

The New York Chapter of the American Institute of Architects

Volume 44, Number 5, January 1983



# **Chapter Reports**

# Names and News

#### Volume 44, Number 5, January 1983

#### Oculus

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Executive Committee 1982-83: Arthur I. Rosenblatt, President Theodore Liebman, First Vice President Richard Hayden, Vice President Terrance R. Williams, Vice President Alan Schwartzman, Treasurer Doris B. Nathan, Secretary Joseph Bresnan F. Eric Goshow John S. Hagmann Nancy A.T. Miao Stuart K. Pertz Mildred Schmertz

# NYC/AIA Staff

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**Executive Director Search Committee** A committee consisting of a number of executive committee members and former officers has placed the following advertisement in a number of publications: The New York Chapter of the American Institute of Architects, located at the Urban Center in the Villard Houses of New York City, seeks a dynamic executive director. Applicants must possess administrative and managerial skills; develop, oversee, and administer chapter programs and activities; be able to communicate effectively, including public presentation of Chapter positions; and work with the members, other architects, and allied professionals. A job description is available. Resumes, addressed to the Search Committee, must reach the Chapter offices by March 1. The New York Chapter/AIA is an Equal **Opportunity Employer.** 

#### by George Lewis

## **Headquarters Remodeling**

By the time this issue of *Oculus* reaches you, the construction work on the new headquarters space will be close to completion, and the staff expects to be set up there by the end of January. When the whole furnished design will be complete is less predictable; further fund raising is required, an effort of which Richard Hayden has taken charge.

#### **Chinatown Prison**

Past president Herbert Oppenheimer called the Chapter's attention to the extreme inadvisability of superimposing a detention facility for juveniles in the same building with adults, as had been proposed to the Board of Estimate. The Executive Committee appointed Oppenheimer to express that view; when the Board voted on December 2, through a compromise pushed by Carol Bellamy, it approved the adult facility (vigorously opposed by the local community) but eliminated the juvenile.

#### **Associated Student Chapters/AIA**

Tom Fowler and Yvonne Kearney, ASC New York director and associate director, have met with Nancy Miao, Cathanne Piesla, and George Lewis to explore ways, of which there are potentially quite a few, for architectural students to learn more about what to look forward to. Student membership (\$6.00), which gets one on the mailing list, should be encouraged; students can serve on committees and attend events. A reception for graduating students will be planned. Chapter members interested in furthering the profession's relationship with students should communicate with Ms. Piesla.

Search Committee Members The Search Committee members are: James B. Baker, Jonathan Barnett, John Belle, Judith Edelman, Bill N. Lacy, Theodore Liebman, Arthur Rosenblatt, Peter Samton, Alan Schwartzman, Joseph Wasserman, and Terrance R. Williams.

The centennial of the Brooklyn Bridge in 1983 (it opened to traffic on May 24, 1883) will be celebrated by at least two exhibitions - one at the Brooklyn Museum (May 19-June 19) and one at the Museum of the City of New York (May 10-September 5) - and a threeday symposium sponsored by the New York Academy of Sciences (May 18-20) .... Charles A. Platt is the Coordinating Architect for the preservation of Gracie Mansion, which is being carried out under the direction of Joan K. Davidson of the Gracie Mansion Conservancy ... Keynote speakers at a four-day symposium, April 21-24, on American architecture to inaugurate Columbia University's new Center for the Study of American Architecture, will be Vincent Scully, Tom Leeuwen. instructor in the Historical Institute at the University of Leiden, and J.B. Jackson, writer and critic. Others speakers will include Dolores Hayden, associate professor of urban planning, University of California; Denise Scott Brown, John Coolidge, professor of fine arts, Harvard; industrial designer Arthur Pulos; Edgar Kaufmann Jr., adjunct professor of architecture. Columbia; Thomas Hines, associate professor of history and architecture, UCLA; Donald Hoffmann, art and architecture critic for the Kansas City Star; James O'Gorman, professor of art history at Wellesley; and Arthur Drexler, director of MOMA's department of architecture and design .... The New York Landmarks Conservancy and Rutger's Center for Urban Policy Research have published Landmarks Preservation and the Property Tax by David Listokin. which is available at Urban Center Books . . . . Lawrence F. Graham, UDC Senior Vice President, has been named to serve as president of a newly created subsidiary of the State's Urban Development Corporation to direct the 42nd Street Development Project, a joint City/ State effort .... The members of the Board of Directors of the Times Square Redevelopment Corporation (TSRC) have also been named: George G. Dempster, Chairman of the Board of the New York State Urban cont'd. p. 14, col. 1

# by Charles K. Hoyt

While preservationists have tended to focus on isolated Landmarks, Local Law 10 promises to have more far reaching affects on the physical character of our city, and – for architects and engineers – poses major legal problems as well.

New York City's Local Law Number 10 came into effect at the end of February 1980 with a compliance date two years thence - or February of last year. It requires the owners of buildings more than six stories high and closer to the sidewalk than 25 feet to have filed with the Department of Buildings a detailed report on the structural condition of the facades, and immediately thereafter to have begun work on any measures required to correct unsafe conditions. The process is to be repeated each five years, and be certified by an architect or engineer, complete with stamp and signature.

Not so bad, you may say, as a proper and direct reaction to the tragedy that James Fitch describes. As research, logic, and a few subsequent events have proved, many tall buildings in New York have reached an uncertain old age in which the steel supports that hold the facades up may now let them down with disasterous results, due to rusting or a variety of other failures.

# **Evaluation of the Law**

But we need to think some more about just how good this law really is. The reality is that any law passed under duress by New York's City Council in six months from inception has a good chance of being hasty and without thought of full consequences.

What have been the consequences so far? For the design professions, the law is a legal headache in placing responsibility for concealed structural supports on a current generation that cont'd. p. 4, col. 1

Charles K. Hoyt is Chairman of the N.Y.C. Chapter/AIA Historic Buildings Committee and an Associate Editor of Architectural Record.

IN

2. View from Woolworth Building. (Photo: Robert Perron)

## by James Marston Fitch

Local Law #10 responds to the real and pressing dangers of being a pedestrian in the older sections of New York. No one can quarrel with its intent: but no one can ignore its serious implications for the aesthetics of New York's structures. It will take lively imaginations and generous budgets for New York architects to meet both requirements.

Fin-de-siecle architects, in designing high-rise buildings in the Beaux Arts manner, invariably followed the "column analogy" in their designs – that is, a *base* of entrance floors and entre-sol: a shaft of stacked floors with uniform fenestration; and a crowning capital consisting of an entablature complete with freize and cornice. These "capitals" were quite large, often concealing the entire attic floor. The projecting cornices were constructed variously of sheet metal on wood, cut stone, or terra cotta. They were often quite bulky, since they were designed to be "read" as an integral element of a 12-to-16-story composition.

Always the most vulnerable feature of the facade due to climatic attrition (corrosion, freeze/thaw, high winds), these cornices have been for decades a• headache for landlords and their management personnel, if for no other reason than that they were difficult to inspect and repair. And none have proved to be as increasingly dangerous as those built of terra cotta, as Columbia University has good reason to know.

On the evening of May 16, 1979, a fragment of terra cotta ornament on the eighth floor of a Beaux Arts apartment house at Broadway and 115th Street broke off and fell. It hit another protruding ornament on the fifth floor, which in turn fell on a *cont'd. p. 6, col. 1* 

Dr. Fitch is director of preservation for the New York firm of Beyer Blinder Belle and author of the recently published book Historic Preservation: Curatorial Management of the Built World (McGraw-Hill, 1982).

3. The Mayflower Hotel, CPW and 61st Street, is complying with Local Law 10.

4. Will the great cornice at 58th and Broadway be spared?

Photos: Stan Ries/ESTO

# Hoyt

## cont'd. from p. 3

did not design them. Since no architect or engineer has yet been hauled before a judge for not seeing through stone or terra cotta, the issue has not become a nightmare.

To the casual observer, the physical affect seems to be minor: a few more scaffolds up around town than usual. But, the truth is that only a small portion of the work that is probably required under even the first phase of inspections has begun. Recently, the press has noted a pressure campaign to force owners to comply in just filing their reports.

The Buildings Department has estimated that the law applies to some 8,500 buildings. Attorney Barry LePatner says that as many as 50,000 may be involved. An attempt to monitor the affects that the reports may produce has been frustrated by an aborted promise to furnish the Chapter with summaries of the examination reports as they come into the Buildings Department.

Still, architects can make an educated guess on what the physical affects will be when compliance is achieved. Even those who do not spend too much time consciously thinking about such things appreciate the visual pleasure that can be had by walking along looking up at the gargoles, balustrades, and reliefs — not to mention columns, stringcourses, and cornices — that other generations required, as Jim Fitch says, to make their facades complete. Of course, this pleasure has lately been tempered with unease.

This unease, coupled with the legal dilemma of design professionals, is likely to make any but the bravest recommend exactly what sensible owners expect they should and what the usual contractor is only capable of doing: "strip the stuff off." Attorney Paul Byard of the board of the Municipal Art Society confirms that the lack of aptitude for restoration is causing contractors to produce exorbitant estimates for restoration as compared to stripping.

So there you have it. As C. Ray Smith



has said, "What the Modern movement was unable to achieve by proscription will now be achieved by legal demolition." Postmodernism — for all of its new recognition of ornament — will not be able to put back the chiseled stone and molded terra cotta on the vast stock of older buildings that establish the character of our city. In most cases, the will, the economics, and the technology will just not be there. What goes goes.

### Some Examples

The look of the future can be seen at the Mayflower Hotel on Central Park West—as well as on other fortunately still-isolated examples. Here, the scar tissue of naked brick has extended over the entire facade. The promise is a city once rich in visual contrast left with only ghostly reminders of its former self.

Of course, the law does not effect designated landmarks. Those truly outstanding examples of architectural merit will go untouched, the owners being required to maintain them in any case.

We may soon wish that the designations had been broadened instead of made more selective, as

argued in the last issue of *Oculus* by George McCormack. Isolated buildings or even districts do not a city character make.

But, are even Landmarks safe? There can be little doubt that the new costs attached to Local Law 10 will once again raise the issue of hardship on the part of owners, and escalate the number of de-designation requests as well as resistance to new designations. For instance, the Empire State Building and the Woolworth Building (both landmarks in the proper sense) have yet to be officially designated.

### Recommendations

What can be done to cure these unpleasant side affects of Local Law 10? Shortly before the compliance date in February 1982, this Chapter joined with the Municipal Art Society in staging a last-minute effort to provide study time by requesting a delay. The Real Estate Board expressed concern. The request was unsuccessful. Many thought the only option was to hold our breaths and wait for public opinion to catch up with reality.

This may in fact happen, and – even just possibly – before the real damage is done. Recent articles on the subject in the popular press have coincided with several meetings held by professional and civic groups. The groundswell may be starting.

But, what can the changes be that will leave the City's facades intact, and still carry out the worthwhile social intent of the law? From the point of view of owners, the issue is the extra financial burden of restoration versus removal. Clearly, the change here should be economic incentive to restore. Although tax abatements are dirty words these days, some form of financial relief attached to the Law should be an obvious answer. A differentiation would have to be made between those buildings that suffer from natural aging and those newer buildings that suffer simply from faulty construction. An age limitation would be a simple method.

Another goal should be to overcome the lack of technical knowledge that makes inspection difficult for design professionals and accessible restoration techniques difficult for owners, who – even given financial incentives – may not want to spend the money that, say, Woolworth has on their building restoration.

The Chapter's Historic Building Committee is undertaking a proposal to get this ball rolling, but it will take time. As long as the real damage is held off with the hope of a more thoughtful resolution to the problems of Local Law 10, there are temporary measures — such as the steel mesh installed on the main public library's balustrades — that will protect public safety if not visually preserve the ornament.

As it stands now, Law 10 is a singlepurpose law passed in the conviction that that purpose was at least *something* that we could do something about. Instead, as one of our committee members has said, and I agree, many feel safer with the chances of a cranial blow on our sidewalks than with the more frequent attacks in our subways.

# Fitch

## cont'd. from p. 3

pedestrian-a young Barnard College co-ed, Grace Gold, who happened to be passing at the time-killing her instantly. The tragedy affected the University at two levels since the building was one of a number of similar structures it had been acquiring across time, much the same age and design. The University had been aware of the hazards of these cornices and had already begun to act to correct them. On some buildings, it had merely sheared off all the projecting members of the entablature, leaving the scar-tissue of the naked brick parapet exposed. These amputations had been sufficiently inexpert and crude to lead to loud cries from neighborhood preservationists.

There is no disputing the fact that the removal of so important a feature from these Beaux Arts facades plays havoc with the aesthetic integrity of both the building and the streetscape. There is also no doubt that corrective cosmetic surgery will be a process requiring time, money, care, and great aesthetic sensitivity. The accurate reconstruction of these failing cornices would be difficult and expensive under any circumstances. In the case of terra cotta, replacement would be all but impossible. The terra cotta industry itself has nearly disappeared, so that only custom-made replicas are available. But besides the cost. an analysis of terra cotta failures all across the northern part of the country now reveals that a sequence of destructive events began immediately after completion (even though the consequences were not to become visible until decades later). The vitreous glaze on the blocks would begin to craze, crack, and spall under the freeze/thaw cycles of northern winters. This permitted water to penetrate the porous webbing of the blocks; the corrosion of metal wall ties began and, with it, an increased cross section of the rusting metal members. This in turn began to exert pressures on the blocks, shifting and deforming them. Ultimately, the integrity of the entire fabric is put at risk. Furthermore, the whole process is

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5. Columbia University's McKim, Mead & White buildings.

6. The west side of Broadway at 113th Street.

7. Columbia University at work on parapets and the King's lions.

8. The stripped cornice, 115th and Broadway.

Photos: Stan Ries/ESTO





irreversible, that is, nothing short of complete replacement is possible and that, as we have seen, is often impracticable.

The case for sheet metal cornices is not much better. The metal itself corrodes, especially where interior surfaces are inaccessible for inspection and maintenance. Wooden outriggers decay as water permeates the entire structure. Moreover, the sheet metal industry on which these cornices depend has also largely disappeared: certainly the vast inventory of dies for forming the moldings and stamping out the coffers, brackets, and rosettes so dear to Beaux Arts architects has all but vanished. Replicas in copper, therefore, would be prohibitive; in sheet metal, expensive; and in wood would be expensive to maintain.

#### **Durable Restorations**

One material out of which replicas might be safely fabricated is fiberglass. It is light-weight, dimensionally stable, and can be molded in large members of intricate cross section. It can be painted to simulate any material. Though it has not been used long enough to establish its long-term durability (life estimates are based on accelerated weathering tests), it has been accepted by the National Park Service as replacement on such important monuments as the wooden balustrades and finials on Independence Hall in Philadelphia.

Some alert fabricators are now offering aluminum replicas of 19th-Century sheet metal cornices. Our firm has just installed one on a New York brownstone townhouse. The molded and bracketed shell, which has been painted to match the brownstone facade, is supported by an aluminum armature bolted to the parapet. The cost of this cornice installed came to approximately \$1,000 per lineal foot.

Any of the above solutions might be used on the Columbia buildings, although none of them is cheap. But another approach to the missing cornice might be its replacement, not

cont'd. p. 10, col. 1

N 83	PATTERN: AN EXHIBITION OF THE DECORATIVE SURFACE American Craft Museum II, Internátional Paper Plaza, 77 W. 45 St. 397-0632. Closes Jan. 28. AMERICAN PICTURE PALACES Exhibition of "Golden Age" of movie houses. Cooper-He witt Museum, 2 E. 91 St. 860-6868. Closes Feb. 27.	FRIDAY 7	LOUIS SULLIVAN AWARD Deadline for mailing entry slips in the Louis Sullivan Award for Architecture to: American Institute of Architects, 1735 New York Ave., N.W., Washington, D.C. 20006.	FRIDAY 14	AUCTION PREVIEW Special viewing of the collection of 19th-century American furniture and decorative arts from The Lindens, a historic house in Washington, D.C., to be auctioned Jan. 22. Christie's, 502 Park Ave. South. 546-1000. Closes Jan. 21. SUNDAY AT THE MET ON JANUARY 16 Frank Lloyd Wright – Films (12-1 pm) and lectures (1:15-4 pm). Metropolitan Museum of Art, 870-5500.
IA JA	FURNITURE BY AMERICAN ARCHITECTS Exhibition. The Whitney Museum of American Art, Fairfield County, 1 Champion Plaza, Stamford, Conn. 203-358-7652. Closes Jan. 26. IRWIN S. CHANIN Exhibition. Houghton Gallery, The Cooper Union, Third Ave. and 7th St. 254-6300, ext. 308. Closes Jan. 28.	<b>THURSDAY 6</b>		<b>THURSDAY 13</b>	AIA/NYC COMPUTER SEMINAR Lecture by Michael Corden and Graham Copeland on "Computer Design and Drafting Applications." 5:30 pm. The Urban Center, 457 Madison Ave. 719-3828.
YC/A	THE BOWERY: PORTRAIT OF A CHANGING STREET Photographic documentation by Carin Drechsler-Marx shared at the Museum of the City of New York, Fifth Ave. at 103 St. 534-1672, and at Goethe House, 1014 Fifth Ave. at 83 St. Closes Jan. 23.	WEDNESDAY 5	NEW YORK FUTURES: VISIONS FOR THE CITY Lecture on "Trolleys in New York: How We Lost Them: How We're Going to Get Them Back," by Commissioner David Gurin of NYC's Department of Transportation, in the Municipal Art Society's Club Mid series. Introduction by Fred Papert. 12:30-1:30 pm. The Urban Center, 457 Madison Ave. 935-3960.	WEDNESDAY 12	NEW YORK FUTURES Lecture on "The New Zoos" by Project, in the MAS's Club Mid series. 12:30-1:30 pm. The Urban Center, 935-3960. LANDMARKS THAT AREN'T Exhibition of Unprotected Treasures. Photographs by Cervin Robinson. Municipal Art Society. Closes Feb. 19. TRANSFORMING CITY SPACE Exhibition of an F.I.T. project for W. 27th Street. The Municipal Art Society, 457 Madison. Closes Feb. 19.
CONTINUING EVENTS	BONJOUR MONSIEUR LARTIGUE Exhibition of photographs taken between 1902 and 1939 by Jacques Henri Lartigue. International Center for Photography, 1130 Fifth Ave. at 94 St. 860-1783. Closes Jan. 9. JAPANESE BUDDHIST SCULPTURE AD 600-1300 Exhibition. Japan House Gallery, 333 E. 47 St. 832-1155. Closes Jan. 16.	<b>TUESDAY 4</b>		<b>TUESDAY 11</b>	
OCUI	Oculus welcomes information for the calendar pertaining to public events about architecture and the other design professions. It is due by the 7th of the month for the following month's issue. Because of the time lag between information received and printed, final details of events are likely to change. It is recommended, therefore, that events be checked with the sponsoring institutions before attending. Send Oculus Calendar information to: New York Chapter/AIA, 457 Madison Avenue, N.Y. 10022.	MONDAY 3		MONDAY 10	

MONDAY 17	<b>TUESDAY 18</b>	WEDNESDAY 19	<b>THURSDAY 20</b>	FRIDAY 21
	LOUIS COMFORT TIFFANY: THE QUEST OF BEAUTY Exhibition presenting a survey of Tiftany designs for domestic use. Cooper-Hewitt Museum, 2 E. 91 St. 860-8688. Closes April 17.	NEW YORK FUTURES: VISIONS FOR THE CITY Lecture on "Battery Park City" by Barry E. Light, President of Battery Park City Corporation, in the Municipal Art Society's Club Mid series. 12:30-1:30 pm. The Urban Center, 457 Madison. 935-3960. DESIGNERS LIGHTING FORUM 1982 Honor Awards Dinner, The University Club. 1 W. 54 St. Information: Shelia McKay 201-825-1846.	ARCHITECTURE & DESIGN Lecture by Theodore Liebman on Housing for Changing Lifestyles, first in a seven-Thursday series sponsored by NYC/AIA and Metropolis Magazine. 6 pm. The Urban Center, 457 Madison Ave. Members free, nonmembers \$5, series \$25, 838-9670.	THE OTHER NEW YORK "The Once and Future Bronx," first of three slide lectures by the Municipal Art Society's Barry Lewis. 67:30 pm. The Urban Center, 457 Madison Ave. 935-3960. Members \$5, nonmembers \$10. AUCTION ON SATURDAY JANUARY 22 The collection of 19th-century furniture and decorative arts from The Lindens, a historic house in Washington, D.C. Christie's, 502 Park Avenue South. 546-1000.
MONDAY 24	<b>TUESDAY 25</b>	WEDNESDAY 26	<b>THURSDAY 27</b>	FRIDAY 28
	DESIGNS FOR THEATER: DRAWINGS AND PRINTS Exhibition including stage designs- from 16th-century performances commissioned by the Medici to Oliver Smith's sets for Oklahoma; and theater architecture and decoration - from Palladio's Teatro Olimpico in Vicenza to the Walnut Street Theater in Philadelphia. Cooper-Hewitt Museum, 2 E. 91 St. 860-6868.	NEW YORK FUTURES VISIONS FOR THE CITY Lecture on "Lincoln West: 76 Acres Reclaimed" by Sheila Thorn, in MAS's Club Mid series. 1230-1:30 pm. 457 Madison Ave. 935-3960. THE OTHER NEW YORK "Brooklyn" slide lecture by Barry Lewis, 6-7:30 pm. 457 Madison Ave. 235-3960. Members \$5, nonmembers \$10. THREE NEW SKYSCRAPERS Exhibition of models, drawings, and construction photographs. Museum of Modern Art, 18 W. 54 St. 708-9400. Closes March 22.	ARCHITECTURE & DESIGN Lecture by Lewis Davis—"Housing, Architecture, and the City" — second in a seven Thursday series sponsored by NYC/AIA and Metropolis by NYC/AIA and Metropolis Magazine 6 pm. The Urban Center, Af7 Madison Ave. Members free, nonmembers \$5, series \$25, 838-9670.	
MONDAY 31	<b>TUESDAY 1 FEB</b>	WEDNESDAY 2 FEB		
<ul> <li>Yes, Sink on Middler, Hours, S.</li> <li>Yes, S. S.</li></ul>		THE OTHER NEW YORK "From Planned Suburb to Melting Pot: Queens," last of three slide lectures by the Municipal Art Society's Barry Lewis. 6-7:30 pm. The Urban Center, 457 Madison Ave. 935-3960. Members \$5, nonmembers \$10. ARCHITECTS FOR SOCIAL RESPONSIBILITY Open meeting at Japan House, 333 E. 47 St. 5:30 pm. Contact: Penny Blum 334-8104.		

9. Saarinen's dorm at the University of Pennsylvania (1960) has a row of metal rods to suggest a cornice – though it has also suggested a fence-top barricade.

10. Hogan Hall, at Columbia University, renovated by R.M. Kliment & Frances Halsband Architects. A new brick parapet replaces the deteriorated tin cornice of the original building. (Photo: Norman McGrath)

### Fitch

#### cont'd. from p. 7

by a literal three-dimensional replica, but by a simplified or abstracted version of the original. Something of this sort had already been tried at Columbia before the tragic event of May 16, 1979. In the rehabilitation of another Beaux Arts building, Hogan Hall, (the former Home for Indigent Gentlewomen), the architects, Kliment & Halsband, confronted a similar condition. Their solution was to remove the cornice and rebuild the parapet in a sort of two-dimensional abstraction of the original threedimensional entablature. While not wholly successful, precisely because it lacked the shadow-casting capabilities of the original, the Hogan Hall design at least suggested a possible response.

From a purely pictorial point of view, one could imagine another kind of surrogate for the failing cornices-a linear rather than a plastic simulation. That is, a new cornice following the profiles of an original but could be fabricated of metal rods, tubes, and flat sheets. These would create a geometry that casts the same shadows and traces the same silhouettes against the sky with but a fraction of the bulk and weight of the prototypes. Eero Saarinen attempted something of this sort on his dormitory for the University of Pennsylvania. He placed an outward-curving "cornice" of wrought iron bars on top of the parapet. The result is surprisingly solid visually.

A more ambitious use of this same technique has been proposed in our project for the restoration of the firedamaged City Hall in Jersey City. This flamboyant building, clearly inspired by the Chicago Fair of 1893, boasted five towers, each topped by a timber-framed cupola sheathed in gilded copper. Mutilated in a series of tasteless remodelings and finally destroyed by the fire, their disappearance leaves the City Hall aesthetically unintelligible. We have proposed that their visual presence on the skyline be restored by a threedimensional framework of metal tubes and sheets cut to match the profiles of the original cupolas.



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Excerpts from "The Maintenance and Repair of Architectural Sandstone"

## by Michael F. Lynch and William J. Higgins

The technical pamphlet The Maintenance and Repair of Architectural Sandstone is available for \$1 by writing to The Landmarks Conservancy, 330 West 42nd Street, New York, N.Y. 10036.

Sandstone, particularly in its darkcolored brownstone form, is a significant material in the history of American building. "Brownstone" is the common name for the entire range of brown, red, purple, and pink sandstones widely used as building materials from the 1840's until the early 20th century. Most of the stone was quarried in Connecticut, Massachusetts, New Jersey, New York, and Pennsylvania...

Almost as soon as sandstone became prominent as a building material in the mid-19th century, it also became notorious for its tendency to decay. Now, more than one hundred years later, brownstone row houses and other sandstone buildings are popular again, and a new generation of owners faces the problem of sandstone decay. The New York Landmarks Conservancy recognized this problem and in 1979 undertook a significant new study of sandstone repair techniques. Under the direction of Norman R. Weiss, Assistant Professor of Architecture and Planning, Columbia University, the study team produced the extensive technical report which is the basis for this leaflet.

The Maintenance and Repair of Architectural Sandstone is a practical guide intended for use by building owners, architects, and contractors. Owners will find information for evaluating the work of architects, contractors and other professionals concerned with sandstone repairs, as well as guidance on maintenance and do-it-yourself repairs; architects, will find information useful in preparing contract documents and inspecting repair work; and contractors can use the recommended materials and techniques to execute satisfactory repairs. The contents of the leaflet are organized in a logical, step-by-step format to guide users through the



process of planning and executing successful sandstone conservation. There are four main sections, one for each step in the process:

I. Looking at Sandstone: how to gain a basic understanding of its structure, appearance and use.

II. Decay of Sandstone: how to recognize the signs and causes of its deterioration.

III. Protection and Maintenance: how to establish a maintenance program to protect sandstone and to arrest decay until repairs can be made.

IV. Repair: how to select methods and execute repairs, starting with techniques that retain the old stone and proceeding through to the replacement of it with new materials, when nothing else is feasible:

Mechanical Repair Composite Patching Cutting and Resurfacing Replacement Manufacturers and Suppliers



# **Terra Cotta Revisited**

16, 17, 18. Concrete masonry units at the Woolworth Building, restored by The Ehrenkrantz Group.

# by Theodore A.M. Prudon

Architectural terra cotta was once a major bulding material in this country. particularly after 1880 and prior to World War II. A walk around New York City will show a great many examples on significant buildings that illustrate the proliferation of the material in that period. In the literature at the time the material was touted as "eternal" or "indestructible" or "self-cleaning". After the war it was no longer used and fell into decline, while its technology disappeared or was largely forgotten. This was caused by several factors - particularly cost and changing aesthetic ideals.

During the last couple of years the material has come into the foreground again and has acquired a dubious reputation to say the least. Several serious accidents caused by falling pieces have focused attention on terra cotta in general and have resulted in strict regulations that are now often culminating in the stripping of terra cotta cornices, balconies, and lintels from existing buildings. In New York City the effect of Local Law 10 is wellknown and terra cotta is specifically identified as a major concern.

In light of these developments, the formation of an organization with the somewhat unlikely name of Friends of Terra Cotta has come about. This organization, consisting perhaps of "Terra Cotta Aficionados" or "Terra Cotta Crazies," has set out to make known the positive qualities of terra cotta that highlight the architecture that was achieved with it. Finally, the organization wants to stimulate restoration of the important architectural examples of terra cotta usage and to disseminate information to others about successful examples.

Some of these goals were accomplished in a series of seminars organized in three major (terra cotta) cities, i.e. San Francisco, Chicago, and New York City. The one in New York City, held on September 30, 1982 at the Mechanics Institute, was attended by some 90 individuals, including architects, engineers, contractors, building owners, and others. Most appropriately the New York seminar was opened by Irwin Fruchtman, the New York City Building Commissioner.

The talks presented on the seminar can be divided into several categories. The first two sessions were aimed at providing a visual and cultural background for the development of terra cotta, ranging from 15th century Italy via England to 19th century America and 20th century New York City. The examples presented were often visually impressive. A scheduled important session on the manufacture of terra cotta unfortunately did not occur because the California based speaker was unable to attend.

The second category of presentation was taken up by talks about the deterioration and inspection of terra cotta architecture. A general introduction about why the material disintegrates or fails was supplemented by a talk on inspection, in which the general decay phenomena were reduced to the few visual indications usually observed. Both methodology in inspection and additional testing procedures were discussed. This general inspection and analysis discussion was supplemented by an important talk on cornice, parapet, and ornament anchorage.

The final component of the program was formed by several discussions relating to the restoration of terra cotta, illustrated by some case studies. The examples ranged from in-kind replacement, as seen on the Marquette Building in Chicago, to the use of concrete masonry units, as seen in the restoration of the Woolworth Building in New York City.

In addition to these two major case studies, information was provided on other possibilities for restoration, for example, how to order new terra cotta (summarized in "Provide information, information, and information"). The discussion on selecting substitute materials combined with examples of fiberglass was useful if new terra cotta was considered too costly or too difficult to install.



The most important contribution of the seminar was probably the part dealing with inspection and restoration. It is those tasks and decisions that most of the participants are generally faced with.

This seminar was seen only as a beginning: additional seminars are to be developed in the future with greater emphasis and more detail on the repair and restoration process and methods.

Theodore Prudon is a Senior Associate of the Ehrenkrantz Group and on the board of The Friends of Terra Cotta.



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Development Corporation (UDC) and Commissioner of the New York State Department of Commerce: Arthur H. Barnes and Donald Glickman, members of the UDC board; Herbert J. Sturz, Chairman of the New York City Planning Commission and Philip E. Aarons, President of the New York **City Public Development Corporation** .... Paul Heyer, Dean of the School of Architecture at Pratt has announced the appointment of Professor Sidney Shelov as Chairman of the School of Architecture .... Two projects designed by Norman Rosenfeld were recently dedicated: the renovation of

designed by Norman Rosenfeld were recently dedicated: the renovation of the Village Nursing Home located in the Greenwich Village Historic District, and the new Roosevelt Hospital Emergency Department .... Hill House, designed in 1902 by Charles Rennie McIntosh in Helensburgh, Scotland, has recently passed into the care of the National Trust for Scotland with a remarkable amount of original furniture and fittings .... A series of lectures on Frank Lloyd Wright at the Metropolitan Museum on Sunday, January 16 (see calendar), will present Robert Judson Clark, Professor of Art and Archaeology, Princeton, on "Arts, Crafts, and Architecture: Wright and His European Contemporaries;" David G. De Long, Chairman, Historic Preservation, Columbia, on "The Persistence of Genius: The Late Work of Frank Lloyd Wright," with concluding remarks by Henry-Russell Hitchcock . . . . The Du Pont Antron Design Award established by the Du Pont Company to recognize outstanding design in commercial interiors has a deadline of April 1, 1983, for entries. For information and entry forms: Du Pont Antron Design Award, Room X-39534, Wilmington, Delaware 19898 .... Ellen Perry Berkeley has written a book not about architecture but about Maverick Cats, ordinary cats who have returned to the wild, published by Walker and Company .... Lever House, 390 Park Avenue, which has been widely acclaimed as a seminal work in the development of modern skyscraper design ever since its completion in

1952, has been designated a New York City Landmark by the Landmarks Preservation Commission. If, however, Lever Brothers decides to sell its lease and move to New Jersey (a possibility under consideration), the landmark building will be in grave danger .... The Landmarks **Preservation Commission has also** designated the lobby interior of the Film Center Building, 630 Ninth Avenue as a New York City landmark .... Richard Stein's article "The Legacy of Walter Gropius," appearing in the July-August issue of the English Architectural Design, relates his experiences as a student under Gropius and Breuer in the Masters Studio at Harvard and outlines the relevance of Bauhaus ideas for today's architects ... Stanley Abercrombie has been appointed as the editor of Interior Design to follow Sherman Emery, who is to be editorial consultant to the magazine ... Kenneth Frampton has resigned from the Institute of Architecture and Urban Studies.



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