

**Work, Worship and Performance:
Integrating the Office Building Development**

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Bachelor of Arts
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1984

SUBMITTED TO THE DEPARTMENT OF ARCHITECTURE IN PARTIAL
FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF
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Tom H. Hurt
Department of Architecture
January 19, 1990

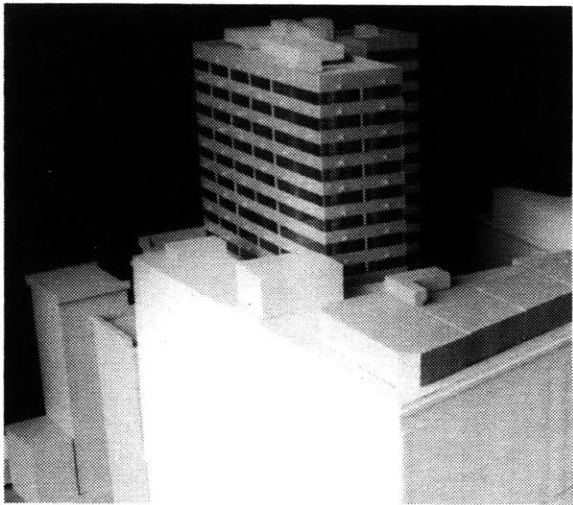
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Bill Hubbard, Jr.
Associate Professor of Architecture
Thesis Supervisor 

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Work, Worship and Performance: Integrating the Office Building Development

By Tom H. Hurt

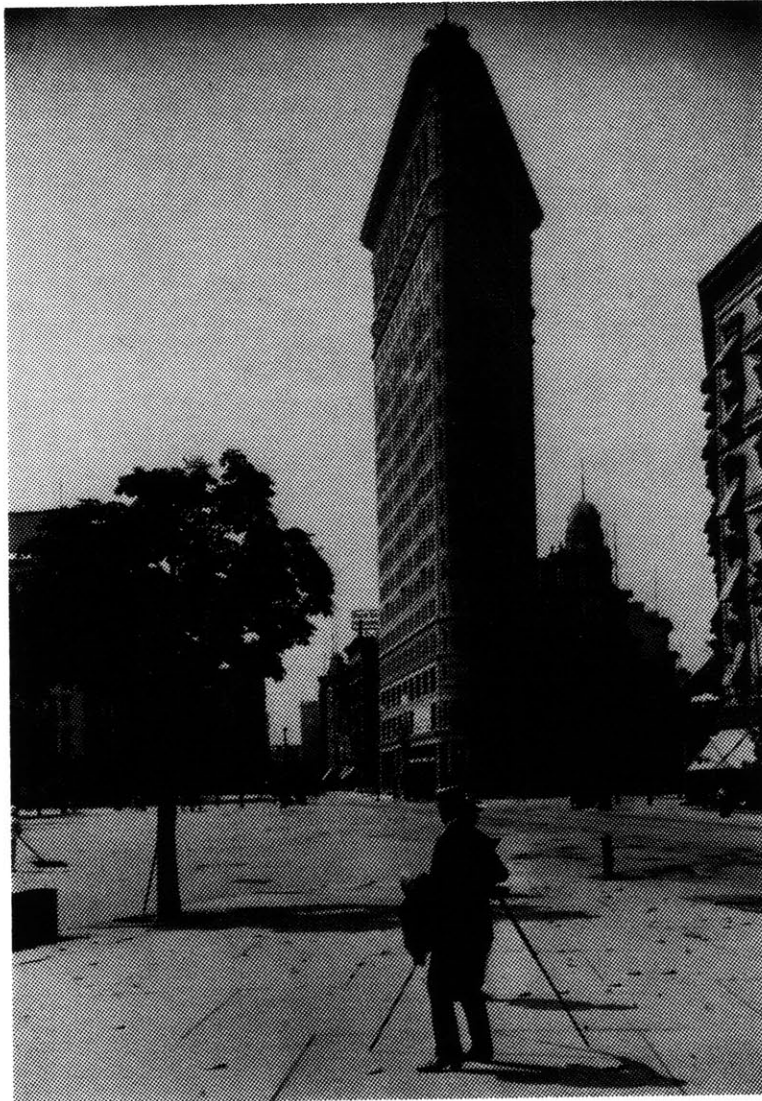
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ABSTRACT

This thesis is the design of an office building which uses the air-rights to an existing church/performance hall. In the design, I try to acknowledge and express underlying economic relationships -- in particular, the funding of cultural facilities by revenue generating office space. I give a form to each of the major partners of an economic venture and then I intersect and juxtapose them. In the resulting development, the forms integrate in a way that suggests interdependence of the parts.

After describing the essential history of the church, the thesis takes the reader graphically through the design starting with the office building. It then describes the block of worker amenities, the shared church/performance hall and their lobby. Finally, it explains the coming together of all the parts on a prominent Boston street corner.

Thesis Advisor: Bill Hubbard
Title: Associate Professor of Architecture



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Many thanks to Fay for being a brilliant and supportive sweetie. To David McCullough for selflessly giving me his head to bounce off ideas (and light).

To Bill Boehm, Chan-Li, Damon, David Milliken, Jason, Joe, Ken, Matthew, Patrick, Pierre, Rick, Sabina, Scott, Shira and everybody else who made these several years so much damn fun!

Thanks to Bill Hubbard for making so much sense out of design and for sharing a truly special insight into the world.

Thanks to Warren Schwartz for making me think of this project as real. To Jim Axley for his constant, high-quality criticism.

Introduction

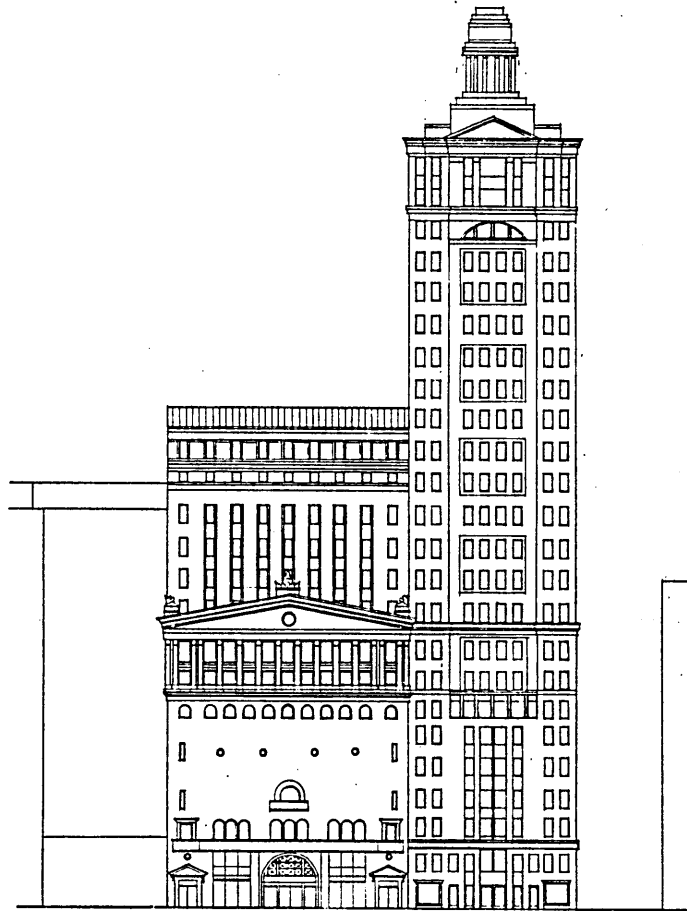
This thesis proposes the design of an office building development which is based on an actual development in Boston. A developer plans to build 150,000 sq. ft. of office space using the adjacent lot to the Tremont Temple Baptist Church and the air-rights above the church.

The form of the design comes from a set of values about what a workplace in the city should be. It comes also from a myriad of facts surrounding the project: for instance, facts of the urban context, the shape of the site, and structural tasks.

But the design focuses sharpest on one particular set of facts. They are the economic relationships between the office developer, the church and the city. This thesis asks what consequences these relationships may have on the form of a development.

The developer's proposal tries to conceal the fact of the air-rights development above the church. Using an historical style, the design strategy is to subdue any differences between the church and the office building.

When I first learned of the developer's approach, it seemed at best like a missed opportunity. I wondered why the juxtaposition of the church and the office building could not be expressed



*St. James Properties Original Proposal for the Office Building
Robert Stern, Architect*

unashamedly. The new could stand above the old reflecting the complexity and interdependency of diverse interests that make up our modern cities.

As I learned about the church, though, I discovered that such a mix of uses - religious and office - was not new at all. For over a hundred years, the church had leased the top three floors of its building as office space. I learned also that the church had rented its hall for secular music performances and speeches. The city, in fact, lists the church building as a theatre and considers the building as part of a broad plan aimed at revitalizing the "Midtown Cultural District" of Boston.

It became apparent that the uses of this building had been very diverse for a long time. What is changing today is the number of economic interests involved. The church is no longer able to maintain itself with the income it gets from its offices and auditorium. By selling its air-rights, it agrees to share its space permanently with another entity, the office building.

As a basis for my design, I made an assumption and took the scenario one step further: Through this development, the city actively seeks to improve its Cultural District. It joins with the developer and the church in an ambitious and cooperative effort to revitalize the performance function of the church hall. The group compiles its

various resources and implementation tools -- the sale of the air rights, incentive zoning, and linkage money -- to create a vibrant, cultural asset to the city.

With this scenario, I return to my original impulse. The design strategy becomes the juxtaposition of forms that represent different partners in an economic and cultural venture. The result is a development which integrates a viable office building for the developer, a renovated and reorganized building for the church, and a major performance hall for the city of Boston.



The Second Tremont Temple Building

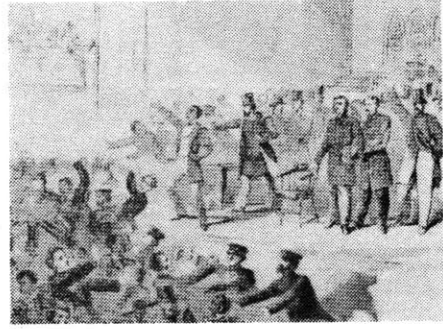


The Fire of 1893

A History of Diversity

The Tremont Temple Baptist Church originally occupied the Tremont Theatre building in 1842. It continued to rent the auditorium for secular events and performances as a source of operating revenue.

Between 1853 and 1893, the church burned three times and was rebuilt three times. Each building retained the theatrical quality and open theatre-seating in favor of building traditional box pews. The open seating allowed the church to continue renting out its auditorium.



*Debate on Abolition
in the Church's Hall, 1851*



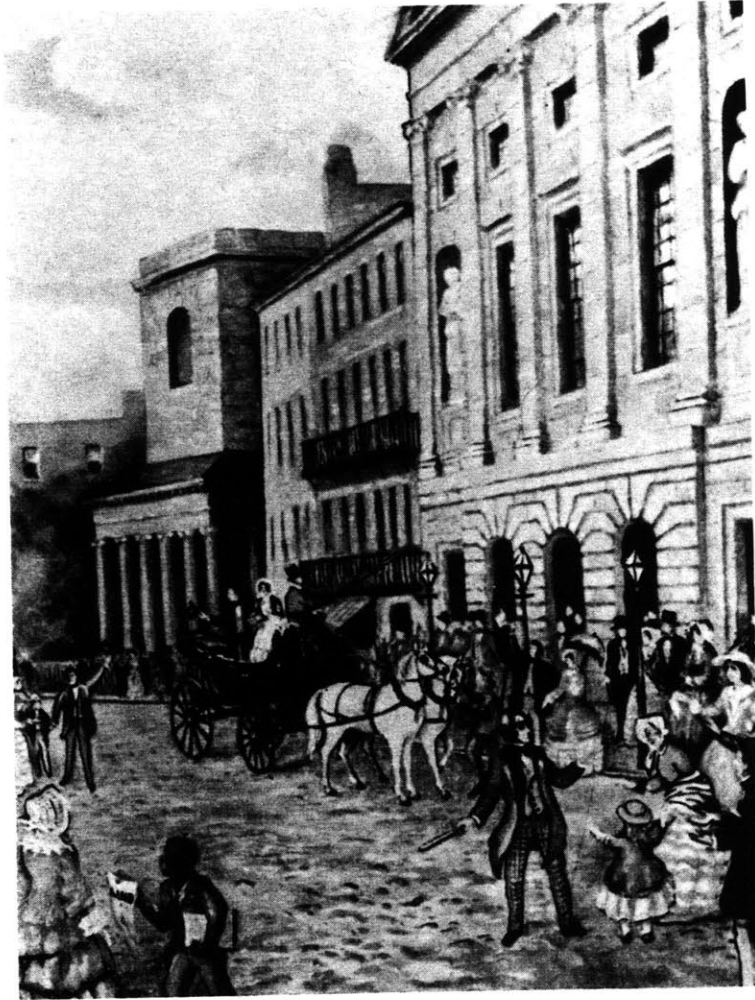
Young Men's Bible Class, 1898



Children's Choir

The open seating also gave the church the unusual distinction of being an integrated church. Blacks who were normally relegated to the balcony seating, could sit in the main seating area. In the mid 1800's the church developed an outspoken stance supporting racial equality. A refuge for runaway slaves, it passed a resolution in defiance of the Fugitive Slave Law of 1850.

Today the church embraces people of many races and nationalities. It holds services for English, Spanish, Laotian, and Chinese speaking congregations. In the Sunday school, it is not uncommon to find a dozen nationalities represented.



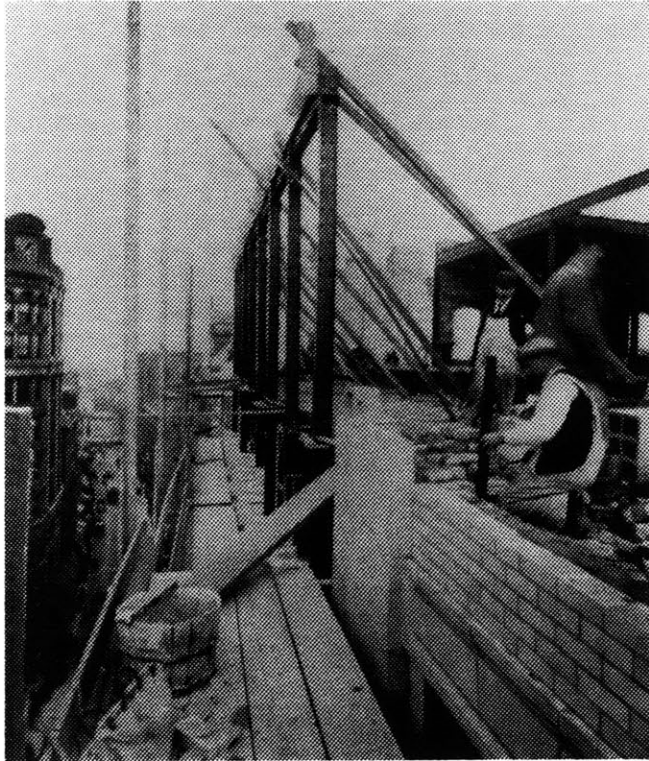
A Boy hands out flyers for a Tremont Theatre performance.



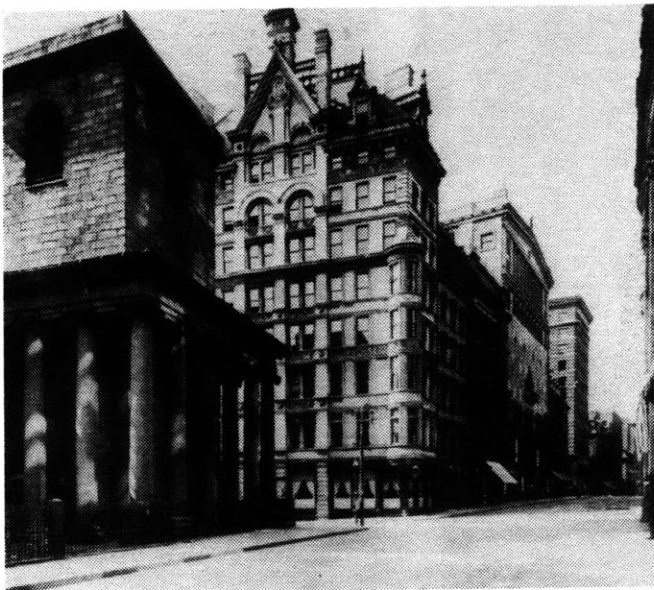
The Church Hall in 1890

Since it originally occupied the Theatre building, the church's auditorium has been a significant speech and performance hall for Boston. Lectures and concerts have been given whether pro- or anti-Christian. Charles Dickens, and many U.S. presidents from Lincoln to Kennedy have spoken from its platform.

In the early 1900's, the church installed a projection booth for the auditorium and showed some of the first moving pictures in Boston. Today, the hall features mainly classical music concerts.



Reconstruction of the Temple



The Temple at the Turn-of-the-Century

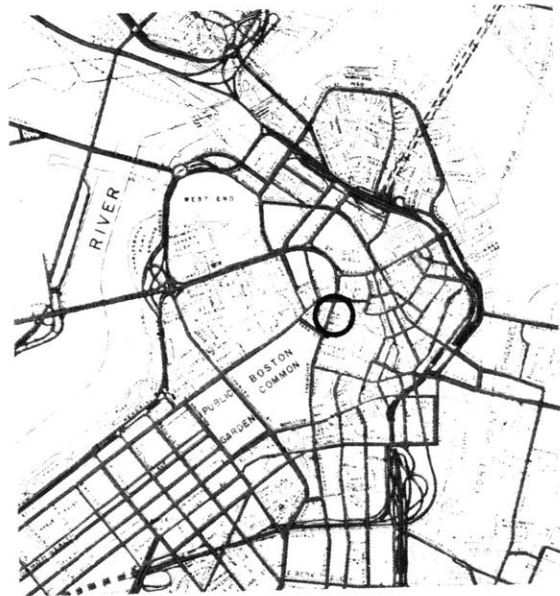
In 1881, in its third building, the church built three floors on top of its auditorium and leased them as office space. When that building burned in 1893, it was rebuilt again with three floors of office space.



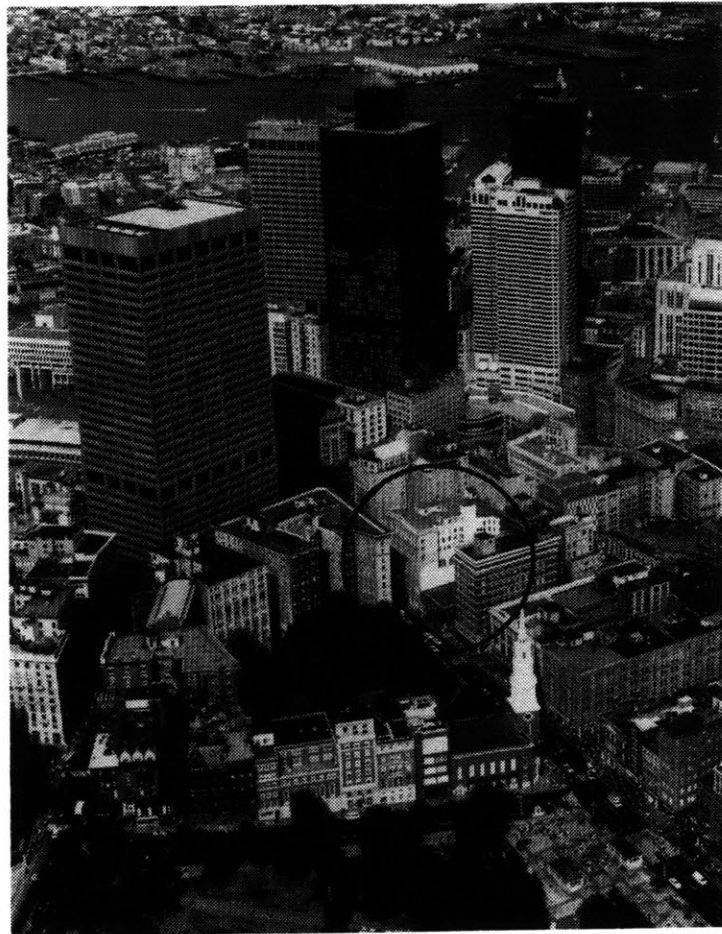
The Tremont Temple Today

Thus, not only has the Tremont Temple been a church but also a performance hall and an office building. In this thesis, the major forms of the new development are derived from these historical functions of the church. In the following pages, I will describe the forms and how I have juxtaposed or intersected them with one another.

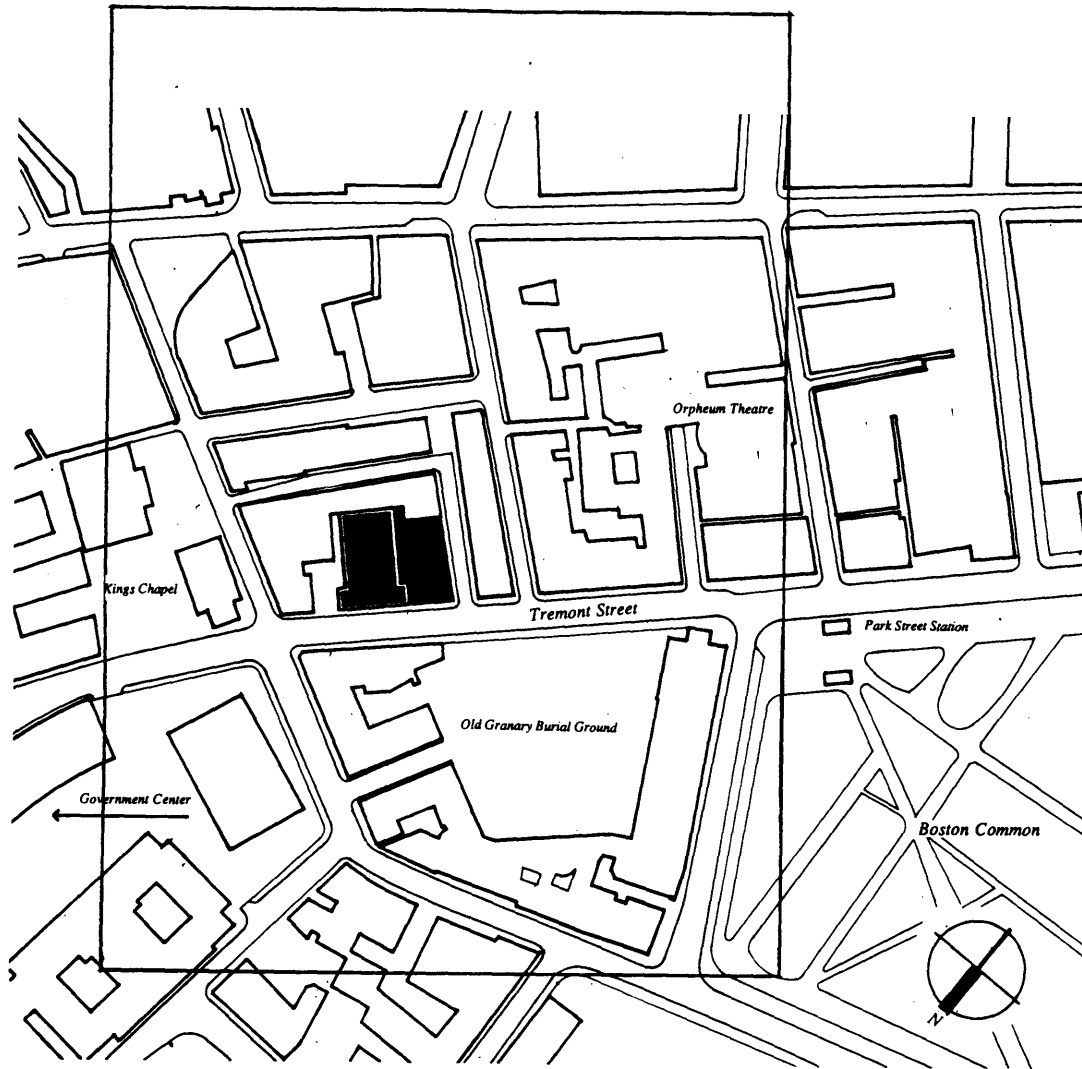
Once an enlightened landlord, the church becomes an enlightened partner in a cultural development.



Location of the Site in Downtown Boston



Aerial View of the Site

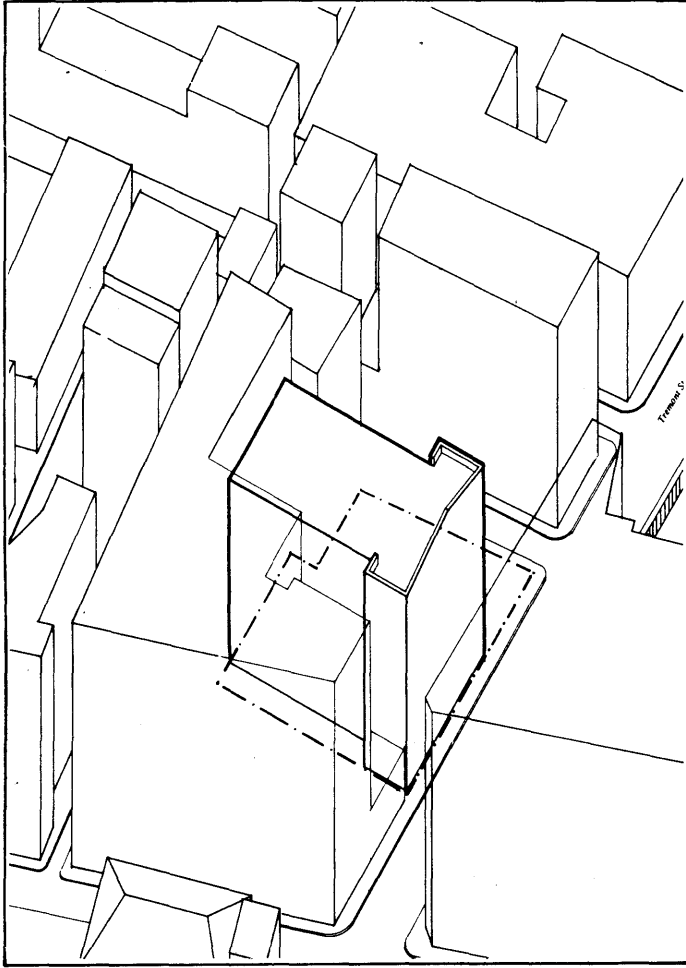


AN INTEGRATED DEVELOPMENT

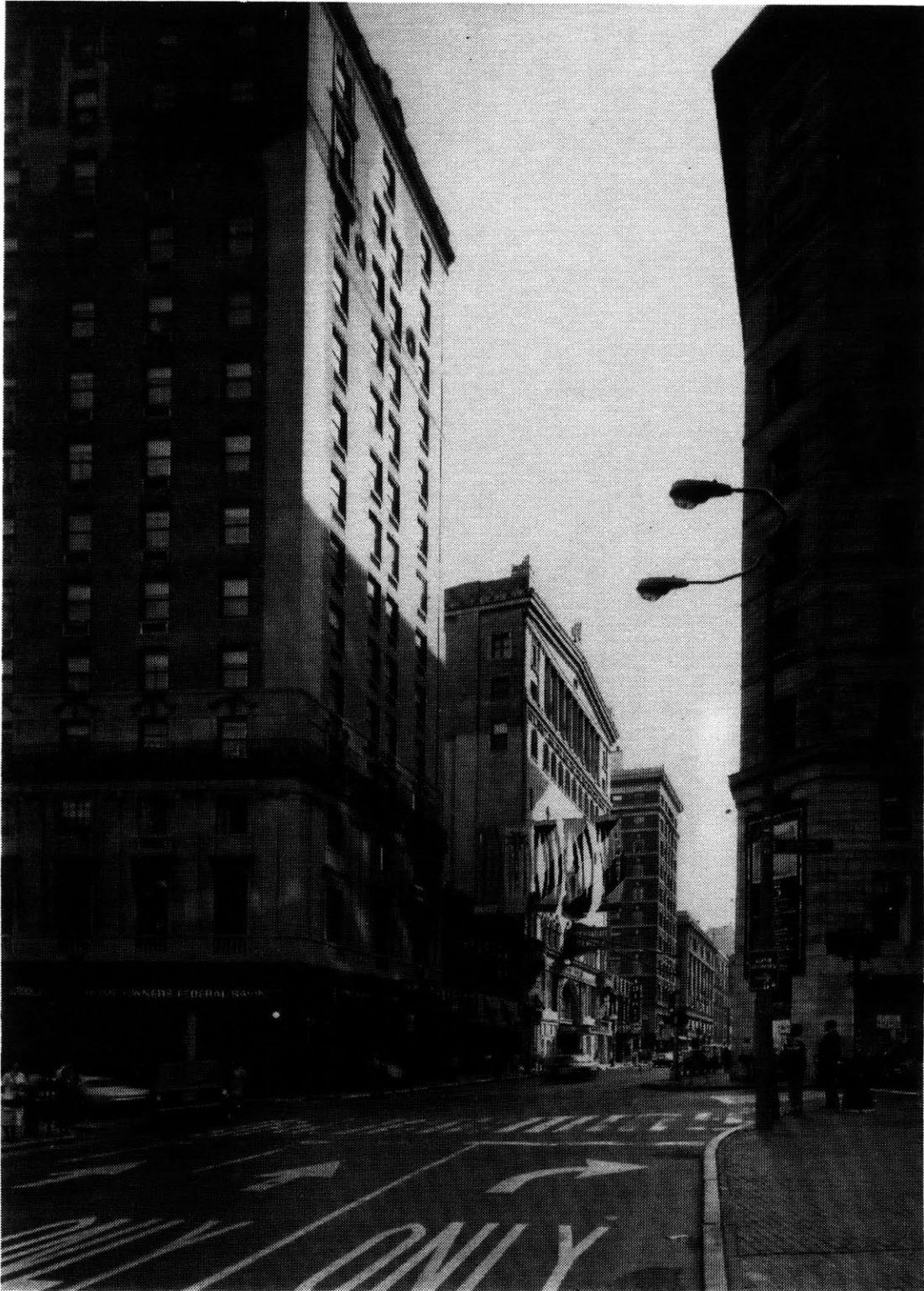
The church sits on Tremont Street at the top of a gentle hill halfway between the Boston Common and Government Center in downtown Boston. Just a few blocks away is the Orpheum Theatre and heart of the Theater District. Across the street is the Old Granary Burial Ground, a popular tourist attraction, where John Hancock and other notable figures are buried.



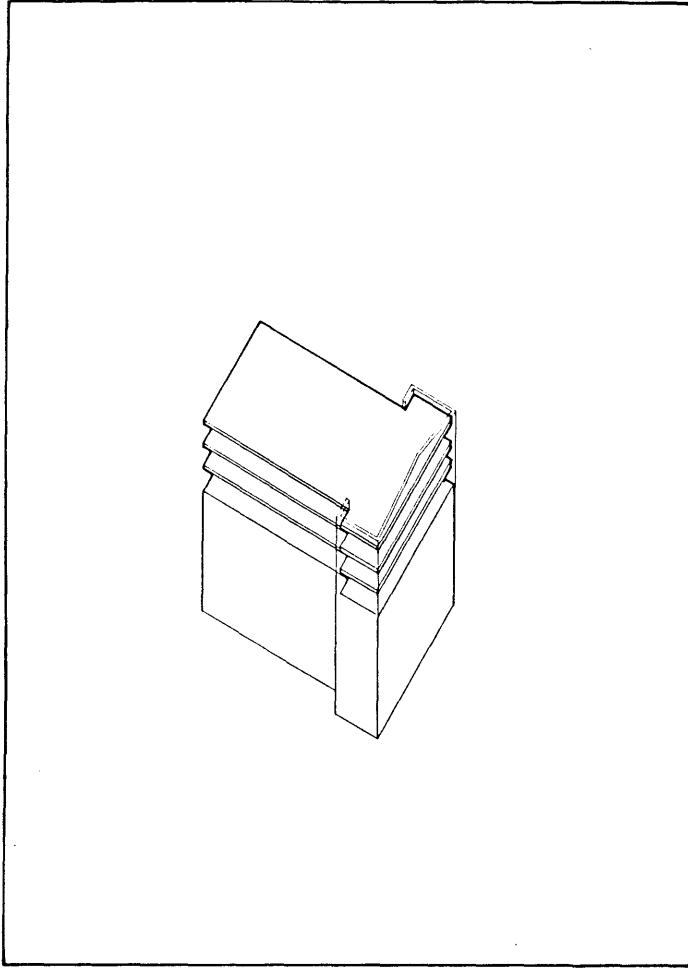
The Site, Occupied Today by Dini's Restaurant



The site is "L" shaped in section since it occupies the air-rights above the Tremont Temple and the lot adjacent to it. Surrounded closely by 8-15 story brick buildings, it is a hole in the city fabric and a conspicuous gap in the strong building wall along Tremont Street.

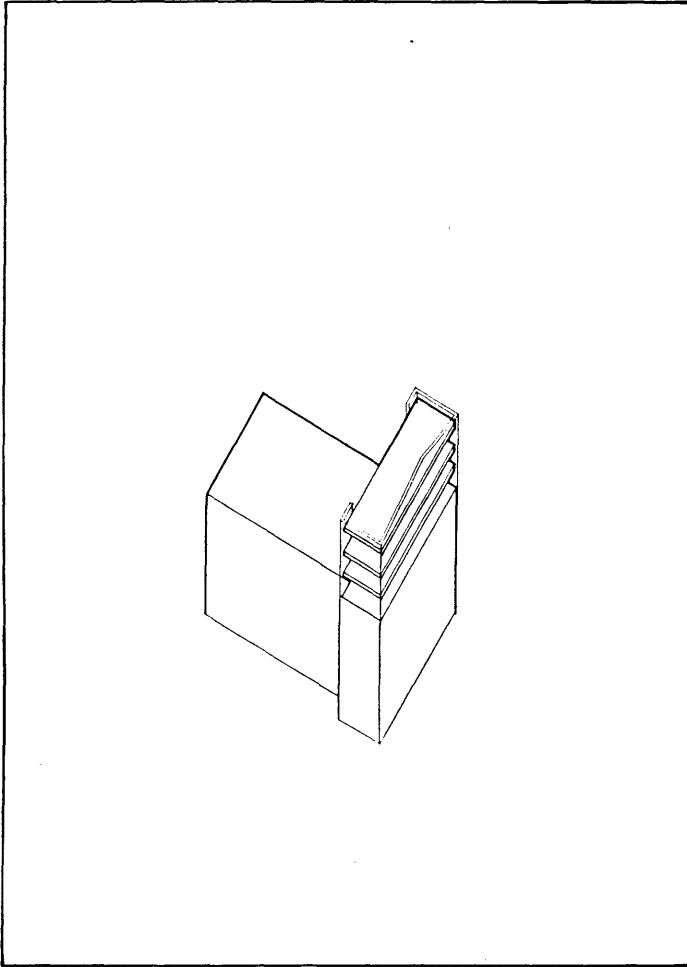


Looking South on Tremont Street



The church presents itself as a 30' thick facade -- a vertical slab -- on Tremont Street.

The top three floors were built as rentable office space though the church administrators kept their offices here also. Many of the offices and meeting rooms are buried deep in the building without light or ventilation.

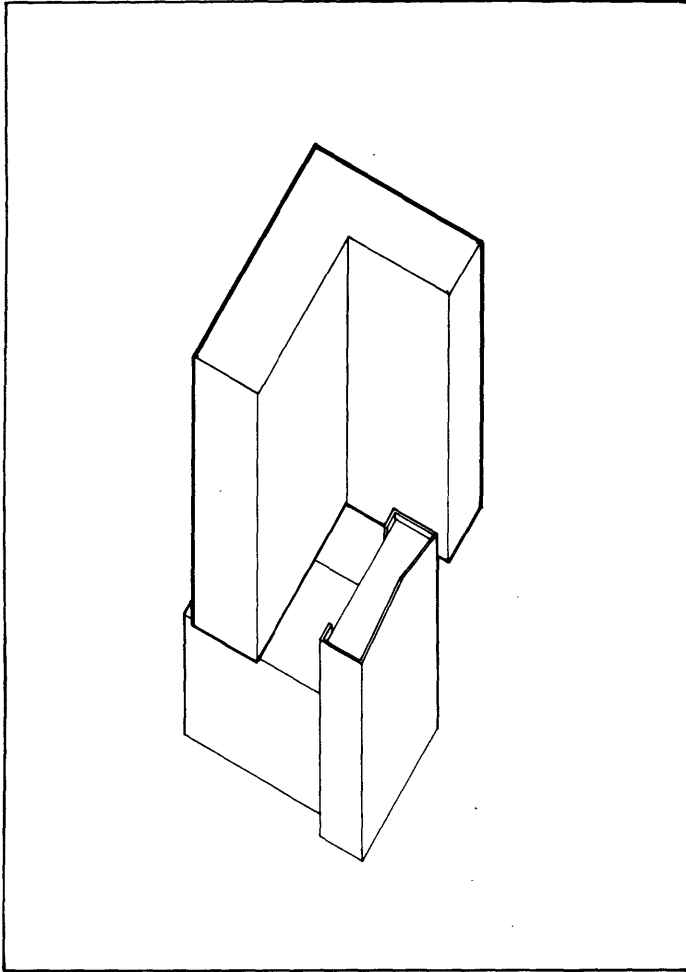


The first operation is the removal of all of the poor office space behind the 30'thick street-facing slab. Only the church auditorium remains behind it. All rentable office space is to placed in the new office building.



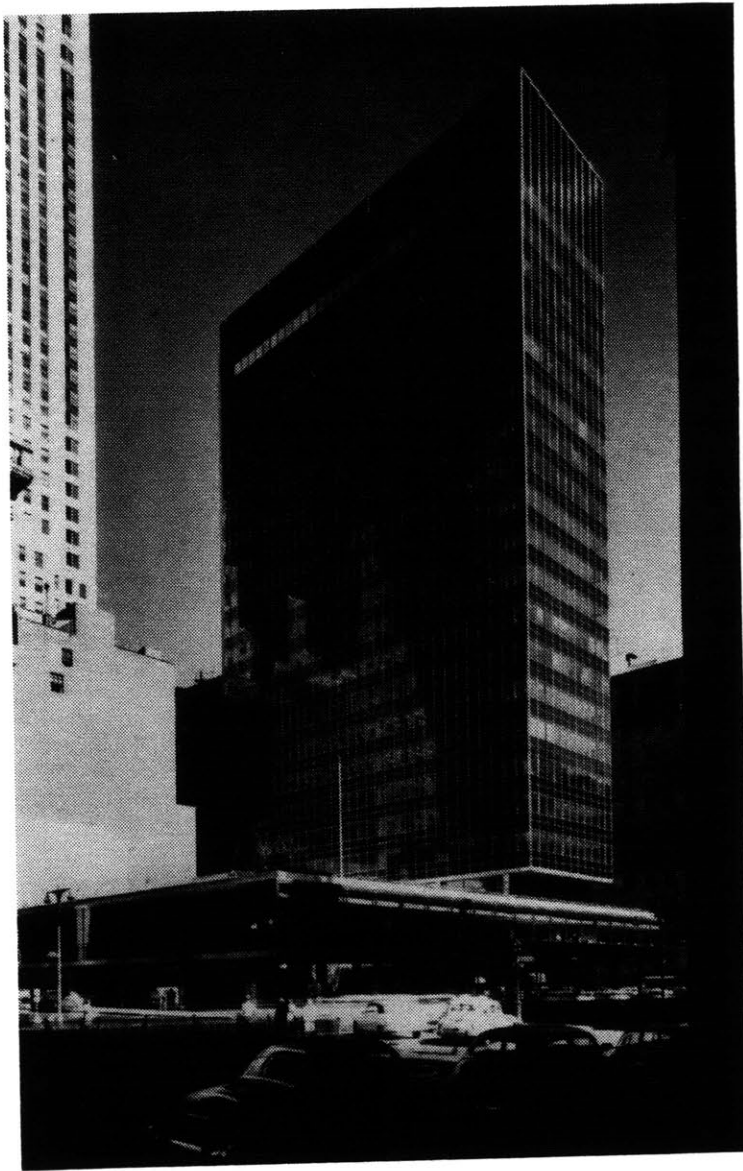
Office Windows in the Upper Facade

The top floors of this slab become free for church offices, Sunday school, and other church-related uses. The church claims the thick facade as its own.



A new office building then may span the the auditorium behind. Here an "L" shaped volume works well for several reasons.

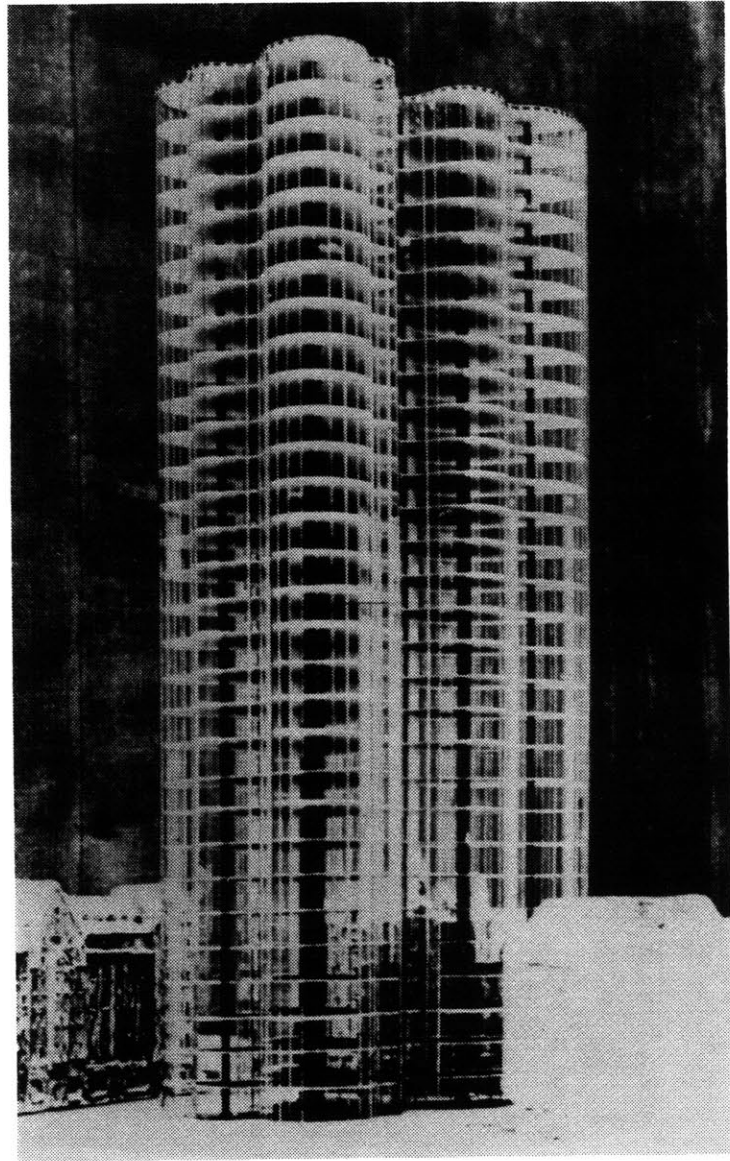
Because one leg of the "L" is set far back from the street, it allows the church to retain its prominence on the street.



The high-rise as "an American vernacular applied to our culture's common needs and purposes" - Ada Louise Huxtable, The Tall Building Artistically Reconsidered, 1982.

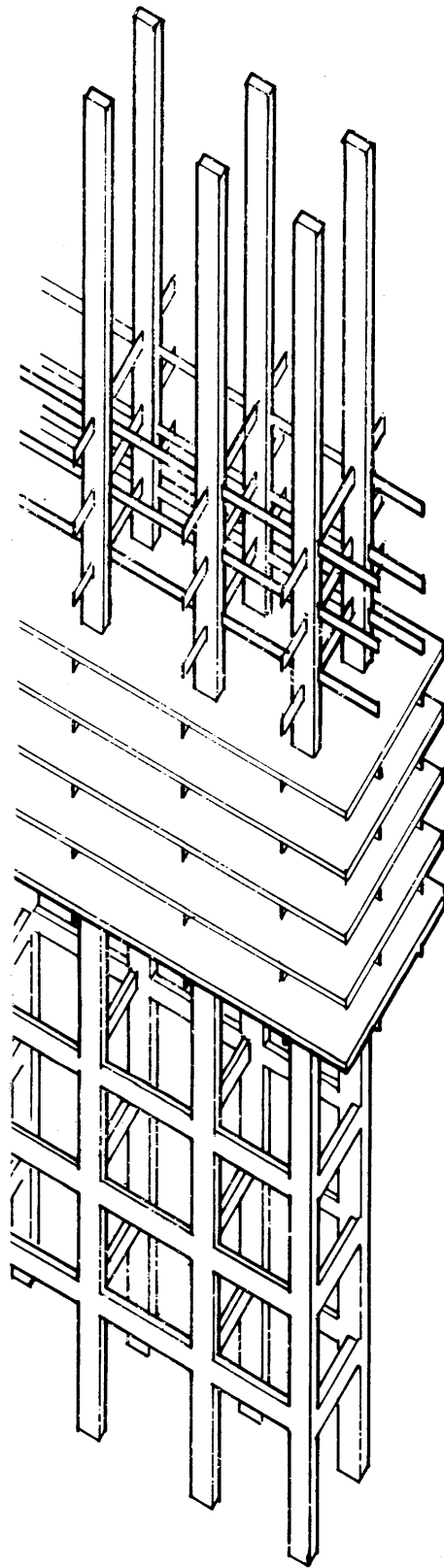
Lever House, New York, Gordon Bunshaft, 1952

The shape also results in a narrow office plate which provides good air and light to the office workers.

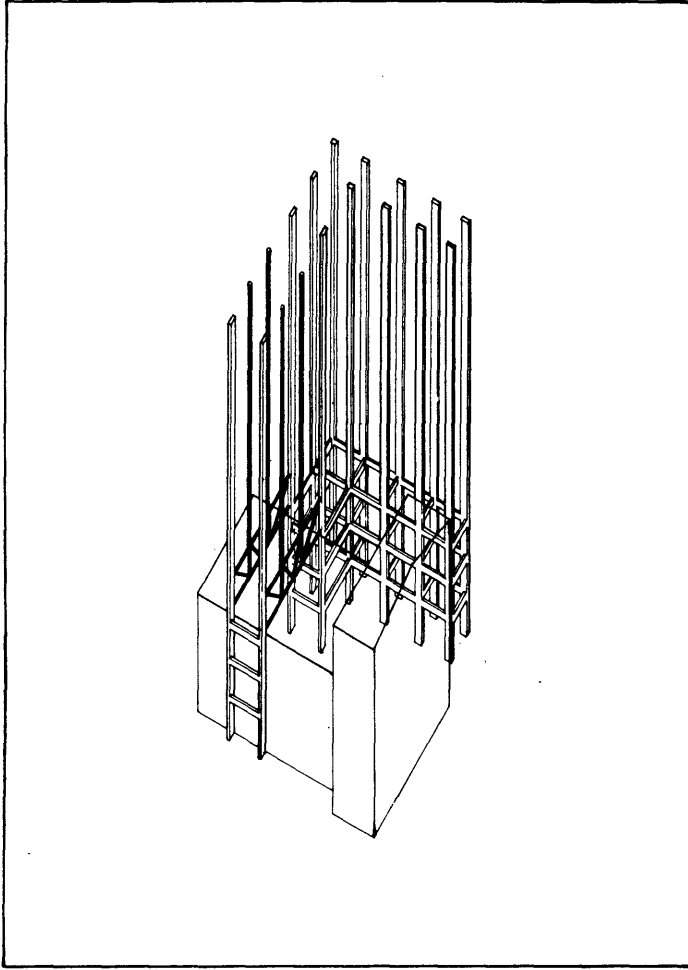


Skyscraper Project, Mies van der Rohe, 1920

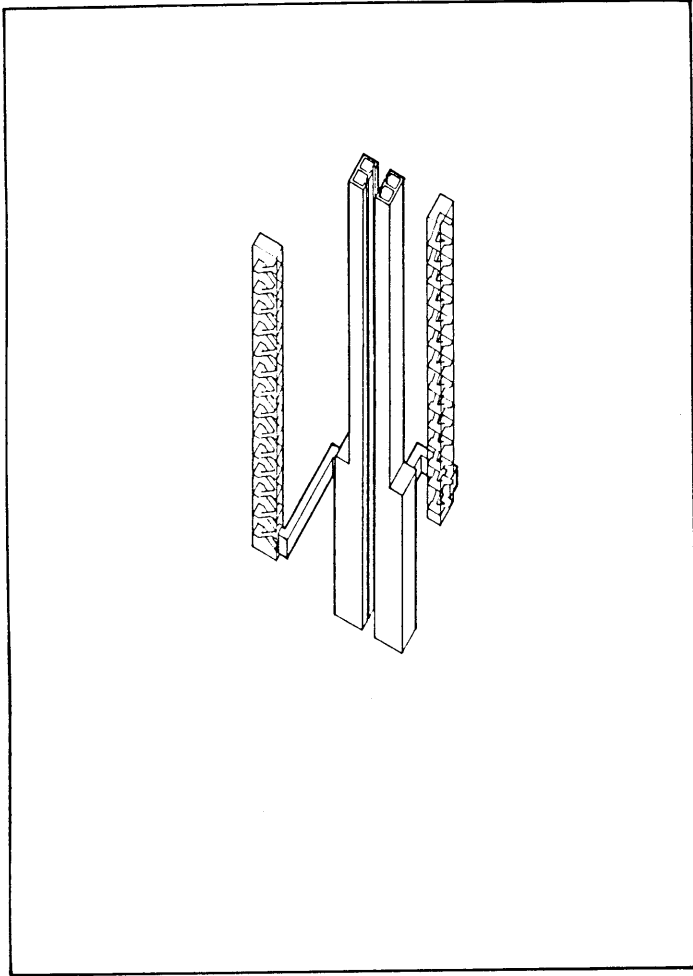
As a stack of uniform plates, it makes economic sense for the developer.



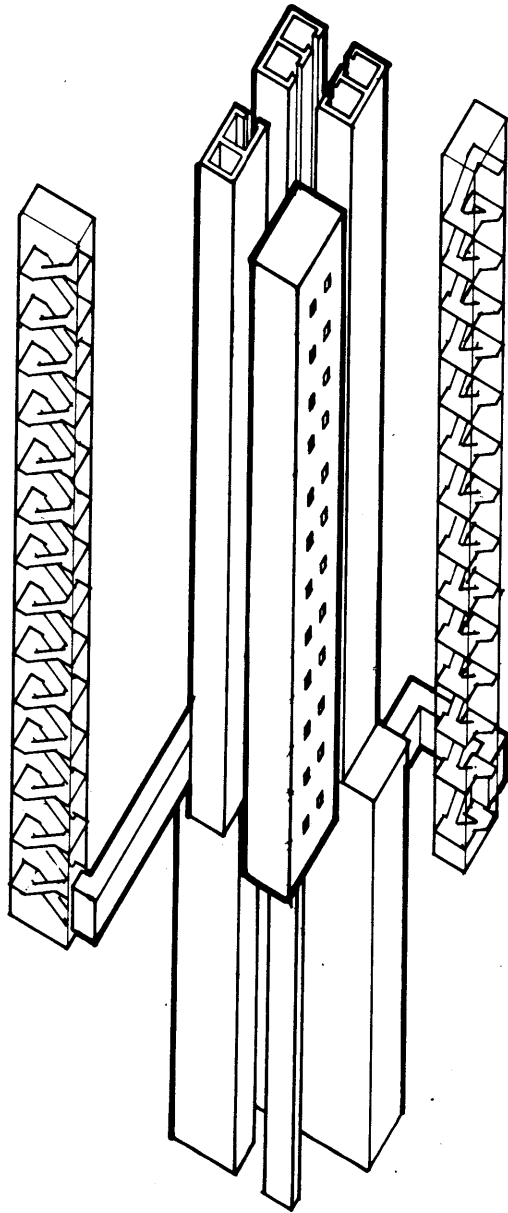
Structural System Supporting the Plates



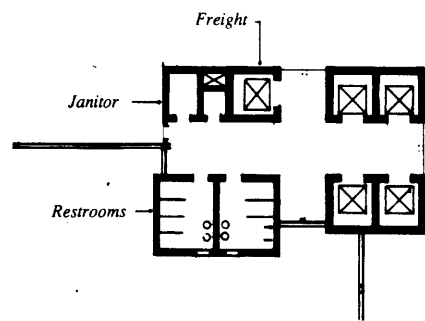
A heavy concrete frame supports the office building using sixteen ft. deep trusses to span the auditorium. Above the frame, steel trusses tie to the concrete piers to carry the individual office plates.



Fire stairs at either end of the office
plate tie to the elevator core just below
the slabs.

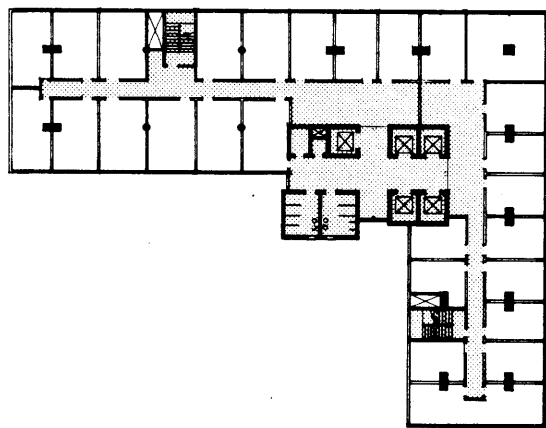
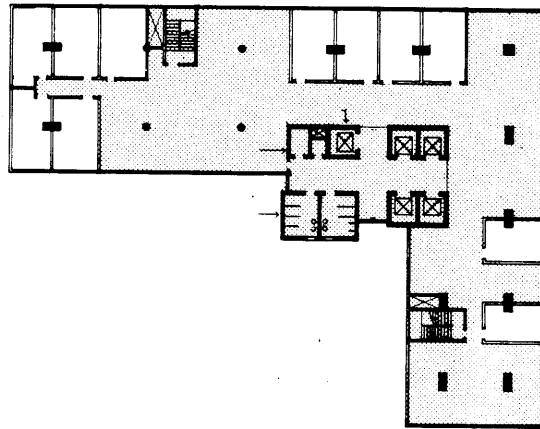
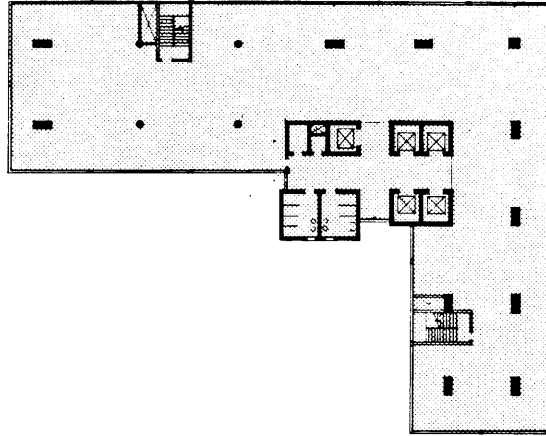


The Complete Core



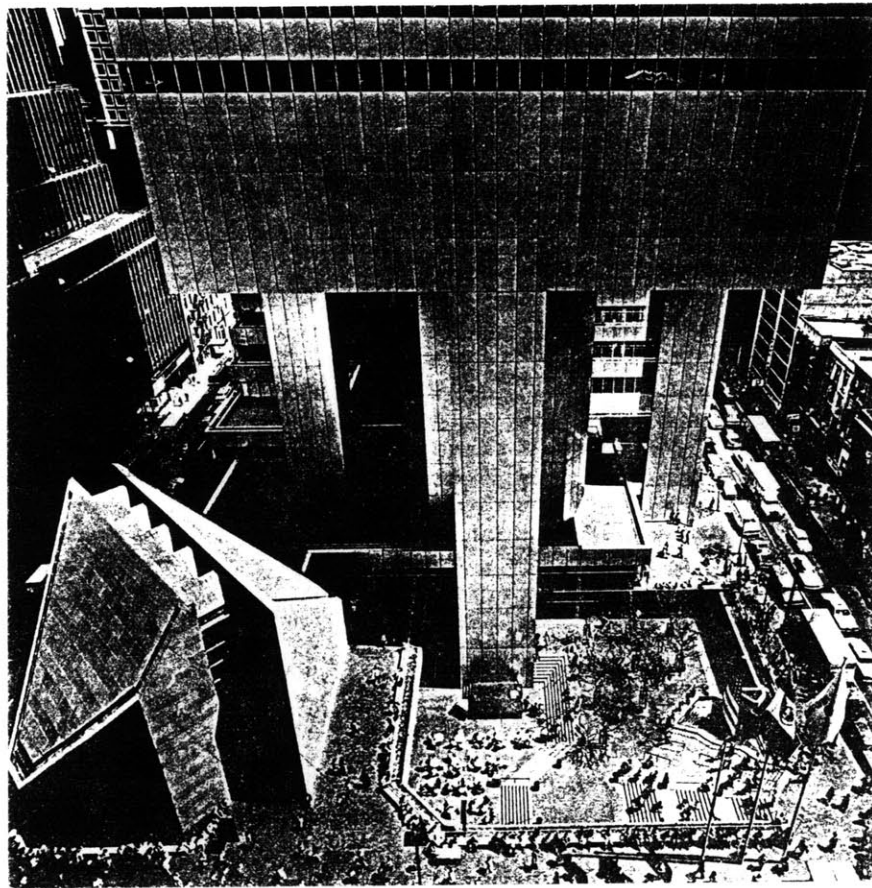
Typical Office Level - Plan of Core

Restrooms float slightly from the core,
allowing cross circulation and views to
the outside.

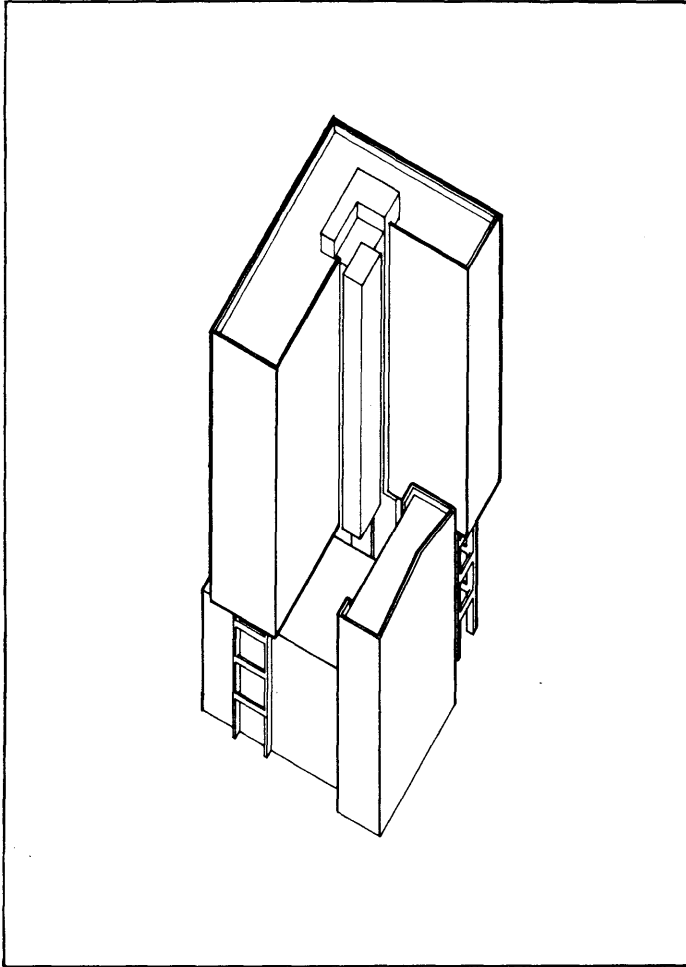


Various Office Layouts

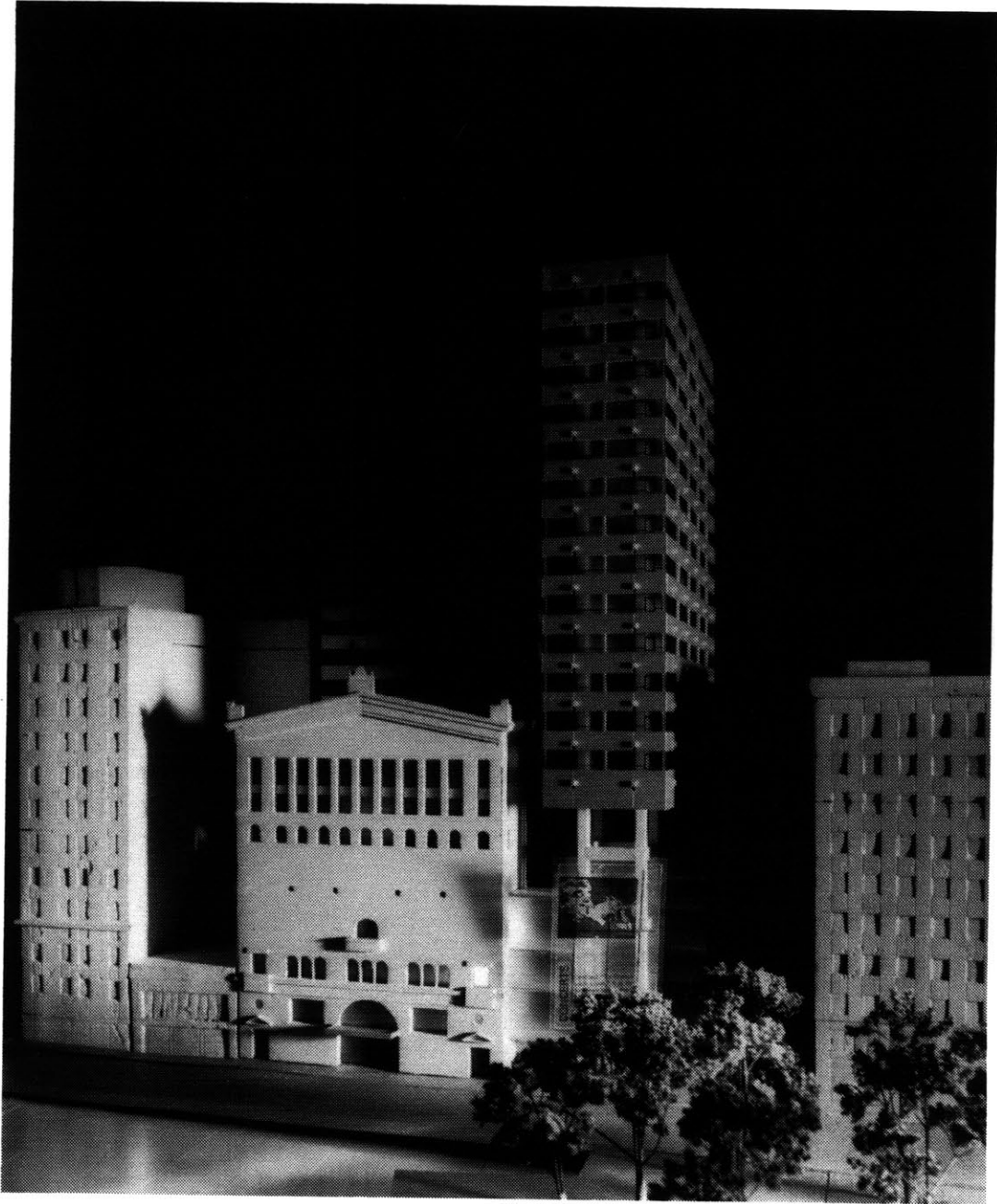
Providing two entry points to the plate, the core favors neither leg of the "L". The arrangement allows for flexibility in the office plan.



Citicorp Building, New York, Hugh Stubbins, 1977



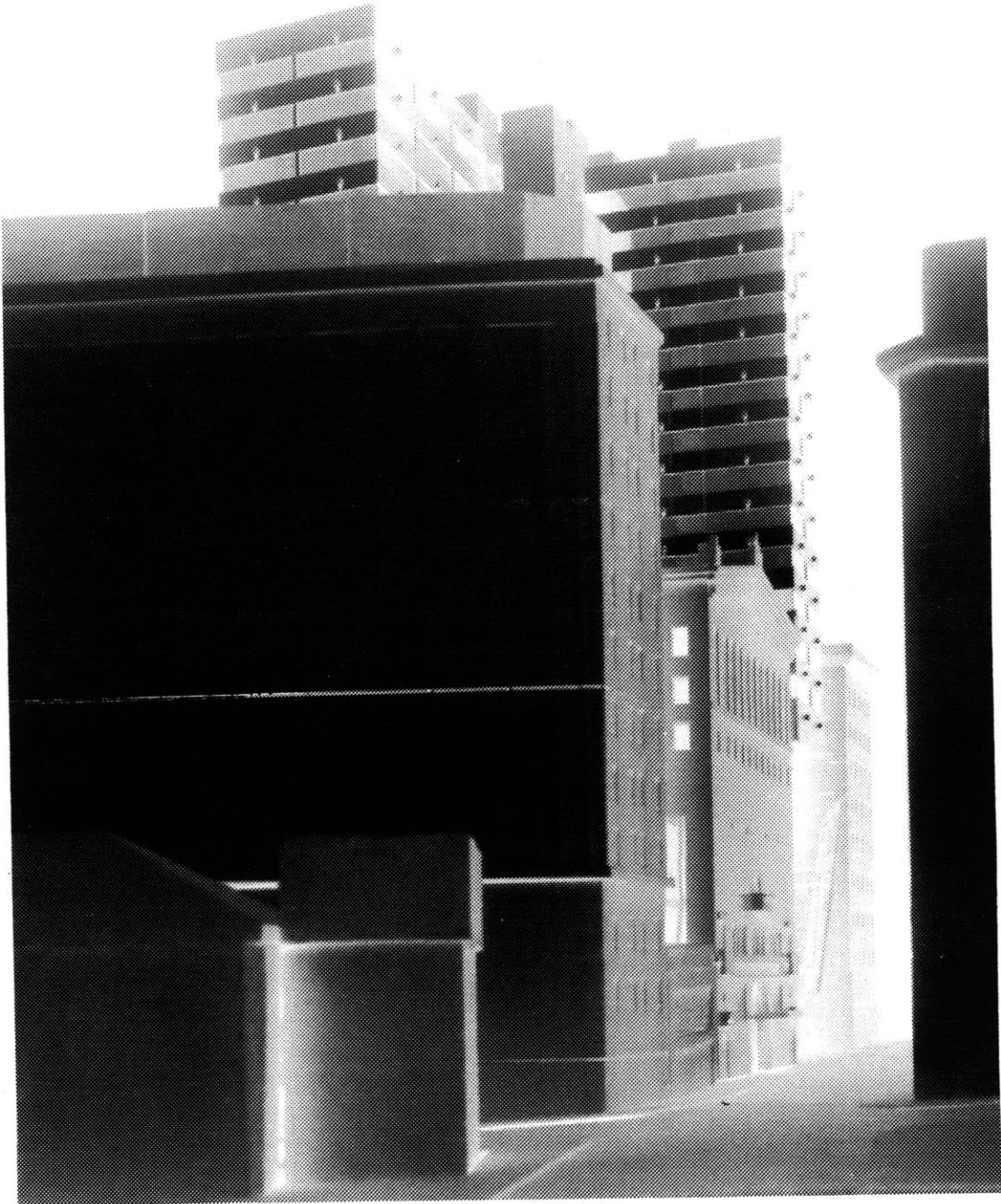
As a volume, the office building sits 84 ft. in the air allowing more street related activities to happen below. Its height also tells the story on the street of its spanning the auditorium behind the church facade.



Model - View Across the Graveyard

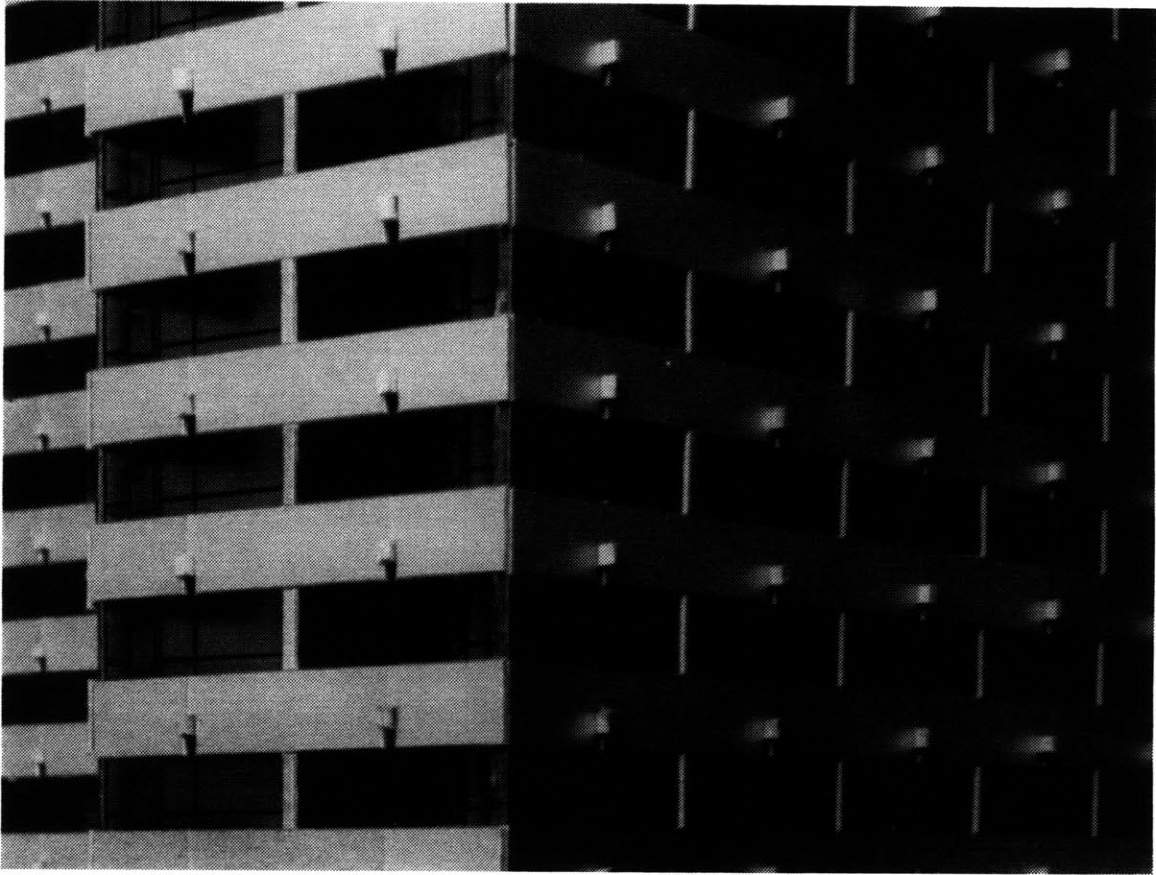
As a building in an urban context, the office building reinforces the wall created by the buildings on Tremont Street.

From many perspectives, the office building appears to be a slender tower which flanks the church and marks the corner of the burial ground.



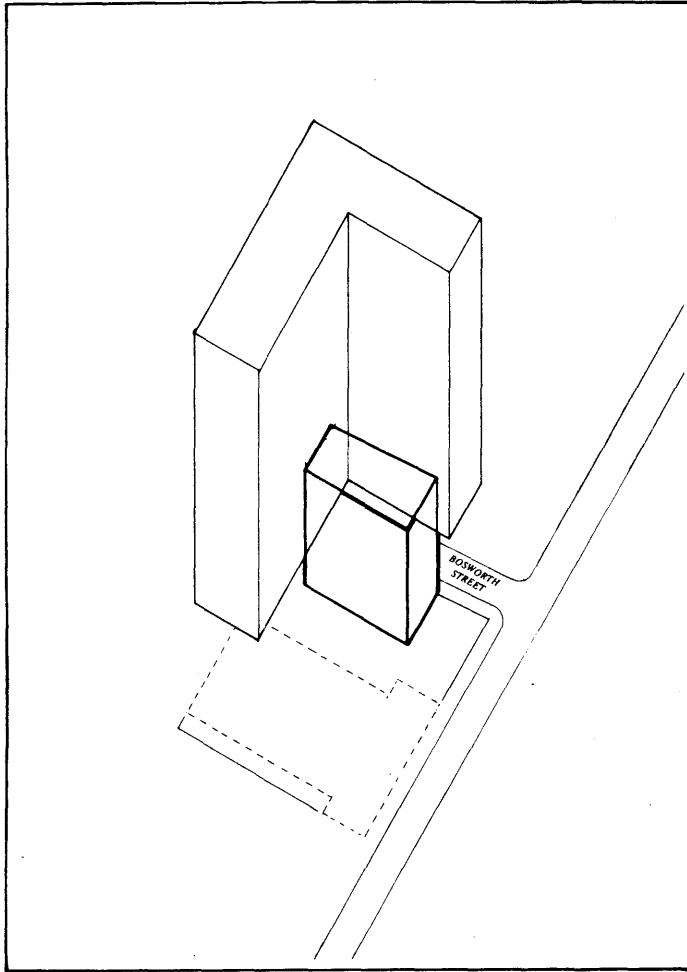
Model - Looking Down Tremont Street

Passing by the Church on Tremont Street, the tall church facade hides the back leg of the "L" of the office building. Moving further from the site, one discovers that part of the building is over the church.

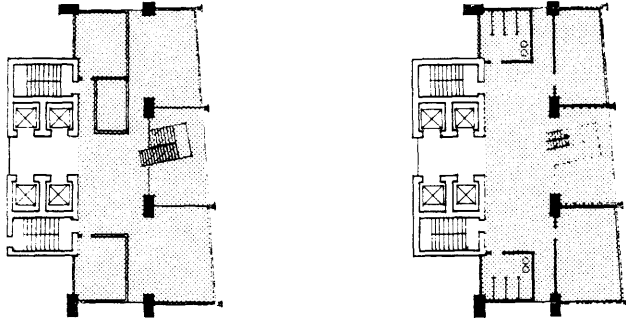


Model - Light Aluminum Skin Wrapping the Office Plates

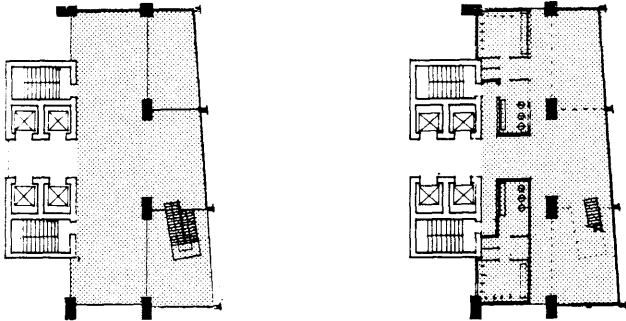
It is a new building performing new tasks.



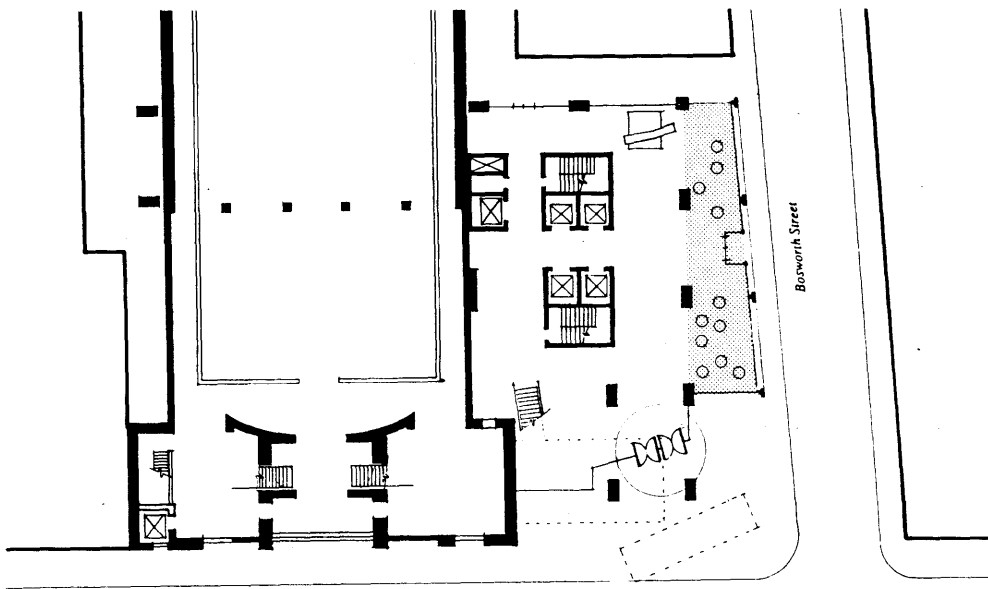
Underneath the stack of office plates is a block of amenities for the office worker. It serves not only the workers from this office building but those in the surrounding neighborhood.



Levels 5 and 6 - Day Care



Levels 3 and 4 - Fitness Facility

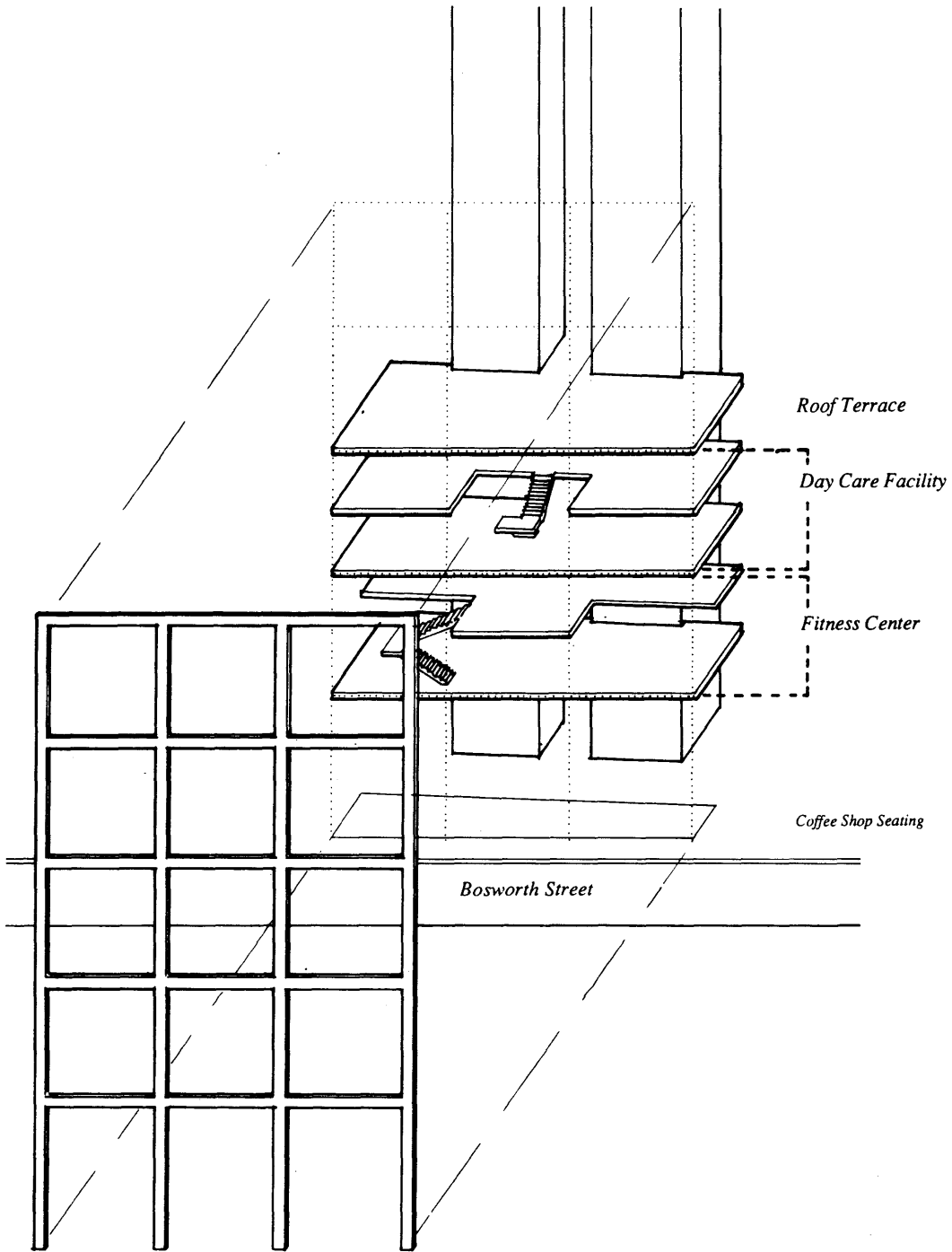


Tremont Street

Bosworth Street

Street Level - Coffee Shop Seating

It contains a day-care center, a fitness center, and on the street level, a small coffee shop which opens itself to the office lobby.



The Block of Amenities

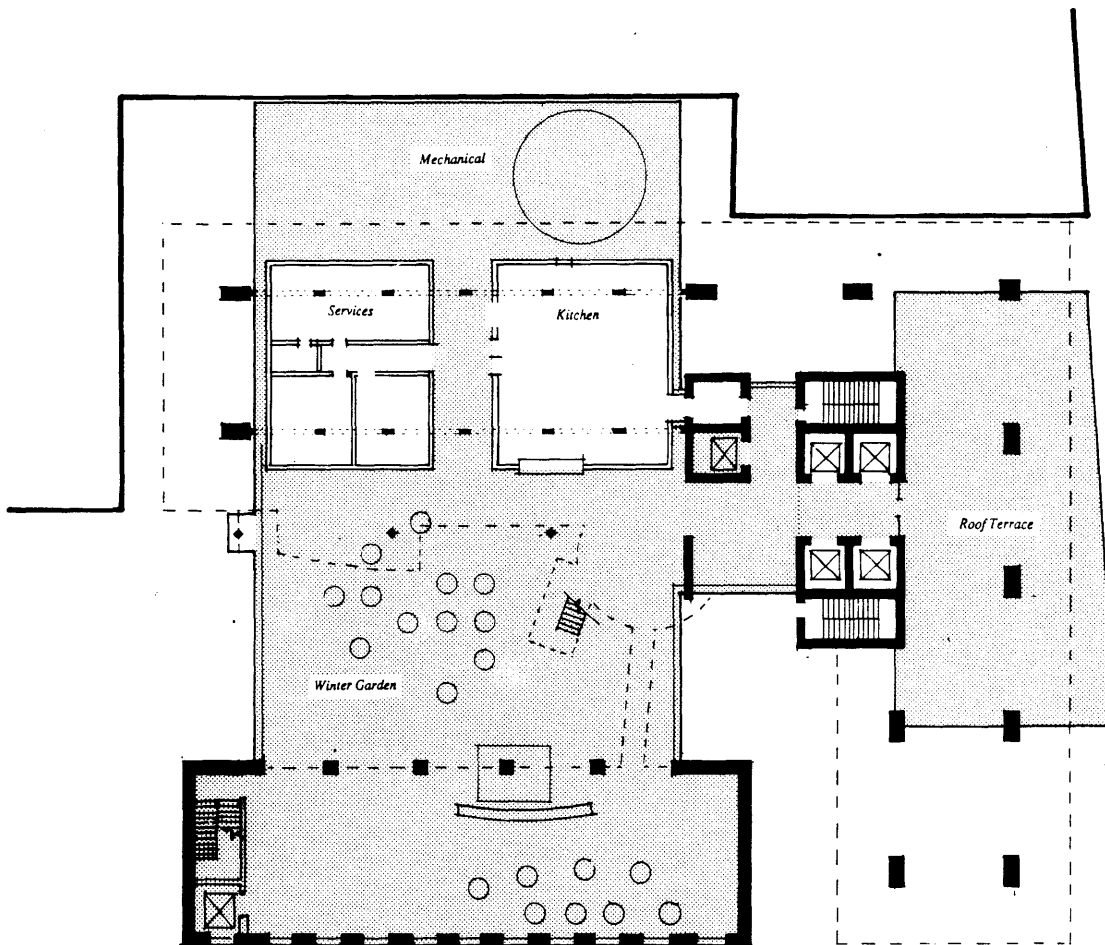
On top is a roof terrace lit by the morning sun and easily accessible to the day care facility.

A steel screen ties this mass of office amenities to the office building above and creates balconies for the lower floors of the office building.

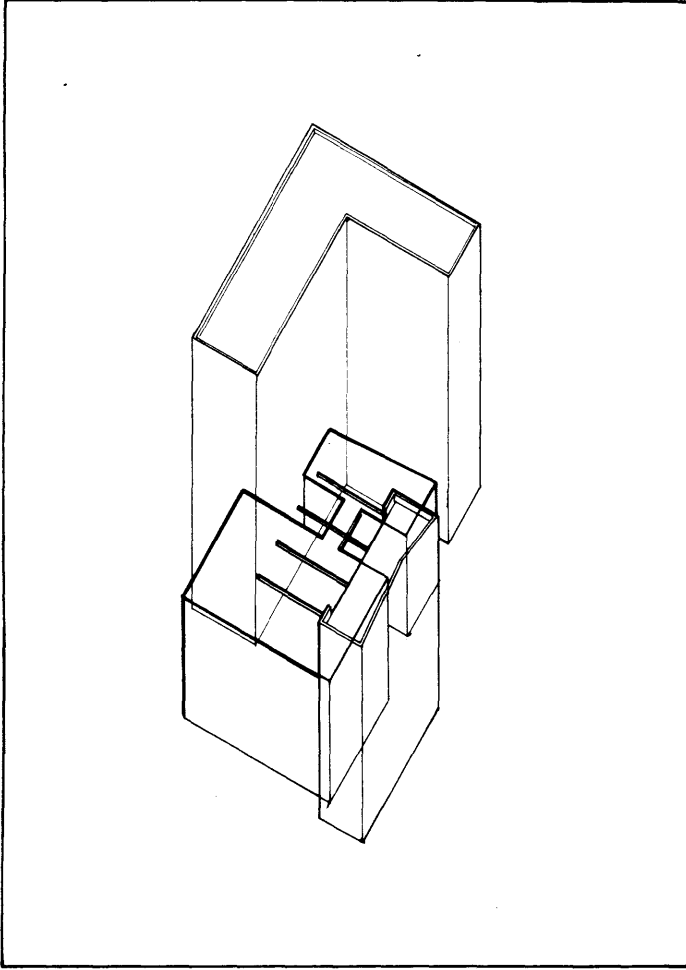


Model - Looking Down Bosworth Street

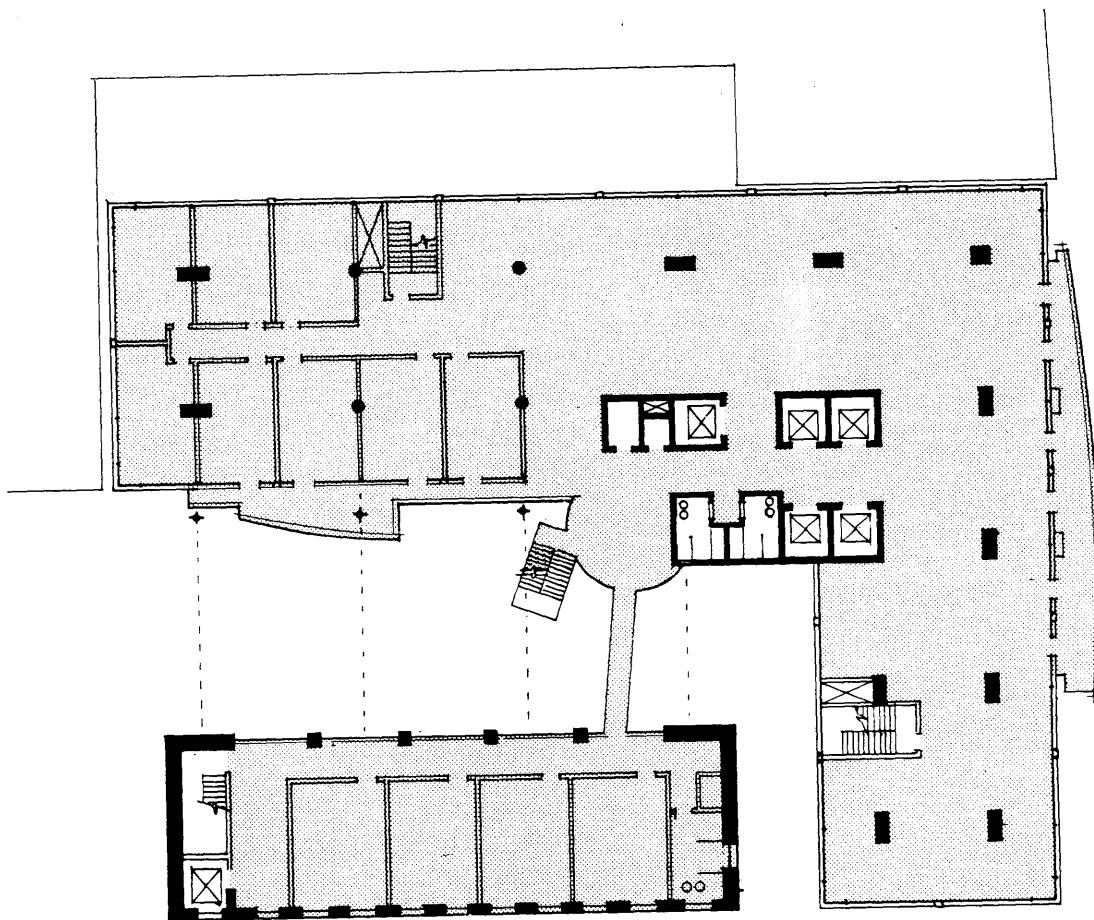
Slipping through the screen, the balconies suggest a cornice line which finds a place among the cornices of surrounding buildings.



Level 7 - Winter Garden & Roof Terrace

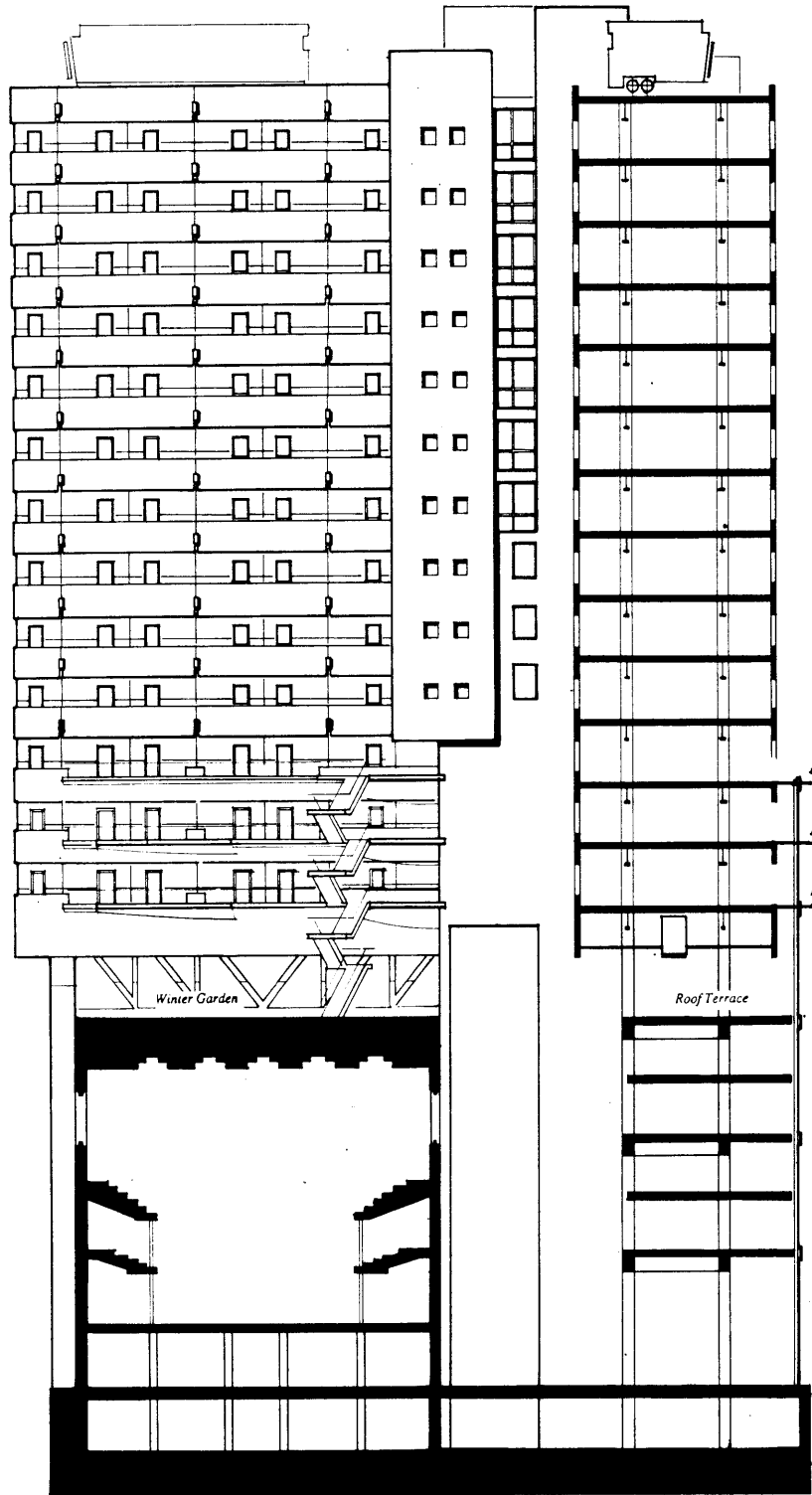


The roof terrace connects on the same level to a winter garden which sits atop the worship/performance hall.

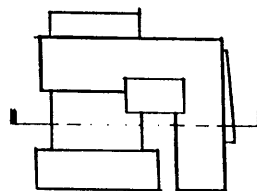


Level 9 - Offices and Church Space

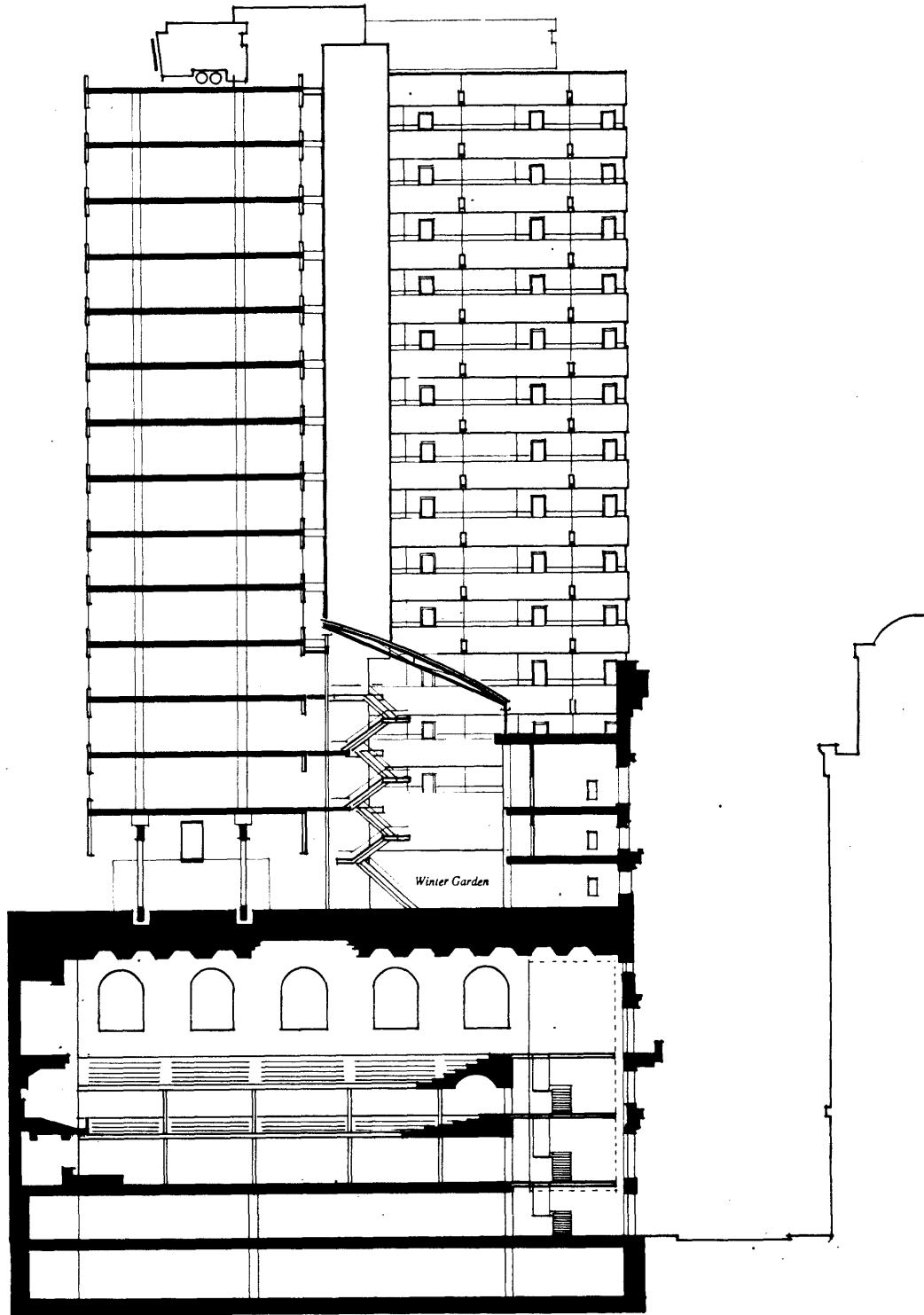
The lower office floors and the top floors of the church "slab" open into the garden with balconies. Near the core, stairs access these spaces to the garden level.



Section Looking East

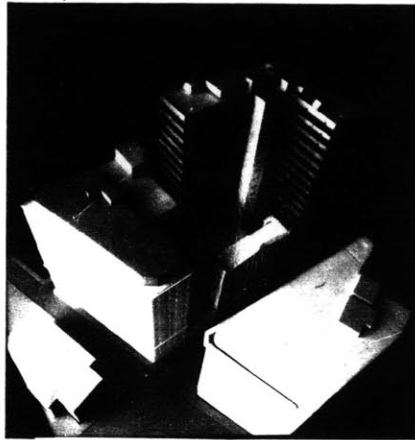


The winter garden is a space for all users of the development: here, some office workers take their lunch break, a church group might hold functions, or, after a performance or movie, one can get something to eat or drink.



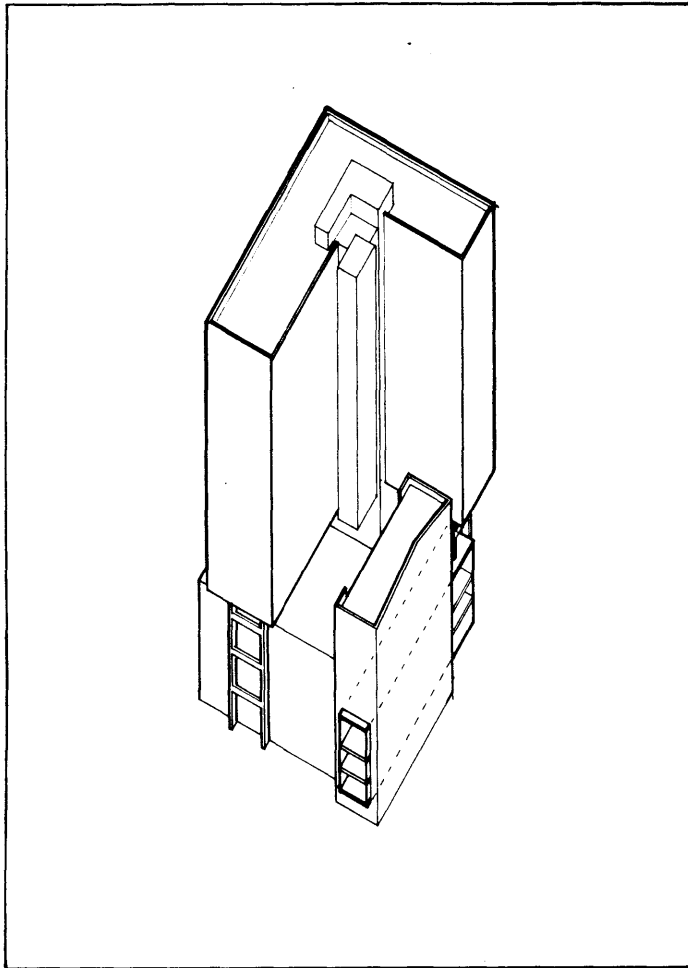
Section Looking South

It is the meeting of the church and the
office building.



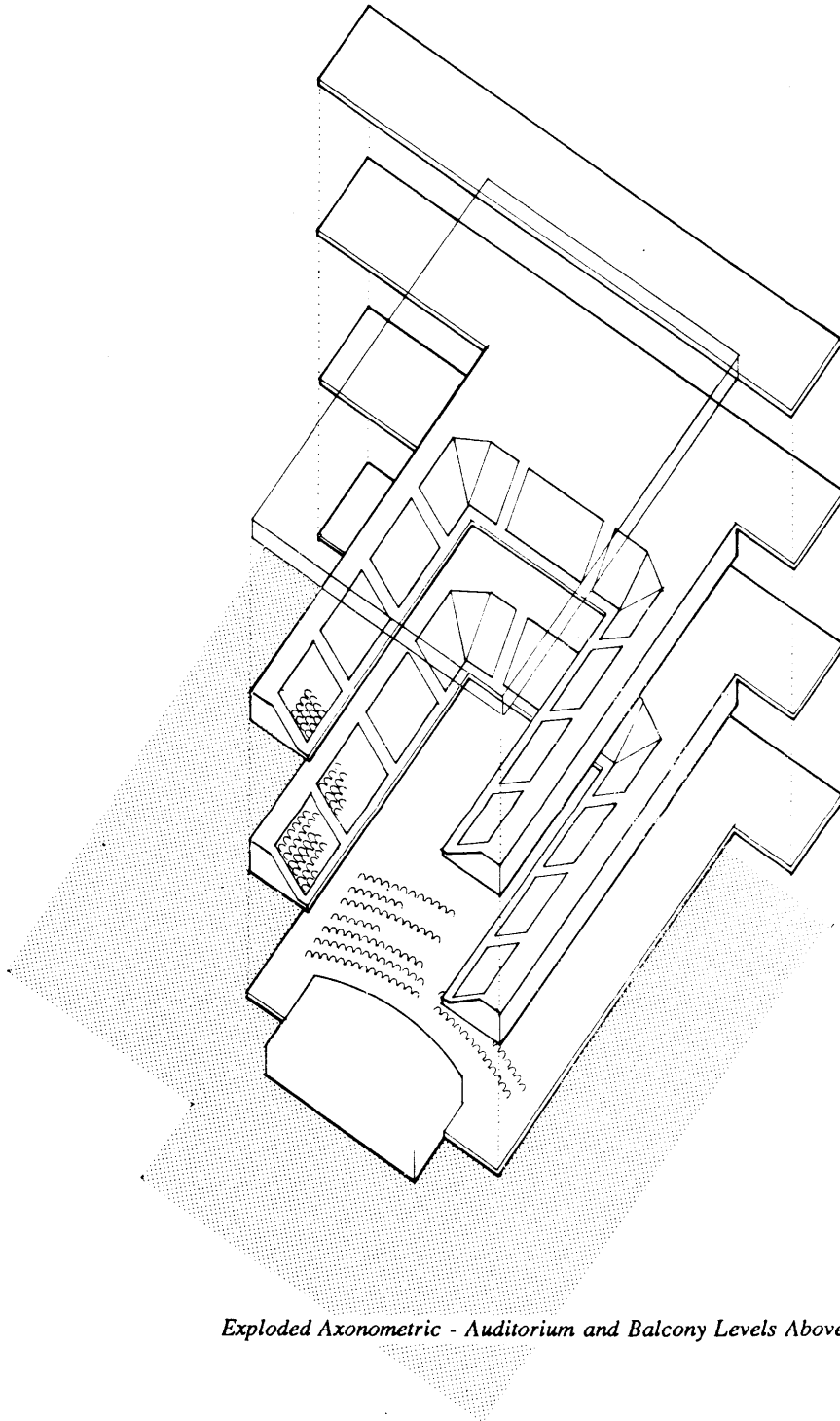
*Model - Office Building Above
the Church*

I have given a form to the office building and explained its relationship to the church. What remains is to give a form to the new life of the performance hall.



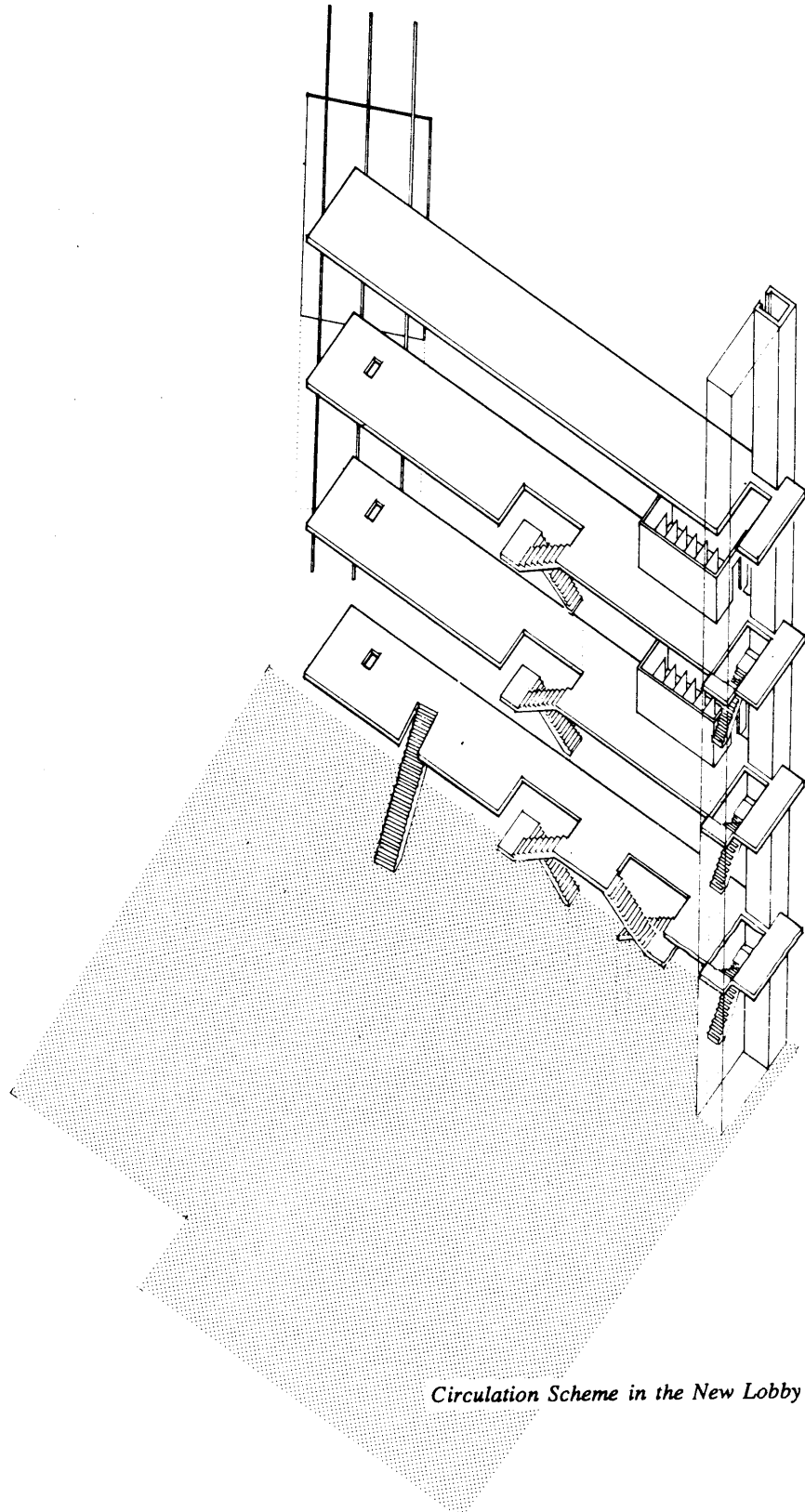
There is no need to create a new auditorium since the existing one serves both the religious and performance functions well. I create, instead, a new lobby.

It takes the form of glass bar inserted into the thick church facade.



Exploded Axonometric - Auditorium and Balcony Levels Above

The new lobby serves both the church and performance functions of the building. It connects the main auditorium floor - the second level of the church - to the two balcony levels above.

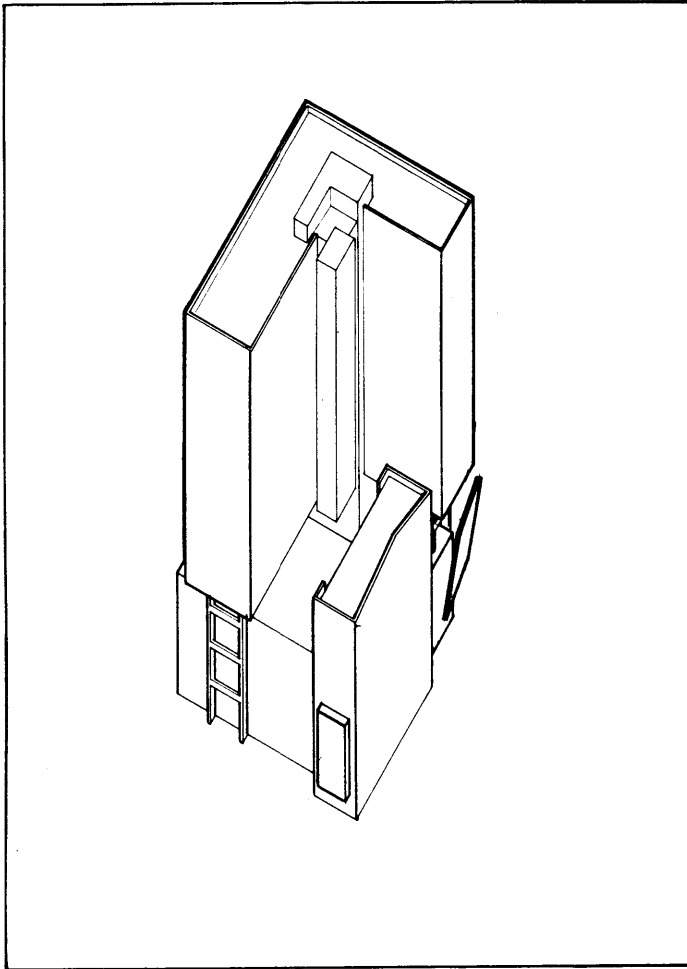


Circulation Scheme in the New Lobby

It is a revamping of the old circulation
in the lobby: simpler and lighter.
From each floor of the new lobby, one
views the brilliant auditorium through
a glass wall.

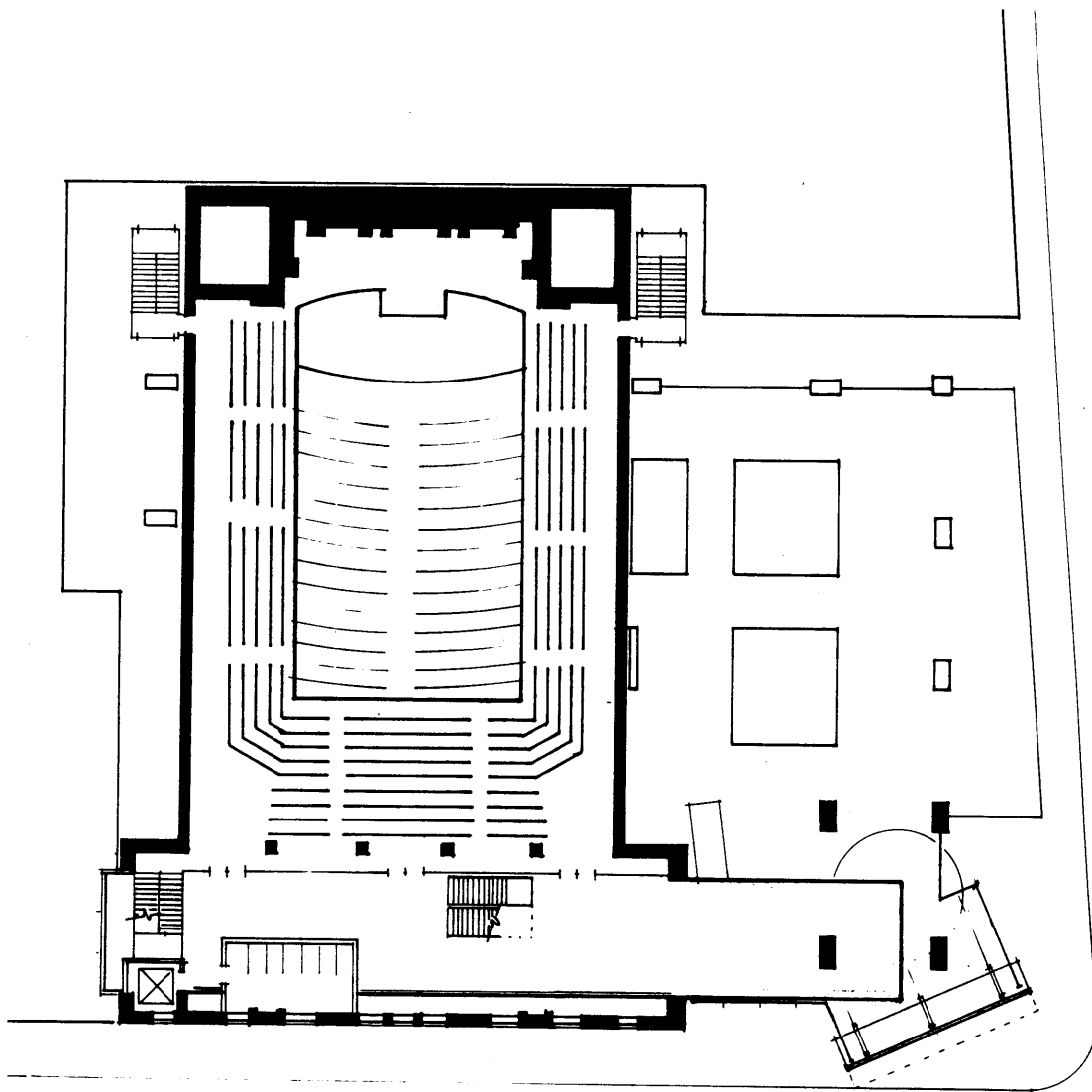


Worm's-Eye View



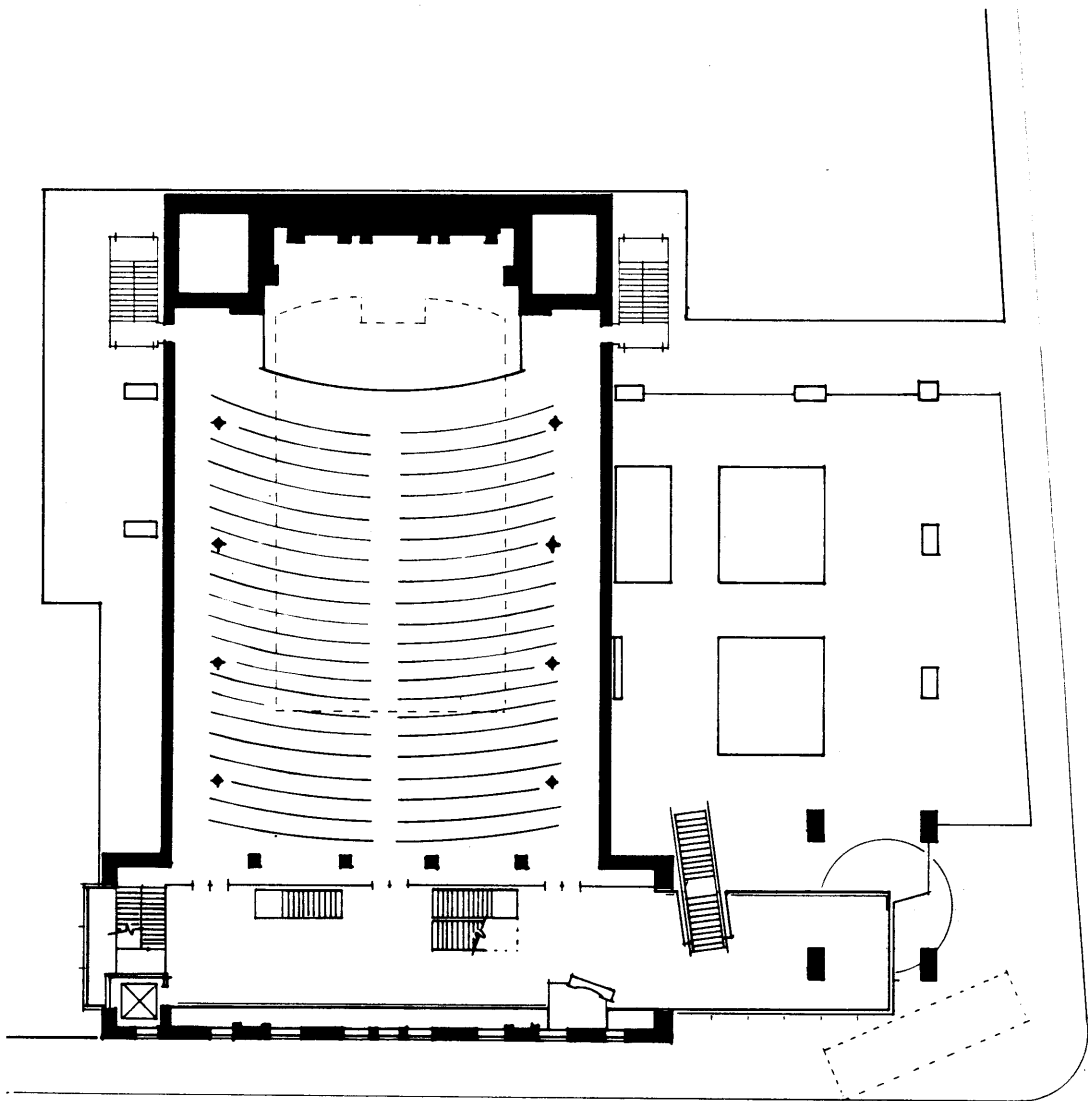
The bar protrudes from the thick facade of the church, intersecting with the structure of the office building. On its end is poised a marquee, shifted slightly down and out towards the long view of the site from Park Street Station. It tells of events to take place in the hall.

Through the new lobby, the auditorium makes a new presence on the street.



Upper Lobby and Auditorium Balconies

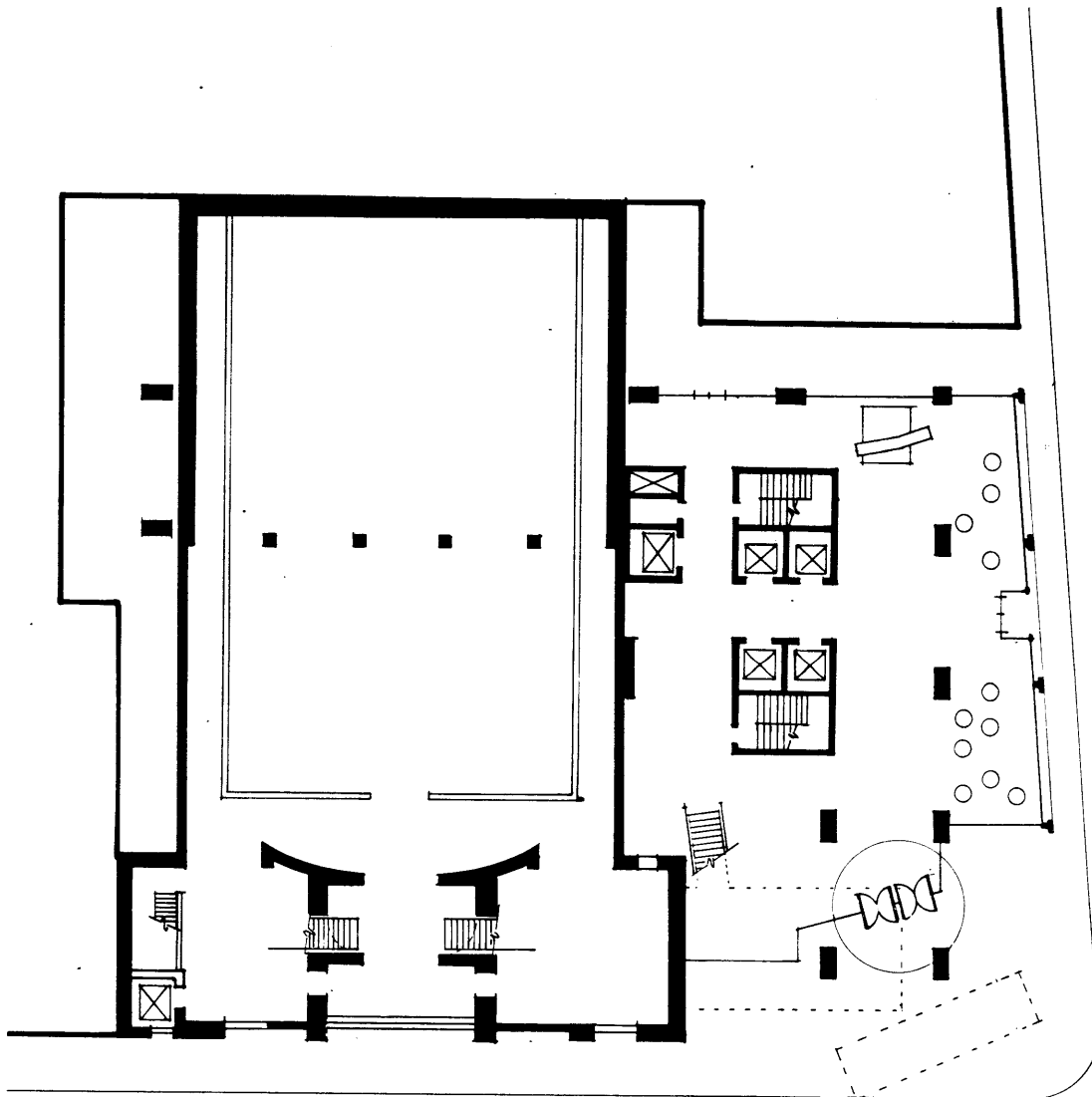
On the upper floors of the bar, one may move up to the marquee and view through it towards Boston Common.



Second Level - Auditorium and Lobby

Below, the lowest level of the new lobby stands 12 ft. above the street, telling on the street the level of the auditorium within.

For secular performances, one enters the bar on this side where it protrudes from the old church facade.



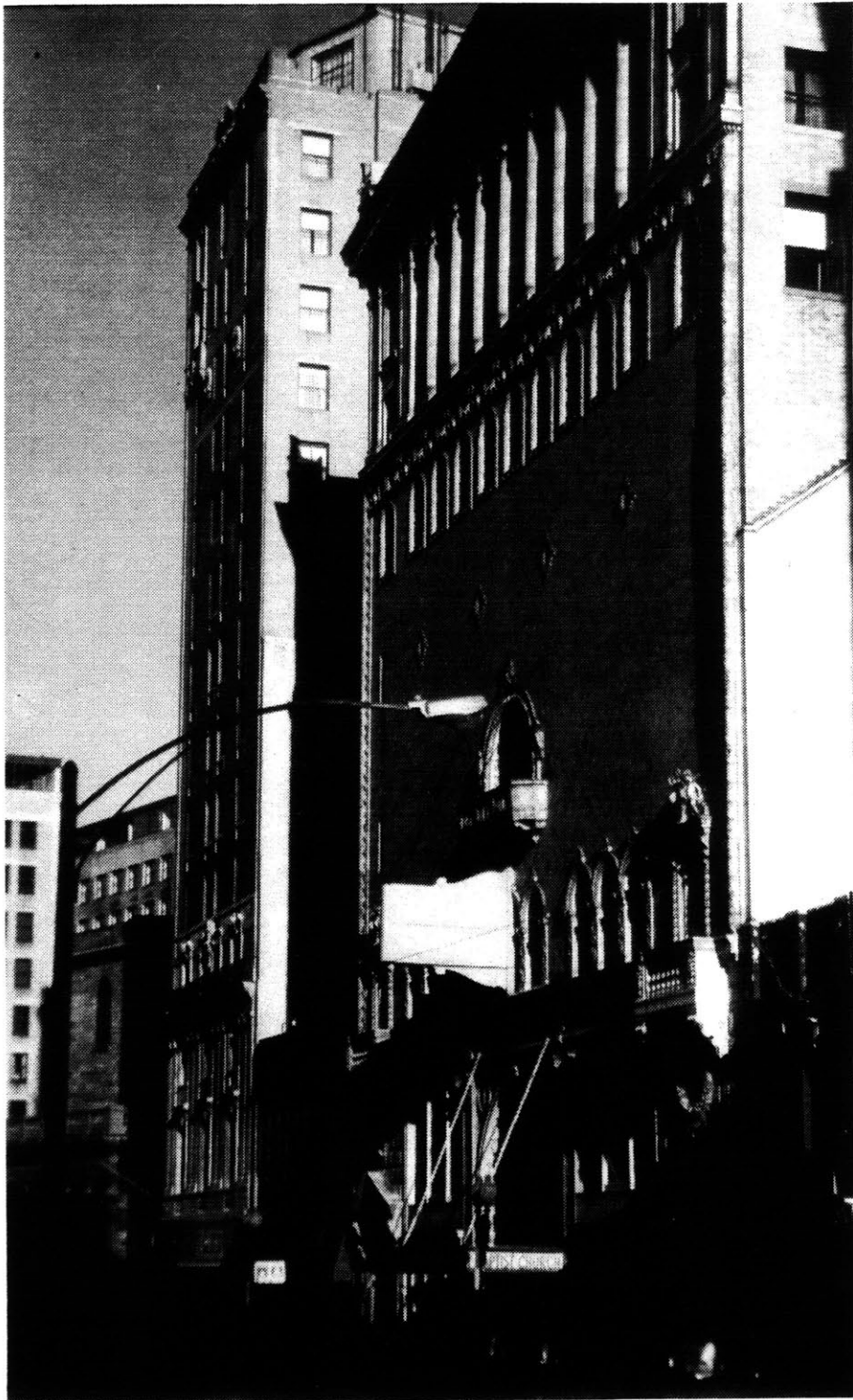
Tremont Street

Bosworth Street

Street Level

On this side of the church, on the street corner, the various parts of the development come together: the heavy frame of the office building and its core, the block of amenities held by the steel screen, the end of the thick church facade and the new glass lobby sliding out of it.

The various parts pull away from the street corner; the sign above marks the entrance to the new development.



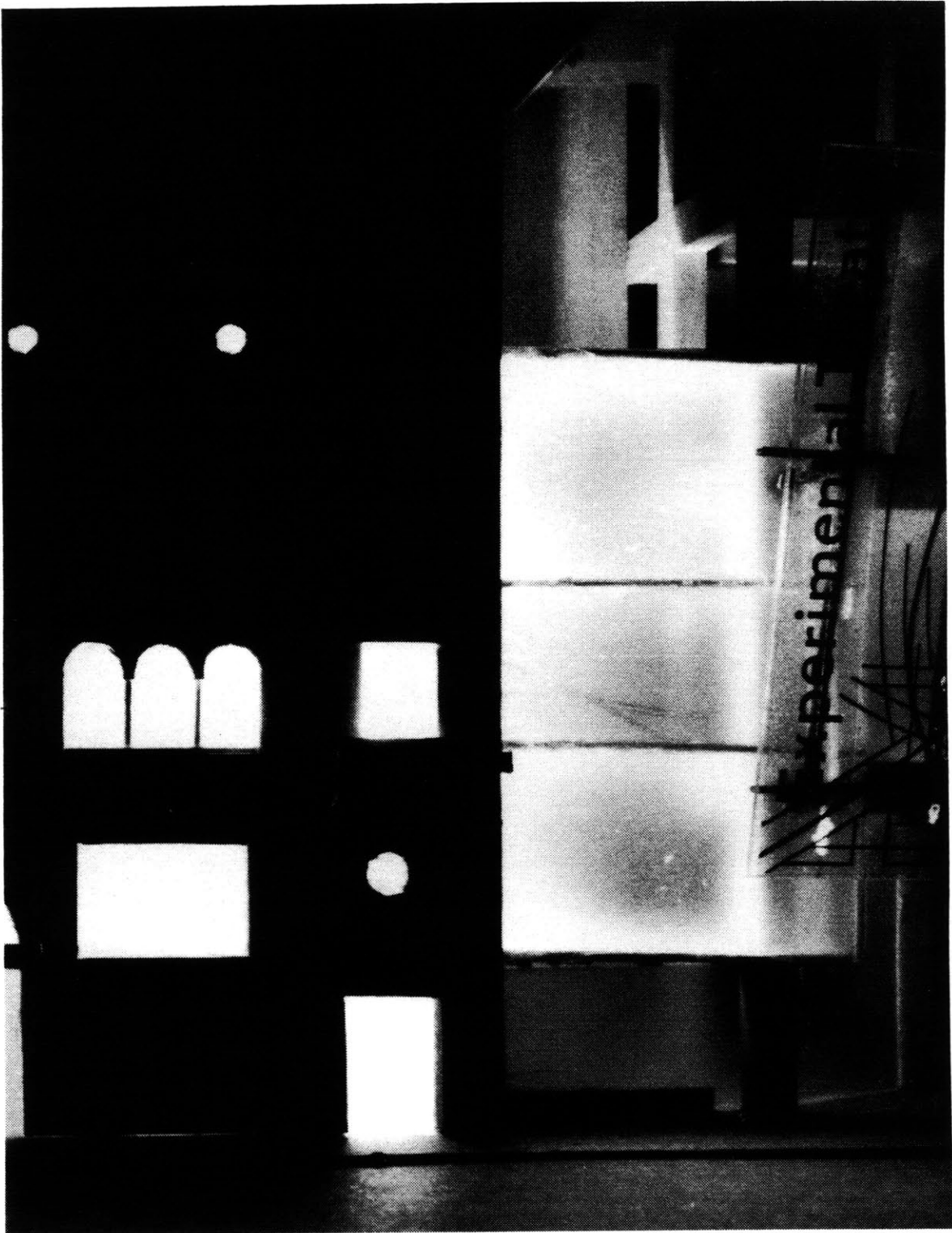
The Facade Lit by the Late Afternoon Sun

The church however retains its traditional entrance in the old facade. Churchgoers use this entrance when the hall is being used for services or other church functions. The form of the facade thus becomes strongly associated with the religious aspect of the development. Through it, the church gains a stronger symbol and identity than it had before.

The contrast between the religious and secular gets played out even further.

During the day, the church facade makes a strong presence on the street, its terracotta tiles lit by the afternoon sun. The new glass lobby recedes visually from the street.

The facade thus becomes a day phenomena reflecting the church's daytime use of the building and of the worship hall.



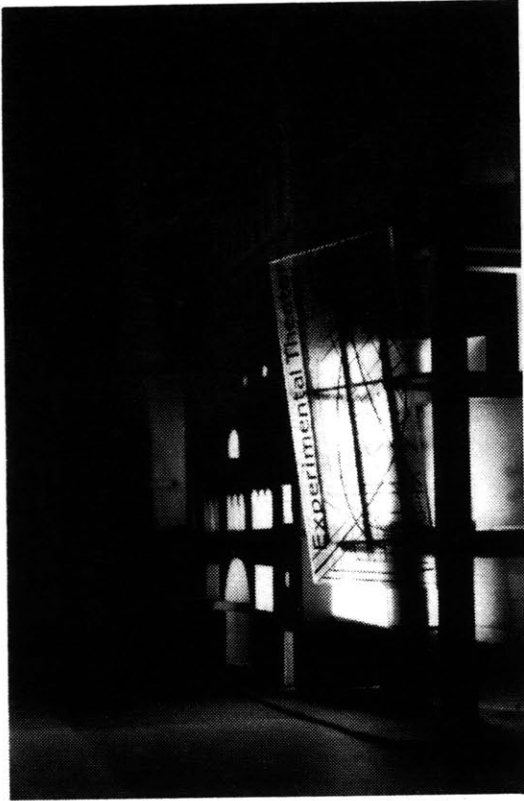
Model - The Glass Bar at Night

At night, the church facade darkens
and only its shaped window openings
glow as the new lobby behind it is
illuminated.



Model - View Looking South Down Tremont Street

Now, the glass lobby, illuminating the marquee, makes its presence on the street.



Model - the Kinetic Marquee

The marquee is made kinetic by
computer programmed changes in a
continuous light-filtered surface.
Marquee images are made more kinetic
by the structure, platforms, mullions
and people behind it.



Model - the Lobby from Above

The lit glass lobby becomes a night phenomena reflecting the night-time function of the auditorium. The contrast between day and night emphasizes the difference between the religious and the secular.

Emphasizing differences is, in fact, the main design strategy in this thesis. The search for autonomy for the office building, the church and the performance hall is extreme. The final juxtaposition of them as diverse forms is perhaps jarring.

But if it is jarring, it is not the kind of jarring that results from an arbitrary intersection of many geometries or from a random "explosion" of a structural system. It is an exercise in understanding certain conditions of a project and then letting those conditions form the project.

The development of forms in this thesis were derived from a plausible scenario -- the joining of diverse interests in one project -- which is ever more typical of our times. Furthermore, the uses which the forms represent have a well grounded history on the site.

Why would one be interested in expressing the juxtaposition of different interests coming together on one site? In part, it is to question the current, more common approach which seeks to smooth differences between the old and the new in our cities. It is to question buildings that conciliate old structures around them to such a degree that they will never have an understandable history for themselves.

People who live and work in the tight space of the city are capable of understanding the unusual relationships and discordances that result from the tightness. Given time, they are capable of delighting in them as well.

References

Chao, Sonia R., ed., Kohn Pedersen Fox, Buildings and Projects 1976-1986,

Rizzoli, New York, 1987.

Goldberger, Paul, The Skyscraper, Alfred A. Knopf, New York, 1981.

Huxtable, Ada Louise, The Tall Building Artistically Reconsidered, Pantheon

Books, New York, 1982.

Polshek, James Stewart, Buildings and Projects 1957-1987, Rizzoli, New

York, 1988.

Schuster, J. Mark, ed., The Arts and Urban Development: Four Case Studies, written for the British American Arts Association conference,

Glasgow, Scotland, 1988.

St. James Properties, Midtown Cultural District Draft Project Impact Report:

Tremont Temple / 90 Tremont Street, submitted to the Boston Redevelopment Authority, Boston, December 14, 1989.

Sudjic, Deyan, Norman Foster, Richard Rogers, James Stirling, New Directions in British Architecture, Thames and Hudson, London, 1986.