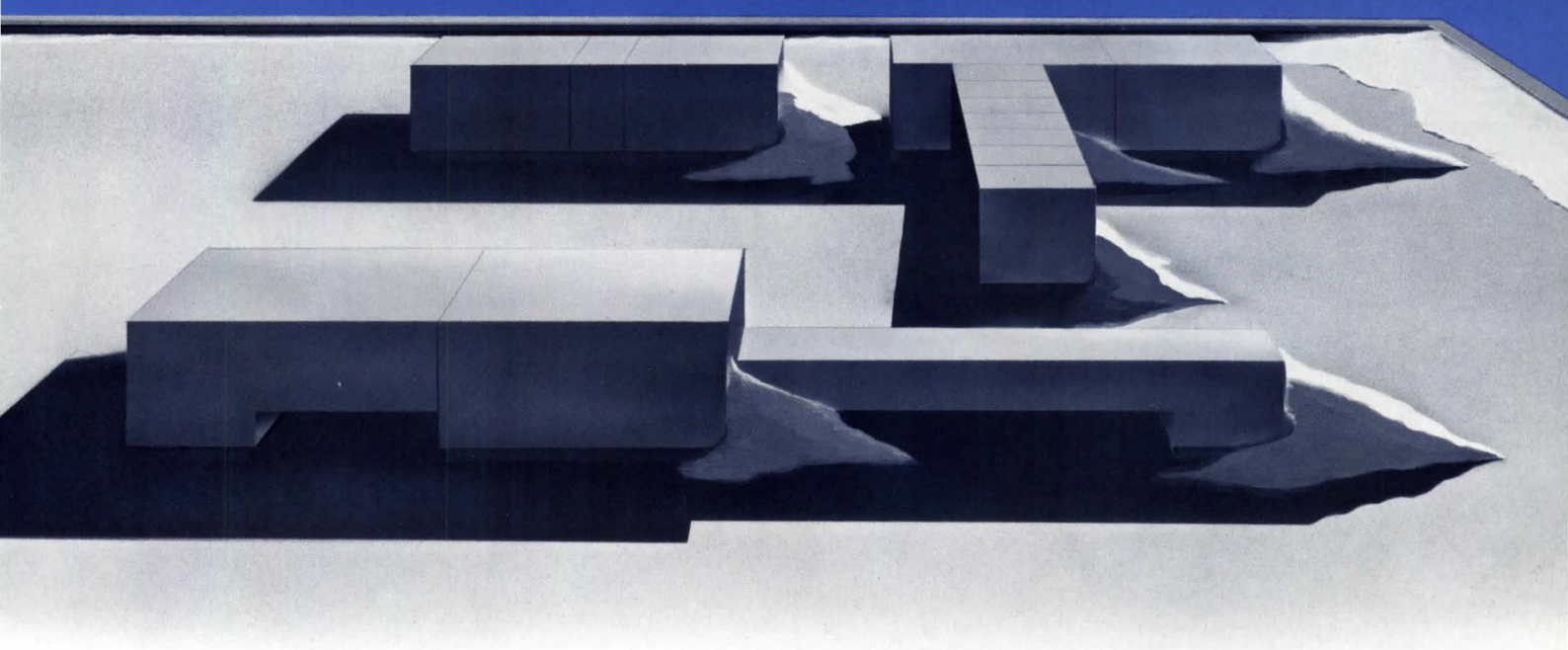




Above, Stern's rendering of the main entrance. Right center, Smith's scheme; bottom, Hardy Holzman Pfeiffer's design.

The new building will be constructed at Linwood, a 40-acre site obtained by the Norman Rockwell Museum in 1983. An early-Victorian marble house located on the property has been converted into administrative offices, and Rockwell's studio has been moved to the site from its original location in the center of Stockbridge. *News continued on page 46*

IT'S 2001 DO YOU KNOW WHERE YOUR R VALUE IS?



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DEATHS

Tony Callison, AIA, founder and president of The Callison Partnership in Seattle, died in January after a short illness. He was 55. His firm has been involved with such projects as Seattle's Pacific First Center; the Park Place office building, built in conjunction with Seattle's Freeway Park; and the recently completed Inn at Semiahmoo in Blaine, Wash. Callison received his B.A. in architecture from the University of Washington and later served on the school's advisory council.

Irwin Chanin was a New York City architect and founder and president of a family concern that erected flavorful Manhattan skyscrapers and theaters in the 1920s and early '30s. Notable among these was the 56-story Chanin Building at East 42nd Street and Lexington Avenue, a 1929 office tower by Sloan & Robertson decorated with a spirited combination of floral and angular bas reliefs. Until January Chanin continued going daily to his offices, which remained largely unchanged for nearly 60 years, in the building bearing his name. He died in late February at the age of 96. A native of Brooklyn, Chanin in 1915 received a degree in civil engineering from the Cooper Union. Sixty-six years later the Cooper Union named its school of architecture after him. With his brother Henry, Chanin started the Chanin Construction Co. in 1919. The company built six legitimate Broadway theaters, including the Mansfield (now the Brooks Atkinson), the 46th Street, and the Majestic, and the elaborate Roxy movie palace. Chanin designed and built the 1931 art deco Centry Apartments on Central Park West and lived there for more than half a century. The streamlined Majestic Apartments of 1930, also on Central Park West, are credited to Chanin's architectural office as well.

Herschel A. Elarth, FAIA, professor emeritus of architecture at Virginia Tech, Blacksburg, died in January at the age of 80. During his tenure at Tech, he served as national membership chairman for the Association of Collegiate Schools of Architecture and was active on the education and practice committees of the Virginia Society/AIA, which gave him a distinguished service award last year. Elarth earned his undergraduate and graduate degrees in architecture at the University of Illinois.

George M.D. Lewis, AIA, practiced with the Scranton, Pa., architecture firm of Davis & Lewis for more than 65 years. He designed and built numerous Scranton-area buildings including banks, churches, schools, and community and corporate offices. He received his bachelor's and master's degrees in architecture from the University of Pennsylvania. He died last October at the age of 96.

J. Blake Mason, AIA, principal with the architecture firm ARCH-1 in San Mateo, Calif., died in January of cancer at the age of 33. He designed data base systems and facilities management software for Visa-USA and other corporations and developed more than 200 data base management programs. As a member of AIA's computers in architecture committee, Mason was project designer for the national AIA contact data base. Mason earned his bachelor's degree in architecture at the University of California, Berkeley, and later studied computer data base theory at the University of Manchester, England.

BRIEFS

Call for Foreign Policy Proposals
The Foreign Policy Institute of the Johns Hopkins School of Advanced International Studies is soliciting original ideas to devise an agenda for U.S.-Soviet relations for the next U.S. Administration. Each proposal, of 500 to 800 words, should articulate an initiative limited to one aspect of architecture and design, politics, the military, or economics. Proposals should be specifically action-oriented. The deadline is May 15. Send proposals and a short biography to: Simon Serfaty, Johns Hopkins Foreign Policy Institute, 1619 Massachusetts Ave. N.W., Washington, D.C. 20036.

Women in Architecture Exhibition
One hundred years of American women in architecture is the subject of a traveling exhibition, "That Exceptional One: Women in American Architecture, 1888-1988," which will open May 15 at the Jacob Javits Convention Center, New York City, in conjunction with the AIA convention. Exhibition materials will include reproductions of artifacts from the women's building at the 1893 World's Columbian Exposition, photos, correspondence, academic catalogs, and architecture exams. For more information, contact Laurie Anderson, (202) 626-7572, or Joy Brandon, (202) 626-7464, at Institute headquarters.

Masonry Design Winners
The Masonry Institute of Michigan has honored five Michigan projects and their architects for excellence in masonry design:
- Harley Ellington Pierce Yee Associates, Southfield, for the GMF Robotics World Headquarters and Technology Development Center in Rochester Hills.
- Luckenbach/Ziegelman & Partners Inc., Birmingham, for 260 Brown St. in Birmingham and the University of Michigan Administration Library/Computing/Executive Center in Ann Arbor.
- Kenneth Neumann/Robert Greager & Associates, Southfield, for the B.O.C. Powertrain headquarters in Brighton.
- Robert C. Wakely Jr., AIA, Farmington Hills, for additions to and renovation of the Grosse Pointe Shores Muncipal Building. □

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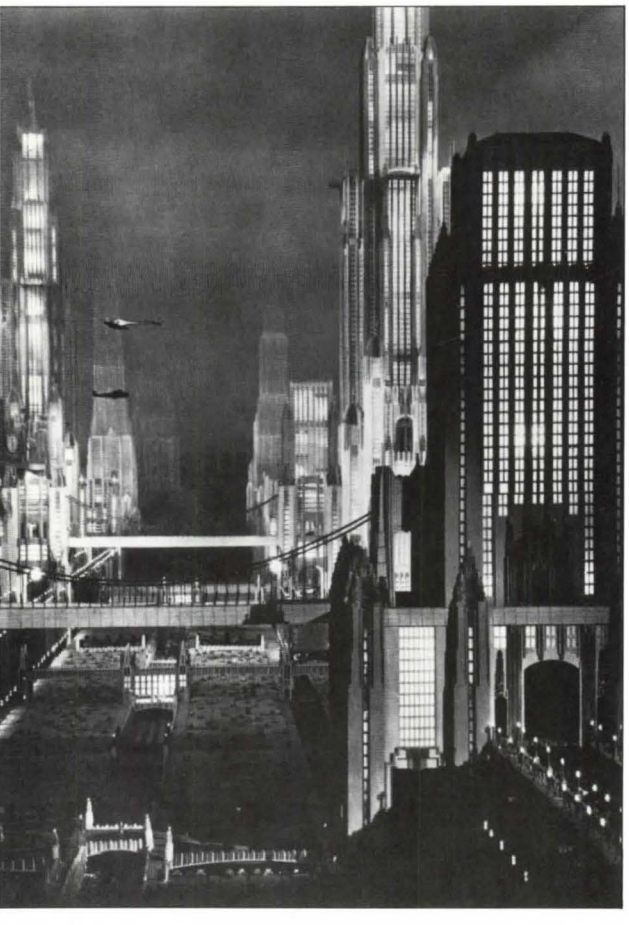
BOOKS

Two on New York, As Through a Glass Romantically



International Museum of Photography at George Eastman House

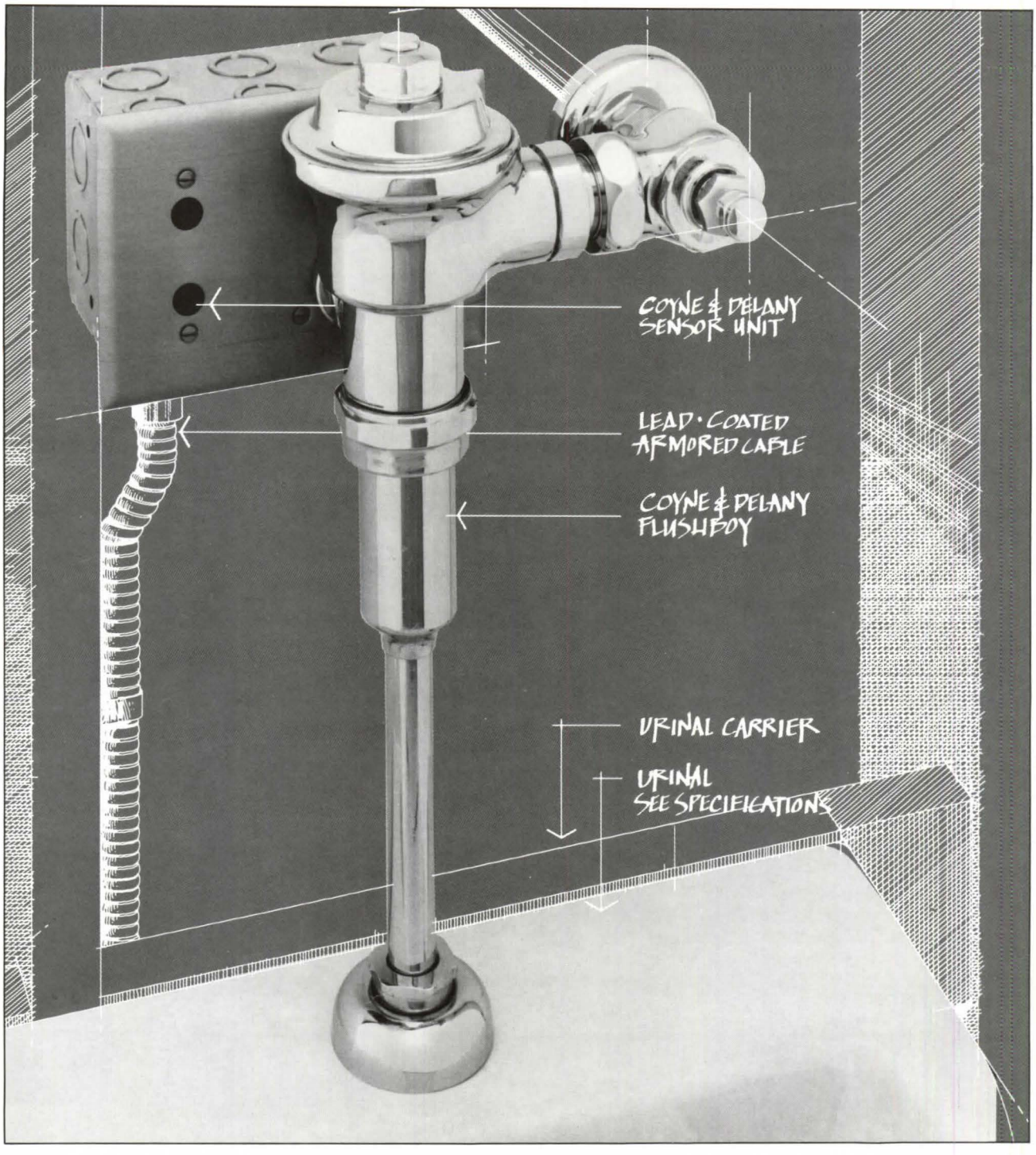
Left, a still from 'Just Imagine,' Hollywood's 1930 vision of New York in 1980, with 200-story skyscrapers and dirigible docks. Above, 'Steel Worker, Empire State Building,' a 1931 photograph by Lewis Hine.

New York 1930: Architecture and Urbanism Between the Two World Wars. Robert A.M. Stern, Gregory Gilmartin, and Thomas Mellins. (Rizzoli, $75.)
New York: A Physical History. Norval White. (Atheneum, Macmillan Publishing Co., $29.95.)

New York! New York! How can one encompass within a book all the variety, energy, chutzpah, sophistication, degradation, and charm, the attraction and the repulsion of our number one city? Reducing the physical to the verbal and pictorial is difficult enough, but how New York? The prize for length—and substance—goes to Isaac Newton Phelps Stokes, a gifted architect (the designer of, among other buildings, the small St. Paul's Chapel, 1907, at Columbia University, which stands as a jewel amid all of Charles McKim's Roman pomp) who authored between 1915 and 1929 *The Iconography of Manhattan Island, 1498-1909.* This magnificent project took Stokes only six volumes and more than 2,000 pages to get the story up to 1909. The prize for short substance goes to E.B. White's *Here Is New York* of 1949. A great stylist and writer for years on *The New Yorker,* White took only 50 pages to capture the city. [In this issue we attempt the feat in 40.—Ed.]

New York 1930: Architecture and Urbanism Between the Two World Wars, written by Robert A.M. Stern, FAIA, along with Gregory Gilmartin and Thomas Mellins, is the second volume in a series (*New York 1900* came out in 1983) that will treat the city at 30-year intervals. As a comprehensive look at New York's built environment in the period 1918-1941 the book is a prodigious feat. It measures 9xll inches and is well over two inches thick, weighs about six pounds, and has 847 pages and at least double that number of illustrations. These illustrations, frequently large-scale, include vintage photographs (by some of the great photographers of the period—Samuel Gottscho, Bernice Abbott, and Sigurd Fischer), renderings, and plans. They support a text that relies extensively on judgments and views by writers, critics, and architects of the period. The approach is encyclopedic, covering grand civic buildings and tiny shops, great complexes like Rockefeller Center and the 1939 fair, "The World of Tomorrow." Also

continued on page 52



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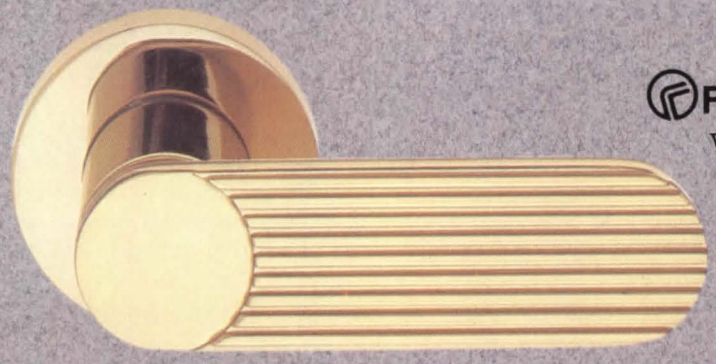

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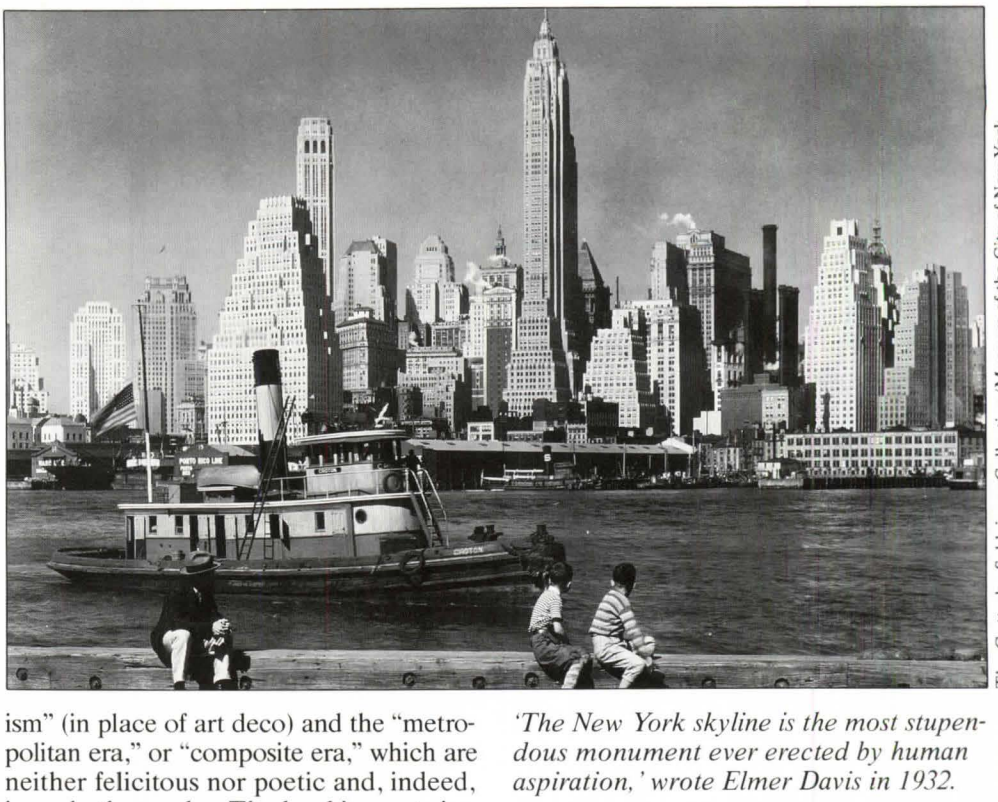
Books *from page 49*
included are treatments of the city in movies and paintings and by critics, and extended discussions of three of the leading architectural performers: Raymond Hood, Ralph Walker, and Ely Jacques Kahn. The boroughs—Brooklyn, the Bronx, Queens, Staten Island—and the expanding suburbs are included, along with some consideration of parkways and new playgrounds like Jones Beach. So comprehensive is *New York 1930* that criticism is admittedly trivial.

Clearly the premise of *New York 1930* is "more is more," which in a sense plays off of the book's subtheme, "The Twilight of Civicism." The authors assert that the older ideal of civic life summed up at the turn of the century by the City Beautiful and the "American renaissance" ethic, a period of *noblesse oblige*, disappears after World War I, and a cynicism of "convenience and commerce" emerges in which anything goes and the city is sold out. This theme is so buried under an avalanche of wonderful material that it becomes muted, and the book probably will become more a resource for information than a hotly debated thesis.

Not considered is strong evidence that property values and the dollar always have been the governing force, or the moxie, of New York and of all American cities. The authors also have a penchant for inventing terms such as "modern naturalism" (in place of art deco) and the "metropolitan era," or "composite era," which are neither felicitous nor poetic and, indeed, impede the reader. The book's great size, which is a virtue, is also a problem since it means that other than reviewers and specialized historians few will really read it. Instead, it will be a reference resource. Frustrating to those who would use the book as a resource is the absence of a page number key for the footnotes that appear in 70 pages at the rear. Being lost amid these several thousand footnotes is not unlike being a wayward traveler in the Union Square subway station. There is little attention to the low life; there are some housing projects, a few neon signs, but no delicatessens. Architecture to the authors



The Gottscho-Schleisner Collection/Museum of the City of New York

'The New York skyline is the most stupendous monument ever erected by human aspiration,' wrote Elmer Davis in 1932.

always has a capital A. But, as noted above, these are really minor carpings of a book reviewer, for Stern, Gilmartin, and Mellins have gone a long way toward providing a comprehensive history of New York's built environment and make a strong case for a full knowledge of that ambitious and yet ambiguous and confusing city. These volumes bid fair to surpass Stokes's earlier triumphal and seminal study.

Norval White's *New York: A Physical History* tries in about 300 pages to encompass the entire saga. White, a practicing architect and teacher, has already done great work with the *AIA Guide to New York City* (1968, revised edition 1978), co-authored with Elliot Willensky, which remains the best, most useful, and best laid out architectural guidebook produced in America. White structures his new book partially by chronology and partially by physical themes such as housing and transportation. However, the book too frequently becomes a catalog of one or two sentences that say this architect did this, or that, with no analysis. Also, the illustrations are a problem: although numbering about 250 they are generally too small, frequently poorly composed, and poorly reproduced. Still, as a one-volume introduction to New York's history by a knowledgeable architectural observer, the book is good. White includes all sorts of arcane yet wonderful detail, such as one of Skidmore, Owings & Merrill's earliest works—Nathan's hot dog stand in Times Square.

From a larger perspective both of these books illustrate a common theme of architectural and historical writing of the past several years. Twenty-five years ago the American architectural city was Chicago. Now, after a fling with Las Vegas and Los Angeles, we are in New York. Our perspective has shifted, we are more tolerant and inclusive; hot dog stands, setback skyscrapers, and Beaux-Arts monuments make up the city and are worthy of study. But there is also a new ideology in the making. A veil of romantic haze has dropped over the earlier American city. In essence this ideology encompasses a romantic vision of civic virtue, noble public men discoursing like Socrates amid classical grandeur at some mythic time in our past. This ideal appears absent in our modern Sodom. (And this reviewer pleads guilty to having contributed to the romanticism.) But New York has always contained—in addition to all of its beauty, nobility, and charm—some of the most degrading, despicable, and horrid conditions of life imaginable. Men, women, and children were ennobled by the urban condition, but also were chewed up and spat out. New York! New York! We still need to encompass you, and understand you.—Richard Guy Wilson

Mr. Wilson is a professor of architectural history at the University of Virginia and author of several books.

The Faber Guide to 20th Century Architecture: Britain and Northern Europe. Lance Knobel. (Faber & Faber, 39 Thompson St., Winchester, Mass. 01890, $29.95.)

This paperback, an awkward size in that it is broader than it is tall and hard to hold, describes, appraises, and illustrates about 300 buildings of the 20th century in Great Britain, France, West Germany, Scandinavia, Holland, and Belgium. The arrangement is by country and, within country, by city. The author says the list is highly selective, and the basis for selection includes the building's influence on other architecture and its importance in the development of a particular style. Or, an edifice might be included simply because it was an interesting example of a specific movement, style, or trend.

Design Office Management. Fred A. Sutt, ed. (Arts + Architecture Prem. $35.)

An anthology of articles and case studies comprises this reference guide to all aspects of design office management, from setting clear goals to ownership transition. The authors represent a wide range of consultants and professionals, each an expert in the management area covered. Essays presented include "Making Money at Design: A Case Study," "Cold Call Blitzing," "Joint Ventures: Happy Marriage or Sudden Death," and "How to Win Arguments." An index, by author and topic, supplements the text. □

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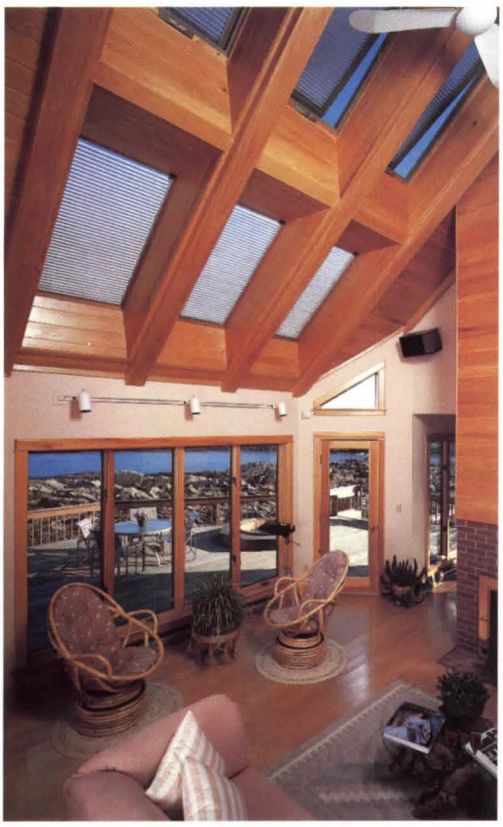

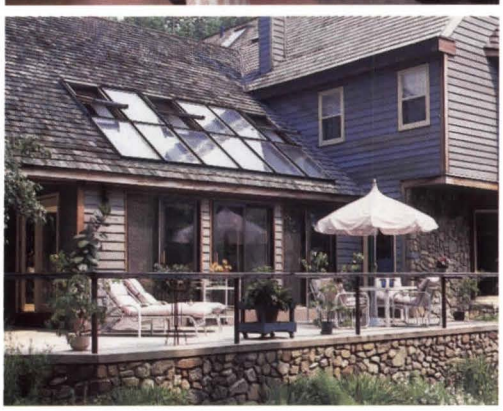

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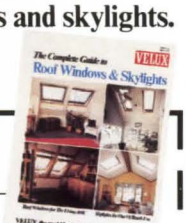

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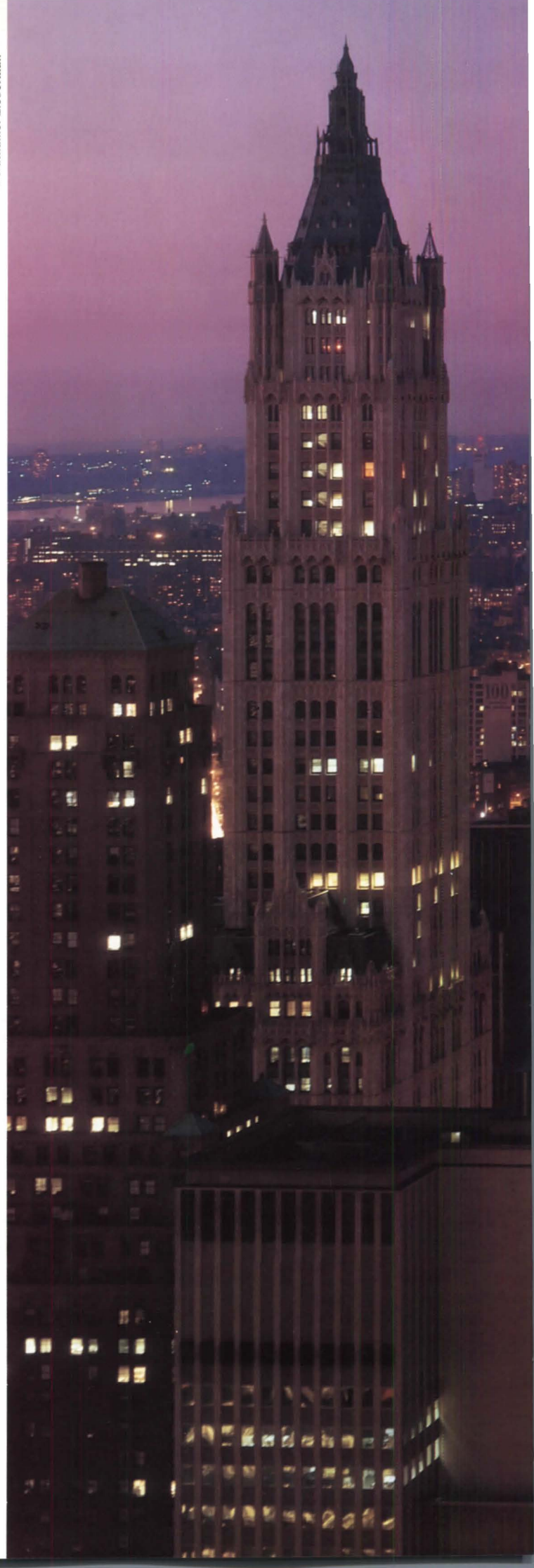
ARCHITECTURE

New Yorkers on New York

This is, of course, the issue we do each year on AIA's convention locale. Doing one on New York City was a daunting prospect. The city seemed too big, too complex, and too diverse to anywhere near capture in a single issue. So we decided to make the task more manageable through two devices. The first was to limit the issue largely to Manhattan. The second was not to launch into the endless research that would be necessary to construct our own coherent view of the city, but to solicit the views of those who not only knew the city well but lived with it daily.

So we invited a group of New Yorkers (some architects and some not), chosen for their acuity and variety of vantage points, to answer in essay form three questions in relation to three subjects. The questions were, "What about the city do you cherish, what do you hate, and what do you miss?" The three subjects to which they were applied were "individual works of architecture, places or precincts of the city, and the quality of city life in general." The illustrated responses follow, and we are endlessly grateful to the authors, who did them so caringly.

Having just tackled the nation's largest city, we are ready to turn to its smaller communities. This is to invite submissions for our October issue, which will concentrate on buildings in places with 50,000 population or less. Any kind of building is eligible, submissions need take no particular form (anything that communicates the design is welcome), and the deadline is July 15.—*D.C.*



© Nathaniel Lieberman

Walter McQuade

'Lights...like sparks thrown off by the abrasion of competitive ideas.'

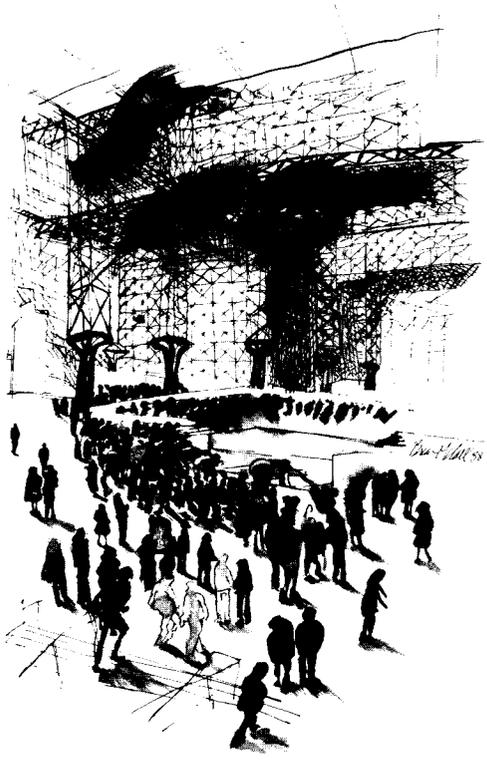
Springtime in New York, after bleak February and before sodden August, is a time to cherish this great, grating city. It is a season for strolling on the sidewalks of Fifth and Madison, Greene Street and upper Broadway, enjoying the various apparel accents of the many different species of people here, from snugly smug to outright wild. In this season Manhattan is at its best; its citizens are happy—if not amiable.

Even in springtime, however, the architectural vernacular of the United States' common-law capital city is quite mediocre, as it has always been. It is an architecture of greed and pomp. The sheer mass of it is what is most stirring, seen in the form of the jagged Manhattan skyline, or from an airliner circling slowly on a clear evening on the approach pattern to LaGuardia. The millions upon millions of lighted windows below re-adjust themselves expectantly, conveying the urgent mental quality of the place. The lights are like sparks thrown off by the abrasion of competitive ideas and passions. And you see how the harbor cradles the city. New York City is officially 25 percent water, with 378 miles of wet frontage along the edges of the five widespread boroughs: middle-class Queens; the Bronx, with a few rich neighborhoods and more that are squalid; Brooklyn, some upper, lots of lower; Staten Island, the house builders' pillaging ground; and tense, sophisticated Manhattan, where AIA conventioneers will stay—and will notice the homeless.

In Manhattan, standing out from the sea of faceless apartment houses and endless shelves of canned office space, are the city's architectural classics, among them a number of fine post-World War II buildings. These include, for me, Mies's great lyric on Park Avenue, of course, Saarinen's CBS, Stubbins's Citicorp, Yama's trade towers, once maligned by the critics as impure modern, Roche's spectral U.N. Plaza, Pelli's new crystal palace in

Mr. McQuade, who serves on the editorial board of Fortune *magazine, was a senior editor of* Architectural Forum *and design critic for* The Nation *and* Life.

Manhattan with illuminated 1811 city hall in right foreground.



Battery Park City, and a few others. These are all by out-of-town architects, you'll notice, so, to be fair, add Pei's New York University apartments, and maybe his convention center [left]. You'll notice too that this list is heavy with unfashionable high modern. Sorry, but the best of the new comes late to New York. It always has, since the Beaux-Arts decades.

But my favorite of all the city's structures is easy to name: the Brooklyn Bridge, which proves that even a crooked political boss, Tweed in this case, *can* put up great works. Some night if you have trouble sleeping, go down and look at it just before dawn, from the Fulton Fish Market, as the rigging of the bridge becomes visible against the lightening sky. It is a beautiful sight.

When John Lindsay was mayor, the community planning boards, which had been called for when the city's planning commission was first established in 1938, were finally set up, giving neighborhoods platforms to argue their own physical futures. This has proved to be hellishly annoying for City Hall, but has helped the city keep a little scale—a *little* scale—and has also saved some virtuous old buildings for historical flavor. New York architects are very good at recycling. The landmarks commission has done well too, although the developers are now grumbling that the commission has already designated too many buildings as worth saving, so stop! I hope they don't.

V. S. Prichett, the eminent British critic, wrote, "By the 18th century Europe had discovered that cities must be designed before they are extended: mere pragmatism and planning will not do. It absolutely will not do if left to engineers, soldiers, or what are called developers."

In New York developer is by now a dirty word, its practitioners seemingly bent on uplanning the city, blocking its interior vistas, creating a kind of stolid chaos, by hook or by crook. For 15 years I lived in Greenwich Village [left], across the street from an apartment house where a Tammany Hall bigwig lived, and while I drank my breakfast coffee I used to watch the chauffeured limousines loitering discreetly, while their owners presumably broke bagels with the boss upstairs and settled little things. Perhaps a variance? An upstandingly honest cab driver once turned in a manila envelope containing, as I recall, more than $100,000 in cash, which he'd found in his back seat after stopping at that address one night. Had the boss been out on a house call? He never laid claim to the envelope.

This is another scandalous time in city history. Mayor Edward I. Koch's appointees and political cronies have been decorated with federal indictments that might have appalled Tweed. Even a former Miss America, who played The Woman At His Side in Koch's election campaigns and was then rewarded with an appointment as civic culture commissioner, has, it is alleged, taken advantage of her position. Koch's line while he was climbing in politics was, "How'm I doing?" He hasn't been asking that much lately.

You may remember that a limited competition was held by the city for developer-architect teams to build, in a monstrous violation of zoning regulations, a combination office building-condo on 1.9 acres owned by the city at Columbus Circle across from the southwestern corner of Central Park. The winning developer bid $455 million for the parcel—with fat tax abatements promised, naturally; the less said about the bombastic building design the better. At his press conference announcing the winner, the mayor said, "Design is part of it. Other aspects are part of it as well."

As I write this, a court action by the Municipal Art Society has caused the floor area ratio tentatively to be lowered from 18 to 15. The original plan was for a bulky building 62 floors tall, which would result in a considerable shadow cast across Central Park. Mayor Koch still favors it and is appealing the court decision.

In short, the city just now does not have a fine eye for architecture. There are too many other aspects. It makes me think of a story told by Bill Caudill. He was in Miami Beach just after a tropical hurricane, and asked a hotelier if his building had suffered any damage in the blow. "No, not really," was the answer. "The architecture all blew off, but the building is O.K." □

Tower and rigging of the Roeblings' Brooklyn Bridge.

Paul Moore Jr.

'An increasing gap between the very rich and the very poor.'

I grew up in and around New York, and after wanderings as far afield as New Hampshire, New Haven, Indianapolis, Washington State, and Washington, D.C., I came home to the city I hope I shall never leave. I remember so well when I was living in Indianapolis, landing at La Guardia, getting out of the airplane and taking a long, deep sniff of that wonderful, polluted atmosphere. My pulse would race, my adrenaline would flow, and I felt I was living at a new intensity.

It is this vitality and power that I love most about New York. It is a city that draws on every resource in your being to live, to work, to carry out your vocation. It is a terribly cruel city to those who are poor or alone. It's a city where people play hardball—where the track is very fast. It's a city where bridges have birthday parties. If you don't like running, don't come to New York.

On the other hand, as has often been said, New York is a city of neighborhoods. I live on Cathedral Heights, 110th and Amsterdam, in a beautiful cathedral close [left], with trees and grass and peacocks and chickens and dogs and cats and children and deans and canons and bishops—Barchester Towers in Harlem, unbelievable. We look over the great expanse of north Manhattan and know that underneath that panorama live people who are in despair and who are losing the struggle for survival. Just south of 110th Street is Manhattan Valley, where Hispanic people are struggling to live and succeed in this new strange place. Across the street is one of the great hospitals of the city, St. Luke's; and across another street, a corner of Columbia University. Despite gentrification on the West Side, our community still has a glorious pluralism, and Broadway and 110th Street, known as Cathedral Parkway, have little stores where they know you.

I also love Chelsea, where I went to seminary on Ninth Avenue and 21st Street. Again, a little enclave that has remained virtually unchanged over the last 100 years. But I also love the old Times Square—can you believe it? I love the sleaze, the raw side of humanity, the place where a little bit of each of us dwells; and where desperations, frustrations, humiliations, and disasters coexist within a block of the greatest theater in the world.

And how about the Bronx? There the incredible vitality of the city is beginning to bring rebirth to the arson desert where Jimmy Carter and Ronald Reagan both promised urban renewal—promises neither fulfilled. Instead, the people of the South Bronx themselves by sheer grit and perseverance have begun to gather enough power to bring the neighborhood back to a place where human beings can live. There are many years to go before this will be accomplished, but the corner has been turned.

What do I miss in New York? I miss the old Fifth Avenue; I miss being able to see Grand Central without the Pan American Building blurring its silhouette; I miss being able to move in safety at any time of night in any part of the city. I remember as a youngster going to nightclubs in Harlem with a total sense of security. I miss sunshine on the midtown streets; I miss the old 52nd Street with the nightclubs full of jazz; I miss Benny Goodman at the Pennsylvania Hotel.

But whatever the changes and the deaths we regret, the spirit of New York is more powerful than ever. But its greatest danger is the increasing gap between the very rich and the very poor that denies the symbol of our beloved city, the Statue of Liberty. □

The Rt. Rev. Mr. Moore is bishop of the Episcopal Diocese of New York.

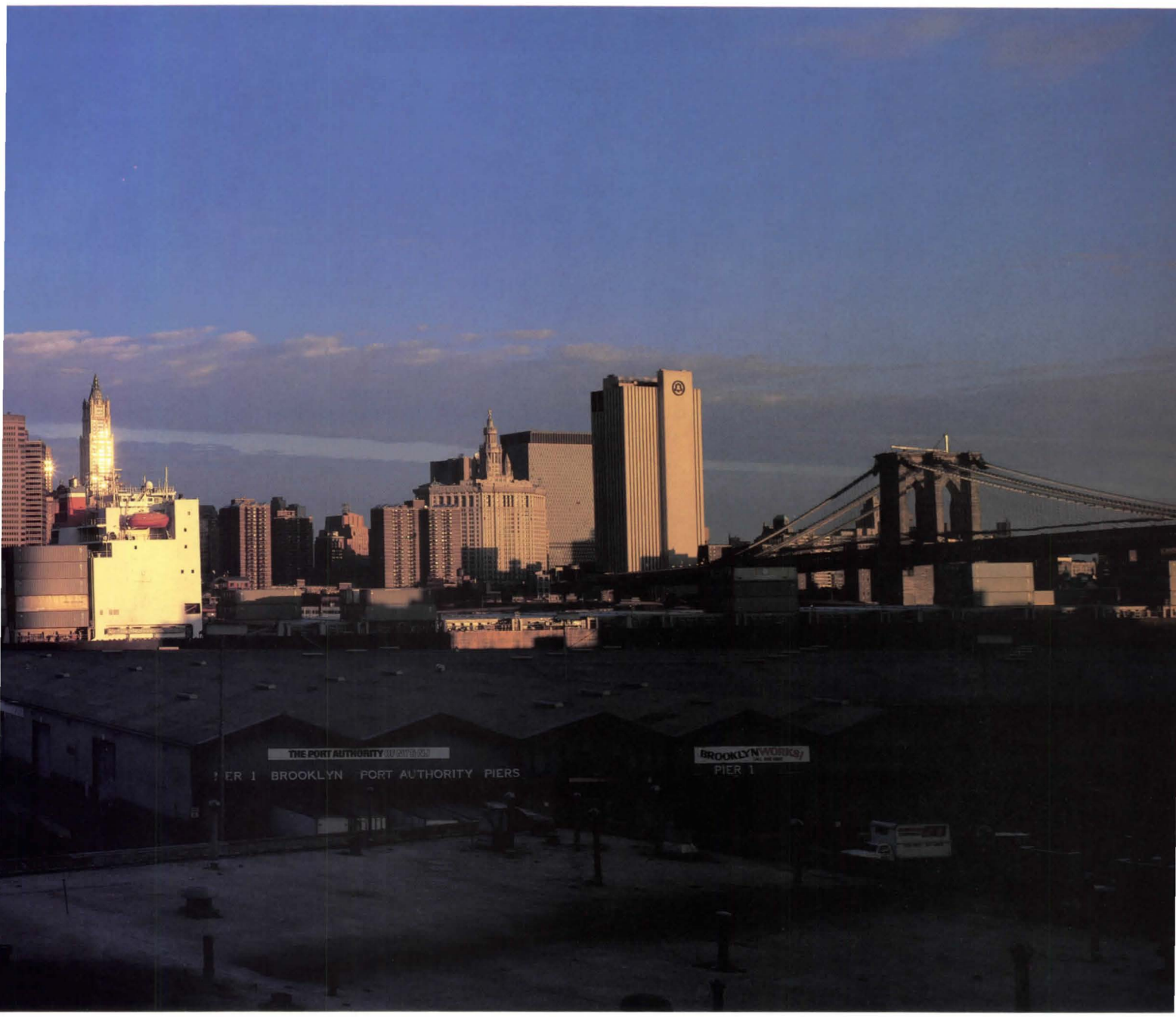
Suburban-style housing sponsored by the South Bronx Development Organization to lure back the middle class

Martin Filler

'New York is the only city I have ever wanted to live in.'

I have lived in New York City between the ages of 1 week and 6 years and from age 18 on. The 12 intervening years were spent in Camden, N.J., dreaming of a permanent return to "the City," a designation that for me and my family made further specificity redundant. New York is the only city I have ever wanted to live in, even though at many times my persistence in putting up with its increasing problems has been severely tested. During my past 22 years back in the city things have changed so much—invariably for the worse—that I fear having become one of those curmudgeonly old-timers one dreaded as a youth. This is the perfect hometown for architectural Jeremiahs.

I still recall block after complete block of miraculously sur-



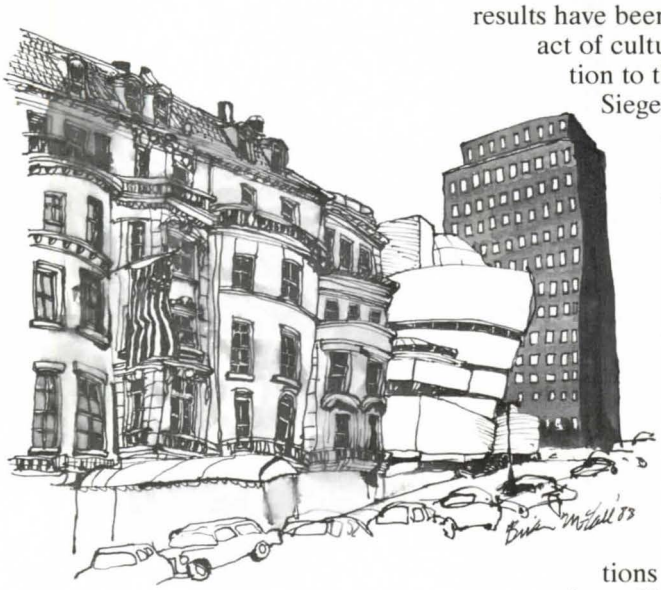
Above, downtown Manhattan and the East River from Brooklyn waterfront, with Brooklyn Bridge at right.

viving Greek revival commercial buildings in lower Manhattan, East Side and West, that retained the air of the great harbor as Herman Melville knew it. These were demolished within my memory to make way for such atrocities as the World Trade Center. It was a tragedy surpassed in its time only by the leveling of the St. Louis waterfront, another manifestation of absolutist urban removal. Subsequent efforts to recapture what was destroyed—especially South Street Seaport, a pathetic plastic pastiche of that ravaged heritage—make the loss of a rich part of New York's past all the more painful.

The suburbanization of New York is another distressing tendency in recent years. Thanks to public design policies that our self-congratulatory city planners of 20 years ago promoted with premature confidence, Manhattan is now riddled with inward-turning atriums and concourses. These are as essentially antithetical to New Yorkers' customary way of life as the open plazas that were a failed fad of the '50s and '60s. The crassly calculated trade-off of taller buildings for ficus-filled malls—unneeded, unwanted spaces stuffed into virtually every new tower to gain additional-height variances in return for these dubious "amenities"—shows how vulnerable those incentives were to exploitation by developers. The surpassingly vulgar Trump Tower is unquestionably the worst manifestation of this trend, but the very concept of the indoor mall ought to be banned from New York as intrinsically inimical to our distinctive civic style.

That used to be defined by the brilliant zoning of midtown Manhattan, with high-rise buildings confined to the north/south avenues and low-rise buildings (particularly the quintessential indigenous New York building type, the brownstone) between them on the east/west streets. That contrapuntal balance of the monumental and the intimate made even the densely inhabited heart of New York seem humane and livable. But no more: such favorite streets as West 53rd between Fifth and Sixth avenues have now been killed by the massive midblock bulks of the Museum Tower and the E. F. Hutton Building. The shops and restaurants that once gave a varied texture to the street are gone, and it seems as gloomy and institutional as a transplanted piece of Wall Street. Abuse of height variances and air rights transfers have ruined many other nearby blocks in a similar manner. One now must go to the far East 60s to get some sense of what made the former configuration work so well.

Mr. Filler frequently writes about architecture and design. He is at work on an architectural and social history of the country house in America.



The seeming determination of the city to befoul its own architectural nest has certainly met with more resistance lately, but the results have been generally disappointing. Most egregious as an act of cultural self-cannibalization is the impending addition to the Guggenheim Museum [left] by Gwathmey Siegel & Associates. It will now proceed after unsuccessful attempts to save this de facto landmark, as yet unprotected under the city's inadequate 30-year minimum-age landmark requirement. Even a century ago many buildings were built and torn down long before three decades elapsed; in New York today, that verges on the eternal. McKim, Mead & White's Pennsylvania Station, the most lamented victim of wanton redevelopment, was torn down to make way for buildings that only 20 years later are themselves now slated for destruction. The public outrage set off by the monstrous (and recently abandoned) Columbus Circle tower scheme designed by Moshe Safdie is an encouraging sign. But what about the equally detrimental concentrations of other high-rises in that same vicinity? The incredible overcrowding caused by three midblock skyscrapers clustered on one block of West 56th Street has drawn hardly a peep of protest.

It has become almost impossible to think of admirable new buildings in New York to send visiting architects to see. In the past decade we have witnessed such horrors as the Helmsley Palace plunked on top of the Villard Houses [left]; Fifth Avenue degraded by the appalling apartment houses at numbers 800 and 1001; the autistic hulk of the Marriott Marquis Hotel looming over Times Square; Philip Johnson and John Burgee's "lipstick" building at 855 Third Avenue; and the glitzy remodelings of the Rockefeller Center Concourse and the Pan Am Building lobby. These are but some of the most offensive. Fortunately, there is still much that gives architectural delight in New York. This is the city of Grace Church, Central Park, the Jefferson Market Courthouse, the Brooklyn Bridge, the Chrysler Building, Radio City Music Hall, the Municipal Asphalt Plant [bottom left], the Seagram Building, and (for the time being) the Guggenheim. Not bad for a city that allegedly has very little great architecture. For these I give thanks whenever I see them.

There is a great deal more that I miss: Steeplechase Park in Coney Island; daylight in midtown, even at high noon at the summer solstice; the old Rizzoli bookstore, gone to the wrecker's ball; the Edwardian Room at the Plaza, never properly restored after its barbarous reincarnation as "The Green Tulip" in the early '70s; the Metropolitan Museum of Art before the rampant expansion of the Hoving era; the Upper West Side before gentrification; the acoustics of Carnegie Hall before its renovation; and being able to use the subway without fearing for one's life.

But what I miss most about New York (and by this I mean Manhattan) is the disappearance of economic diversity, in no small part caused by the astounding escalation of housing costs during the past decade. Fueled by the bull market of 1982-87, it can be attributed to many other factors as well, but the effect has been devastating. New York is now a city of the rich and the poor, and the juxtapositions between the two, always a part of New York life, have become more grotesque and alarming. Nowhere is this symbolized more sadly than at Grand Central Terminal. That noble reminder of New York at the height of its Beaux-Arts civic grandeur has become a fetid flophouse for scores of the growing number of homeless. In no city in Western Europe would this takeover of a public monument be tolerated, nor, because of their governmental housing programs, would it be necessary.

Though the stock market crash of 1987 will certainly act as a corrective to a New York real estate market gone mad—and might indeed spur a new social awareness that was lost during the Greedy '80s—it will not bring back the solid middle-class backbone that made this city great. That is a loss far more disturbing than even Penn Station, and one no more easily rebuilt. □

Lewis Davis, FAIA

'In the '60s, a general commitment to make New York more livable.'

I suppose New York's most fascinating characteristic is its constant vitality. Something is always going on in this city. Even though, architecturally speaking, a lot of what has been going on the last few years has been, to my mind, questionable, I continue to feel that in its restless pursuit of change the city will always offer positive architectural opportunities.

When Sam Brody and I first came to New York and set up our own practice in the late 1950s, there was an almost heady feeling of optimism. We had been educated in the modernist traditions of architecture serving a social purpose, and we believed that our architecture could and should make a positive contribution to the life of the city. As it happened we had the opportunity, through a number of subsidized housing projects, to really change the prevailing architectural attitude toward this building type. We were young and idealistic, and no doubt we had some good ideas, but none of what we did would have been possible if the climate in New York had not been right for this kind of venture. There were a good many subsidies around; the city agencies were interested in the urban planning and design issues; and there was a general commitment to making New York more livable for its average citizens—the middle and working classes. Since housing is in many ways what the city is all about, designing subsidized housing in the 1960s and early 1970s was the most exciting and rewarding work we could have been doing.

Today's market-rate housing, which is really housing for the affluent, does not carry the same spirit of social commitment and adventure. Both Sam and I miss this atmosphere. We've been living and working through a period of serious development of midtown Manhattan, when developers and architects, with the cooperation of city government, have gradually expanded the acceptable standard for development. This often violates the spirit, though not the letter, of the city's zoning ordinances. One only has to spend a few minutes on midtown Third Avenue to see the architectural incoherence that the late 1970s and the 1980s have produced.

With the current preoccupation of adding corporate icons to New York's historic skyline, we must question what is happening at street level. Since the street is where most people experience the city on a day-to-day basis, Manhattan's grid plan can only create a humane environment if certain unwritten rules or conventions are observed. The maintenance of the street wall is the most important. The observance of a constant cornice line within each block and the concentration of the most active commercial activities and the largest-scale buildings at the intersections of the avenues and streets (leaving the midblock streets to a quieter, more relaxed pace and scale) are other important planning traditions. So one of the things I hate about New York is the lost opportunity to exploit fiscal confidence and boom times to enhance the fabric, rhythm, and livability of the city.

These lost opportunities will perhaps have the greatest impact on the neighborhoods outside midtown Manhattan. The outer boroughs represent an enormous opportunity and are New York's best hope to develop as a livable city for the middle class. Each new building that darkens a midtown street represents a lost chance to bring necessary and desirable development to other areas of New York. By creating urban centers in Brooklyn and Queens one can relieve the pressure to overbuild in midtown and provide a long-term strategy for growth. The city, however, must rethink its zoning incentives that, up to now, have not transferred significant amounts of development from midtown to these areas. These incentives must in turn be linked with improvements in transportation in order to create viable hubs outside midtown.

But there have been some good things happening. One of the happiest is the long overdue opening up of the waterfront to the public, and there have been some good recent developments. Battery Park City is a notable example of a creative and enlightened partnership among city government, architects, and developers resulting in a new and vital city precinct with delightful public squares and esplanade. There has been a great deal of sensitive restoration in New York, much of it to formerly run-down industrial structures that, as housing and offices, have become economically viable buildings again and have served to revitalize declining neighborhoods. Lower Park and Fifth avenues are now fashionable commerical districts; Soho [below] and Tribeca are fashionable places to live.

But in spite of some of this good news, I find that the New York architecture I really cherish tends to date from prewar days—from Rockefeller Center with its superb urban amenity and sense of place; to the grand old ubiquitous apartment buildings, idiosyncratic in their sense of style and decoration and yet so courteous to existing block patterns and street walls; to the democratic and elegant New York Public Library by Carrère & Hastings, which Davis, Brody has been privileged to help restore to its original splendor.

New York's architectural heyday predates the present generation of architects by almost half a century, and this is something to which we should give sober consideration as we approach the coming AIA convention in the city. Why can we not design expressive—even idiosyncratic—contemporary buildings that yet remain on comfortable speaking terms with their forbears and neighbors? □

Mr. Davis's firm is Davis, Brody & Associates.

August Heckscher

'Fifth Avenue with the wonderland of Central Park stretching beyond.'

A great city is loved for its special places—its varieties of mood and texture, its enclaves and diversities. It is hated when it becomes a homogeneous mass. The homogeneity may express itself in endless rows of buildings unbroken by open space or in endless towers crowding the streets and blotting out the sky. Judged in this way New York is capable of arousing the most violent of opposite emotions with the balance tipping now one way, now another.

When as a boy in the 1920s I first observed New York, it appeared to me a congeries of local and particular scenes. There was the street of brownstones where I lived. On what was known (and is still known to some) as Sixth Avenue the elevated railroad formed a tunnel of noise and shade and sheltered alluring small shops where china animals frolicked in the window or fragrant Chinese cookies were baked before one's eyes. On Fifth Avenue mansions of the Rockefellers, the Vanderbilts, the Whitneys stood grandly, with the wonderland of Central Park stretching beyond. Turning southward, I glimpsed the open space around the public library, supposing the city to end at that point.

The park and the library remain, but the elevated is gone and processions of skyscrapers line both avenues. As a matter of fact, the block where I lived, on West 49th Street, has vanished as completely as if devastated by a wartime bomb. It is now part of the site of Rockefeller Center, perhaps the greatest single urban achievement of the century. So here is a balance of loss and gain. Elsewhere matters do not always proceed so well.

On the Upper East Side today towers proliferate in an almost unbroken chain, exceeding rational zoning and borrowing extra height from so-called plazas—often useless patches of concrete at their base. The blocks just east of Central Park are spared the worst of these excesses, either because the avenues are relatively narrow or because older buildings are protected as part of a historic area. But Third Avenue and beyond is wide open to the most insensitive of developers. Embattled citizens call in vain upon the city administration for a reconsideration of the zoning regulations so as to maintain a residue of sky and sun.

Times Square is threatened by a vast development that will wipe out its present-day character. Admittedly, it has become sordid enough, but it is not beyond being redeemed as a unique center of entertainment and popular culture. The one way not to redeem it is to substitute for the existing mix of buildings a closely packed assemblage of commercial towers—any more than the way to drive drug dealers out of the nearby open space of Bryant Park is to compromise its openness by the construction of restaurants.

Landmark designation is, fortunately, saving a few of the individual theaters of Times Square. Moreover, the landmarks law has made it possible to keep whole such districts as Greenwich Village or Park Slope in Brooklyn. In other parts of town a renewed appreciation of the charms of diversity has impressed itself sufficiently on citizens and even on commercial interests so as to make them resist the forces of homogenization. Not everyone wants to live in arid (and hideously expensive) tower apartments or to shop in the windy shadow of faceless skyscrapers.

Another, less noted, factor helping to keep New York habitable is the infusion of the new immigrants. A hundred thousand of them, more or less, are arriving annually in the city. An uncounted number move on to other places, but those who remain are giving to neighborhoods in the outer boroughs a new identity and fresh life. The Greeks in Astoria, the Russians in Brighton Beach, the Indians in Sunnyside—all are examples of national groups managing to revitalize areas that had been almost lost to hope. The Grand Concourse of the Bronx, abandoned when middle-class families fled to Co-op City, is today being reclaimed by a diversity of folk aware of its fine housing stock and noble, if frayed, urban amenities.

So New York grows and develops in its own way, never quite predictably and rarely without some glint of good. The discerning eye can still find what is pleasant and unique—and even those towers, when you glance up at them suddenly or see them shining in the western sun, can give to the city lover quite a thrill! □

Mr. Heckscher has been parks and cultural affairs commissioner of New York City. He is author of several books on urban subjects, including Open Spaces—The Life of American Cities.

Itzhak Perlman

'Not among the leading cities when it comes to providing access.'

New York is an exciting place to live. The pace is quick and, as a musician, I appreciate that it is among the two or three cities in the world that has so much to offer: great art, great music, etc. I cherish this very much. But it is not a very easy city to live in, especially if you happen to have a disability and access is something that is necessary to help you move about. I suppose from that point of view there is a lot that I hate about New York.

Looking at the architecture in New York, I find much to remind me that this city is not a very well planned place for a person in a wheelchair. Whether they realize it or not, architects bear the responsibility to make a city accessible to all of its citizens, disabled or not. New York is certainly not among the leading cities when it comes to access.

Even though there have been some improvements such as special buses, public transportation is generally inadequate for the disabled. I still find that architects pay more attention to the way buildings look and not necessarily to the way they function. I feel that the main reason for this is that no formal education has been implemented in architecture schools to give architects a true awareness about the existing problems. All they have to go by are the codes that have to be enforced. This does not work very well if architects are not equipped with the necessary awareness regarding accessibility.

I certainly hope that, as one of the leading cities in the world, New York would also be a leader in providing access to its citizens rather than being one of the most inaccessible places.

I understand that the city of New York is not always as stringent as it should be in its requirements for access when constructing a building. This is most certainly wrong. Let's hope that the city of New York can work conscientiously with its architects to ensure that its disabled citizens can move about with ease and lead normal, productive lives. □

Mr. Perlman is an internationally renowned concert violinist.

Robert A. M. Stern, FAIA

'When I was growing up, Manhattan skyscrapers were my personal Oz.'

Of the places in the world that I love—and there are many—New York is the one I call home. I was born here. I live and work here. For many people, New York is just Manhattan, but as a native of Brooklyn I know New York is much more. Still, Manhattan is *the* city, the hard core of the Big Apple.

Of course, as in human romance, not every aspect of the love object is wonderful—it's the totality that captures the heart, or not. True the city is dirty—but not as dirty as it was 10 years ago. True our taxis are in no way the marvels of London, but have you cabbed it in Boston? Houston? Los Angeles? True New York's subway system became an international symbol of urban decay in the 1970s. But even at its nadir, New York's subway was still one of the world's most efficient public transportation systems. Have you ridden it lately, now that the trains are being cleaned and repainted and new rolling stock is in place? New Yorkers are quick to complain, but they are also quick to boast.

For most of us, the iconic image of New York is without doubt the Manhattan skyline seen from the harbor or from the window of a plane leading into La Guardia Airport. When I was growing up, the skyscrapers of Manhattan seemed to me the peaks of an astonishing mountain range; fabulous buildings, like the Woolworth, the Chrysler, the Empire State, were my personal Oz. As I walked around Manhattan, the thrill I felt at the sight of those skyscrapers first inspired me to become an architect. In the decades after World War II, much of that once-noble skyline was compromised by intrusive bland, boxlike glass and steel buildings that clogged that skyline and nearly ruined it.

For a while I thought I'd give up architecture and become a demolition expert. As such, first on my target list would be the 59-story Pan Am Building, designed in 1963 by Walter Gropius, Emery Roth & Sons, and Pietro Belluschi. The building is so banal and graceless that it should go away and simply be replaced by the light, air, and grand view down Park Avenue—the clearest and most consistent reflection of Haussmannesque urbanism in America—that New Yorkers once took for granted. A close second in this imaginary bad-building sweepstakes would have to be Charles Luckman's Madison Square Garden Center of 1963, which tragically replaced McKim, Mead & White's masterful Pennsylvania Station and buried the railroad facilities within its pathetic banalities. Those of us who wouldn't mind seeing the

Mr. Stern heads Robert A. M. Stern Architects.

Above, midtown panorama from a Sixth Avenue rooftop.

complex disappear may have our dreams realized in 1991 when it is scheduled to be torn down and replaced by office and apartment buildings. This time, one can only hope, what goes up will be better than what comes down.

New York's physical and social realities are only a part of the story. Almost as compelling is the New York of the mind—the city described by writers, painters, moviemakers, and songwriters. Among the portraits of the city that I like best are the movie musicals of the interwar period, particularly those starring Fred Astaire and Ginger Rogers that present an unabashedly dreamy version of Gotham for the glamour set. In "Swing Time" of 1936, directed by George Stevens, Fred and Ginger frequent skyscraper nightclubs, which, as designed by Van Nest Polgase and Carroll Clark, vividly evoke the real-life Rainbow Room on the 65th floor of the RCA Building in Rockefeller Center with curving staircases, shiny dance floors, and silver-framed windows looking out on the starry sky and the city below. Projecting the perfect places for metropolitan romance, these films brilliantly reflect an idealized image of New York that to this day conditions our architecture and our patterns of behavior. Now the Rainbow Room is restored by Hugh Hardy, and my design has been accepted for the dinnerware!

Sure there's lots about today's city I don't admire—the grotesque overbuilding of certain parts of midtown; the terrible, spirit-bereft neighborhoods, many built by architects and planners in the name of social reform and urban renewal; the vast tracts of abandoned buildings and the shocking dereliction of human resources that goes with them; and God knows what else. But notwithstanding these and other serious flaws, New York still exudes *life*— there is vitality about it, and a healthy sense of reality flavored with optimism. New York is a *real* place of people and streets, where a cab ride is a conversation and every driver seems to be an architect (or at least an architecture critic).

Cole Porter got it just right in 1930 when, while en route to Europe following the successful opening of his musical "The New Yorker," he wrote "I Happen to Like New York." The song, which was later added to the show, goes as follows: "I happen to like New York./ I happen to like this town./ I like the city air, I like the drink of it,/ The more I know New York, the more I think of it./ I like the sight and sound and the stink of it . . . / I happen to like New York." Nearly a half-century later, another song captured the complex attitudes New Yorkers hold about their city; as the city began to recover from the social and economic chaos of the 1976 fiscal crisis, the mood was at once cynical and feisty, gritty and glamorous. Set to a lively disco beat, "Native New Yorker" by Denny Randell and Sandy Linzer told of a "New York City girl," but its story belonged to the city itself: "You grew up riding the subways, running with people up in Harlem, down on Broadway. You're no tramp, but you're no lady. Talkin' that street talk—you're the heart and soul of New York City. . . . No one opens the door—for a native New Yorker. . . . You should know the score by now, you're a native New Yorker." □

Stanley Abercrombie, FAIA

'Extremes of obvious poverty and wealth, cheek-by-jowl.'

New York is the most European of American cities, and I don't mean that as a compliment. True, there are some very agreeable ways in which New York seems European: opera, ballet, foreign languages overheard, late suppers. But what I have in mind is not the class but the classes, New York's near-European division into the uppers and lowers. Here, more than anywhere else in this democracy, is embarrassingly obvious poverty as well as embarrassingly obvious wealth, and these extremes are embarrassingly cheek-by-jowl. Neighborhoods here change from good to bad within a block; the retarded bag lady sleeps on subway gratings outside the University Club; muggings occur on Park Avenue as often as on The Bowery.

That's the point of New York, of course: its simultaneity. And for those who have learned to exploit it, it can be titillating. It has titillated me now for a quarter-century. Unlike the little Southern town where I grew up, where everyone knew everyone else's business, where you could tell Bobby was visiting Sally because you spotted his Dodge in her driveway, New York is anonymous, it's full of choices, and it offers perfect disguises. The BMT will take you from Bloomingdale's to Flushing in five minutes; a short crosstown walk will take you from Beekman Place to Times Square. After a $70 dinner at Palio you can slip into something casual (but not jeans; they're out) and be part of the crowd at Savage. Or you can put on your jeans (who cares if they're out?) and down a few drafts at the Blarney Stone. No one will spot your Dodge.

People are supported only by their own backbone in an environment without Dodge recognition. People in New York are not sustained by tradition, nor are they oppressed by it. So I take it back: New York is the least European of American cities.

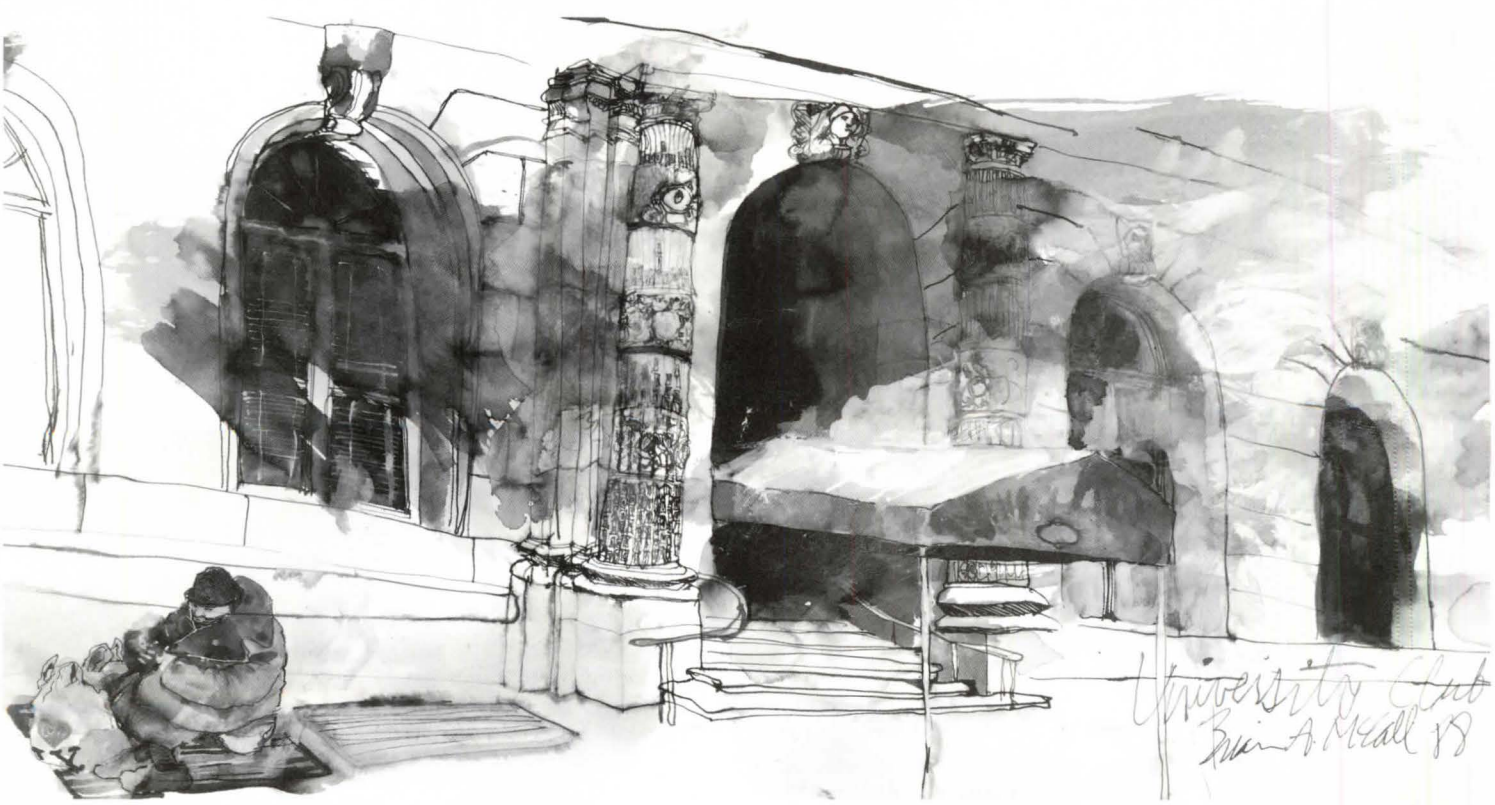
It has become a special thing, a city where traditional social restraints can often be forgotten but where traditional economic stratification is painfully apparent, where democratic freedom of choice has reached a new high, but where the failures of real democracy are seen in a cruel glare. For those on the happier side of the economic divide, of course, this city's offerings are great. Even for those on the edge, they are plentiful. (We may not be *regulars* at Le Cirque, but we can go there on occasion.) Even the homeless and jobless have more choices here than they would in most urban environments. One may even speculate that it is New York's generous offering of choices that has driven so many New Yorkers mad. It is a city with everything, which is more than most of us would like and more than some can handle.

And what is the physical manifestation of this social phenomenon? What is its architecture? Ugly next to fine, appropriately, the luxury apartment block next to the welfare hotel, and neither with a secure future. Individual buildings of great merit are wantonly destroyed all over the city; property values in Harlem and the South Bronx are manipulated for profit while the residents fight rats; the highways collapse and the bridges rust. Zoning regulations are amended and violated, landmarks dynamited in the night with negligible penalties, prime city-owned property auctioned to the highest bidder. And all of it—all the continuous shuffling, the tearing down and the building up, unbridled and even abetted by the city government— is ruled by the developers' greed. Dress up or dress down as we may, relishing our falafel and/or our caviar, this is no longer our city. Donald Trump is the king of New York, and, as advertised, Mrs. Helmsley is the queen.

If this is neither Old Europe nor the new democracy, then what is it? A demonstration of the fragility of the democratic process in the face of laissez-faire economics? Yes, it is that. A demonstration that, with just a little hardening of the heart, many private pleasures are still possible within sight of public hardships? That, too. A demonstration, if one were needed, that architects are merely urban decorators, not the forces that determine fundamental urban character? Sadly, that, too.

But these demonstrations can be instructive for other cities, perhaps even for a future New York. Civic vigilance is needed (as recently shown by the Municipal Art Society), citizen awareness, citizen concern, and citizen control. New York, made great by liberty, is being undone by carelessness. I hope America's architects will come to New York and take home an object lesson for their own cities. I hope, too, they will find some means of leaving behind a lesson for us. □

Mr. Abercrombie is chief editor of Interior Design *magazine.*



Jack Rosenthal

'A need to know which are the chic restaurants of the season.'

New York is different because of restaurants, thousands of restaurants. Brian Miller, the *Times* restaurant critic, says there are now 15,000. Some are wonderful, varied, beautiful. Some may even stay in business for more than a year.

Restaurants are to New York what movies are to most cities. You go to a new one; if it's splendid, you go twice. By the time you go back for a third time, a new restaurant is playing in the same location.

My wife collects the restaurants at 216 E. 49th St. It is now Chin Chin, a spectacular new Chinese restaurant whose front (white, edged in honeyed wood trim, arches, and columns) and back (all white, upholstered chairs) are entirely different. Holly has matches from when it was Night and Day (designed in chiaroscuro tile by Thaleia Christidis, an architect friend; alas, the cooking was not as good as the design), Cafe Americain, and two earlier incarnations whose names I don't remember—all within the space of, I'd guess, five years.

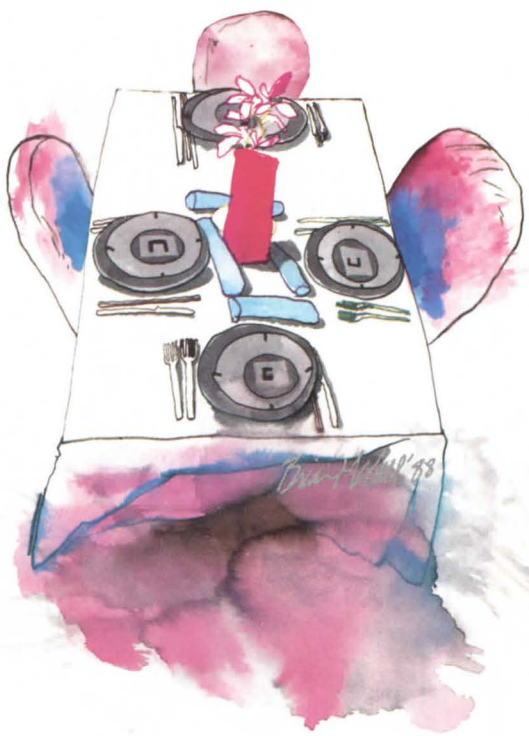
Soon after I moved to the West Side, an ambitious new Italian restaurant opened on Columbus and 85th to provide what the area then sorely lacked: a good kitchen in a setting of high style to appeal to the yuppies flooding the Upper West Side. There was a wonderfully mellow bar, in wood, marble, and frosted glass downstairs and the very latest in industrial modern fittings in the large eating space upstairs. Rubber treads on the stairs, large frosted disc light fixtures mounted on the walls. Oh, the owners were confident. They went to the expense of installing a dazzling street clock on an ornamental standard on the sidewalk, and *in* the sidewalk you can clearly read, in gleaming brass, "Ancora 1985."

Except there's no more Ancora. Overnight it turned from Italian into Mexican. The bar's still mellow, but the industrial modern has been replaced with anodized bronze chachkes, suited to a new identity: Las Delicias de Rosa. Still, the new place turned out wonderful guacamole, served in stone mortars. After what seemed like only weeks, however, it changed again, even without changing the phone number. We went in one night, ordered guacamole, and exchanged a dumbfounding set of confusions with the waitress. Now we were in Patzo's—Italian again, but of a simpler variety. I would have thought of Rod Serling had the sidewalk legend not still said "Ancora 1985."

Some restaurants survive, and I am thankful. I can't think of a more sophisticated, serene setting than the lamplit main room of Le Bernardin in the new Equitable Building. (And to visit the bar in its companion, Palio, is to enter a ruby.) Birthdays, anniversaries, and Christmas would hardly be worth celebrating without the Edwardian cheer of Cafe des Artistes, the abundant elegance of Lutece, or the simplicity and privacy of Chanterelle.

Yet these are like long-running shows: unusual, hits. The usual New York restaurant's fate more closely resembles the old line about New England weather: if you don't like it, wait a few minutes. A sophisticated New Yorker needs to know which are the chic restaurants not only of the year, but of the season. This spring, is it Bahama Mama, with its blue Formica and Caribbean punch, or Fujiyama Mama, with its pencil spotlights and intimidating audio control room?

Who cares: try both; try all; eat, drink and make merry, for tomorrow, the restaurant may die. □



Mr. Rosenthal is editor of the New York Times *editorial page.*

Hugh Hardy, FAIA

'Absent in contemporary architecture is respect for the life of the street.'

What I cherish about New York is the garden of people you find in its streets. This reaches full flower on warm, sunny days, but night is no less appealing when the thoroughfares are full. As much as each of us finds and defines his own community, it is in the streets that the mad diversity of this place is revealed. It delights me, especially on a day when the light strikes in unexpected ways. New York is a polyglot composition of people, vehicles, and buildings that makes even a two-block walk a voyage of discovery. The streets, at their best, hold the promise you can gain access to anyone and everything. Our finest examples of architecture, Grand Central Terminal or Rockefeller Center, (one an indoor, the other an outdoor street) make the pedestrian king and do not disrupt the surrounding city.

Most disturbing about New York is its increasing obsession about the past. For all the glories of preservation, renewal is a necessary part of the future of New York. Saving dilapidated 19th-century brownstones on our major avenues at the expense of legitimate private and institutional development is a short-sighted view of the future. Our retreat into former glories at the expense of contemporary reality is making this a less creative place to be. New York has always been known as the place to discover what's new. But is this great marketplace becoming a place where the creative ideas presented are developed elsewhere? Or does it mirror a general malaise in the United States about an increasing dependency on foreign capital, labor, and ideas?

What I increasingly miss here is the sense of a shared purpose, of the idea that we have a common goal. Instead, each citizen seizes his own turf, defending his right of possession, without regard for what follows next. Aside from a great place to make money, New York must be a great place to *live,* one that new generations will enjoy. We are now building the future city, but is it one people will want to inhabit, even if they can afford to? What is absent in the *posturing* of so much contemporary architecture is respect for the life of street, especially in the lost paradise of Times Square.□

Mr. Hardy's firm is Hardy Holzman Pfeiffer Associates.

© Brian Rose

The lively visual hubbub of Times Square


AIWA
STEREO
CASSETTE
SYSTEMS
CASIO
ALL SPORTS QUARTZ
Electronic
Office
Typewriter
brother
BURGER
KING
OPEN 24 HOURS
MOVIELAND
PURPLE RAIN
stereophones
GEORGE
M
COHAN
1878-1942
Give my Regards to Broadway

Edward Logue

'The city government ought to be massively decentralized.'

New York's magic is unlike that of any other city of my acquaintance. Gotham exudes a high level of energy, a unique stylishness. The pre-eminent world city in the arts, communications, and finance, it is the ultimate urban experience and challenge. Its vitality, street life, sense of the possible, of enormous scale and fine detail can be inspiring, if at times intimidating.

For visiting architects, there is walking to do: Fifth Avenue and Madison Avenue in midtown, Wall Street downtown, Greenwich Village night or day, Brooklyn Heights and its esplanade.

I'd like you to go see Roosevelt Island, an Urban Development Corporation community in the East River reached by the world's first aerial tramway. Someday, maybe, it will get finished. But much the most exciting new project, another UDC project produced under the leadership of Richard Kahan and architect-planner Alex Cooper, is Battery Park City, now ably led by Sandy Frucher. When I remember how awful it was going to be and now walk the present reality, my natural optimism about New York's possibilities is restored. It is typically New York that the public role was minimal.

The downside is that, as cities go today, New York is not very well governed. It cannot keep its house in order. The physical plant is a mess. The streets are filthy. The public schools are a disaster. Although the subway system is improving, traveling on the subway system is more often than not a thoroughly unpleasant experience. City planning has never been very important in New York. Except for John Lindsay's eight years as mayor (1965-73), official policy toward architecture and urban design has been very close to indifference since World War I.

Is this a slap at Ed Koch? No, the villain is elsewhere. With hard work and an abundance of hubris, he restored the city's confidence in itself. He put firmly in place a system of fiscal management that should prevent fiscal disaster from ever threatening the city again. He will be remembered for those things and for his unique ubiquity. He probably will not be remembered for the extraordinary effort to meet and hold public meetings ("town halls") in each of the city's 59 community districts.

The rich do very well in New York, and there seem to be more of them and they seem to be getting richer. But then the rich always are well served. For the poor the city works poorly. For the average person, the city does not work as well as it did 40 or 50 years ago. The villain is not the state government, although its initiatives are not as broad-ranging, innovative, and effective as they were during Nelson Rockefeller's long service as governor.

Nor in my view is the federal government responsible for most of the inadequacies of New York. The Reagan cutbacks for housing and other social programs have been a disaster spread throughout the nation. Nor, finally, do I believe it is the ineptness of the city's public servants, though a significant number have been shown to have been unworthy of their trust.

It is the system by which New Yorkers have chosen to govern themselves. Over the last 40 years, New York has become the most overcentralized municipality in the Western world. Every decision of every kind that is a departure from the established way must be approved downtown. Too often that includes the mayor's office. Here is a city of almost 8 million people spread over 303.7 square miles and just about built up.

I remember waiting for my turn at a meeting of the city planning commission in September 1978. Restless, I picked up a pile of materials about the next subject to come up for discussion and decision. The very first item I read was a two-page staff report and recommendation on a matter that required the attention of commissioners citywide: should or should not a curb cut be allowed at a certain spot on Queens Boulevard? I riffled through some more of the same trivia and listened, in ill-concealed astonishment, to a 10-minute discussion of the curb cut. Nobody in the room seemed to think anything ridiculous was happening. It was the same room, in early 1966, where, in the middle of a discussion about the then pending World Trade Center, I innocently asked the then chairman of the commission whether any consideration had been given to the urban design aspects of the project. He turned to me, puzzled, and said no, he did not think it was any of their business!

A recent example of New York's callousness to the most basic issues of urban design is the Coliseum project. The city told the developer, who in turn told the architect: "We want the top dollar. Design and build accordingly." The city got the top dollar (it thought). An interesting design, totally out of scale, was produced. The citizen elite rebelled, as they occasionally do, and they appear to have won a victory but by no means a war.

On the other hand, the story of how the Westway, initially regarded as the most civilized state-of-the-art multimodal, multipurpose, community-sensitive highway project, got trashed and finally defeated by a group of elitist environmentalists is a whole other story. In my nonobjective view as the original public sponsor of the project, this was a demonstration of the inability of present-day elected political leaders to recognize the necessity to design a delivery system to achieve a project that they wholeheartedly supported.

New York is a puzzlement, and, on the whole, despite some exciting and productive times there, ranging from the creation of Roosevelt Island and its tramway to the raised ranch houses on Charlotte Street in the South Bronx, I am content to be back in Boston, enjoying visits to New York. If asked, I could name some things New York could do to improve, dramatically, its livability and to empower the majority of its citizens who do feel powerless.

The city government ought to be massively decentralized. The central government of the city should maintain control over the location and maintenance of arterial roads and bridges, the disposal of refuse, the location of affordable housing projects, and major land-use decisions, including the location of facilities serving citywide needs. It should retain responsibility for comprehensive planning of all kinds, which now is simply not performed.

The care and maintenance of local streets, collection of trash, snow removal, local land-use decisions, building permits, code enforcement (now nonexistent except on a complaint basis)—all these, for example, should be administered, financed, and controlled at the borough level. Under such an arrangement, the city would have new levels of accountability and new challenges for leadership and higher standards of service delivery.

A new idea? Far from it. It would take New York back to where it was 50 years ago when it was much better run than it is today. But, you say, the old way led to corruption. And I would say, sadly, so did the new. People in power seldom like to give it up. But it is time for a change. □

Mr. Logue, now a development company executive in Boston, headed the New York State Urban Development Corp. from 1968 to 1975, the Roosevelt Island Development Corp. from 1969 to 1975, and the South Bronx Development Organization from 1978 to 1985.

Battery Park City from West Street at World Trade Center.

A cascade of brownstones

Suzanne Stephens

Many New Yorkers hate and/or fear anything designed by an architect.'

Every so often nostalgia for that mythic time when New York City was Truly Splendid surges over me. Naturally that legendary time occurred before I got here. It seems that New York became the capital of the 20th century between 1890 and 1965. By 1965, the year I arrived, it had already begun to turn into a grand aging beauty with one too many face lifts. There is a plastic quality to the area around the eyes; if one looks at the more difficult to fix portions around the mouth, the telltale signs of age and deterioration have not been dispelled.

Does this not sound like the sarcasm of the typical jaded New Yorker who has merely lost his or her sense of wonder, yet is too spoiled to live anywhere else? Or has New York actually declined? Naturally the answer is "both."

In the mid-'60s I lived in an old brick apartment house in Murray Hill, not far from the one I live in now. Murray Hill was and is a small residential oasis demarcated by 34th and 40th streets, from Madison to Third avenues. In 1965, uninterrupted blocks of brownstones extended down Lexington Avenue and parts of Third Avenue as well as its cross streets. While Murray Hill is still intact today—compared with the drastic transmogrification of midtown—certain signal incursions over the years demonstrate New York City's ongoing compulsion to dress up in high-rise dross.

Where a row of small, neat, brick buildings housing antique shops at Third Avenue and 37th Street added to the villagelike quality of the neighborhood, there now stands a giant, beige brick tower distinguished by high-turnover eateries like Bagel Nosh at the street level and a largely unused "public" plaza above. It was a neighborhood "boon" that allowed the tower's developer extra floor area. At 37th and Lexington, another monotonous beige brick shoe box replaced a 19th-century town house that quietly oozed a doddering charm. Now a large, barren, shadowy, also unused arcade—another "public amenity"—provides this corner with the stunning likeness of an excavated subway station.

Going farther west a small town house in a remaining patch of low-scale town houses on Park Avenue at 37th Street was deracinated for a sliver tower of apartments that have not yet sold. The tall shaft is locked and boarded up, already looking dingy and decrepit. Another sliver tower, which replaced a commonplace but low-scale and characteristic 19th-century building on Madison Avenue between 35th and 36th streets, has not attracted occupants for its pricey condominiums either. It is almost totally empty.

All around the edges of Murray Hill, other forms of erosion have taken place over this 20-year period: where once a brick armory, an old pile designed as a ruggedly idiosyncratic fortress, hunkered down on the southeast corner of 34th Street and Park, now looms a banal red brick office tower and school with a dirty windswept plaza (another "public amenity"). The saddest irony is that it was designed by Shreve, Lamb & Harmon, the architect responsible for the nearby and still majestic Empire State Building. Across Park on the southwest corner of 34th Street, where the Manger Vanderbilt Hotel presented a decorously classical mien, are "modernized" garish storefronts of a "renovated" apartment building. If you look up high enough you discover that most of the hotel exterior was kept, but not its grand entrance. And farther up Park Avenue, where the unremarkable brick building for architects' showrooms used to be housed at 40th Street, now hovers a behemoth that is the architectural equivalent of a union between Darth Vader and Batman. Rotated at an angle to Park Avenue, the Eli Attia-designed building sums up New York's attitude toward respecting the urban context. Context, schmontext. Since both 101 Park and the school/office building at 34th Street are lighted at night, and both are twisted at a 45 degree angle to the grid, one never loses sight of their aggressively banal silhouettes.

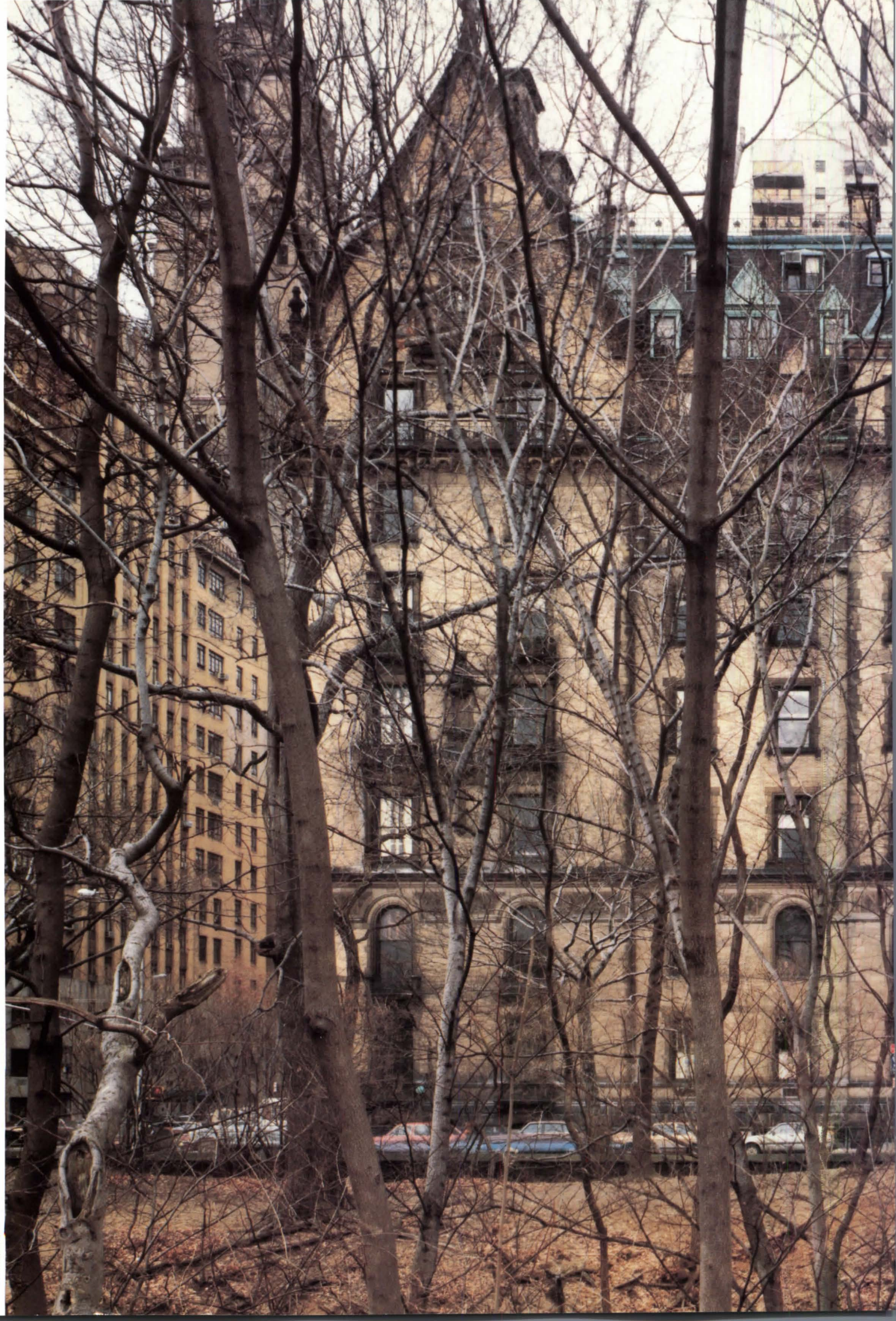
The buildings that have eroded the quality and charm of Murray Hill are not as humongous as many of those plopped in midtown. But the deterioration, speeded by faulty zoning incentives of the late '60s and early '70s and by developers and architects who have neither a clue nor a care about "good architecture" and "good urbanism," is no less painful.

No one needs to ask why so many New Yorkers now hate and/or fear (1) change, (2) big buildings, (3) anything designed by an architect. Few need to ask why preservationists have become such an active force in the last few years. They are not just wallowing in nostalgia. They are being realistic.

There are still morsels of Murray Hill that please the eye and rev up the spirit. Glimpses (while they last) of the Empire State Building, the Morgan Library, the old Morgan brownstone at 37th and Madison, and so on. But none of the good buildings were designed recently.

Over the last century or so, New York has been a work of art, changing and modifying itself with a certain casual belief that it would all eventually work in the end. Despite greed, bad architecture, and overbuilding that has inflicted itself on the city since its earliest days, the balance has somehow remained in the city's favor: New York was able to make itself into an urban masterpiece with its own stylistic identity. But changes in a work of art become more complicated as time goes by and they become more developed, more layered with meaning, and more laden with historic significance. While change can occur, the freedom to be unself-conscious is no longer a prerogative. Our approach to change is now weightier. Our thinking about the city must take this responsibility into account. We didn't create the urbanistic work of art, but we certainly should be better custodians of its beauty and more protective of its dignity. □

Ms. Stephens, who writes frequently about architecture and design, is working on a book on architecture criticism in magazines and newspapers over the past 130 years.



Dakota apartments from Central Park.

Percival Goodman, FAIA

'The most extraordinary urban vision in the history of cities.'

Way back in the 1860s Walt Whitman said it: "City of the world . . . /City of tall facades, of marble and iron!/Proud and passionate city, mettlesome, mad, extravagant city!/Fear not—submit to no models but your own O city!"

He, of course, spoke of Manhattan, not the four other boroughs that then as now bear no resemblance to the island that the world calls New York.

Manhattan had submitted to a "model" before Whitman's time: its street plan of 1811. It was a land speculators' conception in which the counters were 20x100-foot lots set in rectangular blocks on a grid as rigid as a Roman camp. Thus land speculators needed no surveyors to establish metes and bounds; corner lot, interior lot, and location established values in the Monopoly game. "Fear not" was the motto—buy, sell, build, tear down and start again, each time raising the land cost, making the buildings larger and taller, the profits higher. For 150 years the wrecking ball and builder's scaffold seen almost on every street have shown this work-in-progress with no one having the vaguest idea of what was being created—the ultimate monument to capitalism, the Acropolis of the Western world, the eighth wonder!

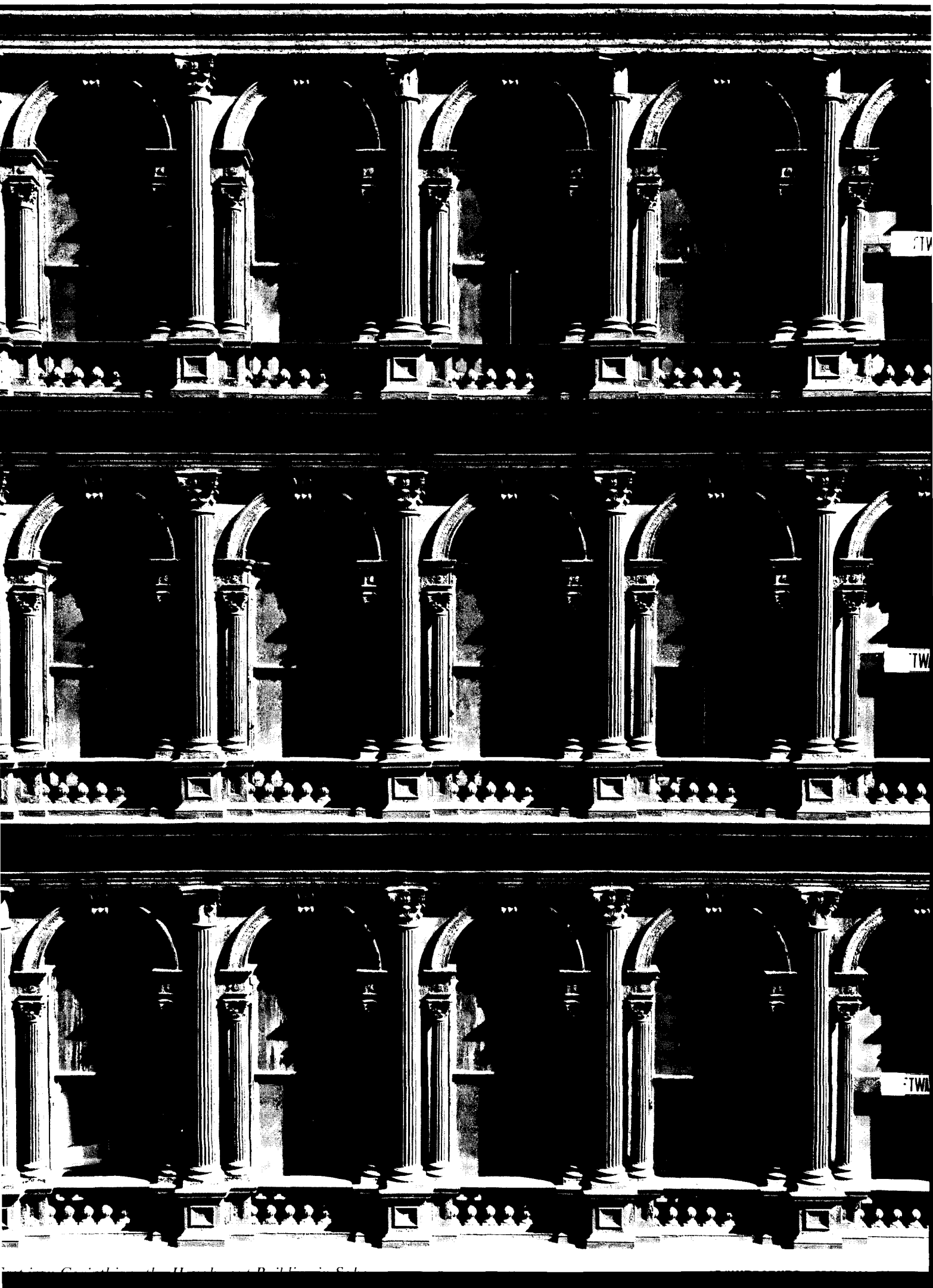
Now in the last part of the century some are becoming faint-hearted. Community boards, preservation commissions, historical societies, "concerned" citizens see Manhattan overbuilt, overpopulated, unlivable. The city's landmarks commission sets up "historic districts" freezing existing patterns, prevents "historic" buildings from being razed or altered, when the real history is the opposite. Many of these well intentioned people ask for "contextual architecture" (buildings designed to fade into their surroundings) when the whole history calls for the brash and new, where in a generation a neighborhood can become unrecognizable. And as to "livability": where in the city's history has there been any worry about the island being livable except for the early taking of 17,000 lots to create Central Park (even then it was written that the taking of the lots would greatly accelerate the sale of adjacent properties)? Or our zoning laws, which if built to the limit would allow a city of 16 million (or is it billion?). Who is mad enough to think that a great monument should also be gemütlich!

By any rational criterion Manhattan—by which I mean that part below 96th Street—was overbuilt 50 years ago. But what is common sense elsewhere does not apply. The island's way has been, "Fear not, submit to no model but your own," which translated has meant not rules of reason for development but the "deal" and the wild gleam in the entrepreneurial eye.

By some magic beyond my ken, the base motives that built my city have led to the most extraordinary urban vision in the history of cities, as any visitor from Europe or the East will tell. So I say let Manhattan fulfill its destiny as the monument to our time, as Imperial Rome, Florence, and Venice were to theirs.

So, colleagues, come celebrate our skyline, our canyons—"tall facades of marble and iron." Our museums, great hotels and shops, our restaurants—more good ones than in all of Great Britain, more bad ones than in all of France. Avoid our slums, pay no attention to our gridlocks, dirty subways, filthy streets and those who block them—hot dog vendors, peddlers of watches or sunglasses, and the homeless who sleep there. All of these are the costs/benefits of living in a monument.□

Mr. Goodman is professor emeritus, school of architecture and planning, Columbia University.



Fred Powledge

'The way the city handles parking tells a lot about the coming collapse.'

Once I was talking with Eugene Odum, the eminent Georgia ecologist, and I mentioned that I lived in New York City. "The trouble with New York," he said, matter-of-factly, "is that it's worn out. It may be so rotten that the city will have to be abandoned." He saw my horrified expression and quickly added: "That's not necessarily bad. It's just age. Things get old. We can build another one on top of it, just as people have been doing for centuries."

Horrified then, yes. But not now. I beat the crowd by abandoning New York City last summer, and it was the smartest thing I've done lately. The place they called the Big Apple, a place that once had meant a lot to me, had become far too rotten to live in.

I don't know exactly *why* the place went bad, or precisely when. Surely a lot of the blame rests on the city's elected officials, who in recent years have allowed—nay, encouraged—the ravishment of the city's people and its environment, from schoolroom to deathbed, sidewalk to airspace, by a few who sustain themselves with frequent engorgements of power and real estate. But surely an electorate that cared could have done something about the politicians. Instead, the voters have consistently returned to office a collection of low-grade hacks headed by one Edward Koch, a man with almost all the talents of a Lester Maddox (the former Georgia governor at least could ride a bicycle backward and probably could pick up trash) and the instincts of a piranha.

Koch presides over, but denies responsibility for, not only one of the most debased municipal administrations of the century but also one of the most slovenly bureaucracies of the hemisphere. He gets away with it because he consistently acts like a quintessential New York jerk—loudmouthed, opinionated but uninformed, completely self-centered, intolerant of those less fortunate, lacking in loyalty to people or principles—and the majority of New York voters share those characteristics. He can't lose.

One can avoid dealings with Koch, but not with his bureaucracy. The police force is larger than Westport, Conn., but it is lazy nigh unto coma and long ago lost interest in trying to cope with the everyday infractions such as mugging, burglary, car theft, and the murder of nonwhite people. New York schools produce sinecures for thousands of incompetent administrators and hundreds of thousands of functional illiterates. The teachers, like the cops and most of the rest of the bureaucracy, are more unionists than professionals. The result is a city so selfish that it has lost both its heart and soul.

New York long ago stopped taking care of what it already had, preferring to pour the proceeds of the nation's highest sales tax into new projects that uniformly are second-rate or worse. A city employee once told me that New York's parks department spends far more money *cutting down* trees than planting new ones. New Yorkers are terrified of nature. When a park is taken over by drug dealers, the characteristic New York response is not to arrest the bad guys (it would be easy, and constitutional, given the openness of the transaction), but rather to lease the place to an entrepreneur who will turn it into something that isn't a park—a restaurant, a skating rink, anything with paving.

Parking space is at a premium in New York City, and the way the city handles this problem tells a lot about the coming collapse. Ignoring promises it made to obey federal clean-air legislation by reducing parking, the city allows thousands of its

Mr. Powledge, now removed to southern Maryland, is working on his 14th book, a history of the civil rights movement.

privileged saprophytes—cops, firefighters, prison guards, physicians, court clerks, even employees of the Fire Patrol (which isn't a city agency at all but rather a collection of insurance companies)—to park wherever they want on the streets, and for as long as they wish. Teachers at more than one school have usurped their students' playgrounds for parking.

New Yorkers, and not just those who work for the city, are always receptive to new ways to rip people off. A recent trick is for restaurant waiters to "round off" a bill to the nearest nickel or higher—always, it hardly needs to be said, in the up direction.

All this begins to rub off on you after a while, and you begin to display the characteristics of what I call the Protective Arrogant Incompetence Syndrome that marks so many New Yorkers. You're not necessarily stupid and mean and unfeeling by nature; you just act that way in order to survive. In my last few years in the city, I was horrified to see myself becoming that way, too.

People and organizations that elsewhere might behave honestly, honorably, politely, and intelligently seem to go to pieces in New York. The weather bureau finds itself incapable of predicting the weather. The post office is near collapse. Our former mailman had a habit of delivering Express Mail without bothering to get the required signature. This included delivering *other people's* Express Mail to us. He has since been promoted to supervisor.

I suspect a lot of this wouldn't happen—especially the governmental ineptitude—if New York had a decent hometown mainstream press, but it doesn't. The *Times* has never covered the city, and the *News* still reads like it was written both for and by some stereotypical Irish desk sergeant. As for the New York *Post*—well, it seems to me that Rupert Murdoch's perfect defense against those who cite the federal rules against his owning both a newspaper and a television station in the same town should be that the *Post* isn't a newspaper at all.

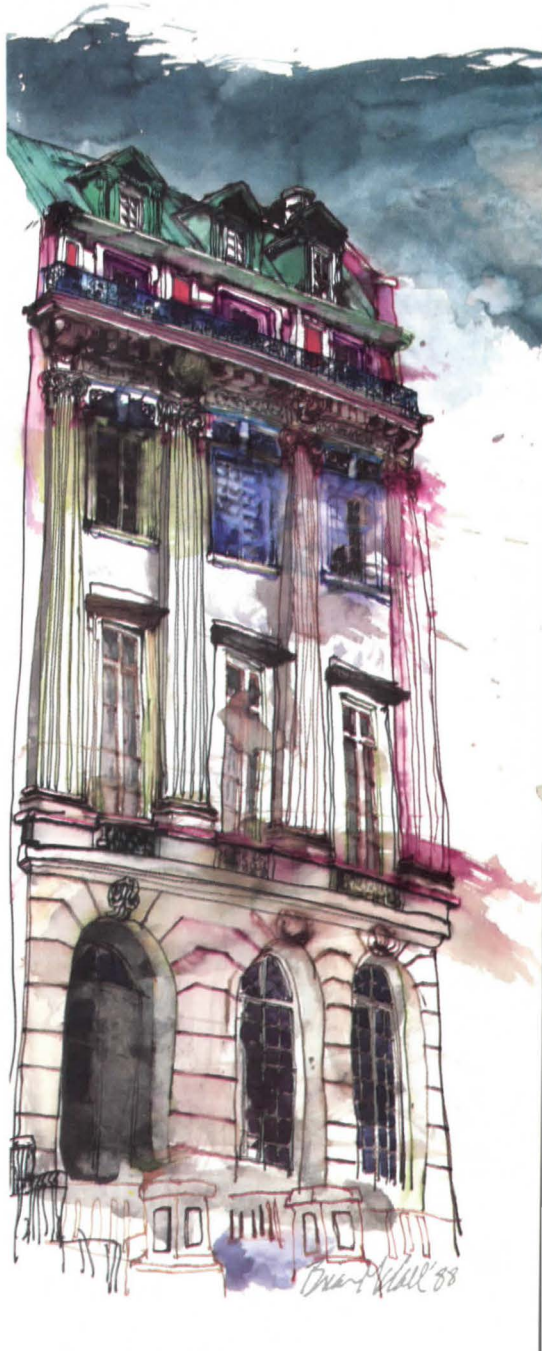
From time to time, there emerge tiny hints of hope that some relic of the city's more civilized past can be saved a few more years. A current possibility is Ladies' Mile, a section of Manhattan that once was the main shopping district and that contains beautiful examples of American renaissance [right] and early town house design. The usual determined gang of people is trying to save it from the usual destruction, against the usual odds. (The district runs roughly from 14th to 23rd streets and from Sixth Avenue to Park Avenue South, and is worth a look.)

But for me, the nuggets of hope are no longer adequate to hold me to the city that so delights in abusing its inmates. Half a year ago my wife and I fled, joyously, ecstatically, to rural Maryland. I immediately discovered that a city so self-assuredly insecure as New York does not like it when one of its citizens manages to escape. Punishment must be dispensed.

As the closing date approached, the city claimed to have no evidence that we had paid the real estate taxes on the house we were leaving (I had the canceled check; the lawyer said such screwups were routine). The Chemical Bank, where we had been banking for only a quarter-century, refused to honor our down payment for the new house because it didn't recognize my wife's signature. Of course, the nitwits didn't inform us of this.

Months after we were installed in our new home, and as the smell of the rotten apple was beginning to fade, I got a summons from the New York City Sanitation Police (sic), accusing me of maintaining two unlicensed dumpsters in front of the house—49 days after we had sold it, as evidenced by the city's own records. I wrote back explaining all this and suggesting that they go after the new owner; the bozos ignored my letter and doubled the fine. The correspondence dragged on, and I haven't heard anything for a couple of months. I'm sure I will, because New York never gives up. In this case, however, neither will I.

On the other hand, my temperament has improved mightily. I have become more civilized since leaving the big city. I've been able to set aside my hypertension medication. I haven't made a rude digital gesture to a motorist in months (although I surely would if I saw a New York sanitation policeman) and I often let people finish their sentences. The long nightmare is coming to an end. I should be thankful for having lived in New York, I appreciate so exquisitely not living there any more. □



Jonathan Barnett, FAIA

'Manhattan gives you variety, energy, choice, and convenience.'

Most visitors know parts of New York almost as well as they know their own cities. They know the classic buildings: the Chrysler, the Woolworth, the refurbished New York Public Library, and the newer towers rising on Madison and Third avenues. They know Rockefeller Center, the South Street Seaport, and Battery Park City.

What they often don't know is why anyone would live here. "How can you stand living in New York?" I am often asked some version of this question when I am in another city to give a lecture or work with my clients. I hear about how someone used to live in New York, but couldn't take it any more, or about high prices, bad traffic, Harlem and the South Bronx.

The answer is that living in Manhattan is nowhere near as alien as it may at first appear. Manhattan is the downtown for an enormous city, one that can reasonably be said to number 22 million people and stretch across three states. New York has the same proportion of people living in poverty as other metropolitan areas, but similar percentages add up to close to two million people within the official boundaries of New York City alone. New York's social problems and injustices are comparable to those in Boston, Chicago, Philadelphia, St. Louis, Houston, or Los Angeles, but the huge numbers of people and the large areas involved make the situation even more serious.

But the intensity of life created by great size also has its advantages. Manhattan south of, say, 110th Street is our downtown. The downtown for 22 million, the downtown for much of the United States, the downtown, along with the central parts of a few other cities like Tokyo and London, for the whole world. Most American cities have some people living downtown. In New York downtown living is an attractive option for people whose income could provide a house with space around it if they lived in another city, or if they chose to commute for 10 or more hours each week.

Living in Manhattan gives you variety, energy, choice, and, above all, convenience. One of the charms of life in Manhattan is not having to bother about a car. Many people can walk to work, and there are always good places to have lunch within an easy walk of the office. As for longer distances, it is much easier to find a cab here than a parking space in most other cities. You can always rent a car for use on weekends. It's impressive how many cab fares or car rentals and how much air travel you can finance for the annual cost of running a car.

Apartment living usually means a compromise on space, but generally comes with services. There are doormen to receive packages and handymen to fix the plumbing and make other repairs quickly, particularly right before Christmas.

The wide choice of cultural events in New York means that people can go to them casually. They can decide to go to a first-run movie or even a play or a concert at the last moment, and find a new and interesting restaurant on the way home. There are more architectural lectures and gallery openings than any one person could possibly attend.

Manhattanites can decide to go shopping and be at a major department store or famous specialty shop within minutes. But New Yorkers also get used to shopping for things that are hard to find in other places: the best Japanese green tea, or imaginative clothes by not-yet-recognized designers. If you want to add to your architectural library, there are several stores that specialize in new architectural books, and antiquarian book dealers who also specialize in architecture. New York is expensive, but it is also a place where the astute shopper can save a lot of money by pursuing the extraordinary array of discount and wholesale options this great manufacturing city has to offer.

There are streets you would not walk down at night, but this is true in every big city in America. The traffic is noisy on the street beneath our high-rise apartment, but traffic was far more intrusive at the charming bed-and-breakfast in the the little country town where we stayed last summer. There were fewer cars, but they were an awful lot closer. □

Mr. Barnett is an urban designer and the director of the graduate program in urban design at the City College of New York.

M. Paul Friedberg

'The people are the architecture and entertainment of this city.'

My experience with New York is anecdotal and episodic. I have no coherent linear way to describe what I cherish, hate, or miss about this place. Even though I've no desire to leave it, I suspect, by now, I couldn't. Making New York my home was a voluntary action that has become my affliction or addiction. I'm here out of some deep atavistic need, a kind of tropism.

Time has made my identification with as well as my affection for this city very personal. I consider it the reward of over 30 years of living in this place.

For instance, aside from my business card, which clearly states my address, I know I'm from New York by the way I'm introduced. In Atlanta, Billings, and Denver I'm always "Paul Friedberg from New York." I could win the Nobel prize, and I'd still be "from New York." Others are introduced as doctor, lawyer, or administrator. I'm always "from New York." I am beginning to wear this label like a badge.

Although born in Brooklyn, I spent the better part of my first 25 years circling the city, living in villages and small towns of populations from 200 to 20,000. At 22 I found myself back in the city due to a short-lived carnal attraction for a New York woman. I suspect that right then and there the spore of the New York virus had implanted itself. Armed with my B.S. in ornamental horticulture (an exotic field to pursue in this town), I found my way into landscape architecture, married, fathered two boys, and acquired a cat—all within the old walls of the city. I had always perceived New York as economically impenetrable and, as such, it would be my fate to live on the outer, epidermal layer at the pleasure of some landlord, as a renter. However, with my newfound profession and family, I had a need for roots, land, a spread, a homestead right here in the city.

I was introduced to the Upper West Side by a friend. This once-elegant neighborhood of single-family brownstones had evolved into a black and Spanish ghetto with a few residual elderly German and Irish. Here there were opportunities. True to the American pioneer spirit, we—wife, kids, and cat—went west to build a homestead, be a family, and taste the social pathology of poverty. All around me were visible signs of the Marxist class struggle: locks, alarms, block guards, and watchdogs, all signs of a collective deep-seated anxiety and paranoia.

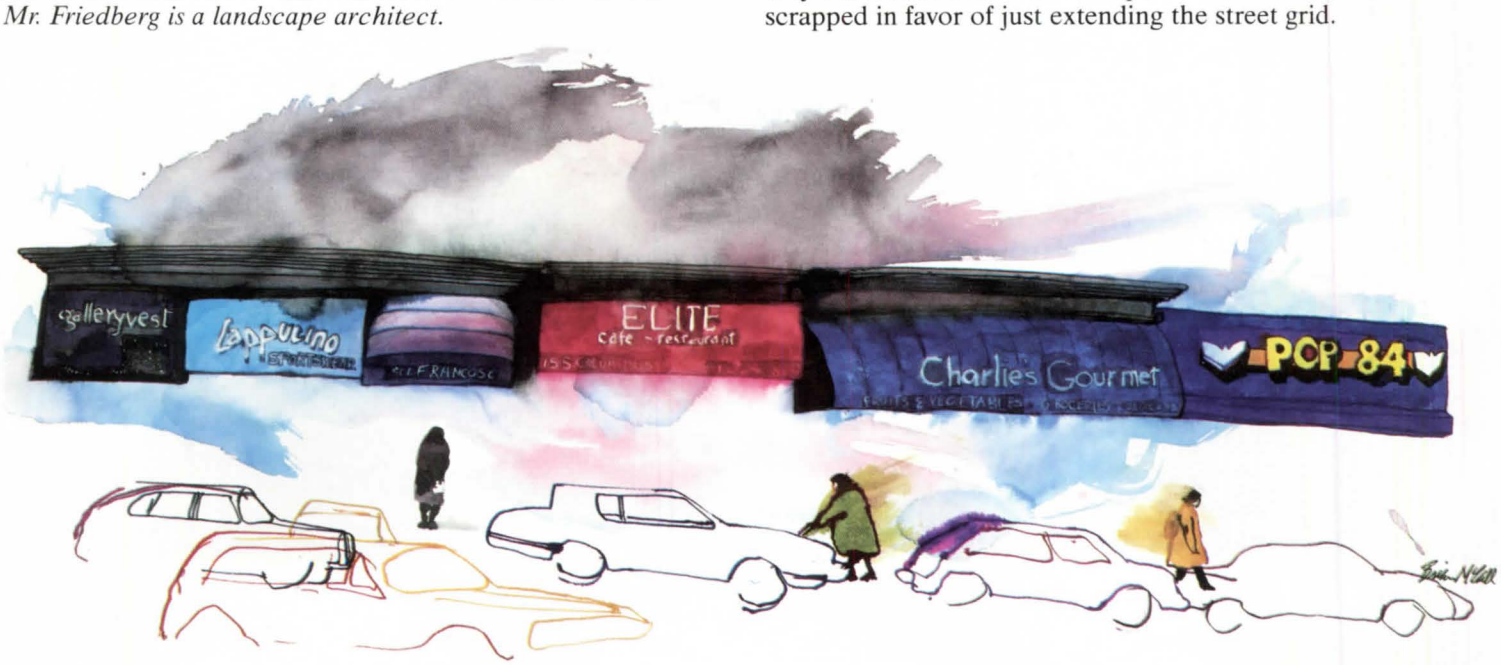
In a short time I had acquired all of the above, even a dog. I visualized a huge, vicious, long-toothed, snarling German shepherd, the proverbial best friend and protector of my family. Unfortunately I started out with a cute, floppy-eared puppy that needed to be walked, for functional reasons, at 11 at night. In an attempt to make this adorable puppy more ferocious, I named him Wolf. This was after discarding appropriate but less desirable names like Fang, Killer, and Blood. After my first terrifying near-midnight encounter with two menacing men while walking Wolf and having succeeded in convincing these muggers that this wet-tongued puppy called Wolf was dangerous, I decided that a dog was not the answer to the class struggle. I realized that I was, like all New Yorkers, destined to a life of perpetual anxiety and defensive living and in some perverse way have rationalized this adaptive stance of fear.

Some 30 years later, here I am, suffering and enjoying diversity, energy, hostility, aggressiveness, anxiety, adaptiveness of the place and its people. My neighborhood is now gentrified. The pioneers of the wild West Side are now yuppies. I'm surrounded by trendy restaurants and boutiques. In some inexplicable anthropomorphic manner the city has defied the planners who predicted that the brownstones of the West Side were not viable for renovation. It sounds ludicrous today. When we consider both the prices and the rent these buildings command, it boggles the mind and drains the pocket. It is this unpredictable, atypical evolution of neighborhoods and places that holds yet another fascination: not only the diversity but the perversity.

It's professionally reassuring to have planned communities like Roosevelt Island or Battery Park City, but it's perversely intriguing to watch the once Hispanic Columbus Avenue take its place as "the scene" like Greenwich Village and other organically produced vital communities: Soho, Noho, and Tribeca. New York and New Yorkers overlook settings. Most of these revitalized communities are housed in the shells of structures of another time, designed for functions that are now obsolete. Many of them are factory buildings or old law tenements built for the working class. These communities erupt episodically like hives in the skin, defying prediction and documenting the latent energy trapped within the geographical and economic body of this place.

New York suggests it is not any one thing or vision of one person but an aggregation of many diverse elements, a collection of communities bounded by two rivers and woven together by the most simpleminded of street patterns. Thirty years ago "the grid" was criticized as banal. Today "the grid" is embraced as rational and very New York. The designers of Battery Park City were lauded when the old plans for this new town were scrapped in favor of just extending the street grid.

Mr. Friedberg is a landscape architect.



While other great cities have more distinguished physical characteristics (the grand boulevards of Paris and the piazzas of Rome), New York has its streets to be filled with people. Places like Rockefeller Center, Battery Park City, and Grand Army Plaza would organize most cities; in New York they were mere episodes. Even Central Park or the rivers that create the borders of the boroughs do not orient or order the city as does the Seine or the Tiber.

The life and energy of the city is realized in its streets, and New Yorkers take to these very streets day and night. We don't sit around at the sidewalk cafe or hang out at the plaza. We're constantly in motion. Our spaces are even misnomers. Times Square is not a square, Grand Army Plaza is not a plaza, Columbus Circle is not a circle. With the exception of Rockefeller Center, which is a mere fragment by European standards, Americans don't seem to know how to create plazas. By special zoning, we gave buildings extra height if they would provide public space, and Sixth Avenue is the result—not one clear-cut, identifiable, organically successful space but open space as front yards for office buildings. The avenue has been suburbanized. We tend to make or find our own gathering points in these front yards, on street corners, the sidewalk, the steps of the library. We're a resourceful people with enormous social needs that manifest themselves in informal ways.

We rush to Europe to sit in the piazzas and stroll the boulevards, then come home and walk our streets or hang out at our parks. Possibly that's why our concern is not for urban design or architecture but each other. When you take to the streets, there are no rules of dress, performance, or behavior—anything from athletic shorts to After Six right on Fifth Avenue. It is not inconceivable to see a man walking down the street with a parrot or a boa constrictor on his shoulder or around his neck. Of course no one pays attention, just as when our institutions were emptied of our marginally sane inmates, no one noticed when they took to the streets.

The people are the architecture and entertainment of this city. The entire world is right at the tip of your eyes. For the out-of-towner, the city is a place of shows, nightclubs, and restaurants, but for the New Yorker, it's the streets—Columbus Avenue, Soho, Chinatown, or Little Italy, or a stroll through Central Park. Like I say, New Yorkers don't sit. Who knows why? Too expensive, no time, no place. We take to the streets for social nourishment and from time to time supplement our cultural needs with museums, galleries, and restaurants.

All is not wonderful in this city with its willful, boundless energy and excitement. It honors its residents while it diminishes them. I've moved my office five times in the last 30 years, each time migrating farther south a step ahead of rent increases but increasing the distance from my home to my office each time.

Each morning I traverse the island from north to south by car or motorcycle because I can't tolerate the dehumanizing effects of the world's largest mass transit system. The commute provides a visual dissection of my town. I cut down the now yuppified Columbus Avenue, the only southbound truck route servicing the West Side of Manhattan, pass Lincoln Center and the early morning logjam of traffic, noise, and ripped-up streets, plow through a tawdry Times Square and into the garment district [right] and Herald Square, where the pedestrian population increases and with it the battle for space and access between people and cars. Conflict and anarchy reigns; there are no rules. The street is like a slalom for the motorist and the pedestrian. Nobody cares about the crosswalks or the lights. Tempers flair, voices are raised. The sorrow is that we have come to accept this daily conflict, humiliation, degradation as the price we pay for living in New York, as if it's inevitable. Possibly this is affliction. As we have come to accept crime, violence, and the accompanying fear and anxiety, we've also come to accept the indignity of this urban anarchy and personal assault.

Somehow it becomes all right again when someone smiles and says hello or keeps the door open for you or stops his or her car and allows you to cross the street safely. For better or worse, this is my town and, "y'all come back." □


71 W 23
OFFICES
FLOORS
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Roofs and water tanks on Lower West Side

Carter Wiseman

Here and there, a magisterial presence, an outpost of excellence.'

Cliché though it may be, diversity is the most precious thing about New York. And in the built New York, it covers a wide range. There is the close-grain texture that has little or nothing to do with high design. The Belgian block surrounding Central Park is an all-natural-fiber paving. The black-iron fire escapes on the countless tenements have a laciness all their own. The wooden water tanks atop the older apartment buildings make an inimitably tactile silhouette against the sky. And the brownstone stoops of the West Side, which are as much for sitting as for stepping, make a link between the durability of building and the transient nature of the user.

Such detail is balanced by the great chunks of built New York. The Renaissance palazzi of Park and West End avenues are large without being anonymous. Here and there is a magisterial presence, the Morgan Library [below], the Ford Foundation, outposts of architectural excellence. Then there are the corporate champs, the Woolworth, the Seagram, Lever House.

The mix is neither intentional nor accidental. It is there because it reflects the mix of the citizenry. No Haussmanns here, please. We have too much to do; the triumphal processions (not to mention the fields of cannon fire) for which his boulevards were designed are just not our thing. That's one reason why the overbearing plan for the Coliseum site collapsed, and why the Burgee-Johnson Times Square mega-châteaux, even if built, aren't going to be New York.

Or are they? What is most hateful about this city in recent years is the shrinking of its diversity or the simplifying of it into the large and the small, the rich and the not-rich. Among buildings, an early intruder was the World Trade Center. Then came the martial ranks of Sixth Avenue's office dolmens, and the Trump-IBM-AT&T triad in the upper 50s. What they swept before them might not be missed if one hadn't seen what a city full of them looks like. Dallas and Houston have their points, but they didn't have much to lose.

New York's losses in architecture culminated in the destruction of Pennsylvania Station. The upside of that awful tearing down was the creation of a landmarks law. Increasingly, though, the landmarks preservation commission has the unenviable assignment of saving things that will be destroyed in all but a literal sense by the erosion of their settings, the buildings of similar period and type in the neighborhood. St. Bartholomew's is already a lesser building because of what happened around it.

The great problem is that when the good goes, better almost never replaces it. The fashion is to blame greedy developers, but responsibility must also lie with an uninformed public that fails to elect officials who will take a view longer than a few terms in office. Without public and political support, architects are more than normally prone to doing buildings beneath their skill, saying, with some justification, "If I don't do it, somebody worse will."

What I miss in New York is, in addition to the architecture that has been lost, the social diversity that was its underpinning—and which ensured the refreshment of the architectural process. No longer can a person loaded with dreams but light in the pocket come to New York (by which I mean Manhattan, as they do) with a reasonable hope of making a mark while there is still spring in the step. Hoboken? Long Island City? Nice enough, but not the New York of which New York was made. Better to enjoy the countryside, or have an old-time urban experience in such much-maligned but increasingly alluring cities as Philadelphia.

A city gets the architecture it deserves, and New York is now getting more than its rightful share. Trump Tower. The Marriott Marquis. Cityspire. These are unworthy of this fundamentally excellent urban place. An exception is Battery Park City. But it was conceived as a mixed-income project and based on the best of New York's vernacular design. It could only be built as luxury-land. How good should we feel about that?

At the root of our losses is that the traditional constituency for architectural diversity—whether tenement or Seagram tower—is fast finding New York City inhospitable. And when the field is abandoned by the people who care, it is rapidly occupied by people who don't, but in most cases can afford not to. When you lose diversity, you all too often get ugliness, social and architectural. □

Mr. Wiseman is the architecture critic for New York *magazine.*

Cervin Robinson

'A city whose glamour of order and light are not easily destroyed by greed.'

It's easy to say what I hate and what I miss in New York: I hate the city's mindless change and I miss the city I found when I arrived here a third of a century ago. (Change plays a peculiar role for architectural photographers: it is their enemy and also their goad. A new building must be taken before its users have an opportunity to change it; an old one may need to be taken because it is about to be mutilated or razed. And yet change protects a picture already made from being duplicated by someone else.) Picture taking is both a process of discovery and a way of holding on to what is evanescent. The ideal city for a photographer would be one like Rome in the Renaissance, a small new city growing in the ruins of a larger ancient one.

To me in the 1950s New York seemed something like that. It held a handful of modern buildings and, to the progressive architectural view, another handful of older buildings that were, though old, worthy of our attention. Beyond these few was a metropolis of older buildings, perhaps irrelevant to modernism, but waiting to be rediscovered. I had all the time in the world to do so, I thought. If this was largely the ignorance of youth, it was partly justified by experience as well: through the 1930s and 1940s New York, like other American cities in the Depression and during World War II, had in fact changed little. I did not realize that that lack of change was abnormal.

And so I miss two separate things, the actual buildings that were present then and are now gone, and the illusory Rome. I miss lost buildings ranging from individuals like the Tribune and Singer towers, the Produce Exchange, and Penn Station [left], to building types like the rows of Greek revival warehouses near the financial district and miles of tenement buildings on the Upper East Side (with low-rent apartments to live in). And I miss the illusion that there was that unknown and largely unchanging city to discover beyond whatever buildings I already knew.

What I cherish is harder to pin down. I think it is the conjunction of a regular street plan to its anomalies: the combination of what Broadway does in Manhattan or where avenues choose to start (at 23rd Street in the instance of Madison, at 14th Street, albeit with a different name, in that of Lexington) with a gridiron street plan that offers ruthless vistas of the horizon to the south and to rivers east and west.

The regular plan gives a dweller the illusion that the city can be conveniently filed away in his mind, that relationships are clear and obvious thanks to two coordinates, that the parts of the city he hasn't seen in a while remain unchanged, and that parts he has never seen are only more of the same. The anomalies make nonsense of the illusion of simple fileable order. The discovery of the surprising conjunction of a set of things one has filed in his mind on one avenue with unrelated things he has filed on another is something I cherish. (It is also close in kind to the discoveries that make good photographs.)

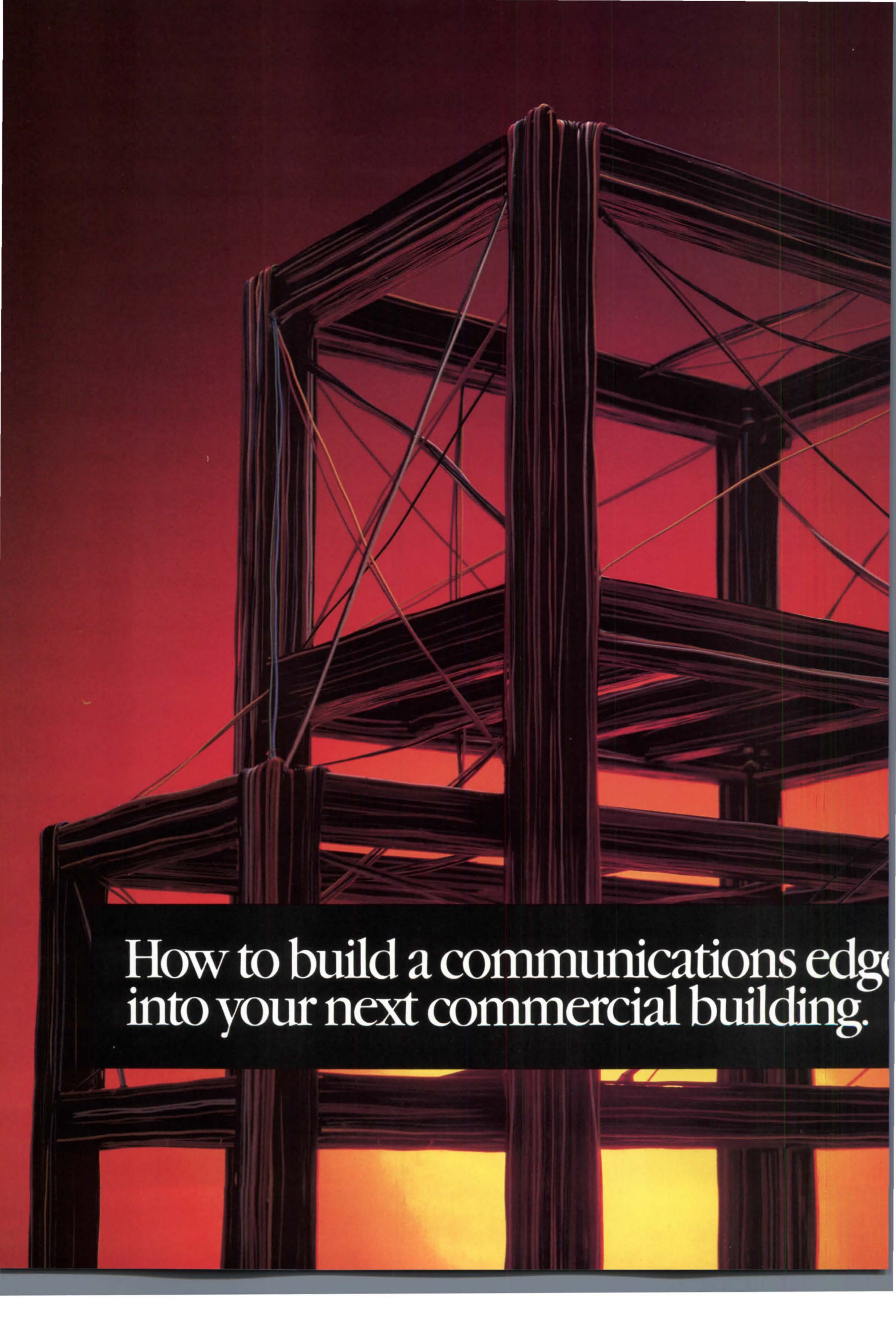
To that pleasure add the fact that Manhattan's plan (though not those of most of the other boroughs), nominally running east-west and north-south, is actually oriented as if by Druids (so that at the winter solstice the sun rises at the east ends of cross streets and at the summer solstice it sets at their west ends), and you have a city whose glamour of order and light, at least to a photographer, cannot easily be destroyed even by greed. □

Mr. Robinson, an architectural photographer and writer, is co-author of Architecture Transformed, a History of the Photography of Buildings from 1839 to the Present *(MIT Press).*

Singer Tower (right in photo).


© Nathaniel Lieberman

East River at twilight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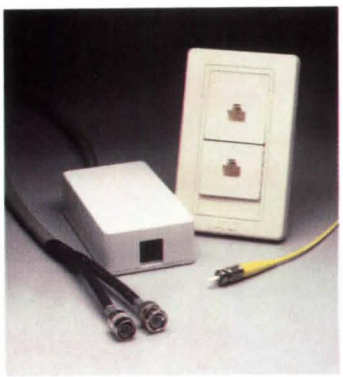

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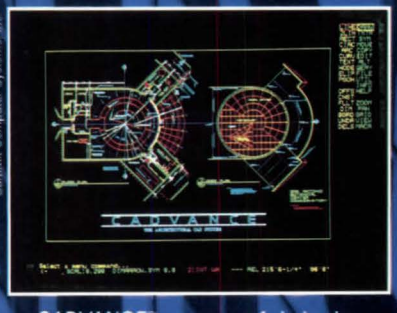

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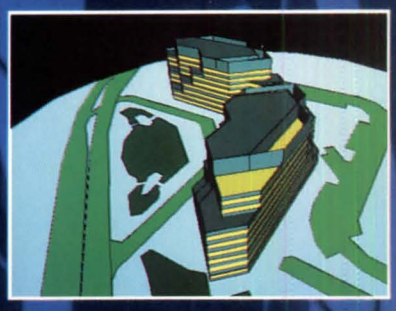

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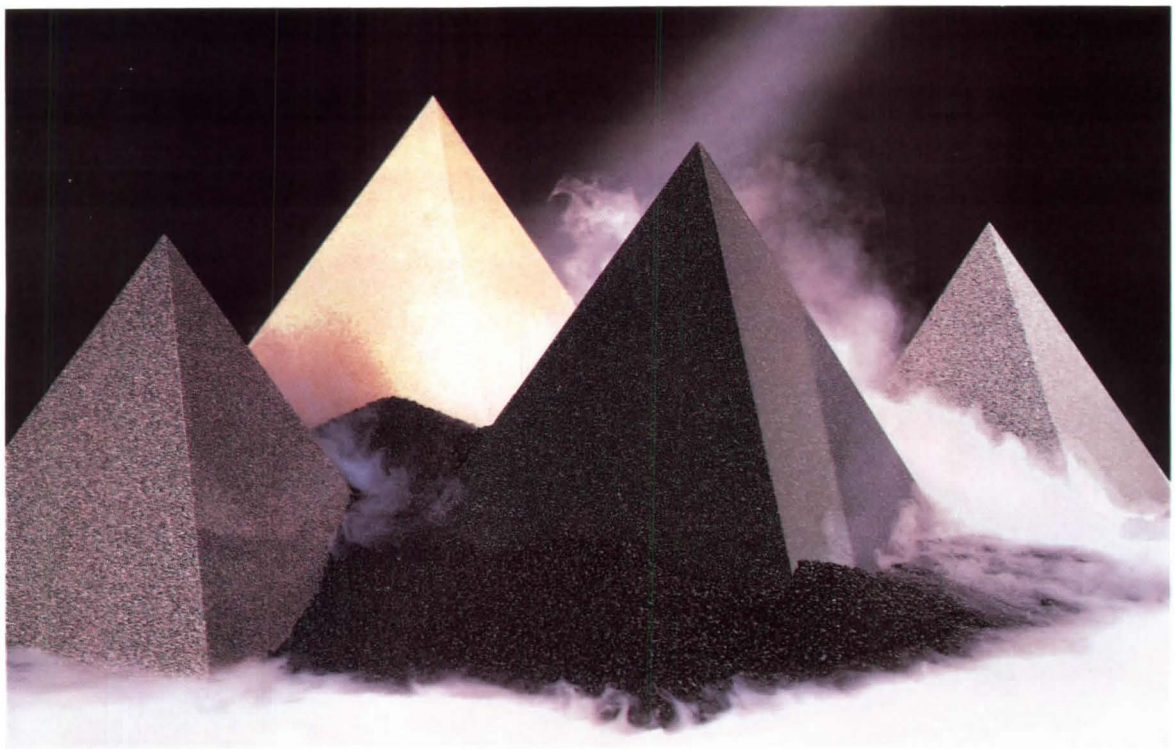


Courtesy of Avonite

Plastics, Past and Future

We are deeply into their age. By Forrest Wilson

"Form follows function," the American sculptor Horatio Greenough stated in 1852 in his book *Thoughts of a Yankee Stonecutter.* Half a century later, Louis Sullivan echoed the theme as an esthetic ideal, and several subsequent generations of modern architects ritualized it into dogma. "Form follows function" carried with it the corollary "truth of materials." Material sensibilities are developed, the argument goes, in the infant's feeling-touching-tasting exploration of the world, which determines perceptual judgment of building materials and structures.

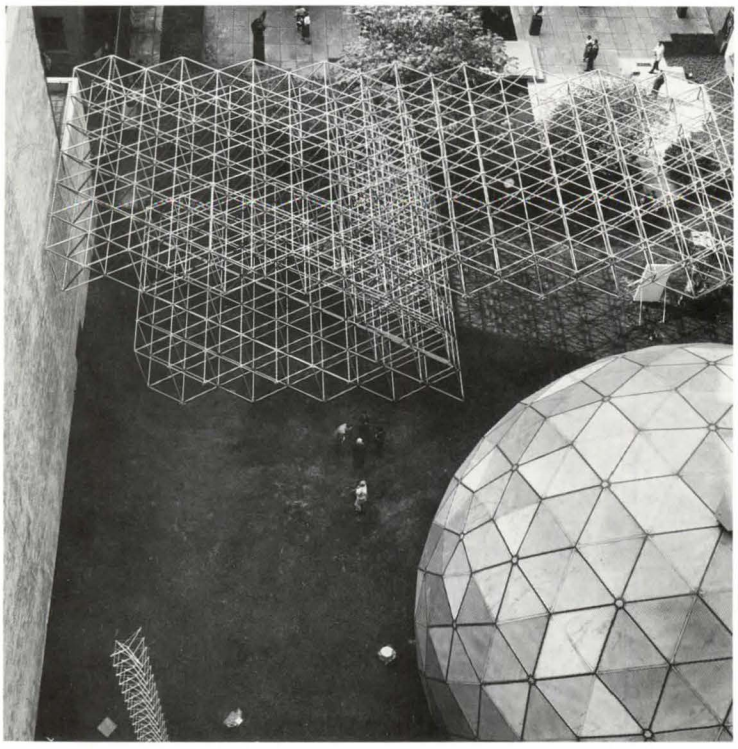
Louis Kahn asked what a brick wanted to be. He concluded that masonry wanted to follow the upward, arching, compressive shape of the parabola, just as cables naturally hang loose in a catenary. Pier Luigi Nervi's lectures at Harvard University in 1961-62 were devoted to proving that all great architecture of the past embodied great structure, even if great structure did not always result in great architecture. For a century, "truth of materials" stood as a form generator, with all the authority of a moral principle.

In the 1920s, Mies said that to build successfully in our modern age, technology must invent a solid, weather-resistant, soundproof, insulating, and lightweight building material that actively invited industrialization. Four decades later, Robert Venturi stirred doubts about form, function, and truth of materials by declaring "less is a bore" in his 1966 book *Complexity and Contradiction in Architecture.* Nonetheless, building materials researchers continued in search of Mies's ideal building material.

Uwe S. Wascher says they have found it, and the material is plastic. We came out of the stone age into the age of bronze, then into the age of iron, which came to an end last year, he says. This is the plastics age. Although the iron age did not end until the 1980s, its imminent demise was evident immediately following World War II; traditional materials were scarce and expensive, and plastics could imitate them as cheaper substitutes. Plastics made a mass consumer market possible—we could not talk into telephones, watch TV, drive automobiles, or do anything else on the scale we do today without plastics, says Wascher. Plastics made microprocessor miniaturization possible; in fact, it would have been impossible without materials science that packaged electronics in a cost-effective manner. There is more computing power in today's telephone than in the first computer that filled an entire room 30 years ago, he says, with all the confident enthusiasm of the guy who cornered Dustin Hoffman in "The Graduate," proffering Hoffman the future in that all-encompassing word—"plastics."

Wascher is a chemical engineer and, if you have not guessed by now, the vice president and general manager in charge of marketing for GE plastics. He says plastic buildings are inevitable. The building and construction industry is the largest plastics market in the world, with packaging a distant second and car bodies third. A hundred times more plastic material is con-

Pyramids of different plastics with Class 1 flame-spread ratings.



Alexandre Georges/Museum of Modern Art

Fuller's plastic-covered 'Radome,' introduced at MOMA in 1959.

sumed in building and construction than in the automotive industry. Plastics is also the fastest growing materials industry in the world, and it is the only proven, affordable material capable of meeting the increasingly crucial, constant demand for building, he continues.

There are more than 10,000 different kinds of plastics marketed today, and their performance abilities span those of every other known material from soft rubber to steel. Mies would be proud. Where did plastics come from? Where are they going? Where is Mies now that we really need someone to design with the materials he searched for?

At the dawn of plastics development, as early as 1828, French chemists invented polystyrene and vinyl plastics. The first plastics molded in the United States 25 years later became novelty picture frames, jewelry boxes, and combs.

John Wesley Hyatt, a Newark, N.J., printer, and his brother, Isaiah, invented "Celluloid" (cellulose nitrate), the first commercial plastic, in 1868. The brothers hoped to win a prize offered for a substitute for ivory. They were awarded a patent in June 1869, but, as far as is known, the prize was never awarded.

Celluloid was used as a substitute for hard rubber; wipe-clean collars, cuffs, and shirt fronts; and window curtains in automobiles. Eastman's film for the first motion picture, shown in 1882, was celluloid. It was not an ideal material; it burned readily, melted easily, and discolored in sunlight.

Phenolics, introduced in 1909 by Leo Baeekland, were the first man-made *thermosetting* (permanently rigid when heated or cured) plastics. They were used to make marbleized clock bases and electric-iron handles. The English laminated sheets of transparent celluloid between sheets of glass using balsam as a binder, but costs were large *and demand* was small.

However, as new plastics were invented the plastics market grew slowly and steadily until World War II, and the "plastic age" became inevitable.

1900-1920: A multitude of uses

The market meets cellophane, introduced in 1912 as a transparent wrap for food. Casein, a milk by-product, is used in the making of plastics in 1919.

Inventor Edward Bevedictus uses gelatin adhesive to bond a sheet of celluloid between two pieces of glass and patents the product as "Triplex" in 1916. Triplex is used during World War I for lenses in goggles and gas masks and for windshields on motor vehicles and aircraft. However, low temperatures make the glass brittle, and sunlight yellows the plastic, rendering Triplex a less than ideal glass substitute.

Building applications. Just after the turn of the century, *thermoplastics,* which soften when heated and harden when cooled, come into use; they include cellulosics such as cellulose acetate (CA) and cellulose acetate butyrate (CAB). These thermoplastics are exceedingly tough and they are clear or translucent, but their optical properties are not as good as those of present-day acrylics. Though CA is not good for extended outdoor exposure, CAB resists weathering and is used for piping and pipe fittings for gas and chemicals and for outdoor lighting fixtures, as well as for photographic film and recording tape. Both CA and CAB find a market in hardware items, handrails, tool handles, adhesives, and coating compounds.

In 1909, phenolics enter the building market. Brittle and hard, with excellent heat resistance and thermal and electrical insulation properties, phenolics are used to this day as molding compounds for electrical parts, sockets, switch boxes, circuit breakers, hardware, and appliance cabinets. They also become high-pressure laminates; they stiffen paper honeycomb for sandwich panels for doors, walls, and room dividers; and they are used to make foamed core for sandwich panels and foamed insulation around piping and ducts.

1920-1930: Polystyrene for building

Laminated safety glass becomes a standard for all automobiles in 1924. Alkyds, thermosetting plastic resins used in paints and coatings, are introduced in 1926.

Soap dishes and bathroom tumblers of polyvinyl chloride acetate reach the market in 1927; vinyl tablecloths, garment bags, and shower curtains are sold beginning in 1928.

Around the same time, urea-formaldehyde is thermoset, processed in a similar manner to phenolics, and molded. The light-colored urea-formaldehyde articles are considered more attractive than phenolic blacks and browns. Concurrently, Wallace H. Carothers and Julian W. Hill develop nylon in the late '20s.

Building applications. Although polystyrene (PS) thermoplastic has been known since 1845, it is not used commercially until 1925. Polystyrene is transparent, water-resistant, and dimensionally stable, but it softens at the boiling point of water. Other points against it are brittleness and poor weather resistance; it becomes increasingly brittle and yellows with outdoor exposure. High-impact polystyrene is produced by adding butadiene, which makes it tougher, more flexible, and suitable for lighting fixtures, signs, and molded hardware. Expanded (foamed) polystyrenes are used as insulation for ducts, pipes, freezers and walk-in refrigerators, walls, floors, and ceilings; as core material for doors; and as sandwich panels.

In 1926, alkyds are added to paints and protective coatings, and they find other uses as plasticizers. Unsaturated polyesters

form the basic constituent of reinforced plastics and, when combined with glass fiber, are used in structural building applications.

New types of ureas appearing at the close of the decade still have relatively low resistance to heat and chemicals but offer greater scratch resistance. They are used in molded hardware, electrical fittings, adhesives in sandwich panels, and insulating foams.

1930-1940: Skylights and stockings

Plexiglas boats are launched in 1930, and the tempo of plastics development accelerates as its popularity rises. *Business Week* reports in 1935: "Modernistic trends have greatly boosted the use of plastic in building, furniture and decoration, and contrariwise, plastics by their beauty have boosted modernism." In the "Plastics Age," according to *Popular Mechanics,* "the American of tomorrow . . . clothed in plastics from head to foot . . . will live in a plastics house, drive a plastics auto and fly in a plastics airplane."

In 1936 acrylics appear as everything from novelty items to sweaters. Melamine resins are introduced, and in 1937 families across the country sit down to dinners served on Melmac plates. Styrene drinking glasses and refrigerator egg trays become common in 1938, the same year Formica hits the market.

Cellulose acetate replaces cellulose nitrate early in the decade; it is an improvement but is brittle at low temperatures and fogs with moisture. At the same time, $6 million worth of R&D results in "high-test safety glass" that employs an interlayer of polyvinyl butyl resin.

The decade culminates with nylon stockings displayed at the New York World's Fair in 1939.

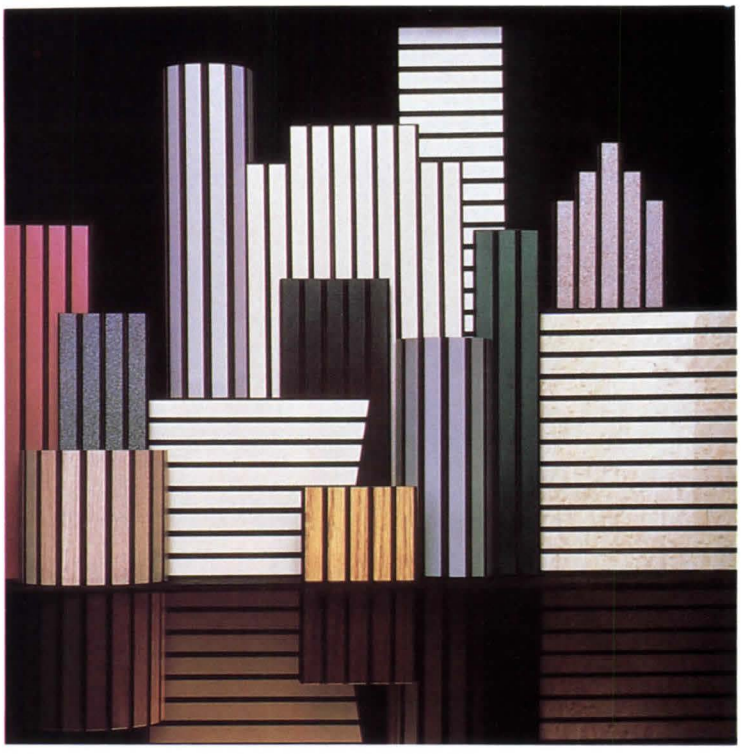
Building applications. In 1936, acrylic polymethyl methacrylate (PMMA), one of the best known types of transparent thermoplastics, demonstrates superior optical qualities. PMMA glazing can pipe light, that is, bend a beam of light around a corner by means of internal reflections of light by an outer layer of plastic tube. Plastics become commonplace as skylights, roof domes, glazing of public buildings, lighting fixtures, translucent ceiling panels, light diffusers, outdoor signs, corrugated roofing sheets, films or sheets bonded to wood or metal for exterior finishes, and molded hardware. PMMA can also be dispersed as finely divided particles in a liquid or mastic medium, producing a latex used for paints.

In 1939, nylon and thermoplastic polyamides (PA) reach the building industry; they are high in strength and chemically resistant but not recommended for continuous outdoor exposure. Synthetic fibers and filaments and high-strength fabrics are durable and tear-resistant. Coated and reinforced nylon fabrics are pressed into service for air-supported structures. Nylon also becomes molded parts: locks, latches, rollers for sliding windows and drawers, gears, and cams.

1940-1950: PVC comes of age

The demand for plastics increases during World War II. The need for improved insulation material leads to the development of polyethylene, considered today to be the most important plastic in the world. Thermoset polyester resins are developed, and polyester "wrinkle-proof" clothing appears in 1940.

During this decade scientists develop acrylonitrile-butadiene-styrene (ABS), another thermoplastic, as part of their search for synthetic rubber, and annual U.S. plastics production reaches 1 billion pounds in the mid-'40s.



Courtesy of Formica Corp.

Collage of colored plastic laminates, entitled 'Tambour City.'

When, during the war, nylon is declared a strategic material for making parachutes, nylon stockings sell on the black market for $10 a pair. The New York *Times* reports that 30,000 New York City women rush to battle for nylons. California women are indifferent.

Tupperware is introduced in 1947, and *House Beautiful* describes a polyethylene kitchen bowl as "Fine Art for 39 cents." But shoddy plastic goods abound—dishes crack, utensils dissolve, and raincoats disintegrate—giving plastics a public image of cheapness. *House Beautiful* asserts confidently that the "only . . . good reason why you, personally, should be interested in plastics" is "damp-cloth cleaning."

Acrylic plastics are used for optical lenses, artificial eyes, dentures, splints, and costume jewelry.

Building applications. Silicones, which offer stability, excellent corrosion resistance, long-term heat resistance, and water repellency, are used as waterproofing for masonry, as sealants, and in the electrical industry as switch parts.

Polyvinyl chloride (PVC), first patented in Germany in 1910 and further developed during the late 1920s, finally becomes important during World War II because of the shortage of rubber. Second only to polyethylene in volume of use, PVCs include a large group of materials with a wide range of properties. They generally exhibit good strength and toughness, fair chemical resistance, and a slow rate of water absorption. Though most are recommended for indoor use, some are suitable for outdoor exposure. Versatile PVC can be used as sheet and tile flooring, gutters, downspouts, moldings, clapboards, siding, window frames, piping, drainage systems, and facings of sandwich construction. PVC can be bonded to wood and metal for exterior building finishes, doors, and window frames. In rigid or flexible foam form,

Courtesy of Avonite

The classic orders presented in four colors. The full-scale model is constructed entirely of Class 1 flame-spread plastic.

PVC becomes the core material in sandwich construction and in cushions for seating. It is combined with other plastics to produce adhesives and binders for terrazzo and other floor toppings. PVB (a PVC copolymer) is used for interlayer in safety glass, coatings for upholstery fabrics, adhesives, mortars, and paints.

During this decade polyethylene is improved; it is now stronger, lighter, more flexible, and shows better water resistance. It is used for vapor barriers in floors and walls; dampproofing of basement walls; piping of cold water, gas, and chemicals; and wire and chemical insulation.

Introduced in 1948, acrylonitrile-butadiene-styrene becomes piping and pipe fittings; water and gas supply lines; drain, waste, and vent systems; door knobs, handles, latches, and handrails; and parts for furniture, appliances, and machines.

1950-1960: Epoxies bond and coat

Improved plastics earn designer acceptance as a basic material. Polypropylene is developed. Acetal and polycarbonate with nylon form the nucleus of a plastics subgroup known as "engineering thermoplastics," which competes with metals.

In 1957, Monsanto's all-plastic House of the Future at Disneyland proclaims its plasticity without apology.

By the second half of the decade "consuming" becomes a way of life in America, and a materials market is born.

The plastic "Radome," Buckminster Fuller's dome sculpture, is exhibited in the garden at the Museum of Modern Art in 1959.

Building applications. Epoxies are recognized for their excellent adhesive strength, chemical and moisture resistance, and ability to adhere to almost any building material. Epoxy bonds to metals, glass, masonry, and other plastics, both as a coating compound and as an adhesive. Epoxy forms a protective coating for appliances, automobiles, and piping and is an adhesive for finishes, sandwich panels, and facings of walls and doors. Epoxies also perform as high-strength mortars for concrete block, as patching materials for cracking monolithic concrete, as binders for terrazzo binders, and as matrices for glass-fiber-reinforced plastics.

By 1950, melamines have been improved to become hard and resistant to scratching as well as heat and chemicals. They are used as high-pressure laminates for countertops and cabinet finishes, adhesives for plywood, protective treatment for fabrics and paper, mineral or wood flour fillers for molded hardware, and electrical fittings.

In 1954, improved urethanes and polyurethanes are low-density foams with widely varying properties. Rigid urethane foams prove to be excellent insulation materials, with the lowest thermal conductivity of any building material, including mineral wool. Urethane is used for wall, floor, and ceiling insulation, insulation around piping and ducts, core material in sandwich panels, and flexible foams for cushions, upholstery, and padding. Polyurethane resins are used for elastomers, synthetic rubbers, adhesives, caulking, and glazing compounds.

Polycarbonate (PC), a transparent thermoplastic with exceptionally high impact strength, heat resistance, and dimensional stability, finds application in break-resistant safety glazing, lighting fixtures, lighted signs, and various pieces of molded hardware. Polypropylene (PP), a thermoplastic similar to polyethylene but stronger, stiffer, and more heat resistant, reaches the market in 1957. Its uses include piping and pipe fittings for hot water supply lines and drainage systems; films and sheetings; and high-strength fibers for carpeting.

1960-1970 Plastics for aircraft

Polyesters are introduced in exterior automotive parts and soft-drink bottles. High-nitrile-barrier resins resist gas permeation and work well as a packaging material.

"High-temperature plastics" including polyimides, polyamide-imides, aromatic polyesters, polyphenylene sulfide, and polyester sulfone are introduced to meet the thermal needs of aerospace and aircraft applications because they sustain temperatures of 400 degrees Fahrenheit and higher. Some sustain 1,000 degrees Fahrenheit with 50 percent retention of mechanical properties.

Annual U.S. plastics production reaches 15 billion pounds in 1967, including Teflon on stick-free frying pans. On a larger scale, the space program puts synthetics to work. Free-form, foam houses are considered esthetic and are furnished with urethane foam beanbag chairs and inflatable vinyl chairs. Art critic Hilton Kramer speaks of the "almost Faustian freedom" that plastics grant to modern society, and Andy Warhol says, "It's not fake anything, it's real plastic."

Plastics figure in Norman Mailer's "cancer-gulch" theories. Theories become fact when research finds that chemicals such as vinyl chloride cause cancer. Polyethylene dry-cleaning bags suffocate children, and plastic six-pack holders strangle birds and fish. Environmentalists go to war.

Building applications. By 1962 polyesters form a large group of plastics used for a wide variety of purposes. Reinforced with glass fiber, they are exceptionally strong and lightweight and can be used in structural building applications, as well as for prefabricated sections for roof structures, translucent sheets for roofing and interior partitioning, window frames, sash, facings for

sandwich panels, bathtubs, shower stalls, sinks, cabinets, and countertops.

Polysulfone is introduced in 1965 as a rigid, strong, heat-resistant thermoplastic used in adhesives, foamed connectors, meter housing, circuit carriers, other electrical/electronic components, medical equipment, coffee makers, humidifiers, and kitchen-range hardware.

Fluorocarbons, especially polytetrafluoroethylene (PTFE), are used in the construction industry. Remarkably inert to chemical attack, and with the lowest coefficients of friction of any known solid, PTFE is commonly known as Teflon. It is useful as piping for extremely corrosive chemicals at high temperatures, sliding pads to permit movement, steam lines, and the no-stick linings for pots and pans.

1970-1980: The plasticized world

Plastics production reaches 29.3 billion pounds in 1974. By 1976 plastics are the nation's most widely used material.

Mandatory federal safety standards for consumer products regulate patio doors, storm doors, entrance and exit doors, and bathtub and shower doors and enclosures.

Laminated glass reduces solar energy transmission, controls glare, and screens out as much as 99 percent of ultraviolet waves.

The Monsanto House of the Future must be torn down by hand; it is impervious to a wrecking ball.

At Expo '70, Wasubot 2, a Japanese robot with black carbon-reinforced, plastic-encased arms, is seated at a Yamaha organ and plays "London Bridge" and the Bach Concerto in A Minor from sheet music.

1980-1988: Exponential increases

Worldwide production of PVC sheeting exceeds 160 million pounds in 1987. Twenty to 25 percent is used in architectural applications. More plastics are made and used than steel, aluminum, and copper combined.

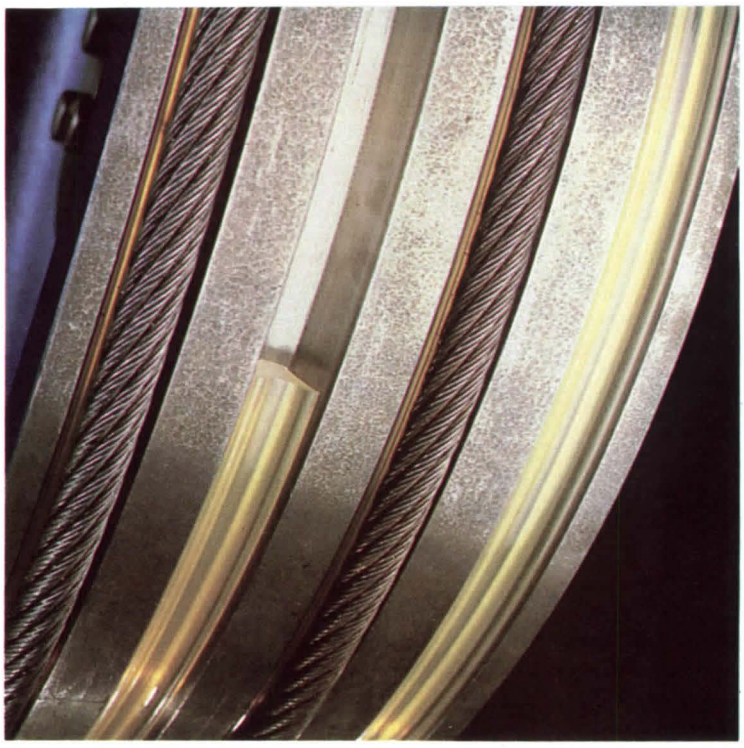
In other types of uses, Kevlar bulletproof vests are marketed, and Teflon-coated bullets create law-enforcement problems. Dakron arteries are invented, and Ronald Reagan is termed "the Teflon president" because criticism slides right off him.

The future of plastics

The Society of the Plastics Industry predicts that nationwide plastics demand will increase from a 1985 level of 48 billion pounds to 76 billion pounds by the year 2000. This prediction is based on assumptions that crude oil prices will remain relatively stable; the real gross national product growth will average 2.9 percent annually; and an aging population, smaller households but more of them, and more working adults will result in life styles that positively affect plastics consumption, particularly in the packaging, electrical, electronics, and transportation markets.

In this scenario, there are several positive factors affecting plastics consumption:

- Plastics will continue to make significant inroads in nondurable goods, particularly packaging, at the expense of glass, paper, and metal.



Courtesy of J. P. Stevens & Co. Inc.

Buff-colored polyurethane strips placed in V-grooves act as a bearing surface and separate steel cable from cast iron sleeves.

- An emphasis on alloys and blends, additives, polymer modification, and composites will enable the design of polymers for specific applications, further replacing traditional materials.
- Many new products will be developed specifically for manufacture from plastics rather than as replacements for existing metal products, although plastics will continue to replace traditional materials in consumer durable goods.
- Plastics will replace metals in structural and semistructural building applications.

Negative factors that could affect plastics consumption include these:

- Legislation and regulation may adversely affect plastics growth, with main areas of concern being solid waste disposal and toxic smoke generation.
- Component miniaturization may result in a decrease in plastic used per component.

Recycling: A new classification system

Recycling may change the perception of plastics from a throwaway to a material of many lives. In terms of recycling, plastics may be divided into three basic categories: commodity plastics, thermosetting engineering plastics, and engineering thermoplastics.

Commodity plastics serve nonstructural applications. Common commodity plastics are polyethylene, polypropylene, polystyrene, and polyvinyl chloride. Bottles, trash bags, credit cards, toothbrushes, hamburger clamshells, and toys are typical applications. Commodity plastics are not valuable enough to recycle.

Thermosetting resins have higher performance ratings than commodity plastics but cannot be recycled. Plastics such as reaction-injection-molded (RIM) polyurethane, sheet molding

Play structure 8 billion times the size of a diamond crystal.

compound (SMC), and phenolics are widely used as circuit breakers, boats, fascias, and auto body panels. Because they are chemically set and cannot be re-formed, thermosetting resins must be burned when discarded. As such, they are already obsolete, Wascher says.

Engineering thermoplastics are high-performance materials capable of prolonged use in structural applications and capable of withstanding stressful chemical, electrical, thermal, and mechanical environments. They are performance-oriented, not product-oriented. They can be transparent, self-lubricating, and formed into complex shapes. Compared with other plastics, thermoplastics can lower tooling and processing equipment costs and simplify inventory control.

In processing, thermoplastics—unlike thermosetting plastics—are subjected to physical rather than chemical change, so they can be reheated and reused without significant change in properties. They do not rot, rust, corrode, or degrade.

The value of engineering plastics is high enough that they need not be sold outright. They can be loaned or rented, as General Electric is presently doing. Following this concept, a billion pounds of recyclable thermoplastics eliminates 2 billion pounds of lower-performance materials. High-performance materials eliminate the need for low-performance ones. Inventories are slashed, mining for replaceable materials is reduced, and automobile exterior panels are recycled into coffee makers.

Wascher's proposal may have more significance than the future of auto bodies or coffee brewing. World economic forces are moving toward a convergent point: the relative equalization of labor costs. Materials are becoming the battlefield on which the coming global economic wars will be fought. Nations that best invent and use materials through interlocking strategies will be tomorrow's winners, he says.

Unique design is no longer enough. Manufacturing costs tend to equalize as labor costs are reduced in Japan, Europe, and the United States. Productivity is more and more related to materials. The development of plastics and plastics technology may well decide the outcome of the competition.

Are we ready for a plastic world?

We know hard and soft wood. We reach out and touch copper, aluminum, and steel and judge them by sensibilities developed from birth. Small children are the world's most efficient universal testing machines. We know copper has value. If Campbell's decided to make soup cans in copper, we would salvage them. But soup cans are cheap sheet metal, so we stomp on them.

Value judgments on plastics are more difficult. We cannot readily distinguish a difference between commodity plastic and high-performance engineering plastic. The average consumer sees a plastic garbage bag and the space shuttle as the same material.

If people were aware that our consumer life style is based on plastics, their attitudes might change, says Wascher. Actually, he continues, our societal values probably are changing. Children's toys are larger than they ever were before, some are life-size, and almost all are plastic. Children whose first experience of the world comes from Toys "R" Us may be developing a different set of material values than adults who grew to maturity surrounded by wood, stone, and metal. □

The author gratefully acknowledges the contributions of GE Plastics representatives Pete Dalrymple, manager of construction programs; Michael Dickens, senior industrial designer; and Eric Balinski, programs specialist; as well as Uwe S. Wascher, vice president of marketing.

I remember how certain parts of that house
et different moods. Some were even dreamlike."

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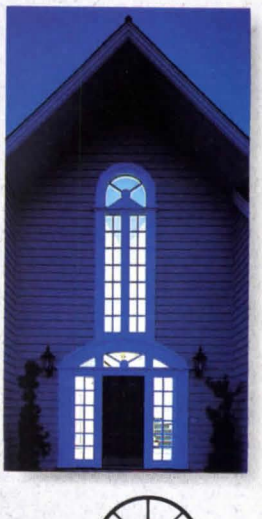

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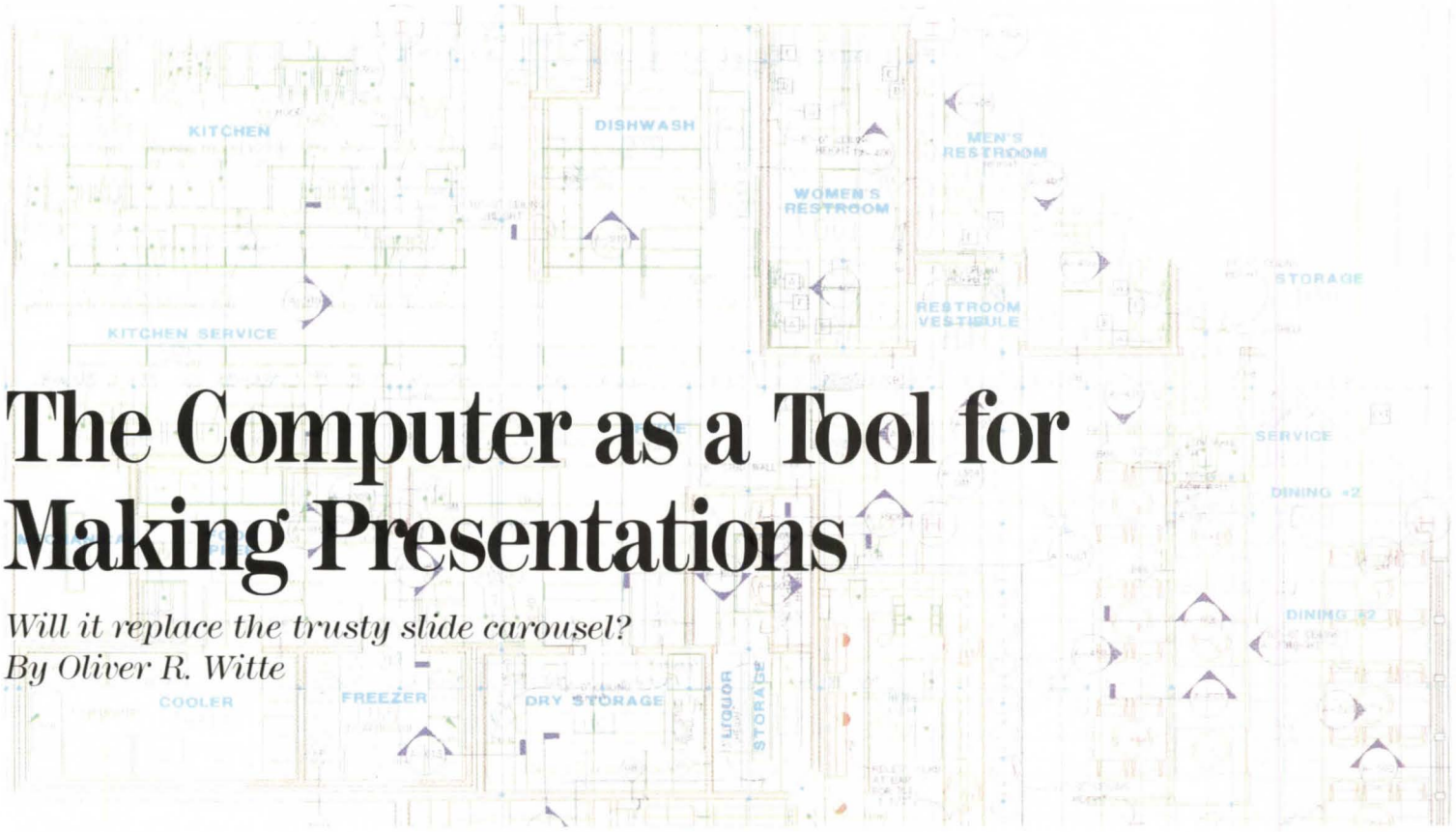

The Computer as a Tool for Making Presentations

Will it replace the trusty slide carousel?
By Oliver R. Witte

For some architects, the technique of making a presentation has not changed since the introduction of the Kodak Carousel back in 1959. Just set the slide tray on the projector and show 20 minutes or so of gorgeous photography of buildings. Then turn on the lights, wake everyone up, and ask for the job. It's that simple (if none of the slides got in backward), and it's been a staple of architectural marketing. Now, newer technologies are offering a wide range of tools to create more effective presentations at various phases of client interaction. Most of the new tools involve some form of computer application.

Architects make presentations for two reasons: to sell their services and to sell their ideas.To the marketing director, as to the director of design, a computer is the slingshot in the hands of David—the great leveler that permits all firms, regardless of size, to compete on an even footing. It puts both power and speed at the disposal of the user. Whatever can be imagined can now be created at minimal cost on a desktop computer. But desktop publishing gives the architect the power not only to become a publishing mogul but also to produce some incredible graphic atrocities.

Architects with appropriate backgrounds, however, are finding that the computer adds a new dimension to the power of persuasion. For initial and continued client contact, newsletters are becoming popular and inexpensive to produce using desktop publishing techniques. A significant volume of personalized letters can be generated by the computer, drawing from a mailing list maintained on a data base program. And in the office, deadlines for submissions, timely reminders to follow up, and appointments can be tracked on calendar programs that will refresh your memory about the status of the job and even dial the phone number of the decision maker.

Combining desktop publishing with CADD clearly points out the dichotomy between IBM and Apple. On one side of the chasm are most of the CADD drawings, best produced on IBM or compatible equipment; on the other side is most of the technology to produce proposals, newsletters, and handouts, and this is where the Macintosh excels. Getting the two sides together isn't easy. The race is on to see whether the Macintosh gets up to speed in CADD before the IBM gets up to speed on presentations. IBM is competing at a disadvantage because its CADD and desktop publishing require different and rather expensive graphics equipment. Few architects will want to make the necessary double investment. The Macintosh runs all graphics programs with equal facility.

Several programs now promise to merge text, headlines, and graphics in a single document. The two with the greatest market share are PageMaker, which now runs on both the IBM and the Macintosh, and Ventura Publisher, which runs on the IBM.

When job prospecting has been successful and the firm is invited to submit its credentials, the computer can quickly turn out brochure inserts targeted directly to the specific client, site, and building type. Little touches like the client's logo and pictures of key people from your own and your client's offices can easily be included in the insert. You prepare them for publication by running them through a new device called a scanner, which applies the dot pattern that enables the picture to show shades of gray. The new desktop output devices can produce inserts of adequate quality. Even dot matrix printers costing less than $1,000, such as the Toshiba P351C, can produce 300-dot-per-inch resolution in color on paper or transparencies. Color thermal printers also can generate 200- or 300-dot-per-inch resolution.The main disadvantage of desktop output devices is that they are slow; producing more than a few copies probably is not reasonable.

If higher resolution and larger quantities are desired, documents can be sent on a computer disk or via modem to a typesetting house, which will produce a master copy suitable for reproduction on a printing press. Publication quality normally begins at about 1,300 dots or lines per inch.

Once the architecture firm has been short-listed and invited to appear in person, the array of techniques and technologies to make a compelling impression grows significantly. No firm with strong design credentials will want to forgo the opportunity to document its successes. Good photography of award-winning buildings continues to be the centerpiece of any stand-up presentation to a prospective client, and color slides are relatively inexpensive to produce and easy to manage. The mistake most firms make is to turn over the entire presentation to photographs of buildings. In most cases, the point can be made in five minutes, and to continue becomes counterproductive.

Some firms are reporting success with videotape presentations, but television has raised quality expectations to such a level that it is difficult to produce a professional-looking tape at an affordable price. Furthermore, a tape can quickly become dated and cannot readily be tailored to the needs of a specific audience.

After the firm has established its esthetic credentials, computer applications can be used to address other concerns of the client. Frequently these concerns include the firm's track record in meeting deadlines and budgets, limiting change orders, minimizing energy consumption, and maximizing value. How the firm makes those points is important. The best way is not with words but with graphics. A series of charts displayed on a screen and reproduced on paper as a leave-behind piece is eminently more effective. Typical techniques include bar, line, and pie charts, or any combination. New computer programs such as Power Point or Cricket Presents make it easy to generate attractive charts without assistance from the graphics department and to heighten their impact by merging text, art, and photos.

Technique can be just as important as technology in a presentation. Until now, the computer has not been a practical presentation tool. Computers suitable for showing graphics are difficult to carry around. Their screens normally can be seen adequately by only a few people. Kodak, General Electric, and Electrohome make projection equipment that attaches to the computer and displays the image on a large screen, but expensive and the quality may not be adequate for some purposes.

Computers have been used mainly to prepare the material that will be displayed as slides or transparencies. Several vendors, notably Polaroid and Presentation Technologies, make equipment that will instantly generate slides directly from the video board of the computer. Numerous vendors can capture the same image that appears on the screen, save it on disk, and produce overnight a high-resolution slide that looks as sharp if it had been hand-drawn by an artist. Or, simply making a picture of what appears on the screen may produce satisfactory results.

Another family of programs directs its output to plotters that accept pens intended to draw in color on transparency film for overhead projectors. Systems integrated with a laser printer make better looking transparencies if a substantial amount of text is involved, but the laser does not print in color.

Some programs require the data to be entered directly. Others will take the results of a spread sheet analysis and graph them without the need to re-enter the data. A few programs, notably Excel by Microsoft, have excellent graphics power built into the spread sheet. And libraries of figures and other symbols are as useful in presentation graphics programs as in CADD programs.

The 4-color reflected ceiling plan, left, was generated by architect TAG Inc. on a Colorgrafix 100 printer. Above, a color rendering of the winning design for the Shanghai Golden Bridge Mansions design competition was created by architecture firm ED2 International using Point Line graphics software.

The latest introduction from Kodak promises to turn the computer into an effective presentation partner. The product, Datashow, takes output from the video card and directs it to a device that fits on an overhead projector. The audience sees on the screen the same images that appear on the computer monitor. When first introduced in the spring of 1986, Datashow had a resolution of 200 vertical lines—about the same as the first IBM color monitor. A new version, to be introduced this month for the Macintosh and next month for the IBM, is twice as sharp and three times clearer. A utility program enables the presenter to capture specified images as slides for playback later. Another utility permits a 16-button remote device to control the computer keyboard. Datashow runs only in black and white, making it a good match for the transportable Macintosh SE. It costs $1,600 for the Macintosh version and $1,700 for the IBM version.

When the job is won and the design completed, a rendering often is required to help key people visualize how the building will look. If the plans already have been completed on the CADD system, little or no additional work may be necessary. Perspectives are generated quickly on the computer, making it easy to select precisely the optimum point of view and vanishing point. Then the line drawing can be turned over to an artist to complete, or the architect can do the job personally with one of the CADD utilities such as AutoShade from Autodesk or Swivel 3-D from Paracomp. The former runs on the IBM computer and the latter on the Macintosh.

Photographs courtesy of Archsoft

Neeley/Lofrano Inc., Architects, graphically transformed the Millbrae Shopping Center using AT&T Truevision and Archsoft Image Libraries. Areas of the original photo were electronically cut, and others added, to create a rendering of the proposed project.

Building a computerized model also has been simplified. Views either within the model or from outside can be studied, and the architect can set up a series of perspectives that show an observer the project from various vantage points.

A variation on this technique makes it possible for a 3D program like Versacad Design to take an observer on a simulated walk through or around the building or even on a helicopter flight around the building. Then the most important views can be converted to paper for the lasting impact that comes from print media with a low-cost ink jet printer such as the Hewlett Packard Paint Jet. It lists for less than $1,400 and represents a breakthrough in price and performance.

Perhaps the most valuable use of this technology is to disprove objections—always a difficult task—that might kill a project unfairly. If the issue is whether a building will shade a playground, a CADD program such as Arris can simulate the passage of the sun throughout the day, demonstrating that the neighbors' fears are unfounded (if they are). Part of the problem with presentations regarding views and environmental impact used to be the time-consuming job of entering enough detail about the site and background to be either helpful or realistic. But technology now allows the computer to capture a series of video images to use as background. Or the operator can scan a photograph into the computer so the model can be built on a realistic representation of the actual terrain.

Perhaps the best-known video capture system is the Targa, by AT&T. It consists of a graphics board inside the computer and software that captures images from a video camera. Once captured, an image can be edited in whatever detail is desired, down to the individual dot. Portions of the image can be cut out and stored for re-entry in another drawing. Dennis J. Neeley, AIA, of San Francisco uses the system for renderings and presentations. He also has found that he can take a video image of an old set of plans and trace over them with a CADD program. One of Neeley's subsidiaries, Archsoft, makes a library of symbols including people, cars, and landscaping for use with Targa pictures. They help add realism to a model set on a video image of the site. MacVision, ProViz, and Data Translation are comparable but less expensive products for the Macintosh.

The last word in computer simulation for architecture currently is animation. Point Line users have been popping eyes with IBM presentations showing cars driving by and elevators going up and down. MacMovies and Video Works are competitive programs for the Macintosh offering stereo music, speech, or other acoustic effects. More realistic, if more expensive, is the video-based modeling system by Cubicomp for the IBM. The company started out making imaging equipment for television producers and has now expanded into architecture. One of the early explorers has been Samuel A. Haffey, AIA, of New York City. He begins his design in Cubicomp, moves to videotape for animation, and dumps to Autocad for working drawings. "The client needs a concept to get started," Haffey said. "Now I can help him and I can do better, more efficient design at the same time."

If animation is the last word, stereoscopic 3D may be the postscript. Richard Koch and Alan Hoffer, researchers at the University of Oregon and Boston University, are working on a program that displays its objects in apparent depth on the computer screen. The program is not ready for sale, but a demonstration version is running on the Macintosh. Yes, you have to wear the funny 3D glasses but the program gives the sensation of designing— not just building a model—in space. AutoShade can produce stereoscopic images on paper or projected on a screen, but not on the computer screen.

How best to master this presentation power is a matter of debate. Some architects are unable to resist popping the cork for the client. Others, like Creighton C. Nolte, AIA, of San Diego, prefer to release the genie from the bottle only in private. "What's going to happen is that a client will be so impressed with how much he can get quickly that he'll think nothing of calling at 5 P.M. and saying he has a meeting with a lender the next morning at 9 and he needs four more 3D views," Nolte said. "And instead of the normal charge for a rendering, the client will expect to pay for only a couple hours' work, or maybe nothing at all if the fee is lump-sum." □

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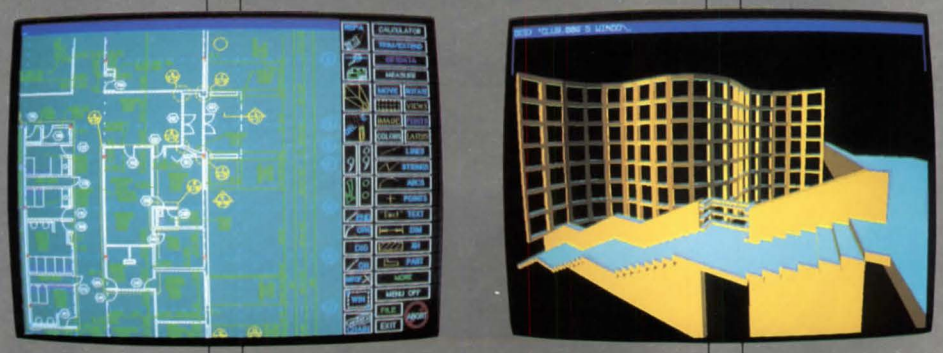

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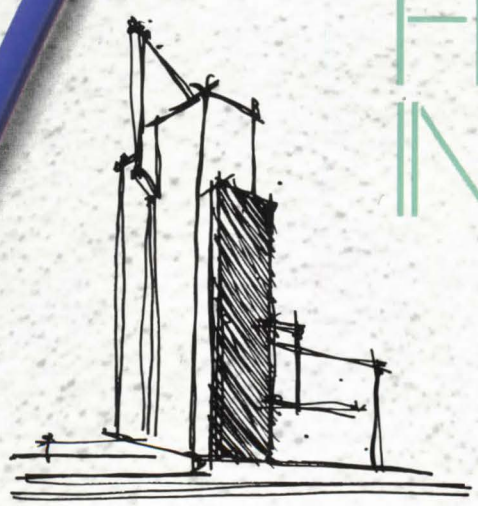

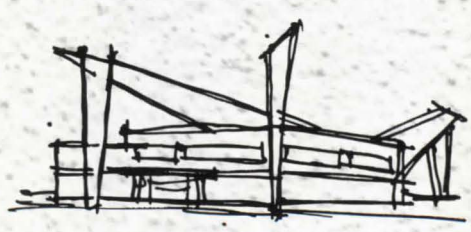

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Demolition: The Flip Side Of Construction

What architects need to know about it. By Bea Sennewald, AIA

It took seven and a half seconds to demolish five apartment buildings—a total of 700,000 square feet—on a rainy morning last May in Kansas City, Mo. They collapsed from the outside in, falling into neat piles of rubble on top of their foundations. In a few moments, orderly structures had been turned into the architectural equivalent of entropy.

Blast demolition is the art of antistructure. It relies on progressive collapse, which structural engineers go to great lengths to prevent in building design. The principle is quite simple: the structure is weakened at strategic points by explosive charges; then gravity takes over and brings the building down.

"There is an enormous amount of kinetic energy contained in a building," explains Douglas Loizeaux, who with his brother Mark owns Controlled Demolition Inc., the contractor for the Kansas City project. "The same amount of energy it took to lift every brick into place during construction is released during demolition."

The few seconds of spectacle capped weeks of quiet, painstaking preparation and engineering that go into this kind of demolition project. It's an arcane skill taken for granted unless something goes wrong—it is something of an art form passed down from father to son. And before demolition planning can even begin, buildings must be studied to determine whether they're fit for destruction by explosives.

One of the major factors governing that decision is the amount of space available for the debris: the rubble pile will have a 1:1

Photographs courtesy of Controlled Demolition Inc.

slope. The size of the building also matters. "It costs about the same for us to tear down a four-story building as a 20-story building," says Loizeaux, adding that on smaller projects conventional demolition is often cheaper.

Even in a blast demolition, much of the initial work is done by hand. Windows must be removed, and most nonstructural partitions are knocked down with sledgehammers. If left in place, the masonry and stud walls would absorb too much of the explosive energy, making it impossible to control the progression of the collapse.

Before the charges are placed, the crew tests one or two columns to determine the amount of explosive necessary to bring the structure down. In a concrete column, the aim of the test is to knock out most of the concrete and rupture the spiral reinforcing cage, making the column fail in compression or bending. Use too much explosive and shrapnel will fly; use too little and the building will refuse to come down. "We overdesign somewhat to avoid that kind of embarrassment," says Loizeaux.

The charges are placed in holes drilled into the columns. Each blast cap contains a variable time-delay mechanism that allows the contractor to control the order of collapse and the direction of fall of the building elements. By sequencing the detonation, walls can be made to fall away from adjacent buildings and even twist or rotate if necessary. Spreading the explosion over time also minimizes the overpressure that would cause windows to pop around the neighborhood.

Photos above show sequence of blast demolition for the Independence Building in Charlotte, N.C. The 1920s building was demolished to make room for new construction.

The sophisticated planning and calculations that go into an explosive demolition are not skills taught in college. Asked if he has an engineering degree, Loizeaux answers: "Oh, no, I majored in filmmaking." In hindsight this was not a bad idea, because the Loizeaux brothers do much of their planning by reviewing the films they have taken of previous projects. Most of their training came from watching their father, Jack, a demolition contractor who pioneered the use of explosives. In fact, many demolition companies are family businesses where skills are passed from one generation to the next.

Though it involves less glamour and adrenaline, conventional demolition is much more common than blasting. Here the methods haven't changed since ancient times—the building is taken down piece by piece with tools that have romantic-sounding names, like clam buckets and headache balls. It's much slower than explosive demolition but *not necessarily* less dangerous. The process is like taking apart a puzzle you can't see.

"In many cases the buildings have been remodeled so much over their lifetime that it's difficult to tell what is holding up what," says Tim Collison, with Baltimore demolition contractor Potts & Callahan. "That's when you move very slowly and let experience and intuition guide you."

This is even more the case in buildings severely damaged by fire or earthquake. Says Collison: "In a building that's barely standing you may have to jump in and build some new shoring at a moment's notice to avert disaster."

Each project presents a new problem requiring special care. Often a building to be destroyed is wedged between two buildings that not only have to remain standing but also should not be damaged. To prevent mishaps the contractor establishes a "line of severance," which is essentially a two- to three-foot-wide sawcut down both sides of the building to be demolished.

When Johns Hopkins University wanted to take down a 70-year-old building that was connected to a lab building, Collison decided to leave the adjacent row of columns standing until they could be taken down individually by hand. "If we had used a wrecking ball, many people in the labs next door would have lost their research experiments from the vibrations," Collison explains.

At Southwestern State Mental Health Institute in Marion, Va., a steam tunnel had to be saved while the buildings above it were torn down. Wallis Mills, an architect with the State of Virginia who supervised the project, was baffled at first. "It was a big pain. We had no drawings and no idea how thick the roof of the tunnel was," he says. To prevent damage, the contractor piled about 10 feet of dirt over the tunnel and bridged it with a wood platform creating a cushion for falling debris.

In this project a new hospital had been designed to reuse some of the old materials from the demolished buildings. This meant taking down the slate roofs shingle by shingle and chiseling out limestone blocks, arches, and lintels. Providing the architectural continuity between the old building and the new project didn't come cheap: the cost of the demolition topped $900,000 for about 150,000 square feet.

A special headache for demolition contractors is the asbestos used as pipe insulation and fireproofing in many older buildings. It has to be removed before any wrecking operation can start. Although the building is coming down, the Occupational Safety and Health Administration usually requires that asbestos be removed with the same care mandated for occupied buildings. This means all openings have to be sealed and a negative pressure maintained. Just before tearing down the building, the contractor actually has to build new temporary walls and window coverings.

Have you ever wondered what happens to the big pile of debris that's left after the building is down? Disposing of it is not as simple as sending it to the city dump. Most state regulations prohibit the burying of wood, metal, or any material that might decompose in landfills. These materials must be separated from the "inert" ones, such as brick and concrete, and taken to a special "rubble dump." While landfill materials often can be sold to earthwork contractors, the rubble dump charges between $150 and $300 per truckload.

"Waste disposal makes up at least half the cost of a demolition project," says Collison. Disposal of asbestos and PCBs from transformers is even more expensive because there are so few licensed sites. It's not unusual to have to factor into the project a truck ride from the East Coast to Arkansas or Wyoming.

The architect's involvement with demolition is usually limited to one section of the specifications. And that section, taking the CSI Masterspec as an example, tells the contractor very little beyond "Follow all laws and do a good job."

The exceptions to this are projects where the facade of an old building is to remain standing to add a historical flavor to the new building behind it. This sort of appliqué architecture—much in vogue at the moment—requires extensive research and detailing, often preceded by lengthy negotiations with the Historical Society or Fine Arts Commission over how much of the old building should be saved. Once that is established, the architect determines the line of severance and carefully details each attachment to the new building.

The task of designing the shoring for the wall during construction commonly falls to the contractor. There are many questions to be addressed: What shape is the wall in? Is the foundation adequate? Where can the shoring be placed?

The easiest way to support a facade is to build trusses on the street side, similar to the back of a billboard. But some wall facings, such as terra-cotta or marble, are too brittle to penetrate for attachments. In that case, "you go through the window openings and attach a beam to the back of the wall," explains Alan Hobelman, the structural engineer in charge of sheeting and shoring design for Hyman Construction, Washington, D.C. "If the facing is very delicate it may even be necessary to place beams on both front and back and sandwich the wall between neoprene pads."

Sometimes there is no room for supports. Georgetown Park, a mall built several years ago in Washington, is an example. The site was separated from an adjacent canal by a stone retaining wall built in 1836, nine feet thick and 32 feet high. The architects decided to slim this wall down to 30 inches to gain additional retail space. For supports, whaler beams were run across the canal and braced against the piers of an old brick structure on the other side. It then took masons 15 months to chip out six and a half feet of stone by hand.

To design a support system the structural engineer has to have some idea of the strength of the old materials. Hobelman prizes his collection of steel manuals dating back to 1873, which give him instant access to the properties of all steel shapes in use during the past hundred years. For concrete or masonry walls, small samples can be tested for strength.

"But even with all the theoretical assessment, you still don't know exactly what you have until you cut into the structure," he says. "On one of our projects the old wall shifted two inches to one side before we could stop it. We had to make quite a few adjustments in the new structure to compensate."

Saving an old facade almost always entails some repair work—masonry has to be repointed, or new attachments may be needed for a cornice. But sometimes the wall is not even strong enough to support itself. When the contractor on the Georgetown Park project started demolition he noticed that the arches in the front facade were very unstable. To support the wall above during repairs a technique called "needling" was used. It consists of cutting small holes in the wall and running short beams through the holes, which in turn are supported by posts on either side.

In the extreme case, preservation for the sake of giving a project a sense of history involves completely demolishing an old structure and rebuilding it from scratch. An example is another Washington project, four blocks from the White House. The rear walls of a block of old town houses were supposed to be integrated into the design of a new office building. But they turned out to have no foundations and were in such poor condition that they had to be taken down brick by brick and then built back up with new mortar. Should this project be classified as demolition, construction, or preservation? Take your pick: an argument could be made for all three. □

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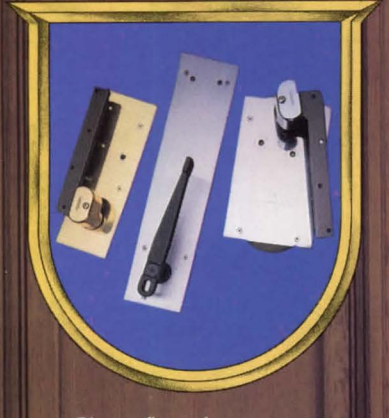

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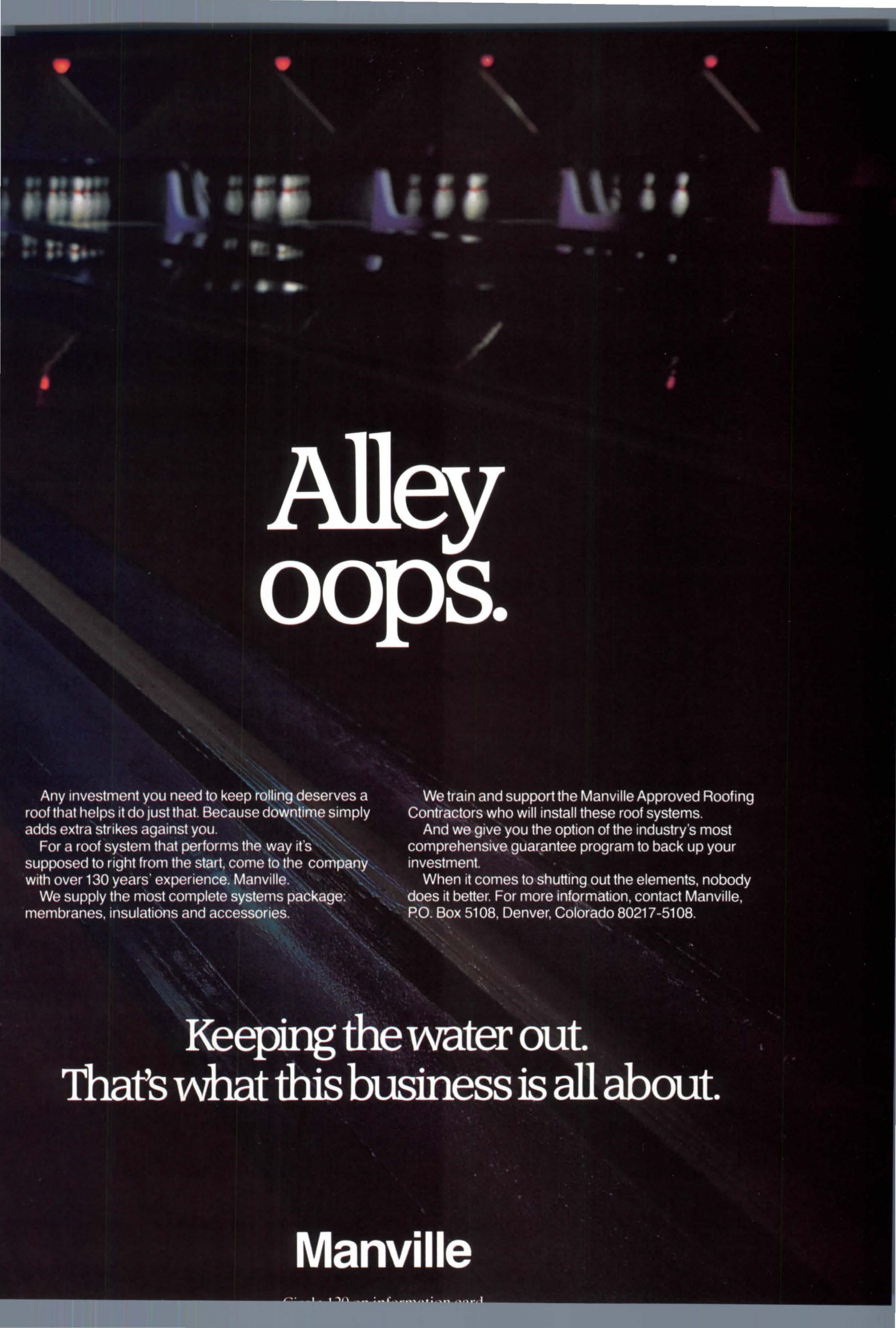

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Signage: Typology and Design

Basics of building communication. By Timothy B. McDonald

There are five basic types of signage, if classified by the information they convey to the user. The first type consists of signs that give directions, often a simple arrow or a symbol combined with an arrow. The second type is for orientation and information and includes signs that are often complex and convey a large amount of information, such as a building directory. Identification signs make up the third type, and their purpose is to identify a place or thing—an office, shop, or building.

Official notice signs, the fourth category, are occasionally confused with information and orientation signs. The difference lies in the specialized nature of the information; good examples of official notice signs are exit and parking signs. The fifth category is warning or prohibitory signs, telling the user what he or she can or can't do, often with a singular symbol.

Color plays a large part in design of signage. If the designer color-codes signs, the palette should include no more than six colors—about the limit to which the user can attribute individual meanings. Colors selected for signage should have commonly recognized names; this is particularly important for color-coded maps and directories. Additionally, certain primary colors have recognized meanings and must not be used out of context. For instance, primary yellow indicates caution and should not be used for any other type of sign.

The lighting in which sign colors will be seen can markedly affect the perceived colors. Red signs appear orange under the high-pressure sodium lighting commonly used in parking lots. The same red appears gray under low-pressure sodium lamps, and brown if exposed to uncoated mercury illumination.

Except for exit signs and some directories, ambient light sources usually are sufficient for illuminating interior signs, while outdoor signs often require their own light sources. The best source for outdoor sign illumination is floodlighting from the ground directly in front of the sign. External lighting of this kind is the least expensive and simplest method for lighting outdoor signs. Signs with interior illumination must be sealed against weather and insects yet be adequately ventilated to avoid buildup of high internal temperatures; these two requirements often work against one other. Additionally, internally illuminated signs require regulation of the brightness level of the light sources. Excessively bright internal illumination can cause translucent letters set against an opaque background to merge with one another. On the other hand, opaque letters against a translucent background can appear inconsistent in thickness and can virtually disappear if the background lighting is too bright.

The designer should choose a typeface that easily sets a regular proportion.

The designer can develop a rough idea of how large a sign should be based on type size, which is selected according to viewing distance, and on the length of the message. A rule of thumb for both vehicular and pedestrian traffic says that capital letters must be at least one inch tall to be seen clearly at 30 feet. For each additional 30 feet of viewing distance, the capital letters must increase another inch in height to remain legible. No line should exceed 30 characters.

Symbol-signs attempt to regulate behavior without words, often when public safety or emergency situations must be understood quickly. Certain sign shapes are recognized as standards for conveying particular messages: for example, the equilateral triangle for warning signs, the circle for regulatory signs, and the square for information signs.

Most symbol-signs incorporate a continuous white border, no less than one-quarter unit wide, to define the color field. The symbol should be located no closer than one-quarter unit to the border and should occupy no more than 50 percent of the color field in which it is set.

Another group of signs that brings with it a unique set of semiotic problems is multiple symbol/legend signs. Consistency is again the watchword. All symbols and legends should be the same size and style. No more than two directions should be indicated per plaque, with different direction symbols separated by a space equal in size to one symbol.

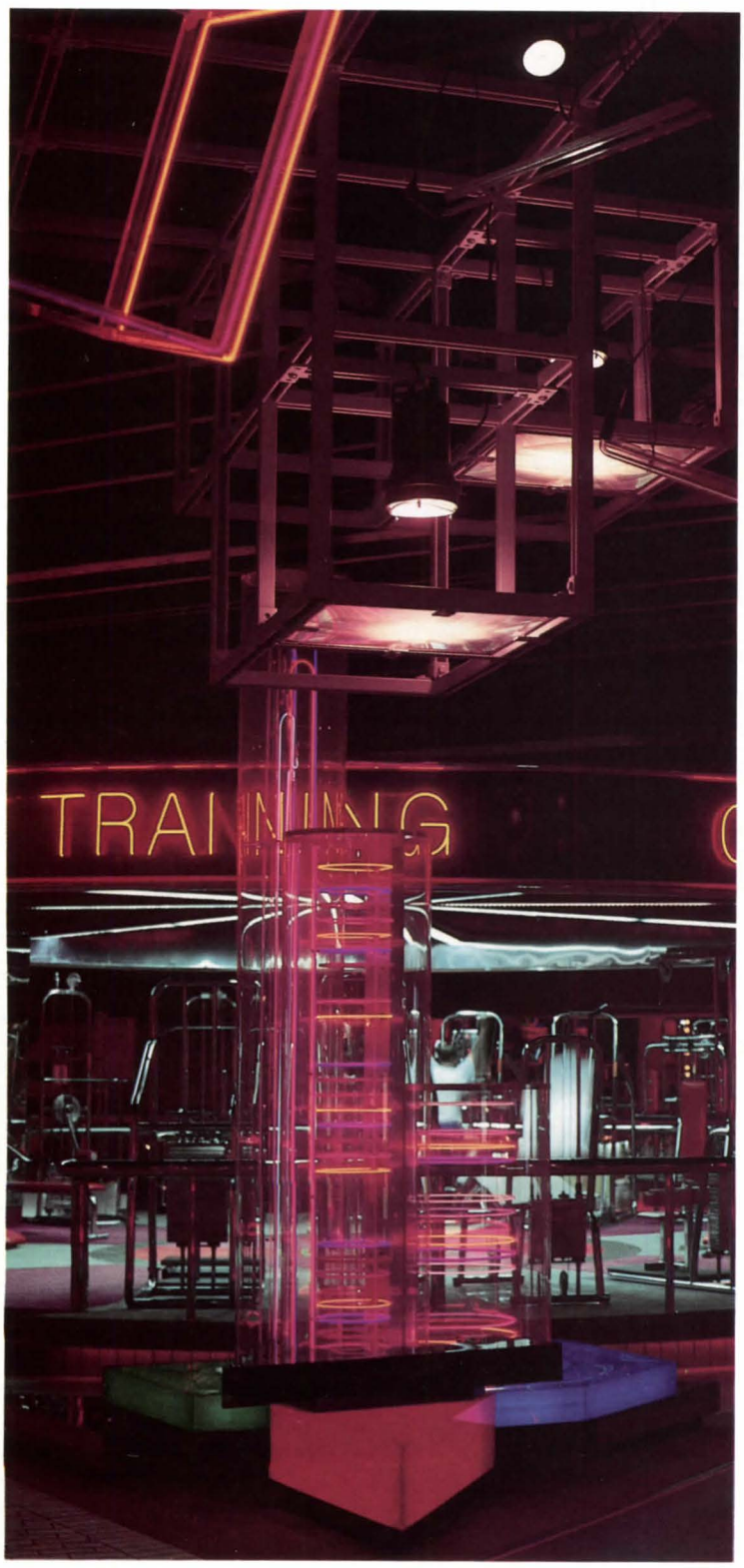
Evaluating the signage requirements for an existing facility is less difficult than evaluating one that is still on the drawing board. A facility that hasn't been built requires the designer to visualize where signs will be located using floor plans, elevations, and sections of the proposed facility. The designer should approach the process as if he or she were a visitor with no prior knowledge of the facility. Beginning with the access drive, the designer proceeds to the parking area and on to the various building entryways, using the five types of signs to provide basic exterior direction.

Identification signs for vehicular and pedestrian traffic are most effective when placed at right angles to the direction of traffic and not less than five feet from the roadway or walkway (to inhibit vandalism). Where there is two-way traffic, identification signs can be freestanding. In areas of one-way traffic, they can be attached to the building. Direction signs should be located some distance before a possible change in direction, particularly for vehicular traffic. Orientation/information signs and official notice signs are best located out of the traffic flow so that people stopping to read them don't create bottlenecks. Warning or prohibition signs should be posted directly on doors or entries where access is prohibited.

Inside the building, the designer considers the signage requirements for the lobby, elevators, and each floor. Directories should be placed on a wall inside the main entrance, where they are clearly visible but out of the flow of traffic so as not to create bottlenecks. Locate directional signs where the user has to make a decision—at hallway intersections and directly across from elevators. Identification signs should be aligned with the front desk or centered on a counter. Room numbers and names are best placed on the door. If this isn't practical, place them just to the right or left of the door. Whatever the choice, placement should be consistent throughout the building. □

Signage: Neon and Other Technologies

A booming industry offers new ways to communicate. By Stevens R. Anderson



Terry Corbett/Courtesy of Belsinger Sign Works Inc.

The sign industry in the United States and Canada is enjoying unprecedented growth with a projected $3 billion annual revenue for the United States alone, according to a 1986 survey conducted by the magazine *Signs of the Times.* This is up significantly from past surveys and is credited by George Kopecky, president of the National Electric Sign Association (NESA), with dynamic changes taking place in the industry focused on new products and technology to answer the need for more diverse signs in the built environment. There is an unmistakable optimism in the industry regarding the future of signs with the rediscovery of neon lighting, advances in the application of computer technology, and innovative use of illuminated awnings and banner signs.

Larry Kanter of Neon Projects, Washington D.C., believes this is an exciting time in neon technology. "Up until now," he says, "neon technology was as exciting as plumbing hardware, with no fundamental changes since its introduction in the 1920s." An attorney with a passion for neon, Kanter set up his firm in partnership with Ted Bonar in 1980. The firm was conceived as a small, custom-design-oriented business concerned principally with architectural lighting.

Kanter and Bonar were early practitioners in the renaissance of neon design, which started in the late 1970s after two decades of decline. They, like others interested in the handcraft side of neon design, had to search for abandoned equipment from defunct neon companies. The result of this today, as Kanter points out, is that a typical neon plant looks like "a cross between Edison's laboratory and an alchemist's workshop." Neon tube bending remains an art, done by hand, one bend at a time, by one individual. New equipment to assist in its bending has only recently begun to be constructed to meet the increased demand for neon and the present shortage of available machinery for a growing number of neon designers. Technology in the neon industry has therefore been directed more toward the improvement of its presentation than toward its production.

Neon light is achieved when a high-voltage current is applied to inert gas contained within a hand-shaped glass tube. Neon gas, the most commonly used, produces a red glow; mercury and argon combined produces a blue glow. Colored glass and phosphor-coated clear glass provide the remaining spectrum of color associated with neon lighting. Colored glass, once produced in this country, now is imported primarily from Western Europe and the Far East.

Neon as a sign can be used in one of two ways—either exposed or as part of a channel letter. The channel letter is an illuminated letter fabricated of aluminum, with neon dropped inside a letter form and then sealed with acrylic plastic. The other alternative, known as an open channel, leaves off the acrylic plastic and allows the neon to be exposed within the channel. Exposed neon allows for greater creativity in its display with the design freedom to join a business logo with the building's architectural

Mr. Anderson is an architectural historian and writer living in Washington, D.C.

Recent technology offers a variety of neon applications with improved presentation. Facing page, Holiday Spa, Rockville, Md. Left, Eaton Centre, Toronto. Below, Paper Moon Restaurant, Washington, D.C.

Kenneth M. Wyner/Courtesy of Neon Projects

detailing. At the Interfirst Bank Building in Dallas, a neon system designed by Federal Sign is used to outline the 70-story skyscraper. The building itself becomes the company's logo, its architectural silhouette visible against Dallas's night skyline.

Neon is also shaping into an independent art form as freestanding sculpture. A recent example of neon sculpture is found in Helmut Jahn's high-tech United terminal at O'Hare Airport, completed last August. Considered the world's largest neon light sculpture, the 744-foot flashing neon system is suspended from the ceiling of a 1,000-foot underground tunnel that links United's two concourses. Eight shades of neon are synchronized to music to present a pulsating display of colors for the passengers on the four moving sidewalks below. These varied uses of neon are possible primarily through technological advances in the sign industry.

Perhaps the most important innovation in neon technology is the redesign of the transformer, the power source for neon. The high-voltage transformer used in this country since the 1920s had few modifications until last year when a new solid-state transformer was introduced on the market. It was long awaited by designers but predictably met with resistance from the two leading American transformer manufacturers. The technology, which already existed in Scandinavia and other European countries, was adapted by several smaller U.S. transformer companies to the production of a solid-state transformer operating on an American current. DiAnalog System Inc. of Houston was the first company to receive UL certification for this new product. Edward Martin, vice president of DiAnalog, reported that his company sold more than 30,000 of the new transformers the first year of production.

The solid-state transformer is based on the principle of high frequency rather than high voltage and allows the transformer to be more compact and quieter. It emits less heat, thus requiring less concern for insulation or ventilation. It also saves up to 40 percent of the energy cost. Several American companies now are working on an improved solid-state transformer with the capability of lighting signs of various ratings.

The second and more recent development in neon technology is the introduction of a Transformer Overload Protection Switch (TOPS). According to Bob Whorton of Diversified Components, Point Blank, Tex., this product is just now gearing up for production under his company's direction. Whorton, who believed there was a need for a protection device for the secondary wiring of neon transformers, has worked on this overload switch for the past four years.

In a lighting system using a transformer, the current to the transformer is termed "primary" and the current moving away from the transformer is termed "secondary." Designed as a disconnecting feature for the secondary current, TOPS will automatically disconnect the primary power to the transformer when the secondary voltage goes to ground, when the secondary voltage is overloaded, or when the secondary voltage to the neon is interrupted. At present, transformers continue to put out high voltage if any of those problems occur, thus damaging the wiring, neon tubing, electrodes, and the transformer itself. There is also potential risk of electrical shock or fire in the event of grounding and arcing to ground around any combustible materials.

TOPS senses the imbalance in the voltage surge produced by the transformer as a result of problems in the secondary current and disconnects the primary circuit to the transformer. The equip-

The sequence left and below typifies the kind of neon sign being adapted to computer-signaled systems. Right, neon as freestanding sculpture. Facing page, Princeton's Market Fair combines neon, fluorescent, and incandescent lighting.

ment is automatically shut down until the necessary repairs can be made and the primary reset and the sign turned back on. This is an important development for a lighting system that is no longer contained within sign boxes but rather is being applied in closer proximity to the public and in integration with architectural components.

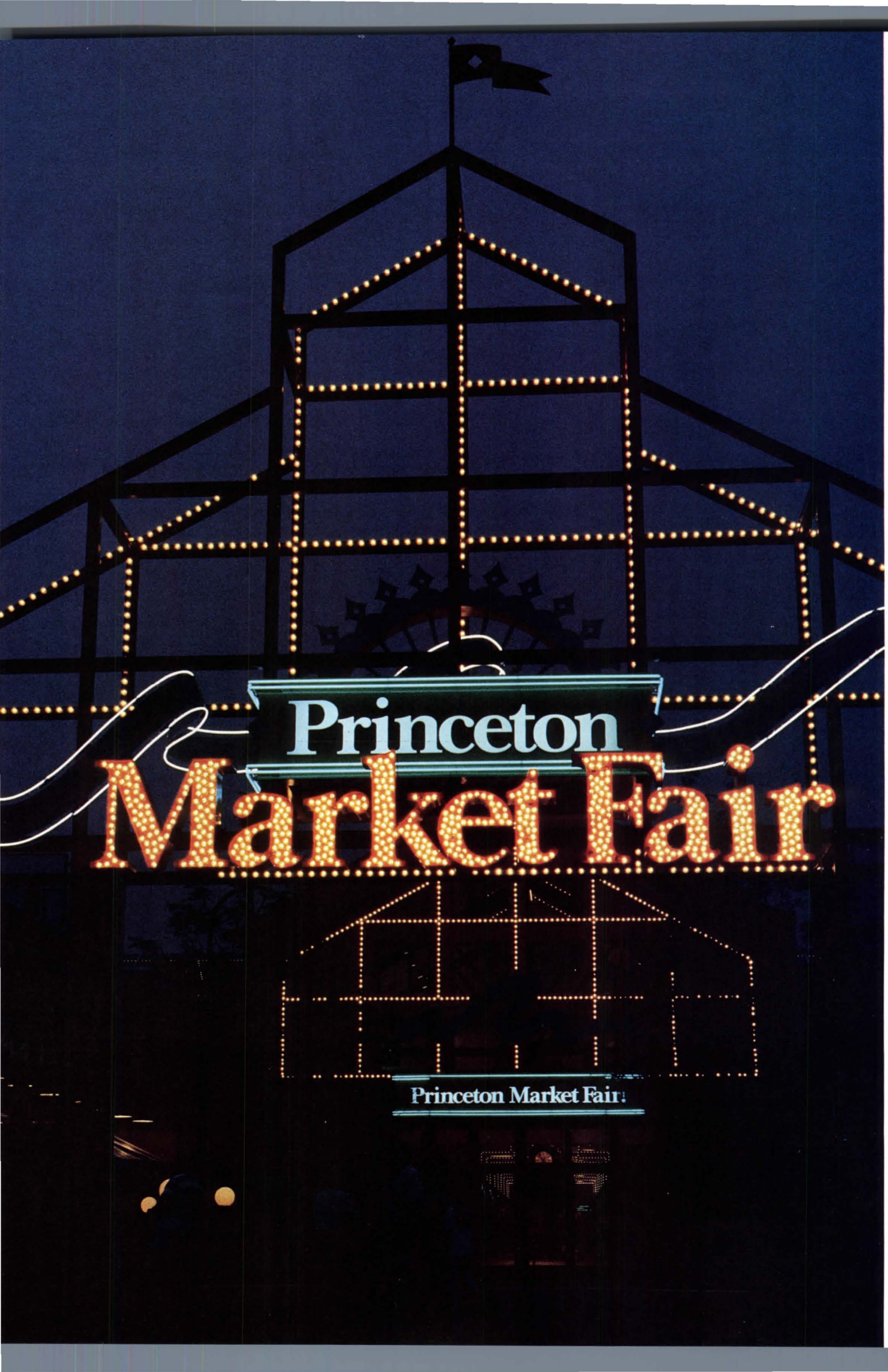
The third development in neon lighting has been the adaptation of the fluorescent solid-state triac dimmer to neon. Neon dimmers provide a more pleasing interior environment devoid of neon glare while increasing the life span of the lighting system and drastically reducing operational cost. The concept of the dimmer, first used with incandescent lighting in the early 1960s and then with fluorescent in the early 1970s, finally was applied to neon in the early years of this decade. The neon dimmer first received UL certification in 1984.

Generally, the life span of a neon system is up to 10 maintenance-free years but that can be doubled with the use of dimmers that allow the transformer to run cooler. The limited amount of lumens put out by neon restricts its usage to areas where illumination levels do not need to be high, such as hallways, restaurants, and lobbies. Where neon lighting is appropriate, dimmers can provide a wider spectrum of lighting color with the juxtaposition of primary colors in various intensities.

George Goodenow, president of Xeonix, Duncanville, Tex., is working on an interior neon lighting system that will utilize the dimmer to create an alternative to flashing on/off neon. By adjusting the speed and intensity level of neon, Goodenow's "blossom light" will achieve animation by dissolving. The advantages of this continuous lighting system will be elimination of the wear on the transformer associated with an on/off system and enhancement of the interior environment by reduction of eyestrain caused by an on/off system.

The fourth development in neon lighting is the direct use of electronics to enhance its display. Flashing neon signs traditionally controlled by time-clock mechanisms are now being controlled by a computer-signaled system. At the Eaton Centre in Toronto, neon signs are being programmed using the computerized solid-state neon flasher with its unlimited animation capabilities. The local firm Markle Brothers Ltd. acted as sign consultant for architect Eberhard Zeidler on this mixed-use center. Variety in sculptural signs was achieved by selecting various Canadian artists to work with the center's commercial clients. Markle Brothers provided the electronic technology for 27 commissioned sign designs—five exterior and 22 interior. An exemplary one is the Uniroyal sign designed by Michael Hayden; it is a tire design using some 105 pieces of neon randomly programmed by a computer to appear in constant motion. The computer flasher provides diversity through speed and color variations. It also allows the client considerable freedom to program desired sequences so that there is no visual repeat for up to five years, while the introduction of a new program disk can instantly change the total effect of the existing sign.

Neon, one of the more visible growth areas in the sign industry, is but one field in graphic communications. The union of microcomputers with sign operations has resulted in what is termed, "CAD CAM CAG," (computer-aided design, computer-aided manufacture, and computer-aided graphics). Research in electronics is improving display systems using light-emitting diodes (LEDs), while computerized directories, capable of listing up to 22,000 names, are quickly replacing the traditional directory signs found in office building lobbies and shopping malls. In the past few years, illuminated awnings have become a viable and sometimes festive means of advertising. The introduction of a translucent vinyl surface material, that in some cases triples the life span of earlier canvas awnings, has produced an entirely new life for these backlighted signs. Each of these diverse fields is assisting an expanding industry in meeting the requirements for new and innovative signs. Neon, with its growing use by architects and designers, is a medium in which art and technology come together providing an effective means of communication. □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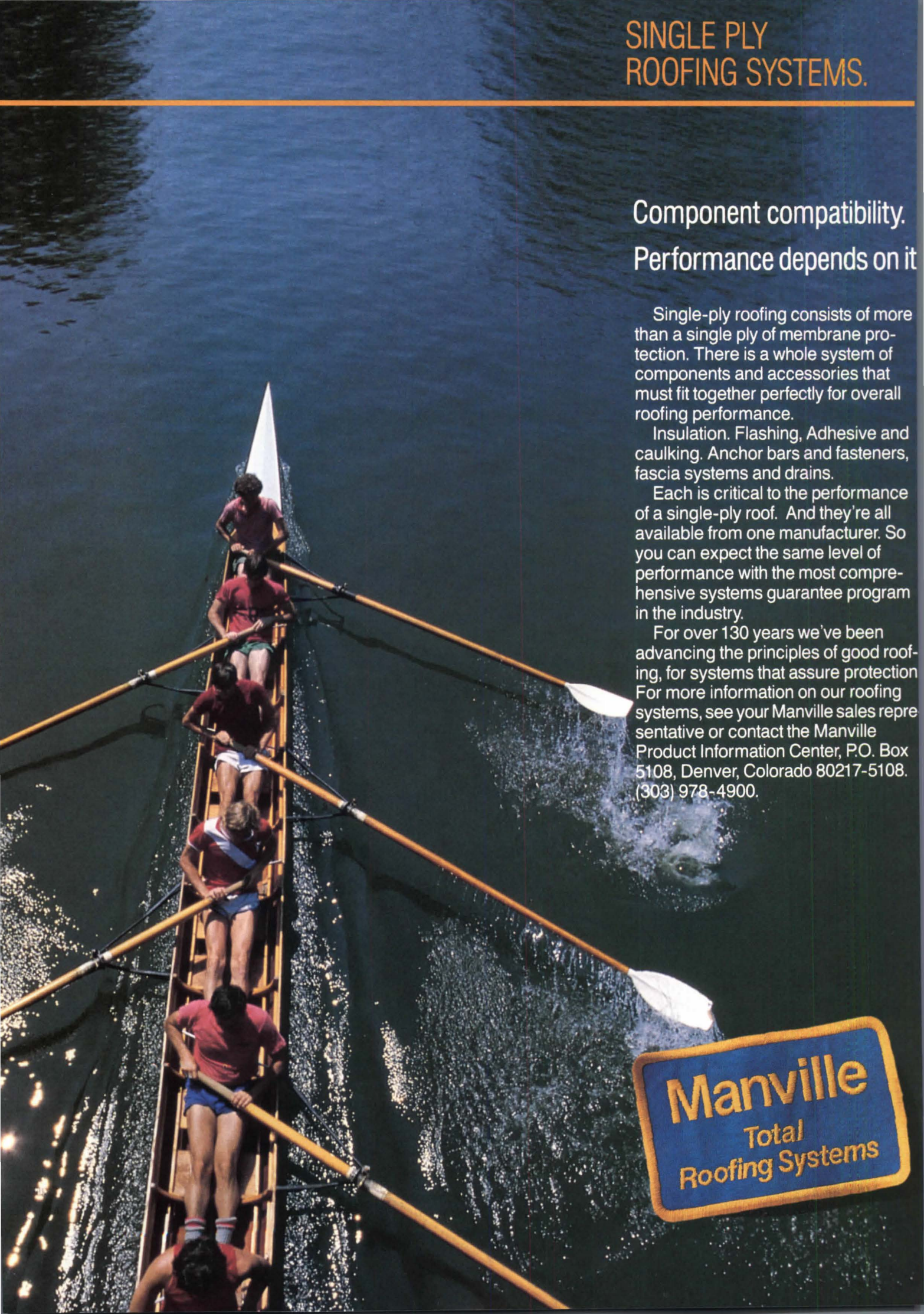

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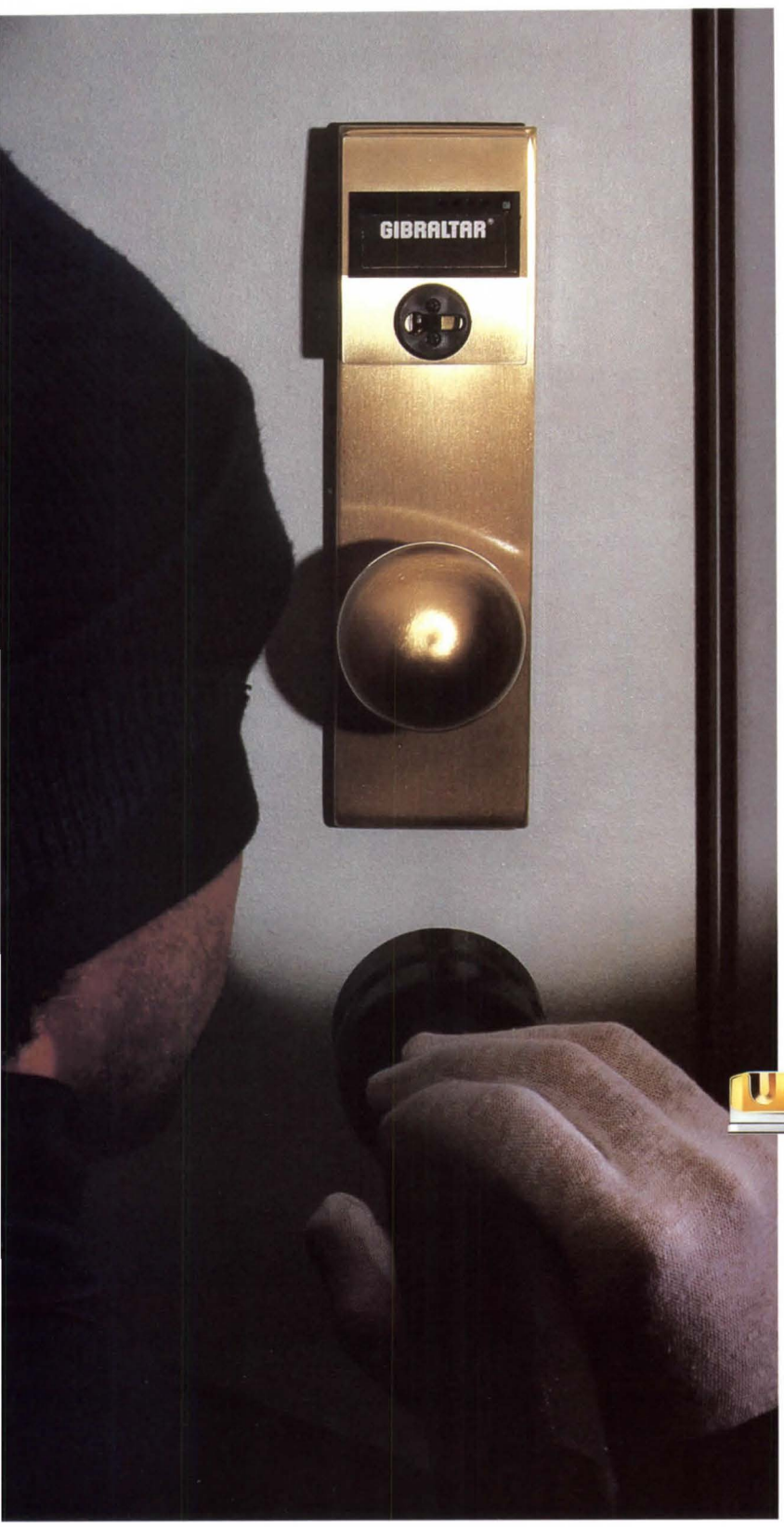

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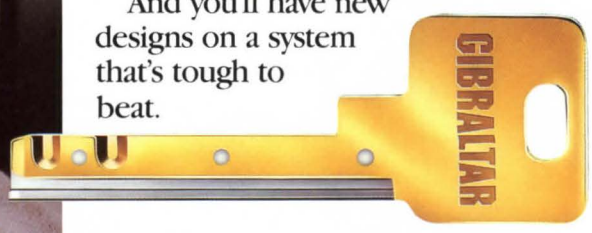

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Architects' Most Frequent Questions About Copyrights

By Dale Ellickson, AIA

Ideas are an architect's stock in trade. They traditionally have been expressed through drawings. The central importance of drawings to architects was emphasized by an AIA committee shortly after the Institute's founding in 1857, when it stated the principle: "Drawings are instruments of service and therefore belong to the architect at all times." A founding father of the AIA, Richard Upjohn, was involved in a lawsuit to recover his drawings and his fee for architectural services. On cross-examination, he explained that the drawings were to be returned.

"Return the sketches?" demanded the opposing attorney.

"Yes, sir," Mr. Upjohn replied, "he is to pay me $600 for them. You will understand—the idea."

"One percent [of the construction cost] for the idea?" the lawyer inquired in astonishment. Mr. Upjohn's answer closed the attorney's arsenal of questions: "You, as a lawyer, when you give your opinion, do not charge for pen, ink, and paper, but for your opinion." (From *The AIA's First Hundred Years*, by Henry Hodgman Saylor, 1957.)

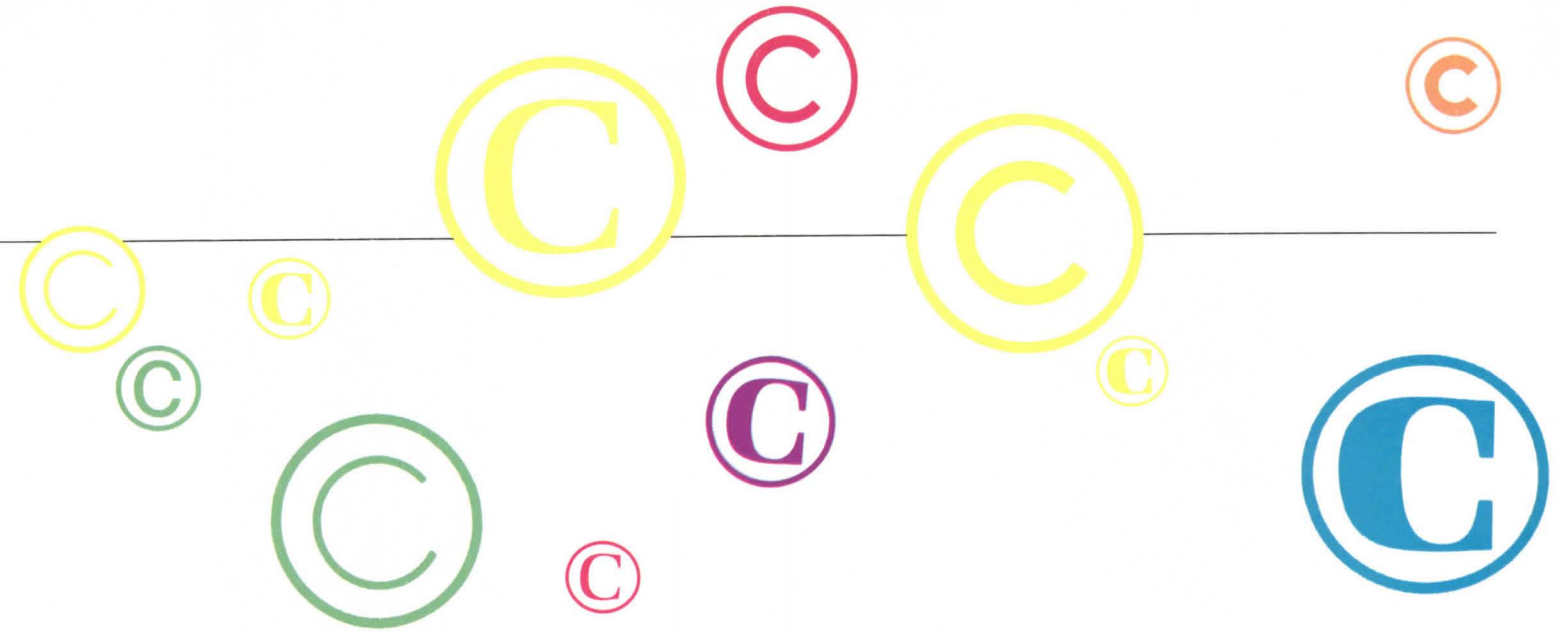
Today, the legacy of this principle is embodied in the AIA documents (mainly the owner-architect agreements, such as B141 and B161), and the term "instruments of service" still is used in the documents to describe the rights of the architect to drawings, specifications, and other documentation.

In addition to the right to own the physical drawings, the architect may have the exclusive right to copy the drawings or make derivations of them; this is known as a copyright. AIA often receives inquiries about the rights in regard to drawings from members and their clients. Some of the more frequent questions are answered below.

Q: Must an architect have a written agreement with the client to retain the ownership or copyright of the architectural drawings?
A: Until relatively recently some U.S. courts confused the right to ownership of the physical works with the right to copy them. Also, some court cases in a minority of jurisdictions concluded erroneously that the architect was selling a product (the drawings) rather than a service. This made it necessary to state by written contract that the architect retained the ownership and copyright of the drawings.

Q: If I as an architect sell my drawings, do I also sell the copyright?
A: Assuming first that you have taken the appropriate steps to protect your copyright, the selling of the physical work does not necessarily also transfer with it the right to copy that work. A new copyright statute was adopted by Congress in 1976 that clearly makes a copyright a separate claim from that of ownership. Before 1976 the courts were not always clear that these were two separate rights.

Mr. Ellickson is senior director, AIA documents program.



Q: How do I file my work?
A: The necessary forms and helpful instructional pamphlets are available from the U.S. Copyright Office. Just tell them you want to register a copyright on architectural plans, drawings, and specifications. You *must* use the forms the Copyright Office sends you—anything else, including a photocopy, will be rejected. The filing fee will be $15.00 or $25.00, depending on the applicable regulations. Registration normally will be granted within one to three months of filing.

Q: What do I include in the filing besides the completed form?
A: Just the drawings, specifications, or other material that you wish to have protected by copyright.

Q: A lawyer once told me that I had to file for copyright within a couple of months or lose my right to attorneys' fees. True?
A: In addition to normal damages, there are certain statutory damages that you may receive compensation for, if you file within three months of first publication. These statutory damages, but not common law damages, would be waived if you fail to file within that three month period; they include attorneys' fees, the right to have your work returned to you, and the right to an injunctive order depriving the infringing party of the use of the work. As a practical matter, an injunction of that kind probably would be sufficient to stop the project. Thus, it is important to file for registration of your work as soon as possible.

Q: What if someone takes one of my copyrighted drawings and makes a small change in it? Do I lose my copyright protection?
A: No. If it can be seen that the altered work was derived from the initial, copyrighted work, the copyright protection is unchanged. It is important to realize that a copyright protects your derivative works as well as the original. Outside of certain narrow limits, the creation of a derivative work without the permission of the original copyright holder gives the copyright holder a right of action for copyright infringement.

Q: A friend of mine once spoke of obtaining a copyright through the copyright office of his home state. Is there such a thing as a state copyright?
A: There is no statutory state copyright. The power to grant copyright is reserved to Congress under the Constitution, and it is solely a federal right. Some legal authorities claim there is such a thing as common law state copyright, but none of the states has a copyright office. If you wish to register a copyright, the only place to do it is with the Copyright Office of the Library of Congress in Washington, D.C.

Q: What happens if I sell my drawings?
A: Under the old copyright law, you would have sold the copyright along with them. Under the Copyright Act of 1976, however, you may sell the physical property while retaining the copyright and with it the right to license reproduction. Conversely, you may also sell the copyright while retaining the property.

It is important to note that as long as you retain the copyright you retain control over the licensing process—you can assign limits, not only to the number of copies that may be made, but also to the purpose for which they may be made.

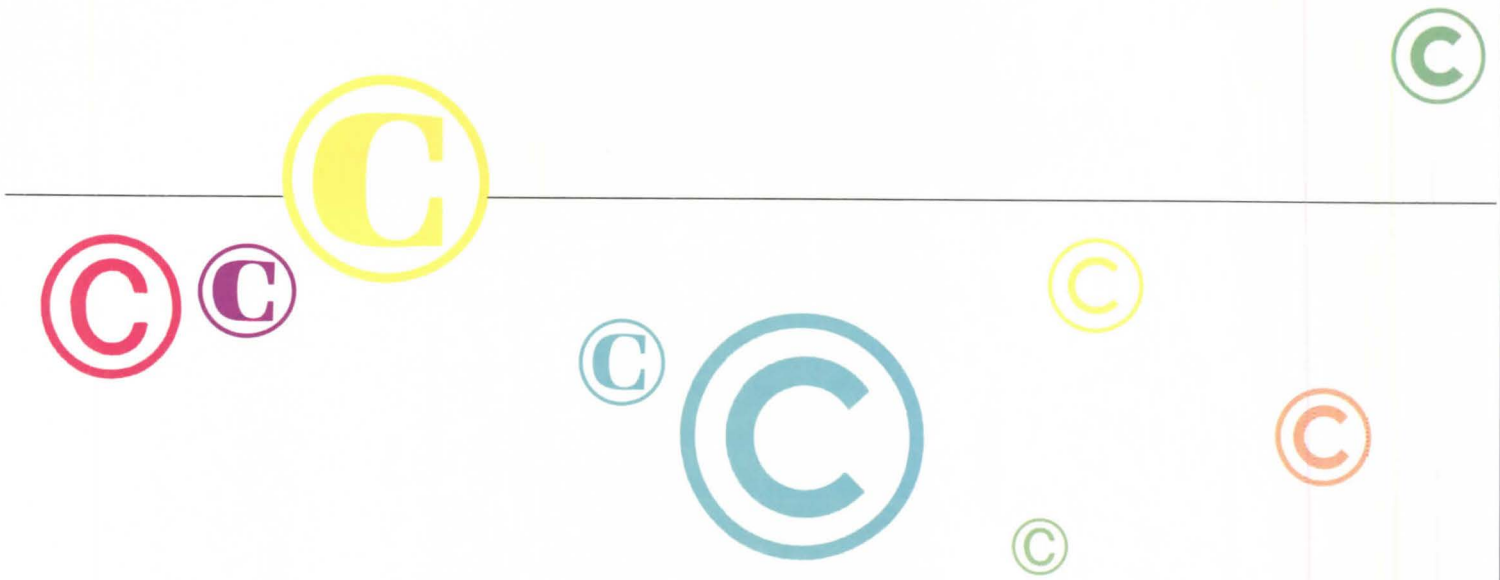
Q: Suppose I'm the second architect on a project—the first one has done the schematic design drawings and copyrighted them, and I've been brought in to take it from there. Does that mean that I or the client must go to the first architect and get a license or otherwise get permission to use his or her drawings?
A: That is correct, especially if the client and the first architect have signed an AIA owner-architect agreement form, which creates a contractual right of the architect to the drawings even if that architect does not choose to protect them through copyright. Therefore, it is important that you get a license or a complete transfer of copyright from the first architect.

Q: What kind of liability do I face if I don't do this?
A: You may be accused of infringing on the first architect's copyright or interfering with his or her contractual rights. You may also risk losing your license under certain states' registration laws if you seal another's work procured outside of your firm without permission. This sort of liability is *in addition to* the exposure you may have under the Copyright Act. Statutory damages under the act can run as high as $50,000.

Q: Suppose I am the first architect. I sell my drawings, or license the use of them, to another architect who completes the project, and the building collapses. Do I have any liability exposure?
A: You may. You created the initial work, and you may be held liable for any latent or patent errors in that work even though you might have discovered them if you had been retained through the course of construction. It is possible to obtain certain contractual limitations of liability, such as hold-harmless clauses or indemnification clauses, from the owner, but this must be done before you transfer the right to the use of your drawings.

Q: What about the second architect? Does he or she have any potential exposure to liability?
A: Yes. The second architect has adopted the first architect's work into his or her own work and has the same responsibility for it as would have been the case had it been produced in his or her own office.

The AIA documents provide the primary protection for architectural works as they concern the architect and the owner. Secondary protection for drawings against misuse or abuse by others is available through copyright registration. The prudent practitioner will use both methods.



Today, if an architect wishes to sell the ownership of the physical drawings, that may be done without also transferring the copyright. For many reasons, the copyright almost always should be retained, especially so that the architect may derive new ideas from a previous project without having to reinvent a new way to express those ideas.

Q: Will a copyright protect my ideas from being stolen?
A: Copyright protects only the way ideas are expressed, not the underlying ideas. In essence, the physical medium through which an idea is expressed—whether drawn, written, photographic, phonographic, or electronic—is what is copyrighted, not the idea.

Copyright also protects derivatives of your expression from being stolen. There is a myth that another party can make a minor change in a copyrighted work and thus avoid prosecution by the original copyright holder. The truth is that the copyright holder has full rights to any of the derivative work so long as it can be shown that:

- the alleged copyright infringer had seen or otherwise had access to the original work,
- there are recognizable elements of expression unique to the original work that can reasonably be recognized in the derivative work, and
- the copyrighted expression is sufficiently unique to be copyrightable and appropriate steps were taken to do so.

Q: Does B141 protect my copyright on drawings and specifications? Once I've executed that document with the owner, have I got all the protection I need?
A: Not necessarily. An executed B141 is a contract between you and the owner, and is very broad in that respect—it does not protect your work from infringement by third parties. Copyright is a right established by an act of Congress covering the expression of intellectual work. If you want to preserve your copyright in your work, you must go through the steps prescribed by the Copyright Act of 1976.

There are two basic steps you must take. The first is to put a copyright notice on your work, and the second is to make a timely filing of your work (within five years of publication) with the U.S. Copyright Office at the Library of Congress in order to get it registered.

The copyright notice is made up of three elements. The first is the word "Copyright," the copyright symbol (the letter "c" in a circle), or the abbreviation "Copr."

The second element is the date; the year in which the work was first published is sufficient.

The third element is the name of the party claiming the copyright. The name may be abbreviated, but only if the abbreviation is widely recognized. In other words, you may use the abbreviation "IBM" if your name is International Business Machines, but not if it is Irving B. McPherson.

Q: Where should the notice appear?
A: The notice should appear in a prominent place—at the very least, on the front page of each set of drawings and on each separate section of the specifications. Because they are often separated for distribution to subcontractors, it is best to have the copyright notice appear on each drawing. Many architects place the copyright notice in the title block, but it is preferable to place it in the body of the drawing since material in the title block can easily be stripped off.

Q: When do I need to put the copyright notice on the drawing or specification? Am I exposing work to infringement if it circulates in my office without the notice?
A: The copyright notice preferably should be on the work at the time of first publication. "Publication" is a term of art under the Copyright Act indicating the time when the copyrighted work is first distributed to the public. Ordinarily, this would not occur while the work remains within your office or even when you show the work to your client. Depending on the circumstances, however, publication probably could occur when you file drawings and specifications with the local building authority or send them out to bids. At that point they should have the copyright notice clearly displayed on them.

Q: What if someone publishes a work without a copyright notice and without registering it with the U.S. Copyright Office? Is the copyright lost?
A: It used to be that a copyrighted work published without the correct copyright notice would pass into the public domain. Under the Copyright Act of 1976, this is not always the case. The law now gives the author the right to rectify an error in the copyright notice or a failure to provide the notice for up to five years after first publication—so long as all parties to whom the copyrightable work is exposed may be notified of the copyright.

For most architectural works, such a corrective notification is usually possible because the people who see the work usually are rather few in number and can be identified. This would not be true, however, in a case where the drawings, for example, had been published in a sales brochure without copyright notice. Sales brochures usually are distributed to the general public, so it would be practically impossible to identify in particular those who had seen the work. This would be true regardless of whether or not the original drawings had the copyright notice on them, so it is important that all copies include the copyright notice.

Q: You said I had to make a timely filing with the U.S. Copyright Office. What does the Copyright Office consider to be "timely" filing?
A: Timely filing is defined under the Copyright Act as a filing that occurs within five years of the publication of the work. □

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*R-Value means resistance to heat flow. The higher the R-Value, the greater the insulating power.

Circle 130 on information card

INTERIORS

A slick and streamlined six-story atrium inside the new St. Anthony Professional Building in Oklahoma City, designed by Larry Keller, AIA, and Edward J. Riley, AIA, of the local A/E firm of HTB Inc., contrasts strongly with the Gothic-inspired design of its connecting medical complex and with a hospital across the street.

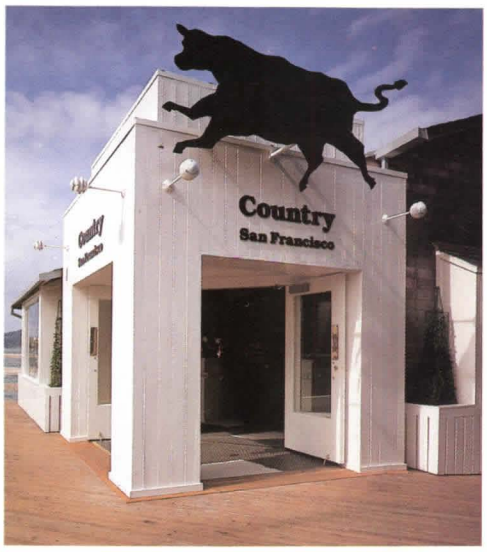
Both architects envisioned a high-tech feel for the atrium area. Keller describes the tiled patterns on the wall (photo, right) as being "similar to an IBM punch card," while Riley gets "more of a stained glass feeling" from the tile pattern. The glazed tiles form changing patterns based on a consistent module. Broken borders of black tile force the primary colors to "pop," and other tile accents skip up the wall's full length, further adding contrast and color. A royal blue tile design backing drinking fountains on each floor picks up the blue tile used in the elevator shaft and seems to draw the surrounding walkway floors toward the central atrium, reinforcing it as a focal point.

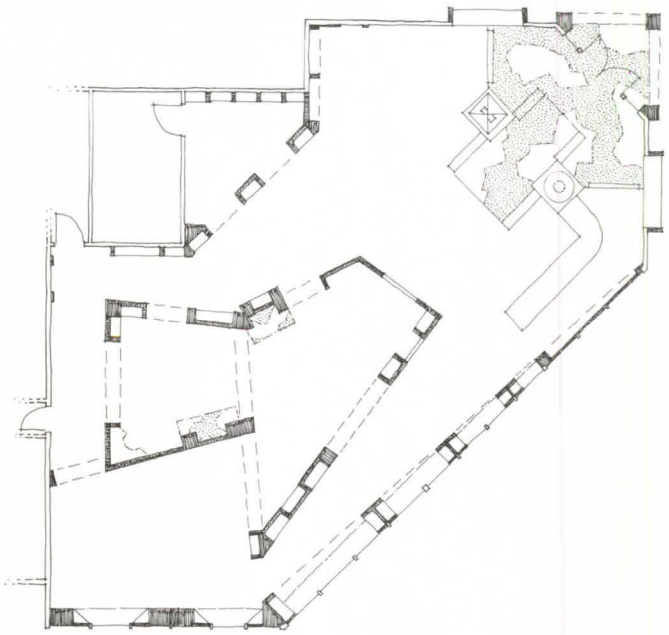
Riley likens the tall, linear atrium space to a well. Glass runs the full length of the north facade, and glass elevators on the west end overlook the atrium space. The elevators rise from a small indoor garden at grade where a part of the slab was cut out. Glass railings with chrome caps further open up the space. Carpeting and walls in a warm shade of gray extend the atrium's stonelike color elsewhere within the building.

The medical complex connects to the existing hospital by means of a second-floor, glassed-in covered walkway, with the atrium serving as a dramatic link between the two buildings. A restaurant and a pharmacy are located within the medical complex off to one side of the walkway.

—Amy Gray Light

© Greg Hursley

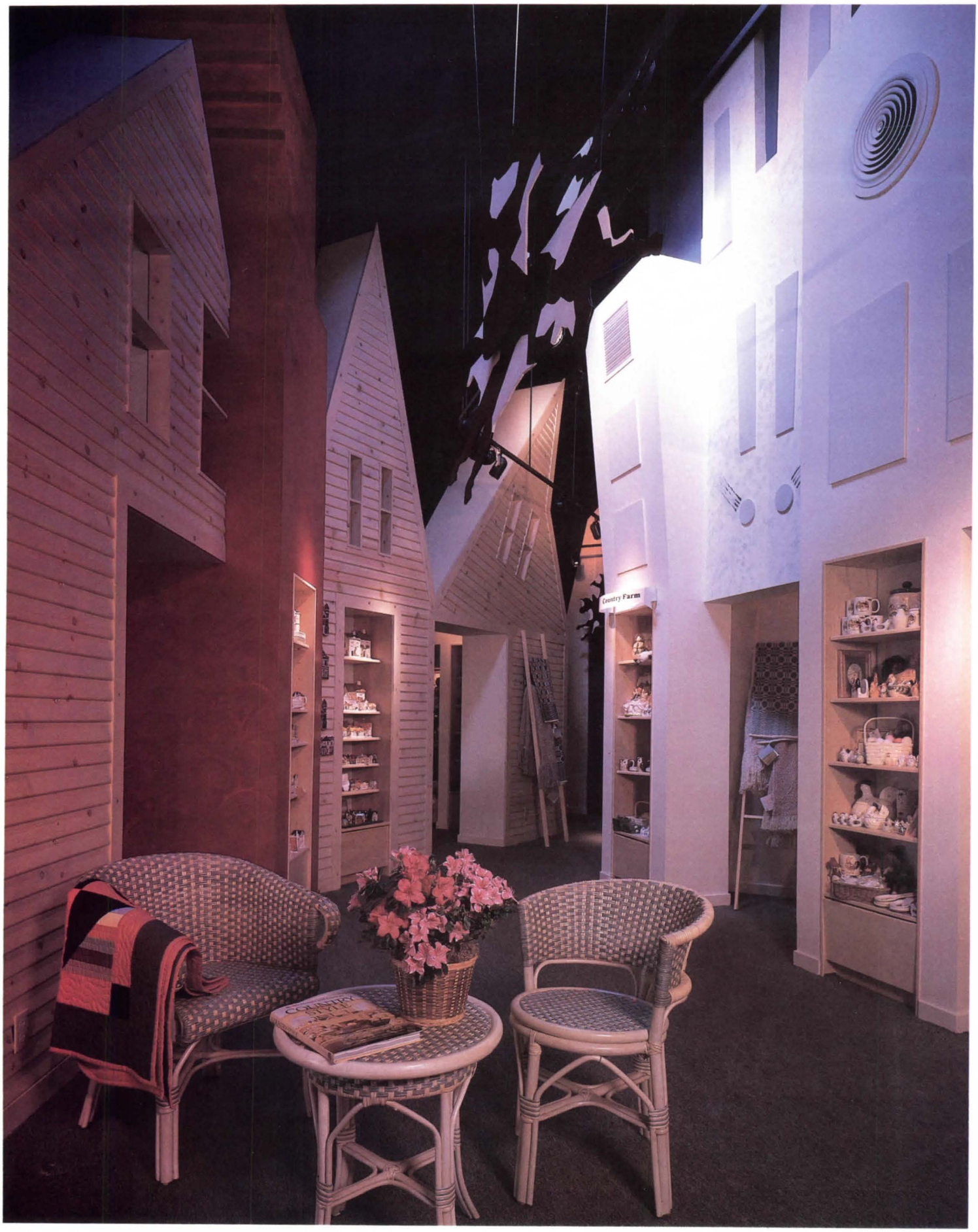


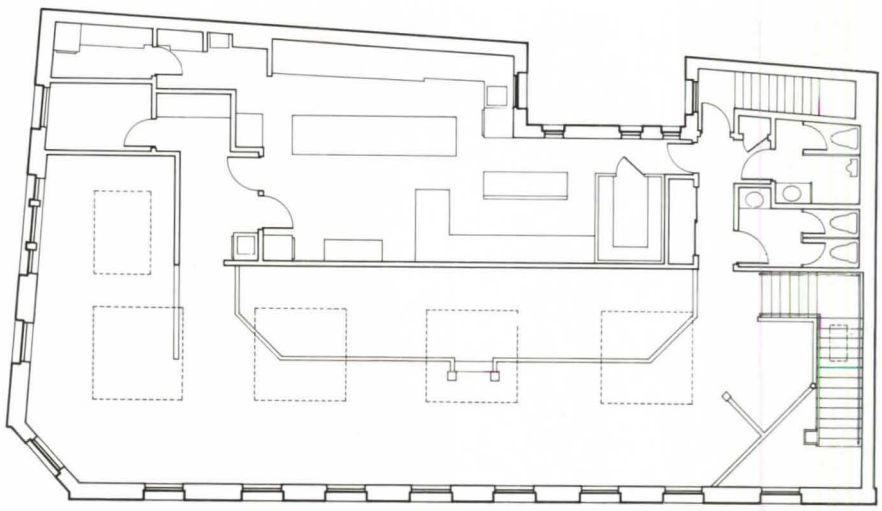


Country San Francisco is an oxymoronic name for a store that strives to make country living chic to urbanites and suburbanites. The owners called in David Weingarten and Lucia Howard of ACE Architects in nearby Oakland to solve the problems of attracting tourists to the far east end of Pier 39, a San Francisco waterfront development, and generating excitement for a shop that must compete against some 140 other retailers and restaurants.

The architects created a compelling exterior that conveys, immediately and from a distance, what the store is all about. The white barnlike building rises from a terminus to the vista of the distant pier and is crowned by the profile of a black cow hurtling across a white tower. The intriguing storefront draws potential shoppers toward the store, and a pattern of black and white ceramic tile laid to resemble cowhide beckons them inside and channels them between wood and glass display cases of open framework shelving that resemble Coit Tower and the Transamerica pyramid. Except for the entrance, the store is carpeted.

Inside, surrealistic models, including a miniature white San Francisco cityscape and an almost full-size country house, are arrayed within 2,700 square feet of retail sales space, with an additional 1,700 square feet of office and stock space. The country house, which is missing a roof, resembles a somewhat spooky stage set of "rooms" (parlor, chamber, and kitchen), providing a range of domestic country settings in which to display the store merchandise (full-size photo). Between the house and cityscape, fanciful winged cows fly from the ceiling (photo, top right). A painted, trellised, perspectively "corrected" hedge on the other side of the house frames real-life views to the Bay. —Amy Gray Light





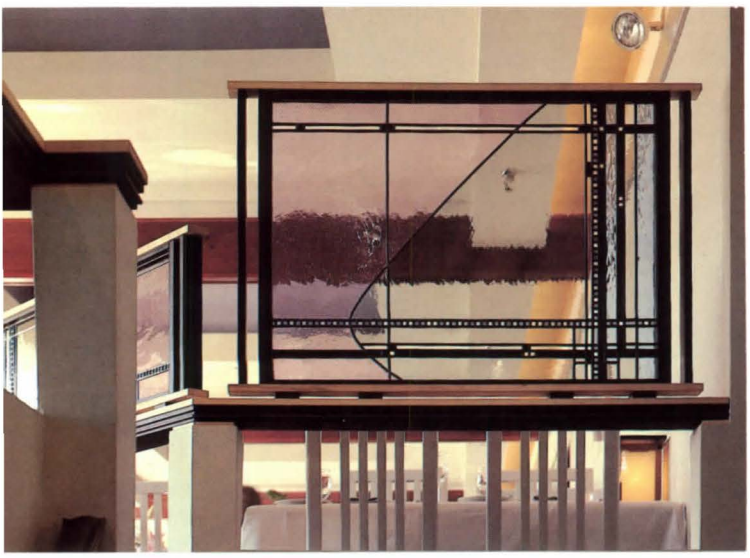
NEW HEIGHTS
ON CALVERT

New Heights in Washington, D.C., is a successful collaboration among local architect Tom Manion, AIA, the client, and a host of talented woodworkers and artists (plus an innovative chef). A small bar area on the ground level provides the first glimpse of the quality craftsmanship of the space, while a stairway with an ornate railing leads to the dining room.

The space was completely rebuilt with a new coffered ceiling with mahogany beams and recessed lighting. The architect retained the incline of the original roof line to provide a slightly sloping ceiling within the three coffers. New trim and moldings were added to define the new window pattern and accent the new light coves. Leaded stained glass panels provide partial screening for a raised dining area along the interior wall.

The meticulously crafted triangular tables of padauk and maple were conceived by the restaurant owners, Michelle and Amarjeet Singh, to avoid the monotony of a long row of tables and provide a more intimate arrangement for parties of three. Colors throughout are subdued, while the upholstery and graphics are coordinated to create a cohesive space.

Manion drew freely from the traditions of the Greene brothers, Frank Lloyd Wright, and Charles Rennie Mackintosh. However, New Heights is special because it echos not only the forms of the arts and crafts movement but also its sophistication and attention to detail in the execution. —Lynn Nesmith



Above, the second-floor dining area is flooded with natural light from the row of windows along the south wall. Subtle geometrical forms are repeated in the stained glass partitions (left) and the restaurant's logo (facing page, far left). Facing page, the intimate bar area.

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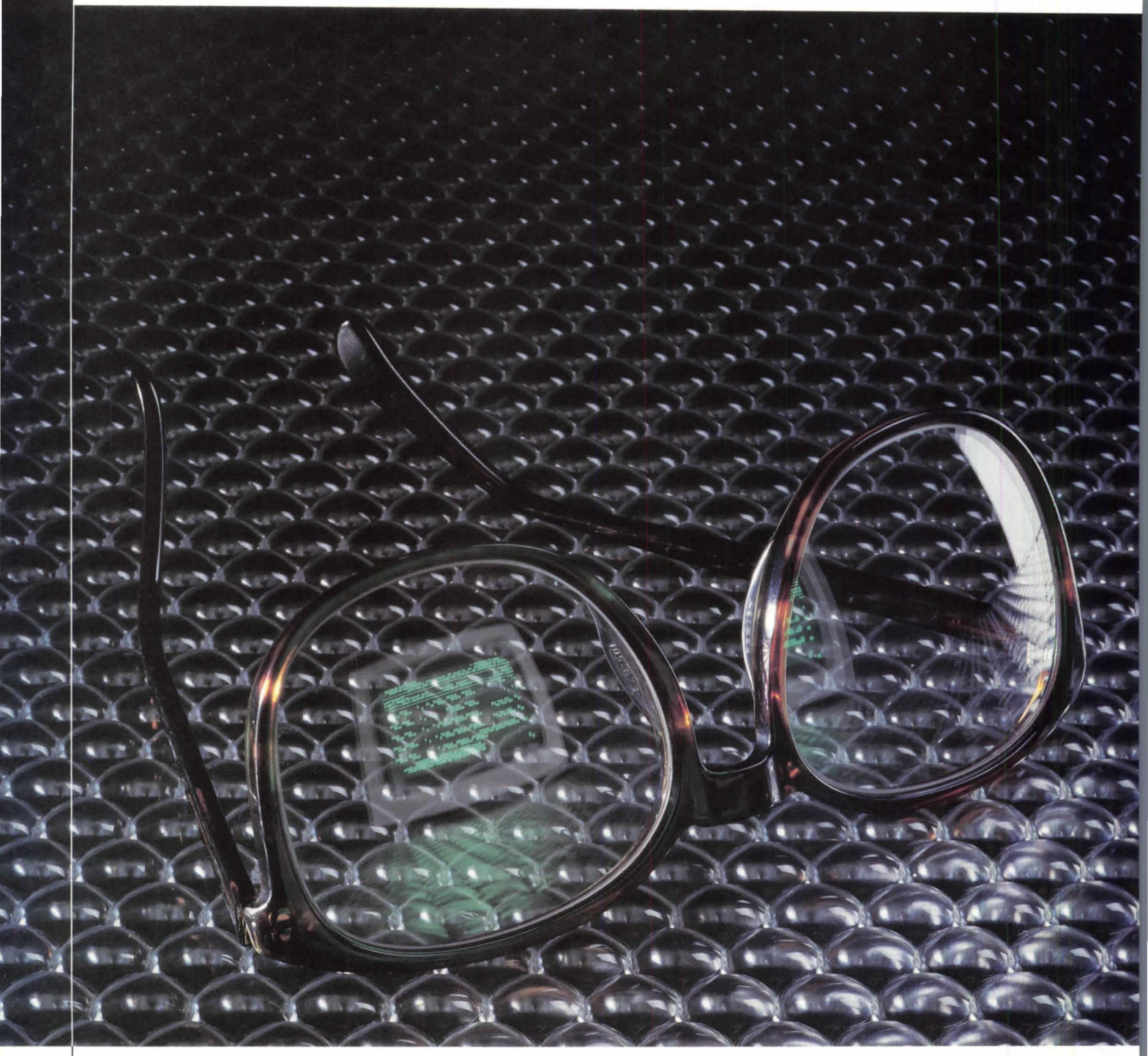

Nothing lights up today's CRT-dominated workspace with soft, even, glare-free light like the Refractive Grid® from Holophane®. Lighting so efficient, it actually delivers more light with *less* glare.

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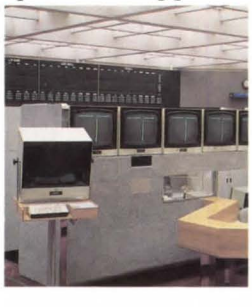

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Circle 132 on information card

PRODUCTS

Furnishings

Anthropomorphic Lounge Furniture
Lounge furniture (shown at left) from Japanese designer Toshiyuki Kita celebrates the free, dynamic, moving forms that combine the rigor of the body and its attitudes together with the rigor of the spirit, according to Kita. In 1980 Kita produced the Wink armchair, which the Architecture and Design Acquisitions Committee of the Museum of Modern Art in New York City has since added to its Design Study Collection. The changeable combination armchair/lounger/recliner adapts to body positions by means of side controls to adjust the angle of the back, and a headrest that inclines in two separate parts. The seat base remains in a kneeling position unless it is pulled out and lengthened. The armchair has a steel carrying structure and upholstery in expanded polyurethane foam. The upholstery is joined to the metal structure, but cloth or leather covers are zippered over the upholstery.

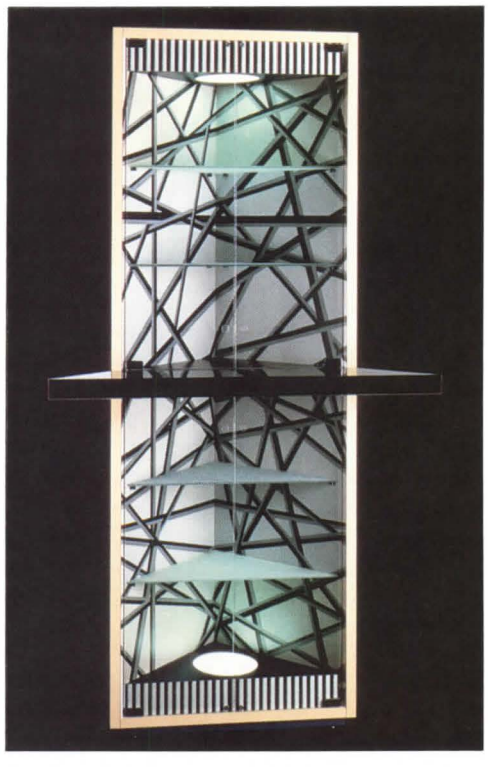
In 1983 the Kick table was introduced as a companion piece to Wink. The low, pivoting table has a wooden oval top with a glossy blue, yellow, red, or black lacquered finish, and a dark gray enameled steel base with self-orienting casters on two of its three legs. A pneumatic mechanism with a lever control permits height adjustment up to three inches. A black rubber "bumper" ring inserted around the top's perimeter protects the table.

The Luck sofa was added to the collection in 1987. Luck's anthropomorphic form is constructed of welded steel framework encapsulated in expanded polyurethane foam, padded with Dacron fiberfill, and upholstered in a selection of fabrics, vinyls, and leathers. Legs are molded black urethane foam capped with nylon guides. Optional removable, contrasting covers stretch over the foam body and are secured by rubber rings. An integral flat wedge that juts from the backrest is designed to be sturdy enough to use as a second resting place.
Atelier International Ltd.
Circle 403 on information card

Products continued on page 145

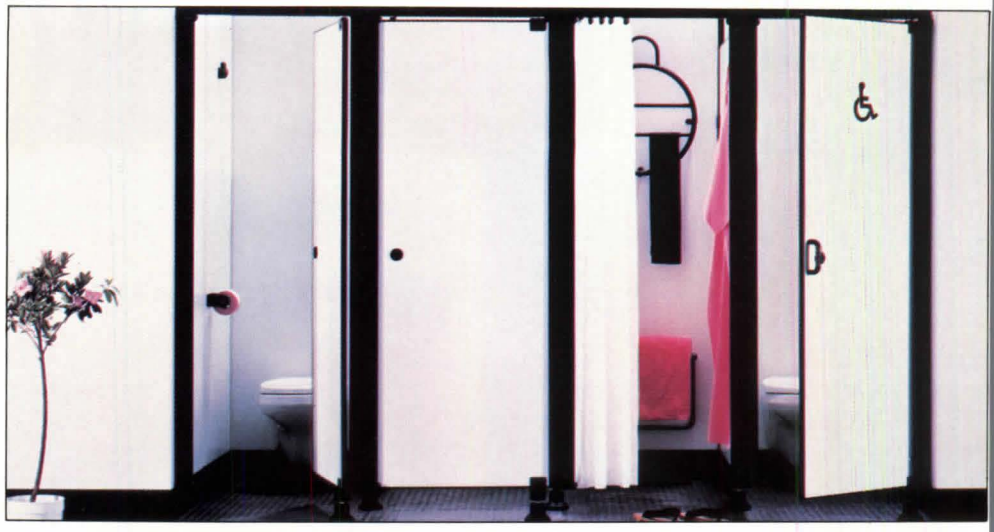
Decorative Laminate
Solid-color decorative laminates in the Color Quest line (above) are available in 110 colors and a wide range of finishes and product types, including solid-color Solicor, grooved decorative tambours, and specially made laminates that resist fire, abrasion, and chemicals.
Wilsonart
Circle 401 on information card

Products *is written by Amy Gray Light.*



Corner Cabinet
Michele De Lucci's Memphis/Milano corner cabinet (above) is constructed of plastic laminate with glass doors and inside lights. The cabinet is 47½x22¾x86½ inches.
Memphis Milano, division of Artemide Inc.
Circle 402 on information card

Versatile Cubicles
New Thrislington cubicles (shown at right) can be used as bathroom partitions, shower units, and dressing room cubicles. Standard panels are 60 inches wide by 72 inches high, and standard doors are 24 inches wide by 72 inches high. The minimum clearance between doors and panels assures maximum stall privacy. Six-foot panel heights provide additional seclusion. An adjustable foot mechanism allows installation at different floor heights, and door hinges integral to the foot mechanism and a head rail contribute to the modular strength of an all-inclusive aluminum framework. Two lines, Combat and Lotus, are offered. The Combat line of cubicles is designed for heavy-duty use. The doors and panels are constructed of high-density particleboard faced with either Formica plastic laminates, the Kinney vinyl-fabric wall coverings, or glass-fiber reinforced plastic panels, and they come in a variety of colors. The doors have an extra support trim for the top and bottom with double rubber bumpers fitted to the top and bottom of the post sections. Tamper-resistant hardware is manufactured of black, glass-filled nylon. The Lotus line, designed for layout flexibility, features an aluminum-edge trim and also has stylized black nylon fittings. In all standard dry applications, both doors and panels are made from high-density particleboard faced with laminates and are available in a wide variety of textures and colors. Optional accessories and barrier-free cubicle units are available. The cubicles won the 1986 Building Centre Trust Award and the Design Council Award for the best new, proven building product in the United Kingdom.
Thrislington Cubicles
Circle 404 on information card



NEW AND NOTEWORTHY

Fabric Structure
Fabric tension structures made of silicone-coated glass fiber fabrics are designed to provide excellent weathering properties and resistance to ultraviolet degradation, temperature extremes, mildew, and most chemicals. Both the Softglass and Vestar lines of fabrics meet stringent wind and snow requirements, enabling structures to be classified as permanent. Both lines of silicone fabrics meet current building code flammability requirements as well. Various other fabrics, such as Teflon-coated glass fiber and Tedlar-coated vinyl, also are available.

The fabrics make possible levels of translucency in a range from 1 to 80 percent. Three-dimensional, free-form shapes can be achieved due to the flexibility and double curvature of the fabrics. Their light weight saves on the cost of installation. The fabrics can also be used in custom and modular skylight systems.
DCI
Circle 405 on information card

Standard and Custom Stairways
Balzac Inc. manufactures circular, straight, and winder stairs (above) in solid maple or oak. Balzac will also detail any type of stairway in any size or wood species given appropriate specifications and dimensions from the architect or designer. Mylar stair templates are available to assist in drawing stairs on plans. Architects can also specify Balzac on plans and drawings and leave the stair location open on the drawings, which Balzac will complete.

All curved stairways are shipped ready for assembly, with railings and balusters (spindles) in coded, knock-down form for easy assembly. All straight stairways are shipped assembled or in coded knock-down form. Solid oak and maple stairways are shipped with wooden tread protectors so workers won't damage treads while construction is in progress.

A detailed brochure features pictures, line drawings, materials, and specification information. A stair appendix, different types of railings, and available components also are listed.
Balzac Inc.
Circle 406 on information card

Spiral Escalators
The first spiral escalators in North America are designed in accordance with ANSI A17.1, Safety Code for Elevators and Escalators, and provide the same vertical transportation as conventional linear escalators, the difference being the dramatic look they offer. A detailed technical manual is available.
Mitsubishi Elevator, a subsidiary of Mitsubishi Electric Sales America
Circle 407 on information card

PC-to-FAX Package for Autocad
An enhancement to Gammafax's communications product, a software interface to Autocad, enables PC users to send Autocad documents via ordinary telephone lines to any Group III facsimile machine.

The package is designed to save Autocad users the time and cost of plotting Autocad documents and sending them by courier or mail to remote sites. In addition, Gammafax eliminates the need to feed documents manually into a facsimile machine.

The Gammafax package, which consists of an easily installed, printed circuit board and menu-driven communications software on two diskettes, establishes a direct PC-to-FAX communication link. The 9,600 bits-per-second modem and software can send Autocad drawings at an average rate of one page per minute. Gammafax can be used to send facsimile transmissions of any computer-generated document, including drawings, plots, estimates, schedules, parts lists, and bills of materials. Multiple files can be routed automatically to multiple locations. Various combinations of documents can be transmitted automatically to multiple sites. The software can be customized for unattended operation. Since the Gammafax board and software replace the transmitting facsimile, the user avoids the degradation in print quality that occurs when documents pass through the sending device's scanning mechanism.

A store-and-forward feature allows documents to be sent automatically when telephone rates are lowest. Gammafax also provides high-speed, error-free, PC-to-PC file transfer of Autocad files. This capability enables Autocad users to send any type of file between Gammafax-equipped computers at a fraction of the speed of standard modems.
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Introducing

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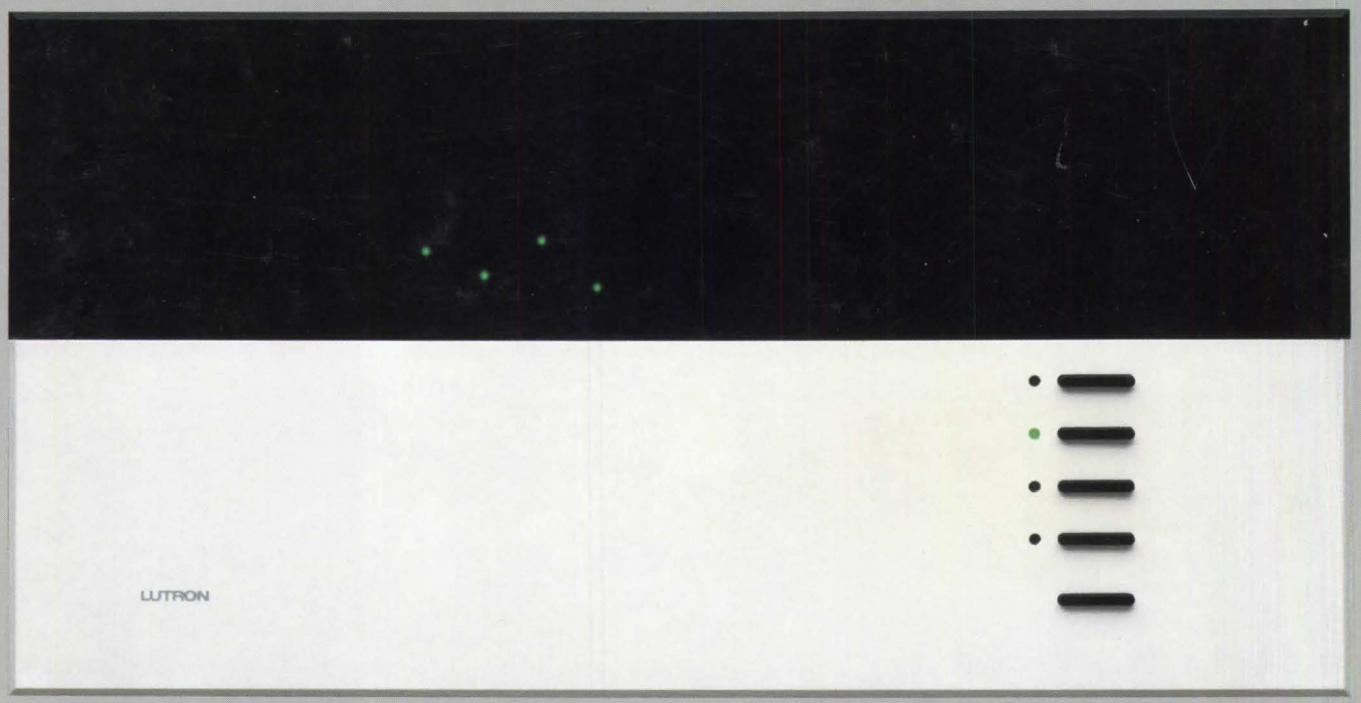
4-Scene, 4-Zone Preset Dimming Control



GRAFIK Eye Control—Preset dimming with a sleek, thin profile design (UL)

Create 4 Distinct Lighting Scenes. . . Recall Each by Touching a Button

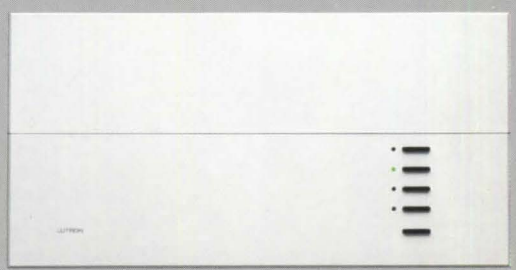
The GRAFIK Eye Preset Dimming Control offers:

- coordinated lighting control in one sleek, thin profile unit.
- control of 4 independent lighting zones (circuits) which create 4 distinct lighting scenes.
- the ability to transform the lighting of any space with the simple touch of a button.

The GRAFIK Eye Control can:

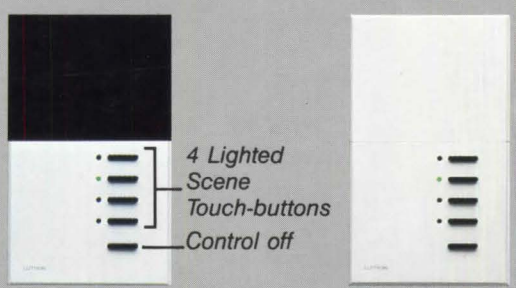
- provide proper lighting levels for multiple functions.
- emphasize unique features that have been designed for the space.
- create different moods or ambiance.

The GRAFIK Eye unit controls up to **2000 watts*** of incandescent, incandescent low voltage, and fluorescent lighting.



GRAFIK Eye Control with white opaque cover
Dimensions: .295" thin x 8⅞" x 4½"

Thin profile



Dimensions: .295" thin x 2¾" x 4½"

Auxiliary Scene Activators provide remote touch-butt control from 1 or additional location Available with smoked translucer cover and white opaque cover

* For applications requiring more than 2000W/VA total load, consult the Lutron Hotline.

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For more information on the GRAFIK Eye Preset Dimming Control, call Lutron's Hotline toll-free:
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