

On Method and Madness

by
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A.B. University of Florida, 1978

Submitted in partial fulfillment of the requirements for the degree of Master of Architecture
at the Massachusetts Institute of Technology, March 1983.

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Submitted to the Department of Architecture on March 3, 1983, in partial fulfillment of the requirements for the degree of Master of Architecture.

ABSTRACT:

Through the design of an architecture school for Harvard University on the site presently occupied by Gund Hall, this thesis seeks to address the issue of defining architecture as an expressive endeavor--as a way of naming the essence of a given place, in all its cultural, sociological, historical and geophysical complexity--while simultaneously making a personal and contexturally responsible statement.

Thesis Supervisor: Fernando Domeyko
Title: Associate Professor of Architecture

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I extend my gratitude

- to all of those, students and faculty, with whom I have forged a perspective on building and architecture during the last three years
- to Professor Fernando Domeyko for the breadth of his architectural knowledge and for the contagious excitement and constant wonder that pervade his thinking and criticism
- to Professor John Habraken for the early insights which gave focus to this thesis project
- to the residents of McCormick third and fourth east for many occasions and reasons to smile
- to Amy, for her help and laughter
- to Pam, Callie and Eric for perspective and understanding and especially friendship

but most of all

- to my parents and Rafael, for everything.

This thesis is dedicated to Victoria Adouth Cohen.

TABLE OF CONTENTS

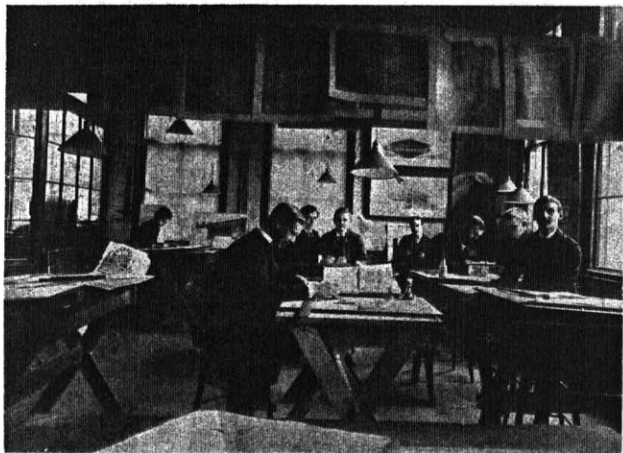
	9
NOTE	
	11
INTRODUCTION	
	17
THE PLACE	
	101
THE AGENDA	
	111
PERSONAL REFERENCES PALETTE ESTABLISHED	
	119
DESIGN	
	151
ANALYSIS	
	173
CONCLUSION	
	177
LIST OF ILLUSTRATIONS	
	178
BIBLIOGRAPHY	

A PREFATORY NOTE

The work that follows has no scholarly pretensions. Originally, it purposed to be a philosophical/political enquiry whose results would lead, directly and inexorably, to responsible form-making. The endeavor was predictably doomed to failure--not only because of its unreasonable scope, but, more importantly, because of its very structure. Increasingly, the task of linking physical form to abstract theory appeared artificial, arbitrary, and completely at odds with the earth-bound intentions of the thesis. Gradually, a focus on the experience-bound, on an understanding of the physical and existential elements of an environment, presented itself as a construct sufficiently three-dimensional to gather and balance both the analytic and personal components of architecture.

Although the written portion of this thesis quotes no single theoretician, architect or historian, the framework within which it develops does not pretend to originate with its author. Particular attribution must be made here to the thought and concerns of Hannah Arendt in The Human Condition, of Christian Norberg-Schulz in Genius Loci, of Aldo Van Eyck in many of his writings, and to the work, both drawn and written, of Louis I. Kahn and Alvar Aalto.

For all the deficiencies and misrepresentations found herein, the author hereby humbly accepts all censure.



INTRODUCTION

Inspiration is the feeling of beginning at the threshold where Silence and Light meet. Silence, the unmeasurable, desire to be, desire to express, the source of new need, meets Light, the measurable, giver of all presence, by will, by law, the measure of things already made, at a threshold which is inspiration, the sanctuary of art, the Treasury of Shadow.

The artist offers his work to his art in the sanctuary of all expression, which I like to call the Treasury of the Shadow, lying in that ambience: Light to Silence, Silence to Light. Light, the giver of presence, casts its shadow, which belongs to Light. What is made belongs to Light and to Desire.

Jeani I. Kalou

INTRODUCTION

The exercise that follows has two separate but closely related goals. The first of these is to suggest a link between the generation of physical form and an understanding of the place which that form proposes to occupy. The second objective is to acknowledge and define the role of the personal, the idiosyncratic, within the framework of hopefully rational architectural design.

The first of the goals listed above rests on the assumption that any given place has a special character and spirit which identifies it, and which is, therefore, worthy of maintenance. The implication of this assumption is that it is advantageous and important to enumerate the elements--both physical and organizational--that are the key of that identity, in order to design responsibly within a given context. "Place,"

as it is used here, is best defined as the collective expression of those cultural, historical, economic, geographical, and social values that are manifested in the physical form of any given site. In this model, working within the complexity of that construct, while simultaneously manipulating issues of building program, becomes the task of a responsible design process. The resulting link between form and place works to define design as a synthetic proposition--one that brings together a number of variables for the purpose of expressing a sense of place and a specific agenda.

Giving value to personal images and references, allowing them to modify, transform and inflect the design decisions suggested by an analysis of site and program, these comprise a second claim of this thesis. That desire rests on the belief that no analysis and no

theoretical framework is purely objective, that all decisions are value-laden, and that no system, regardless of its complexity, is capable of generating anything autonomously. Personal input seems to be the life force of all design work-- however committed to contextual, analysis-based form generation a designer might be.

In particular, then, this thesis undertakes the design of an architecture school for Harvard University, on the site presently occupied by Gund Hall. The project was chosen because its program represented no designated building type, and because its location has a particularly distinctive and coherent character: The absence of a clear formal precedent served to underline the importance of understanding and interpreting a building program, while the strong context allowed the site to exert a powerful

influence over the generation and modulation of appropriate form.

The thesis commences with an analysis of the Harvard University context at the scales of the city, the street and the individual buildings. In each case, an effort is made to identify those elements that combine together to give Harvard its special identity. The second chapter examines, and seeks to interpret, the numerous agendas of a school given to the study of design. From each of these exercises, a set of intentions, both for the manipulation of the site and for the disposition of uses within the building, is identified. It is hoped that these goals will form the basis for a structure that is supportive of both place and occasion.

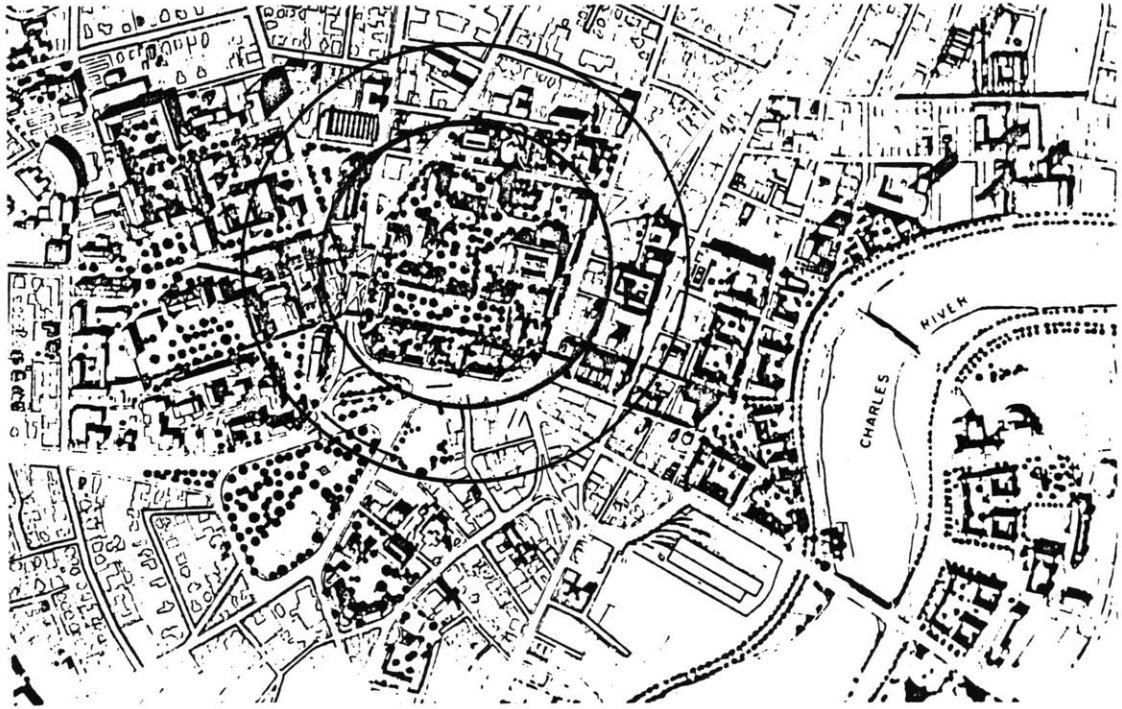
Beginning with its third chapter, the thesis becomes almost entirely dependent on visual material for the transferral of information. Drawings

and diagrams of the actual design project are given preference over verbal analysis and description. The intention here is allow the thesis itself, in its structure and sequence, to approximate the experience of generating form within the parameters established in the first chapter, then evaluating the product of that process.

This third chapter, then, documents the incremental process by which personal images and references are identified, and enlisted in the task of conferring purpose and meaning on the physical form of the design project, by generating patterns and clarifying systems of organization. Finally, in its last chapter the thesis speaks to the issue of refining, clarifying, making coherent a project that ultimately and unquestionably emerges with its own independent existence. The final chapter calls back the elements



that defined Harvard University and Quincy Street, with the purpose measuring the extent to which the new building does in fact express the spirit of that place.



THE PLACE

Time present and time past
Are both perhaps present in time future
And time future contained in time past...
T.S. Eliot

CHAPTER 1 THE PLACE

George Gund Hall, seat of the Harvard Graduate School of Design (GSD), provides both site and program for the exercise which is at the heart of the following inquiry. Its specific location at 48 Quincy Street, Cambridge, is best understood as part of the larger context of Harvard University, which, in turn, is firmly lodged within the urban fabric of the City of Cambridge. What follows in this first chapter is an analysis of the character and quality of Harvard University as it is expressed in the morphology of its built form.

Because Harvard College established itself in its present location well before the urbanization of the Cambridge area, those of its holdings which date back to its founding in 1636 have a distinctly different character from those that were sub-

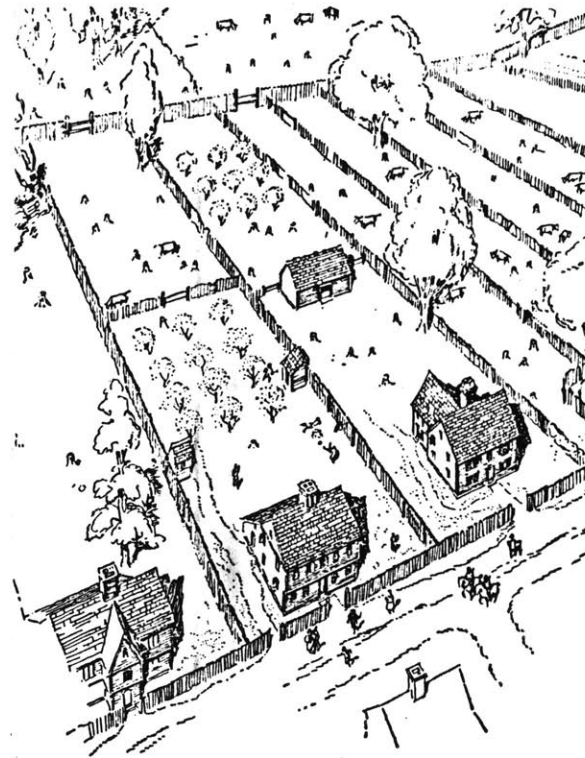


Fig. 1

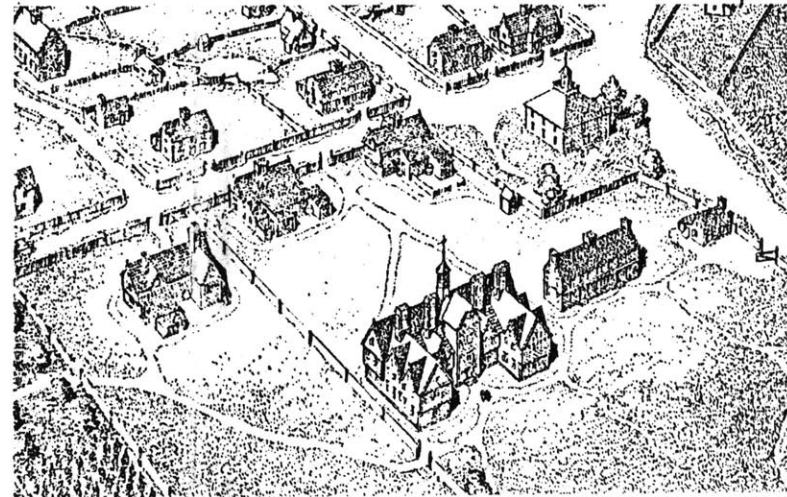


Fig. 2

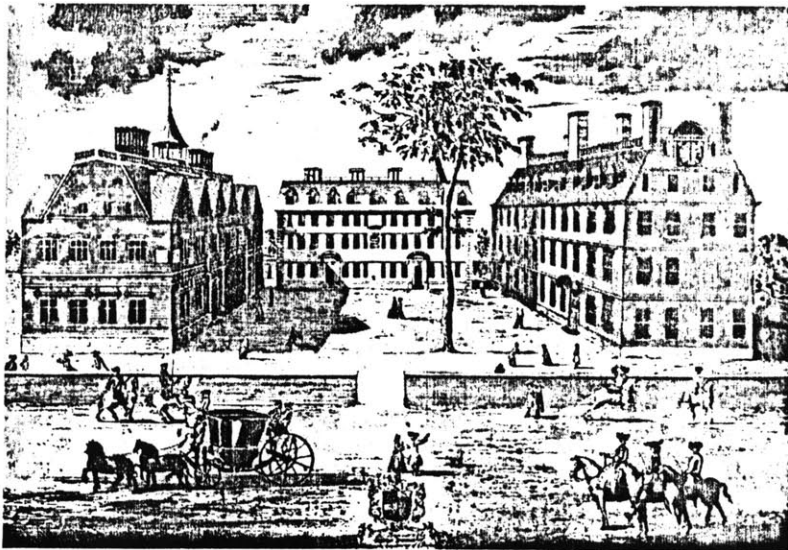


Fig 3

sequently acquired. While the later acquisitions form part of the city proper and are thus basically street-oriented, earlier holdings are centered on the site of the present College Yard. It is here that the image and character of the University most clearly and cogently manifest themselves.

Even now, in its present conditions, Harvard Yard, an area comprised of nearly two city blocks, closely ap-



Fig 4

proximates the continuous landscape conditions under which the University was initially established. Although the Yard was first occupied by house-scale wood-frame buildings whose character and siting echoed their residential setting, changes in the University gradually transformed the formal aspect of the college campus. With the passing years Harvard forged its own distinctive character. And although the University retained some

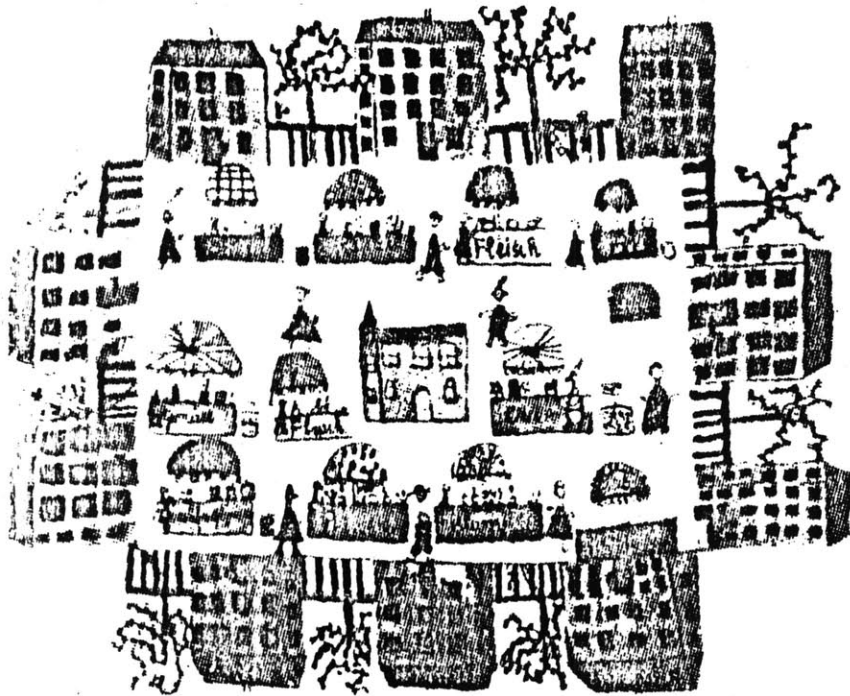
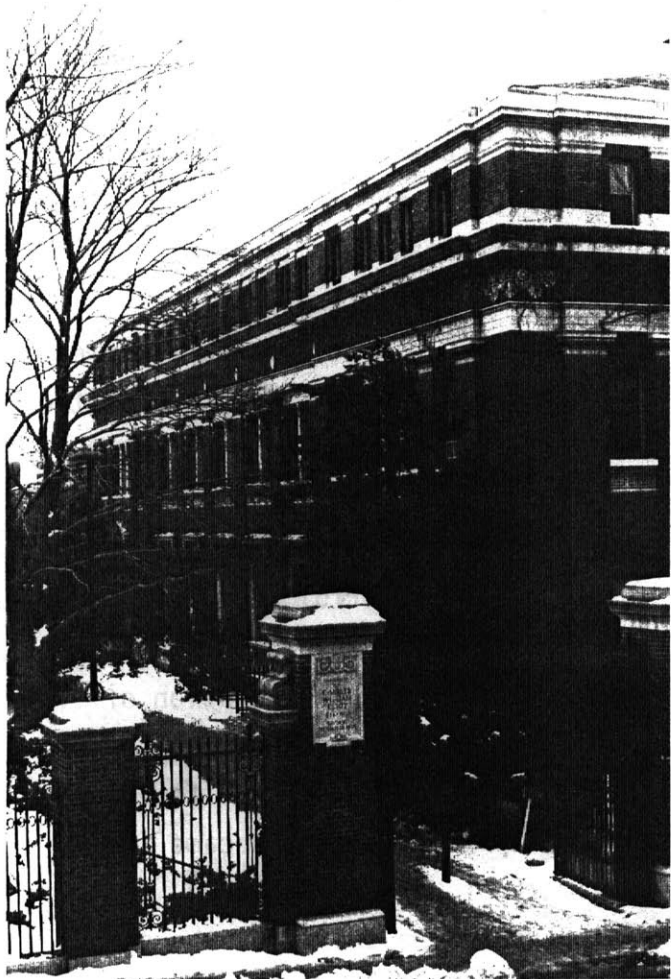


Fig. 5

of its spirit of adjacency to a strongly residential environment, Harvard's new, self-conscious identity found expression in the character and planning that organized its newer, more permanent masonry buildings.

The single most important element in the formal built expression of the University's developing personality, resided in the decision to link all buildings representing Harvard to a distinct and powerful geometric order--the courtyard organization. An organic, topographic aggregation of small, centrally focused open spaces, paved, repeated and placed together in quilt-like fashion, became the hallmark of Harvard College.

Because the spirit of the campus can be best understood in terms of these courtyard arrangements, the analysis that follows will focus first on evolving an understanding of this particular system for landscape defini-

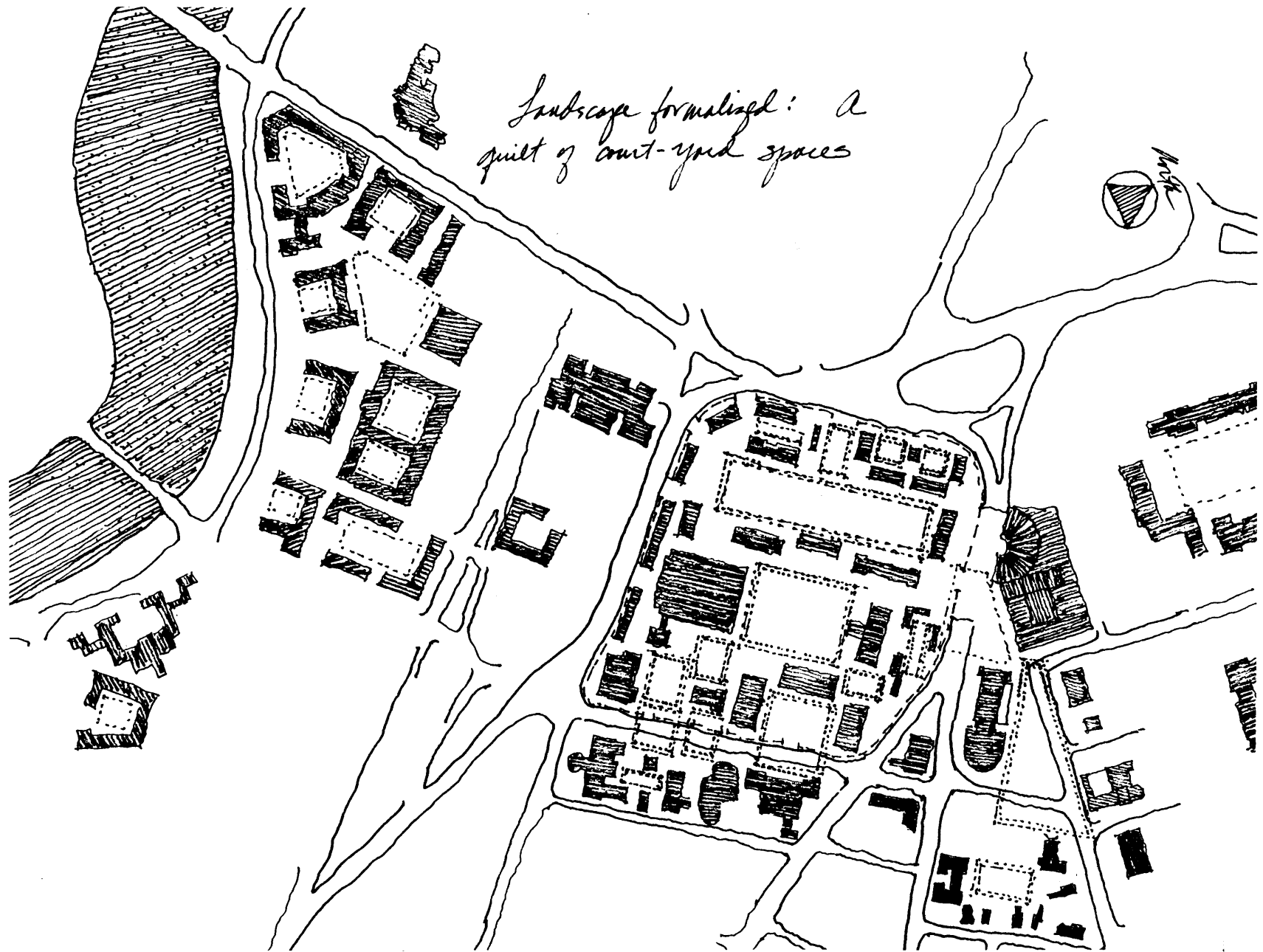


tion and manipulation. The present chapter will continue by narrowing its focus and examining the character of Quincy Street--this, both to set the stage for the design project documented in Chapter 4 and to study the structure of those University holdings which fall outside the Yard proper. The intention here is to identify those elements of the University image (as they were originally established in the College Yard) which lend themselves to manipulation and transformation, thus serving to link the city extension of the University with the central core of the University Campus. The underlying assumption is that although the courtyard organization was born of a desire to define intermediate-sized spaces within a continuous landscape condition while simultaneously establishing a dignified aspect for the University at the scale of the city, the adaptability of

that spatial order to an urban (that is street-related) condition is the hinge upon which the coherence of the University relies. It is this mechanism of courtyards, repeated at the various scales, which carries the image of Harvard, therefore allowing for discernable patterns in expansion, and which serves to define the terms of the peculiar overlapping between landscape and urban space which are the essence of the Harvard University context.

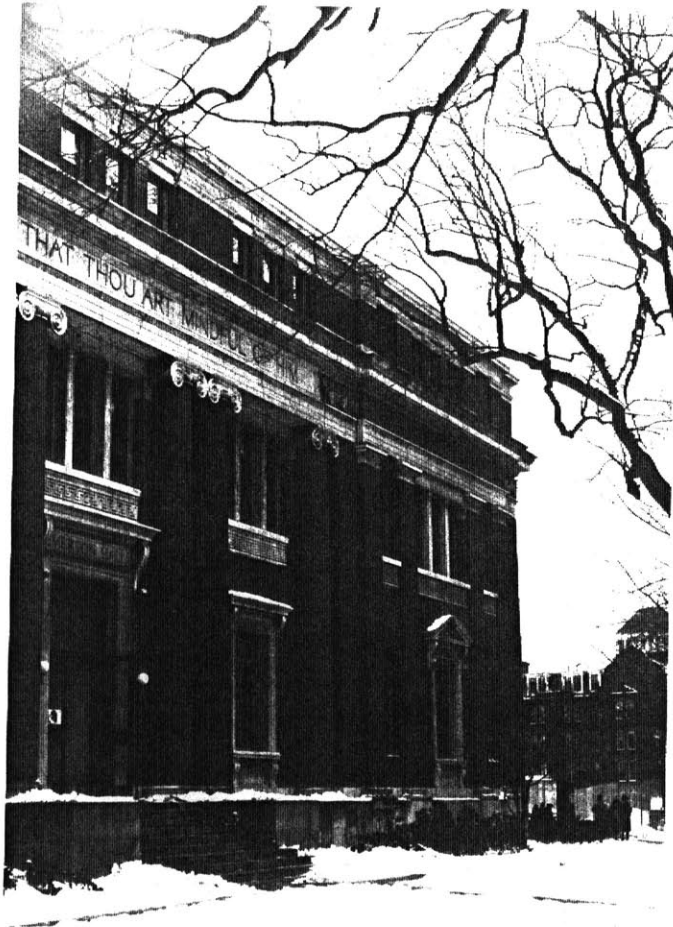


Fig 6

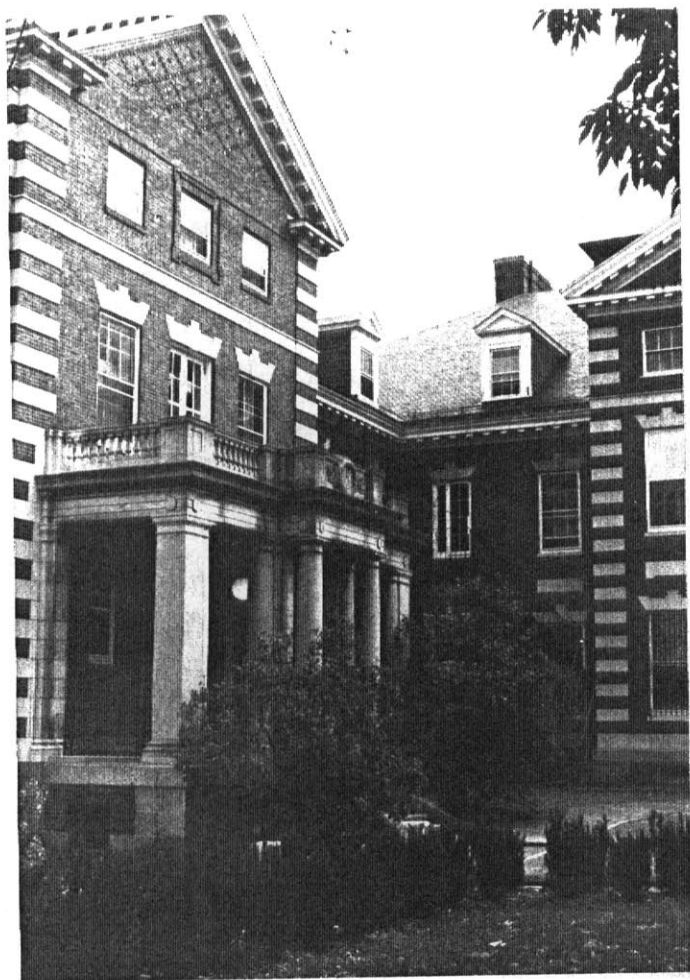


Landscape formalized: a quilt of court-yard spaces

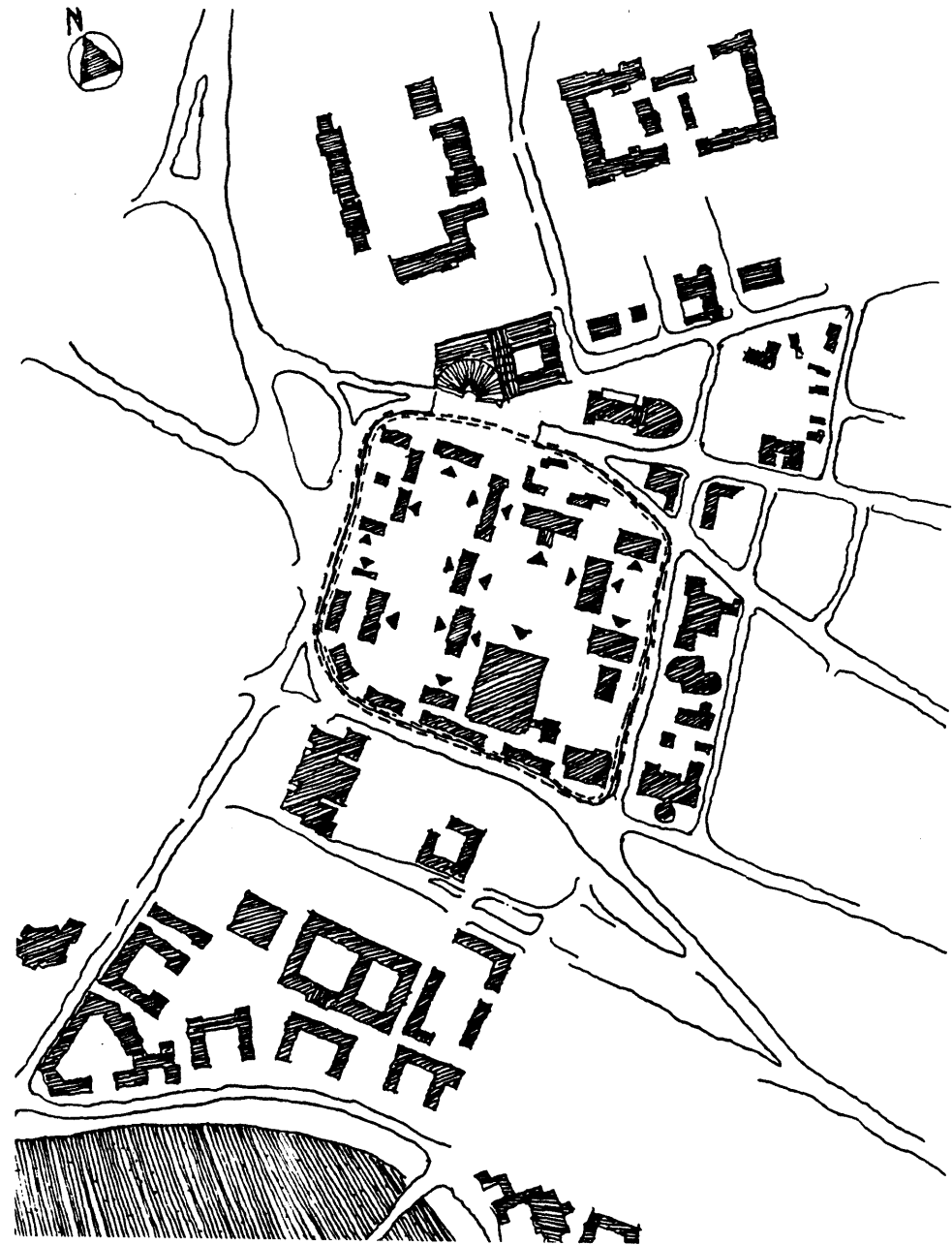
COURTYARD ORGANIZATIONS - HARVARD UNIVERSITY



A series of courts, designed to give enclosure at a scale smaller than that of the city but greater than that of a public indoor room comprise much of the grain of the Harvard College Yard. No two of these courtyard spaces are identical; each has its own distinct character determined by its dimensions, proportions, the edges of the buildings that form its boundaries, by its graphical orientation, by the specific use of the buildings that surround it, by its relation to adjacent spaces, and by the quality of that adjacency. Nevertheless, there are vast areas of overlap and similarity among the many courtyard spaces. Within the confines of the Yard, the edges of each courtyard are defined by buildings of red brick exterior usually four or five storeys

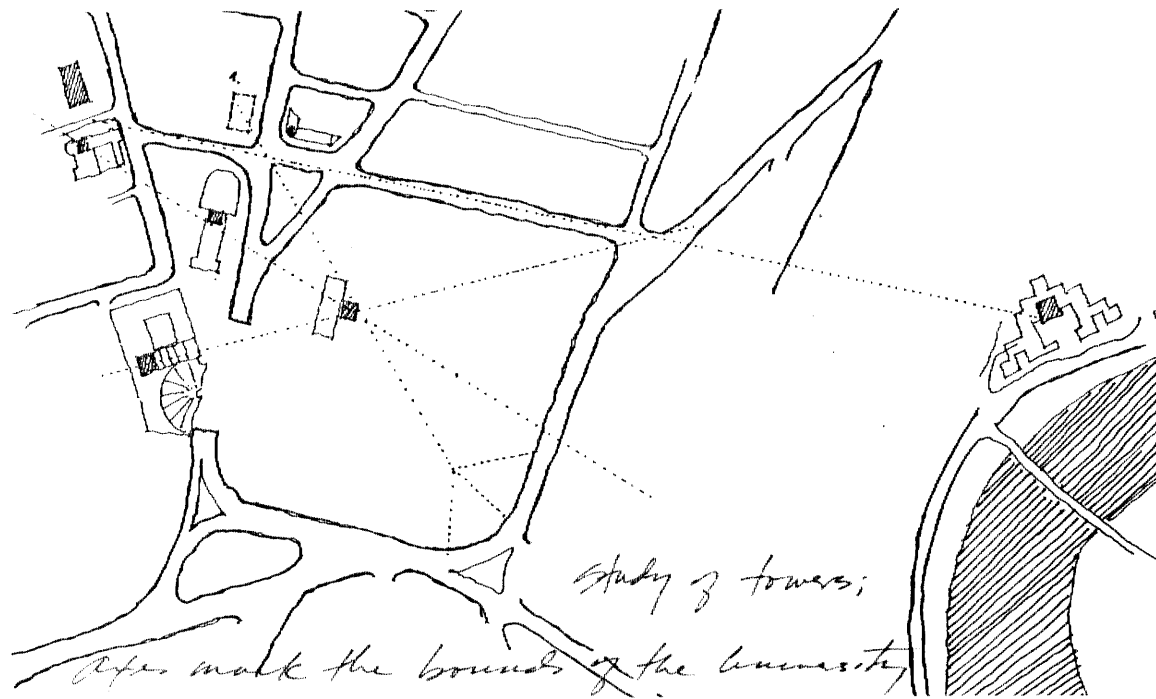


in height topped by pitched shingled roofs, characterized by symmetrical elevations and plan organizations, and generally characterized by linear arrangements of spaces. As a rule these buildings are entered at their central points, and entry is generally preceded by a level change. Front loggias are not always the rule although they do occur occasionally. Without exception, the Harvard College courtyards have open corners which facilitate diagonal views and, consequently, connections to adjacent open spaces. Much of the landscape continuity within which the college courtyards establish an organic order is maintained by means of these diagonal connections. The diagonal views, which allow for virtual continuity with adjacent courtyard spaces, work to give perspective on the overall dimensions of the University, even by the walls of the smaller spaces give one a sense of







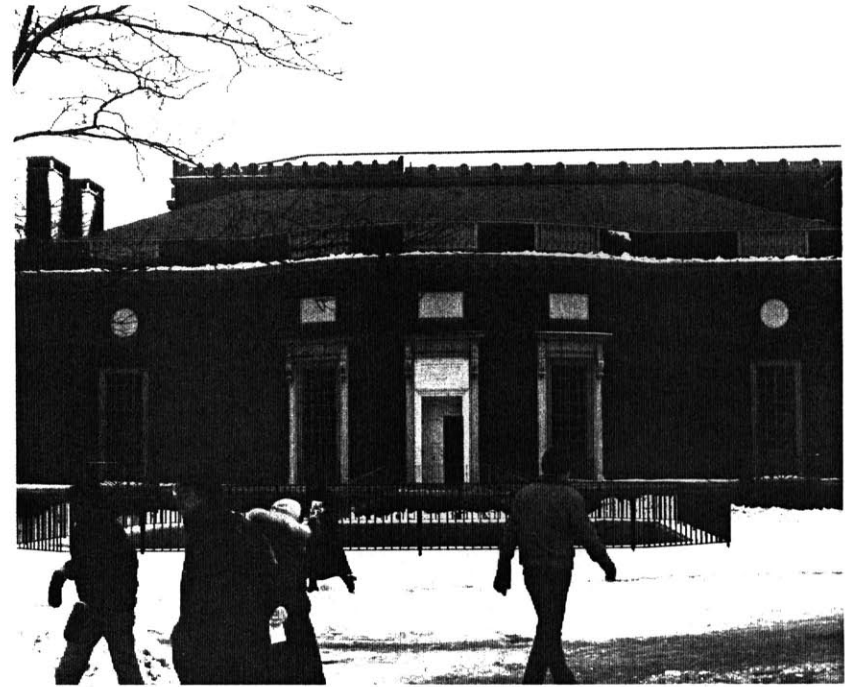


enclosure. Orthogonal views, on the other hand, draw attention to the separation between spaces that the college buildings signify.

The towers which mark each of the Harvard courtyards serve similar purposes. These vertical extensions give presence and identity to each courtyard, and serve as markers in the city fabric for the horizontal boundaries of the University grounds. With the

repetitive court organizations, the uniformity of building materials and symmetry of spatial distribution, the towers of the University are yet another element that adds to establishing a continuity of image for a campus fragmented and deposited at different corners of the City of Cambridge.



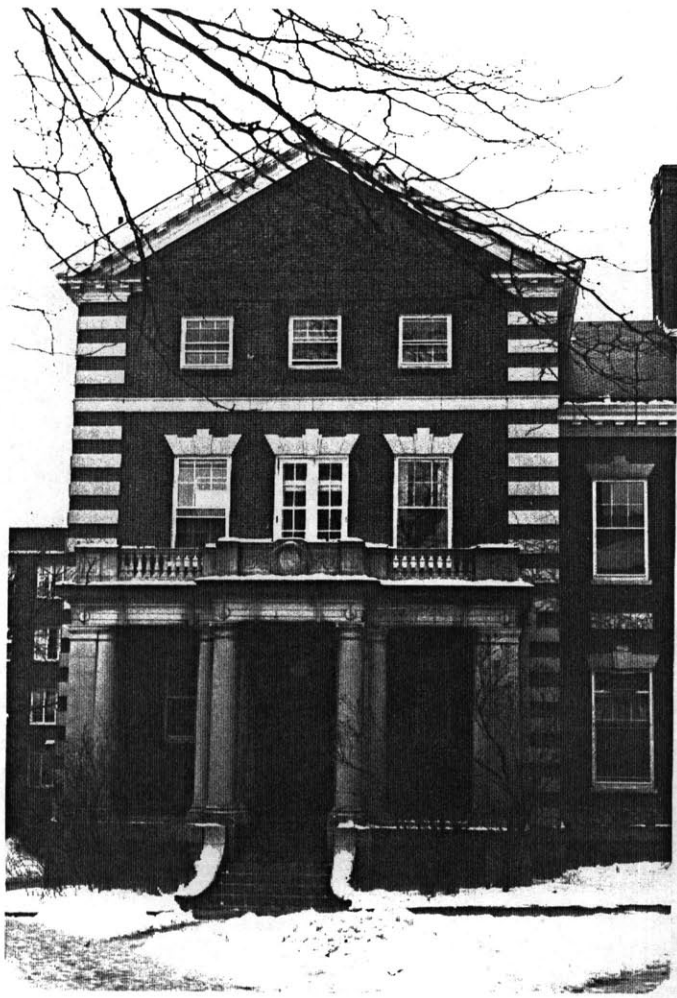


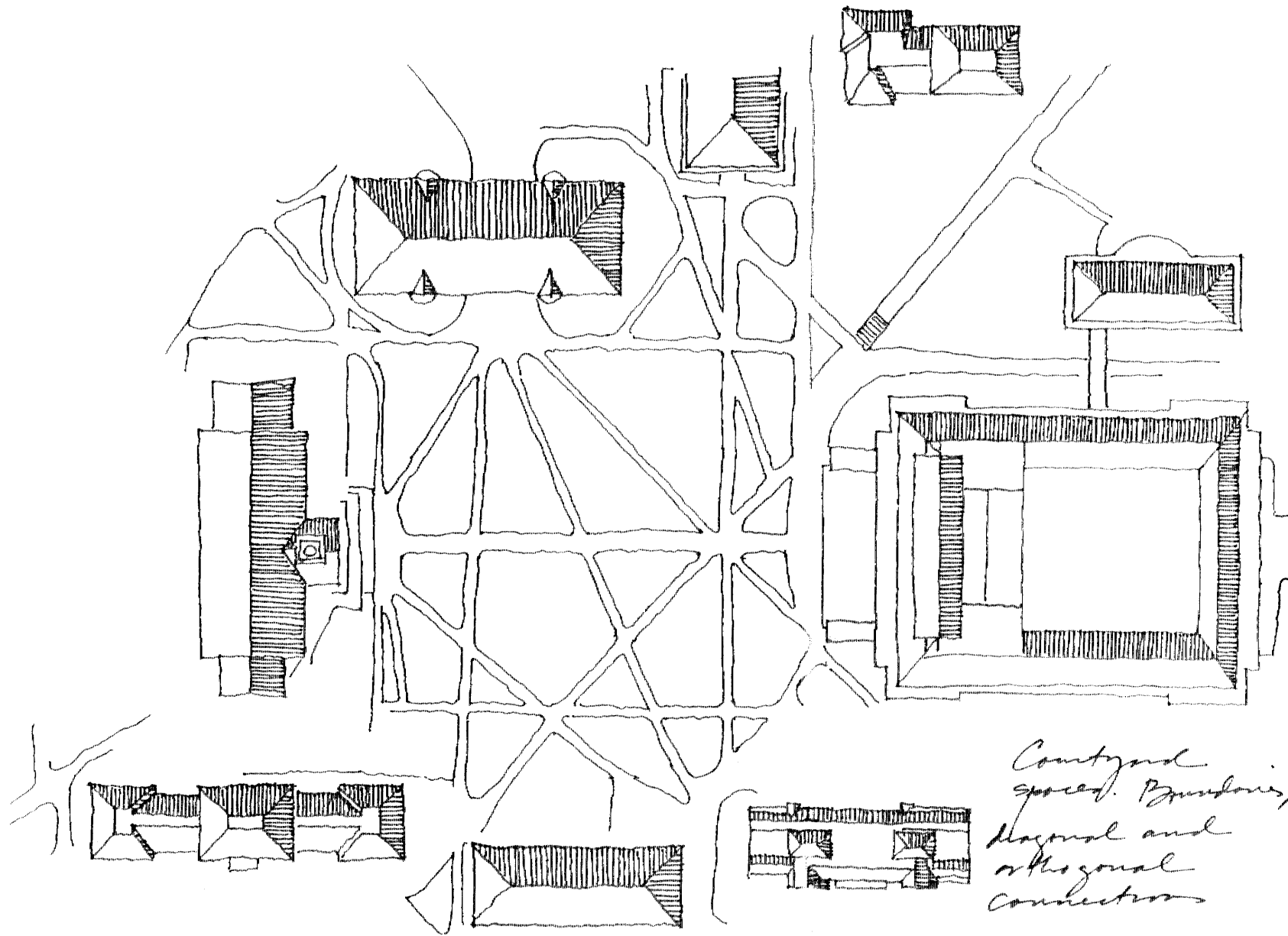
Movement from court to court within the College Yard proceeds in any or all of the three following manners. Pedestrians can traverse the open courtyards: (1) along their diagonals (these usually acknowledged by means of a marked paved path) across the open courtyard space; (2) in the orthogonal direction, along any one of the edges

of the spaces in question or; (3) by crossing through the buildings that separate one courtyard from the next. This last possibility has considerable significance.

Because the University buildings are often experienced as bridges between courtyard spaces, or interior streets, they become an integral part of the network of connections that comprise the University. Rather than remain solely a built separation between open spaces, they participate actively in the use of both courtyards simultaneously, and entertain two different but equally active edges. As a result, the lines of separation between indoor and outdoor spaces are not as distinctly drawn as one might, at first glance, suspect upon examining a site plan of the College Yard. Despite the fact that the walls of Harvard buildings are invariably opaque rather than transparent, and despite their largely self-contained character, most Harvard buildings (pavilion-like







Courtyard
spaces. Boundaries,
diagonal and
orthogonal
connections

in their pristine geometric integrity) manage to maintain an experiential continuity between indoors and out that is considerable. Again, this phenomenon is largely due to the power of the courtyard organization. The siting of the narrow buildings between two vital open spaces is crucial. Moreover, at the scale in which this courtyard arrangement is manifest throughout the University grounds, the spaces created retain an intimacy that allow one to feel comfortably enclosed within them. The buildings that edge these spaces generate a tension among themselves that can best be attributed to the dimensions of the spaces that separate them, to the collective proportions of the walls they provide for the space which they enclose, and to their symmetrical position, one immediately opposite the next.

It is interesting, finally, to note that there is a hierarchy of dimension rather than one of procession throughout the courtyard

spaces in question. It is the degree of publicness of the buildings which edge the spaces and the presence of the tower that give the court its relative importance in the network of open spaces.

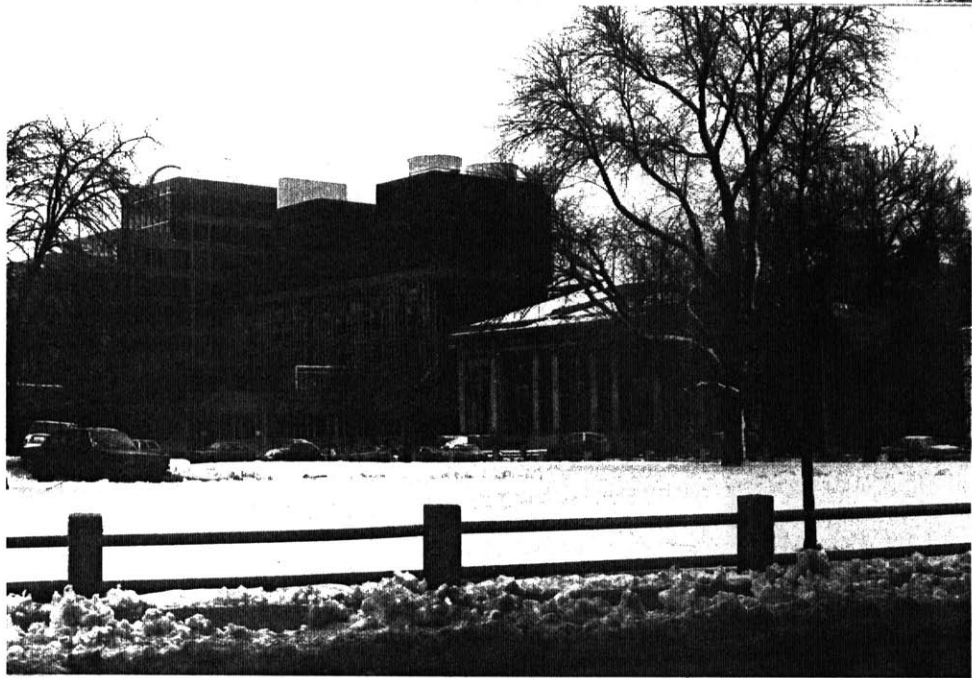
Outside the immediate area of the Yard the rules of spatial composition are forced to change. The difference most clearly and immediately obvious is the intrusion of the city, and with it, the order overlaid and imposed by its network of streets. The result, of course, is the impossibility of forming effectively bound exterior spaces, as control is lost to the wider dimensions and distinct directional preference imposed by the presence of vehicular thoroughways.

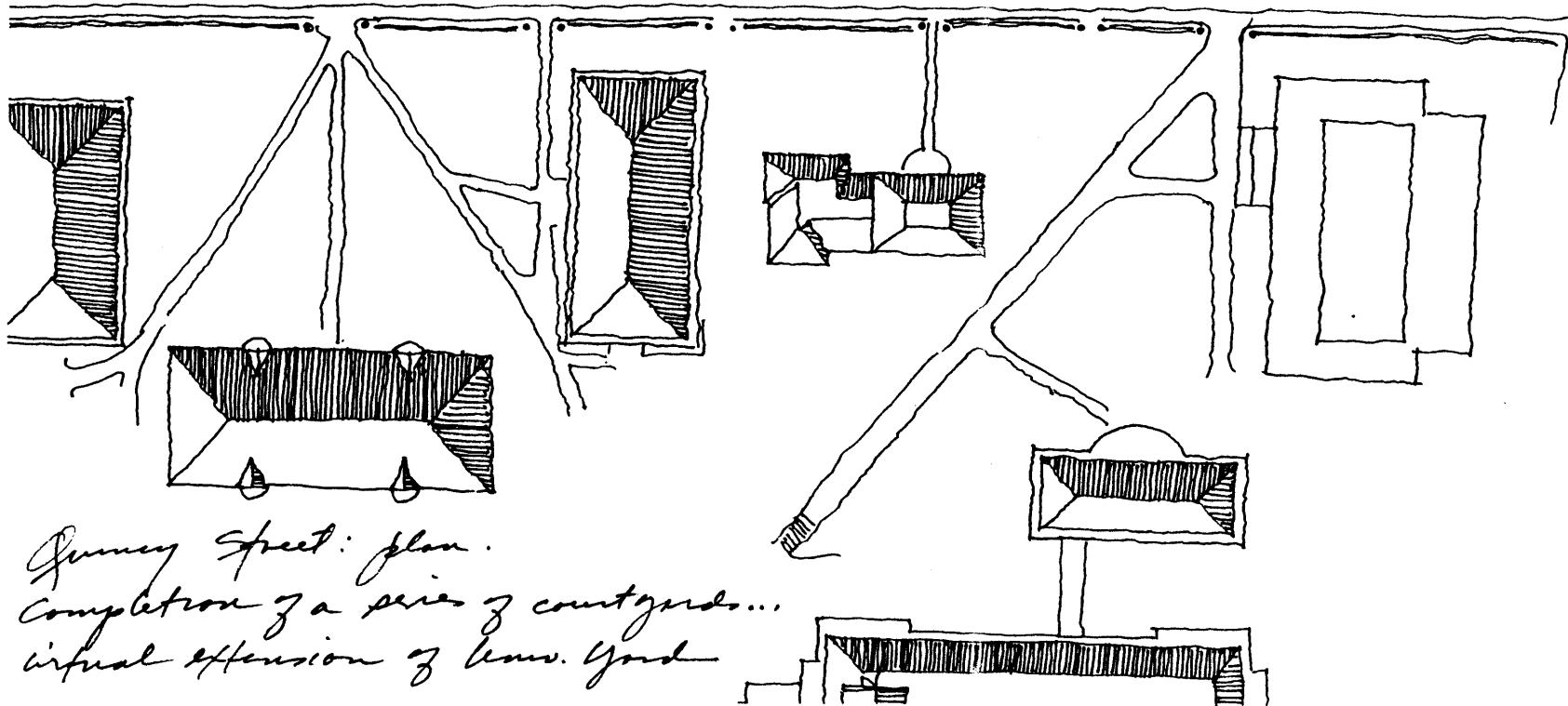
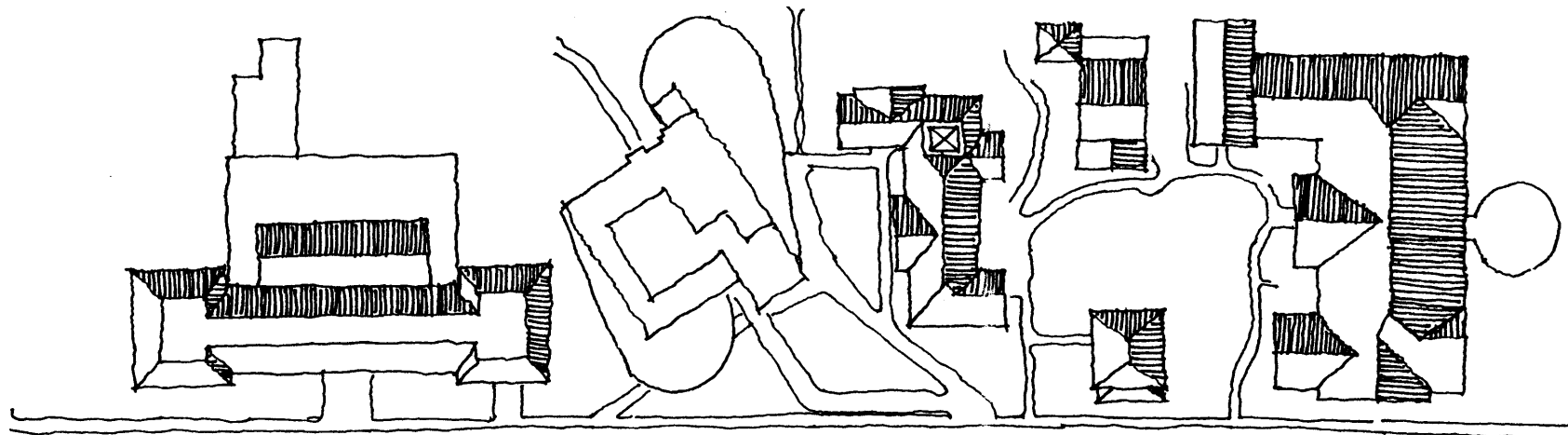
As a general case, the response of University buildings to a necessary street orientation is as consistent as it is many-sided. Having lost the



tight-knit quality and texture of the Yard, the buildings that enfront Cambridge streets take up the courtyard organization theme on a different scale. The notion of a centralized, inwardly focused organization becomes the province of the individual building rather than that of a group of such structures. At this smaller scale, the elements that characterized the organization and established the identity of Harvard in the College Yard also find expression. Here, too, red brick is the basic facing material, here, too, towers mark the central green space and form a visual axial link to the heart of the University. In the smaller yards, too, spatial projections are analogous to those of the parent space, and buildings also retain a symmetry that satisfies a need to echo the image of the large in its own smaller-scale version.

A distinctly different set of site issues, however, effect a number of dissimilarities between the more and

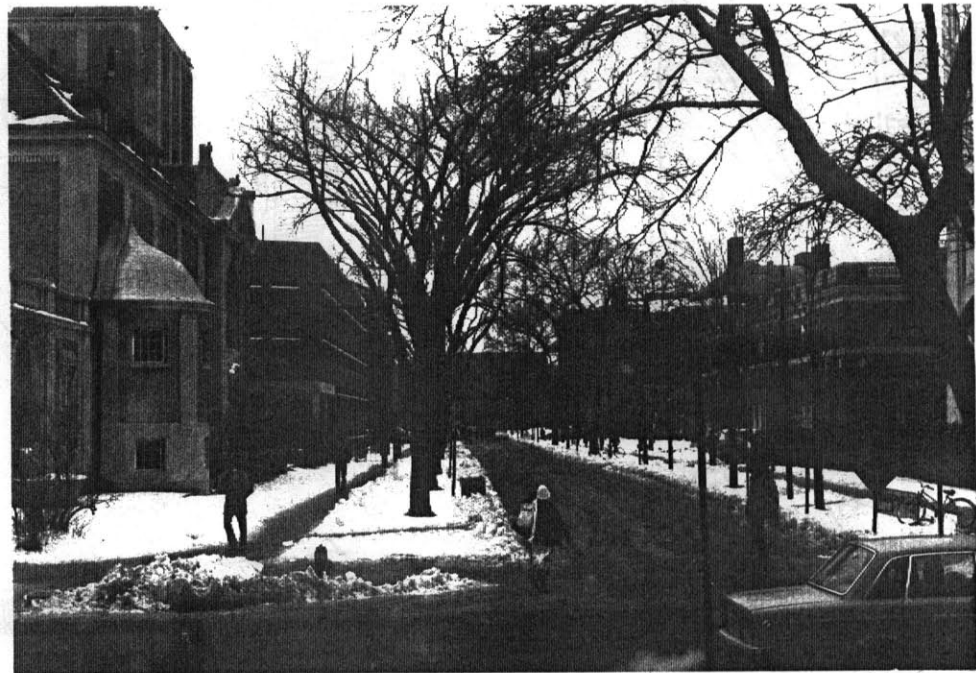




Quincy Street: plan.
 Completion of a series of courtyards...
 virtual extension of Univ. Yard



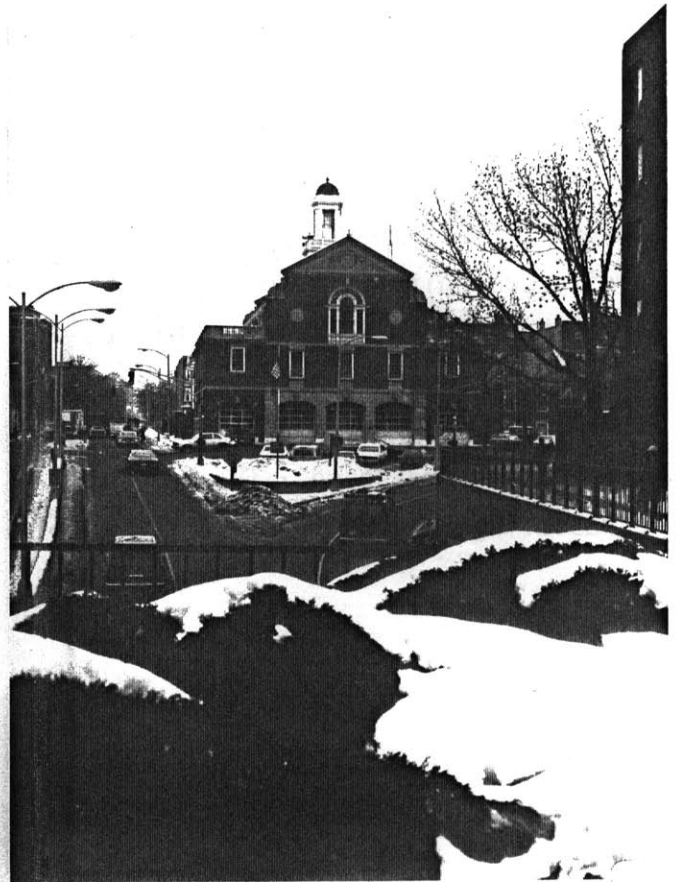
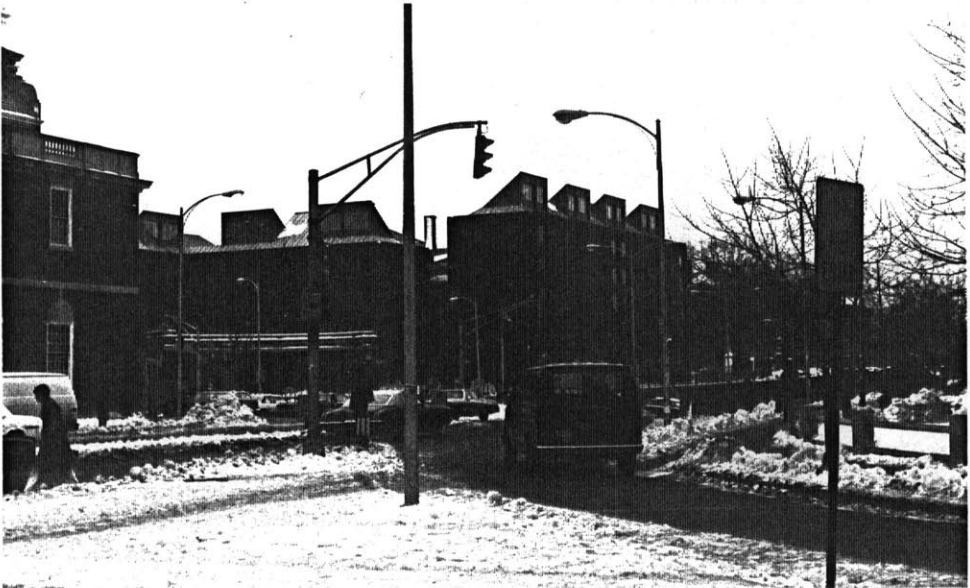
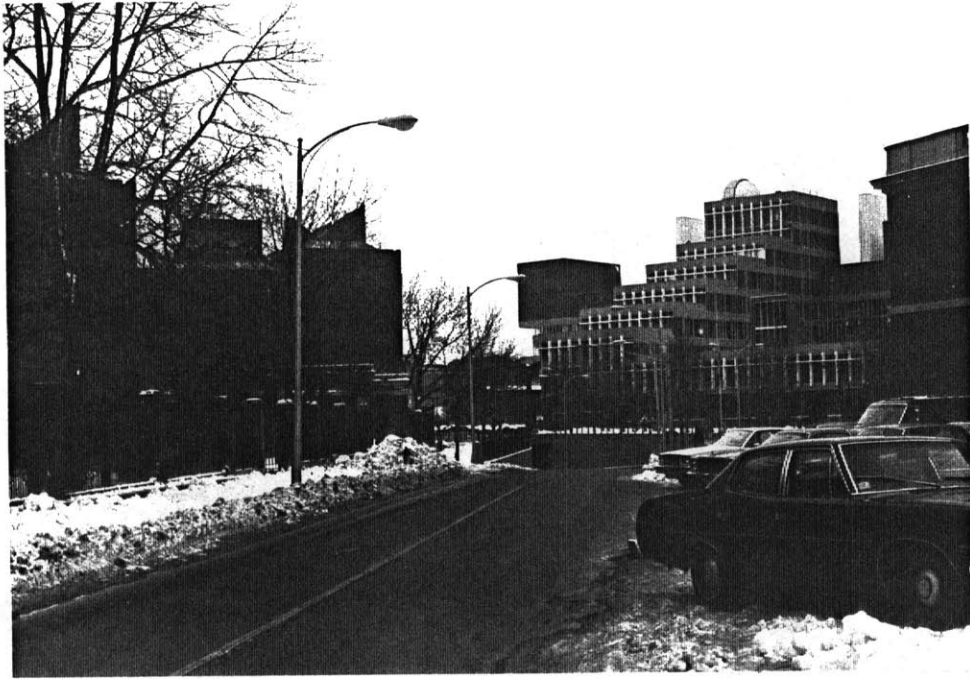
less urban structures of Harvard University. Although the buildings that stand outside the confines of the Yard are not physically continuous with any of the urban structures, they generally lack the simple object quality of the Yard buildings. Invariably, these outside structures are more complex than those they emulate, since they are in themselves responsible for performing the entire function of

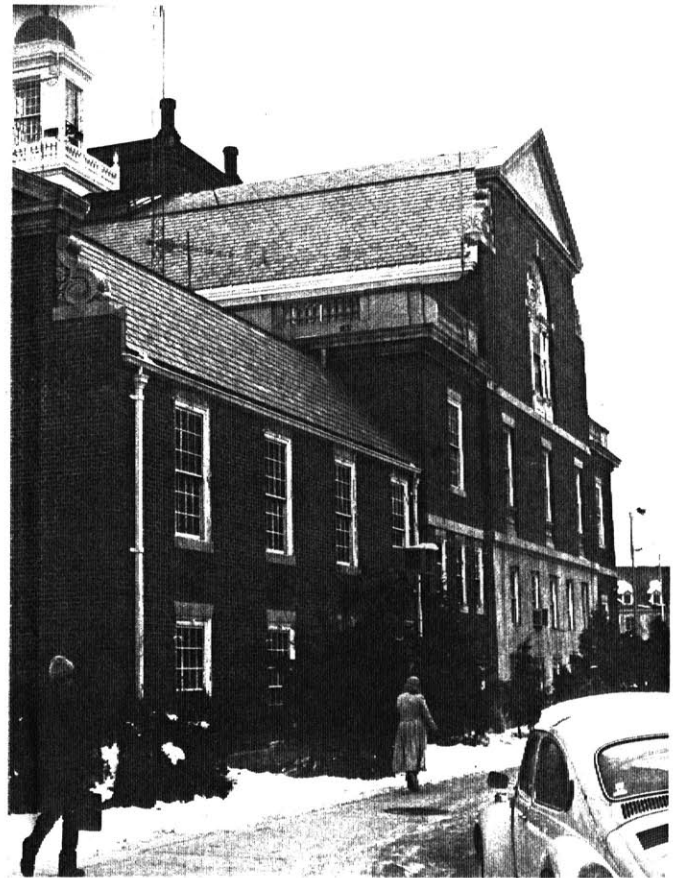


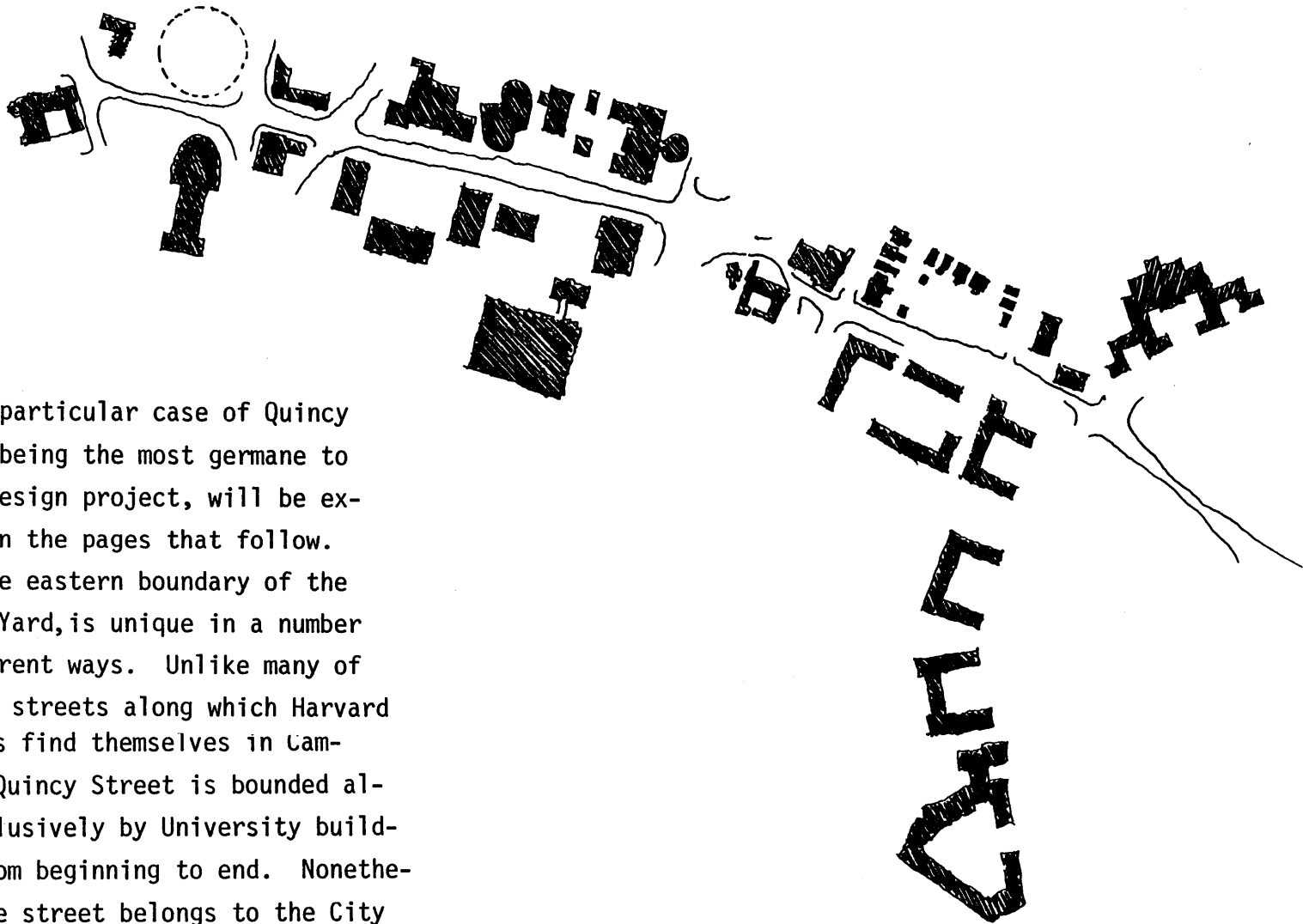
forming a courtyard--either as interior or exterior space.

Moreover, buildings related to the Cambridge streets have the burden of maintaining the image of the University form within the city, according to the rules of perception and understanding prescribed by street-orientation. These structures need respond to patterns of light, shadow, transitions, entrance, cadence of bays and appropriate cornice lines--even as they express their membership in the University community. In so doing, however, these buildings respond to two opposing forces--one being the exterior, the other, the prescribed interior courtyard space. The modes of resolving that conflict vary.





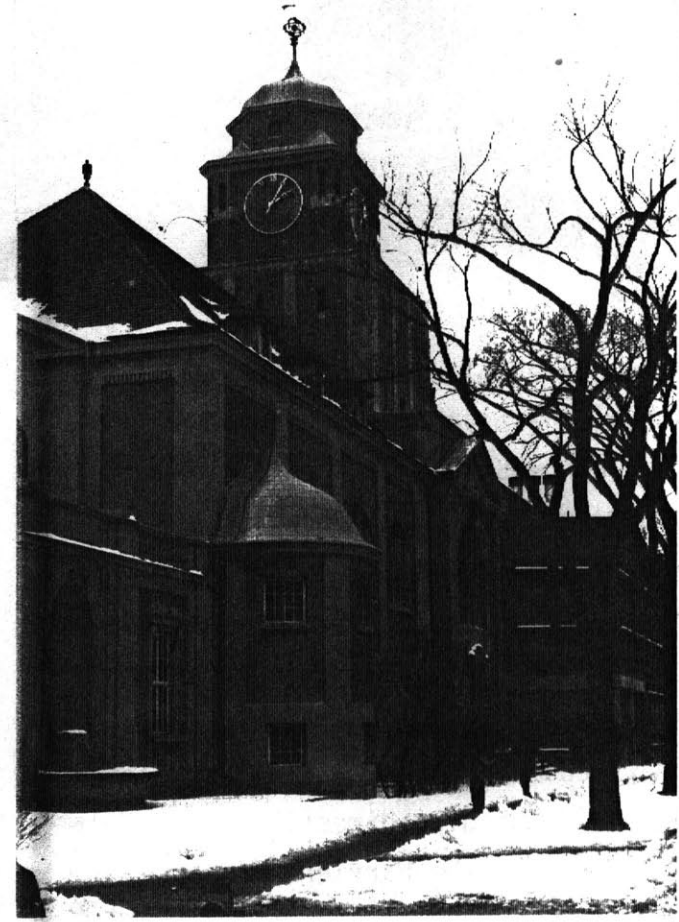


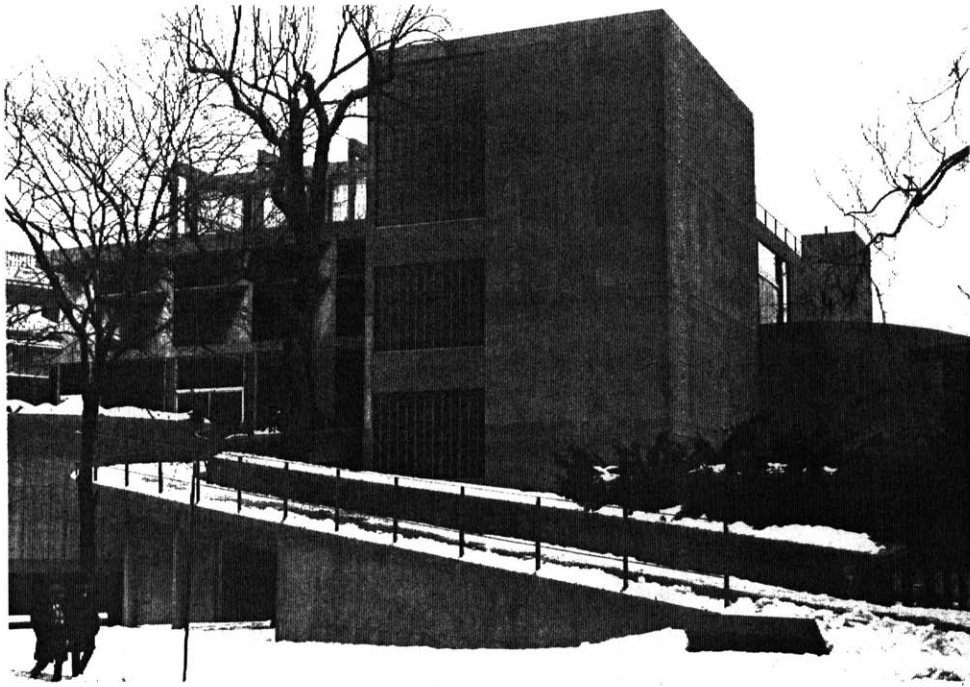


The particular case of Quincy Street, being the most germane to my own design project, will be examined in the pages that follow. This, the eastern boundary of the College Yard, is unique in a number of different ways. Unlike many of the city streets along which Harvard buildings find themselves in Cambridge, Quincy Street is bounded almost exclusively by University buildings, from beginning to end. Nonetheless, the street belongs to the City and so becomes a screen or line of transition between the Yard and the residential fabric of North Cambridge at its eastern edge. Quincy Street is



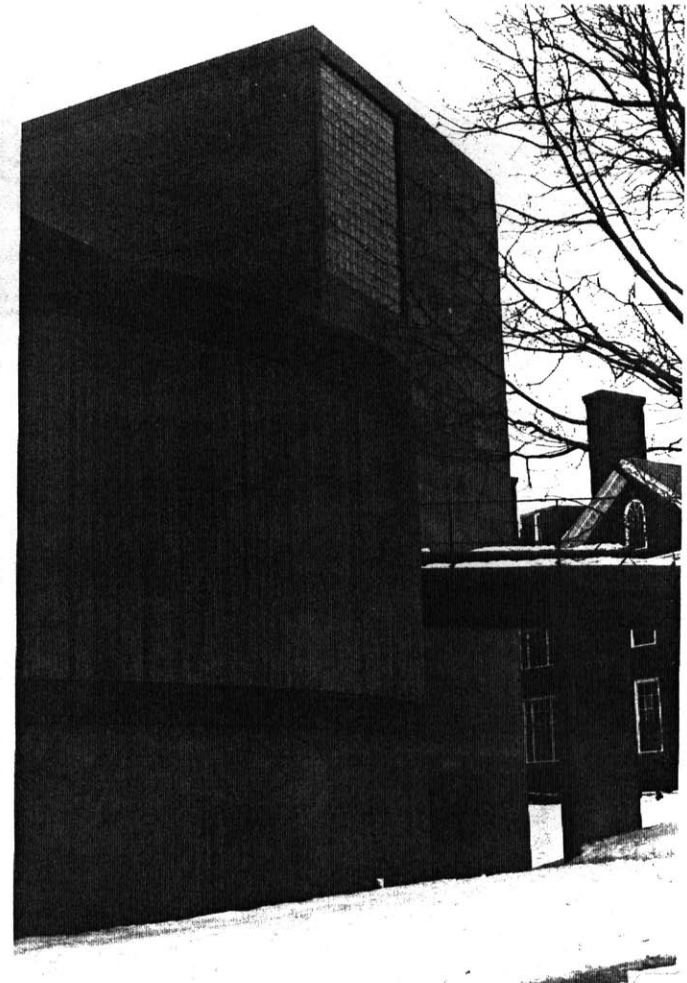
unique in so far as it collects the most public functions of the University, placing them at the intersection of city and school. Indeed, the buildings that find their place along it: Le Corbusier's Carpenter Center for the Visual Arts, the Fogg Museum with its upcoming addition by James Stirling, Memorial Hall/Sanders Theatre, the Busch Reisinger Museum and, of course, the Graduate School of





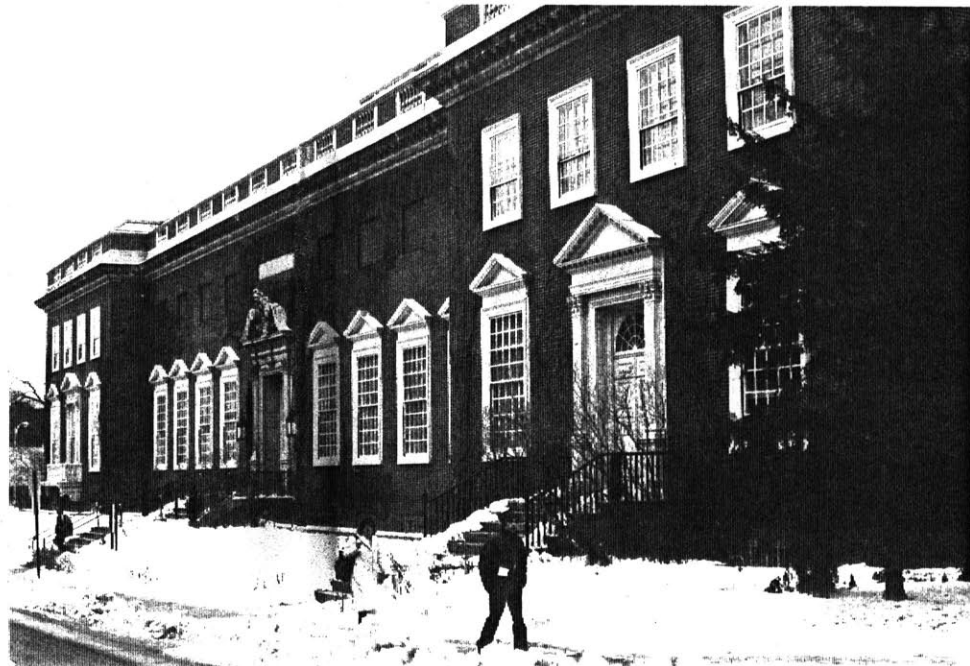
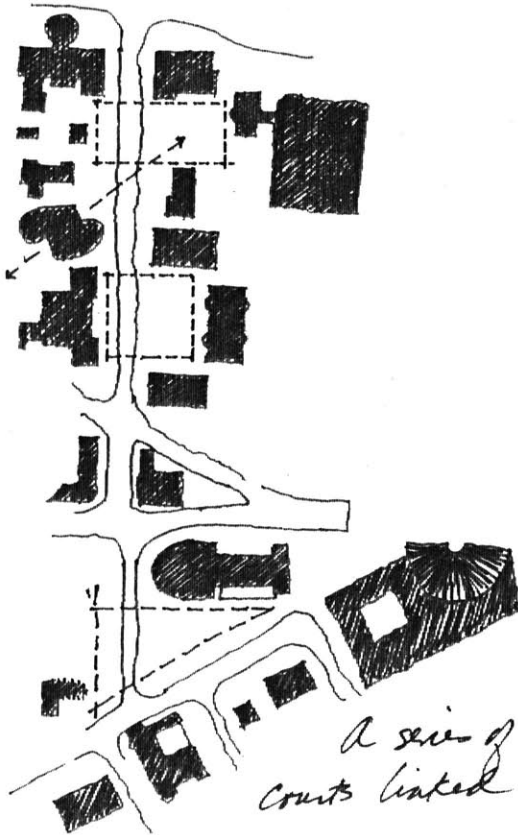
Design are all either museums, theatres or arts-related buildings.

Quincy Street can be read in a number of additional ways. The portion of the street which fronts directly on the Yard does, in fact, work to complete the open geometries of Sever court and Houghton-Lamont Library court. These buildings address the Yard building directly, as if oblivious to the barriers of fence,



sidewalk and street. They obey rules of open corners and buildings-as-throughways, and in and of themselves (Fogg, Carpenter Center) enclose a certain variety of courtyard space. The Fogg acknowledges the symmetry of Sever Hall, and matches its cornice

lines to that of H.H. Richardson's classroom building. It maintains the uniformity of Harvard's red brick facing, and in its window frames makes some effort to acknowledge the pitched-roof motif that links University buildings to the adjacent residential street. Carpenter Center addresses the importance of the diagonal connection across courtyard spaces, and



gives prominence to the notion of building-as-bridge or thoroughfare. Although it violates rules of material and proposes a massing more sculptural than any other along the street, it registers the cornice lines of its neighboring buildings, and exhibits some similarity in strategy for admitting light to its interior spaces. Simultaneously, Quincy Street established its own identity--it devises a cadence of open and built spaces, sets rules for passage from public street to more private interior courtyard, as well as conditions for continuity and discontinuity along each of its sides. Street elevations establish a cadence of vertical and horizontal elements, a language of entry and a notion of light and materials entirely its own.

Quincy Street could, in fact, be interpreted as a chain of consecutive courtyard spaces terminating in a wide space, and marked by the tower of the

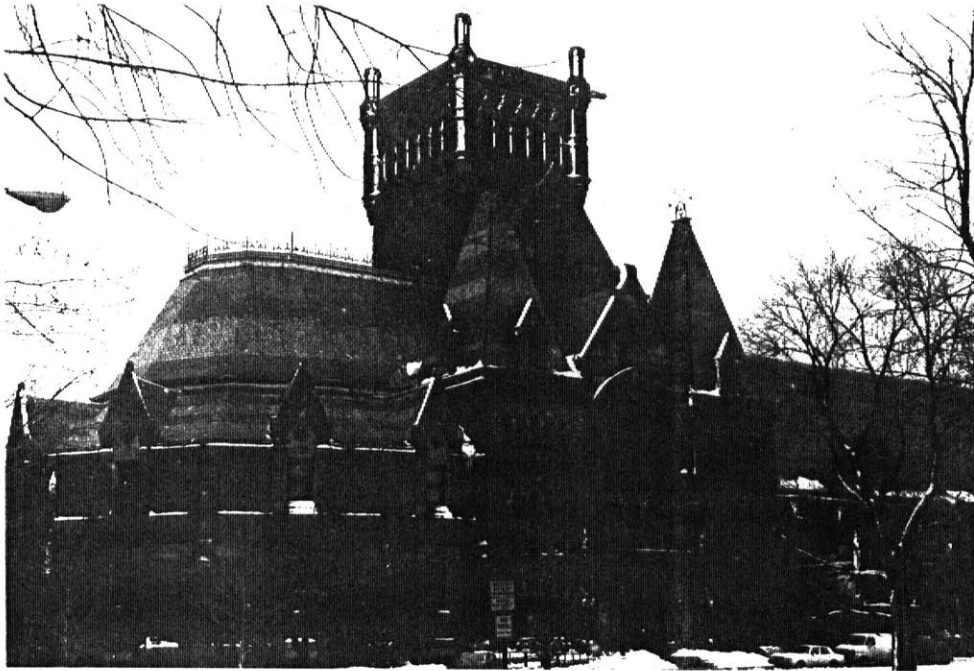


Busch Reisinger Museum. This building ends the street and links the space upon which it fronts with the tower of Memorial Church in the Harvard Yard. That space is particularly important, as it ties the University to North Cambridge along Kirkland and Cambridge Streets and forms a juncture at which the University changes the direction of its exposure from eastward northward.

The street is unusual in that it is, effectively, a one-sided street until it reaches the wide expanse of the space defined by the Busch Reisinger, Memorial Hall, the Science Center, Church of the New Jerusalem and the Graduate School of Design. It is at this point the street becomes a plaza, and the scale of the University is once again established along it.

Although the generous and welcoming face of the Busch Reisinger Museum defines the total dimension of Quincy





Street, the continuity of that street is potentially broken at two different points: at the intersections of Quincy and Broadway and Quincy and Cambridge Streets. Both of these are busy, noisy, traffic-filled interruptions to the peaceful promenade on either end of the street. Stirling's museum will attempt to remedy that by providing the street with a solid and continuous wall between the two points of intersection as well as a bridge to the Fogg over Broadway Street. It is left to the Graduate School of Design to maintain the continuity across the Cambridge Street intersection.

In light of the analysis above it is clear that Harvard University can be understood as a hybrid of landscape and urban organizations, linked together across the boundaries of city and traffic by means of a powerful spatial ordering system, marked by towers in the landscape, perceptible

by means of axial (orthogonal) and diagonal views, interconnected by a network of passages either between or through buildings and retaining adherence to a basically uniform strategy for meeting street and sky.

It is interesting and important to note again the power that an organizational spatial system, wielded in a repetitive although varied manner, can have in effecting a certain coherence for the image of an institution whose pieces are dispersed among numerous small city streets. The role that pattern plays in investing form with meaning and rendering character understandable becomes obvious in light of the analysis undertaken for the purpose of identifying the elements that give Harvard University its sense of place, at the scale of the city and that of the street.

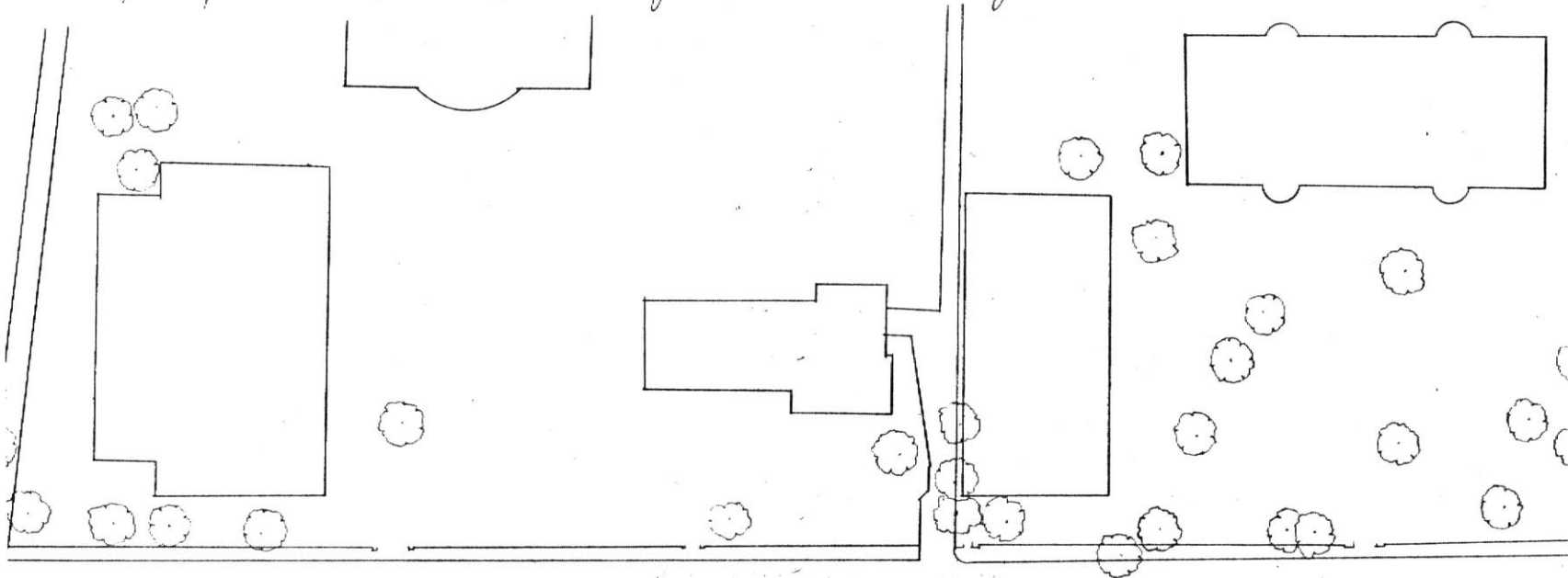
At the scale of the individual building, too Harvard University mani-

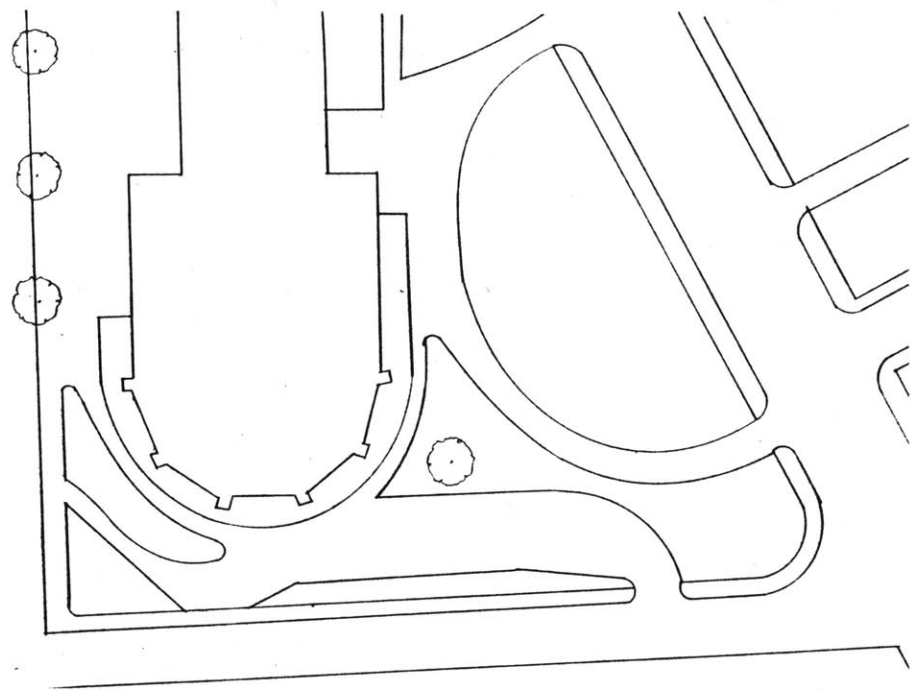
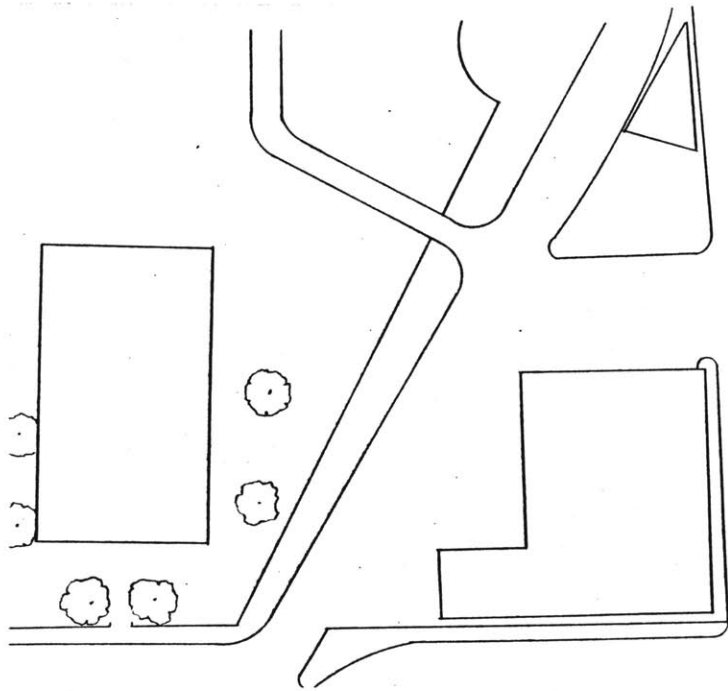
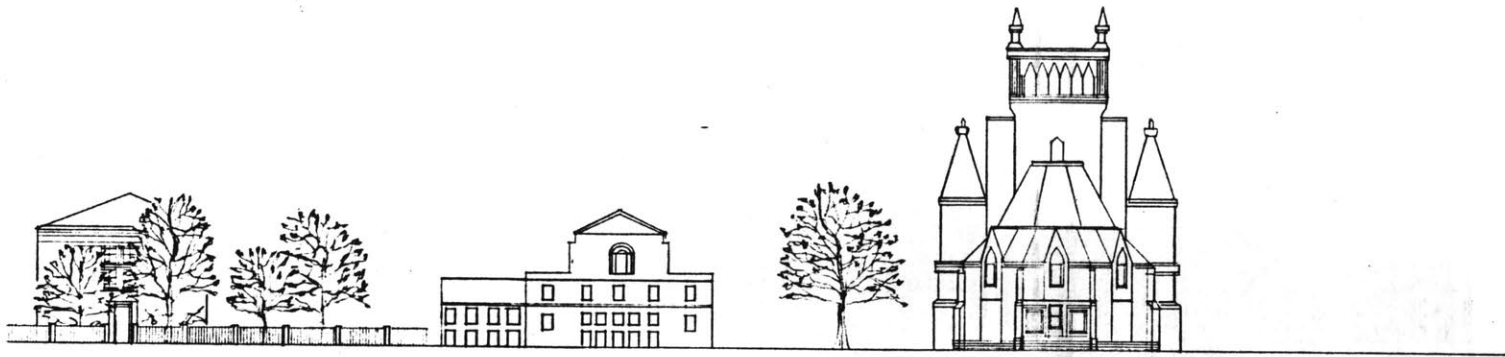
festes itself as an environment. The genius loci of a given place is carved as much by its external character as it is by the spatial systems and inward view expressed in the design of the individual buildings which compose it.

The diagrams that follow will analyse the five buildings that most clearly characterize Quincy Street: the Carpenter Center of Le Corbusier, the Fogg Museum of Shepley, Bullfinch, Richardson and Abbott, the James Stirling (future) addition to the Fogg, the Busch Reisinger Museum and Ware and Van Brundt's Memorial Hall. A comparative study of the buildings will form the basis for the range of the palette from which a new design might take inspiration.



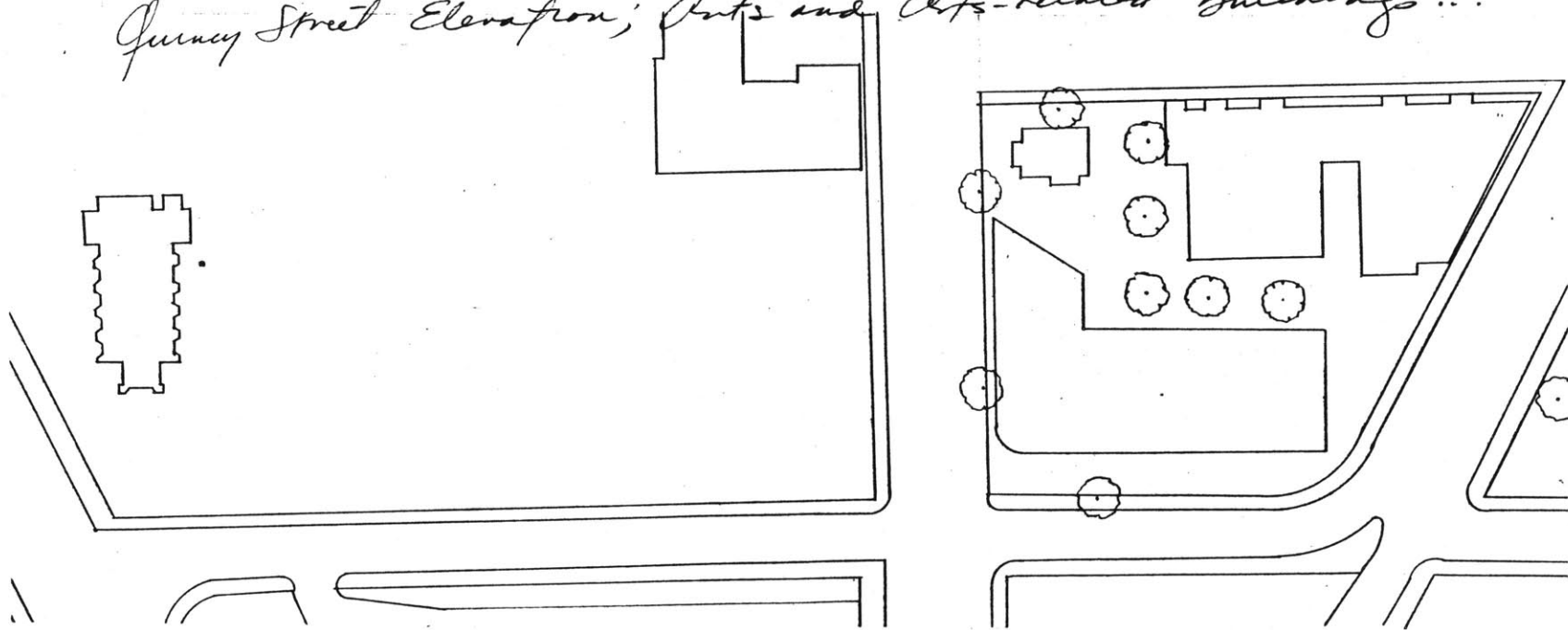
Quincy Street Elevation, facing Harvard Yard

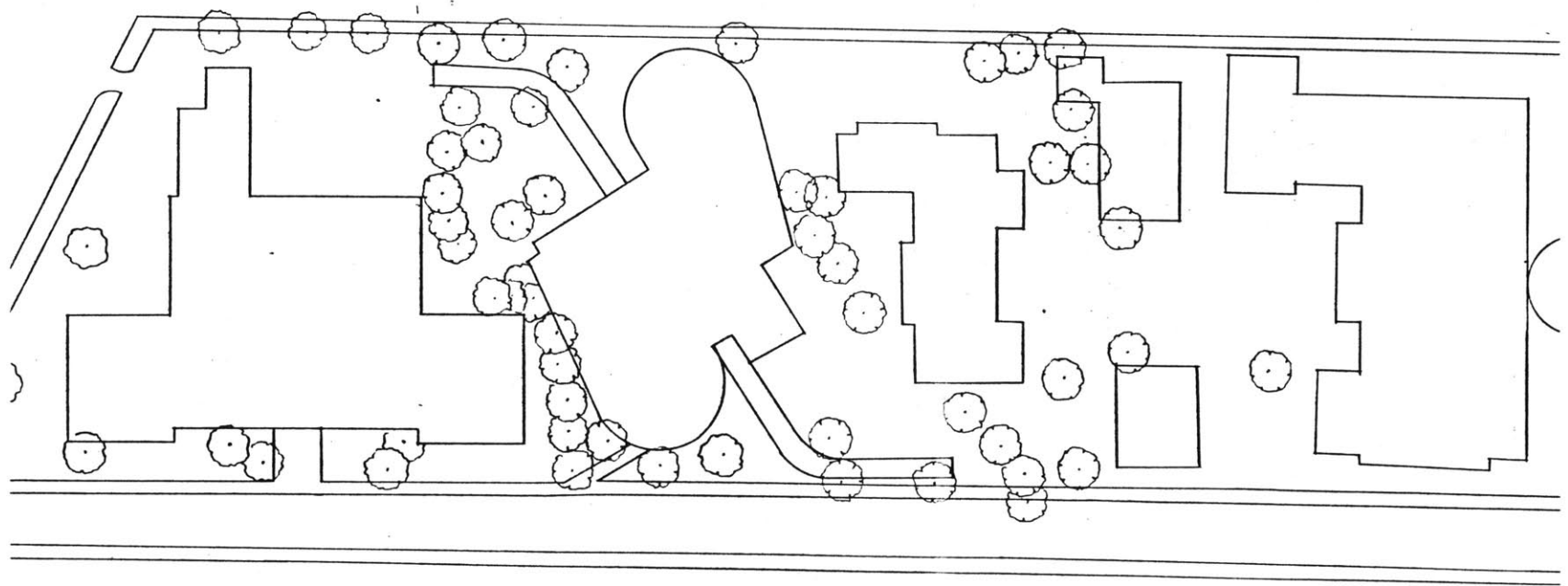
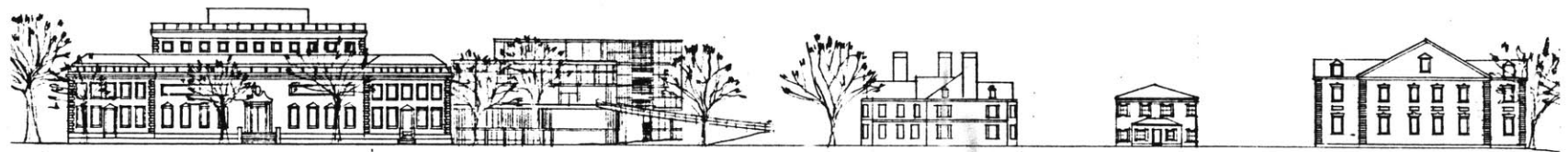


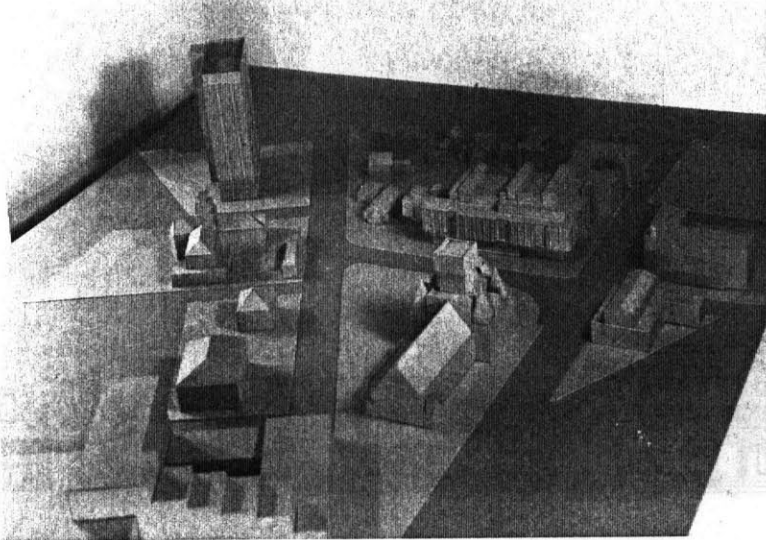
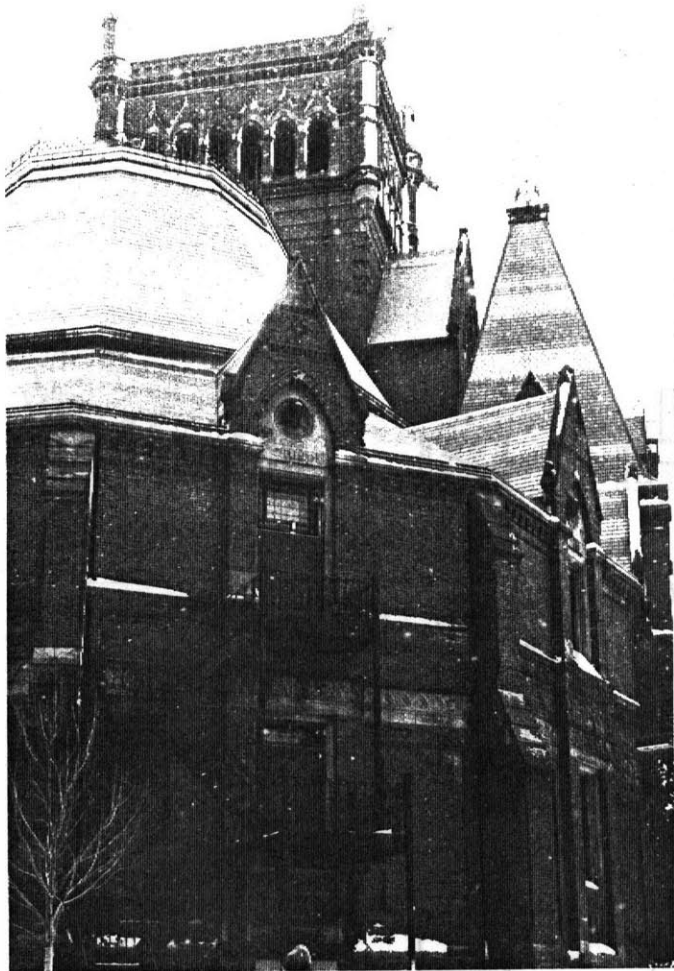


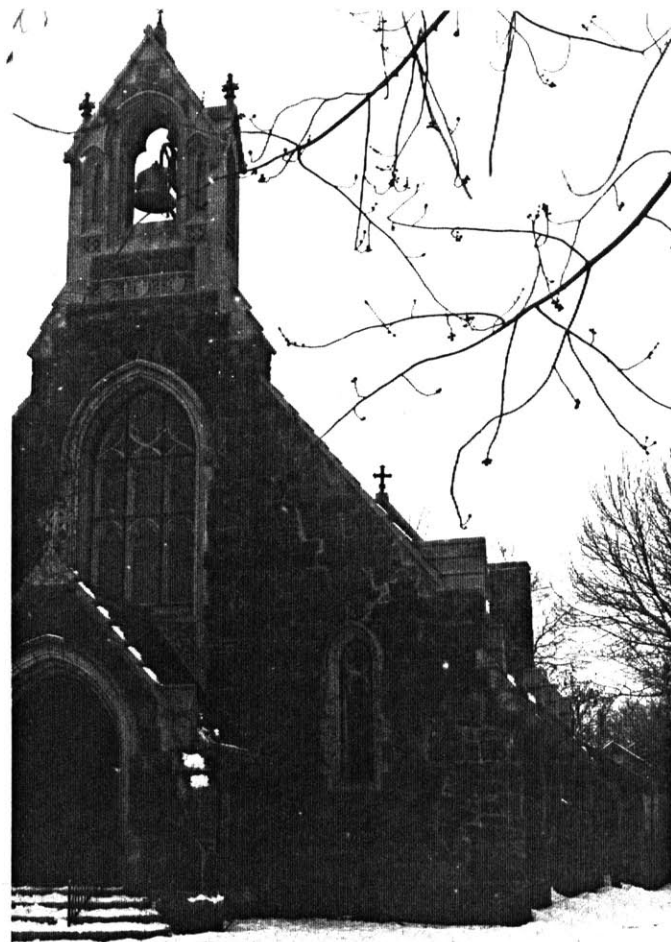


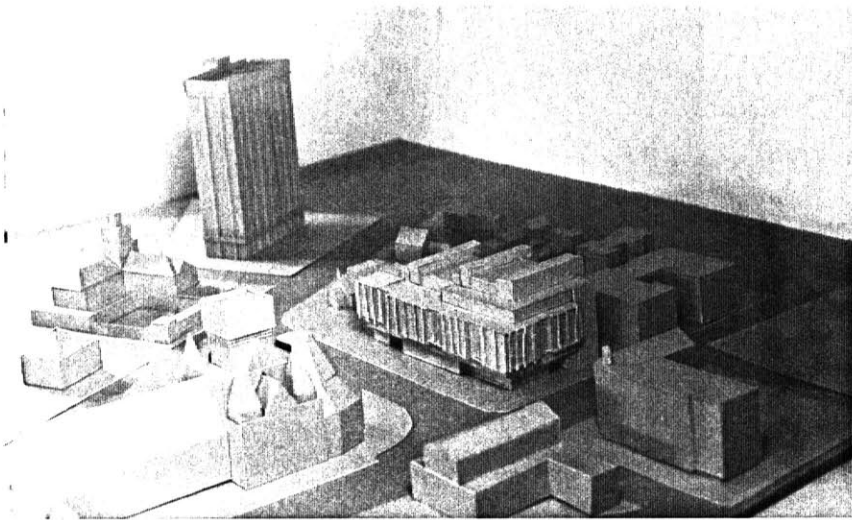
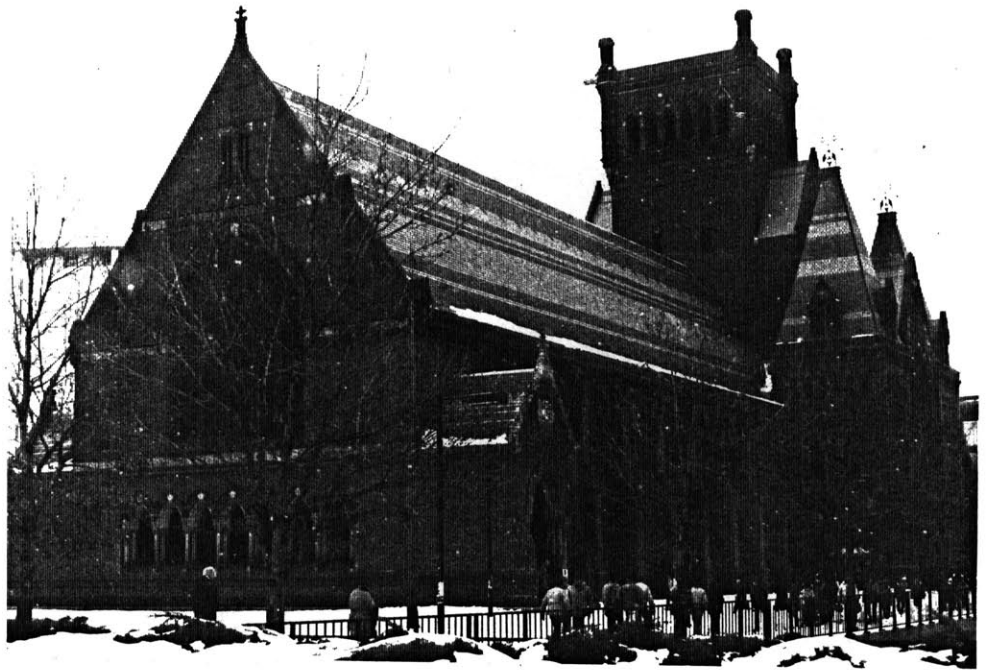
Quincy Street Elevation; Arts and Arts-related buildings ...

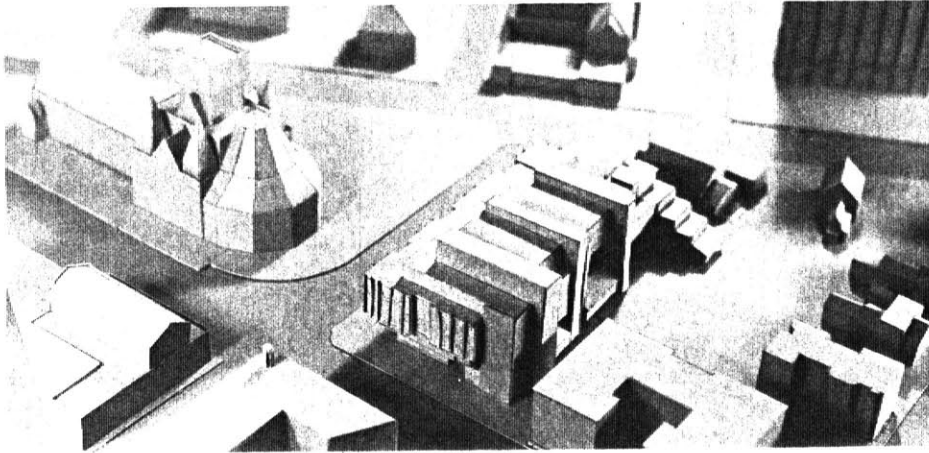


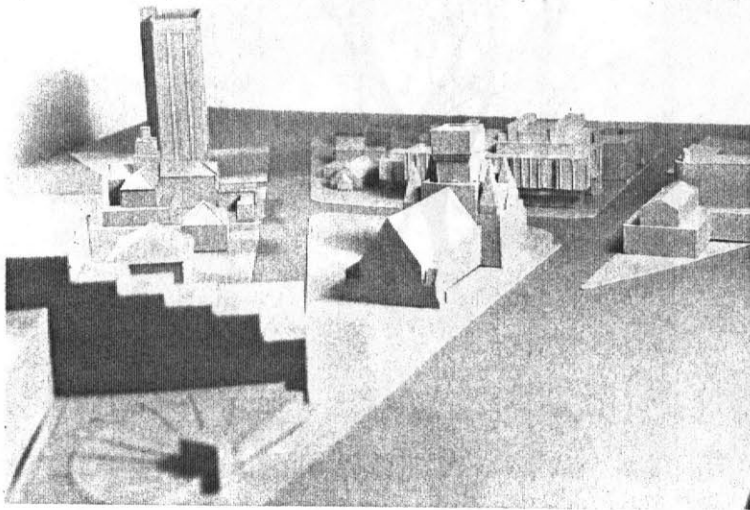
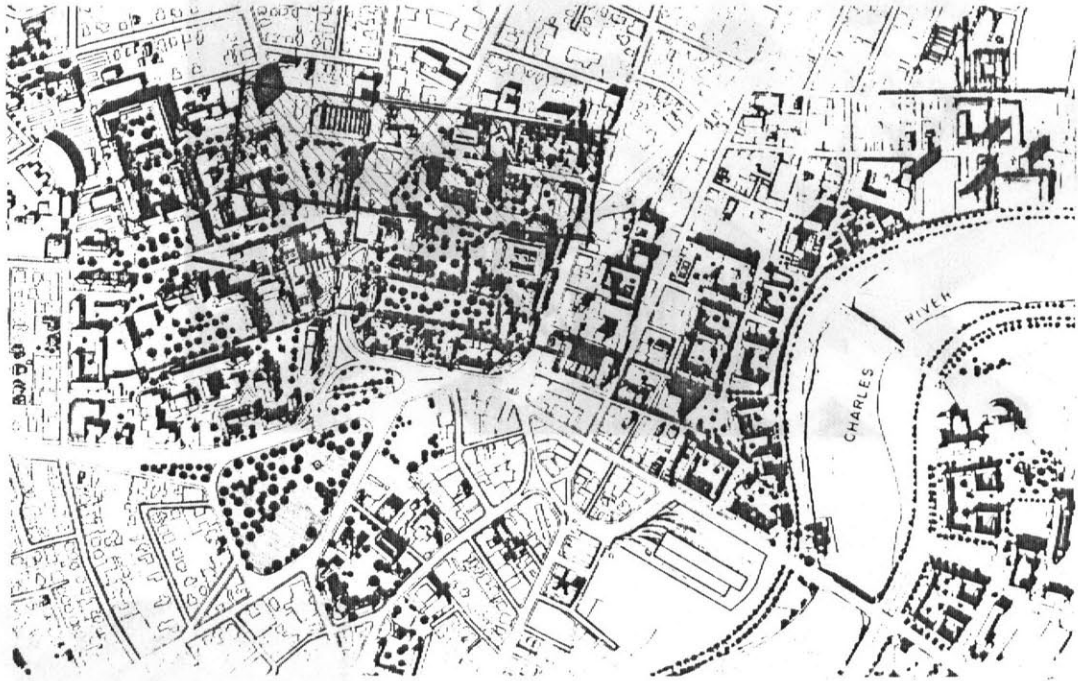


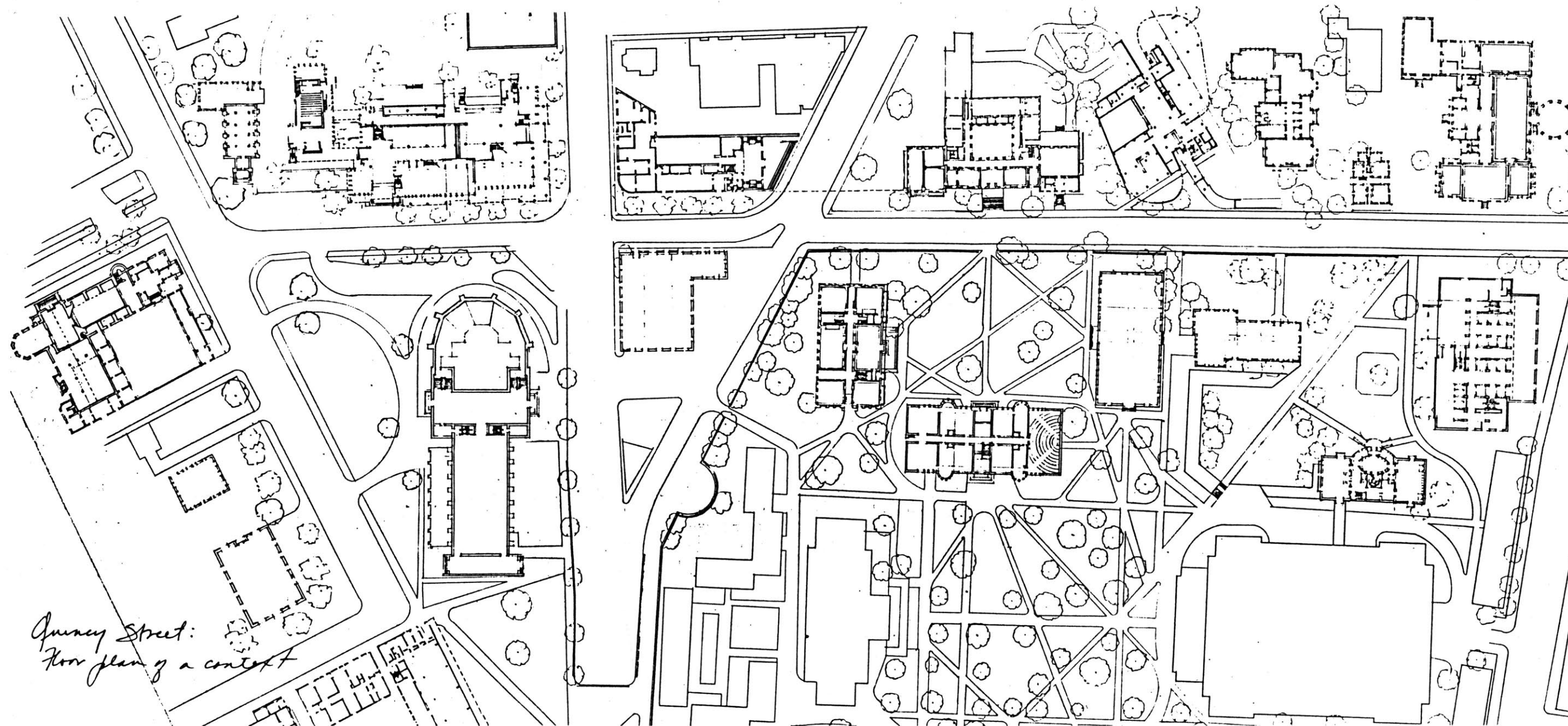




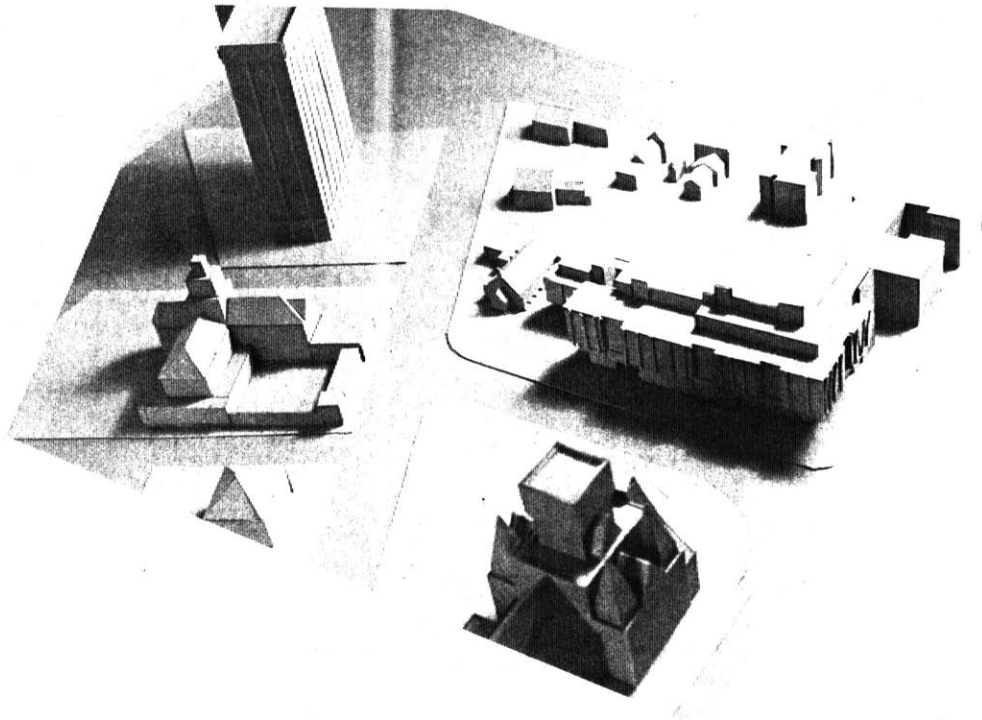
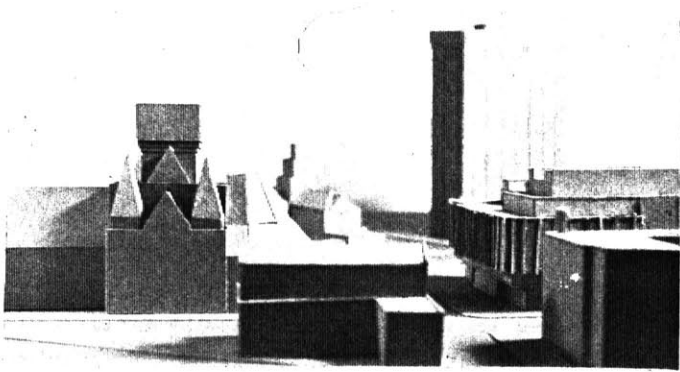




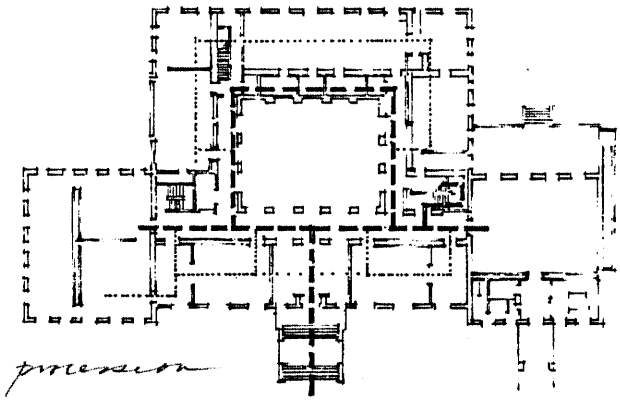




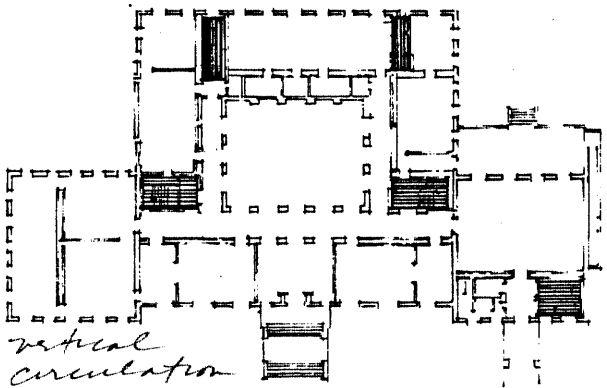
*Quincey Street:
Floor plan of a context*



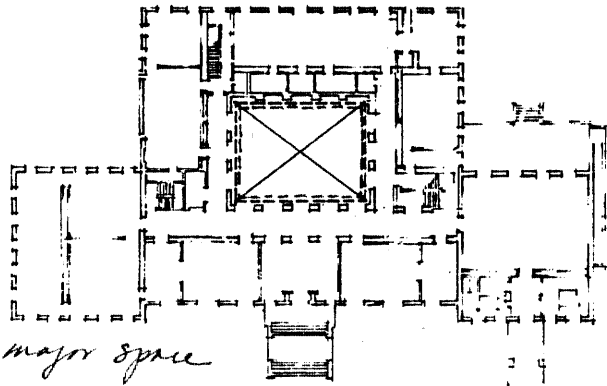
Fogg Art Museum



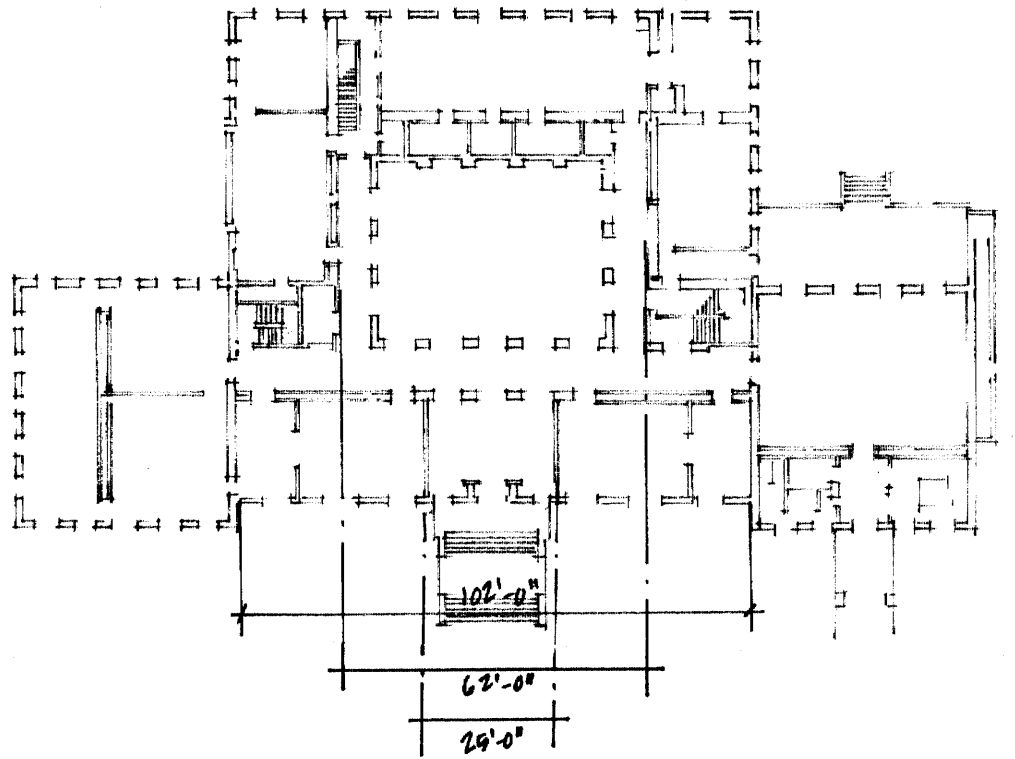
circulation



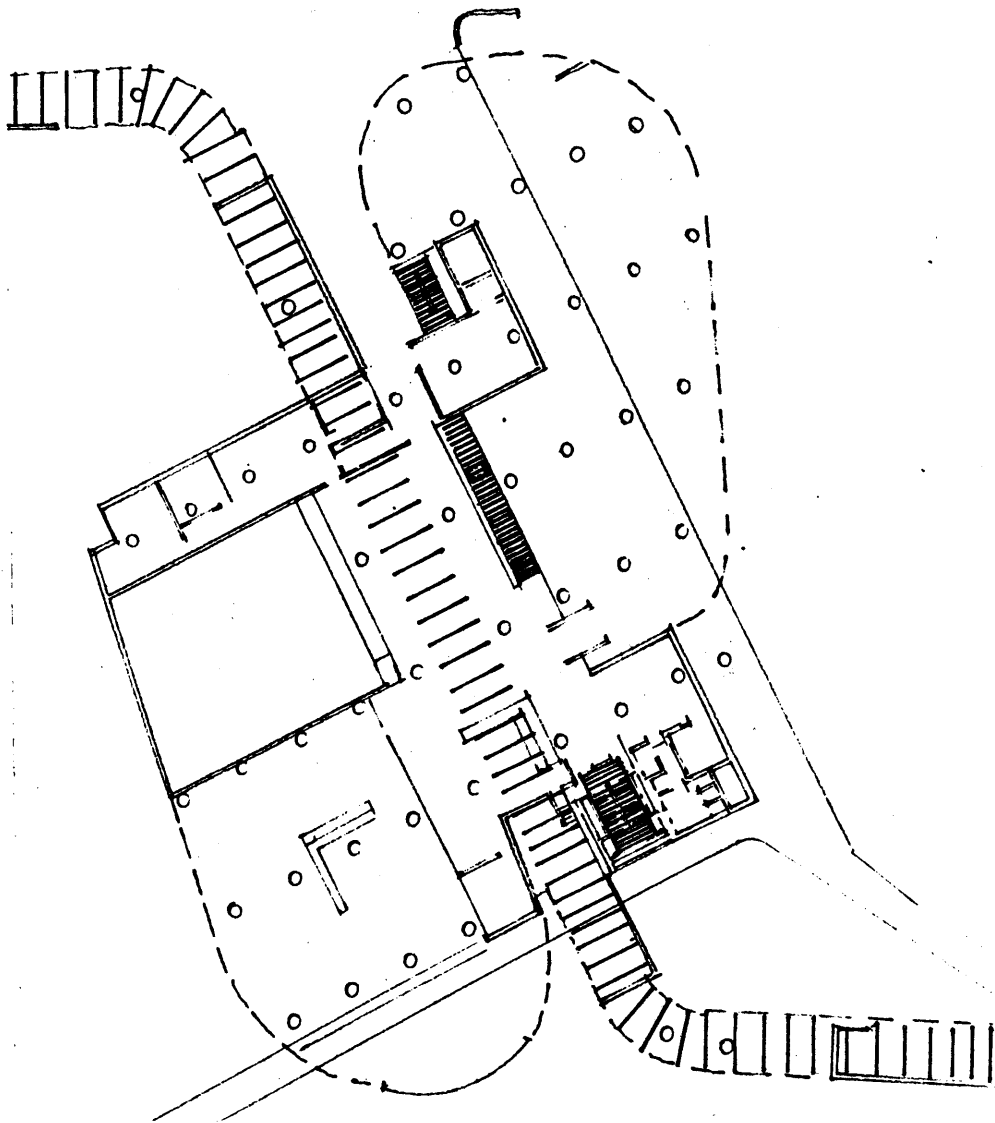
vertical circulation



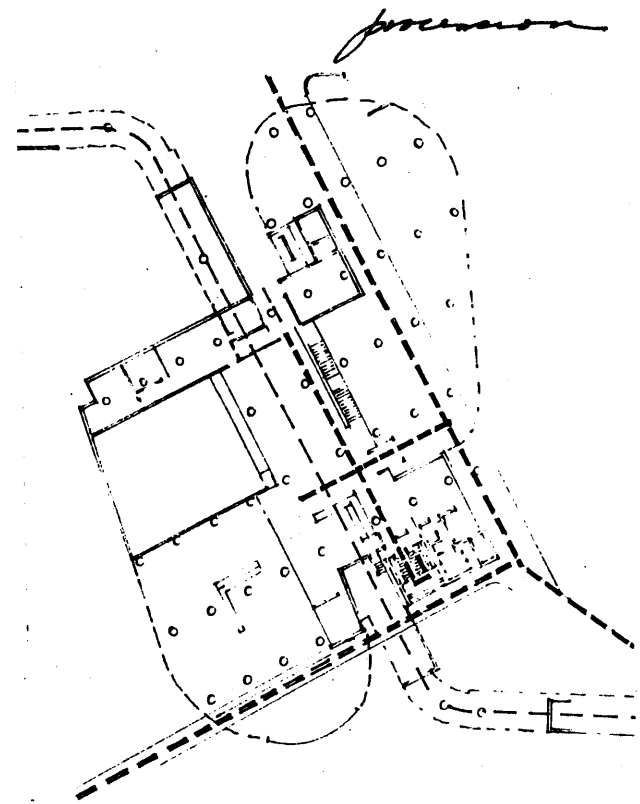
major space



*Cooper's Centre for the
Visual Arts*

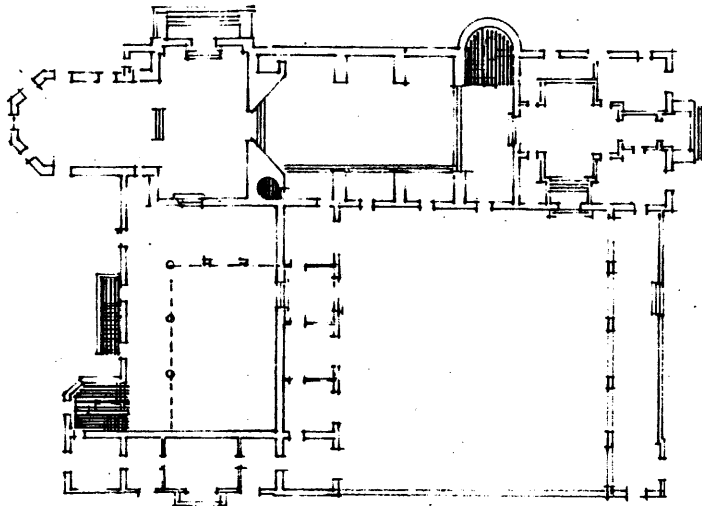
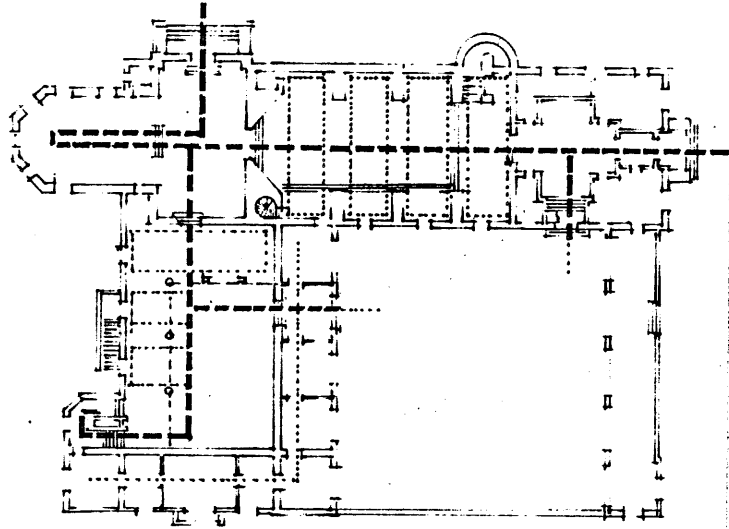


vertical circulation



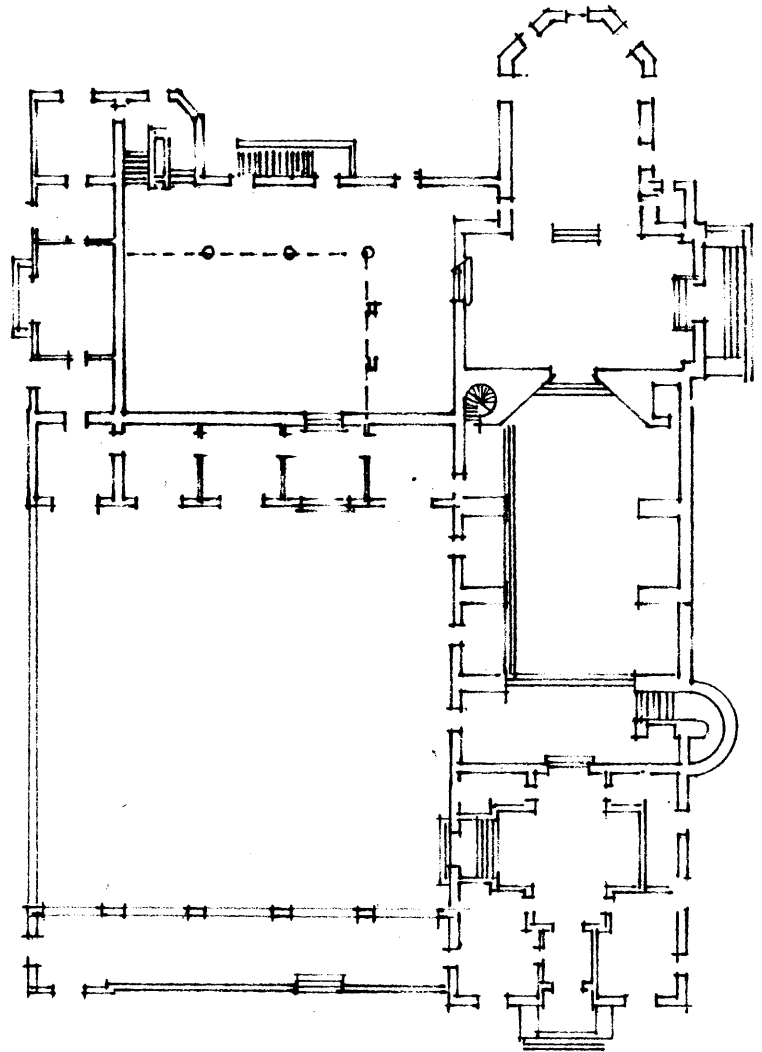
circulation

procession

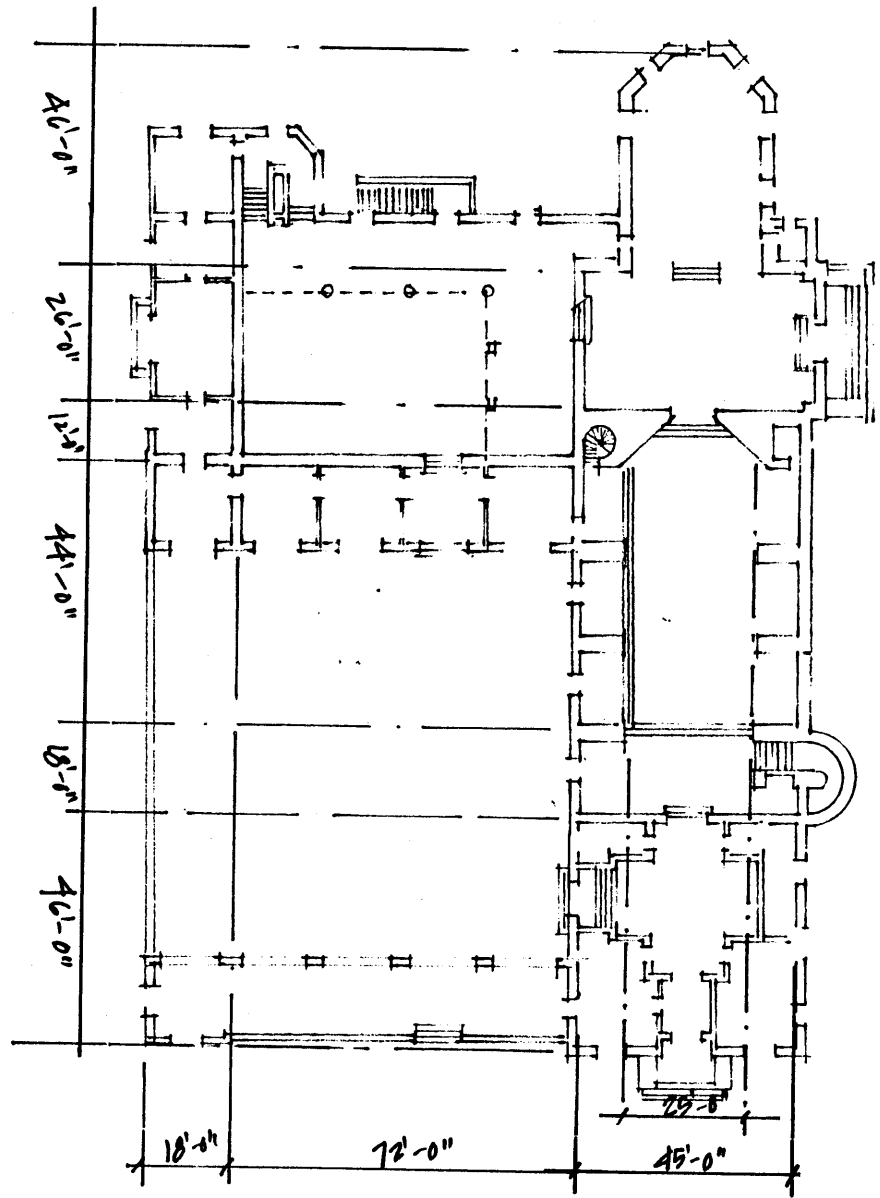
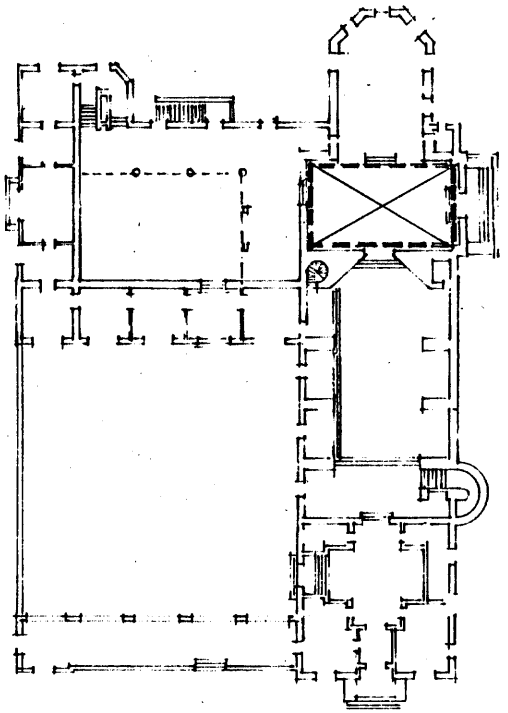


vertical circulation

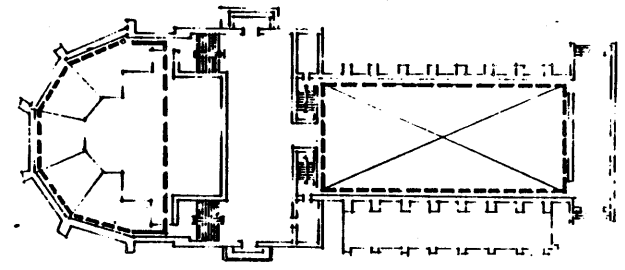
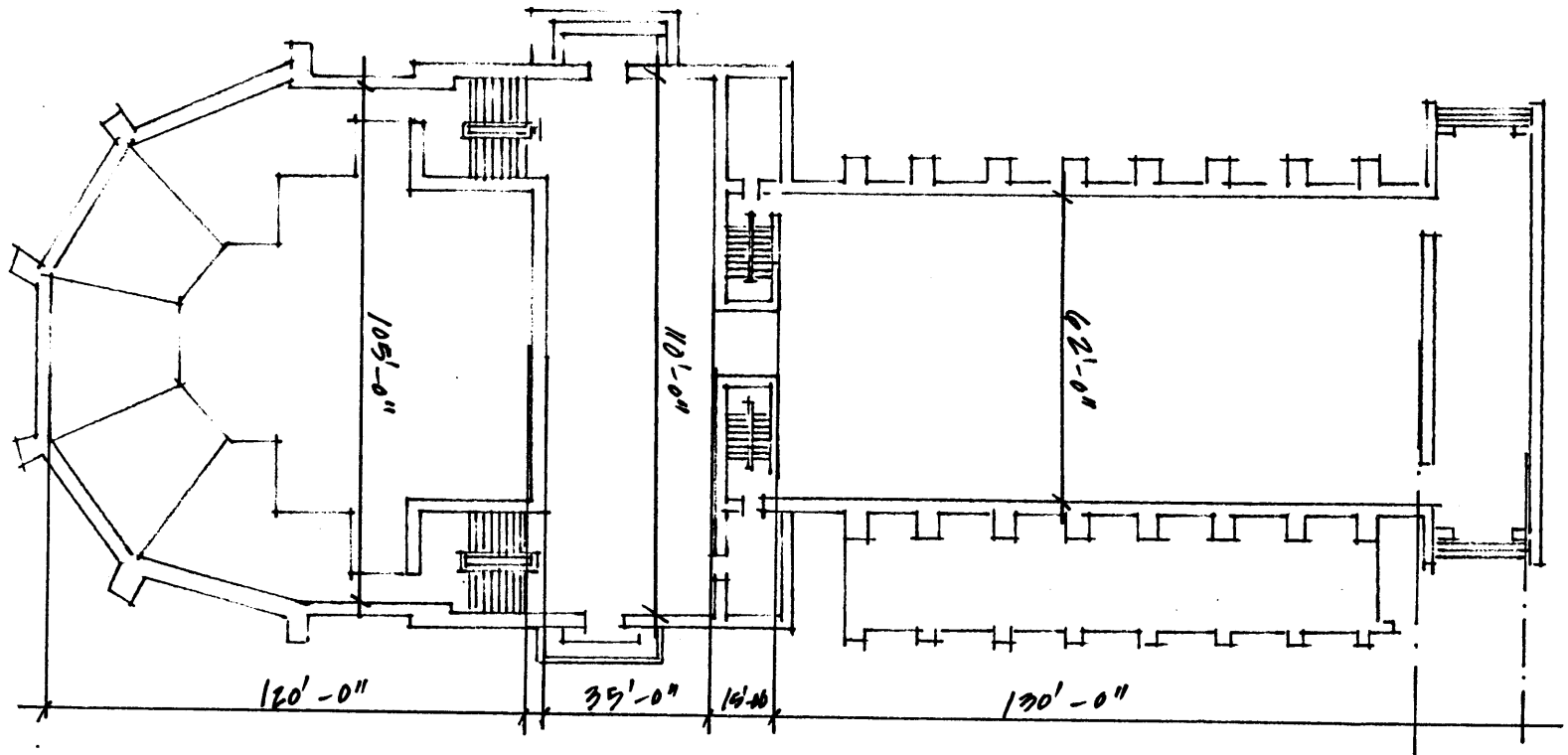
Busch Reisinger Museum



major space

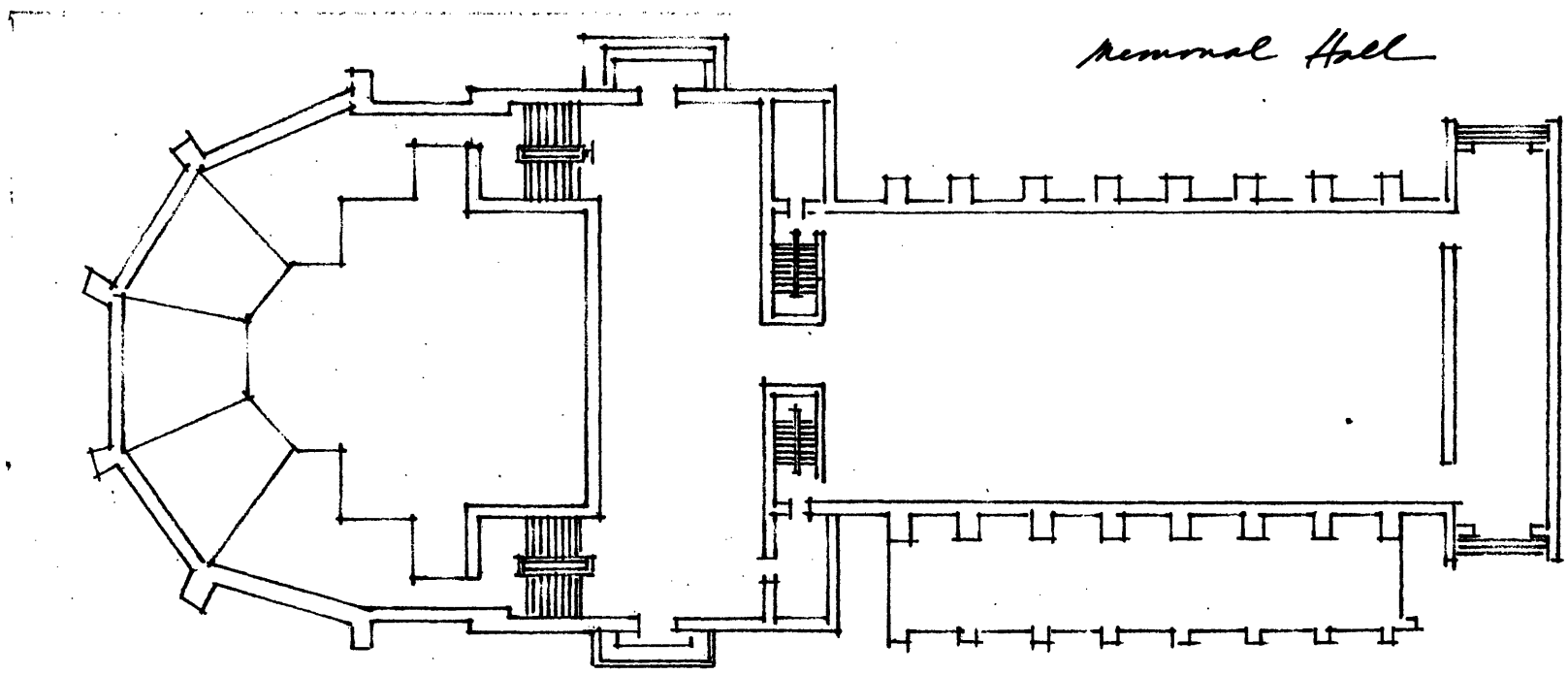


Busch Reisinger Museum

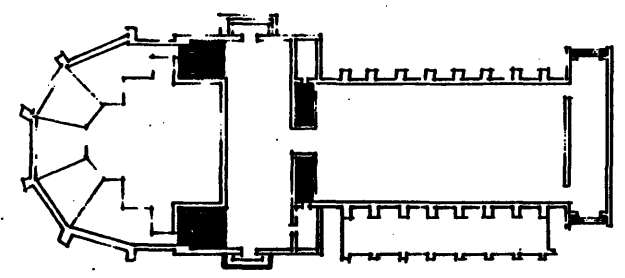


Memorial Hall

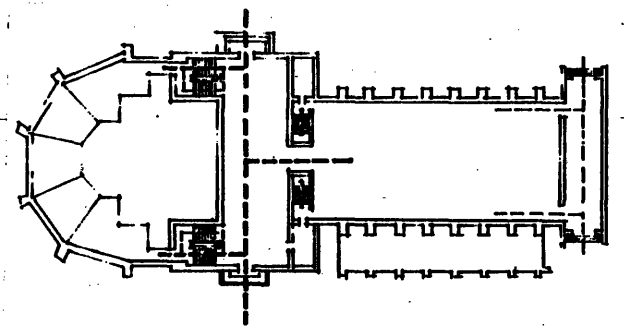
major spaces



Remond Hall



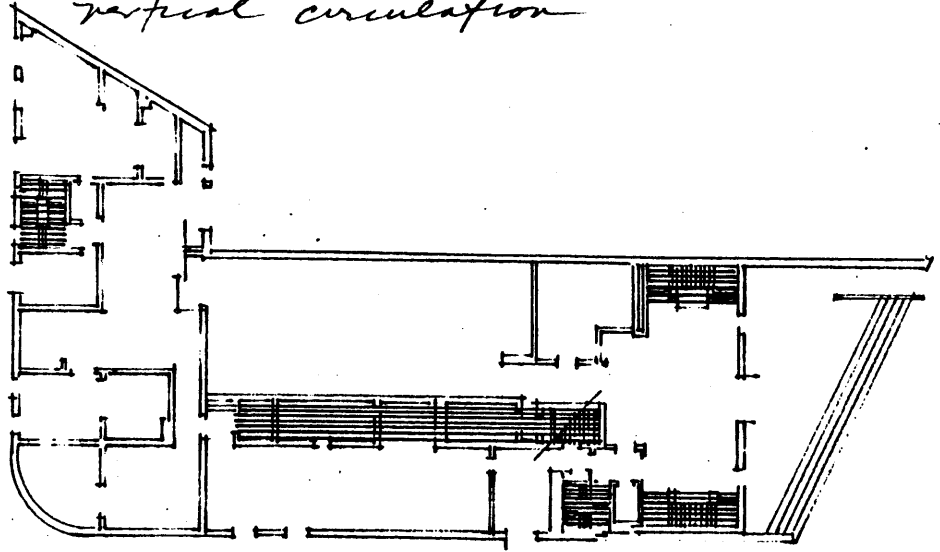
vertical circulation



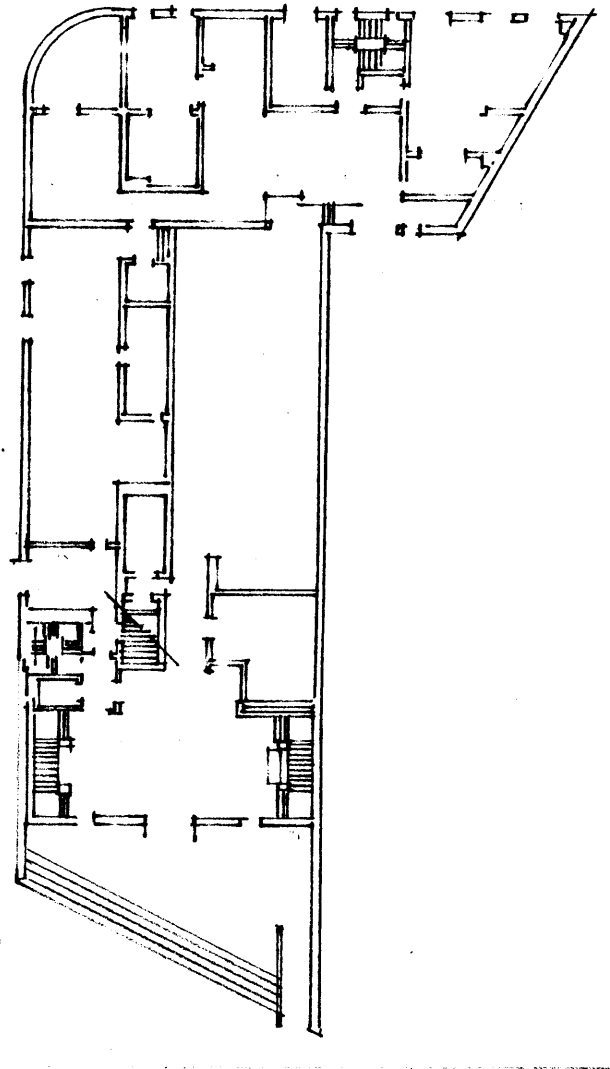
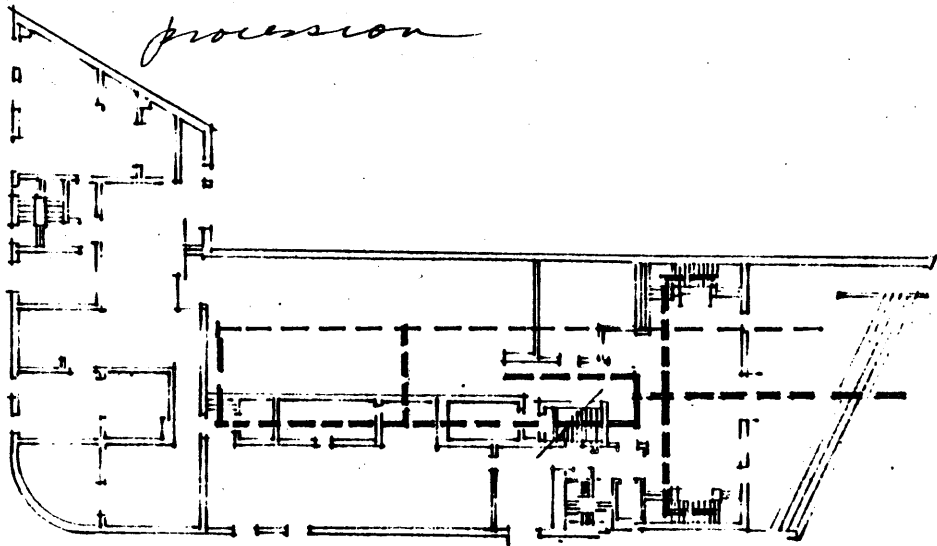
procession

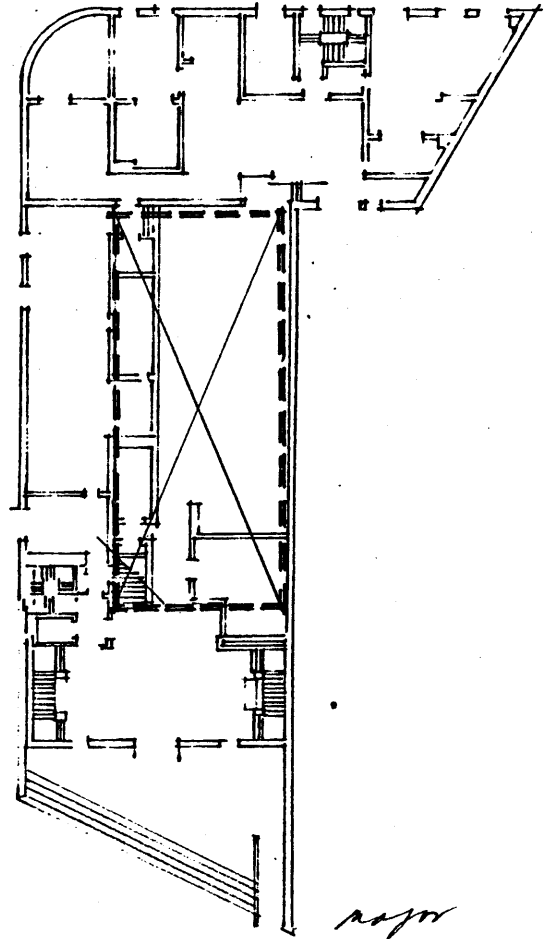
Addition, Foggy Art Museum

vertical circulation



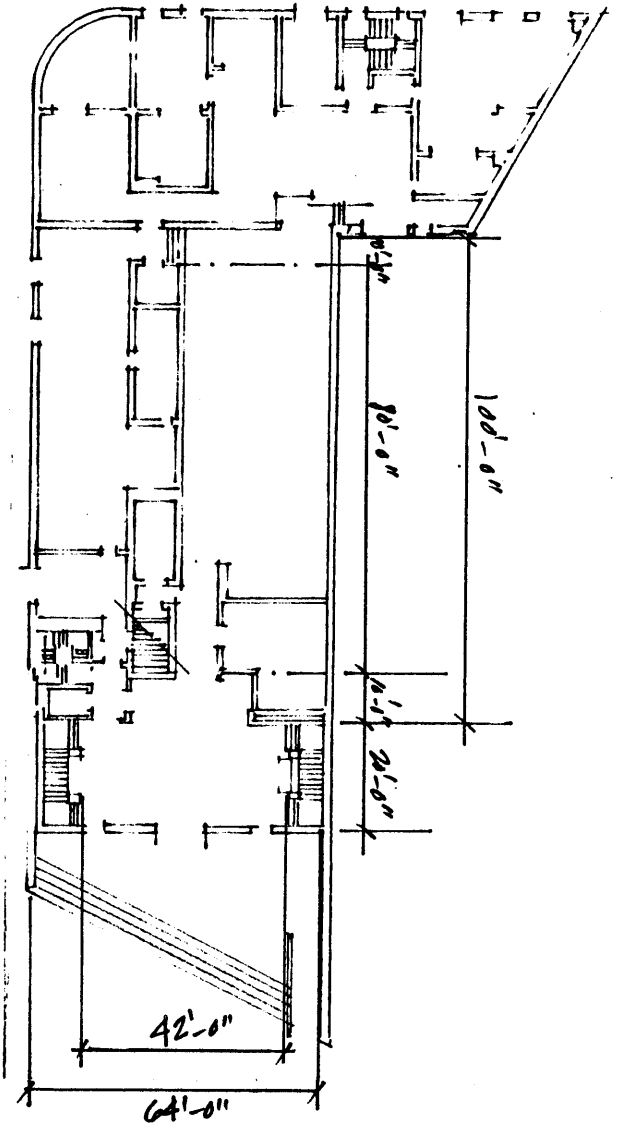
procession





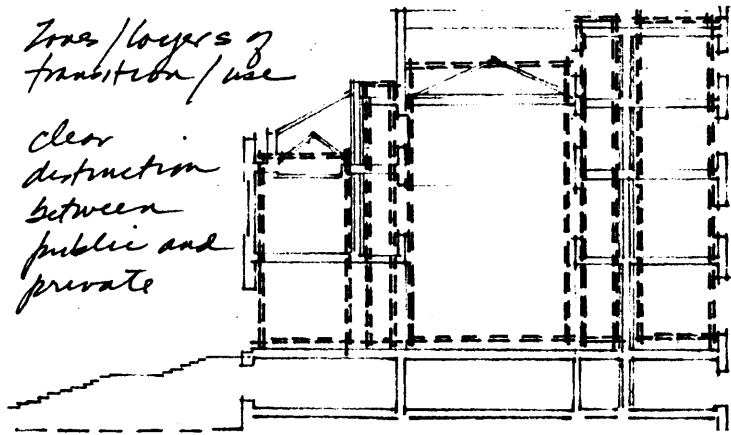
*open
space*

Addition, Fryer Art Museum

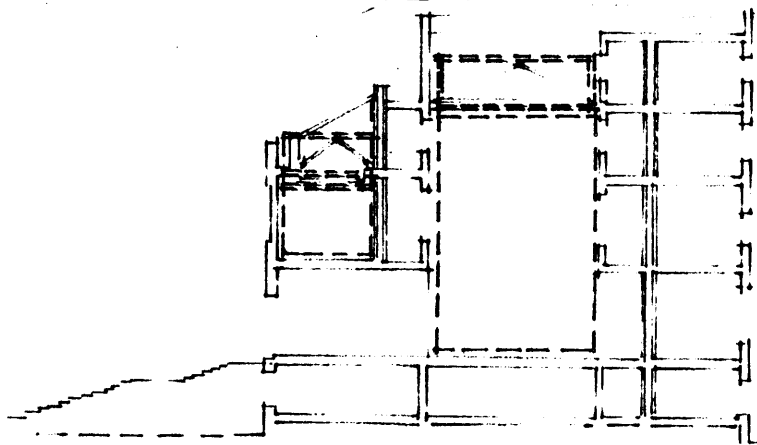
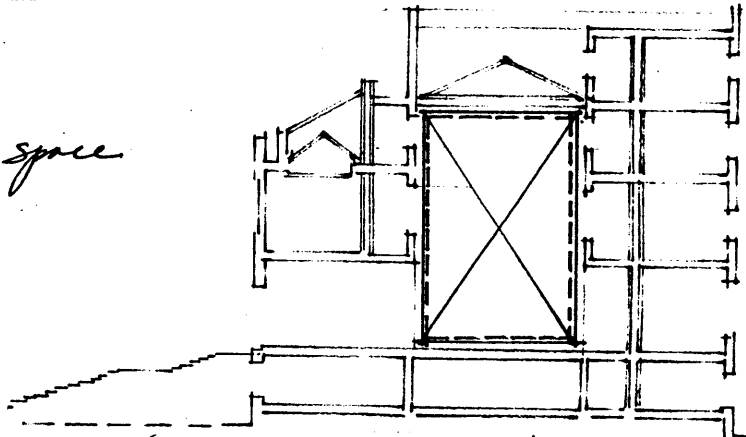


*Zone / layers of
transition / use*

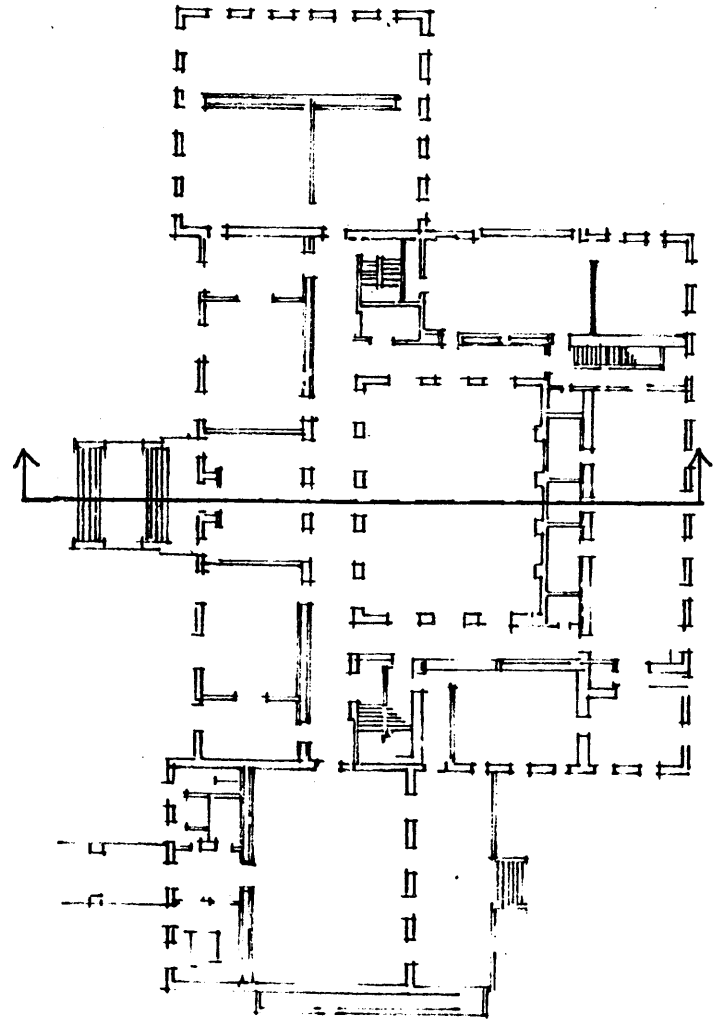
*clear
distinction
between
public and
private*



major space

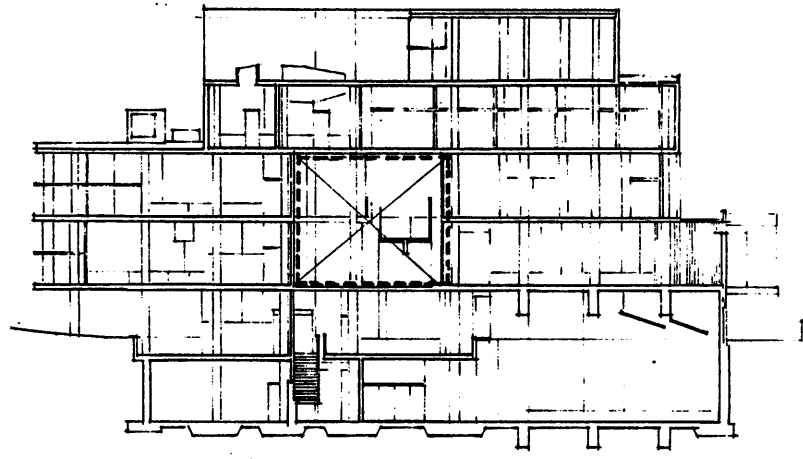


*Fogg Art Museum,
sections*

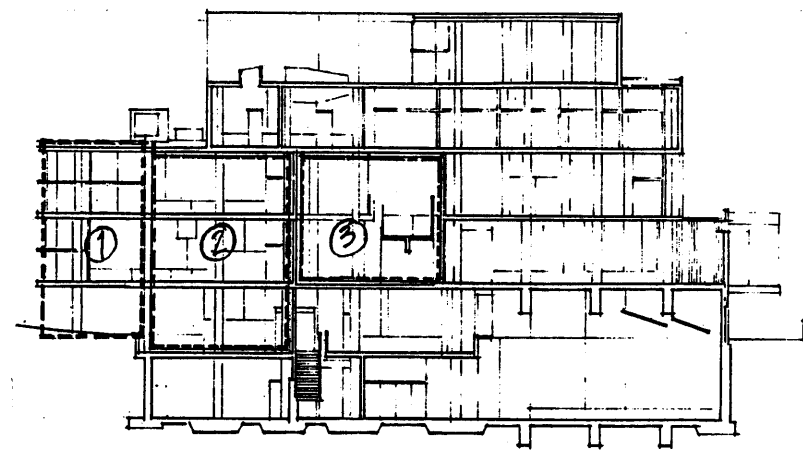


light associated with major use spaces

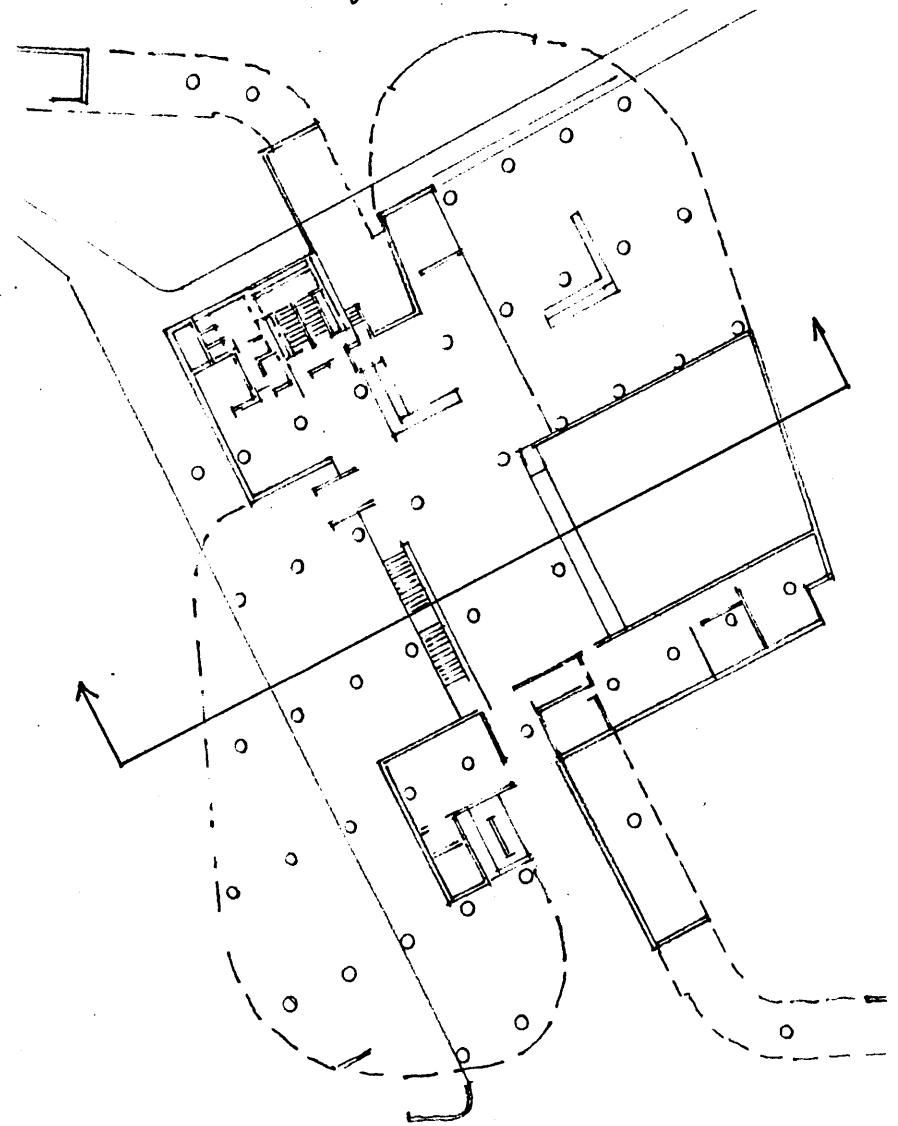
Carpenter Centre, section



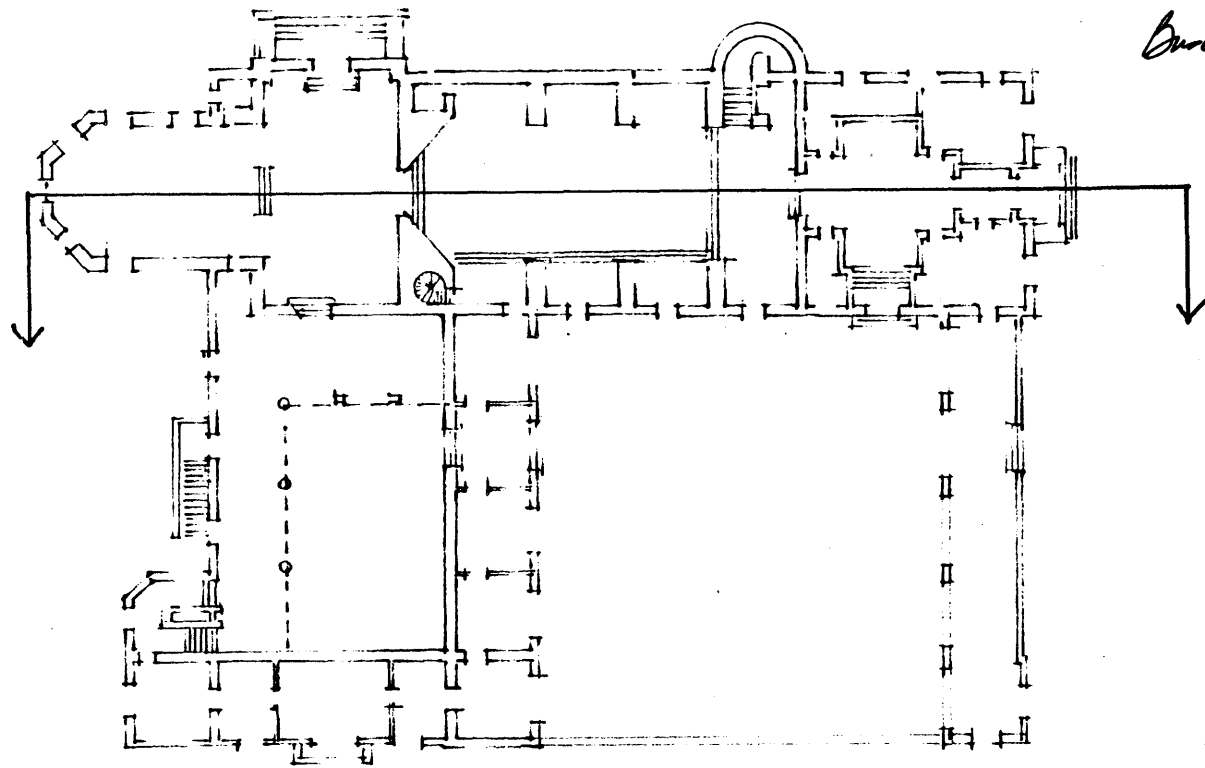
major space



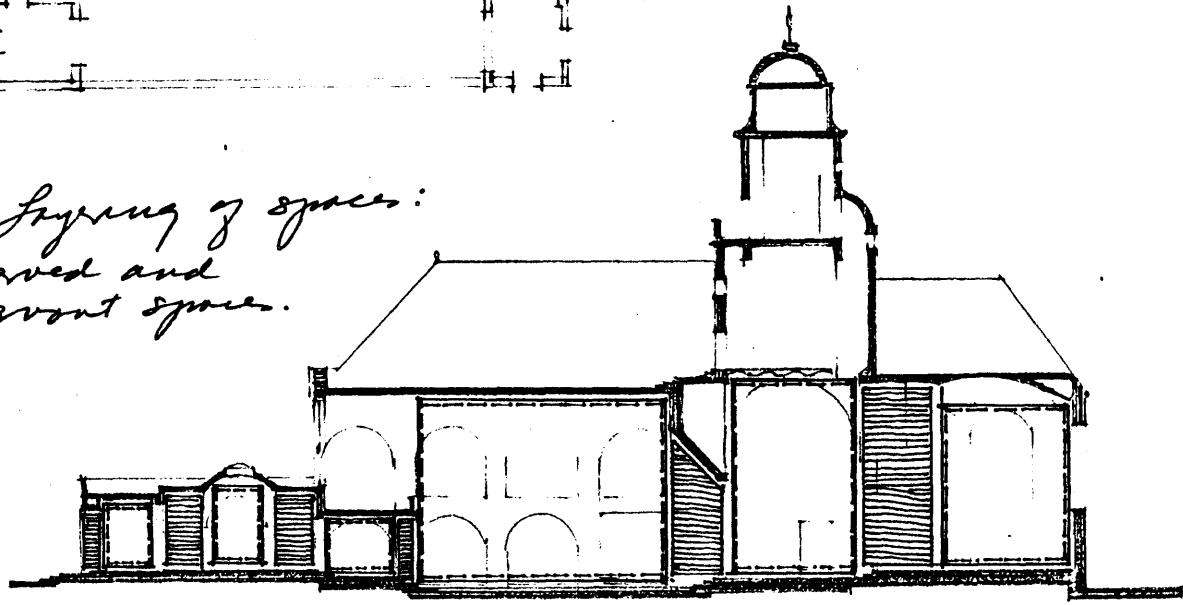
Zones of transition from street to major space

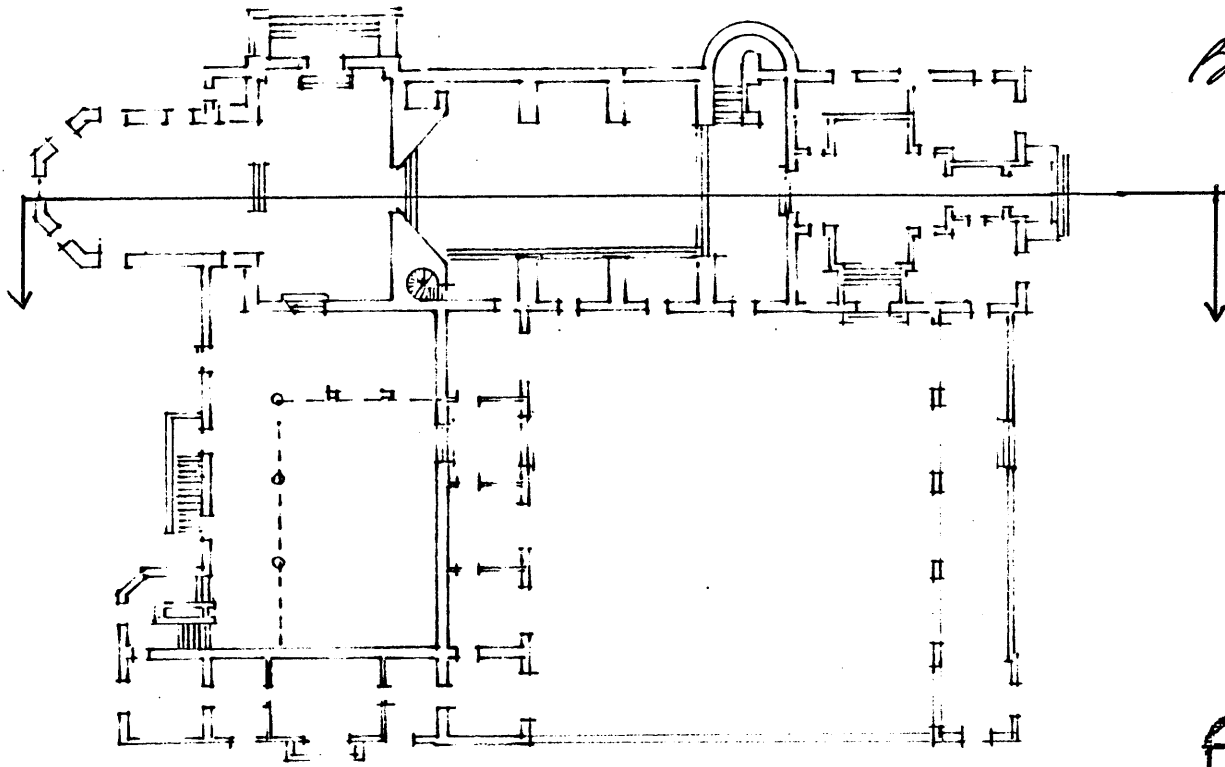


*Brach Piesinger Museum,
section*



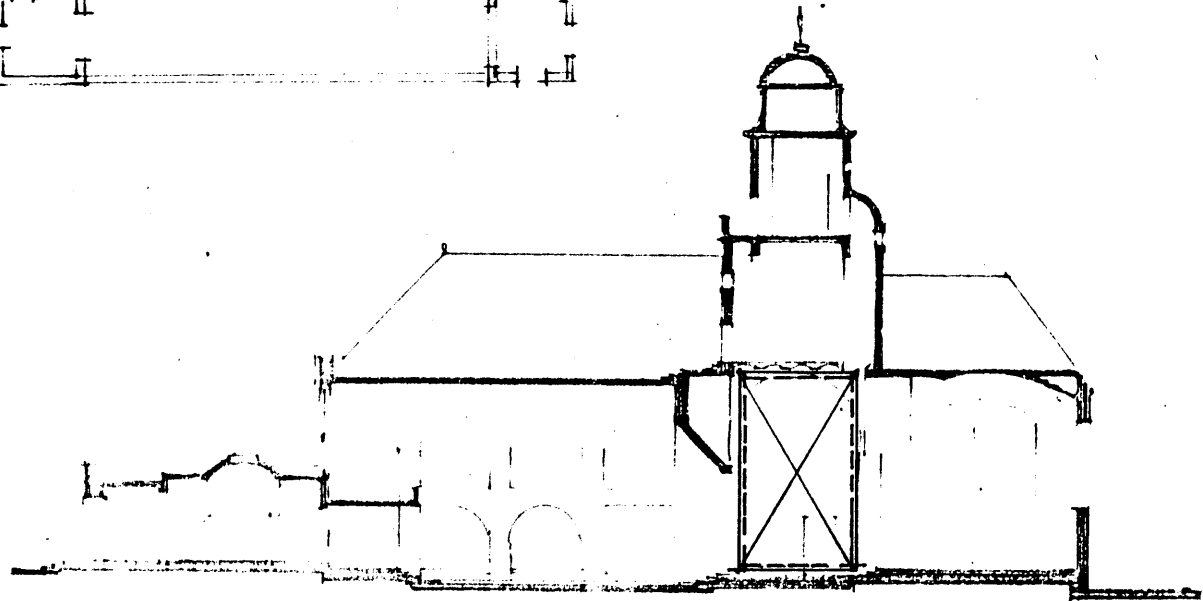
*Spacing of spaces:
served and
servant spaces.*



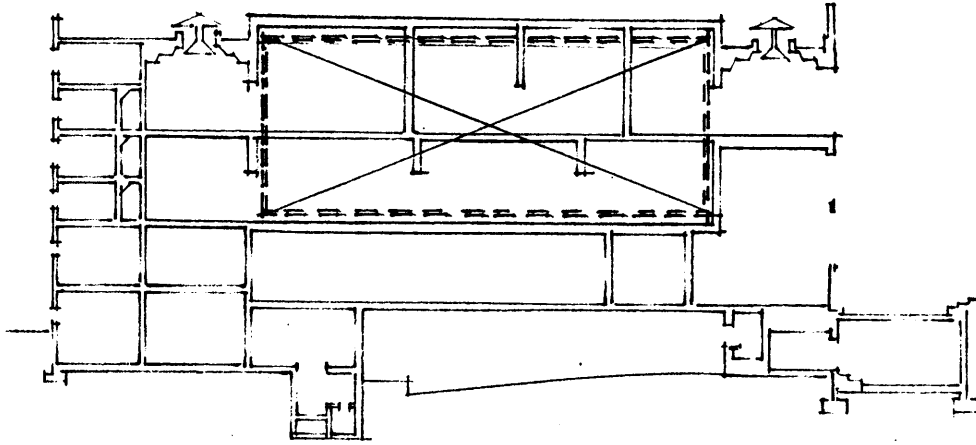


*Busch Reisinger
Museum,
section*

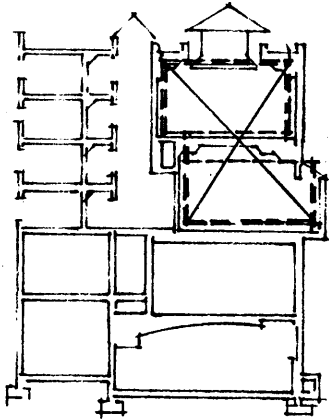
major space



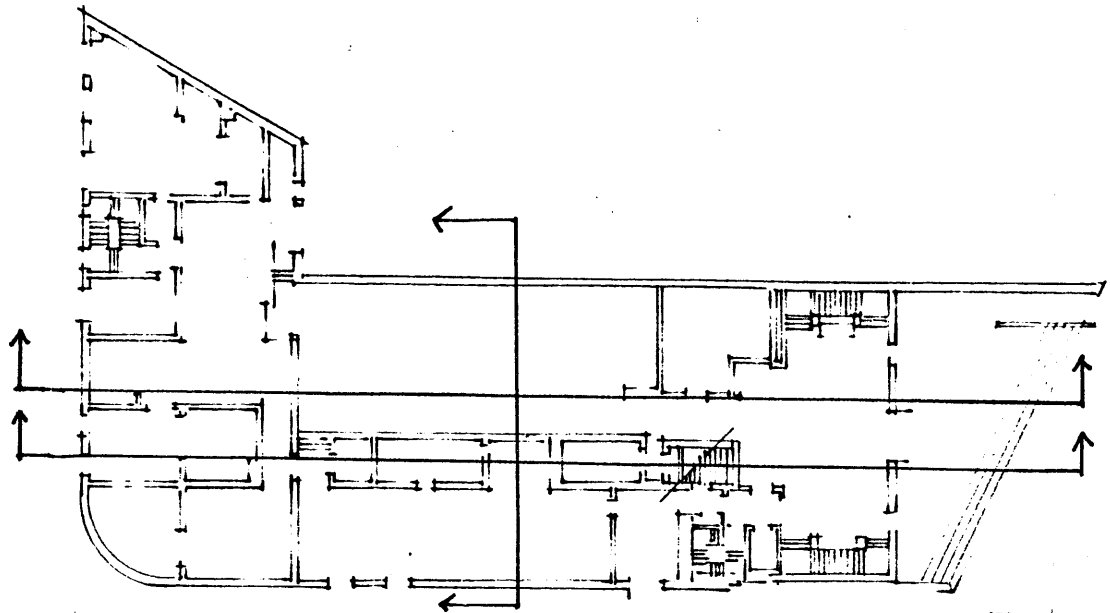
Addition, Foggy Post
Museum ; section

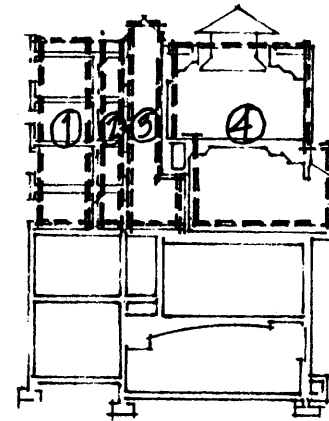
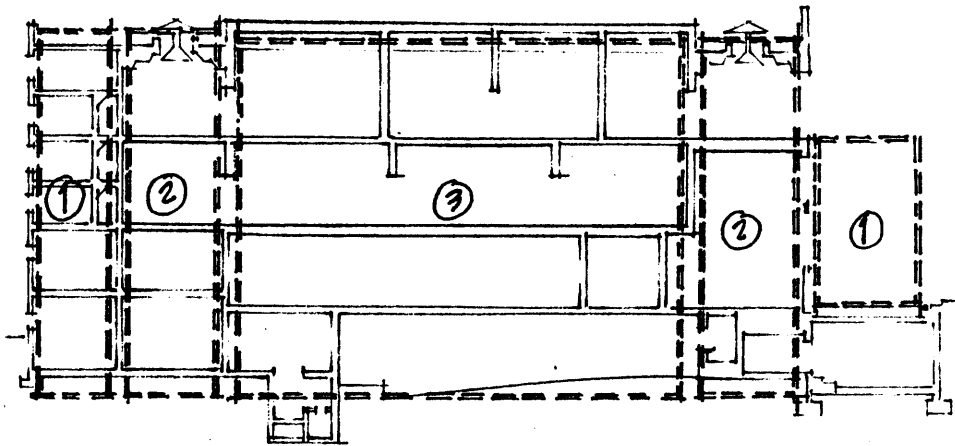


major spaces

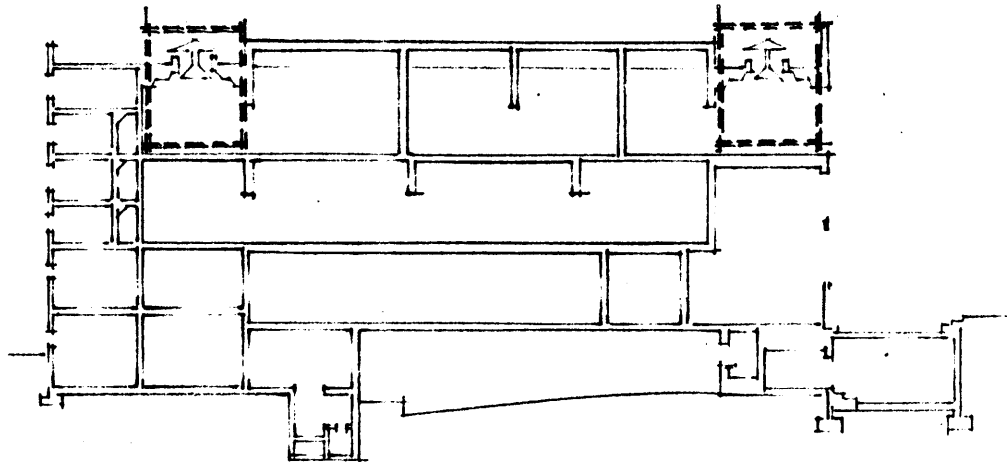
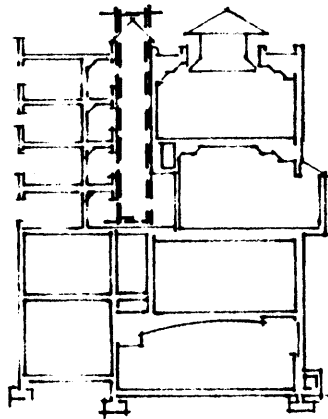


major spaces

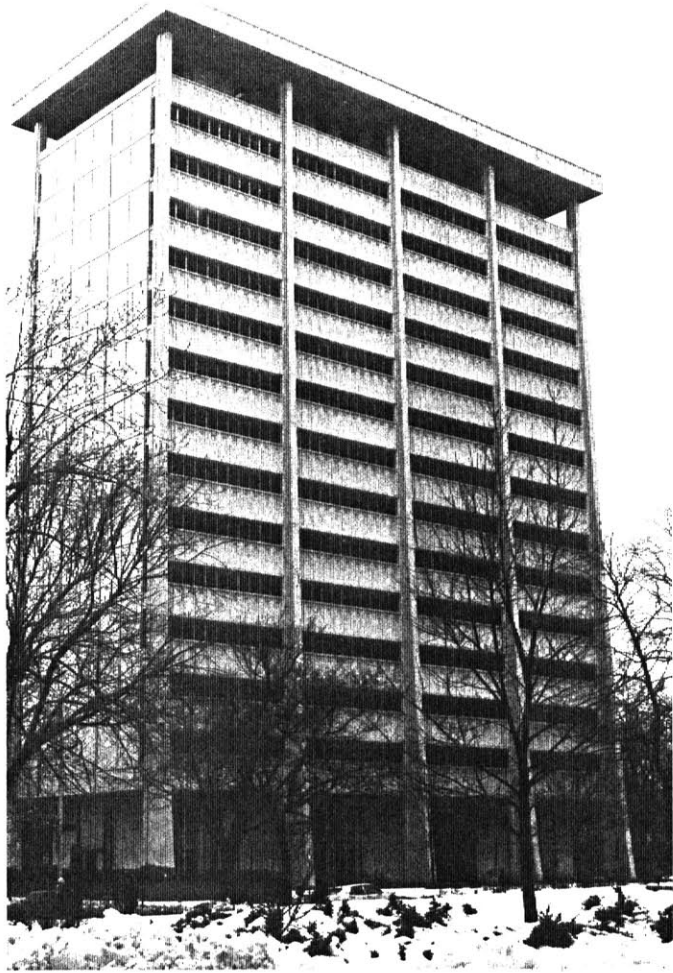


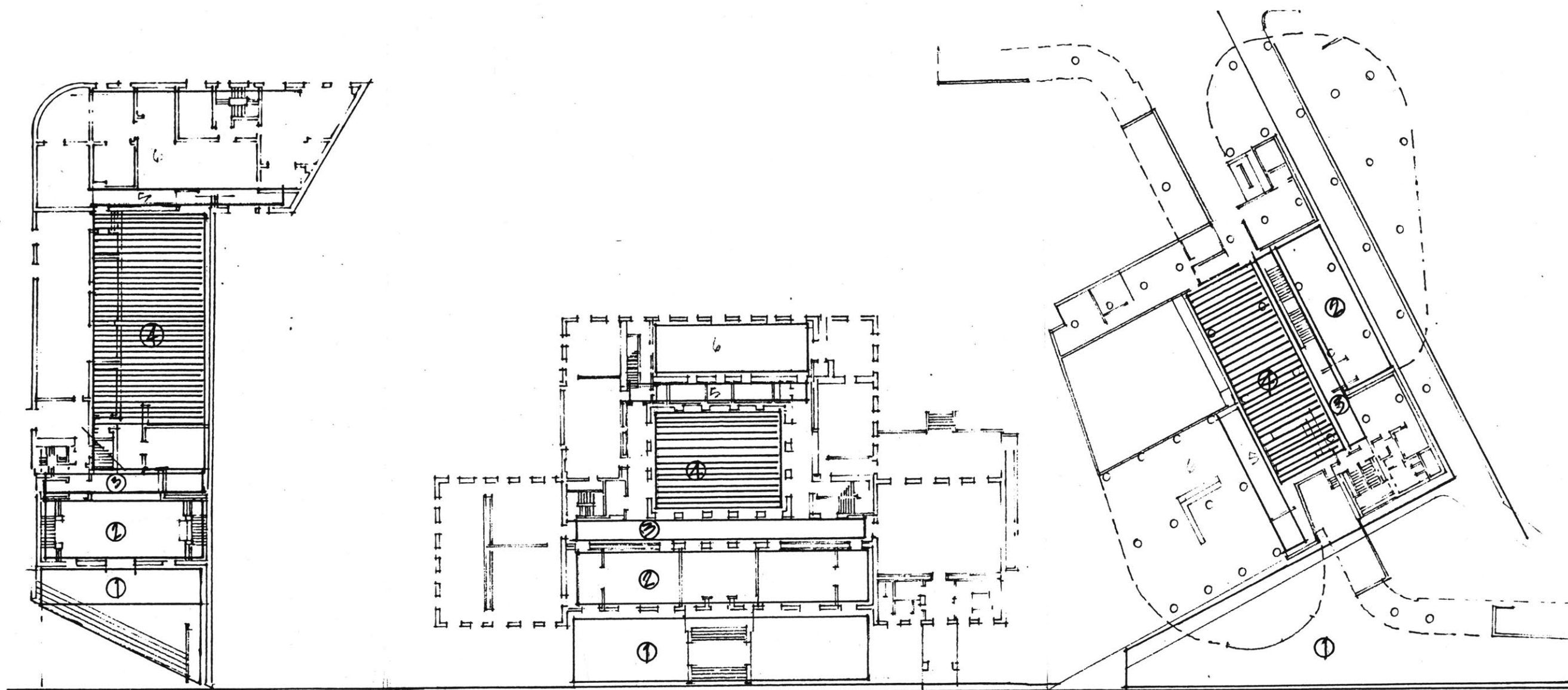


*Zones of transition / paved and servant
spaces from street to interior public space*



*Light marks fronts of public
circulation / change of program*

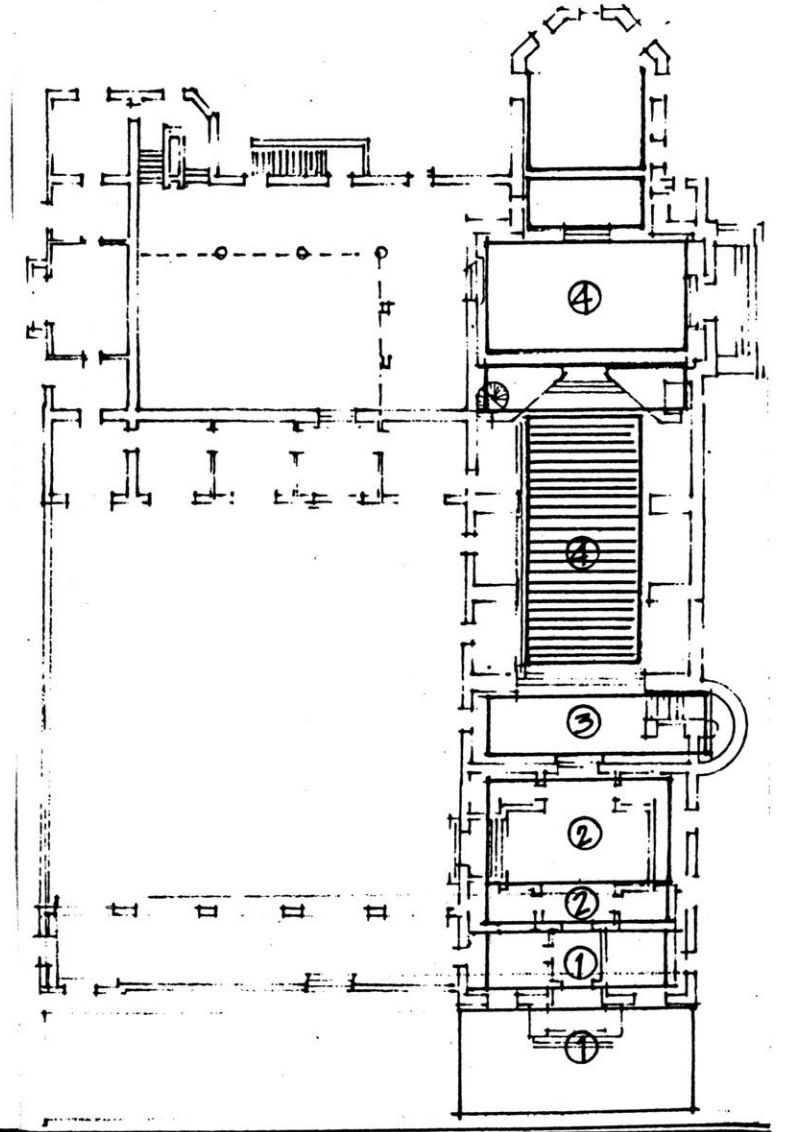
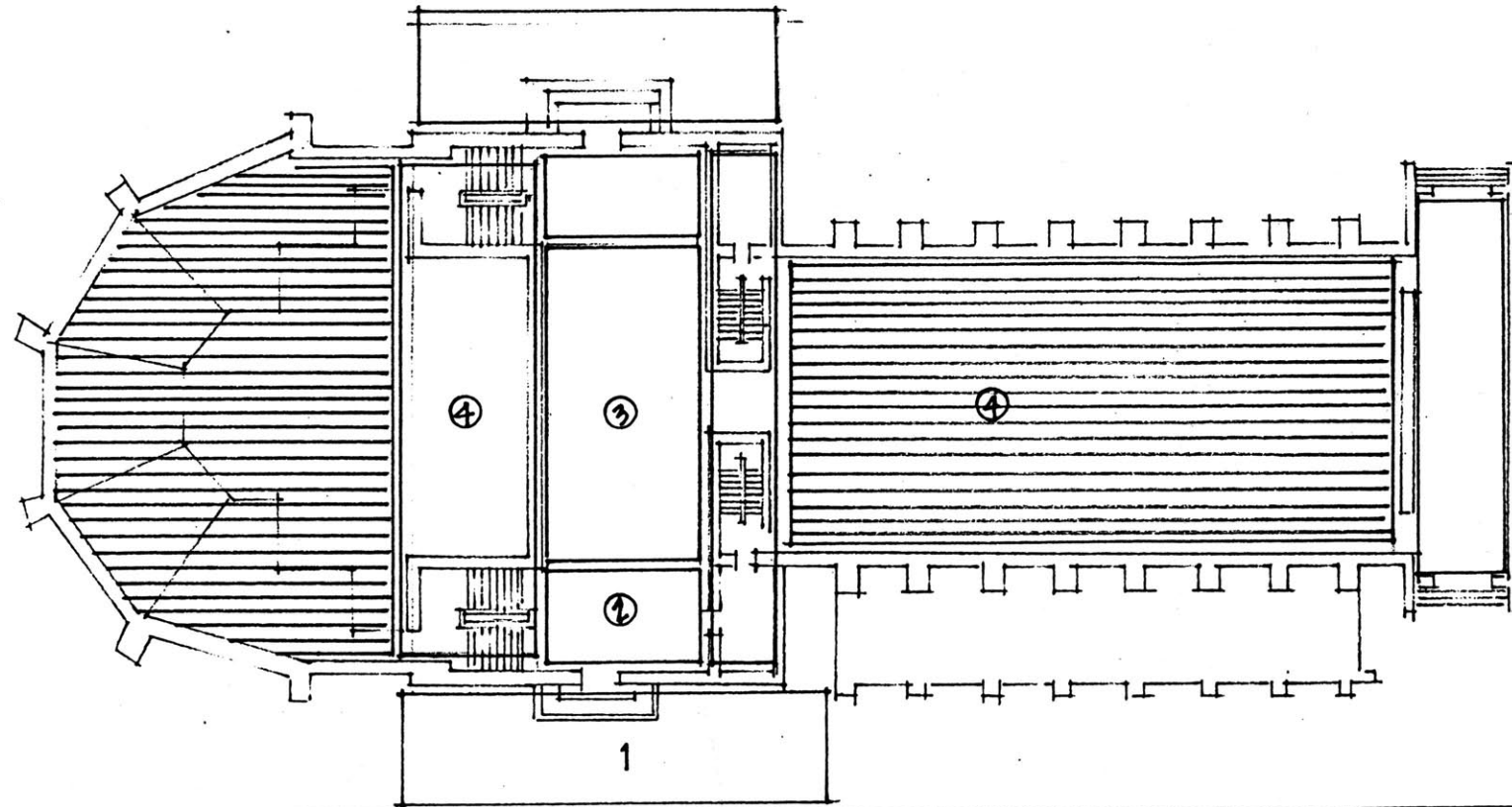


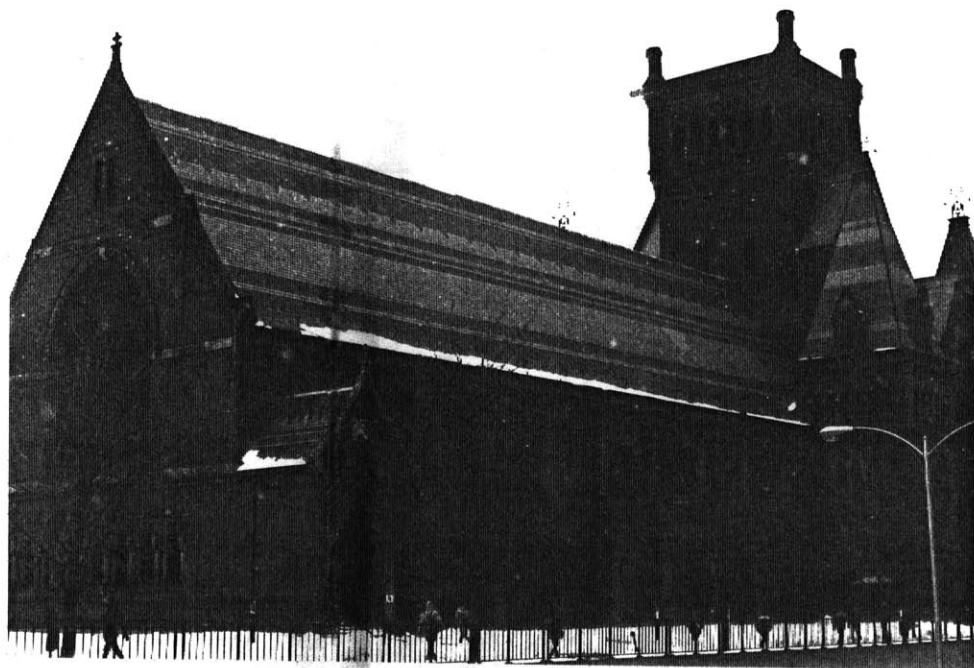


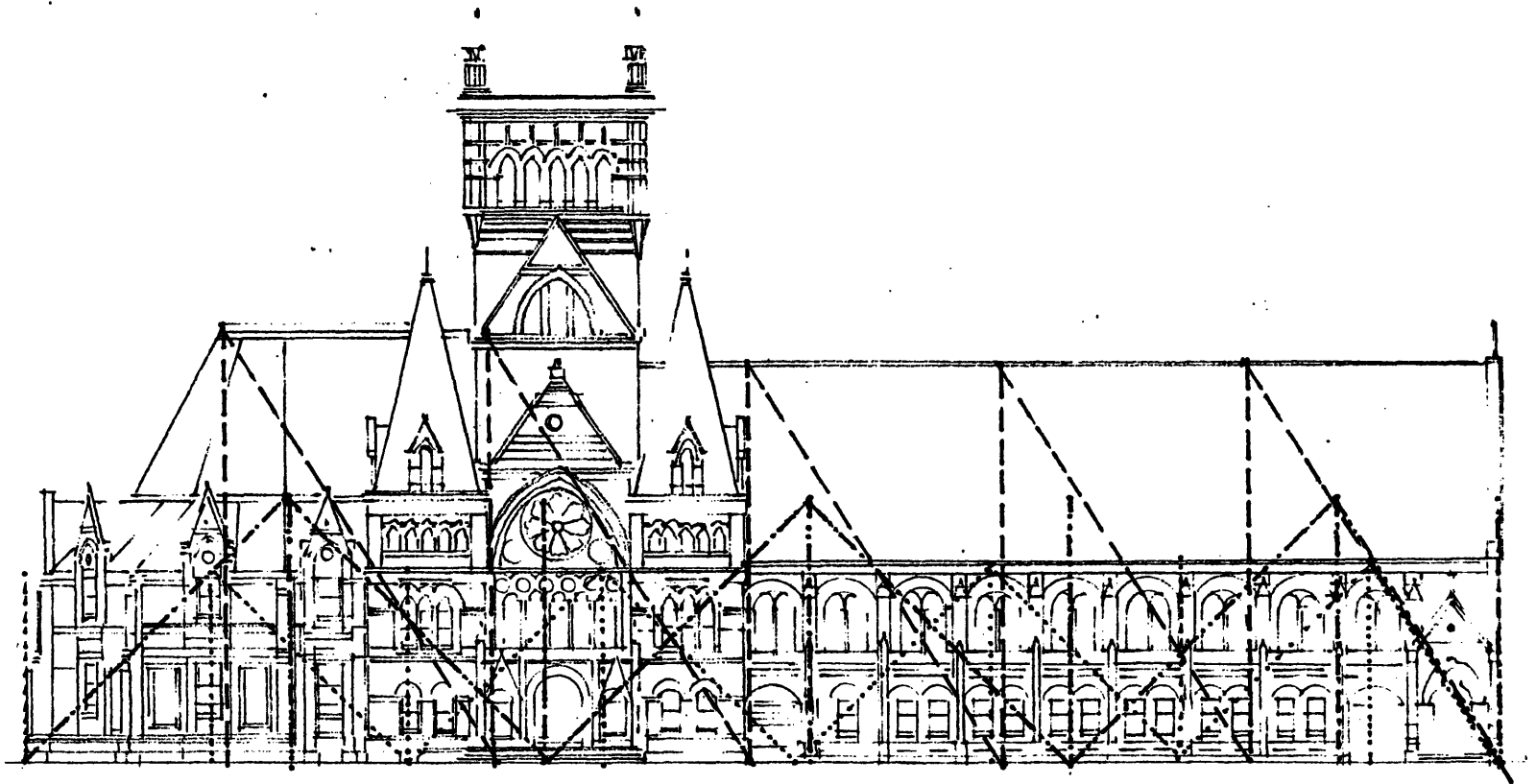
Comparative plan
Study:

Zone of transition
from street to
interior space:

- 1- STREET / PLAZA
- 2- ENTRANCE
- 3- CIRCULATION
- 4- MAJOR SPACE



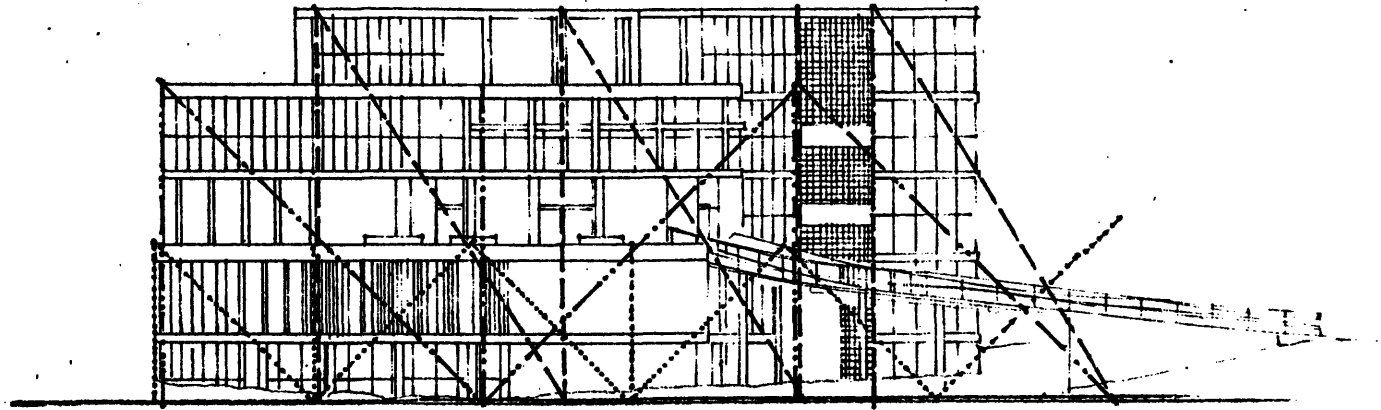




A composition in squares
and the golden section
zone geometric follow previous
pattern

Memorial Hall

A composition in the square and golden section. Again, each zone of the building mass is identified by its own geometry, even as all of them are intertwined.



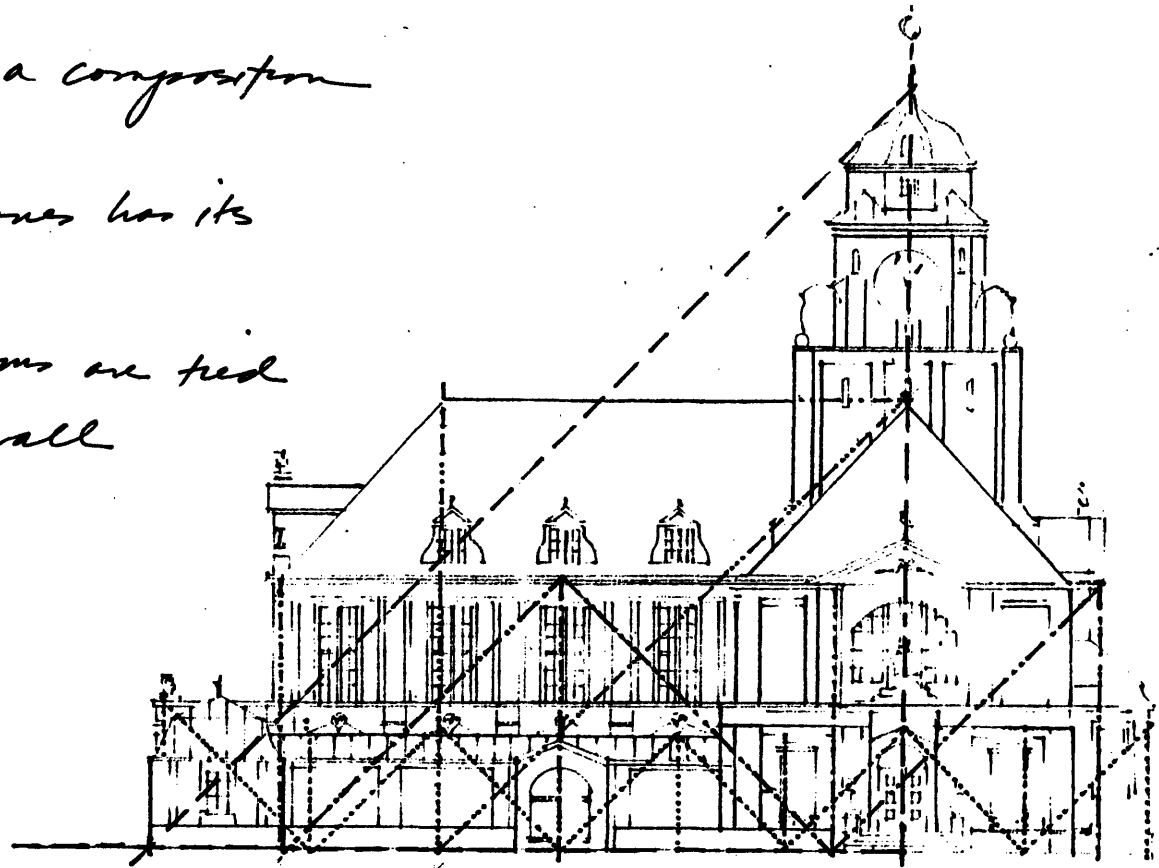
Carpenter Center for the Visual Arts.



The building is a composition
of squares!

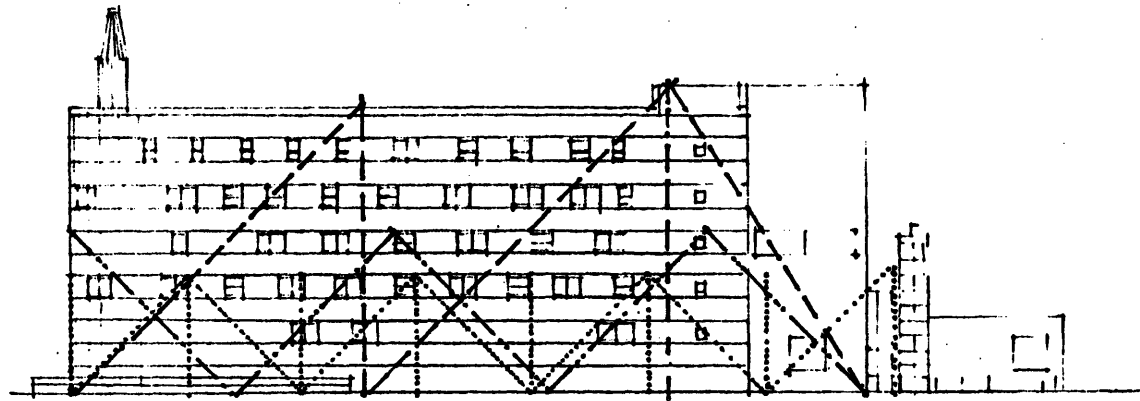
Each of its 3 zones has its
own geometry,

yet all the systems are tied
together by an overall
geometric order.

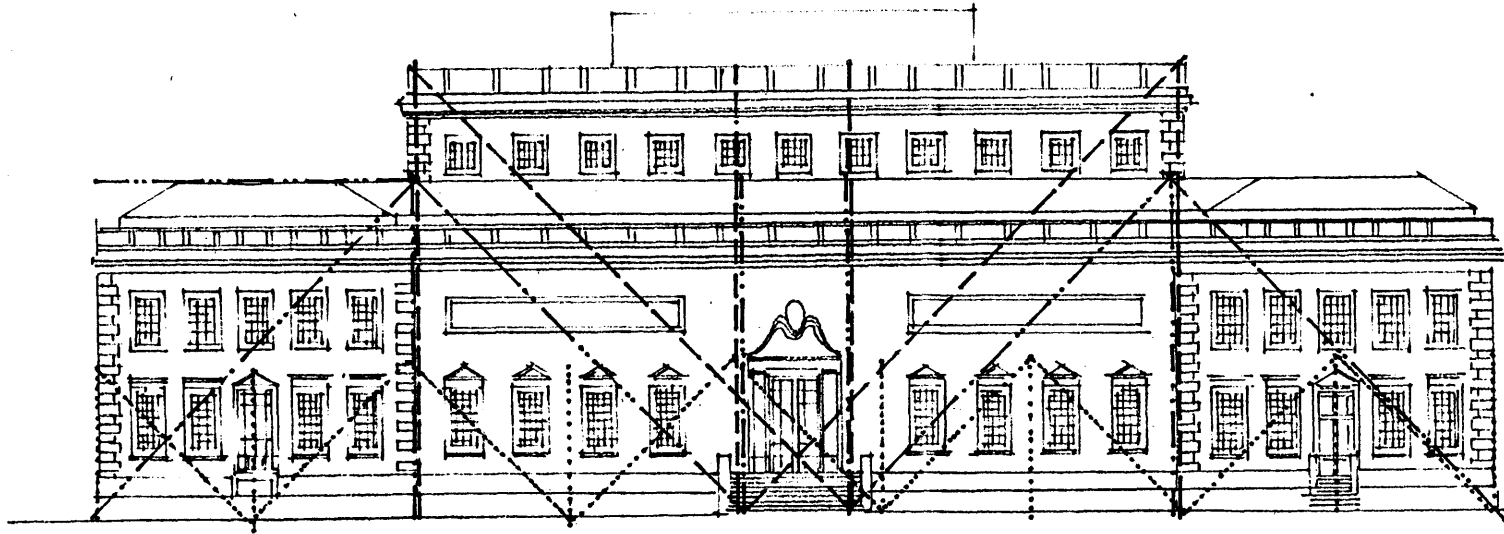


Busch-Reisinger Museum

Building zones reduced to wall
articulation. Geometric consistency
persists.

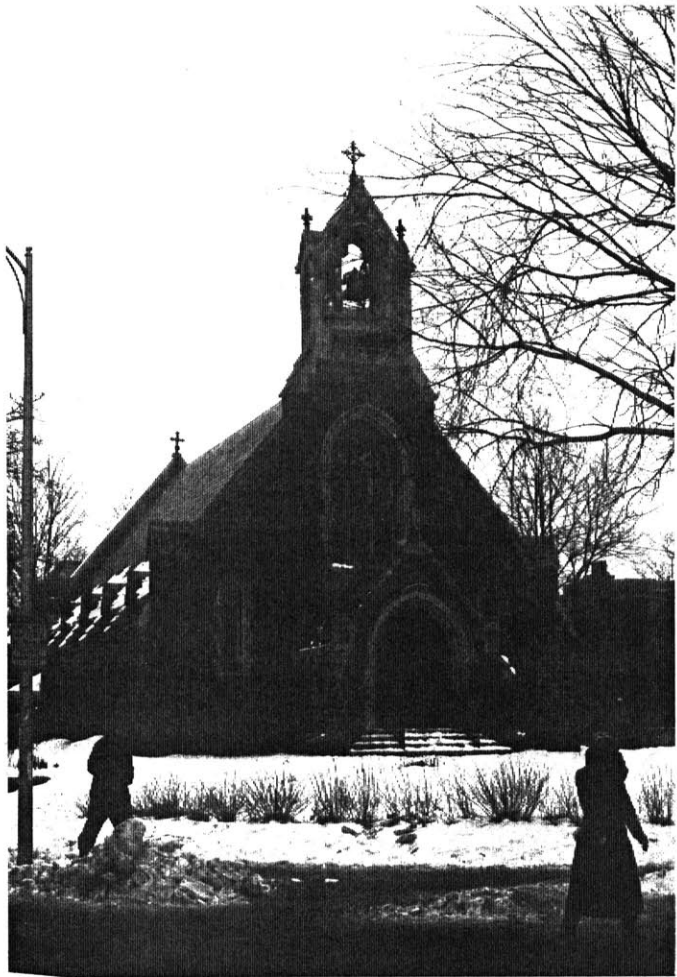


Fogg Art Museum - Addition



Get another comparison
of squares, each building
zone independently defined
by its own geometric system

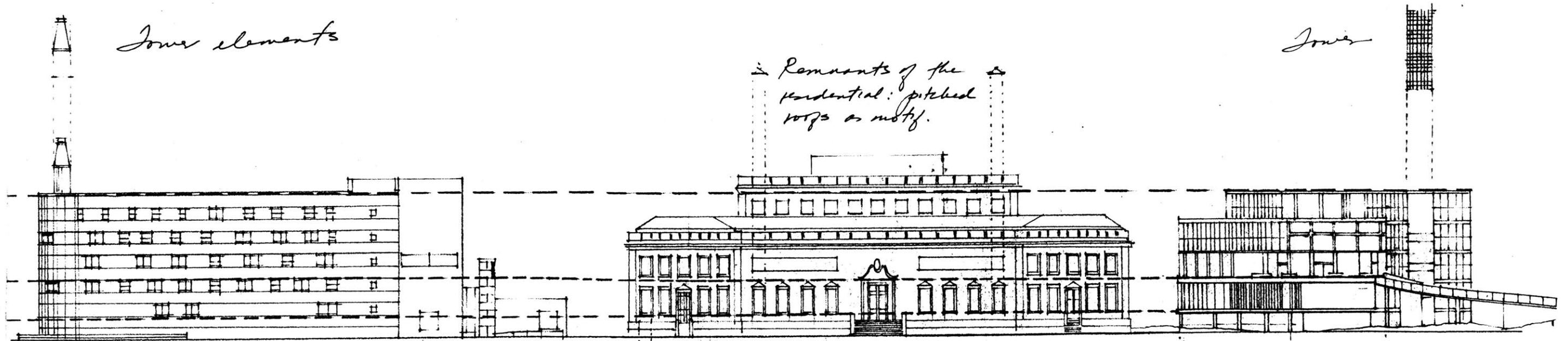
Fogg Art Museum



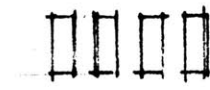
Zone elements

Zone

Remnants of the residential: pitched roofs as motif.



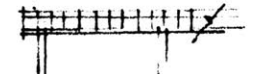
Elevation Studies: Elements along the street



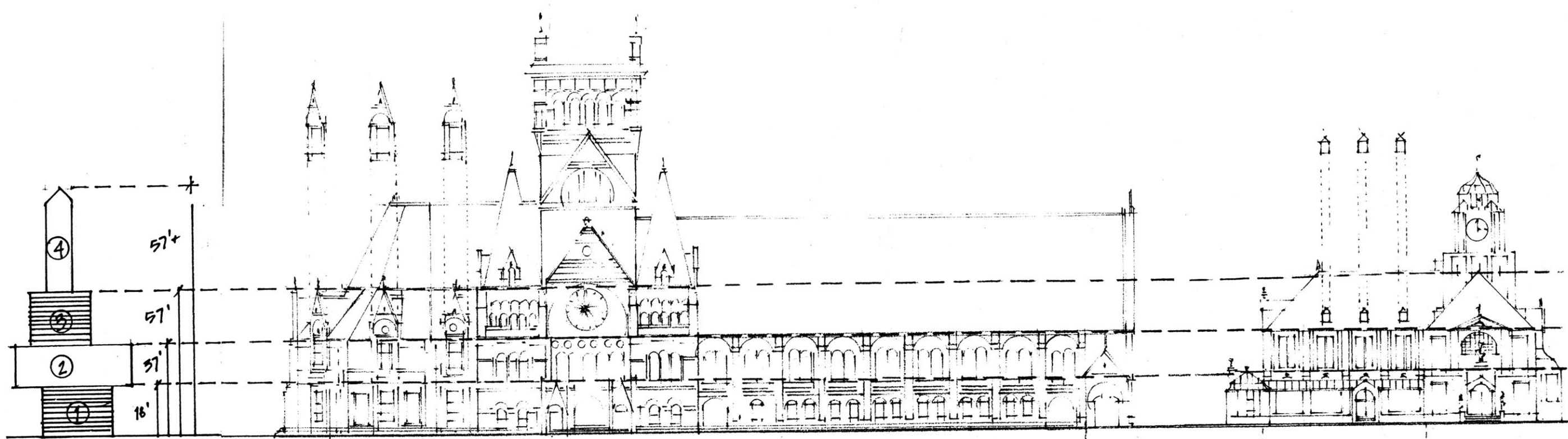
Rhythm of bays



Awade



Ramp



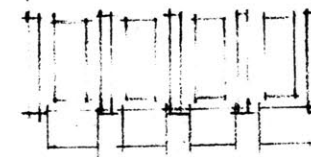
Zone diagram:

- ① Building designs
Street edge
- ② Building designs
Courtyard edge
- ③ Building designs
University character
- ④ Building at city scale

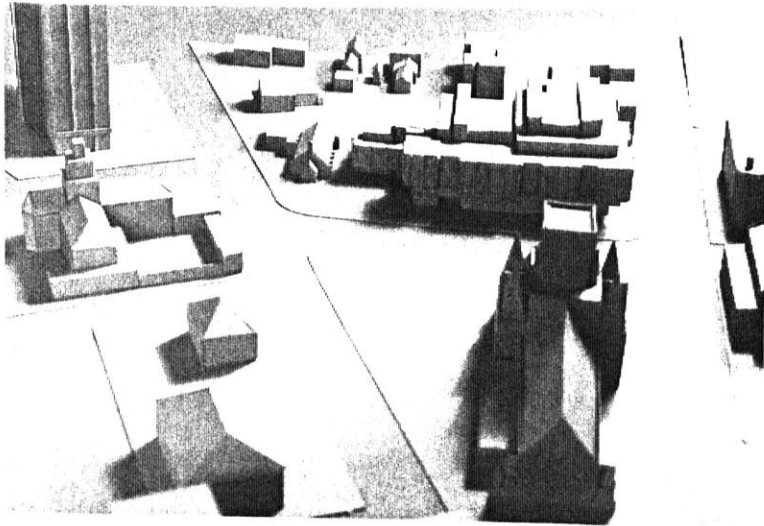
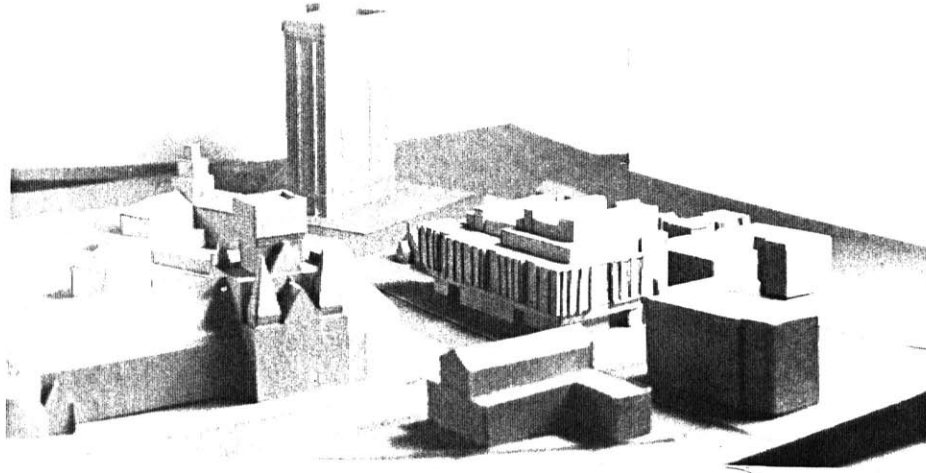
Elements along street



Adience of bays







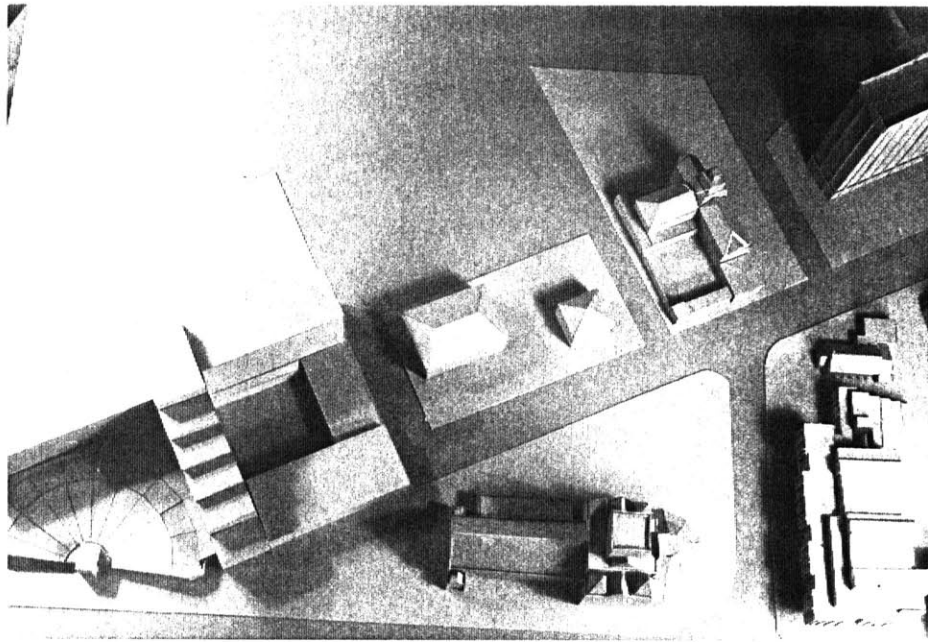
As a result of the preceding examination of Harvard University as context at the scale of the city and street the following set of intentions were formulated for the site at 48 Quincy Street:

- a. Create a viable edge for the major open space that is created by Memorial Hall, the Busch Reisinger Museum, the Science Center, and Gund Hall.
- b. Maintain the continuity of Quincy Street across the Cambridge Street intersection.
- c. Consider achieving both of these by devising a continuous element along the street edge similar in dimension to the length of the Fogg addition.
- d. Enter building from Quincy Street beyond the extent of Memorial Hall/Sanders Theatre

- building mass.
- e. Open the corner of Quincy and Cambridge Streets at ground level, mark it with a tower-like element above.
 - f. Create space that will give Church of New Jerusalem its identity again.
 - g. Create space that will be usable and will continue the courtyard from the front of Memorial Hall, across Quincy Street, to the front of the new Graduate School of Design.
 - h. Allow passage through to interior courtyard.
 - i. Make the rear courtyard a viable, plausible space. Alive!
 - j. Give shape to the rear court by means of a courtyard configuration at the scale of building mass.
 - k. Gather and focus the resi-
 - g. Maintain position of use of spaces between an indoor and outdoor open space.
 - h. Consider the use of proportional systems and regulating ones to modulate plans, sections, elevations.
 - i. Use clerestory lighting for large, wide spaces.
 - j. Consider the transformation of a residential image in this new building.
 - k. Mediate between the scale of Memorial Hall and that of the small Church of the New Jerusalem.
 - l. Effect a transition in materials between the brick of the southwest portion of the street and the white stucco/concrete/white stone facades of the end plaza. quality of light entering the building.

In consequence of the comparative studies carried out by examining some of the individual buildings the following intensions were identified:

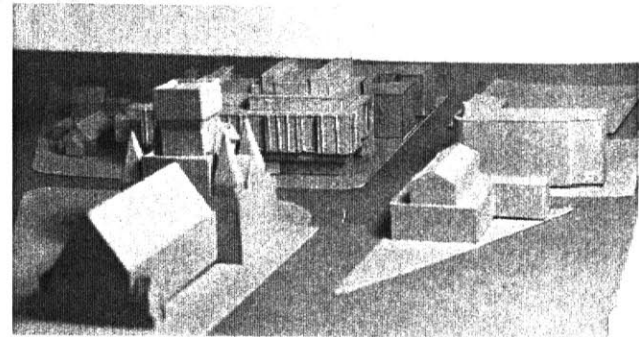
- a. Use some variation on the courtyard organization scheme-- perhaps coupled with a linear movement strategy due to the length of the Gund Hall site.
- b. Emphasize points of vertical circulation in the building mass.
- c. Place smaller, private spaces at the street edge, larger, more public spaces behind.
- d. Articulate spaces between open courtyard spaces in the building mass in order to retain scale.
- e. Consider variations on symmetrical organizations of space.
- f. Consider variations on quality of screens that regulate the

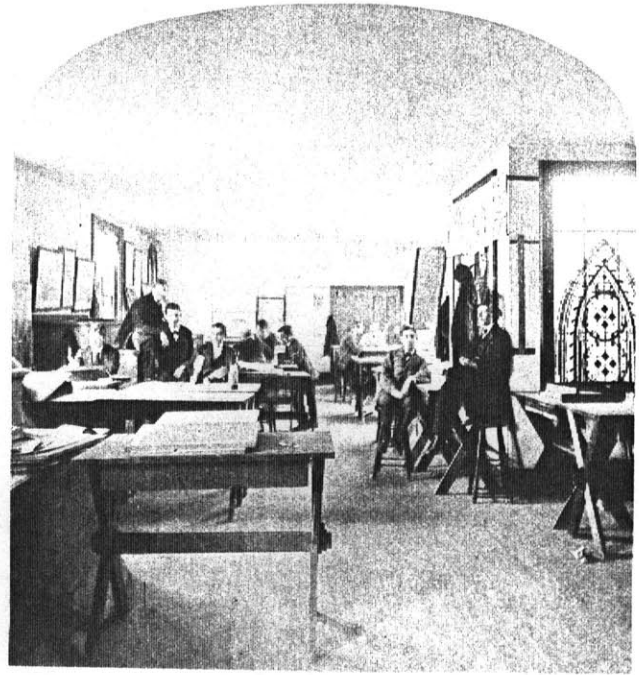
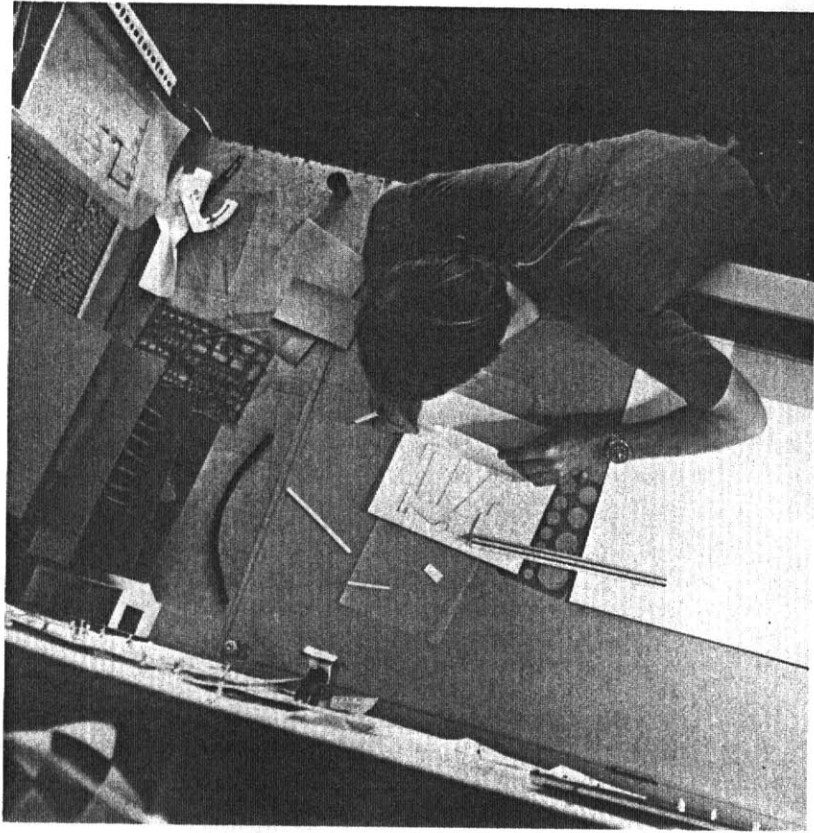


dential scale University buildings by some collective gesture.

- l. Effect transition between inside and outside building--confuse and overlap the interior and exterior spaces.
- m. Effect gentle transition in scale between residential scale of rear and side and street/city scale of front.
- n. Mark gate to University at Cambridge Street/Quincy Street corner.
- o. Incorporate a level change at entry and set back from the street.
- p. Consider the notion of organizing inside space in a manner analogous to the order evidenced by intimate outdoor spaces at the University.

- m. Deal with the notions of formal procession and exhibition that are so much a part of these buildings.





THE AGENDA



*Temple
Delphi*

The School

I think of school as an environment of spaces where it is good to learn. Schools began with a man under a tree, who did not know he was a teacher, discussing his realization with a few, who did not know they were students. The students aspired that their sons also listen to such a man. Spaces were erected and the first schools became. It can also be said that the existence-will of school was there even before the circumstances of the man under a tree. That is why it is good for the mind to go back to the beginning, because the beginning of any established activity is its most wonderful moment.

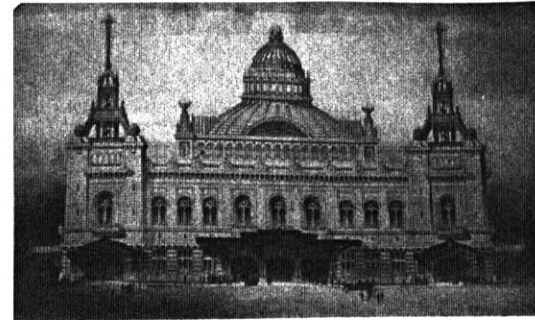
You get an order from the school board that says, "We have a great idea. We should not put windows in the school, because the children need wall space for their paintings, and also windows can distract from the teacher." Now, what teacher deserves that much attention? I'd like to know. Because after all, the bird outside, the person scurrying for shelter in the rain, the leaves falling from the tree, the clouds passing by, the sun penetrating: these are all great things. They are lessons in themselves.

Windows are essential to the school. You are made from light, and therefore you must live with the sense that light is important. Such a direction from the school board telling you what life is all about must be resisted. Without light there is no architecture.

Louis I. Kahn

CHAPTER 2 THE AGENDA

Just as an understanding of what Christian Norberg-Schulz calls the genius loci of a place suggests the formal palette within which a designer might work responsibly, a thorough examination of program is imperative in devising a set of hopes and intentions for the spirit which will transform the building from receptacle of function to a vital, living entity. It is the process of linking program to system of movement, to an organization of spaces, to street and sky, to materials and structure as they are revealed by light, which forges the individual quality of any building. The interplay between disparate demands of inside and out, expressed by way of a designer's personal language, combine to produce a building that exhibits an internal coherence and which is expressive of a set of



values, a special purpose, a special place at a specific point in time.

In particular, then, the Harvard Graduate School of Design is comprised of a School of Architecture, a School of Landscape Architecture, and a School of Urban Design and Planning. The existing facility houses these at Gund Hall, 48 Quincy Street, in some 160,000 s.f. of space subdivided as follows:

<u>Program</u>		Exhibition Space (Elastic at least	2,500 s.f.)
Harvard Graduate School of Design		Faculty Offices	20,000 s.f.
Total 160,000 s.f.		Administrative Offices	
M.Arch. Studio space (252 students @ 10 s.f./student	25,200 s.f.	Classroom Space	9,000 s.f.
Landscape Arch. Studios (124 students)	12,400 s.f.	Woodworking Shop	5,000 s.f.
Urban Design Studios (57 students)	570 s.f.	Cafe	3,500 s.f.
Total Studio Space	48,170 s.f.	Charrette, Stones	1,000 s.f.
Piper Auditorium (need be able to function independently)	7,000 s.f.	Harvard Architectural Review	1,000 s.f.
Frances Loeb Library	25,500 s.f.	Showers, Lounges, Lockers	2,400 s.f.
Review Space (none currently in program)	7,000 s.f.	Photography Lab	5,000 s.f.
		Model-Building Shop	5,000 s.f.
		Circulation, WC, Mechanical	+ 20%

PROGRAM RELATIONSHIPS

	LIBRARY	LECTURE	EXHIBIT	CAFE	CLASS RM	OFFICES	SHOP	PHOTO LAB	COMPUTER	STORE	REVIEW	STUDIO	ENTRANCE
LIBRARY													
LECTURE													
EXHIBIT													
CAFE													
CLASS RM													
OFFICES													
SHOP													
PHOTO LAB													
COMPUTER													
STORE													
REVIEW													
STUDIO													
ENTRANCE													

KEY				
	STRONG REL	SOME REL	NO DIR REL	ADVERSE REL

An analysis of the internal workings of the GSD reveals that students favor privacy (both acoustic and visual) to carry on their work, that some space for socializing is important to them, but that it should, preferably, find itself away from individual student desks. Work spaces should have ample light, and, in a reasonable number of cases, visual access to either the out of doors or to some space larger than and beyond the student's immediate surroundings. Natural north light is deemed most preferable, as is some connection to the street; access to the library should be easy and direct; as should connection to review spaces (none currently provided), classrooms and the lecture hall.

A cafe ought to be located on the premises with immediate access to the out of doors. Space should be allocated to a branch of Charrette and

Stones. Changing exhibits of student and faculty work should be accommodated, as well as exhibits marking the changing concerns of the profession.

Life at the GSD is often socially oriented. Space, sufficiently flexible, should be provided for holding parties and large gatherings. Wednesday cookies-and-tea and Friday hot dogs-and-beer rituals should have adequate space to take place.

Graduation ceremonies, which are annually slated to take place on GSD grounds, should have sufficient and appropriate space in the courtyard behind the architecture school building. Access to that courtyard might be external as well as internal.

Aside from its function as a school of the various urban design arts, the GSD serves an important public function. Gund Hall is a center of the Boston area architectural community. Harvard hosts a lecture

series of some renown, and architects of high professional standing accept positions as visiting faculty there. At the GSD, they exhibit as well as speak about their own work. A sense of place as public forum seems appropriate to the public face of the Graduate School of Design.

Area alumni/ae make use of the GSD library reference facilities and, in short, the building retains close ties with the professional community at large. Via functions that bring an influx of professionals to the grounds of the GSD, students and practitioners come together under the auspices of the School.

The GSD, then, has three strong, closely linked but primarily separate foci: the first of these, the public/professional is associated most directly with street and the out-of-doors. The second focal point is the studio community linked to but separate from

the public courtyard. The significance of connections to and through the out-of-doors as demanded by both site and agenda make the outside world the third and most important focus of the University building.

The GSD program suggests a building whose spaces project the dignity of being a public forum for ideas in the architectural profession. Simultaneously, it suggests a place full of the activity and informality of the twenty-four hour-a-day schedule that is student life on charrette. The program suggests space for the polarities of absolute privacy and total openness to public scrutiny. It demands various degrees of public display for student work, and space for various degrees of formal behavior. Understanding the extent to which it is possible to immerse oneself in design work, humanness suggests that the out-of-doors be forever present as

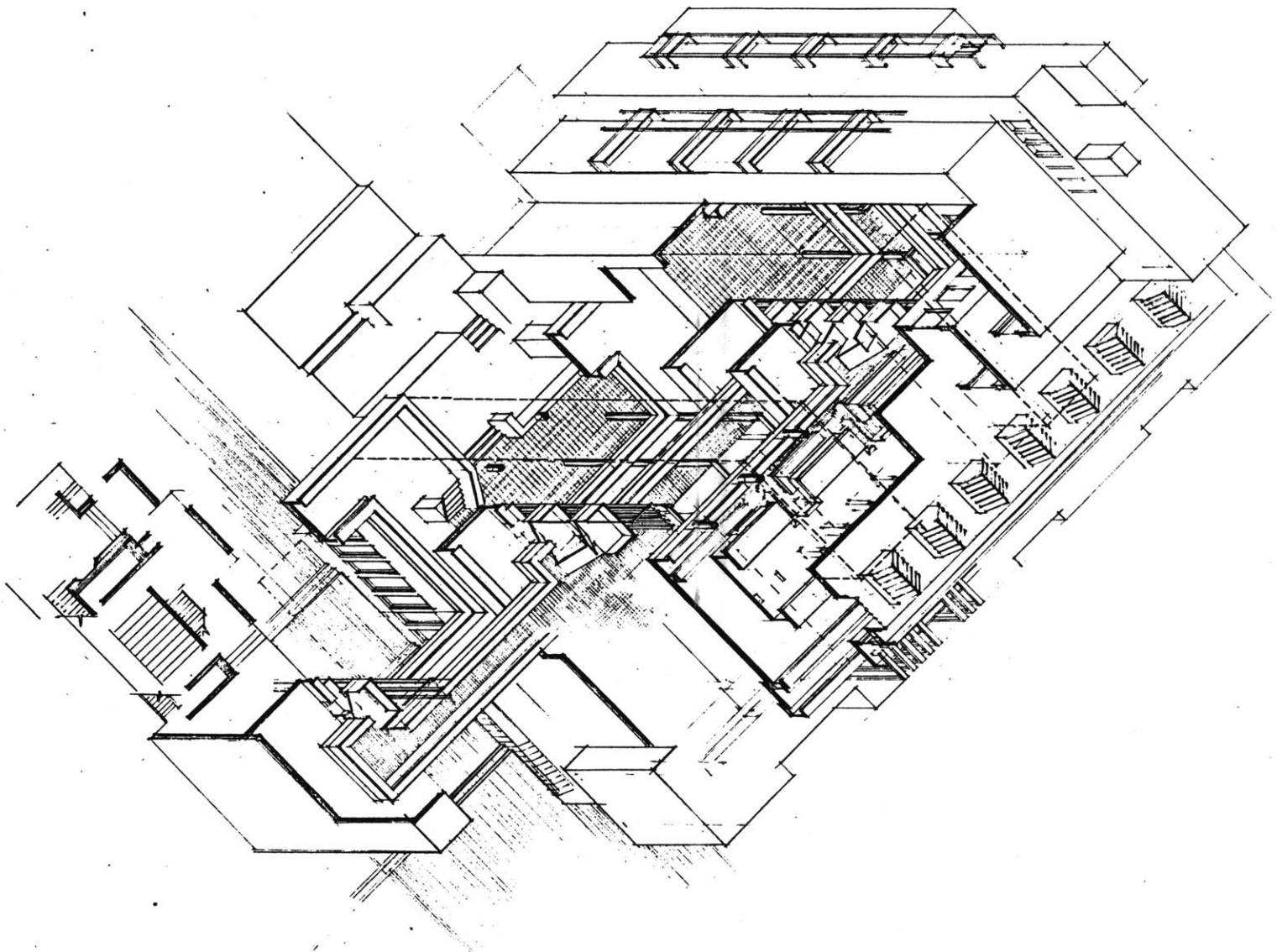
a reminder of the existence of an outside world.

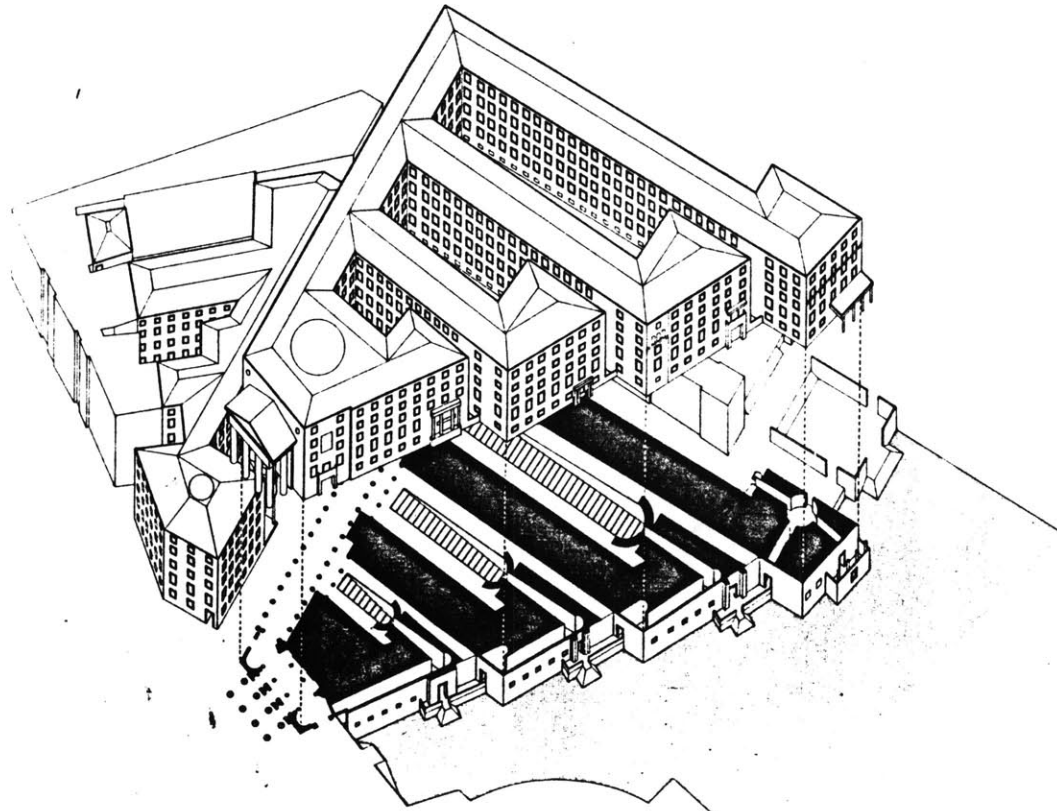
The users of the Gund Hall facility meet at various of its more public use spaces. Perhaps it is possible to express the meeting of student and professional life by way of the functions that separate the studio and public worlds. Perhaps, too, materials of the building might reflect the change in focus from the public, street related world to the more private introspective student world.





1:100





Asplund. Royal Chancellery Competition

Fig 8

REFERENCES

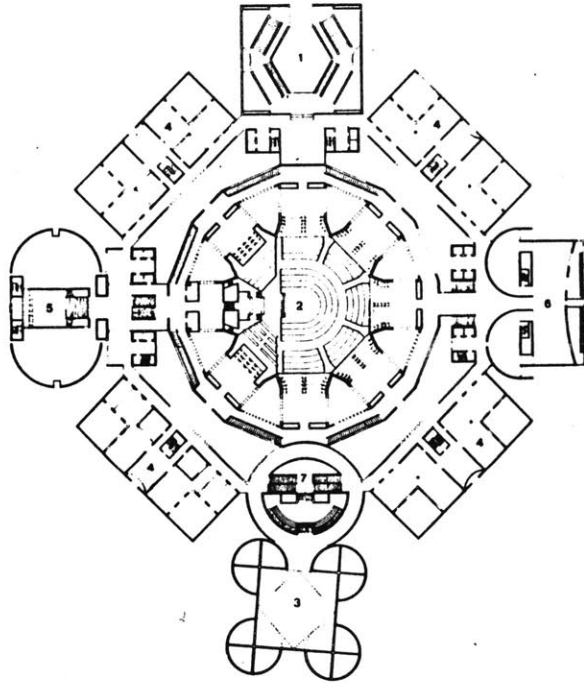


Fig 9
Kahn

It is a decision coming from commonality that you choose a place out of all places to build, a place where others can also settle. It is a very important decision, of the same importance as the positioning of a Greek temple amongst the hills. Of all the hills, this hill is chosen for the temple, and then all the other hills beckon to it as if bowing to this decision. You do not see the hills now except as respecting the decision of the placing of this eulogizing building, which is remarkable in that it has never been there before.

Louis I. Kahn

CHAPTER 3 PERSONAL PREFERENCES:
PALETTE ESTABLISHED

The manner in which the intentions of the preceding chapter and the palette defined by the previous exercise become a building, is less than clear or logically straightfoward. Setting out a series of hopes for a building both in its interior and exterior faces leaves much open to question in the way of finding adequate and appropriate form.

It is at this point that meaning and its articulation must settle into comfortable partnership, and the mental links which allow that to happen are entirely personal. Particular images come into play as ordering devices, as tools that help make decisions which site analysis and program studies cannot. References to past experiences or knowledge acquired earlier, in a different

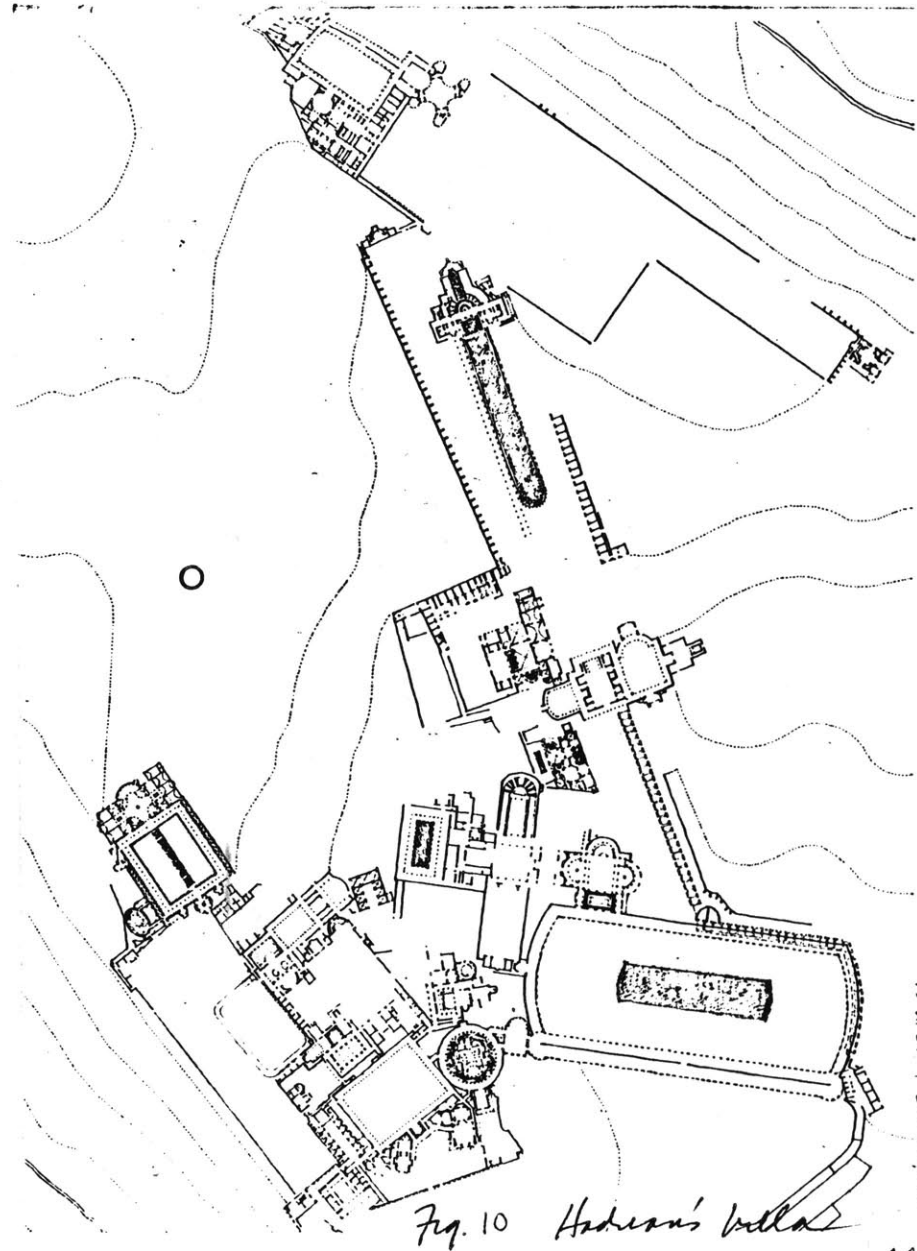


Fig. 10 Hudson's Villa

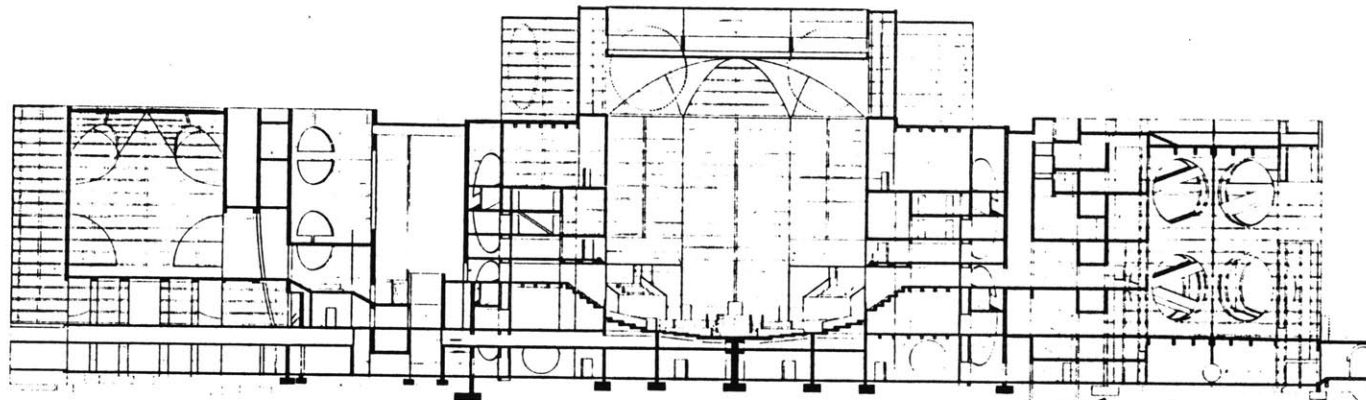


Fig. 11
Kalen

connection, are identified and employed in the ongoing process of design. It is interesting to note that at this point it is not helpful to call upon a structural framework or upon a formal language of assemblage alone to aid in effecting the transferal of meaning from idea to physical form.

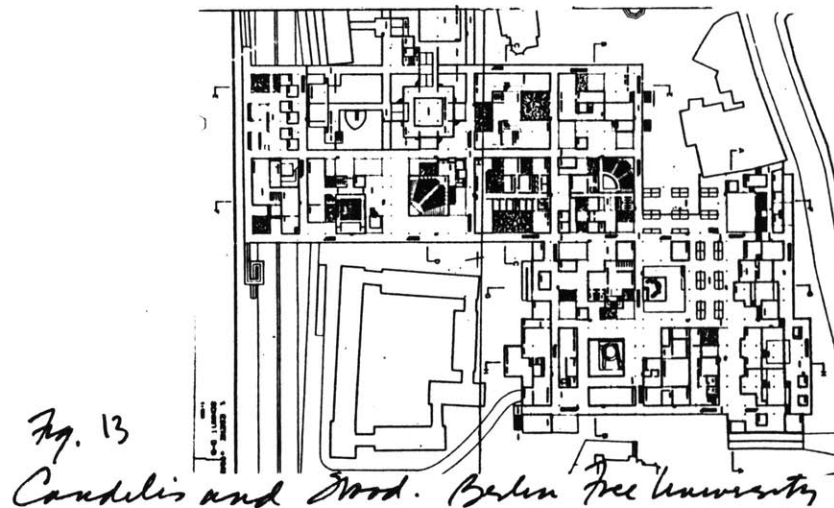
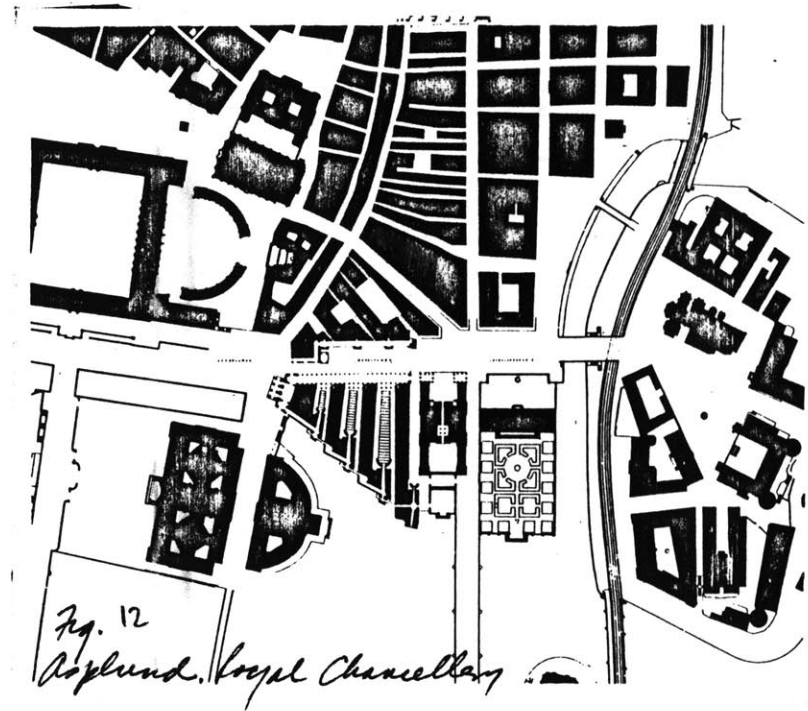
An understanding of place such as the one to which I arrived after the analysis documented in the first chapter suggested that my building, too, would adopt a courtyard organization--

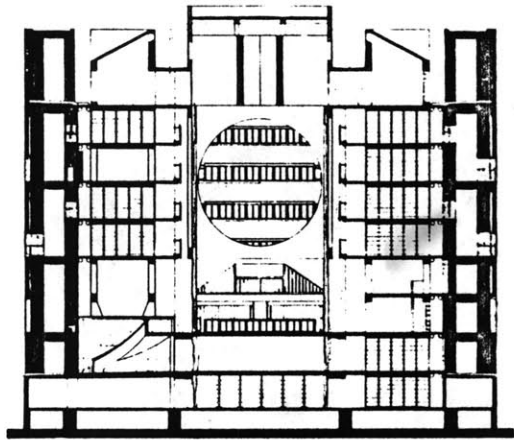
both as internal ordering system and as overall massing strategy, in an effort to gather the disparate residential buildings behind the site around a single form. This decision, coupled with the demands of a long site and a tripartite program, suggested a grouping of three consecutive courtyards, each, perhaps, grounded on a different level of the building. This choice became quickly

linked with the notion of extending the quality of the out-of-doors into the interior of my proposed building. The resultant network of multi-level "streets" probably owes a debt to the Berlin Free University of Candelis and Wood, the Venice Hospital of Le Corbusier or many of the Dutch structuralist projects that subsequently took up a similar theme.

Erik Asplund, too, worked to maintain a continuity of the urban fabric of Stockholm in his project for the Royal Chancellery. That project was called upon to clarify the idea of repetitive court spaces related to both street and landscape, and separated by bands of usable built space. In my own scheme, these become the review spaces that formed one of the links between public and more private open spaces.

From both Aalto and Asplund came the notion of dissembling a massive

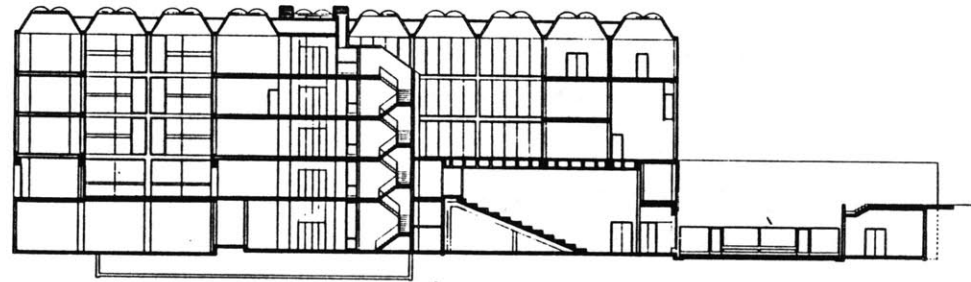




*Fig. 14 Kahn, Library,
Exeter*

building into smaller-scale increments that match the scale of surrounding buildings.

Louis Kahn's library at Exeter clarified the original intention of articulating a distinct inner and outer building--one assembling the public spaces of the school, associated with large-scale strategies for admitting light and expressed vertically in the building mass, the other comprising the more private use spaces, related to the street and articulated horizontally in the building mass.



*Fig. 15 Kahn, Yale Centre
for British Art*

Kahn's gallery at Yale, with its two courtyards separated by a stair-related space gave additional clarity to my earlier intentions and began to speak of a language for its articulation.

From Frank Lloyd Wright's Taliesin West came my own attempts at defining outdoor spaces by gentle protrusions into the outdoors from a fundamentally

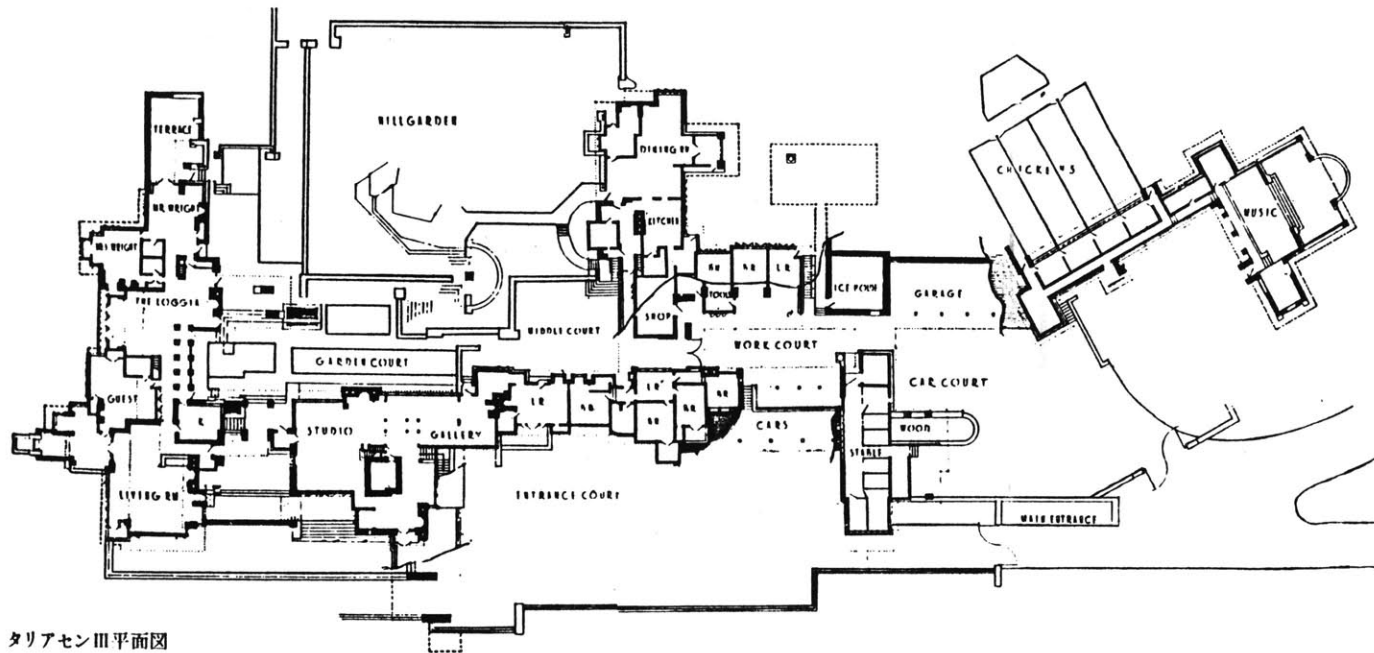
From time spent in southern Spain came the idea of an out-of-doors as carefully dimensioned and defined as indoor spaces, and, in fact, totally interchangeable with spaces which it reciprocally defines.

Finally, from the the context, again and again, came guidelines for elevation articulation, for choices in spatial structure, in systems of movement, in transitional spaces--at all the scales of building design.

linear space.

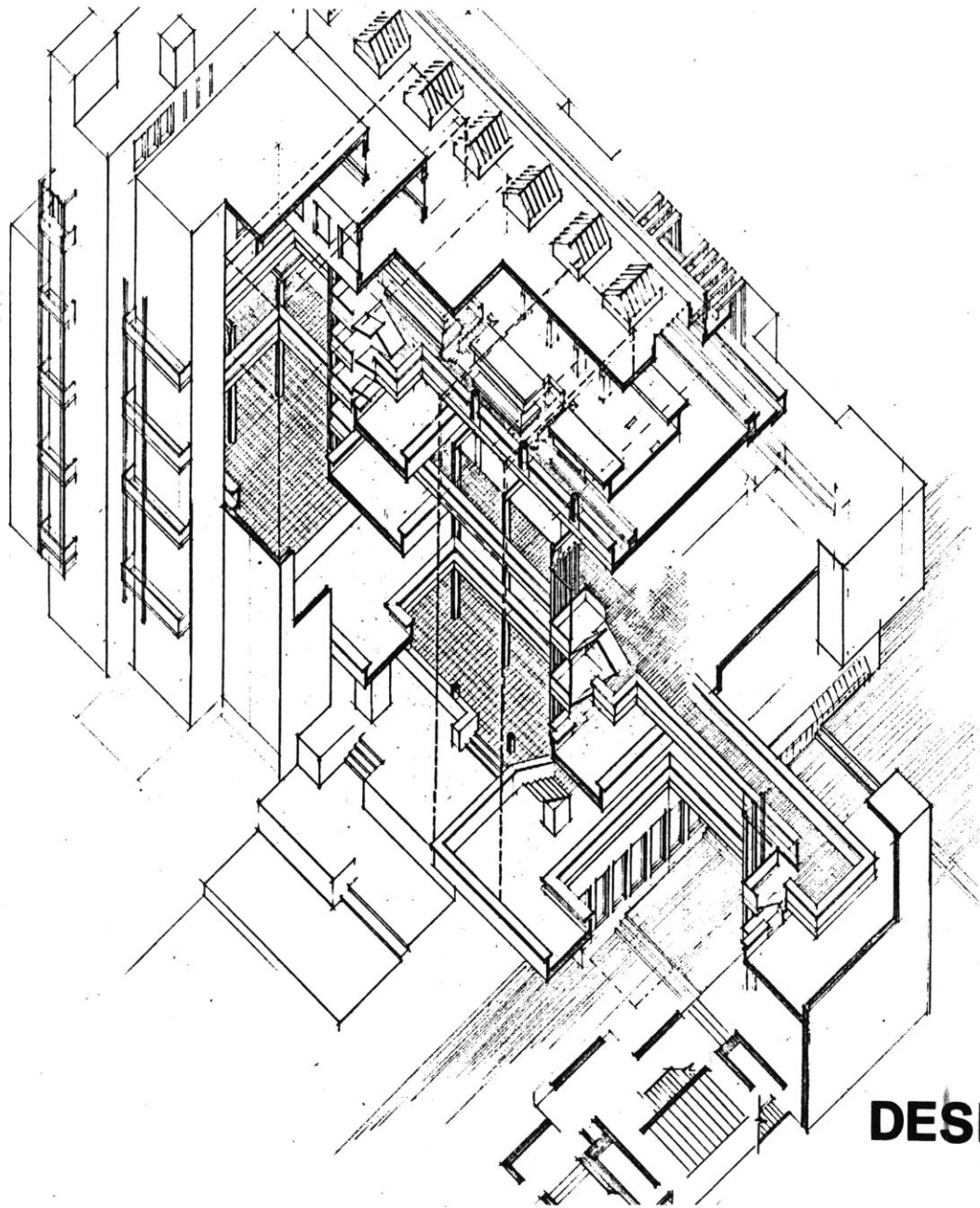
From Garnier and Kahn came greater clarity in the definition of space in section, and again, the concept of articulating the spaces between as positive usable space.

From my own visit to Hadrian's Villa and the Alhambra came the notion of courtyard spaces edged by columns and commanding a view of the out-of-doors.



タリアセンIII平面図

*Fig 16
F.L. Wright
Julian Street*



DESIGN

W

With the sense of Wonder comes Realization. Realization is born out of the intuitive. Something must be just so, and it has a definite existence though you cannot see it. You strive because that existence makes you think of what you want to express. In this drive to express, you make a distinction between existence and presence. When you give something presence, you have to consult nature, and that is where Design begins.

Form encompasses a harmony of systems, a sense of Order, and that which distinguishes one existence from another. Form is the realization of a nature, made up of inseparable elements. Form has no shape or dimension. It is completely inaudible, unseeable. It has no presence; its existence is in the mind. You turn to nature to make it actually present. Form precedes Design. Form is "what." Design is "how." Form is impersonal; Design belongs to the designer.

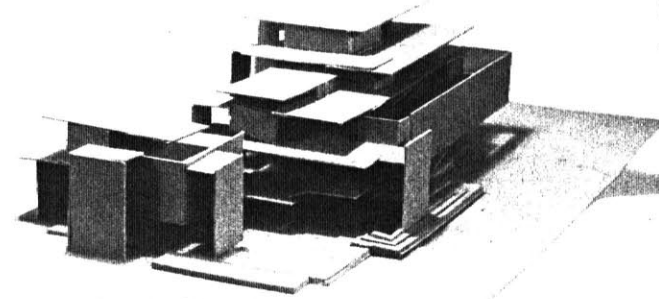
Design gives the elements their shape, taking them from their existence in the mind to their tangible presence. Design is a circumstantial act. In architecture, it characterizes a harmony of spaces good for a certain activity.

Louis I. Kahn

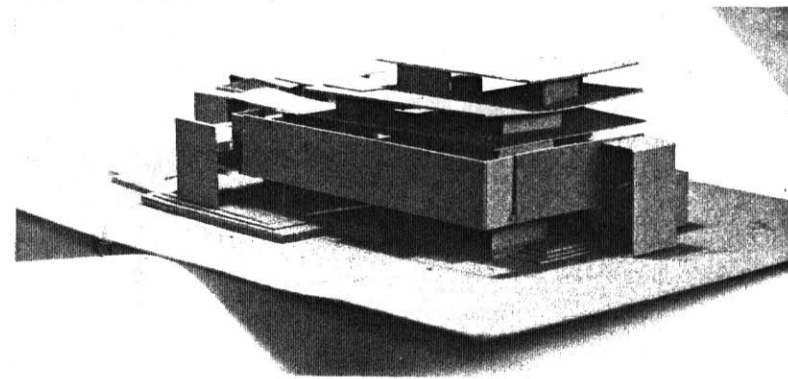
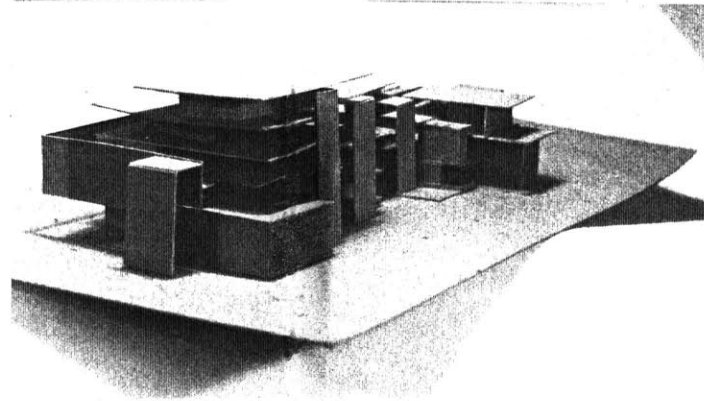
CHAPTER 4 DESIGN

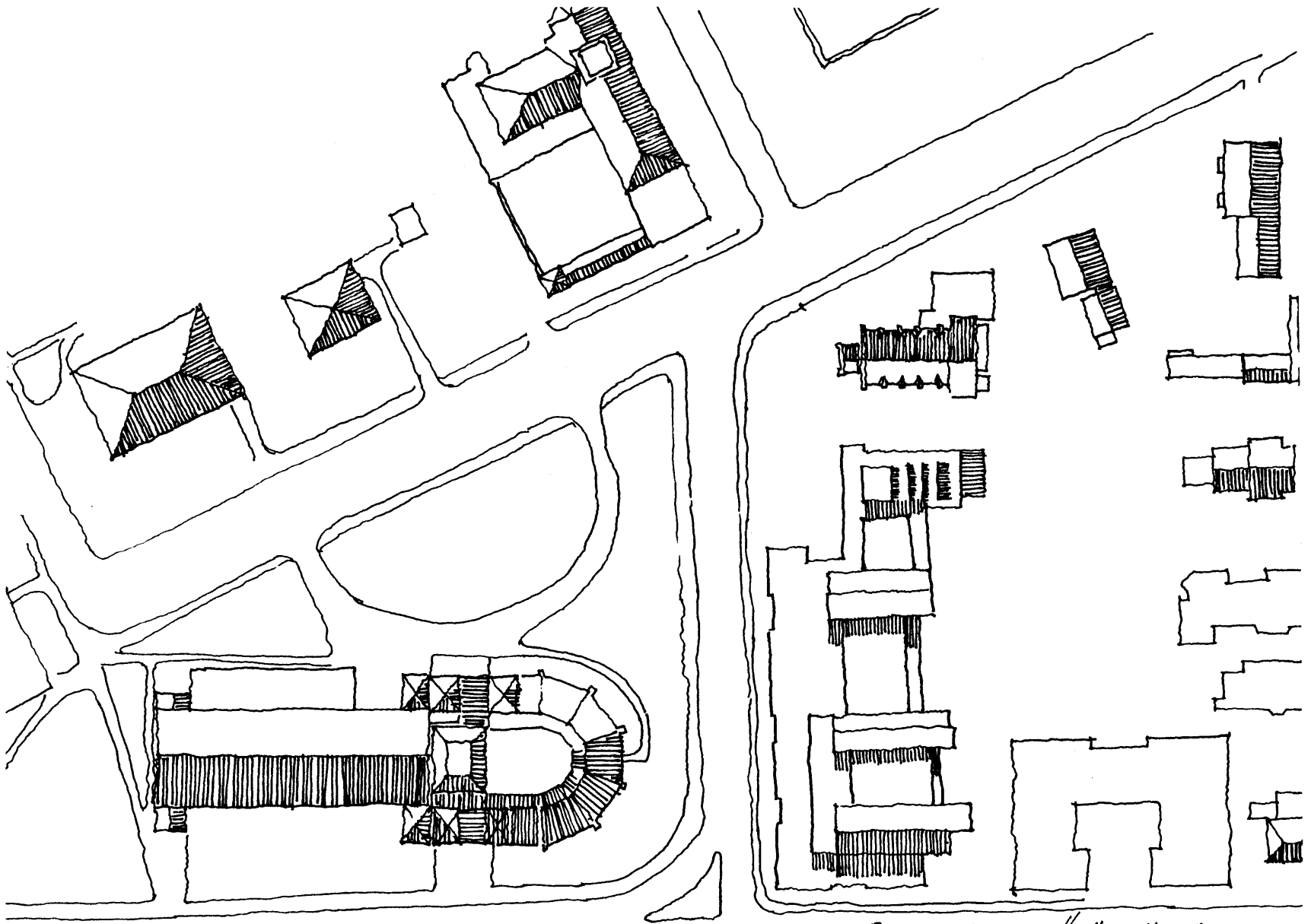
The veritable wealth of information gathered, culled, applied and discarded, shuffled and re-shuffled in innumerable interactions of plans, sections, and elevations, have been persuaded to stand, for the moment, as solution to the design problem introduced with the opening words and images of this thesis.

At some, difficult-to-pinpoint juncture, in the course of the multitude of false starts, and pauses for analysis, summarizings for new references and humble efforts to fashion yet another rendition of a faulty drawing, at some point the building begins to announce its own identity, its own life, its own spirit. In some moment, the idea that guided the search for suitable expression changes hands, and belongs not the the designer, but to the project itself.

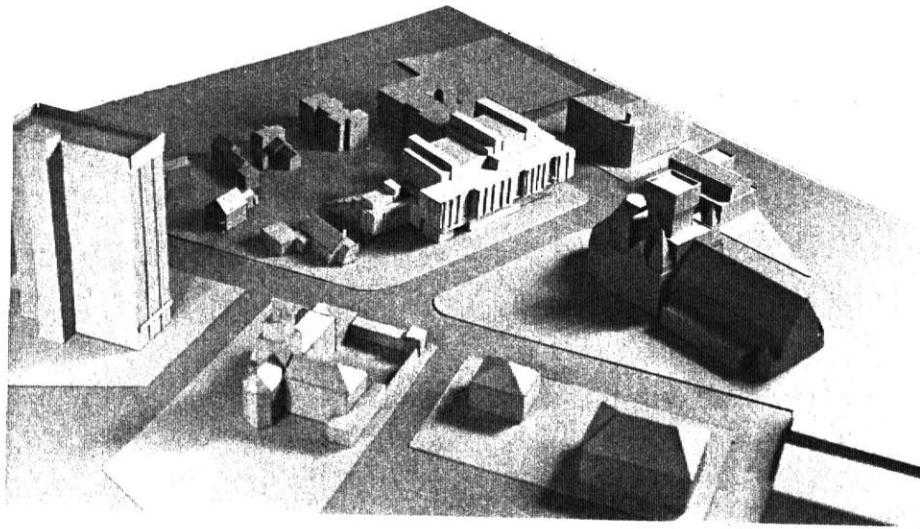
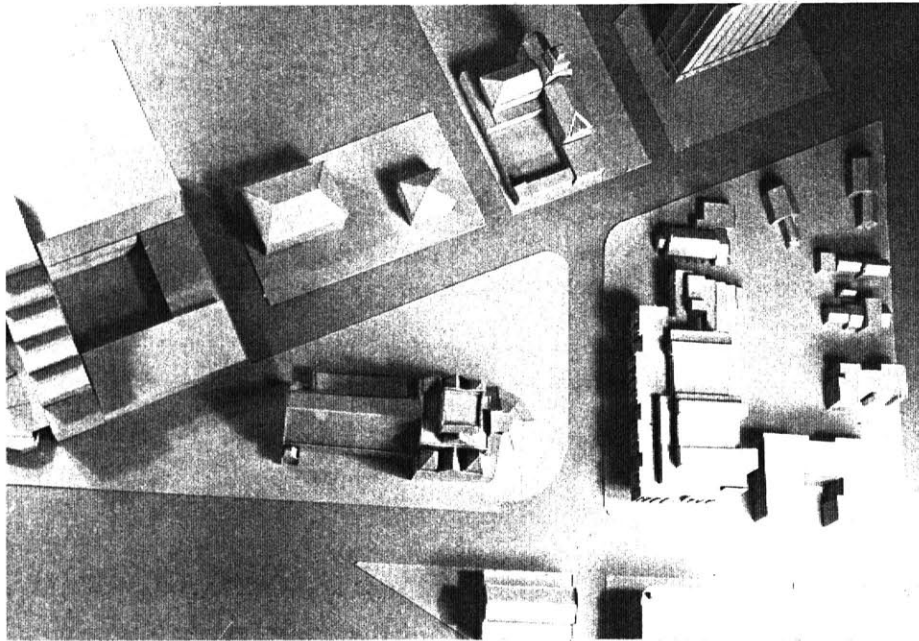


Study model; idea established



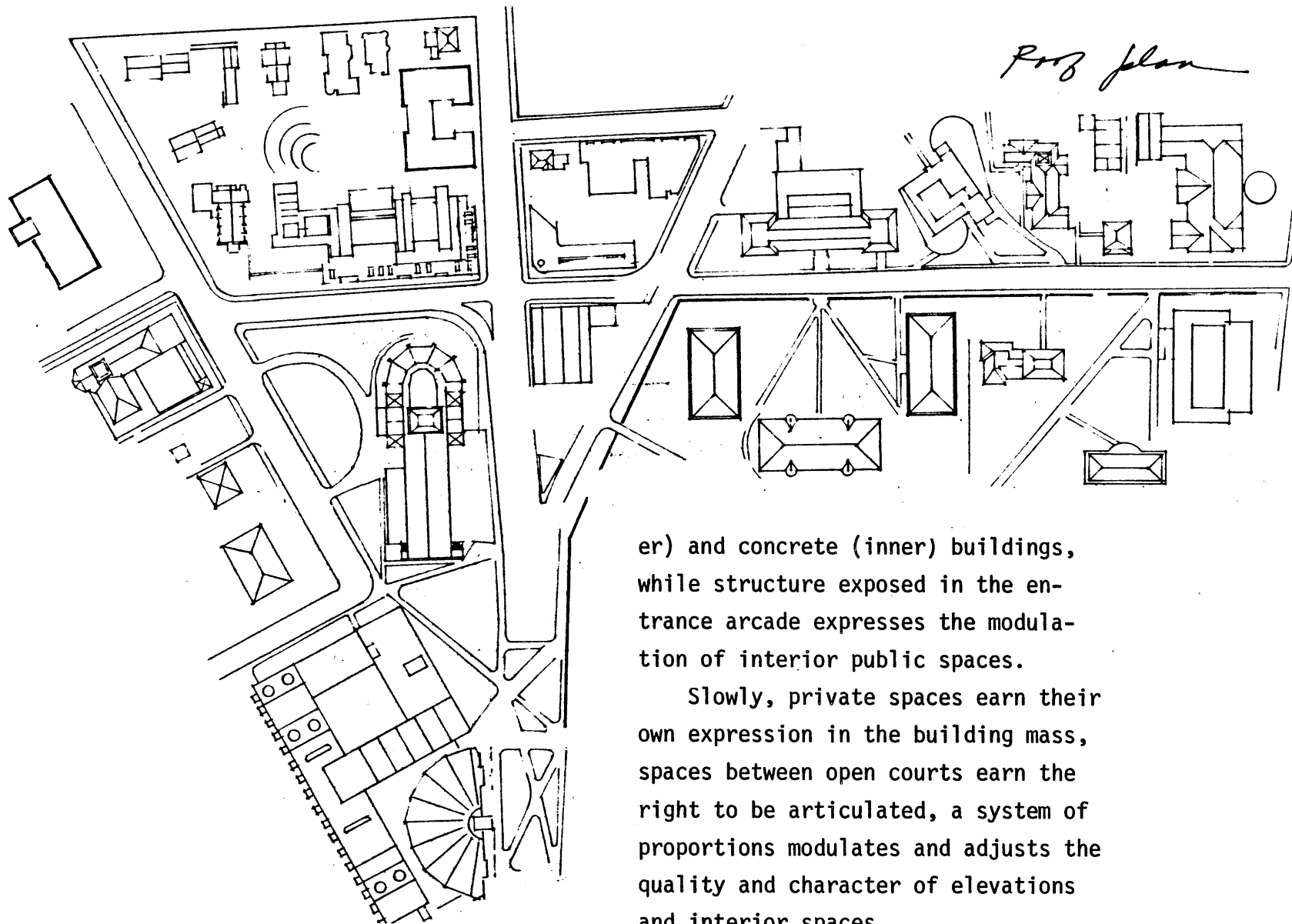


Site plan $\frac{1}{100}'' = 1'-0''$



Increasingly, then, the task becomes to clarify intentions, to collect and understand decisions taken early in the project, to discard remnants of old ideas, to render each of the component parts of the building, as much as possible an integral part of the whole. At each juncture, with each decision, it becomes necessary to listen again to the demands of context and agenda, to listen again, more carefully, to the demands of the project to which I have given life, to balance, to refine, to analyze my own work that I might understand how to best help it become itself.

Carefully, slowly, structural system becomes inextricably entwined with a strategy for bringing light into the public spaces. Slowly the building separates into its inner and outer layers, and light, revealed by a system of screens and vertical circulation, mediates between brick (out-



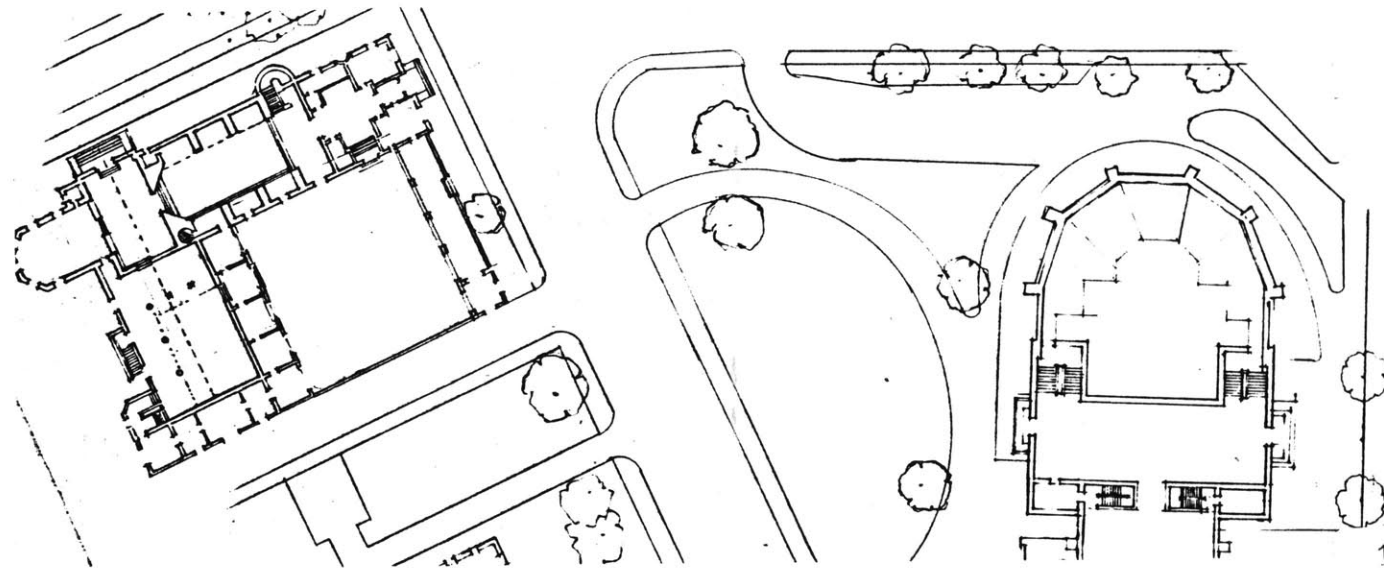
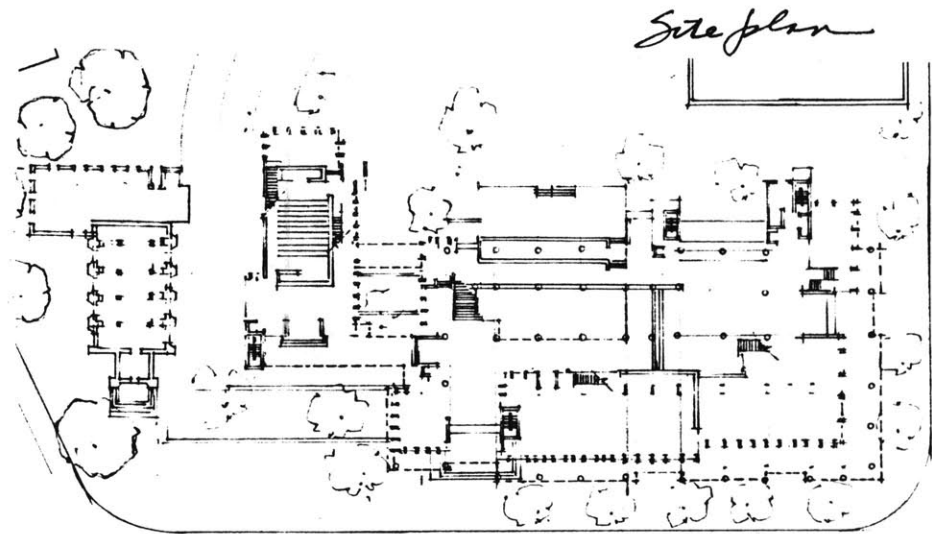
Roof plan

er) and concrete (inner) buildings, while structure exposed in the entrance arcade expresses the modulation of interior public spaces.

Slowly, private spaces earn their own expression in the building mass, spaces between open courts earn the right to be articulated, a system of proportions modulates and adjusts the quality and character of elevations and interior spaces.

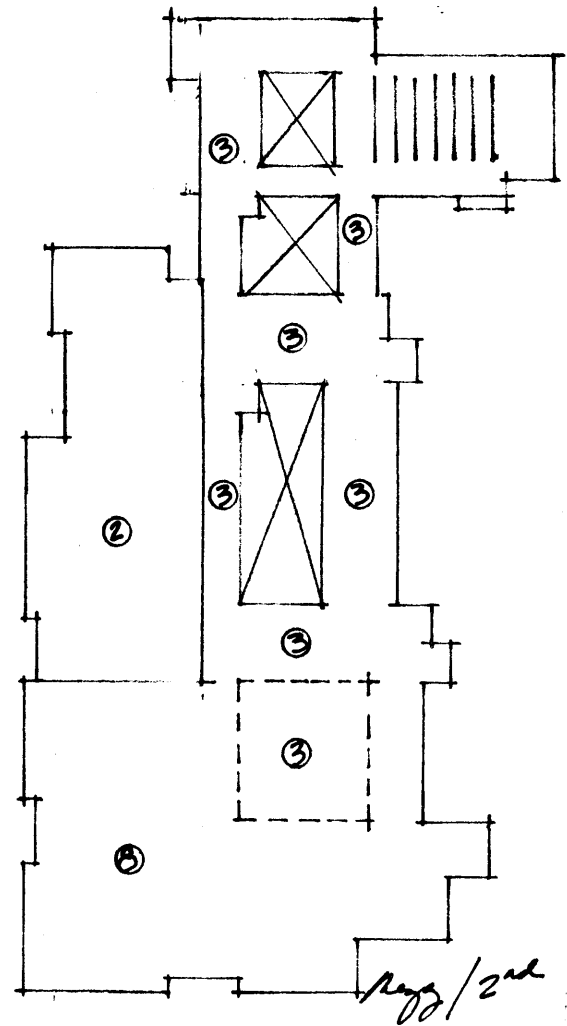
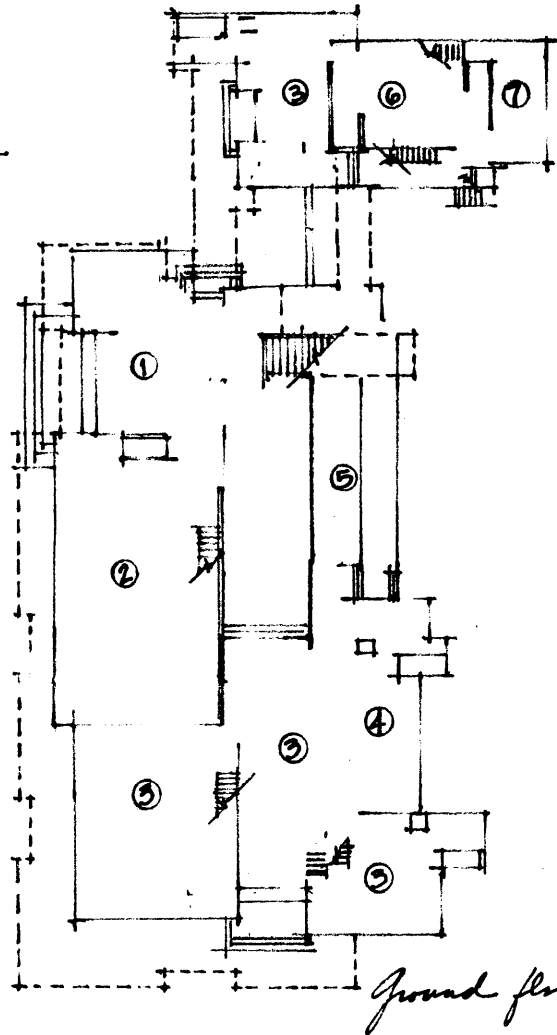
In the course of working, exhibi-

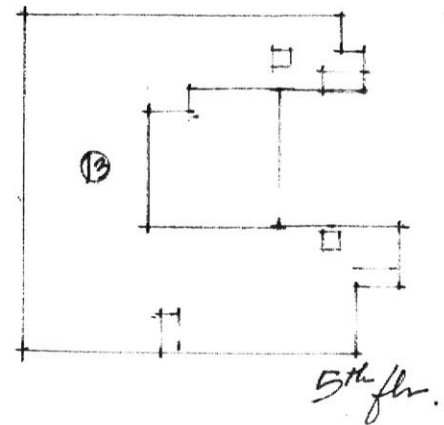
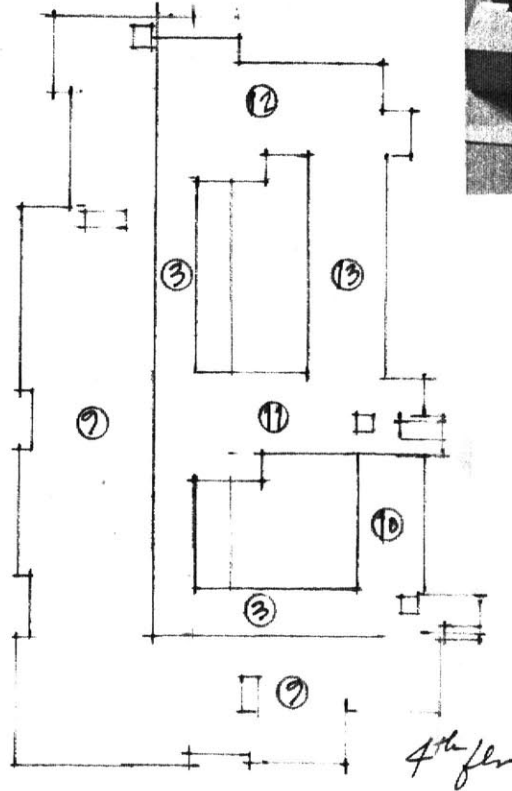
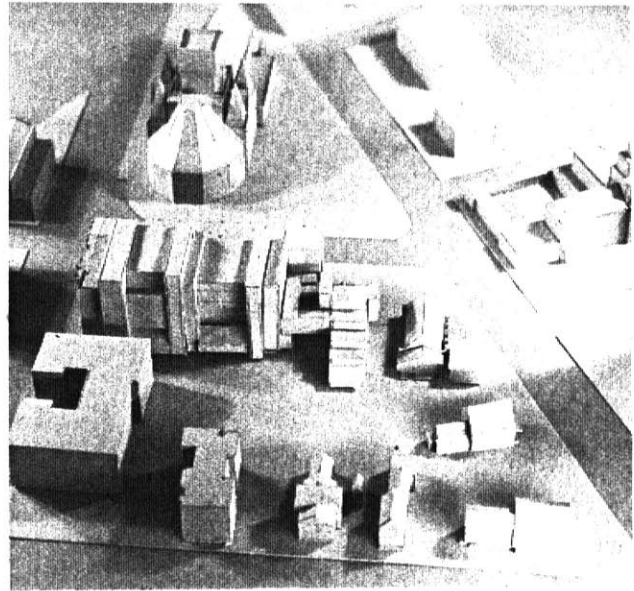
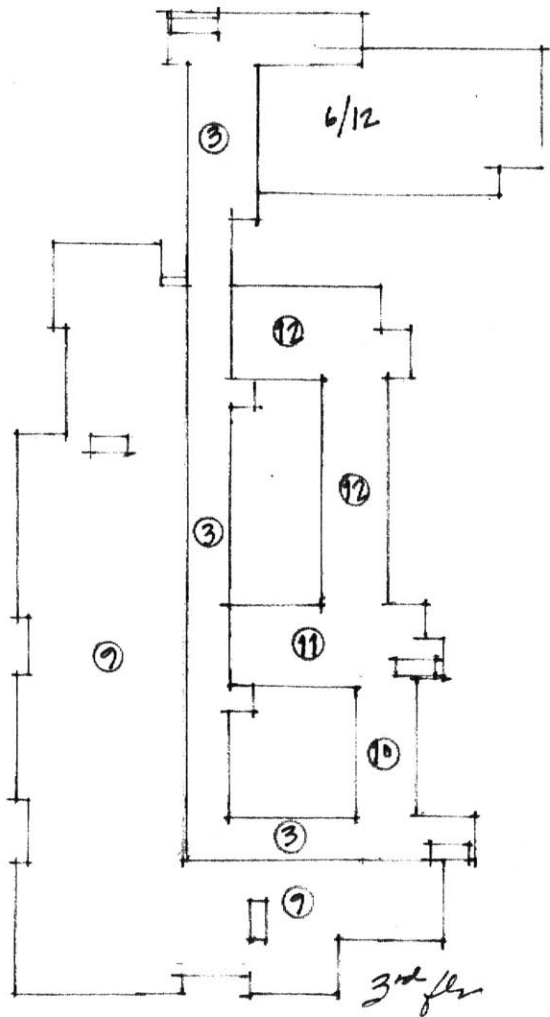
tion spaces are reinterpreted as the glue that, spread throughout, ties the various wings of the building together. Gradually, a pitched-roof idiom is reinterpreted as a building mass that steps down in a spiraling pattern from the high point that marks entry to the Harvard Campus from Cambridge Street to the outdoor amphitheater that gathers together the small residential building behind the GSD.



Use Distribution: flos 1-5

1. Entrance
2. Library
3. Exhibit / gallery space
4. Charrette / Studio
5. Café
6. Lecture hall
7. Reception / lounge
8. Administrative
9. Studio
10. Lounge
11. Review space
12. Classroom / lecture
13. Faculty offices.

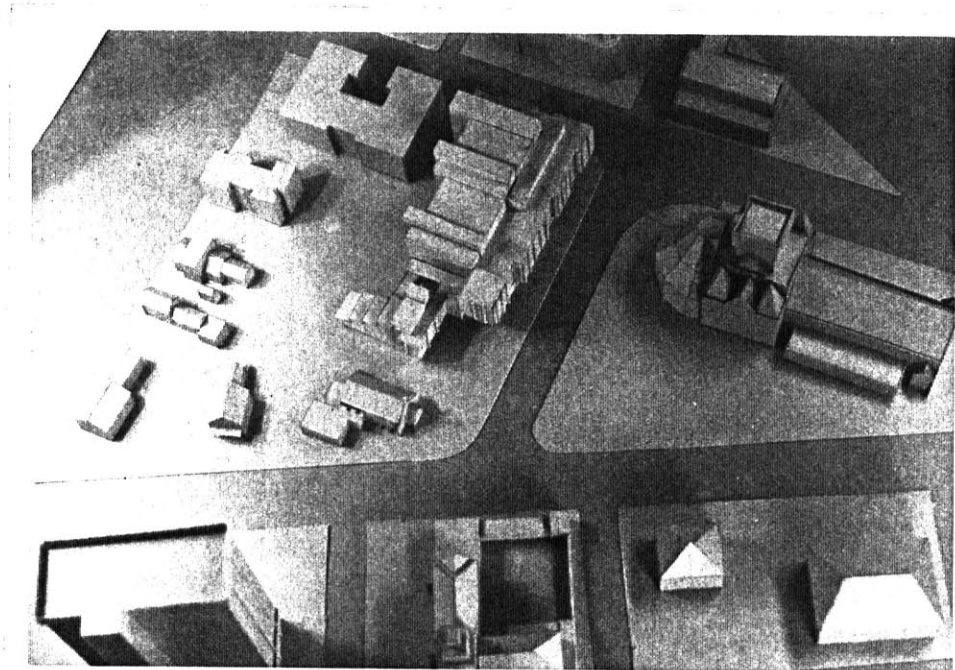


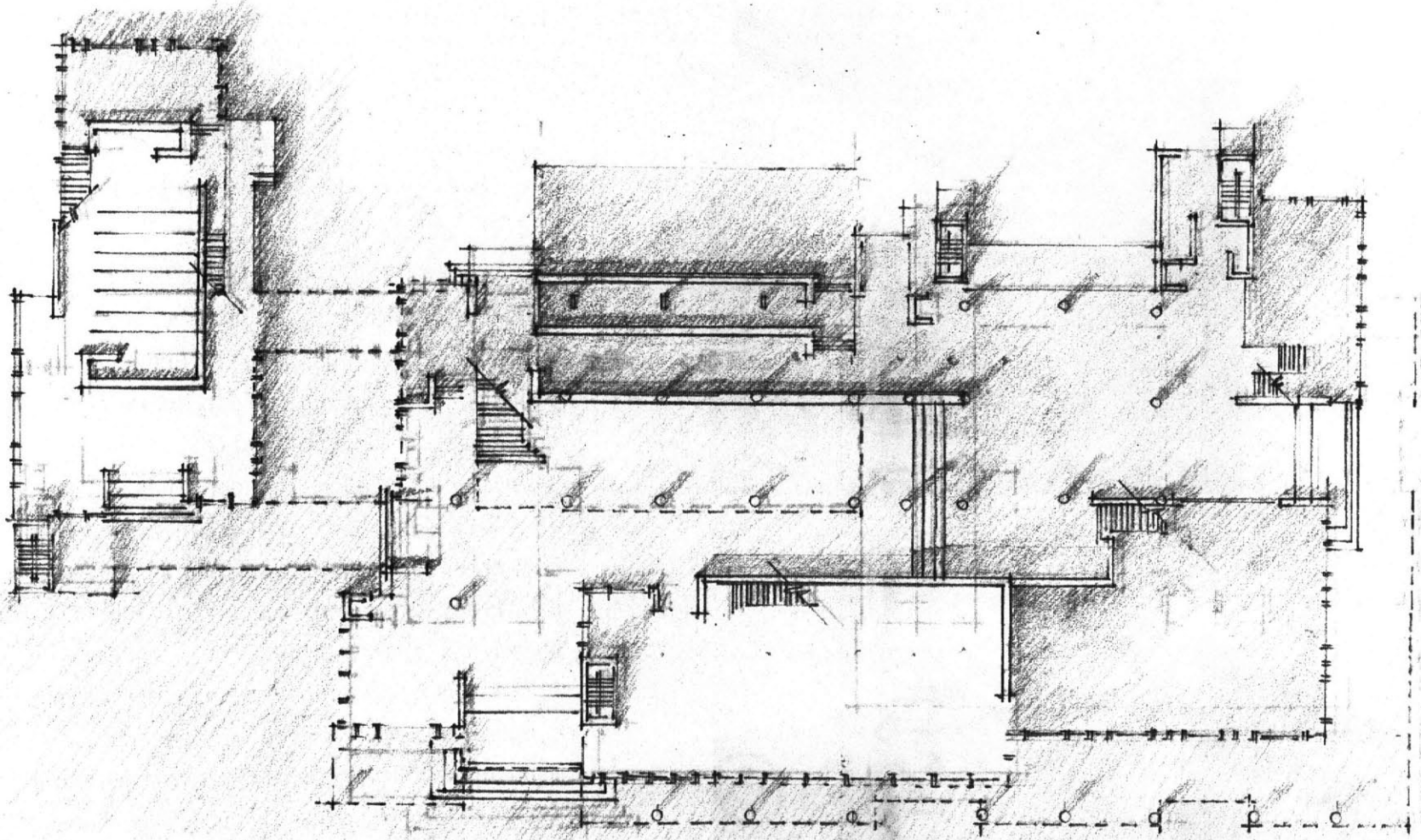


In the ongoing process of design the decorated solid-wall architecture of most Quincy Street buildings is transformed into a three dimensional screen-and-balcony system that is carefully inflected by the cadence of alternating column bay sizes.

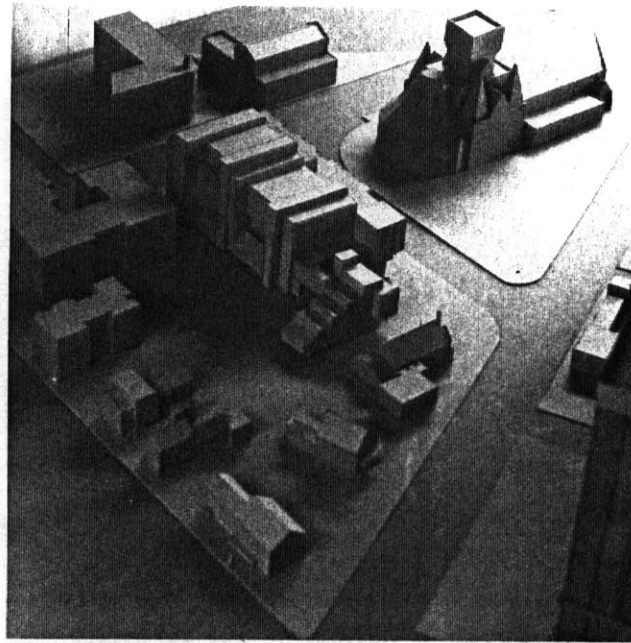
Slowly, too, a pattern of stairs and solid structural walls allies itself to the tartan column grid of the building and changes from an enclosed stair in a closed core, to a closed stair in an open core, to the open principal stair of the building, to the lecture hall space which is, in itself a spatial stair, and finally to the outdoor amphitheatre in the court behind.

From an understanding of context comes the premium placed on diagonal views through open courtyards to the open space beyond. From here, too, comes the nearly-symmetrical quality of the building's open spaces--



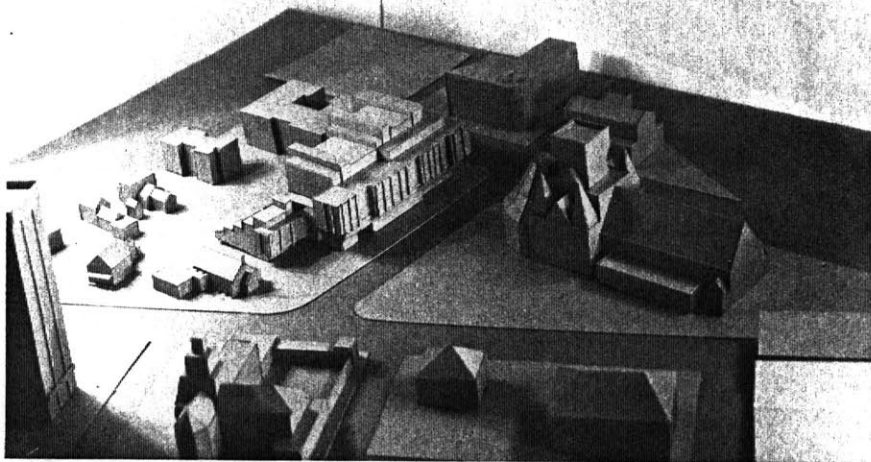


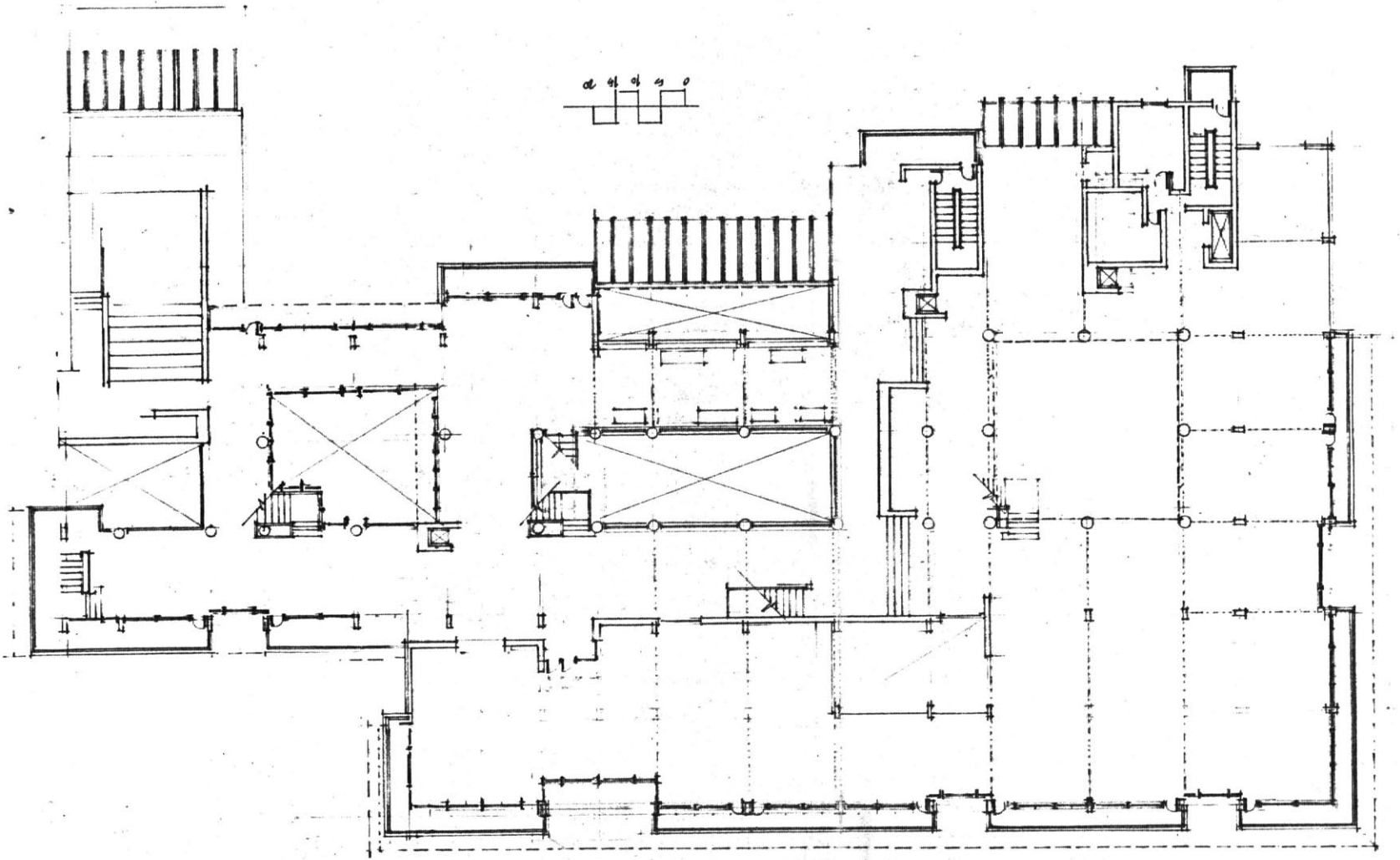
First floor plan



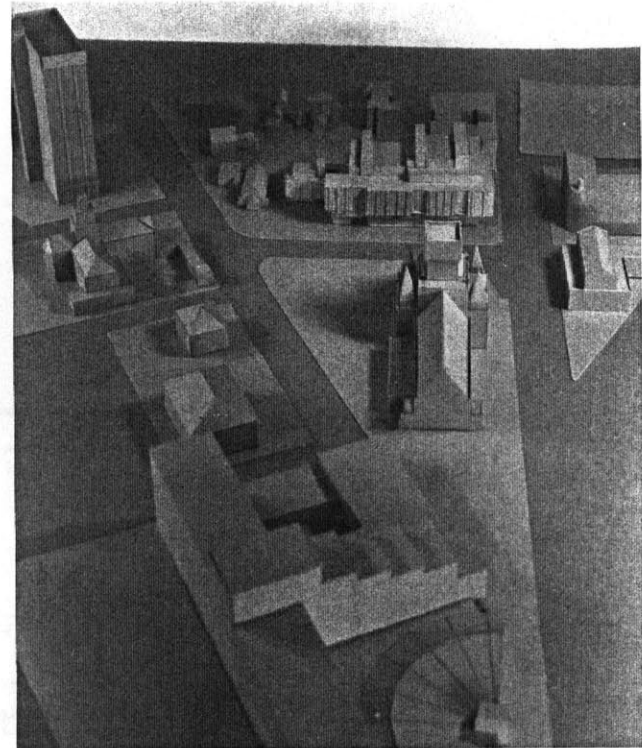
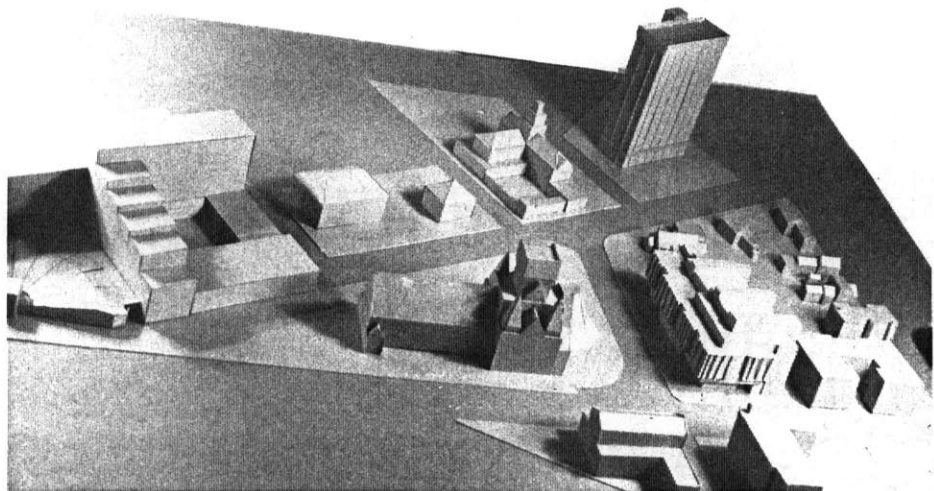
asymmetrical though the School remains, both experientially and in its massing and articulation. Also from the College Yard come the courtyard spaces with their incomplete geometrics and open corners both in plan and in section.

The built orthogonal spatial framework that emerges as the key element of the building is unquestionably the product of an intention to re-establish the quality of outdoor spaces within the confines of an individual building organization. Nevertheless, the framework itself has no direct precedent in any of the buildings that surround it. Indeed, it is the ordering system itself which synthesizes the myriad of demands made upon the building by program and site. That framework is the backbone, or the structure of the character and identity of this new building. Definitions at the scale of details and





Mezzanine / Second floor plan

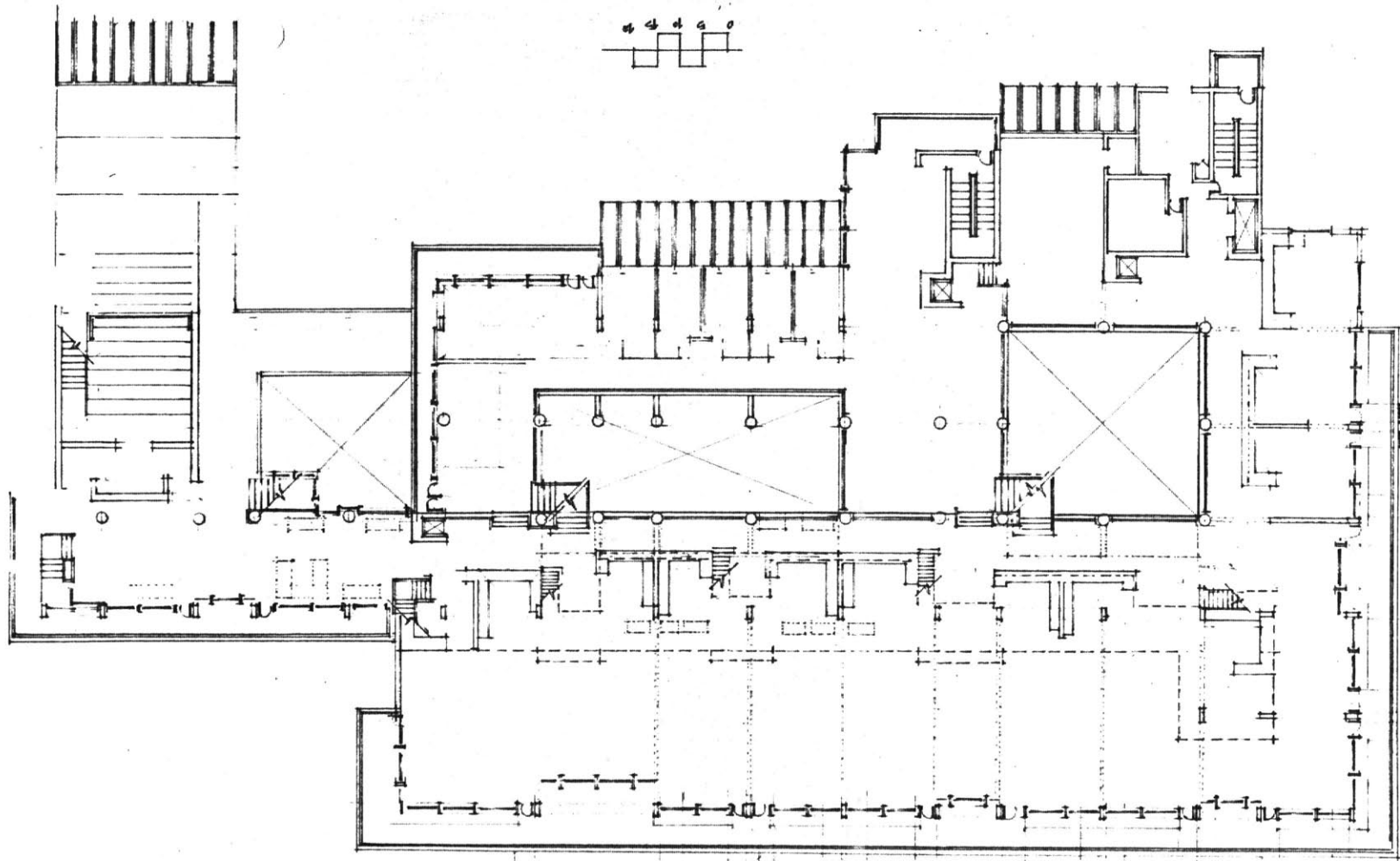


materials, while they work to complete that description of character, would be meaningless without it.

The structural framework, bound up as it is to the system of movement and light of the building, has a clearly understood preferred direction, an asymmetrical distribution of uses which results in a correspondingly asymmetrical movement spine, a clear distinction among public spaces that is non-hierarchical despite its symmetry, and a distinct strategy for making transitions from public to more

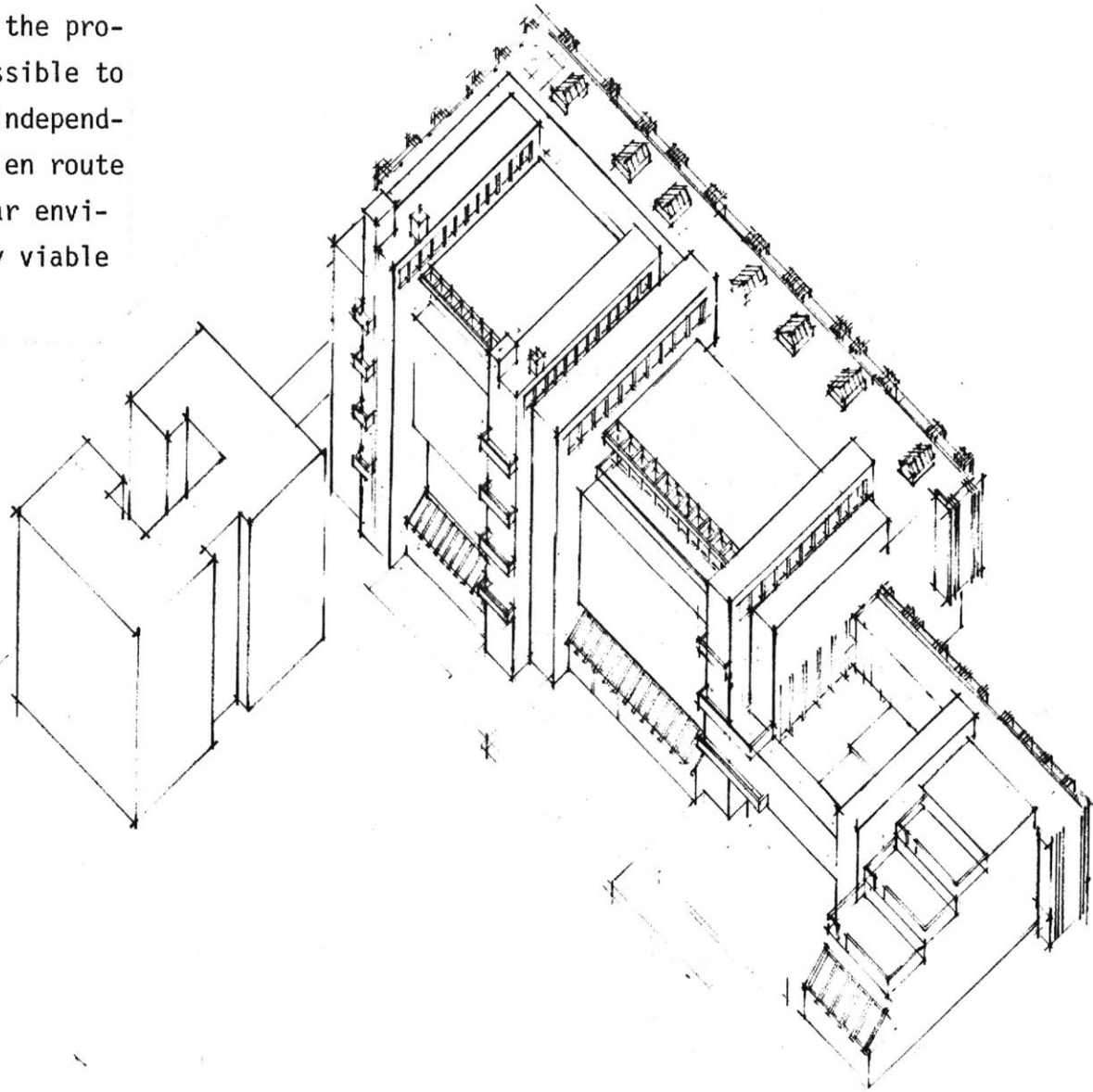
private spaces.

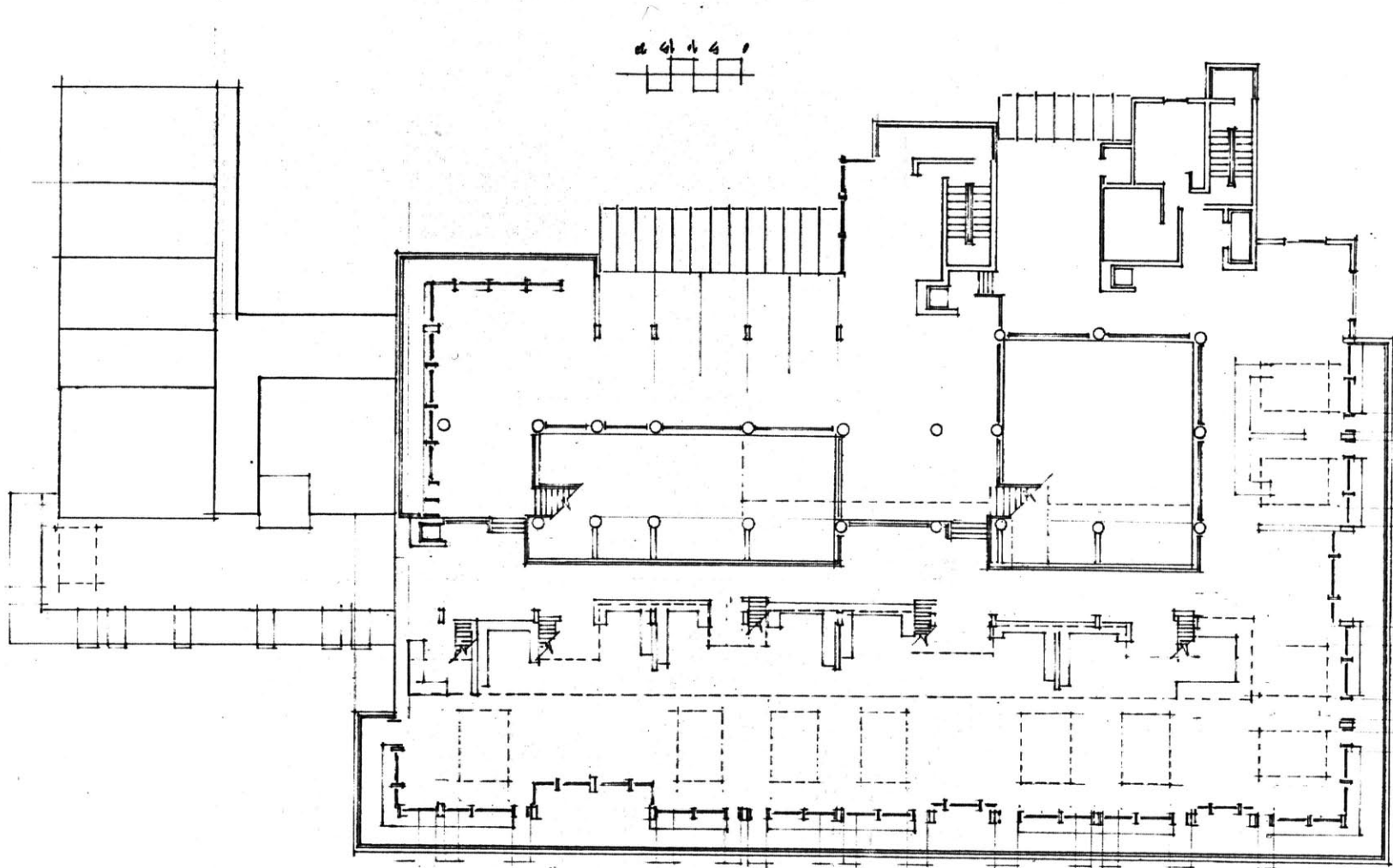
The strength of the framework lies in its ability to tolerate the existence of numerous independent subsystems which modulate and articulate the scheme in such a way as to render that internal order sensitive to site--all without disturbing or clouding the clarity of the overall interior statement. Against the consistency of the



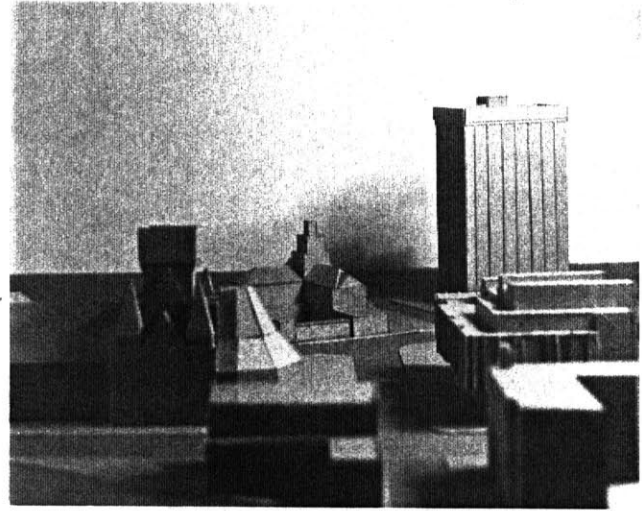
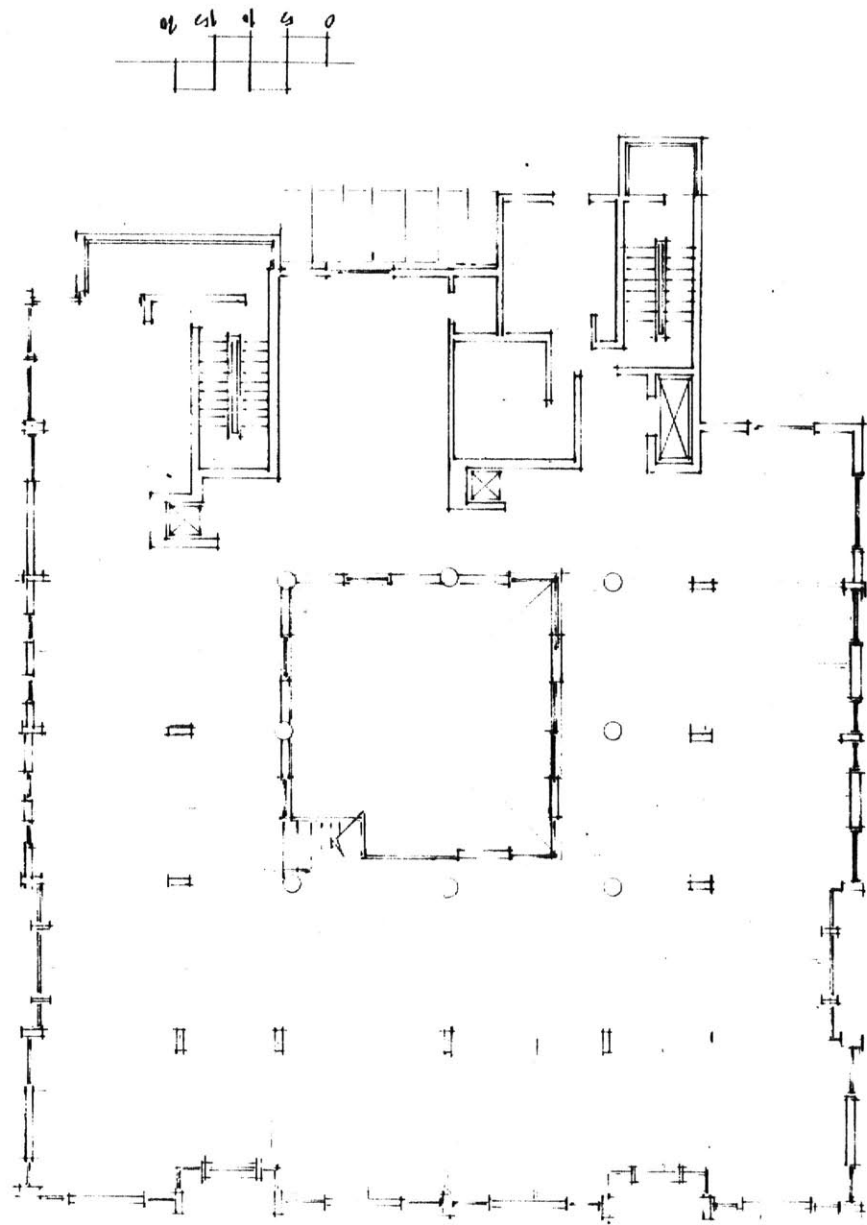
Third floor plan

order gradually discovered in the process of design, it becomes possible to play a number of related but independent themes. The building is en route to becoming a complex but clear environment as well as a hopefully viable expression of place.

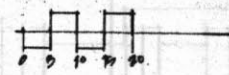
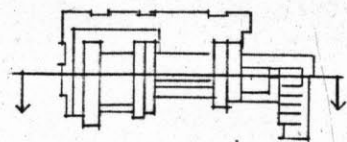
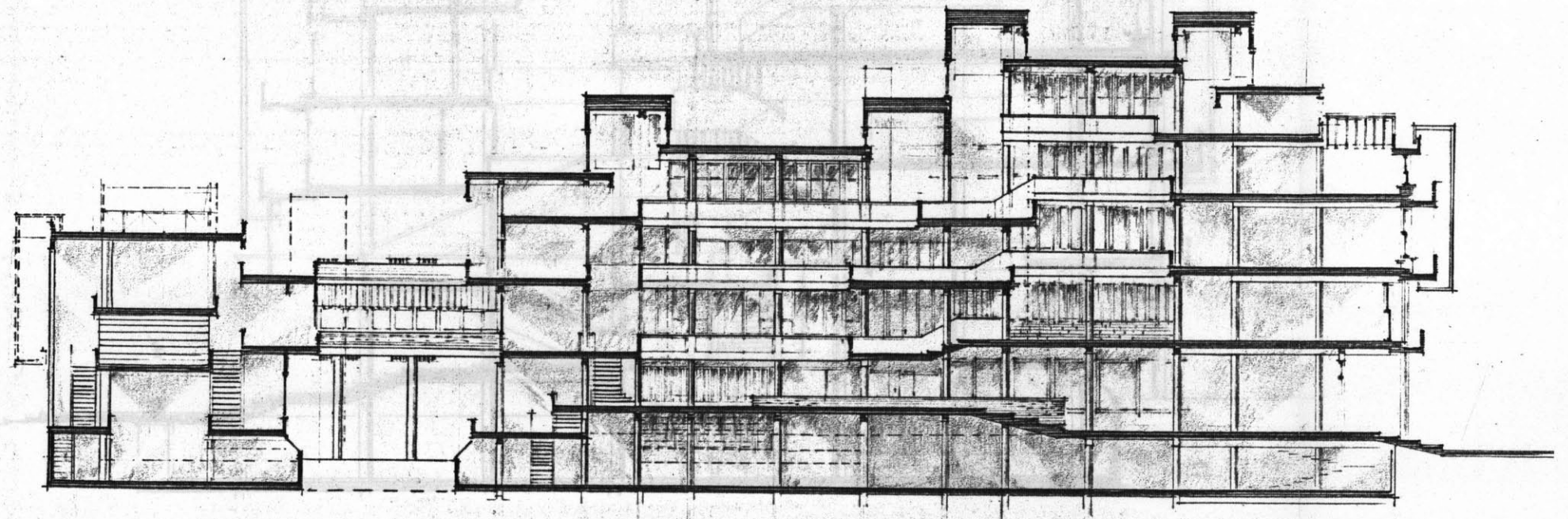




Fourth floor plan

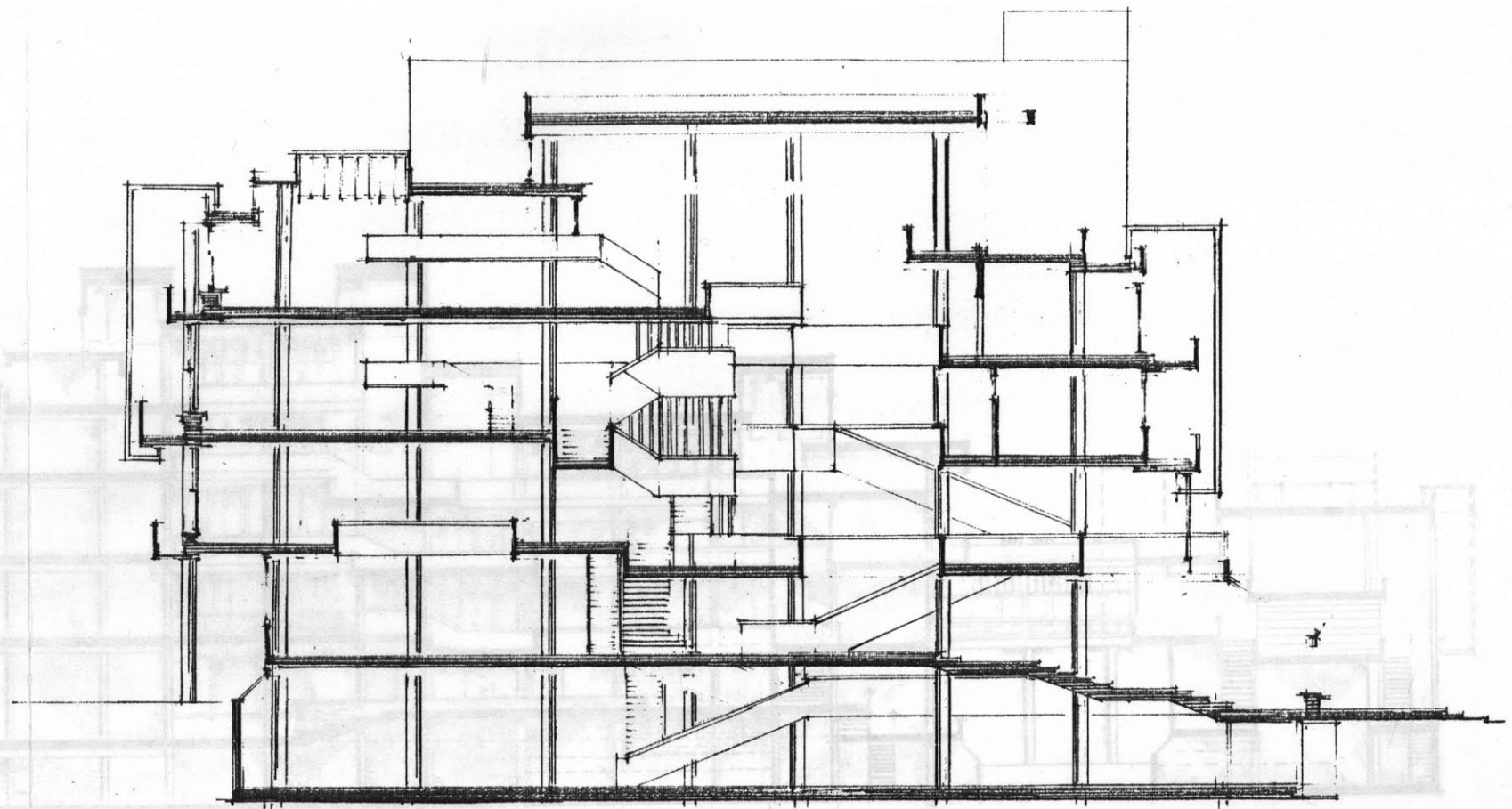


Fifth floor plan



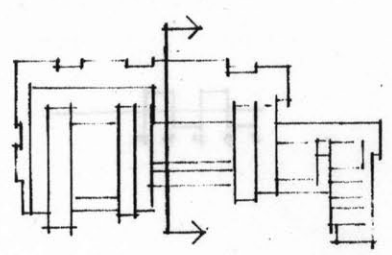
Longitudinal section

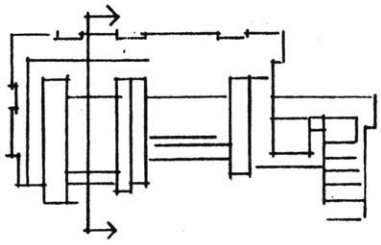
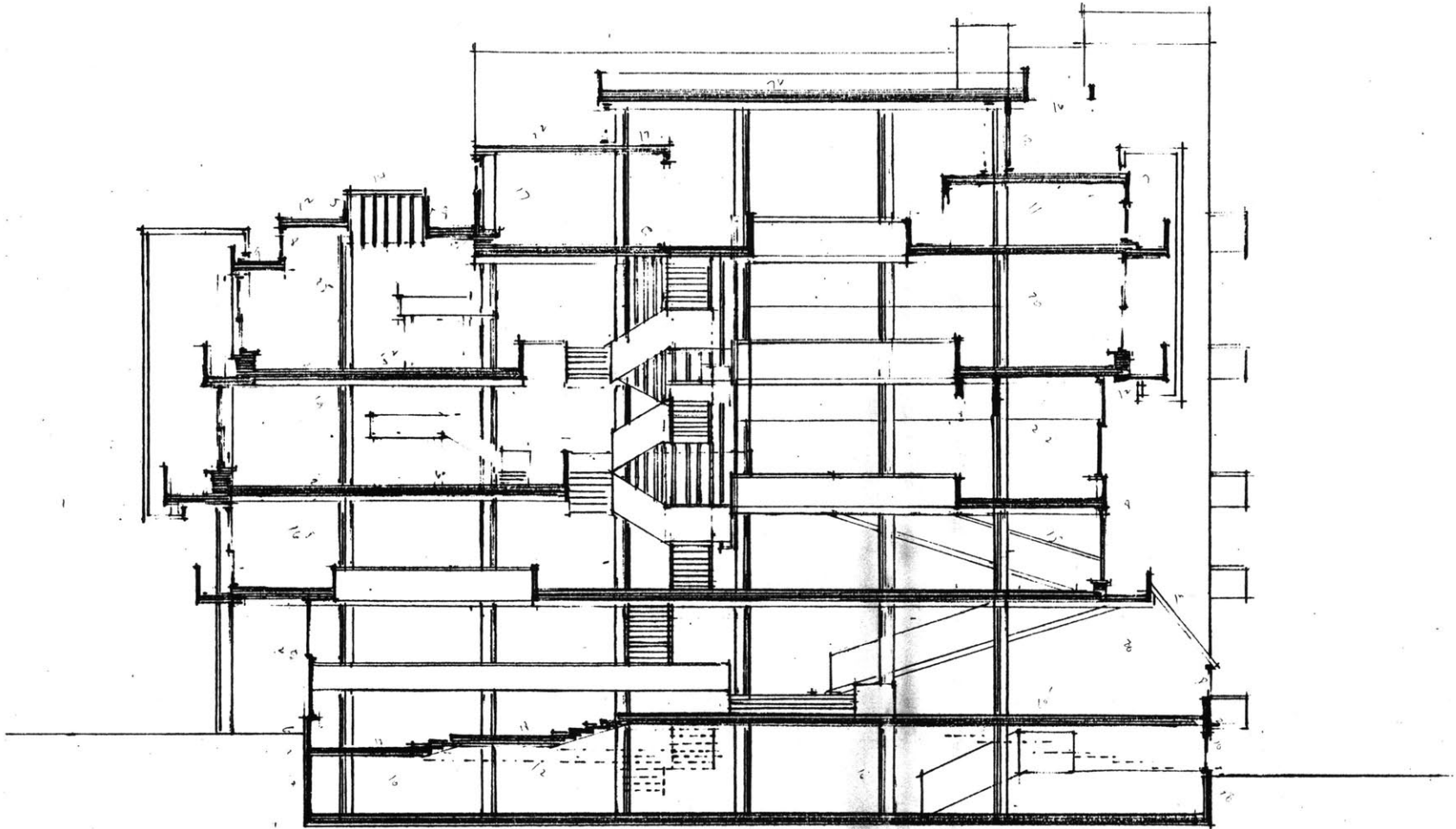
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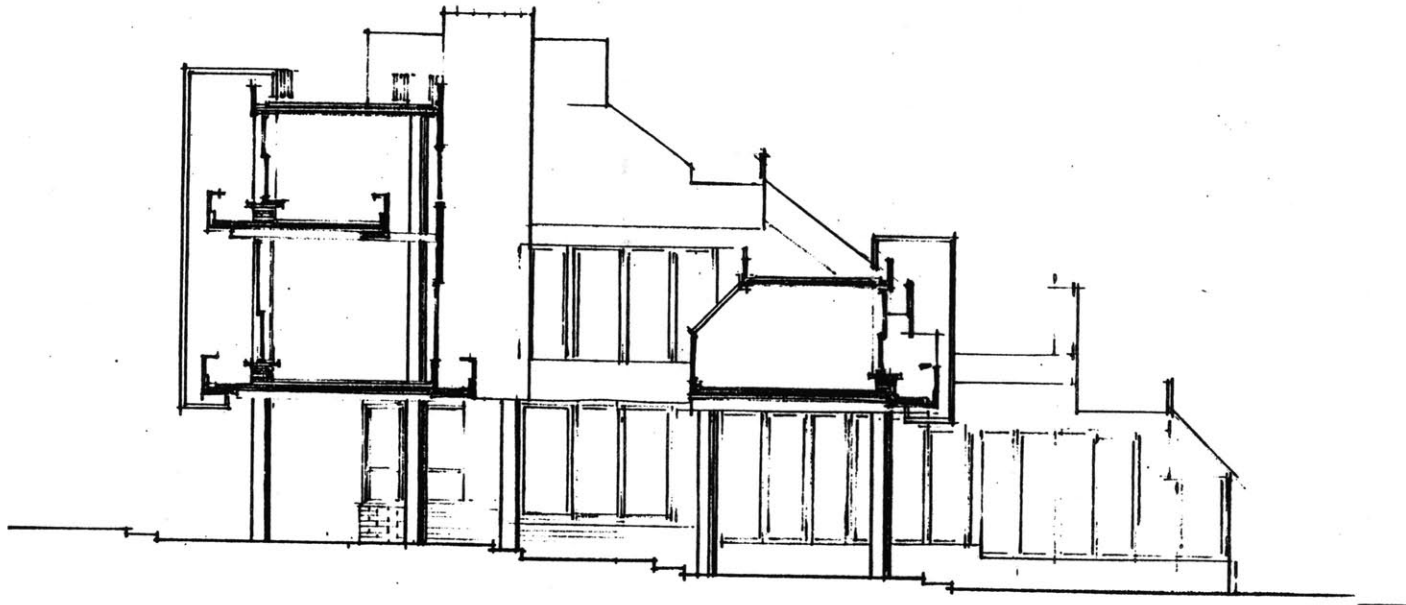
Inverse section

0 5 10 15 20 SCALE:

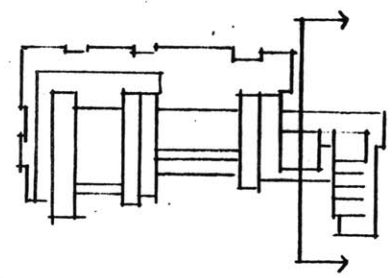


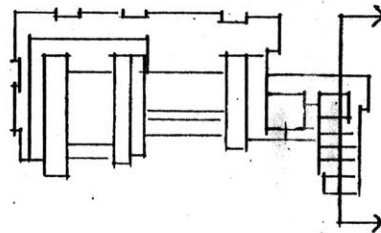
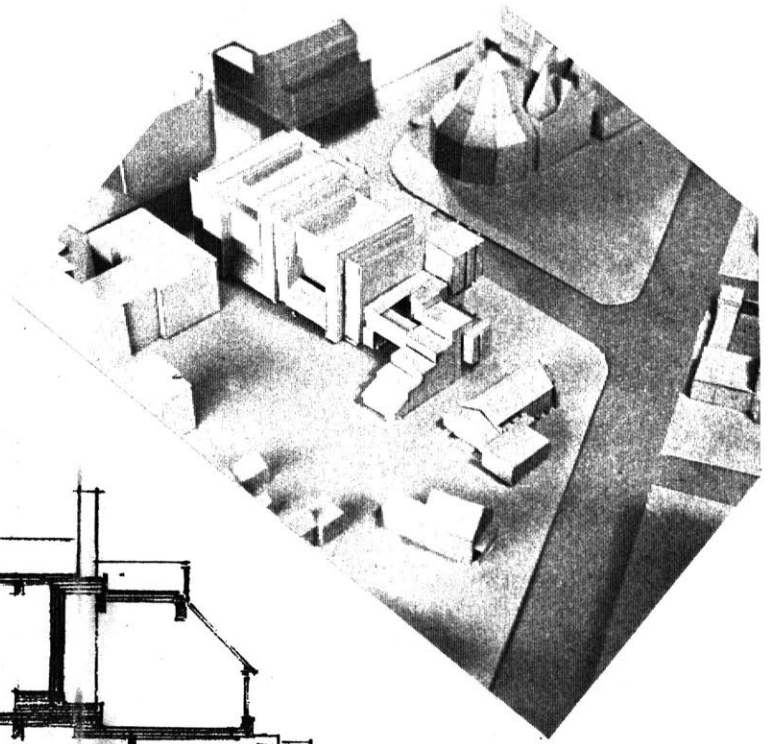
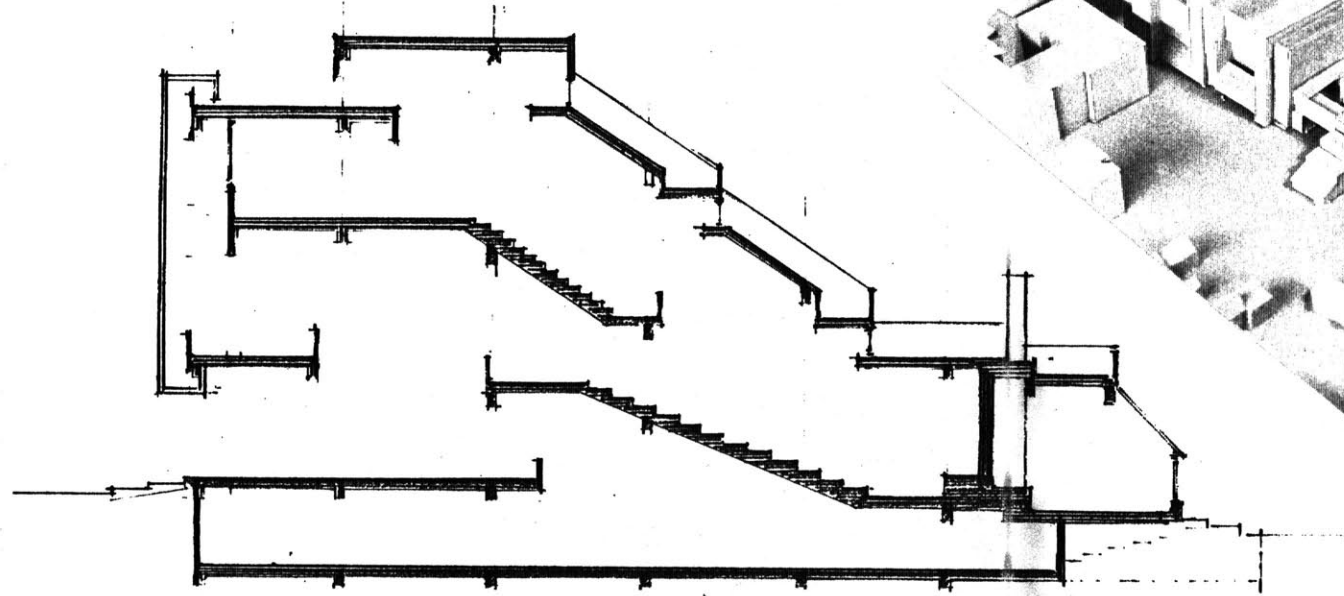


Joinrise Section



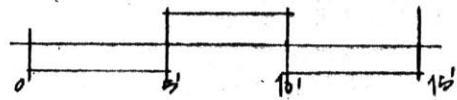
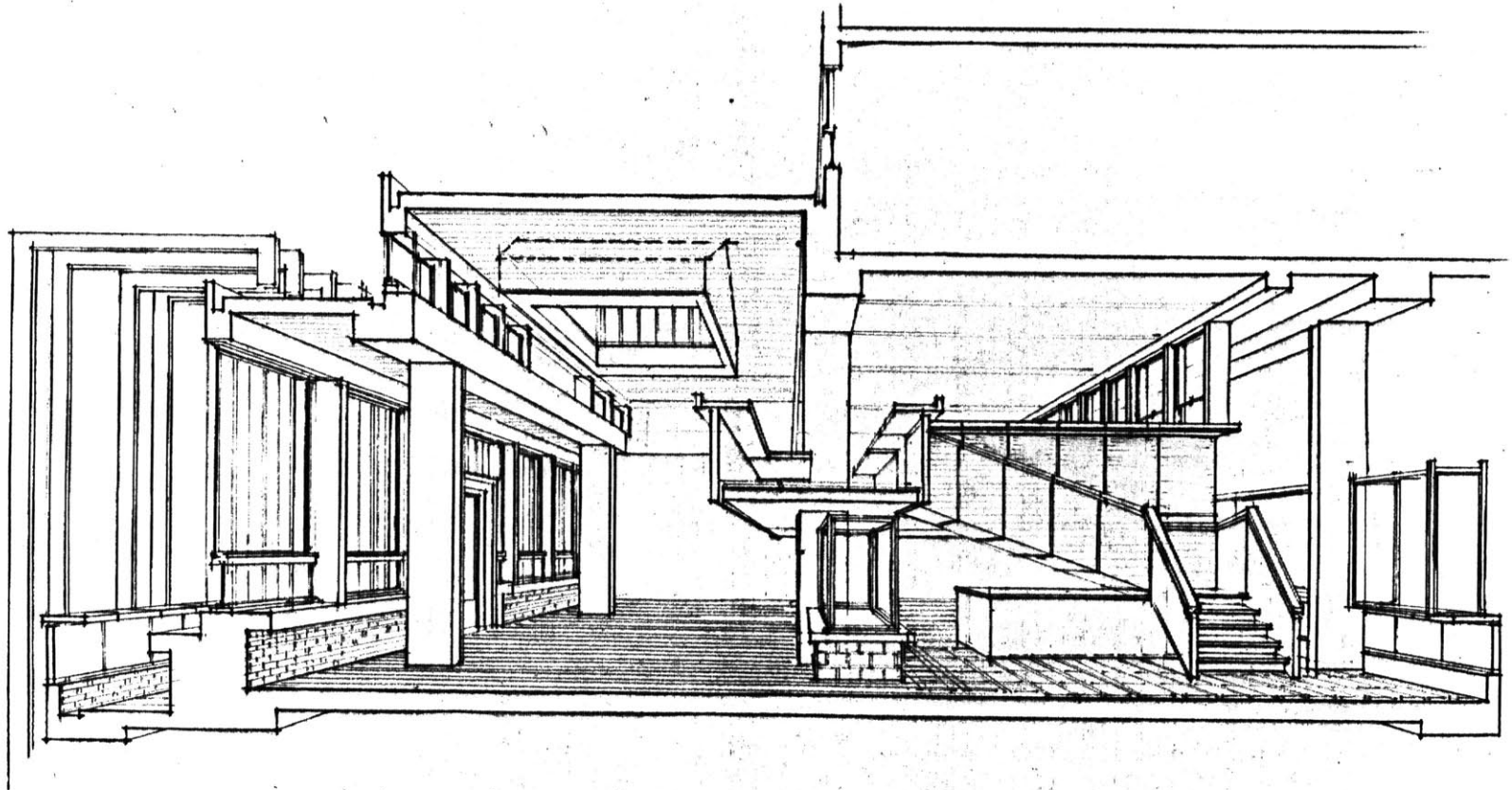
*Section through
exterior courtyard*



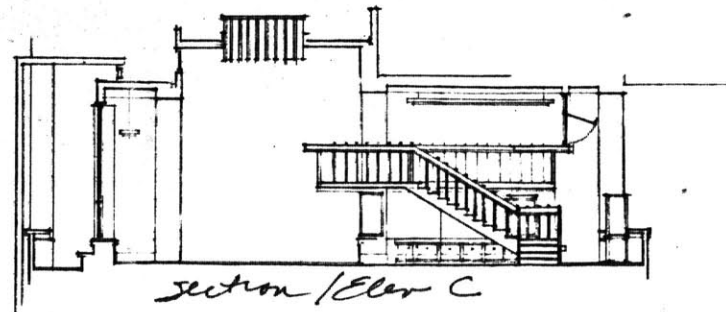
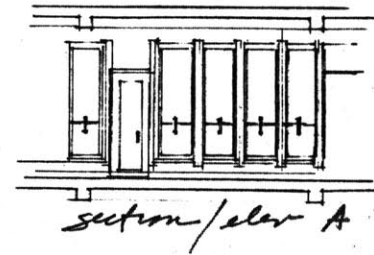
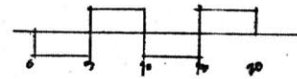
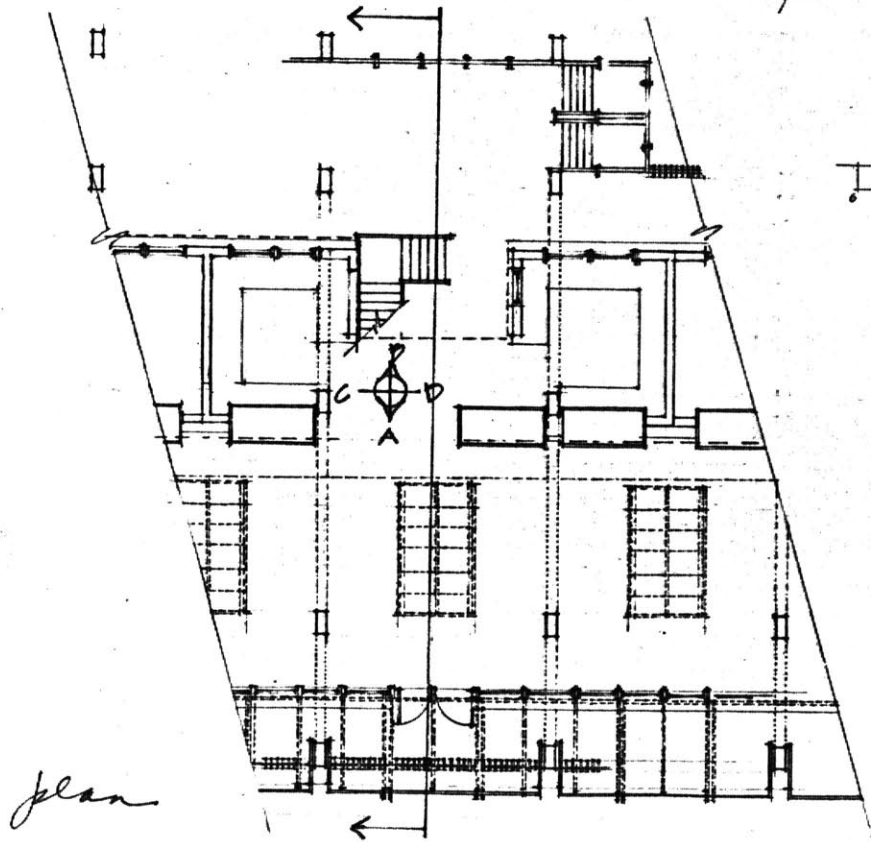
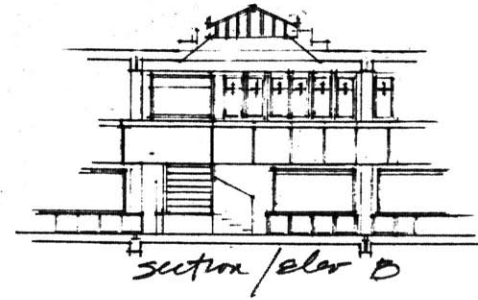
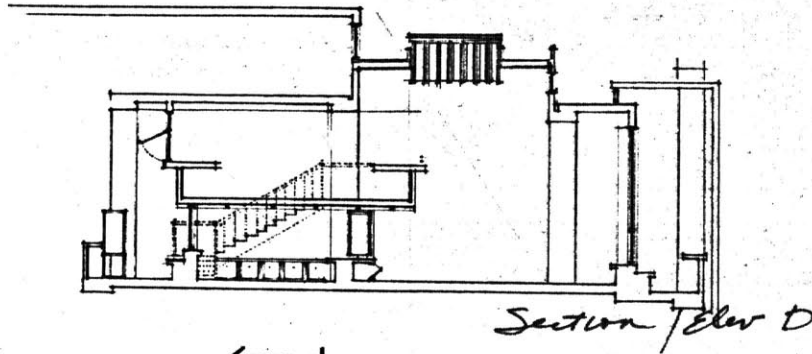


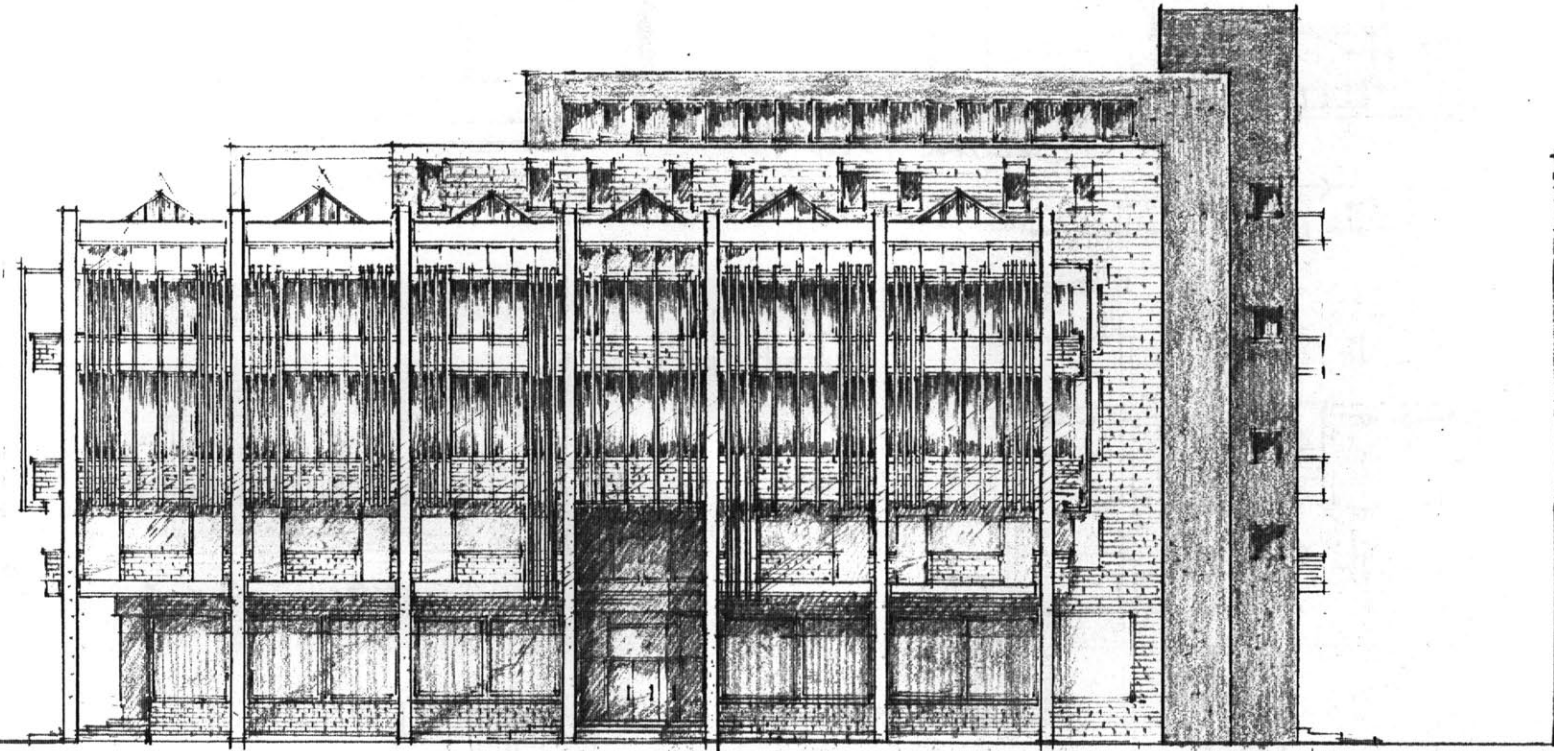
*Section through
theatre*

*Studio space
Section - perspective*



Studio spaces : studios
3 private spaces, lighting

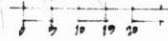
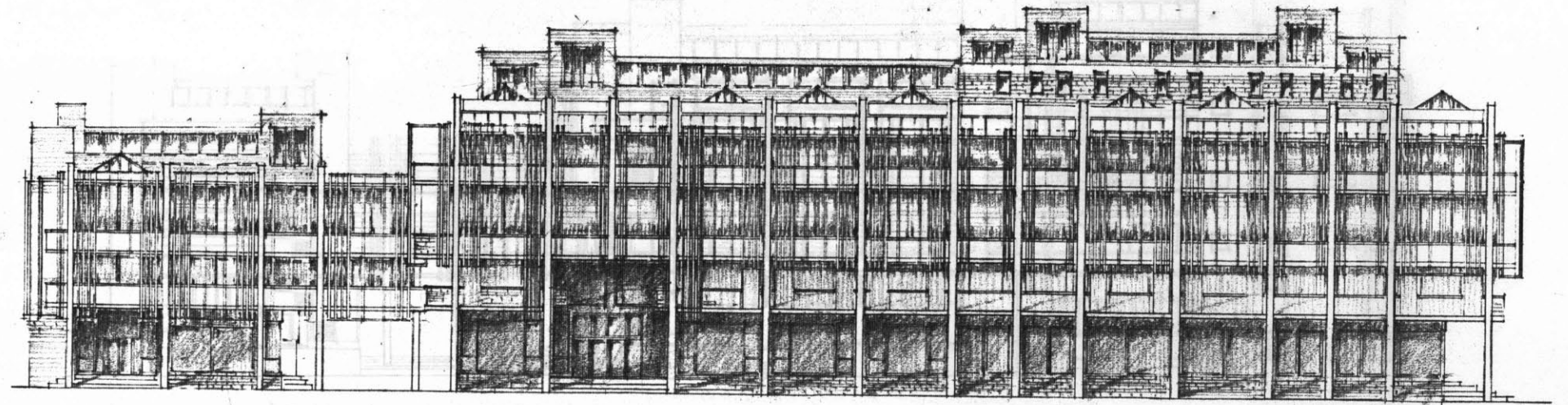
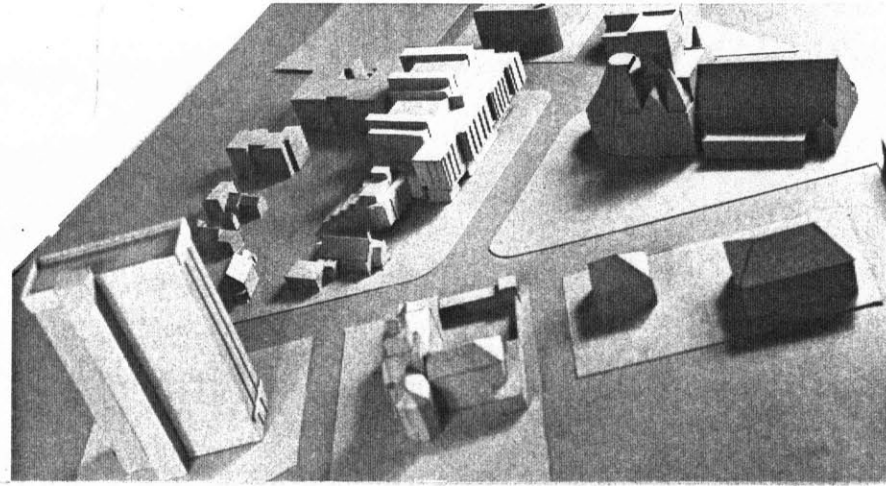




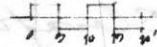
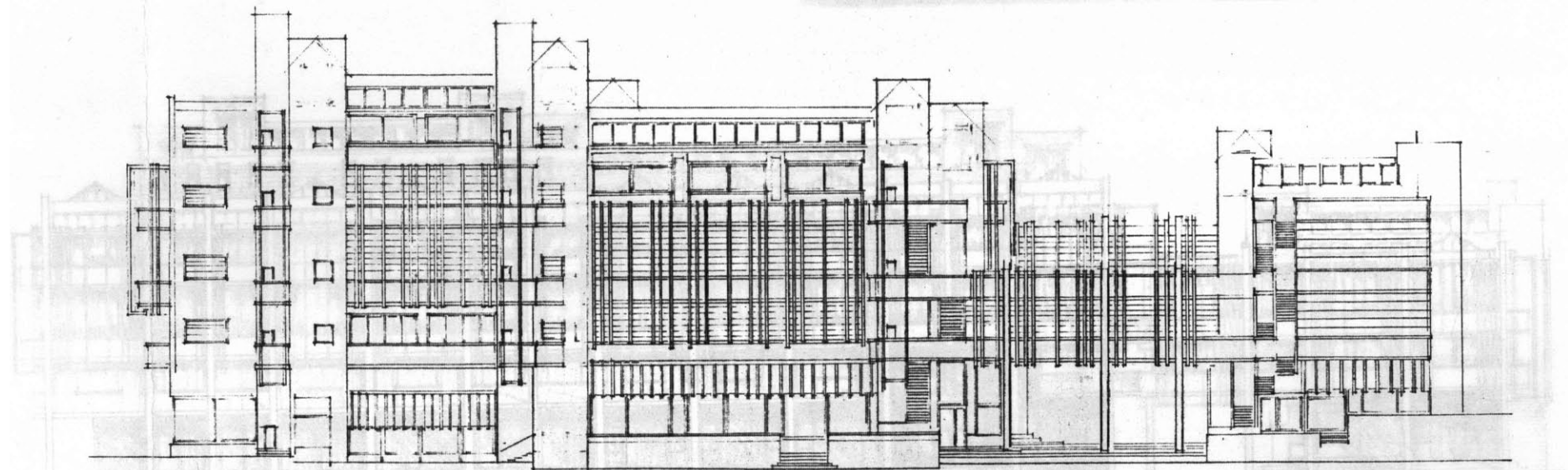
Cambridge Street
Elevation

0 6 30

144

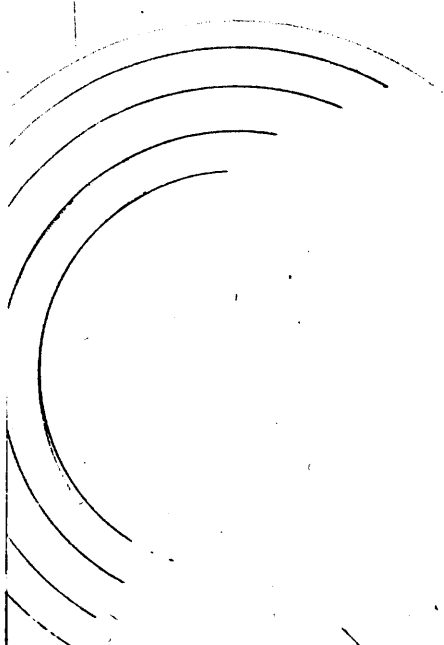


Quincy Street Elevation

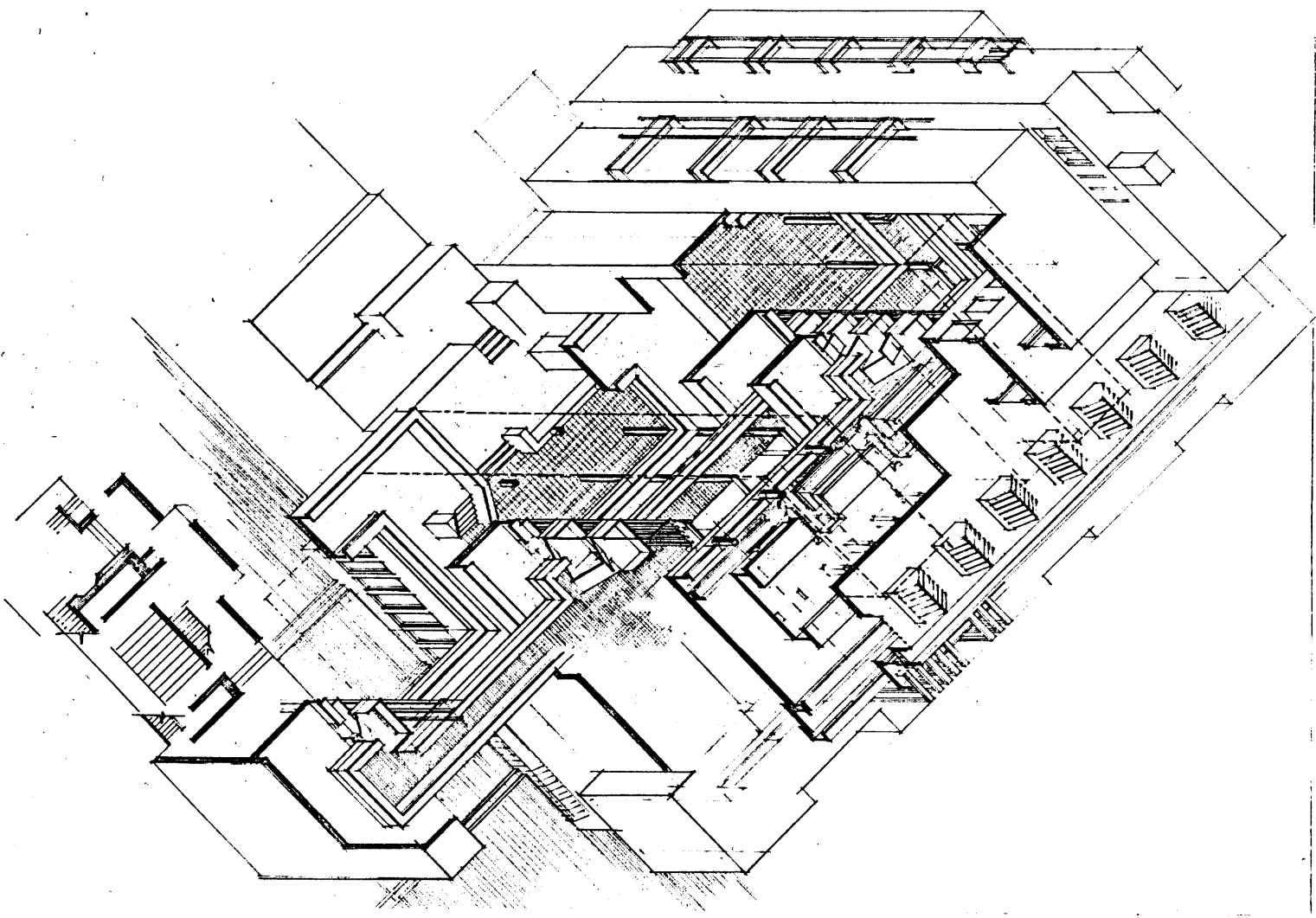


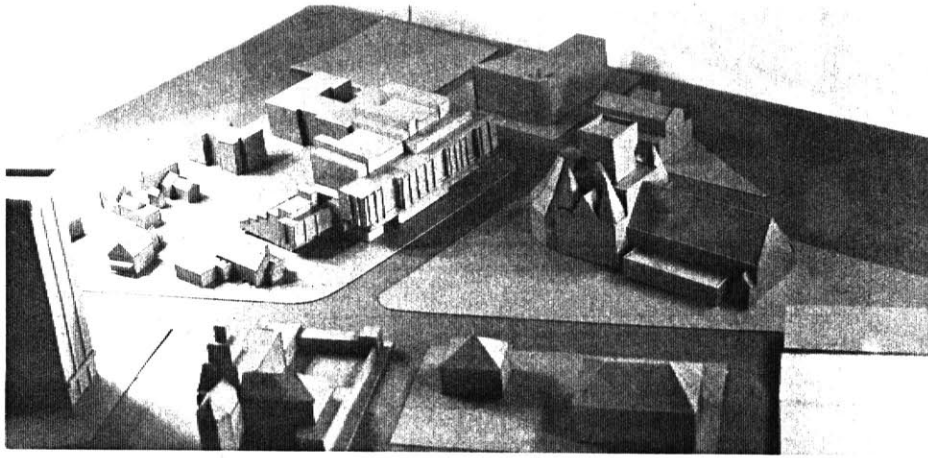
Courtyard Elevation

146



Antimony Apertures



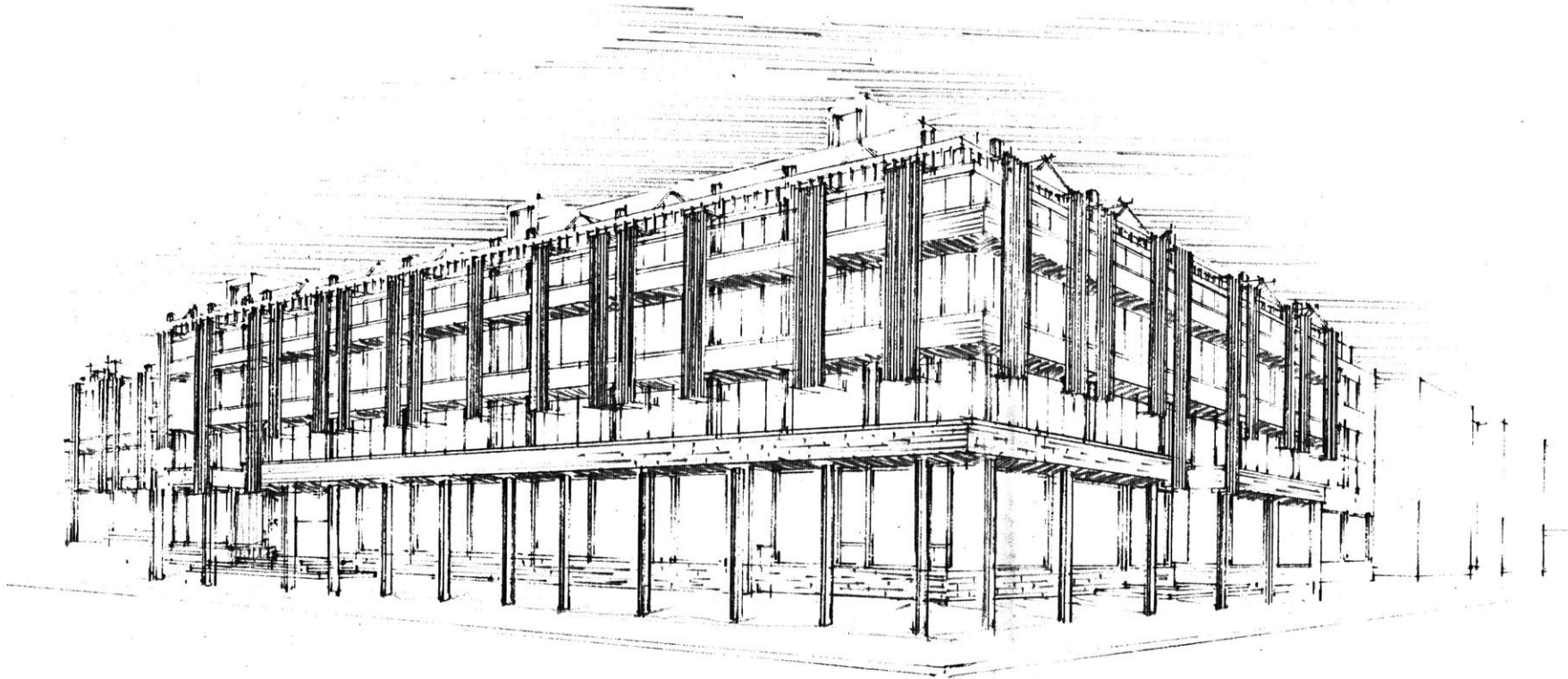


The way one does things is private, but what one does can belong to everybody. Your greatest worth is in the area where you can claim no ownership, and the part that you do that doesn't belong to you is the most precious. It is the kind of thing you can offer because it is a better part of you; it is a part of general commonality that belongs to everybody. You feel that what you truly have to offer is in your next work, and that what you have done is always incomplete. I believe that even a great composer like Bach, who did everything as though it belonged to everyone else, died thinking he did nothing, because a person is greater than his works. He must continue.

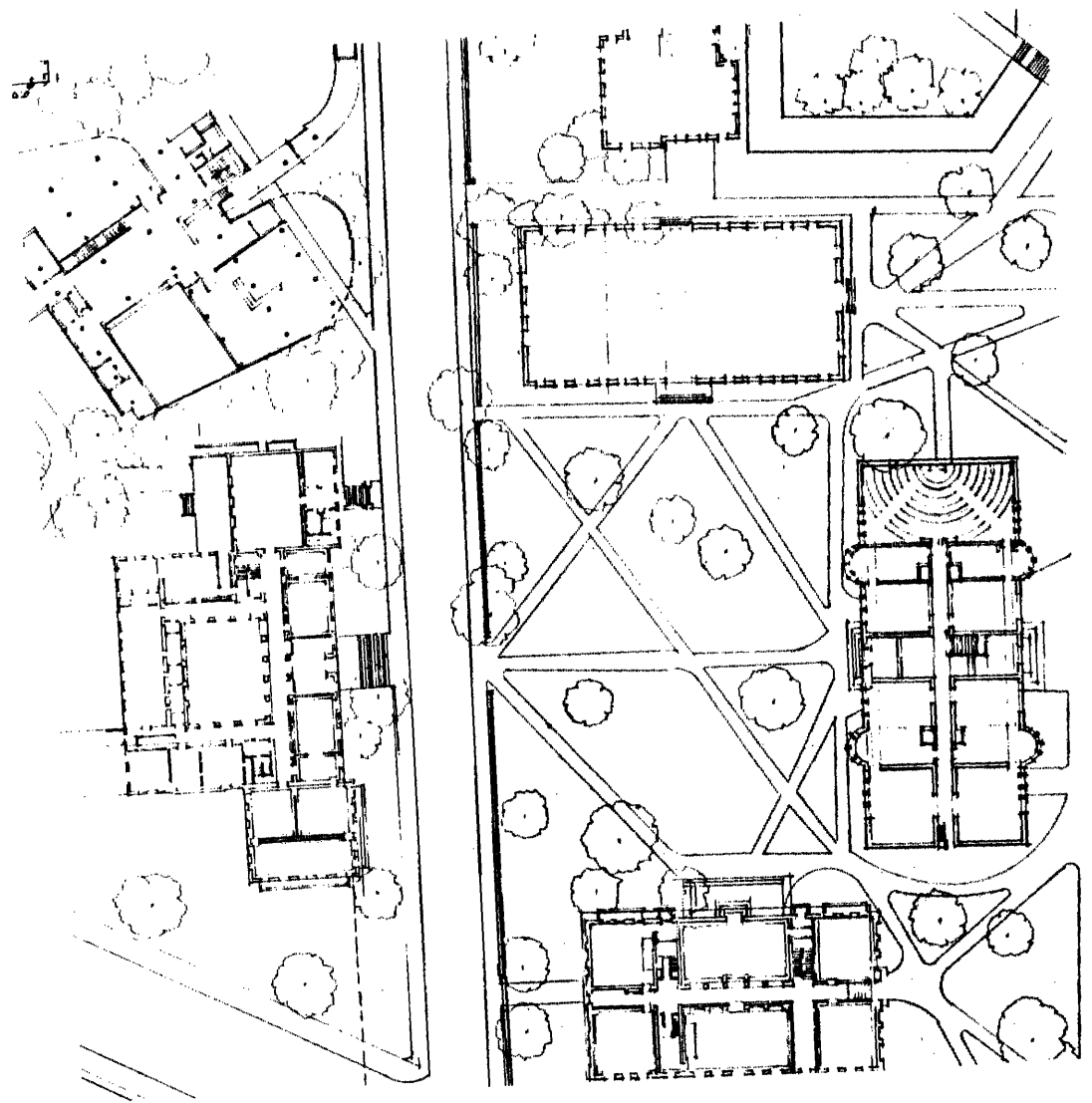
I believe it takes a long time to be an architect; it takes a long time to be the architect of one's aspirations. You can become an architect professionally overnight. But to feel the spirit of architecture from which one makes his offering takes much longer.

And where does the architect sit? He sits right there; he is the one who conveys the beauty of spaces, which is the very meaning of architecture. Think of meaningful space and you invent an environment, and it can be your invention. Therein lies the architect.

Louis I. Kahn

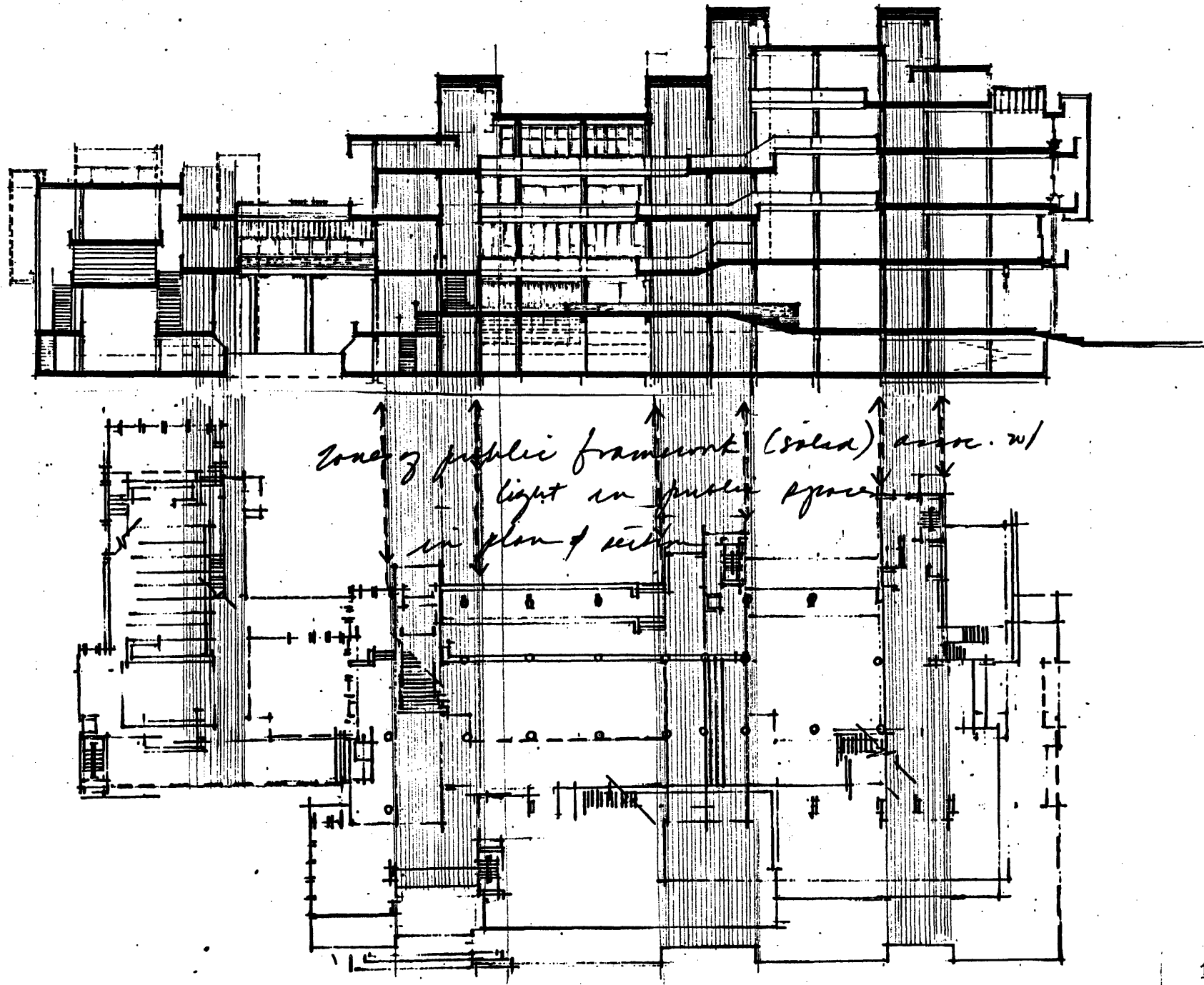


Quincy Street, Perspective

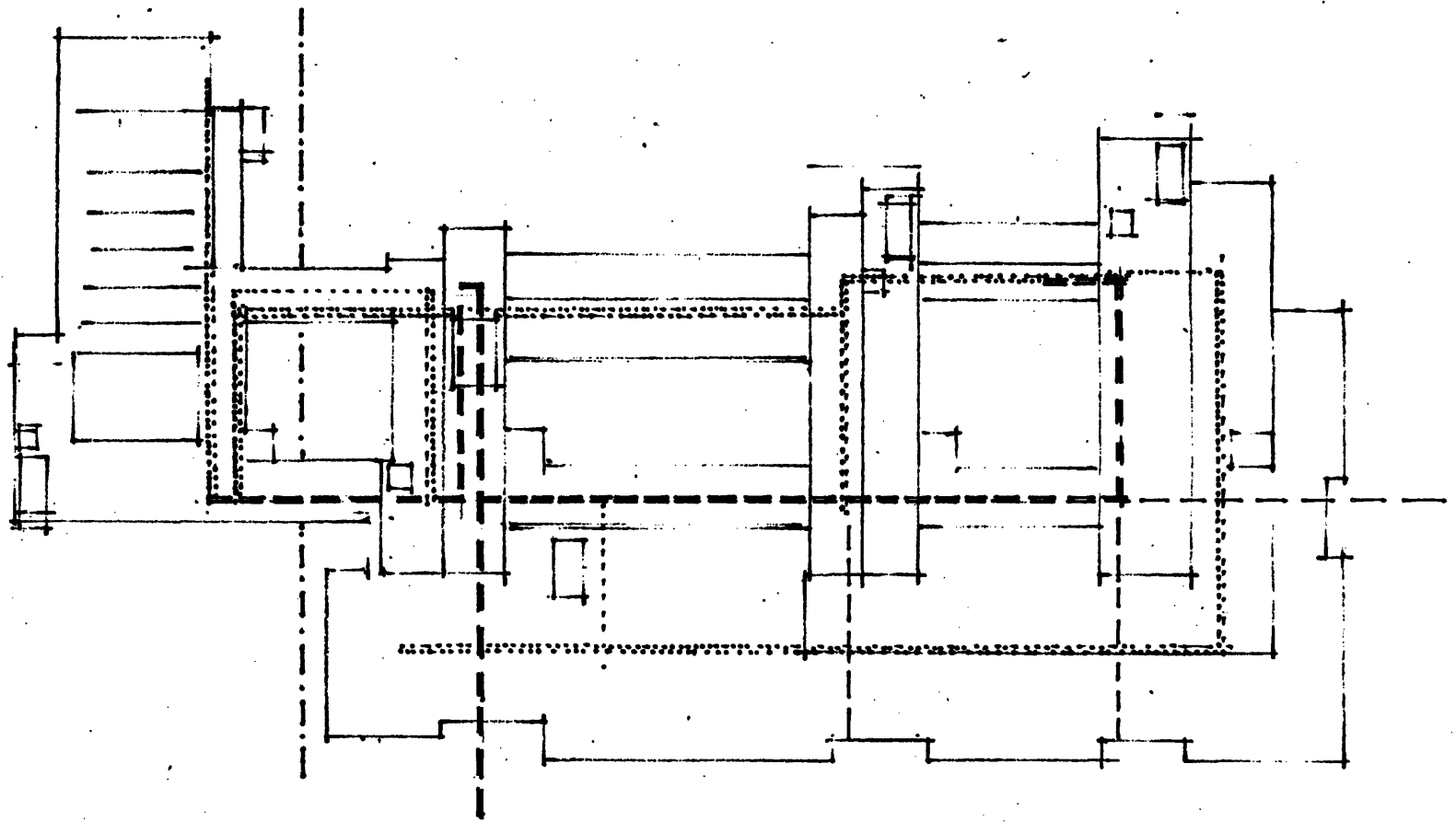


ANALYSIS

O, Chestnut tree, great-rooted blossomer,
Are you the leaf, the blossom, or the bole,
O, body swayed to music, o brightening glance
How can we know the dancer from the dance
William Butler Yeats

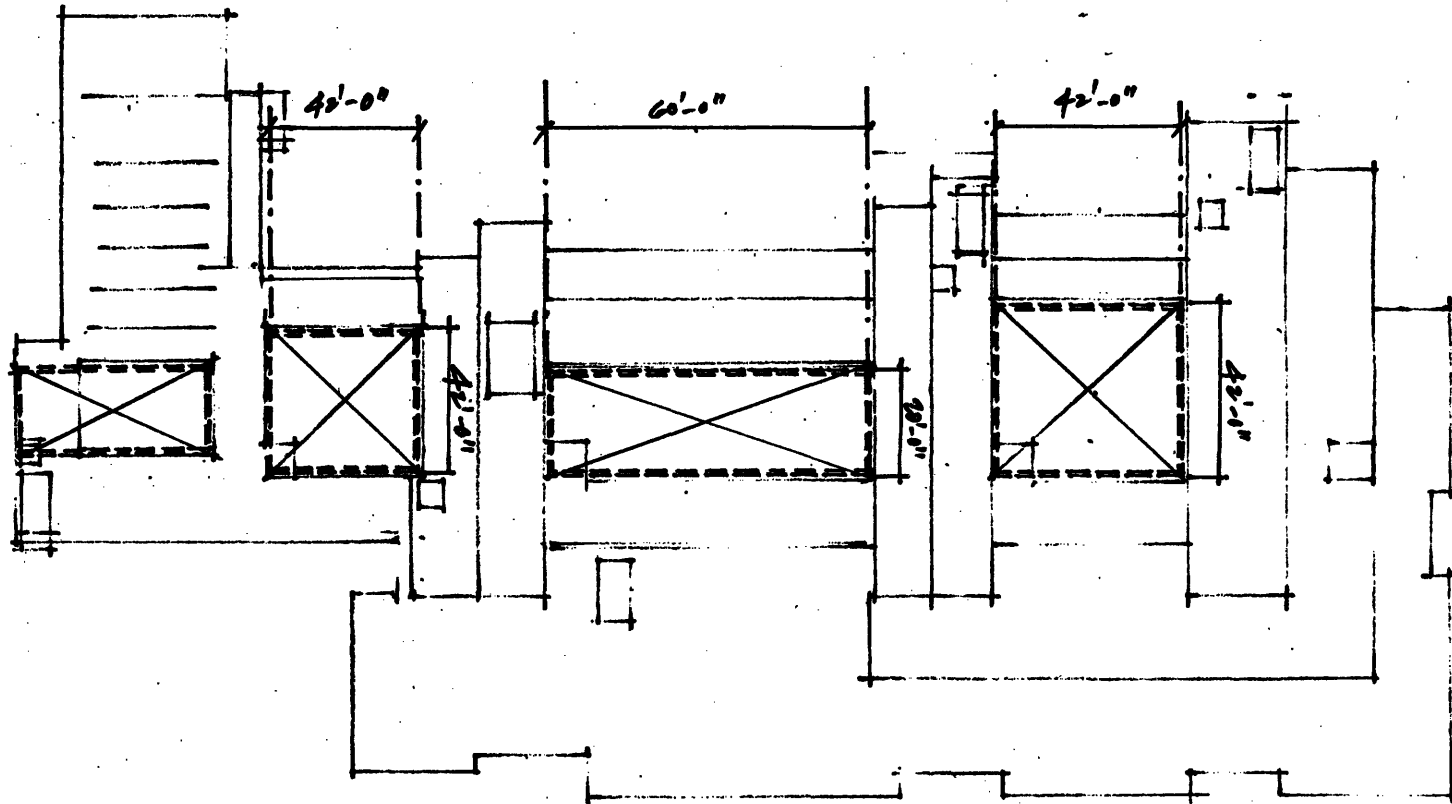


Zone of public framework (shaded) assoc. w/
light in public space
in plan of section

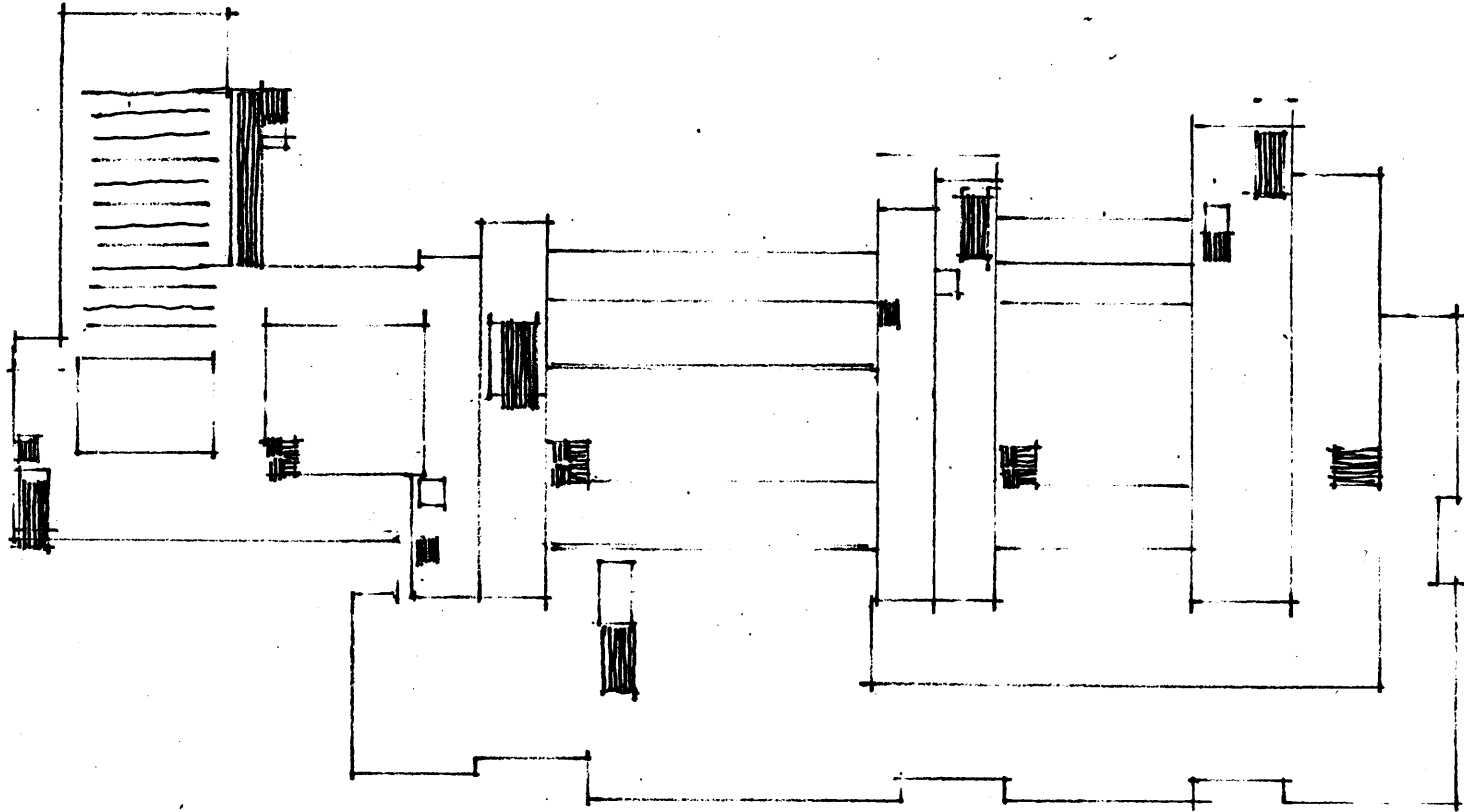


Major systems of movement.

— primary
 secondary



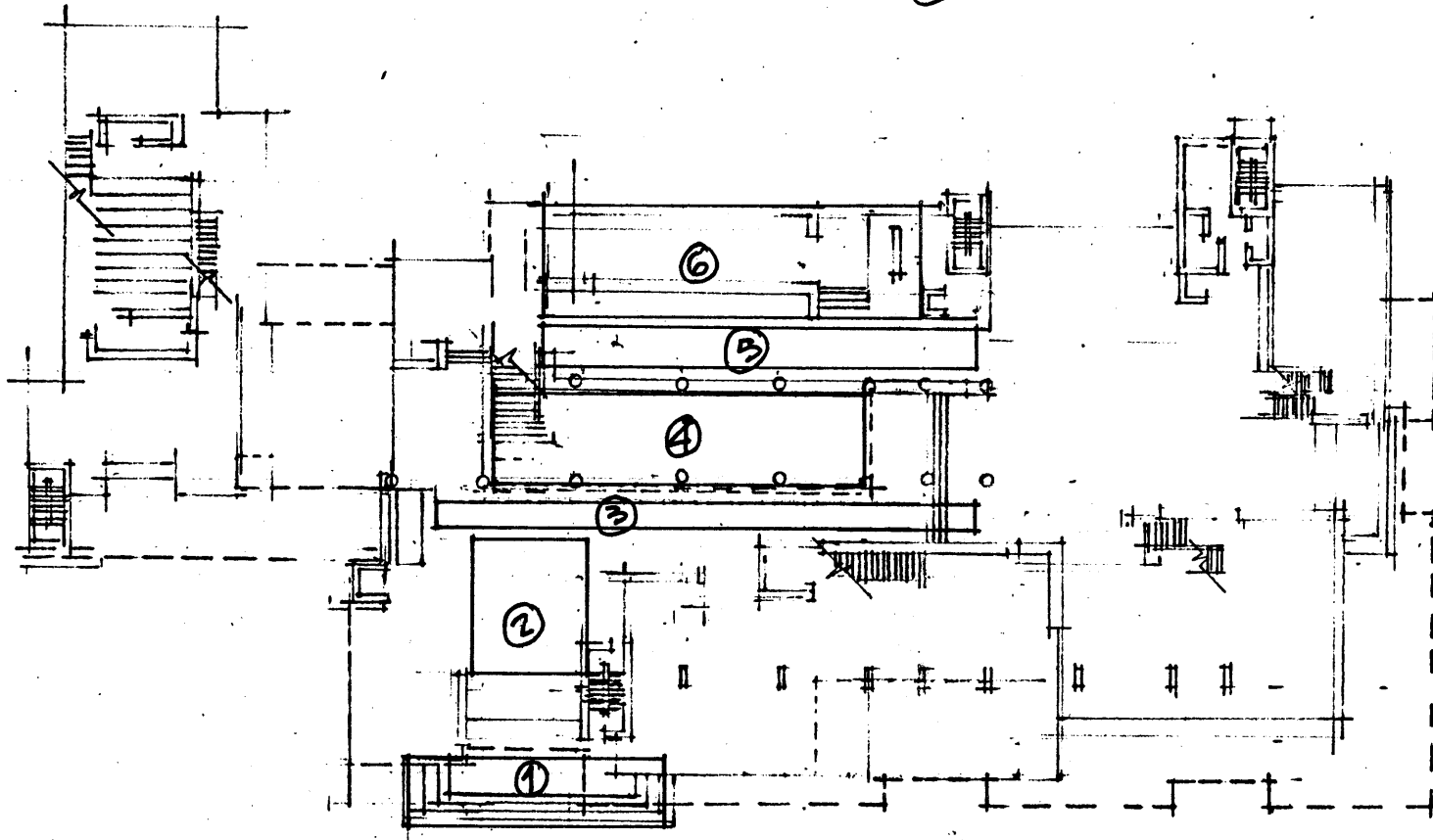
Major grid lines. Framework established



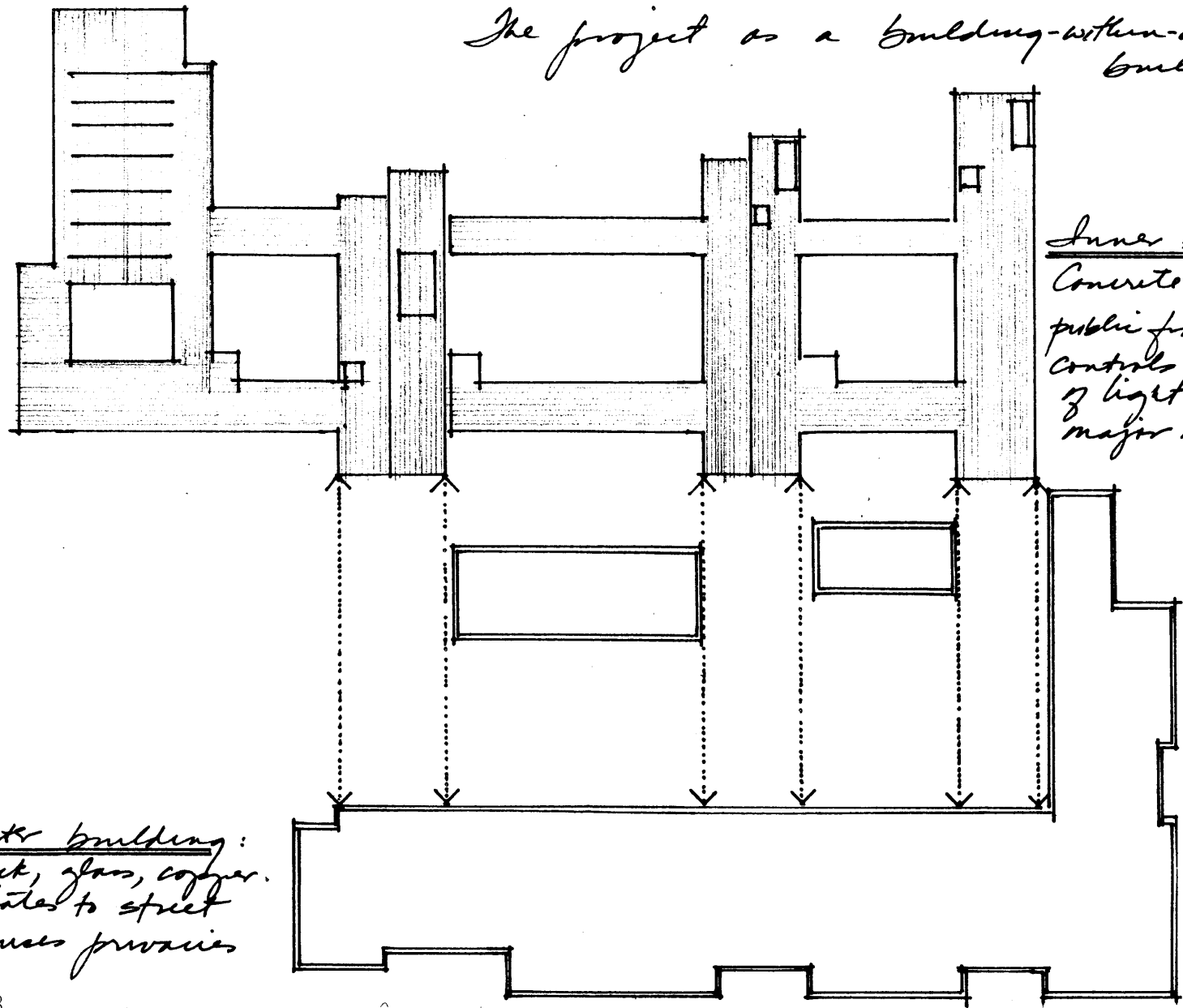
Vertical circulation.

Building zone analysis.

- ① street plaza
- ② entrance
- ③ circulation
- ④ major space
- ⑤ circulation
- ⑥ use



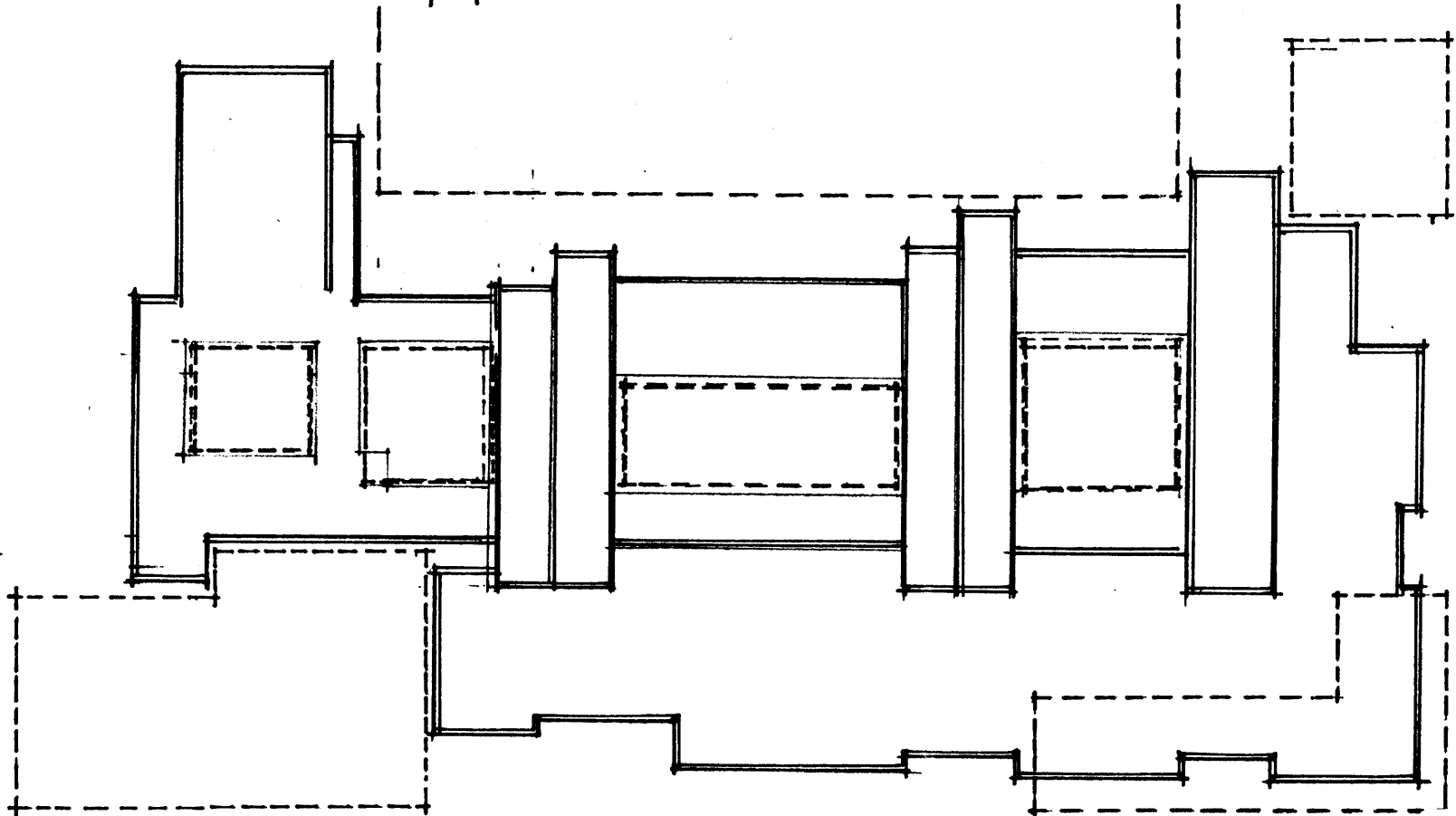
The project as a building-within-a-building

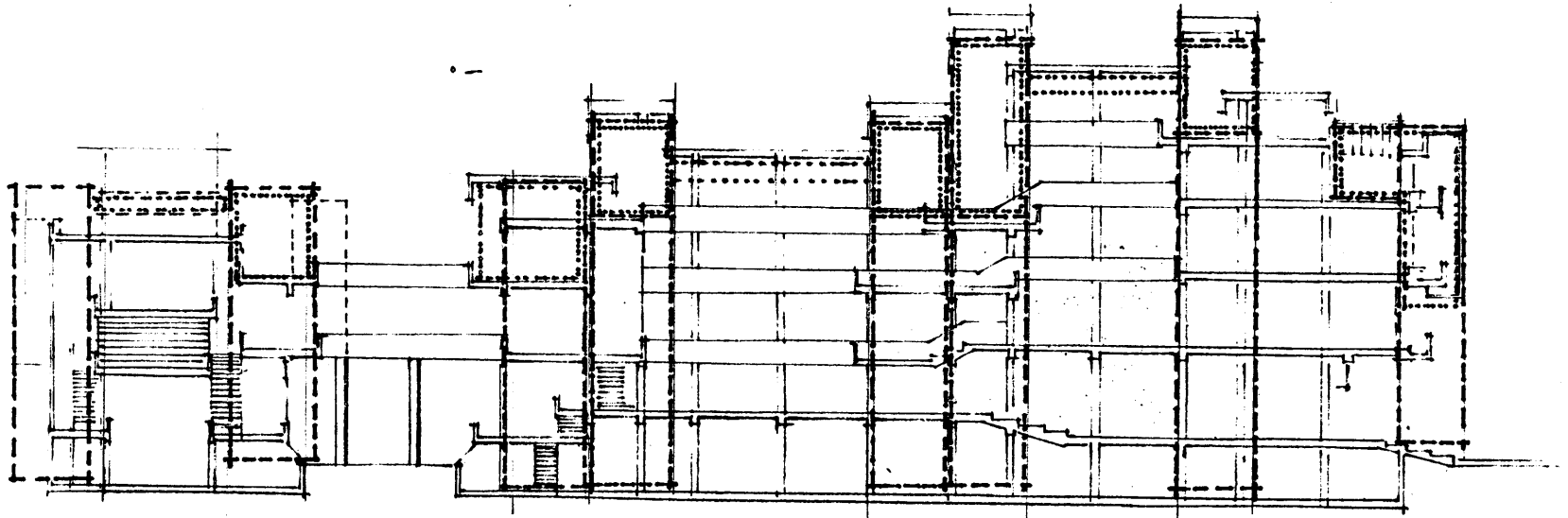


Inner building
Concrete structure.
public framework.
Controls systems
of light and
major movement

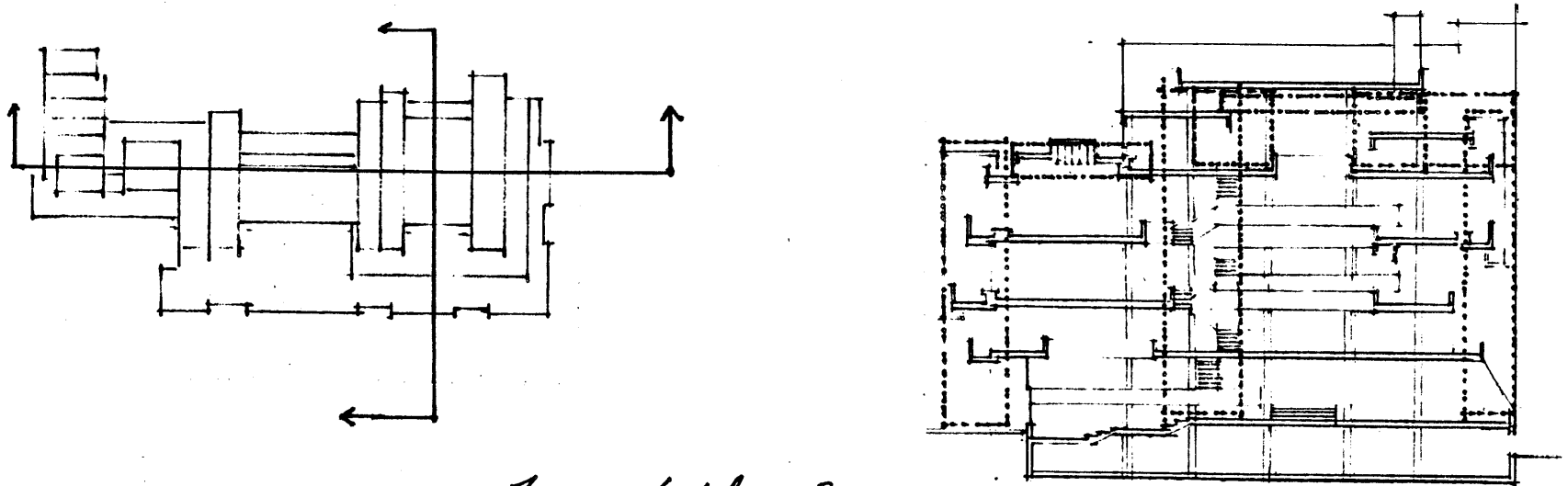
Outer building:
brick, glass, copper.
relates to street
houses porches

*Interior and exterior courtyards created by building mass and
Spatial organization*

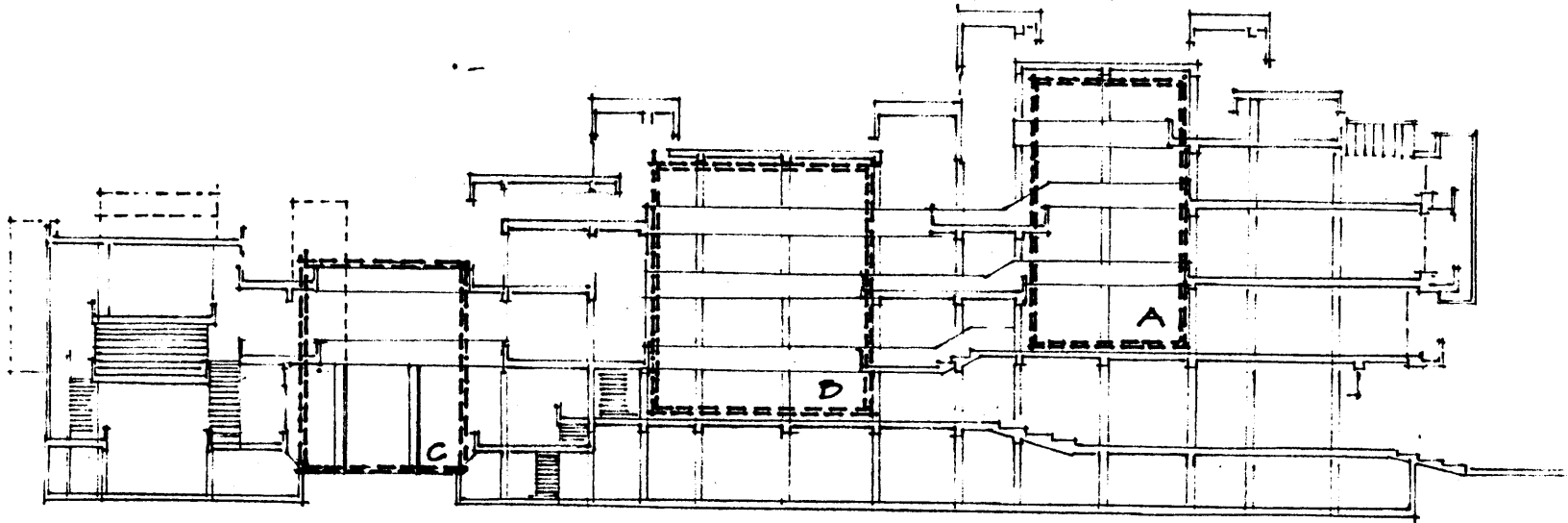




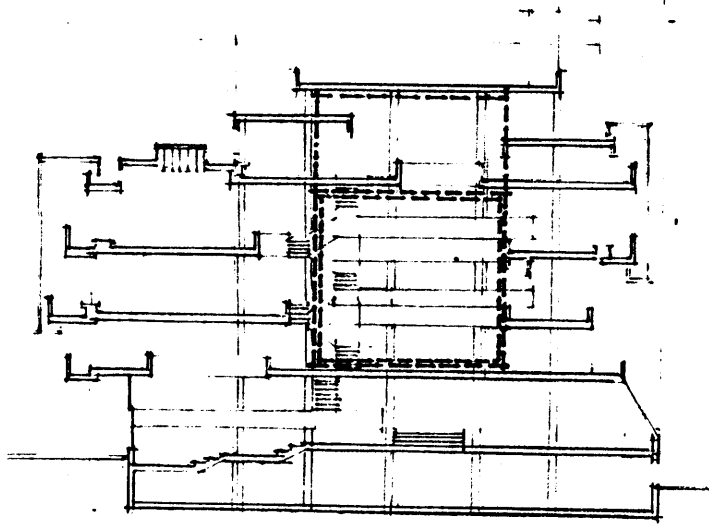
*Zones of light mark transition from public to private:
Creating, inside, a new "outdoors."*



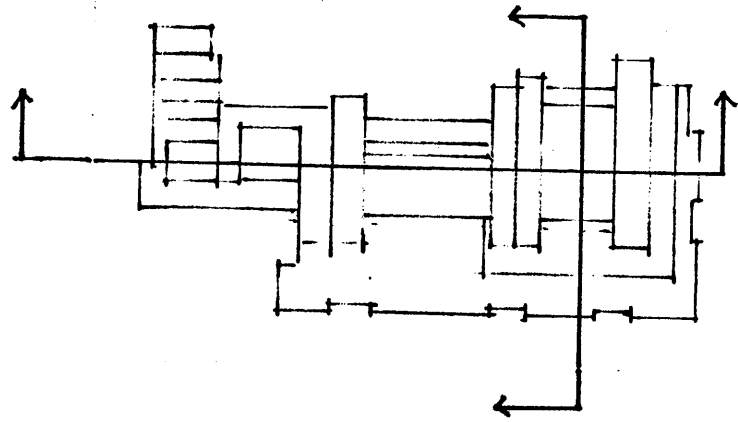
Zones of light. Screens.

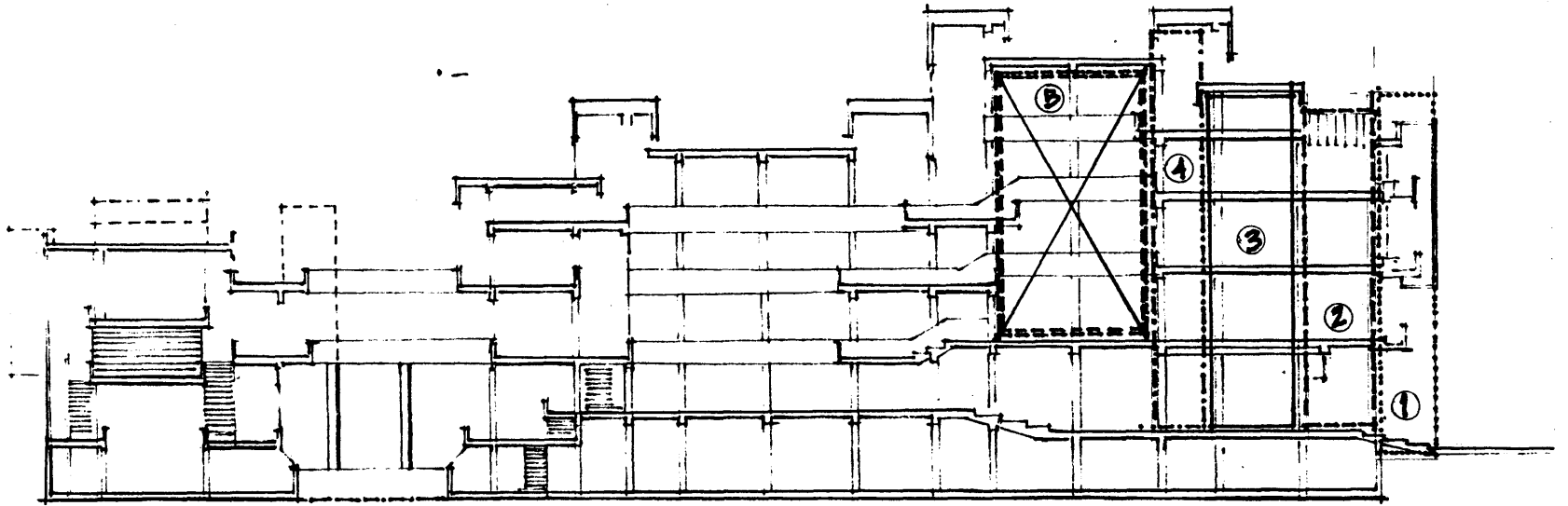


major public spaces

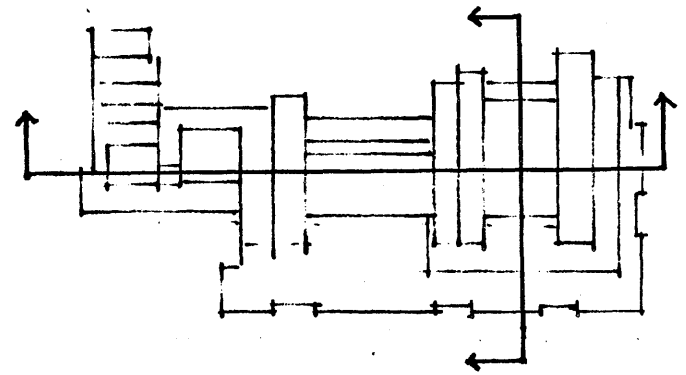
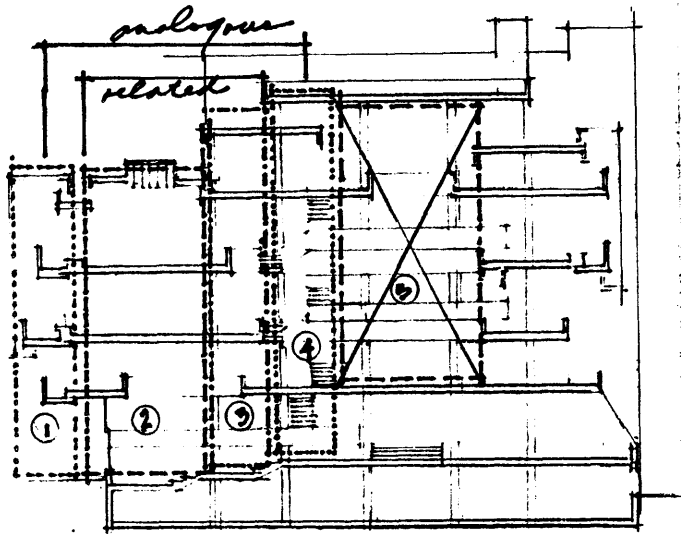


major public space A



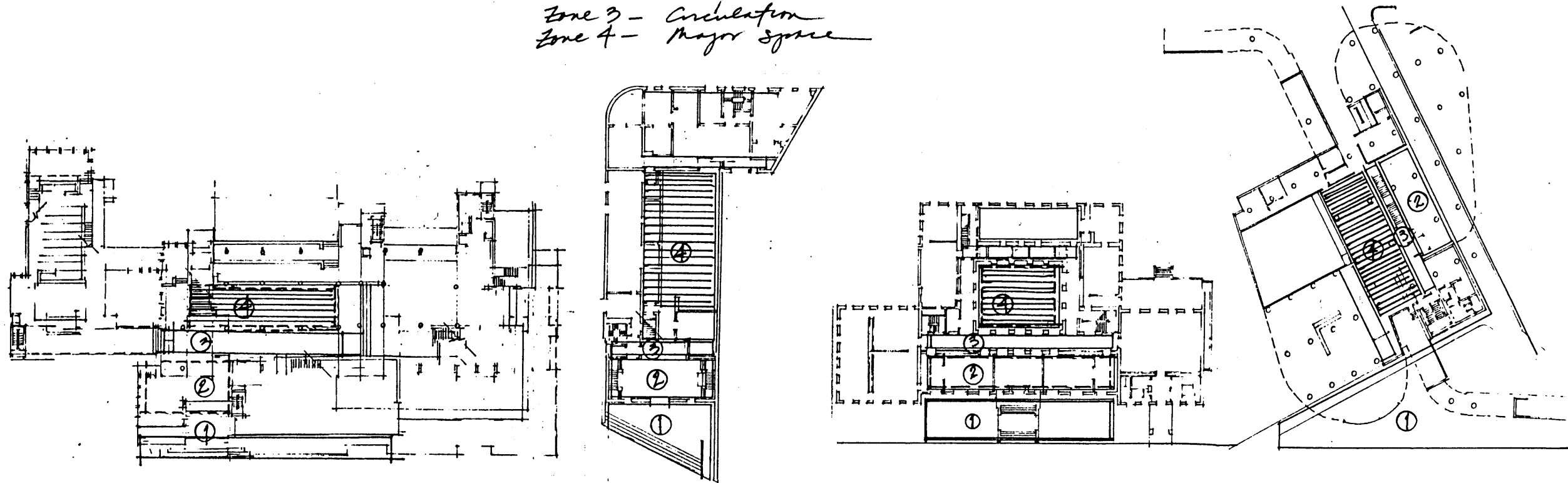


Zones of transition: from street to major public space.



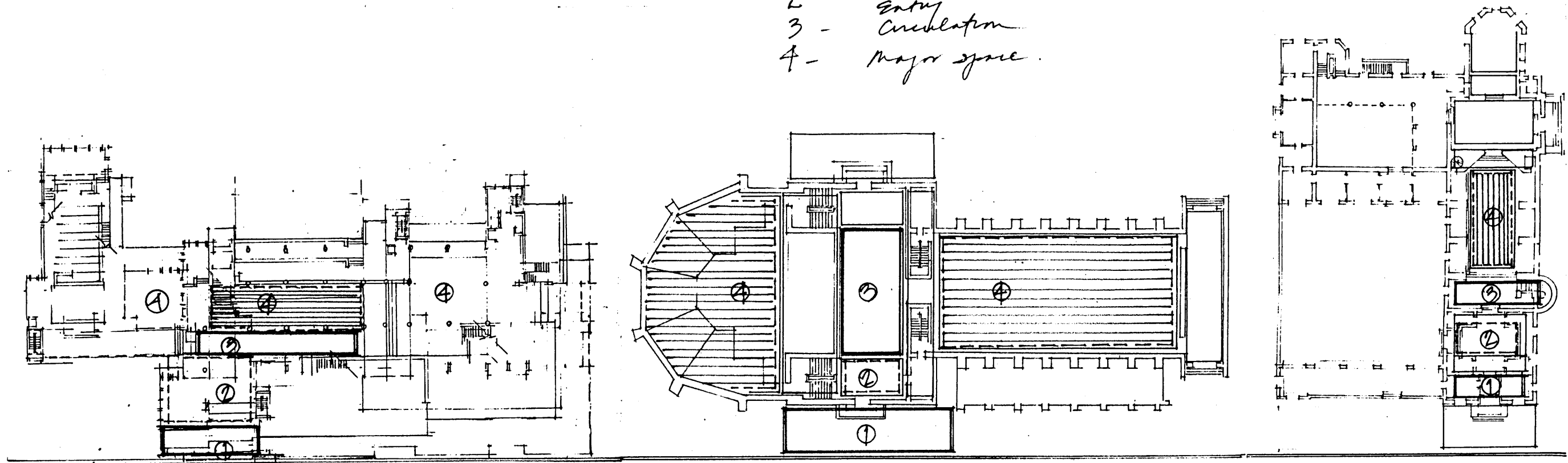
space. Screens, transitions, from street to public

zone 1 - street / transition
zone 2 - entry
zone 3 - circulation
zone 4 - major space



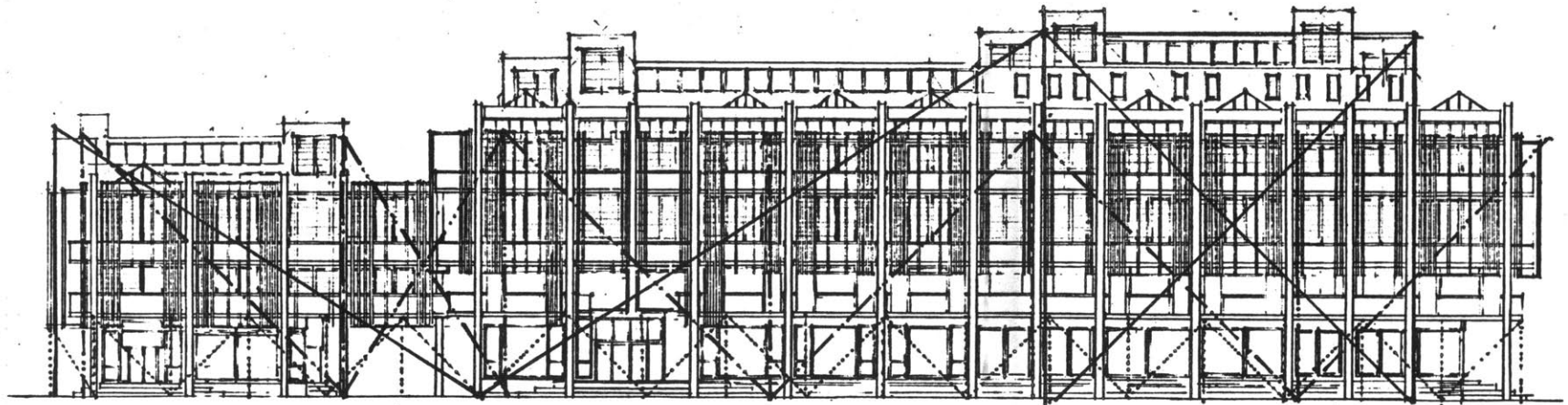
Context considered: A comparative study of plans, from street edge to major interior space.

- Zones: 1 - street
2 - entry
3 - circulation
4 - major space.

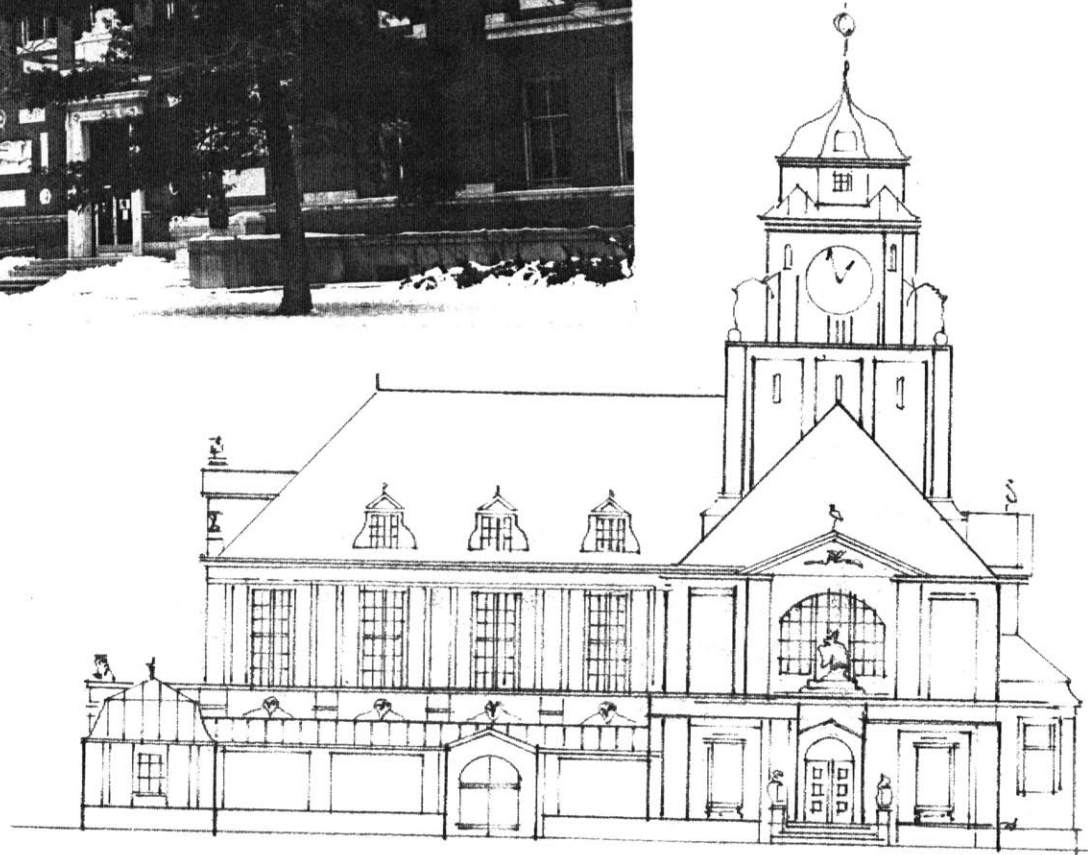
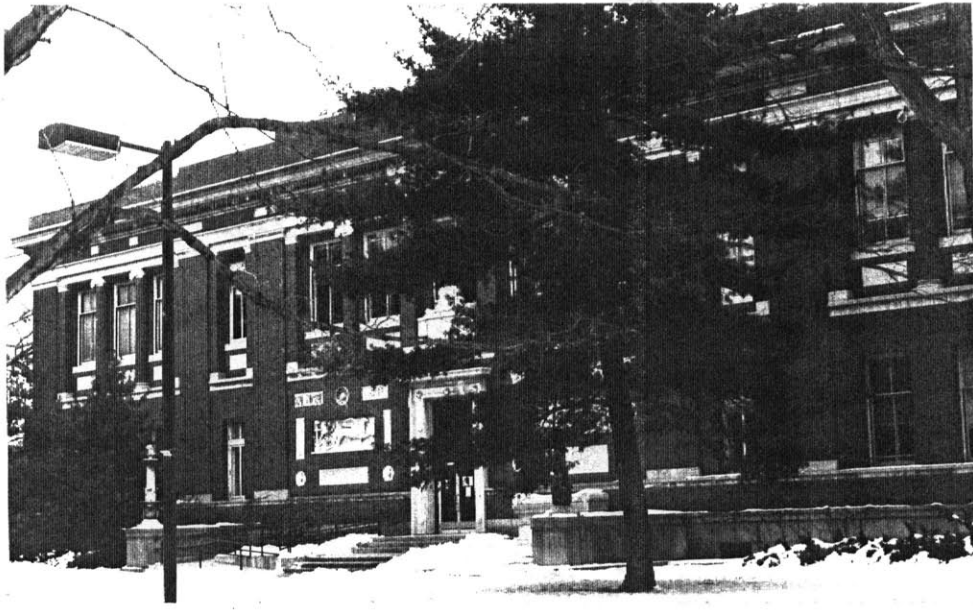


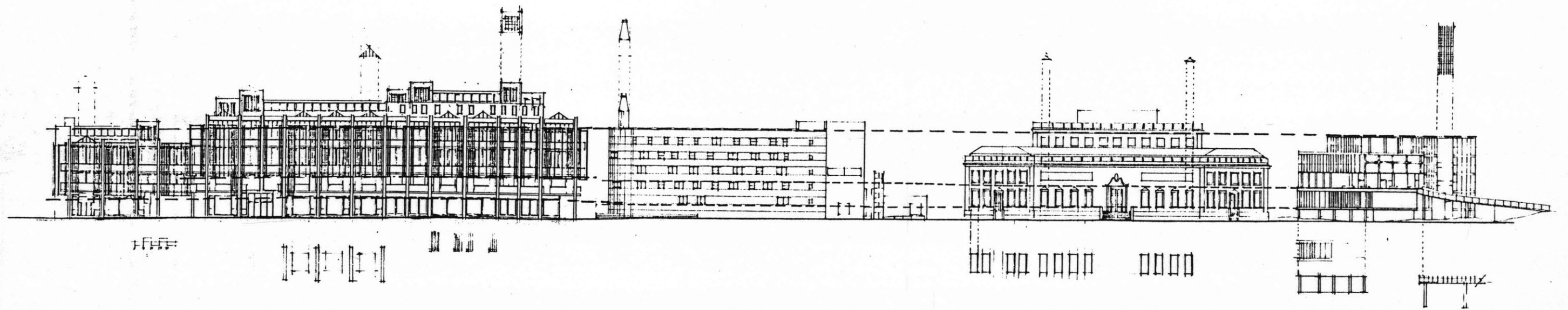
Context reconsidered: A comparative study of plans/
zones of transition from street to major interior space.

The building as a composition in the square and the golden section. Each zone of the building has its independent geometrical system, yet all remain tied to the overall geometric order.

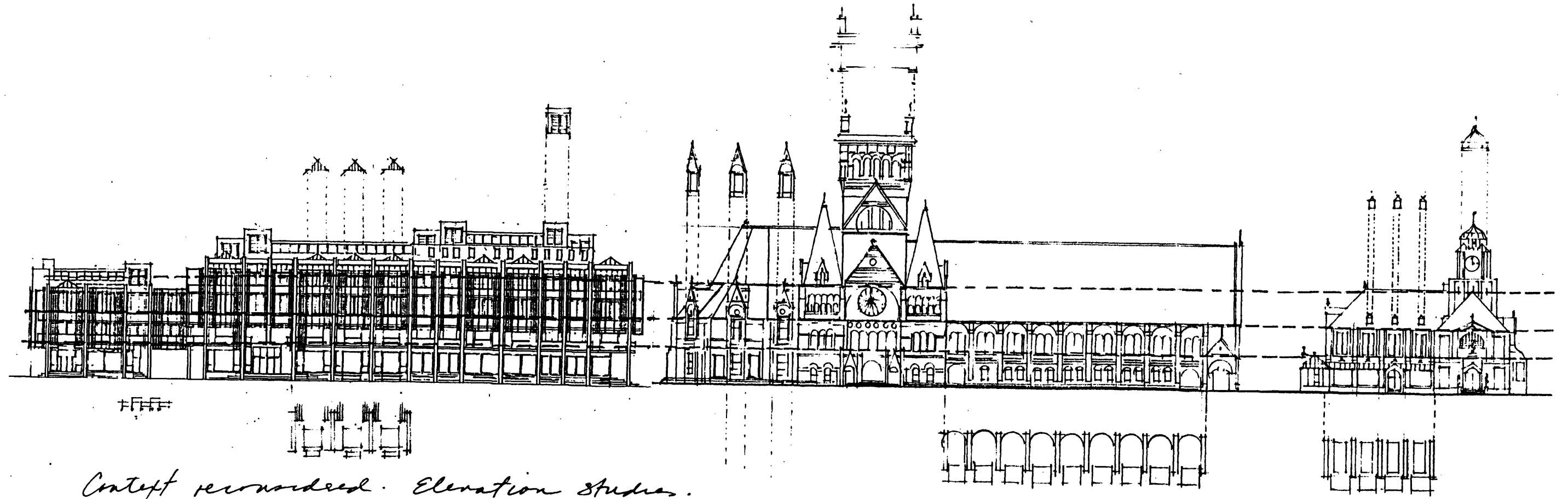


Proposed Harvard Graduate School of Design





Context reconsidered: Study of elevations, noting continuity
of tower, gable, street edge elements, as well as maintenance
of zone organization along street.



Context reconsidered. Elevation studies.

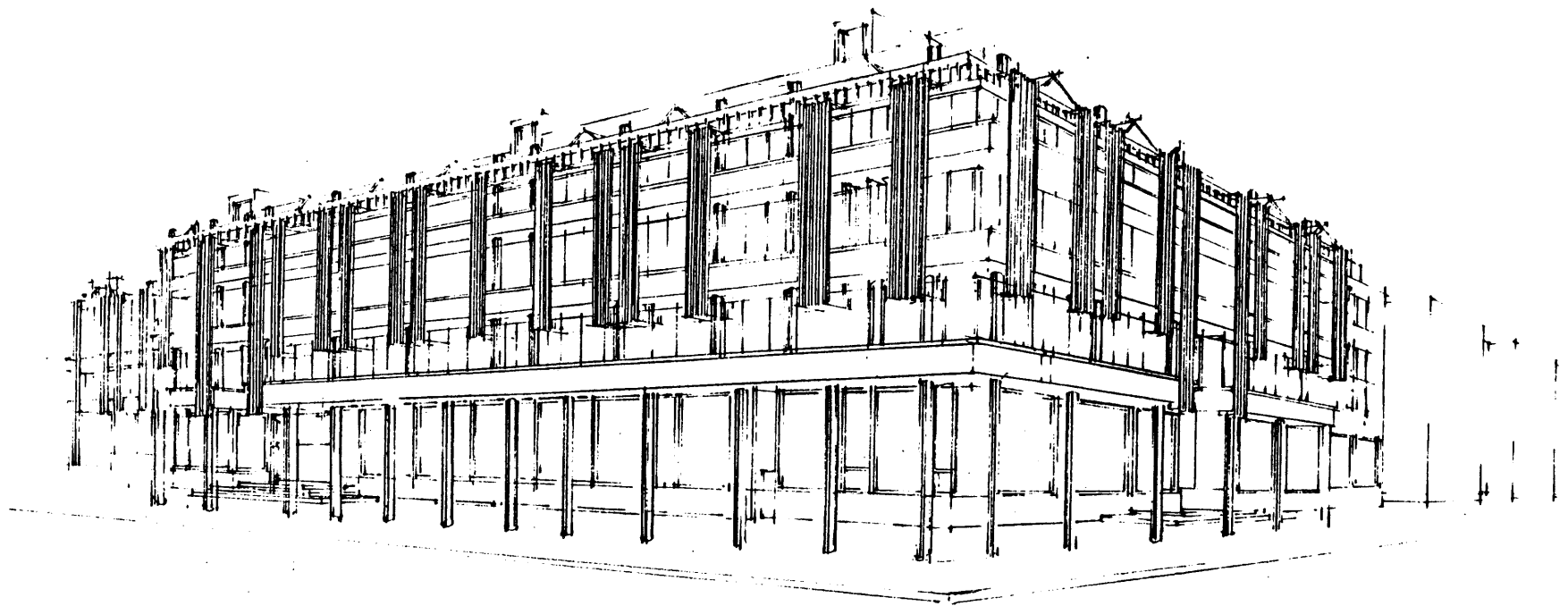
CONCLUSION

The preceding pages record a process of generating, then testing, ideas that define design as a synthetic, expressive endeavor. While this thesis expresses no wish either to undermine the importance or to negate the possibility of thinking about architecture on different terms, it has chosen to concern itself with the tasks of understanding a context to which the author felt herself responsible, identifying the components of its particular character as it was expressed in its built form, noting the manner in which these were manipulated and transformed in various parts of the general site, and proceeding to work within the parameters they established in order to design a project that hopefully expressed the character of the place it proposed to inhabit, while it retained an independent spirit of

its own.

The undertaking seemed important for a number of reasons. It gave respected and understandable value to building within a historical framework, it coupled form with a distinct set of values and intentions which rendered formal design decisions meaningful rather than abstract, it gave a place to personal images and preferences in the ongoing process of design, it allowed a design project its own integrity and spirit and, in short, gave precedence to the evocative power of form.

This semester was spent in thinking about architecture as a way of gathering, in the body of a specific building design, qualities of place and occasion. The extent to which my own work achieved or fell short of the goals set forth by my analysis is less than clear. By means of drawings and models that emphasized the three-



dimensionality (both internal and external) of my intrusion of the Harvard University Campus, I sought to understand the impact of the building I proposed for the Gund Hall site. While I humbly submit that the design project is nothing more than a record of my best effort after three years of design education, I still believe in the validity of the process discovered and recorded in this thesis, as well as in the definition of architectural design upon which it is based.

I felt first of all joyous. I felt that which Joy is made of, and I realized that Joy itself must have been the impelling force, that which was there before we were there, and that somehow Joy was in every ingredient of our making. When the world was an ooze without any shape or direction, there must have been this force of Joy that prevailed everywhere and that was reaching out to express. And somehow the word Joy became the most unmeasurable word. It was the essence of creativity, the force of creativity. I realized that if I were a painter about to paint a great catastrophe, I could not put the first stroke on canvas without thinking of Joy in doing it. You cannot make a building unless you are joyously engaged.

I would like to feel that I have not forgotten, nor have you as I speak to you, about the stream of Joy which must be felt. Otherwise, you really don't feel anything. If what I say somehow activates that feeling, I would, of course, be terribly pleased and honored.

Louis Kahn



LIST OF ILLUSTRATIONS

- Fig. 1 Harvard, 1638 (Harvard University Handbook, p. 2)
- Fig. 2 Harvard, 1686 (ibid, p. 7)
- Fig. 3 Harvard, 1726 (ibid, p. 15)
- Fig. 4 Harvard, 1767 (ibid, p. 16)
- Fig. 5 Child's Image of a Square (Czaja, Gods of Myth and Stone, p. 73)
- Fig. 6 Harvard Yard and its Surrounds, 1936 (Harvard University Handbook, p. 7)
- Fig. 7 Delphi (Norberg-Shulz, Genius Loci, p. 30)
- Fig. 8 Asplund, Royal Chancellory Competition (Wiede, The Architecture of Erik Gunnar Asplund, p. 81)
- Fig. 9 Kahn, National Assembly Hall, Bangladesh (Lobell, Between Silence and Light, p. 93)
- Fig. 10 Hadrian's Villa (Ching, Architecture: Space, Form and Order, p. 192)
- Fig. 11 Kahn, National Assembly Hall, Bangladesh (Lobell, p. 93)
- Fig. 12 Asplund, Royal Chancellory Competition (Wiede, p. 77)
- Fig. 13 Candelis and Wood, Berlin Free University (Architectural Forum v. 124 no. 4, p. 42)
- Fig. 14 Kahn, Library, Exeter (Lobell, p. 105)
- Fig. 15 Kahn, Yale Centre for British Art (Lobell, p. 111)
- Fig. 16 F.L. Wright, Taliesin West (Global Interiors, "Frank Lloyd Wright," p. 149)

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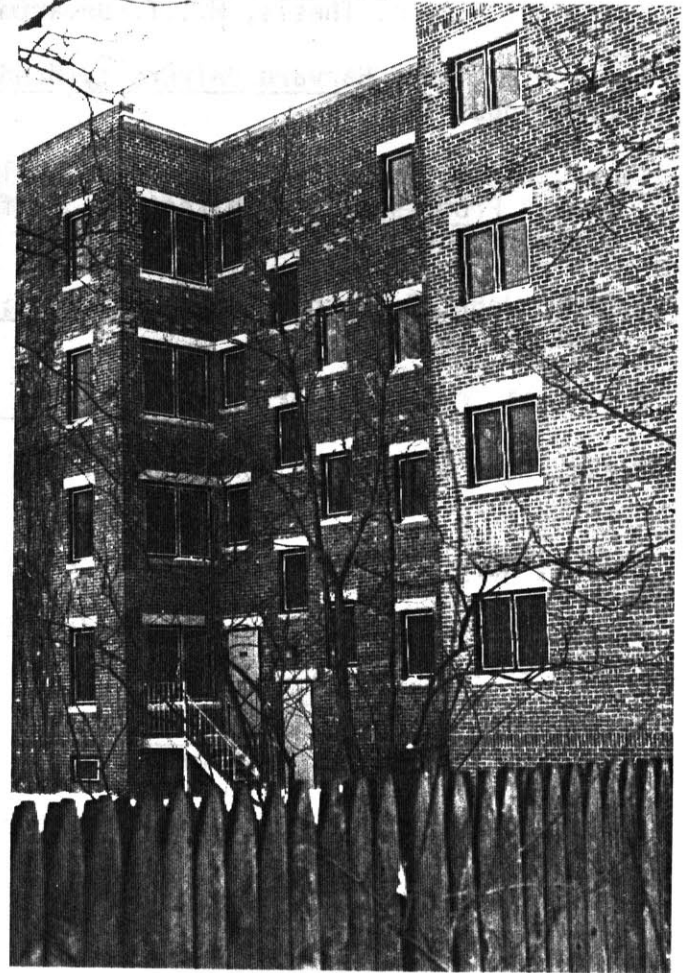
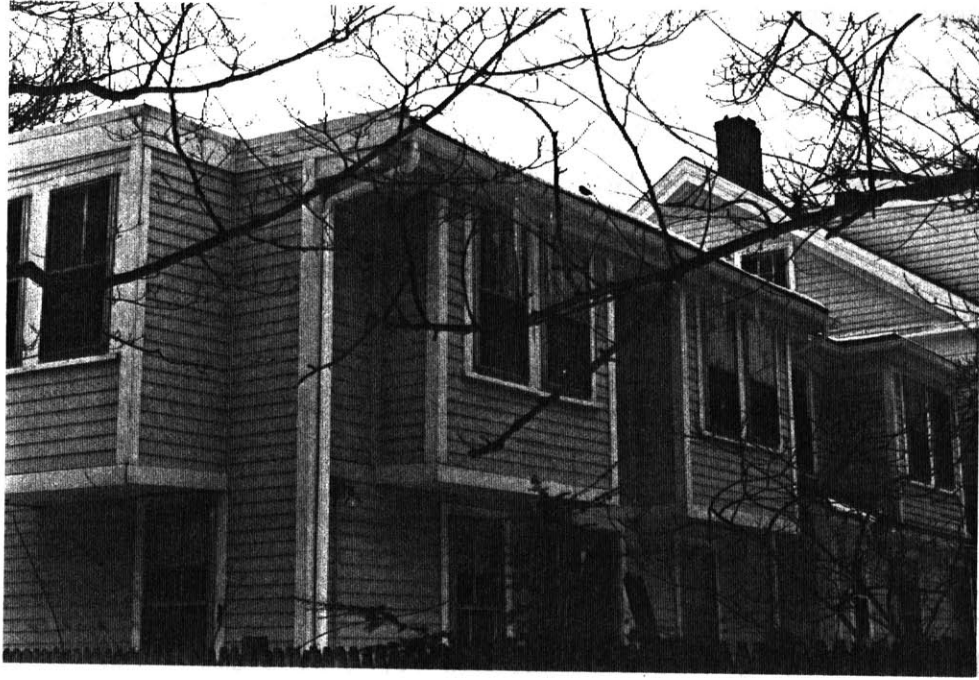
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