

A DESIGN EXPLORATION FOR ROTCH LIBRARY:
A Notion of Vertical Space and Light

by
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Rotch

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LIBRARIES

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A Notion of Vertical Space and Light.

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Submitted to the Department of Architecture on June 14, 1983
in partial fulfillment of the requirements for the Degree of
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ABSTRACT

This thesis is a design exploration of interior vertical space and light in the context of a university architectural library. More specifically, a program for Massachusetts Institute of Technology's Rotch Library will be applied to the now vacant Building 11, former Medical Building as a context for the exploration. Organizational issues will be developed to provide a context for the exploration. Solution for the library with respect to the reuse of this building is dependent upon vertical continuity of space and the appropriate architectural expression of place.

Thesis Supervisor: John R. Myer
Title: Professor of Architecture, Head of the Department

ACKNOWLEDGEMENTS

To my Grandfather.

Thanks to John for his help in obtaining the Maki article.

Thanks to Angela, Jeff and Dr. Pont who took such good care of my teeth these past few months.

Thanks to Brad and Edrick for their support, advice and criticism.

Thanks to my family for their understanding and support.

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STATEMENT

...notions of vertical space and light.

Vertical space is an attempt to verbalize an architectural intention to unite stratified space with connections vertically. As opposed to layers of space between isolated floors, space would be treated in a more fluid manner using stairs and openings to floors below. Stairs are not just a means to travel from floor to floor, but connect two places on different levels uniting the space between.

It is the quality of light which will render the architectural intention for these vertical connections. In some cases light and vertical connections are intertwined, light washes a wall or penetrates to a floor below. Absence of light has its own expression as inviting darkness in contrast.

INTRODUCTION

My first experiences with libraries as a child were a delight! Looking back now, I feel extremely fortunate to have had those experiences. My elementary school library was a wonderful room full of low shelves and dark wood paneling. And with the impressionistic memory of a first grader, I can still recall the rug in front of the fireplace where my class would sit curled up as we listened to our teacher, sitting in an armchair, reading us a story. Or, the power a child feels when he learns that by returning to a special shelf, he can find another book, more exciting than the last.

That was fortunate. Perhaps it sustained me through all those pale mint green concrete block boxes erected to contain both children and books. Encountering Sterling Library at Yale for the first time, I felt pangs of jealousy in realizing there still existed libraries which celebrated the use of books. Even the low stone vaults over the card catalogues had a sense of intimacy. In studios, we talk lovingly of the work of Richardson. We sneak off to the old Boston Public Library to sit at our own place in the large reading room. But we trudge off to study in noisy closets full of books.

It is the sense of place, identity and intimacy, which has been built out of today's library. Reference books on library design are very scientific discussing flexibility, efficiency and lighting levels, but have only the vaguest mention of the quality of space requisite of a library. It is this need for architectural expression which is the most abstract, yet the most specific to a particular library. A good library must balance these concerns; all are equally important.

My interest in libraries was rekindled by a search for a thesis topic which would emphasize the need to study the nature of interior space. Many of my recent studio projects were of such a large scale that their importance relied upon their exterior expression. This left much of the interior space unresolved and much of my own ideas about the nature of interior space equally unresolved.

Incorporated into my own notions about design has been a growing awareness of the necessity of incorporating light into the design process. Light is the means most of us perceive space. Light renders space or can dissolve

material to abstraction. Light can be controlled and manipulated much as material can. It is a sensibility towards light that I am trying to achieve in my design method.

The premise for this thesis, that Rotch Library has needs which merit study, came from a general mood of introspection that the School of Architecture and Planning is currently undergoing. Curriculum development committees, seminars on the changing nature of the architectural profession, and attempts to improve the physical environment of the studios has forced us to look at ourselves in a new light. Out of my own daily confrontation with the inadequacies of Rotch Library came an awareness of the lacking sense of place. Rotch Library has been one of the more continuous threads within the history of the School. It is time for Rotch Library to come out of the closet.

PROGRAM

In 1979, a study was conducted to project Rotch Library's spatial needs over the following ten years. A year later, it was adjusted to include additions to the collection coming from the Aga Khan Program. Even at that time, Rotch's collection had already expanded beyond the space it presently occupies. A sizeable portion of the collection is now being stored at the Resource Sharing Center. Books from the Center must be requested a day in advance for delivery to Rotch. The Visual Collection, formerly located within the library, already has its own problems stemming from its present location's lack of space. The study examined the spatial needs of both collections based upon projections of the annual growth rate, the eventual increase in library staff, and the addition of support facilities now lacking in the libraries. (A portion of the study for Rotch Library is included in the Appendix.) Accompanying the report was a statement voicing the staff's own concerns for the quality of space provided in the library.

In terms of Rotch Library's needs, the amount of square footage necessary does not reveal the entire story. Certainly, uniting the

collection in one building would be a tremendous improvement over the current situation. Issues of privacy, noise control, lighting or type of working environment supportive to the needs of the staff as well as the users, all need to be addressed. And in the larger perspective, the role Rotch Library is to play in the life of the School must be addressed.

The program which was the end result of the 1979 study has been reinterpreted for this design exploration. Some figures have been reduced since the areas provided seemed overly generous or redundant, such as the allocation of staff workspace. The seating has been increased for the creation of a major reading room within the building. Washrooms have been added. The nature of the exhibition space has been redefined by enlarging the allocation to provide exhibition space in conjunction with the entrances on first and third floors. This would take advantage of the supervised public space within the library in which work from the school can be displayed.

While Rotch Library must function effectively as a library, it must also serve the

needs of the School as a whole. This potential must be maximized. Rotch is a storehouse of knowledge which its users come to seek out. It must have a contemplative atmosphere supportive of these activities. And this must find its resolution in appropriate architectural expression.

Program for Rotch Library		
Housing for the Collections		
Open stacks: Books and Theses		4,805
Folios		220
Periodicals (Bound)		1,050
Reference		<u>350</u>
Subtotal		6,425
Limited Access Collections		<u>1,760</u>
	Total	8,185
Reading Accomodations		
100 Study spaces @ 30 sq.ft. average		3,000
20 Lounge chairs @ 35 sq.ft. average		700
16 Special purpose @ 25 sq.ft. average		<u>400</u>
	Total	4,100
Circulation and Reserves	Total	1,220
Special Facilities		
Census room		400
Seminar room		300
Typing/Terminal room		<u>200</u>
	Total	900
Staff Facilites		
Workroom/Storage/Receiving		450
Office space 15 @ 150 sq.ft. average		2,250
Conference/Lunchroom		<u>200</u>
	Total	2,900
Restrooms	Total	300
Exhibition Space	Total	<u>600</u>
Subtotal		18,205
Unassignable Space, est. at 10%		<u>1,820</u>
ROTCH LIBRARY - TOTAL		20,025
ROTCH VISUAL COLLECTIONS		<u>2,625</u>
	TOTAL	22,650

THE BUILDING

The former MIT Medical Building (Bldg 11) was selected for its suitability in terms of location, size and as a set of constraints within which to do this design exploration. At the time this thesis topic was formulated, the building was vacant, giving rise to speculations as to what would be an appropriate reuse for the building. Since that time, the building has been renovated to house an information processing service.

The location of Bldg 11 was primary in its selection as a site. Another of the endless variants on the concrete frame, yellow brick clad motif that pervades the MIT campus, the building is situated between a service drive and an underutilized garden courtyard. The building connects into the main Institute building at the basement, first and second floors in an intersection with Bldg 3. The potential also exists for a third floor connection. The first floor entrance to this building on MIT's main corridor would provide a highly visible and accessible facade for the School of Architecture and Planning. One of the largest lecture halls used by the Department of Architecture is located across the hall from the entrance. A

second entrance on the third floor would be in close proximity with the Department of Architecture Headquarters and faculty offices. An expansion of the Rotch Visual Collection into the adjacent textile laboratory would serve to reunite the two portions of the library. In this location, Rotch Library would be capable of uniting previously severed areas of the School.

In terms of size, Bldg 11 and the projected needs of Rotch Library are quite similar, each approximately 19,000 sq.ft. For the purposes of this study, it is assumed that the existing structure can handle the live loading requirements of the library (150 lbs./sq.ft.) and that the structural system offers the potential for modification.

The building's natural lighting conditions are reflective of its siting. Located to the north of the main Institute complex, Bldg 11 rarely receives a continuous day of direct sunlight. Sun angle permitting, the building receives morning light on the garden court facade, afternoon sun to the service drive's. Direct sunlight is not essential for good library design and in many cases it is

discouraged due to problems stemming from environmental control, glare and degradation of materials. But it also can be associated with a sense of warmth and the passing of time. This study is not an attempt to maximize the daylighting capacity of the building, but an investigation of form with respect to light, enhancing and controlling. The amount of light which the building receives is perceived as a balance between extremes; enough to keep the lighting conditions from becoming static.

THOUGHTS ON LIBRARY DESIGN

Probably the most controlling factor in library design is the placement of the book stacks. Stacks have evolved to a standardized set of dimensions: 3' wide, 7'-6" high, and are placed 4'-6" on center to give an aisle of three feet. Variance from these dimensions will alter the storage capacity. Linear arrangements of stacks, ranges, are usually placed to minimize the number of cross-aisles resulting in a more efficient storage system.

The circulation desk is another important factor in the design. In most libraries, the circulation desk provides a number of services: checking of books, information, overseeing of the library, staff workspace and monitoring of the exit. This last task requires library users to be funnelled past the desk as they exit. Electronic sensors now check for library materials automatically but still require staff members to catch people. In Rotch Library, the reserve book collection is also supervised by the desk staff. This necessitates having a large area with limited access in close proximity to the door.

Both natural and artificial lighting are

important issues in libraries. Adequate illumination is needed for reading and other library tasks. A general level of illumination can be provided for the entire facility (less desirable), or a portion of the library, such as the stacks (more desirable). A level of ambient lighting can be provided with task lighting for areas where more lighting is necessary, such as carrels, desks, etc. A major concern in library design is prevention of immediate contact with bright outdoor light upon entering the library. This would make the user demand a higher level of lighting intensity for the performance of tasks. For a more indepth look at the character of light with respect to library design, see Sally Harrison's thesis, Light and the Spirit of Place: the design of a small public library, MIT, 1979.

DESIGN CONTEXT

My initial plunge into the design of this project was a balancing act between the space planning needs of the library and my own ideas about what an appropriate form of architectural expression for this study would be. The goal was to deploy the program in a way which would have architectural implications supportive for the design exploration. My first work in gathering references was to provide some insight into defining limits for the design study. I knew I would look to Aalto for his many library designs, and more importantly to his works with respect to light as a generator of form. I also felt that Kahn's building at Yale, the British Center with its two interior courts might have an important role in my thinking.

My first attempt at a solution to this problem was a series of stairs which horizontally progressed through the building with small vertical openings connecting the floors, the program deployed as seemed appropriate. The scheme didn't work. Due to the cubic configuration of the building, the stairs had to double back on themselves. Light only trickled through the openings. The scheme didn't have enough energy to generate an

identity for the library. All became circulation in opposition to my intention to create a contemplative atmosphere.

It was evident that a bolder approach was required; that in order to create larger openings, more space would have to be added to compensate. Mezzanines were the solution. Due to the large floor to ceiling heights, the existing structural system was not the most efficient means of storing books. Clear space above the stacks could be seen as wasted space. The removal of one floor and its replacement with two new floors accommodated more books. To maximize the efficiency of these new floors, it was decided to make them two bays deep, allowing for larger ranges with only one main aisle at the edge.

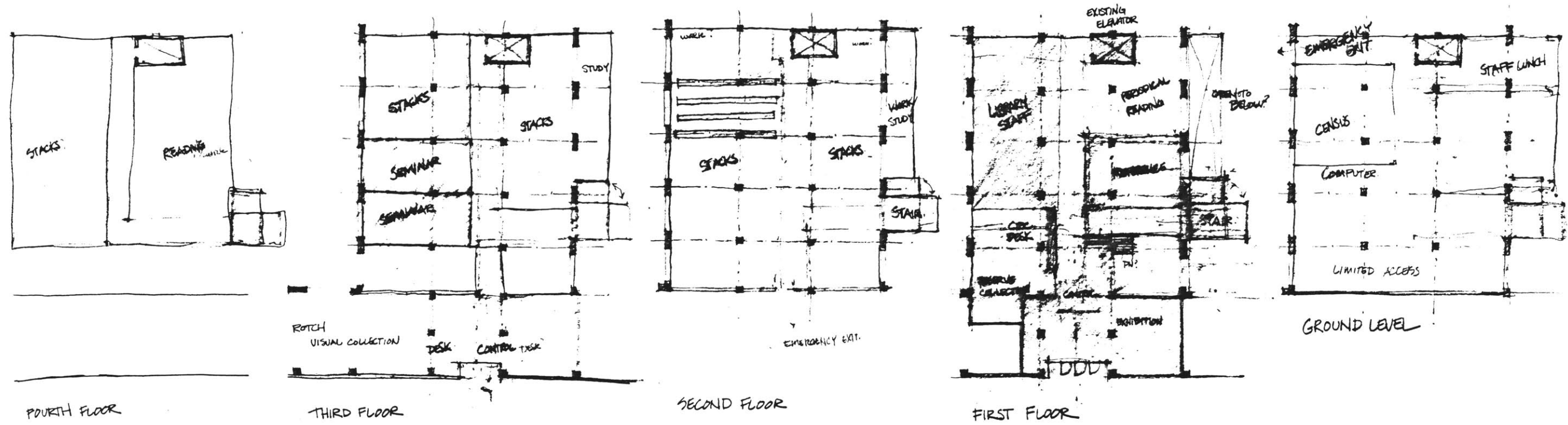
To test the implications of the mezzanines, a rough chipboard model was built at 1/16" scale in a manner to accommodate more than one scheme. The model was valuable in that it not only rendered an idea in three dimensions but also gave an idea of the quality of light inherent with each scheme.

Scheme A shows the stack mezzanines placed against the west wall. They were placed so they could buffer the noise from the service drive and leave the east wall free for its preferable view. This left only 19 feet to the east wall, so a decision was made to extend the floors beyond the east facade. This provided more room, but little opportunity to create a larger vertical space. Floors still remained isolated.

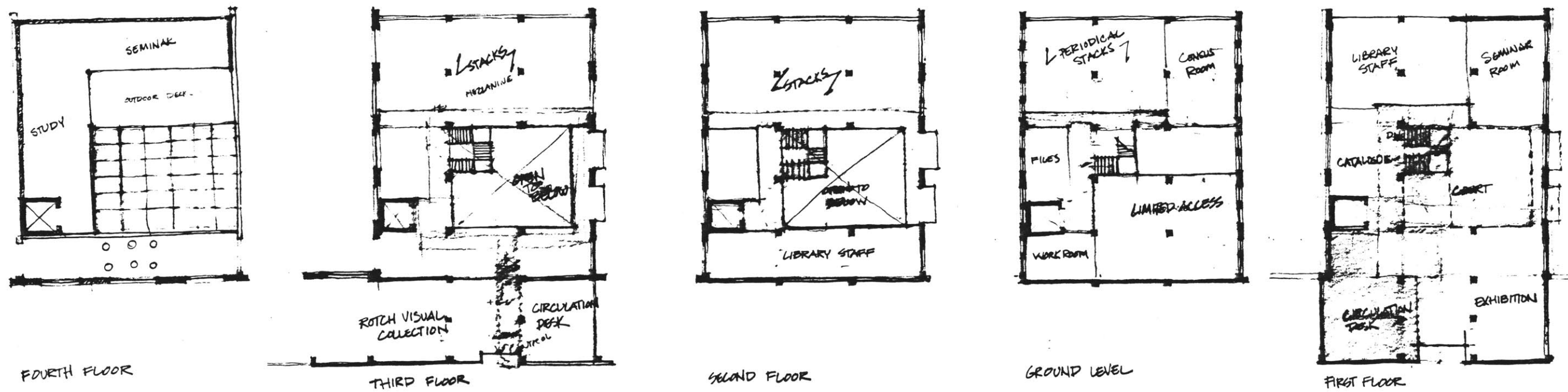
Scheme B places the mezzanines to the north. This allowed for the creation of the larger vertical space by removal of four bays from the second and third floors with an opening through the roof. The size of the opening seemed workable, and I began to organize my thoughts around it. This scheme recalled the typology for a pre-Renaissance palazzo. The typical plan for a palazzo was to have an arcaded, publically oriented facade. Passing through this front room, you came upon a courtyard encircled by a cloister serving the lower story of the building. Stairs were usually found to the left. Symmetry in plan was preferred, but if the site was irregular, the court would be pushed to one side. The main corridor at MIT is very much like a street. Just as a palazzo, the library

wanted to have public functions up front, such as the circulation desk, and exhibition space. The space defined by the removal of the floors above could become a court, circulation moving around it. The elevator would find its place to the left, with the stairs to one side of the court.

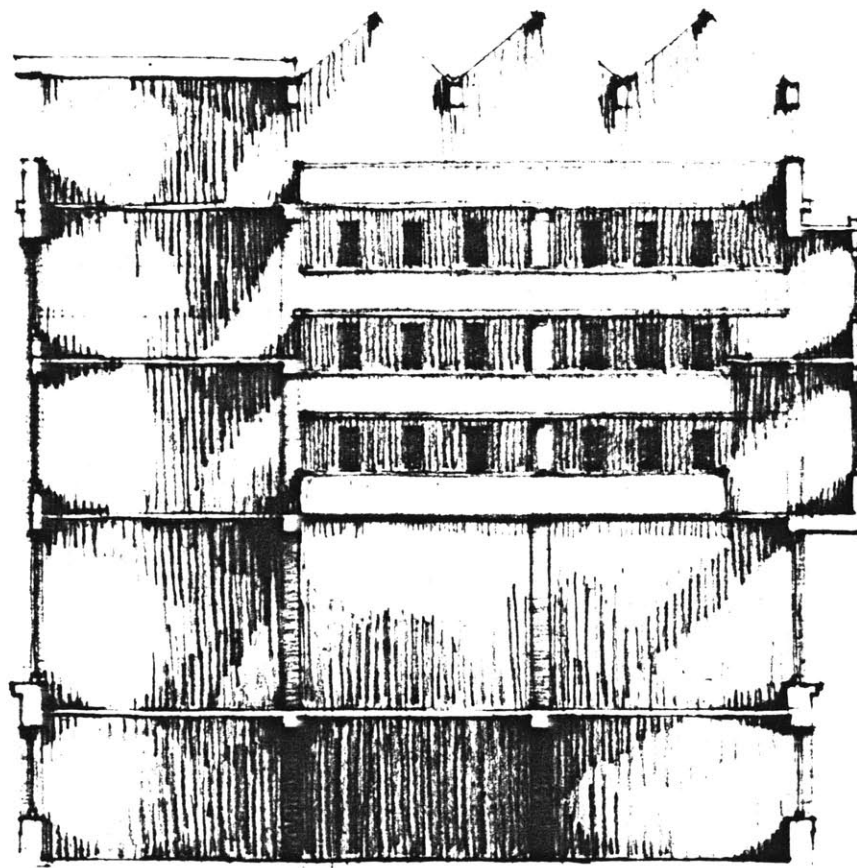
Deployment of the program was a matter of prioritizing what was to be on each floor. Each part of the program has its own implications as to the architectural definitions it will require. The first floor is the most public of all. With a 16'-6" floor to floor height, space was too valuable to be used for books, so the three mezzanines started on the second floor with the periodical stacks to be located on the ground level. Librarians like to be centrally located. While the ground level and second floor were under consideration for their offices, the final choice was the first floor with the inclusion of a mezzanine, both highly visible and accessible. The court became the reading room for the library. Card catalogue was also located on the first floor for accessibility. Limited Access, while by its nature a separate entity, stores some of the



SCHEME A



SCHEME B

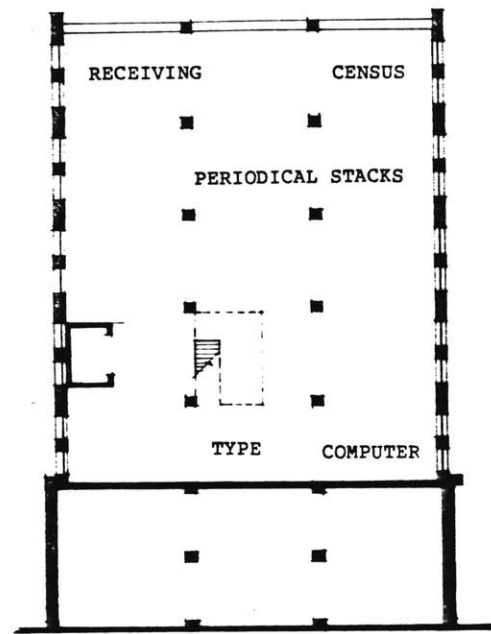


true treasures of the collection. Preservation of the materials takes precedence over natural light in this instance, and at first it was located on the ground level. The second floor became a more desirable location, giving the Limited Access Collection higher visibility. Other items such as the census room, terminal room, typing and folios found their way to the ground level.

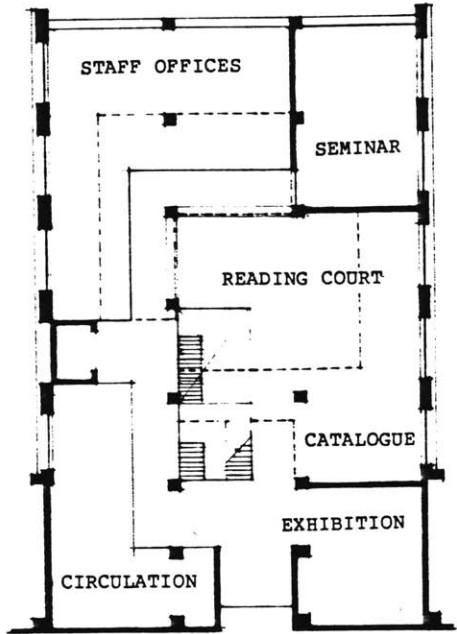
It became clear to me at this point that the reading court was key to the solution of the building. At the heart of the library, it was the one element around which other things were organized. How were its edges to be defined to support the activities within as well as along its edges?

A light study was done to examine the nature of the light which would enter the court. At the time of the study, a fourth floor was a part of the design. A fourth floor tended to make the court too deep to allow much light to reach the first floor. Later, it was determined that enough space had been provided within the library, another floor was not necessary. The study was a helpful reference during the design.

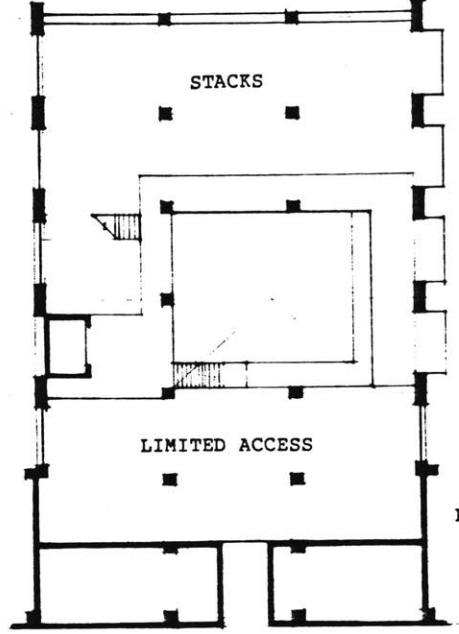
To document the result of the space planning and to begin to generate issues which would arise in further exploration of the court, a few sections were done at 1/4" scale. They revealed the ambient nature of the library recording the activities taking place.



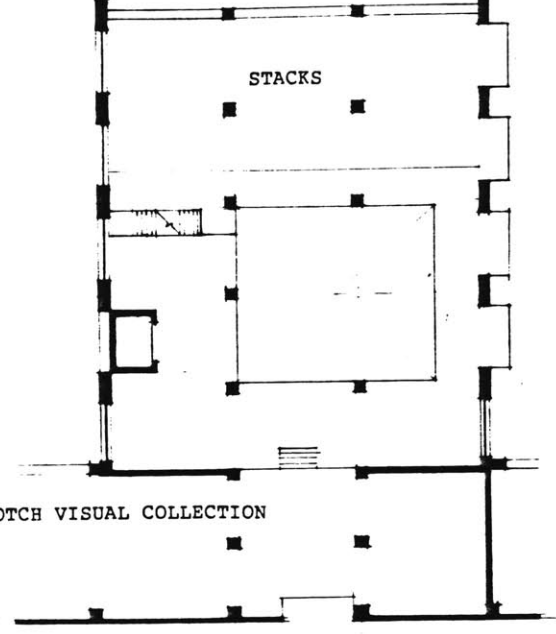
GROUND LEVEL



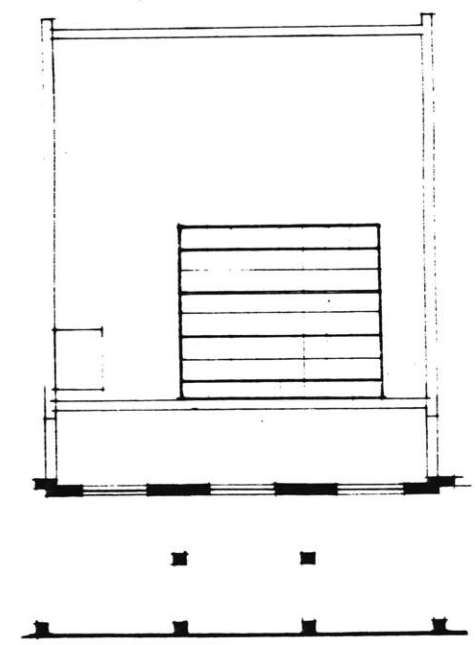
FIRST FLOOR



SECOND FLOOR



THIRD FLOOR

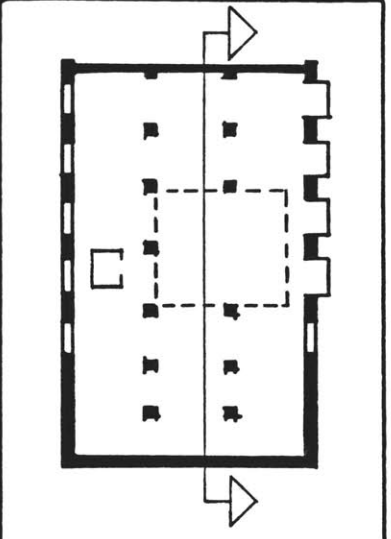
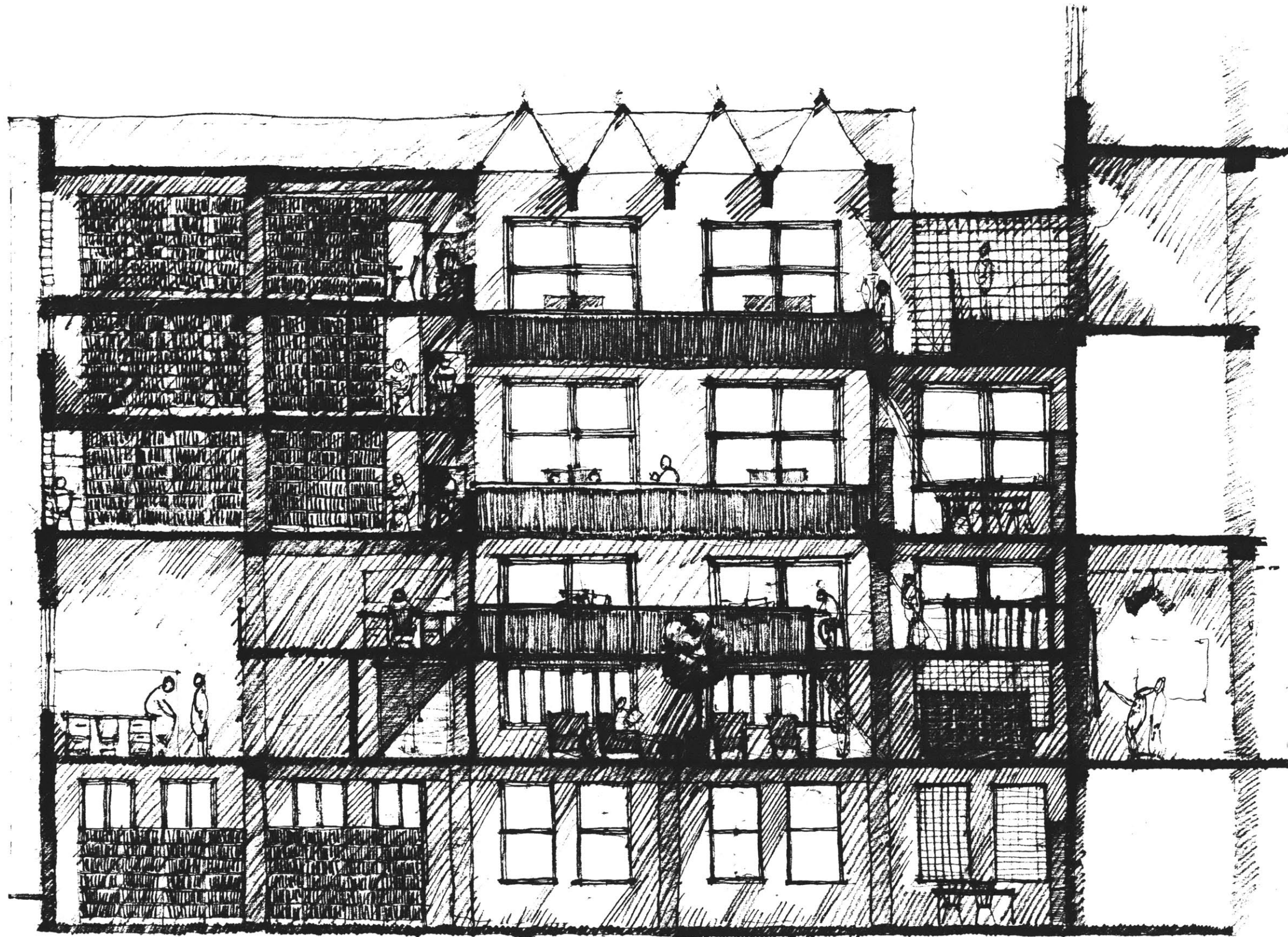


ROOF LEVEL



DESIGN CONTEXT
SPACE PLAN

0 32 64



DESIGN CONTEXT
SECTION

0 8 16

THE COURT

From my earliest premise that a solution for Rotch Library would be dependent upon vertical continuity, came a notion that this would be a sequence of spaces connected by openings and stairways. Through the development of the context it became evident that the identity for the library was dependent upon the reading court. So it became the object of my design explorations, delving into the nature of material and light in search for a sense of place for Rotch Library.

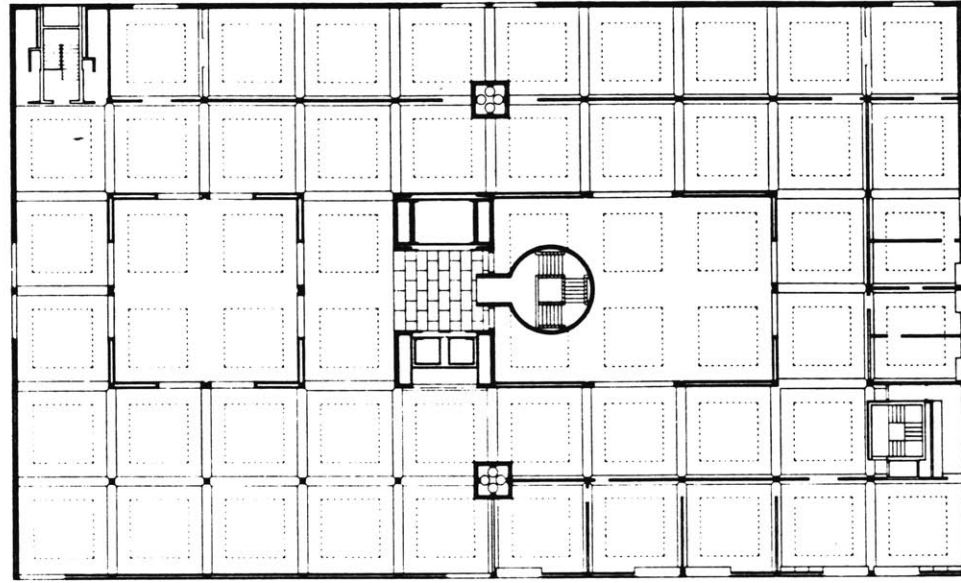
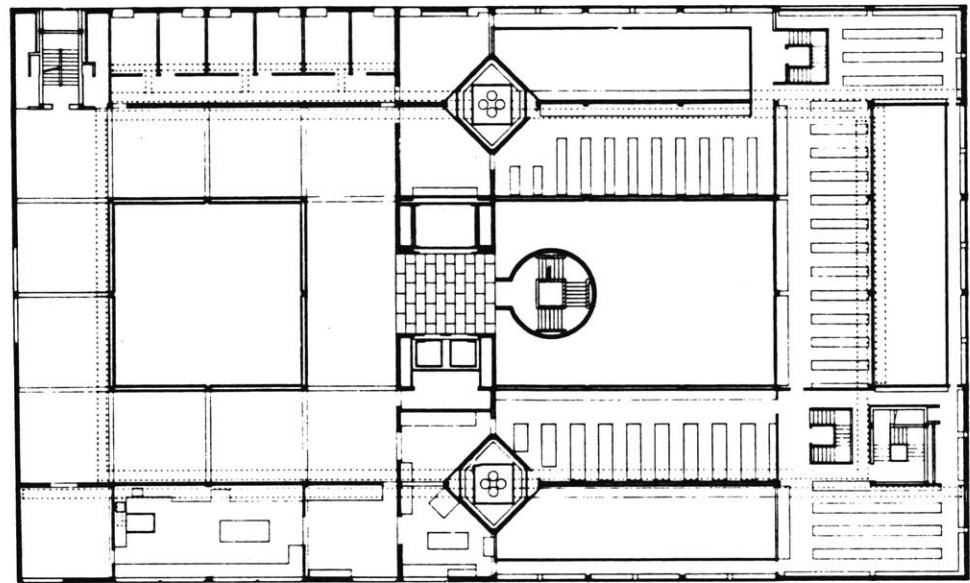
The development of the court was an evolution, proceeding with few preconceived images. At first, it was the removal of four bays from the second and third floors which generated it; space defined by that which was not removed. It's location, adjacent to the east wall, oriented the rest of the library towards the garden court. Direct contact with the exterior world seemed stark; the intention for the court was to be inward focused, illuminated from above. Study spaces were added along the east wall, screening the court from the outside and reclaiming a desirable location in terms of light and view. Mezzanines were added above the first floor to return an

intimate dimension to the court's edge.

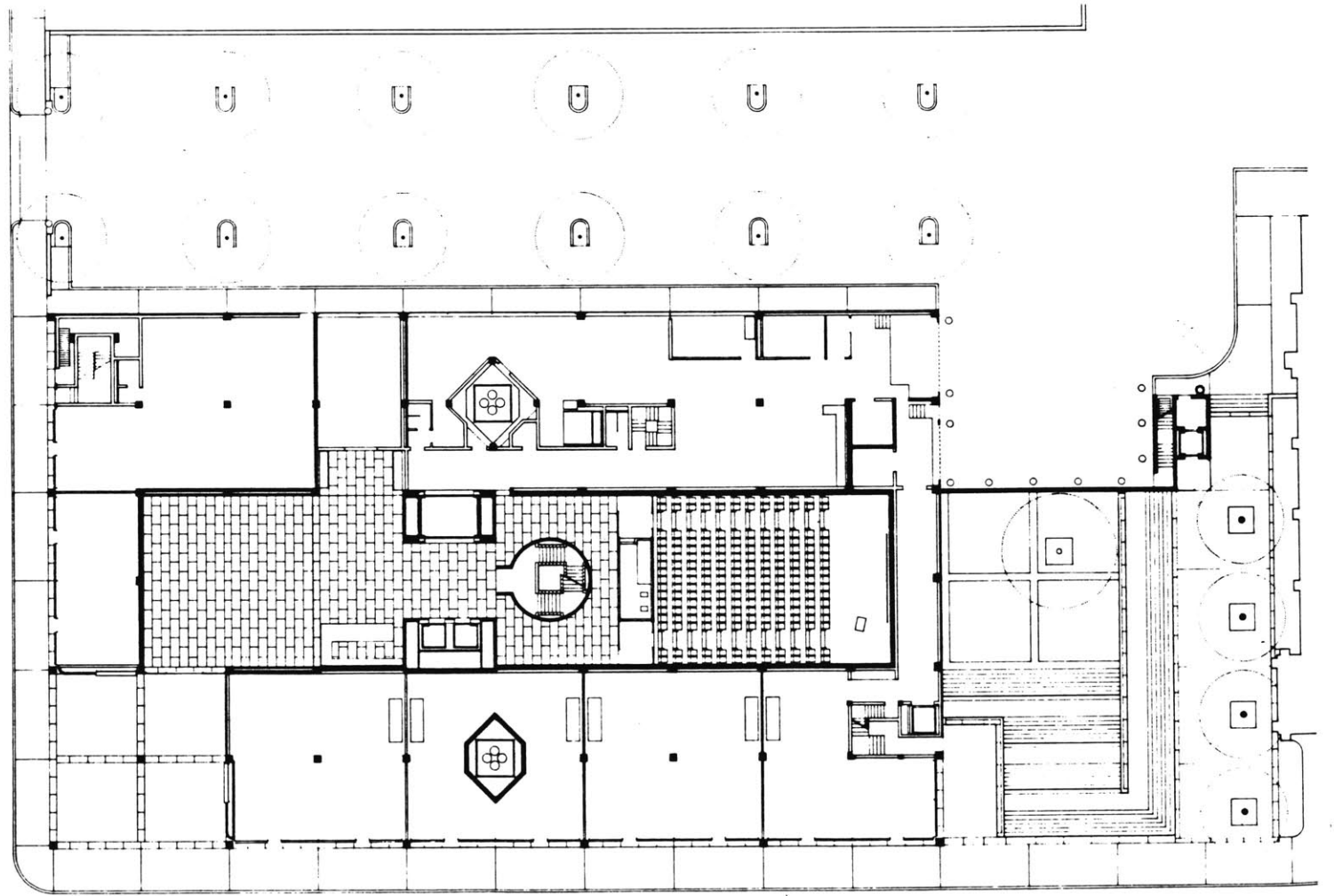
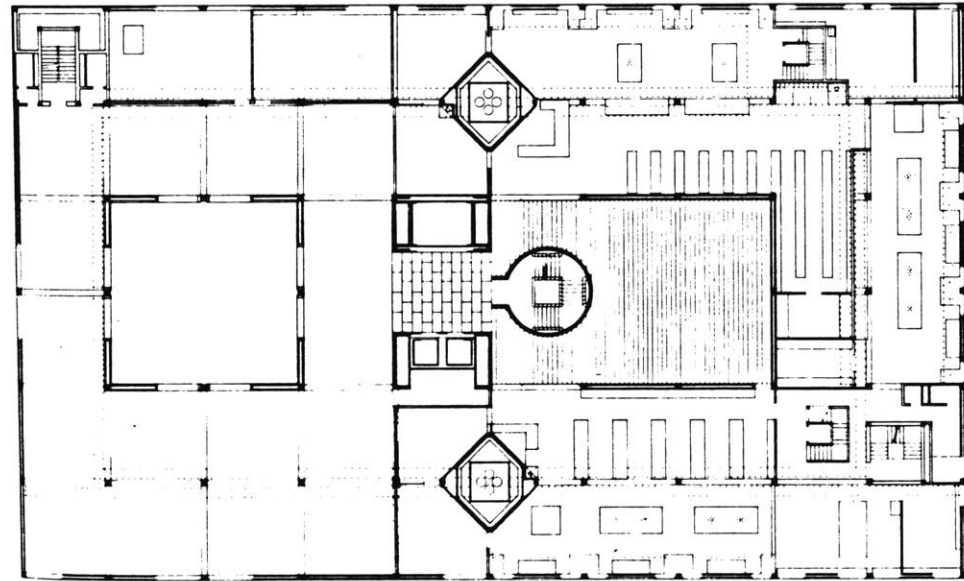
References were vital in the progression of my thinking. Earlier in the development of organizational issues, they were reminders of the limits I would like to leave myself for later exploration. Through studying a few selected projects, I felt that by understanding the nature of their solution, I could refine my own thinking with respect to this study.

Kahn's British Center at Yale offered an example of a building oriented around two courts. The building is constructed from a 20' x 20' concrete frame bay; the courtyards defined by the number of bays removed. The first is an entrance court whose square plan is maintained the full height of the building. The first floor has only planters and seating; above windows offer controlled views into the court. The concrete structure provides the framework for the wood panel infill system. The second rectangular court begins on the second floor, encircled by the libraries the floor level and galleries above. At the entrance end of the court stands a concrete cylinder which encloses the stair, serving much like a piece of

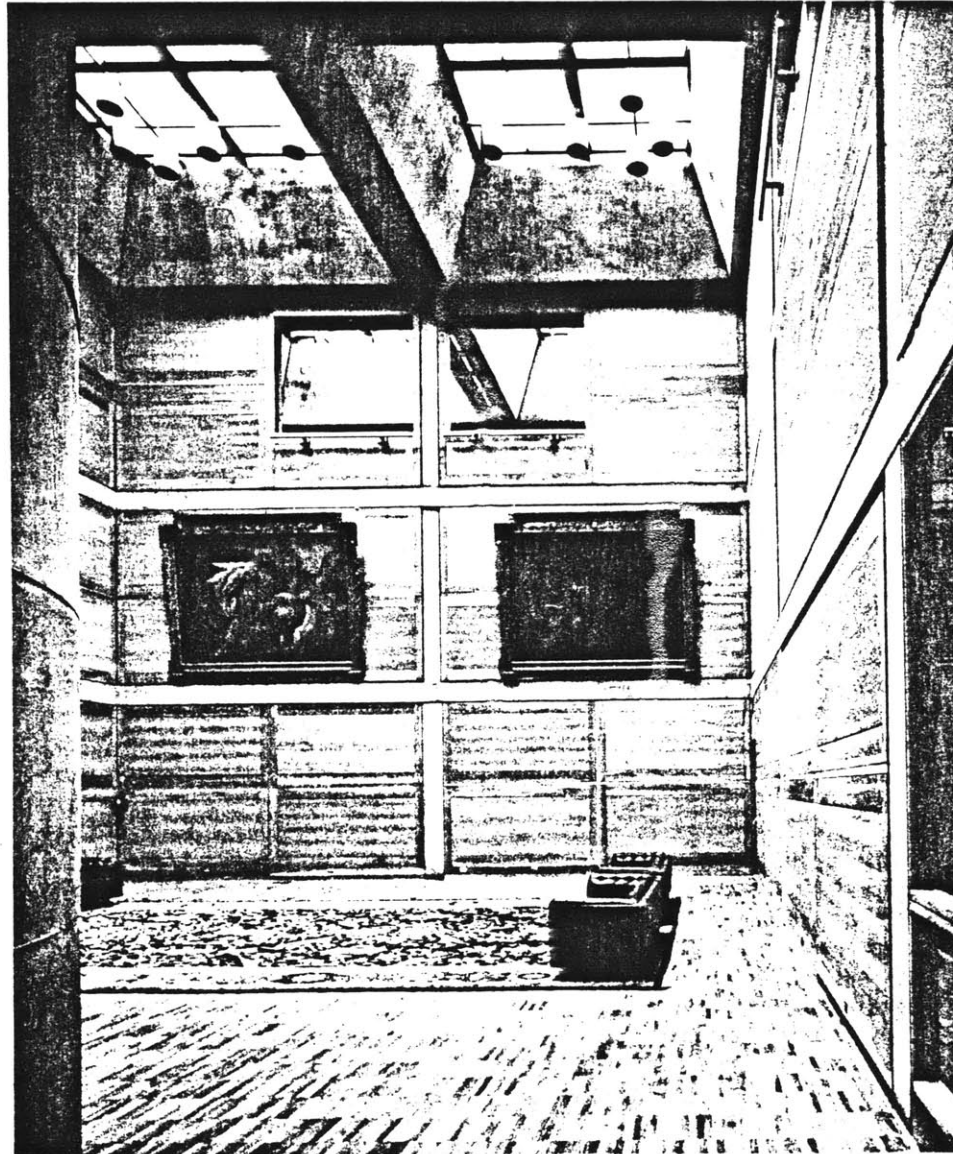
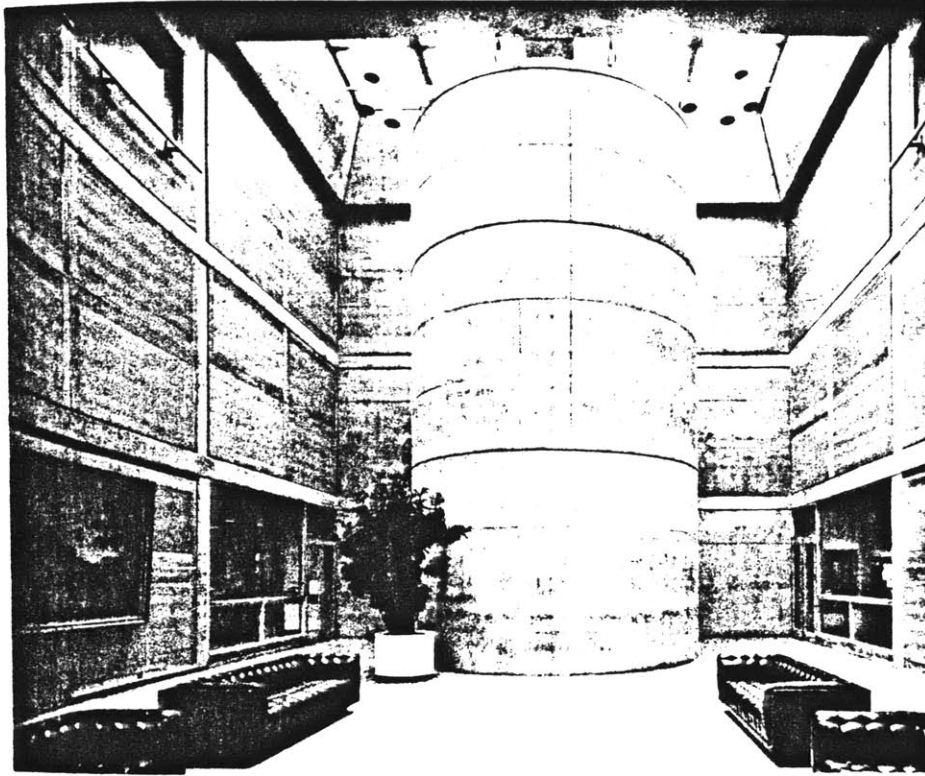




Second floor (left), third and fourth floors (above)



Street floor

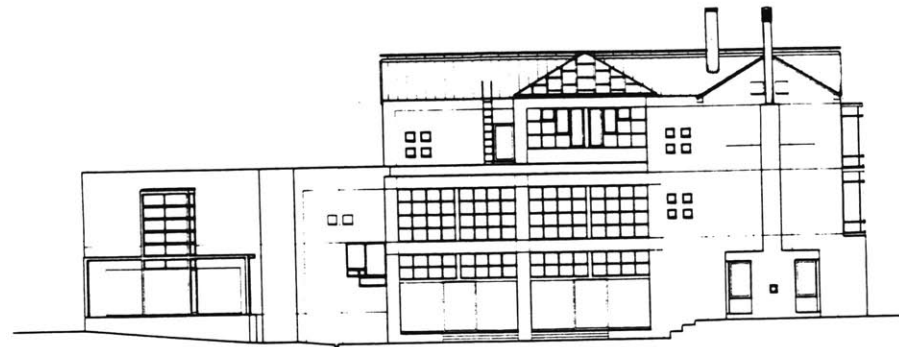


Main exhibition court (opposite end)

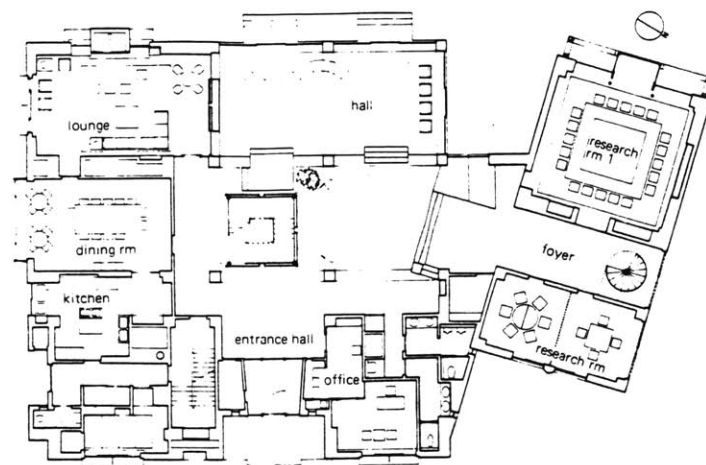
sculpture. The roof consists entirely of a concrete coffered skylight system, lighting the fourth floor galleries and interior courts.

References provoke speculation as to what is appropriate to take from them. In examination of the courts, is their value in their size, proportion, or the total integration between their plan, lighting and structure? I found the enclosed stairway somewhat appealing, despite its self-contained form, in the way it added another dimension to the space, and directed the circulation about itself. The expression of the structural system as a means to generate the court interior pointed to a potential for the existing structural system within the library.

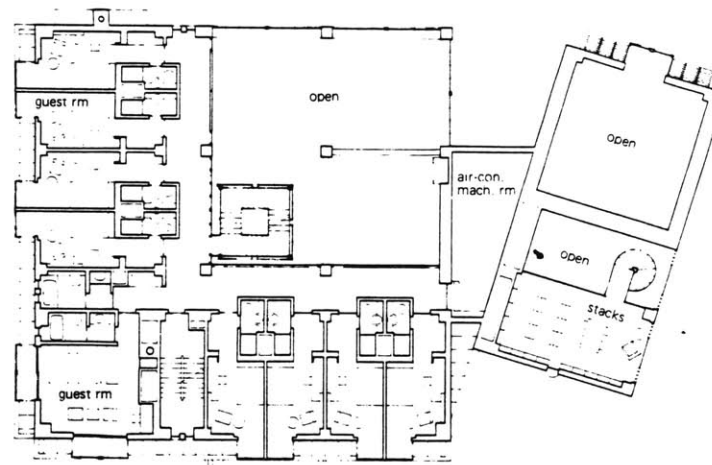
My second major reference practically found me. During a lecture at Harvard by Fumihiko Maki, I became acquainted with his recently completed YKK Guest House. At the time of the lecture, the project had not yet been published, so it was a rare treat. The program for the guest house was quite similar to that which Wright had for Johnson Wax Company's Wingspread; it contained guest and meeting rooms and an oversized living room or hall. One of the



West elevation.

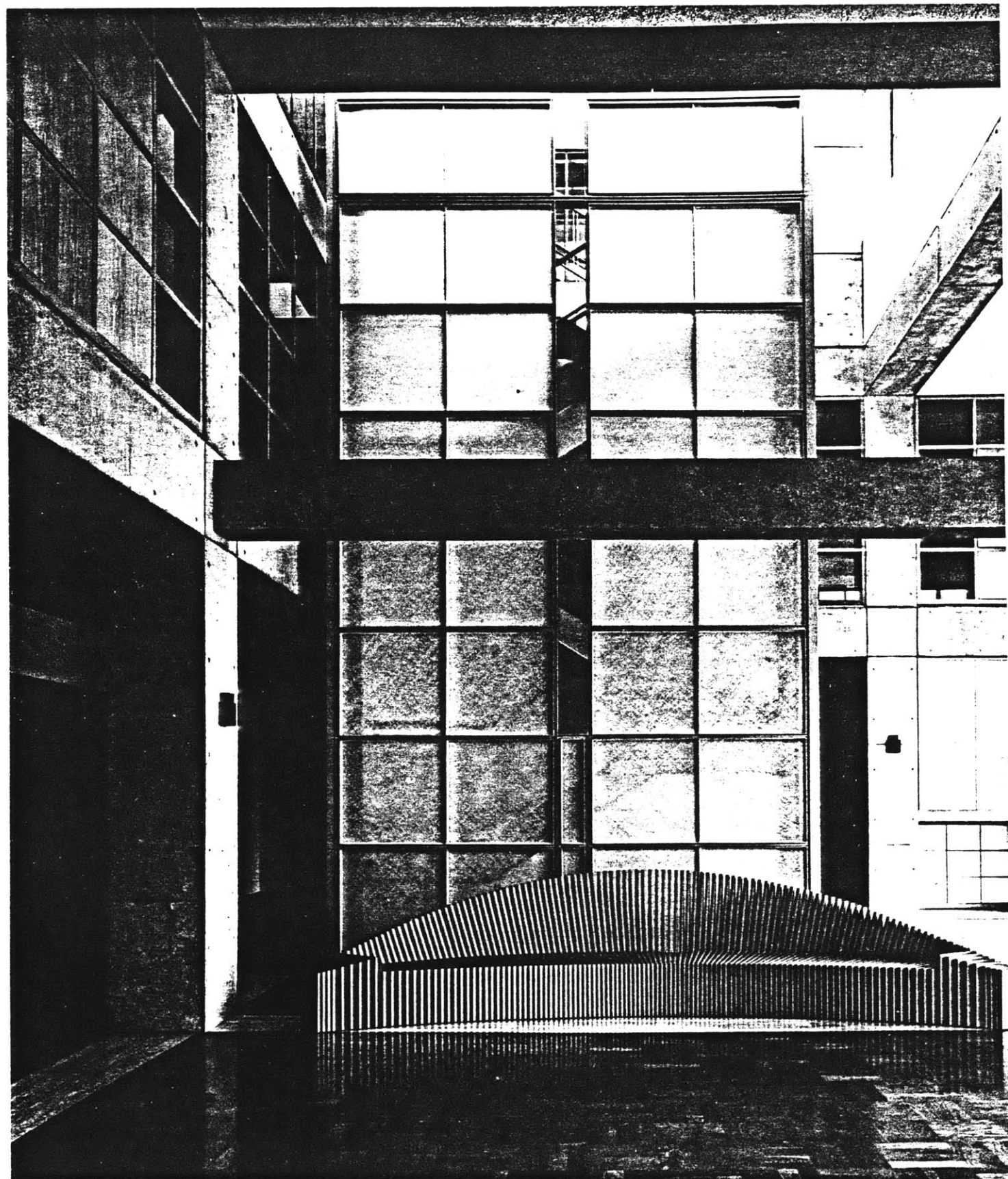


First-floor plan; scale: 1/400.



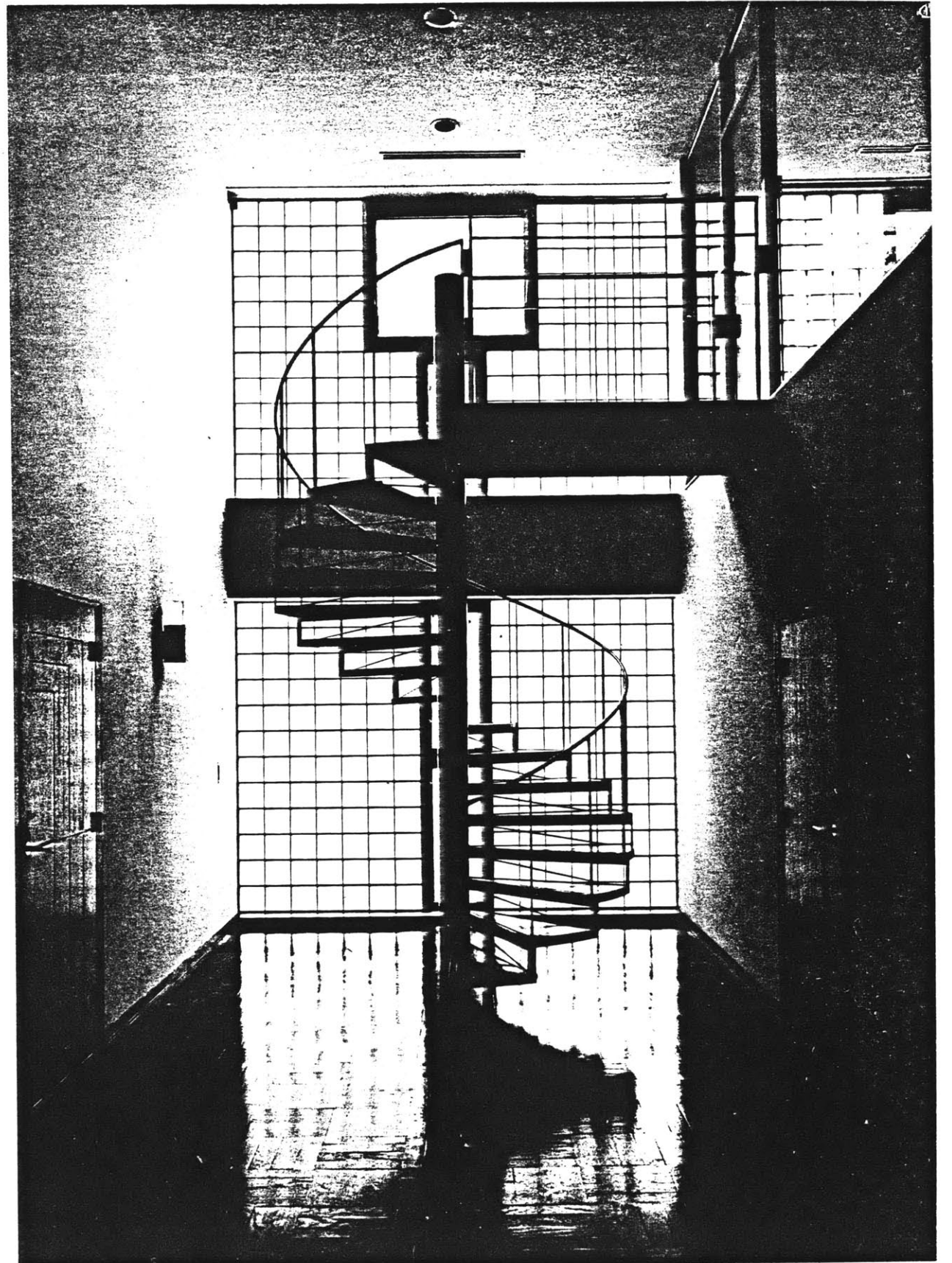
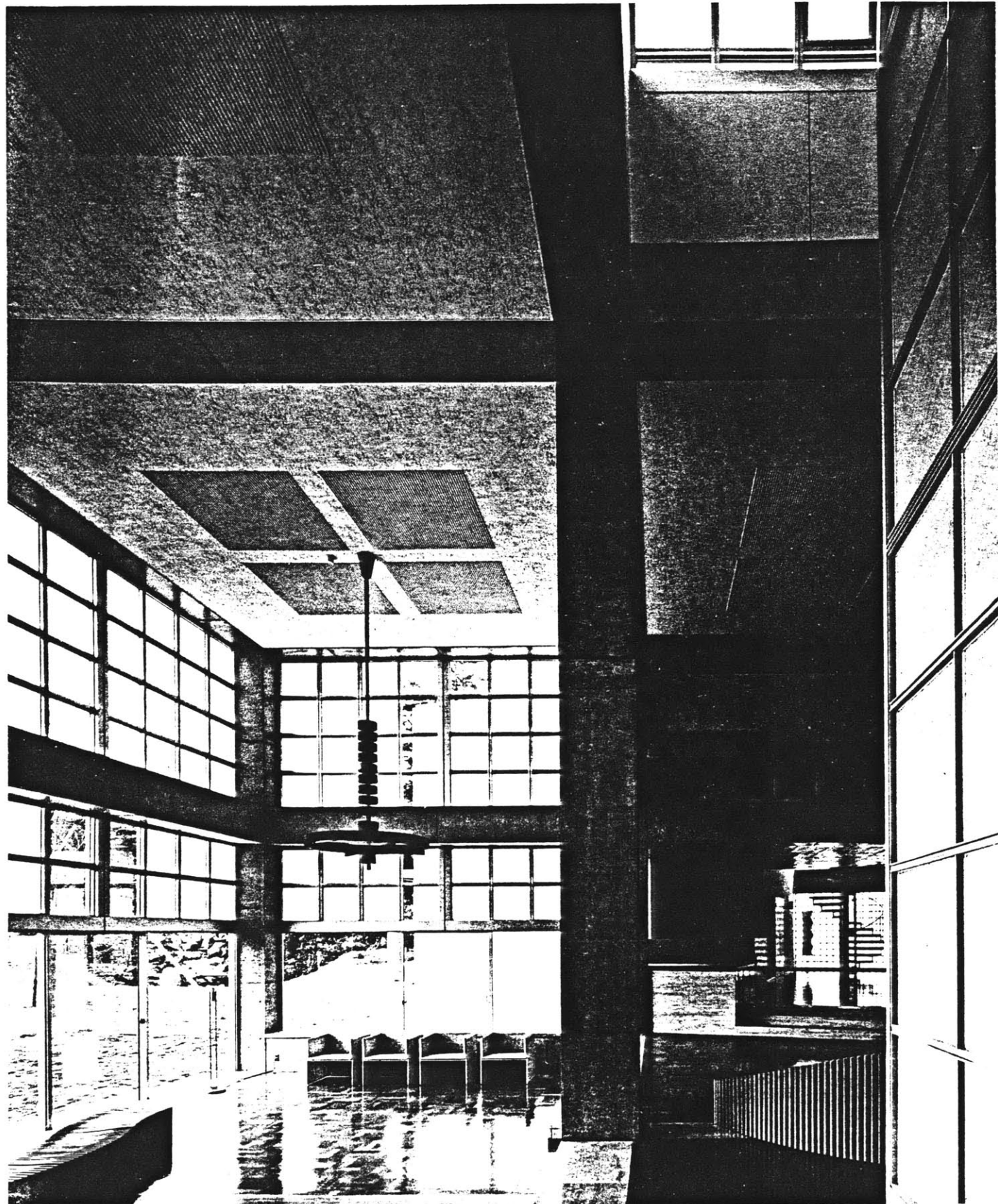
Second-floor plan.

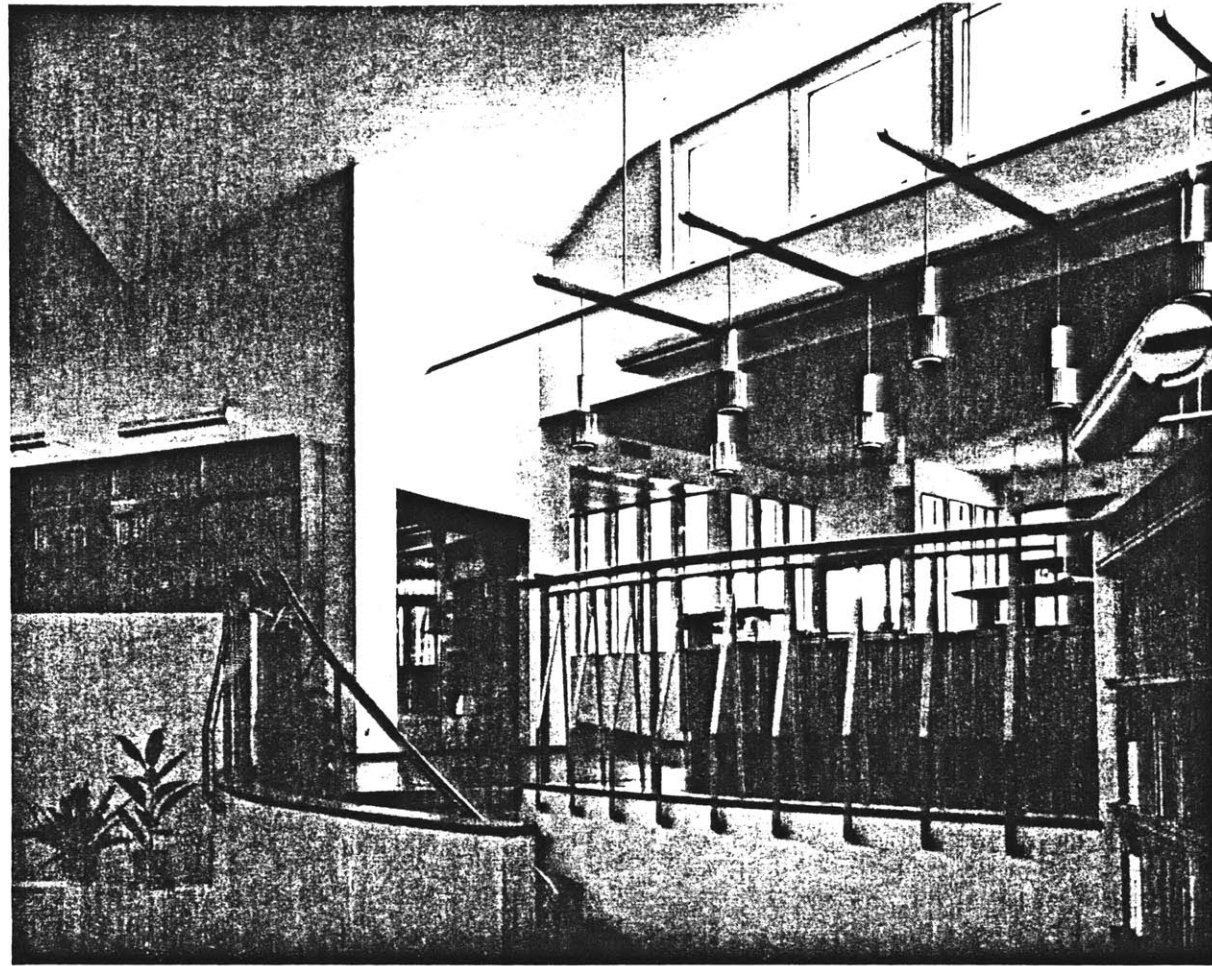
fascinating things about the project was Maki's description of how he had been influenced by a recent visit to Kahn's building at Yale. The building was organized around three sides of the hall; the other side and an additional face above was exposed to the exterior. Maki, like Kahn, defines his "court" by using a concrete frame structural system and the boundary of what is open above. Diverging from Kahn, he allows the frame to invade the court to delimit space within. He chooses to include a stair much in the same way as the British Center. It is a volume around which circulation moves. It adds a sculptural quality through its surface and volume. But his stair goes on to become more. The stair's enclosure is a framework of translucent panels; a void in the screen reveals the stair within. Above the stair is a pyramidal skylight which by day, washes the surface of the screen with light. At night, the stair is lit from within, becoming a lantern to illuminate the room. The grid pattern of the stair enclosure is a motif which recurs in the wood panels and screen infill of the structure as well as the windows uniting the building.



including the stair in the library's court from the example of my references. This became a source of frustration. I spent much time trying to resolve the issue. Access had to be provided to the first floor mezzanines, second floor and ground level. To develop one stair which would satisfy all of those conditions was asking too much. Enclosure of a stair within the court meant consuming more of the vital space. To leave the stair exposed meant subjecting the court to a major portion of the library traffic. The resolution was to divide and conquer. The main stair to the floors above was placed in conjunction with the elevator. The reference mezzanine was provided with its own spiral staircase. The stair to the ground level was left within the court to connect the court with the floor below. The edge of the stair helped to define the court entrance.

Resolution of the interior surfaces of the reading court, or light court as it was sometimes referred, was the next concern. The court elevations needed to be supportive of activities occurring within and outside of the court. Circulation moved directly along the west edge with a need for some screening at the





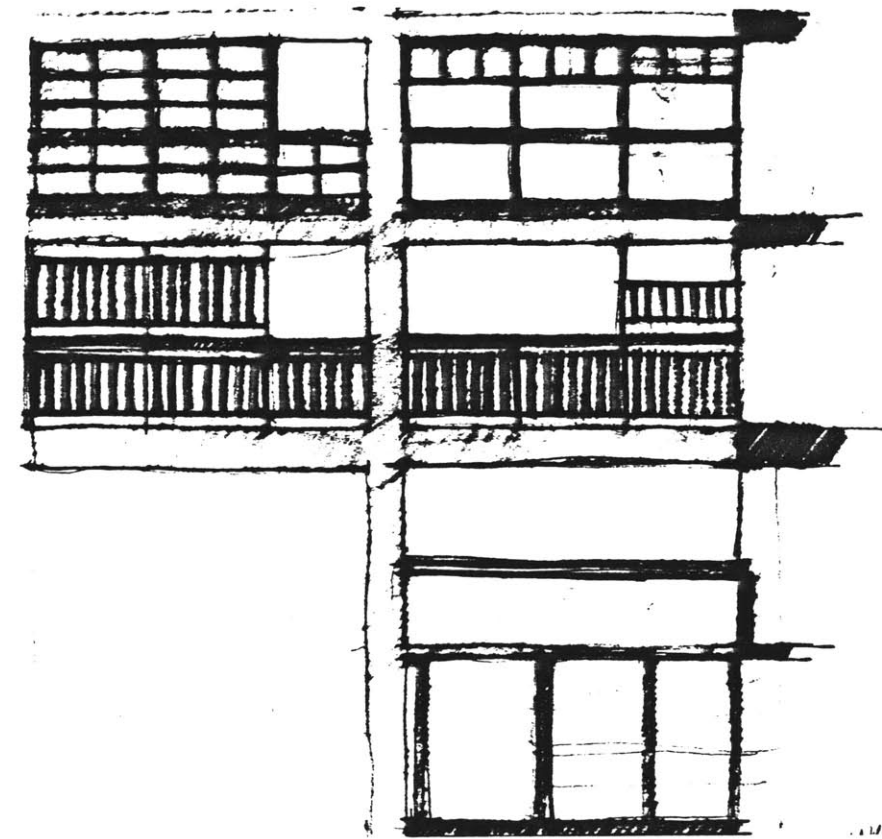
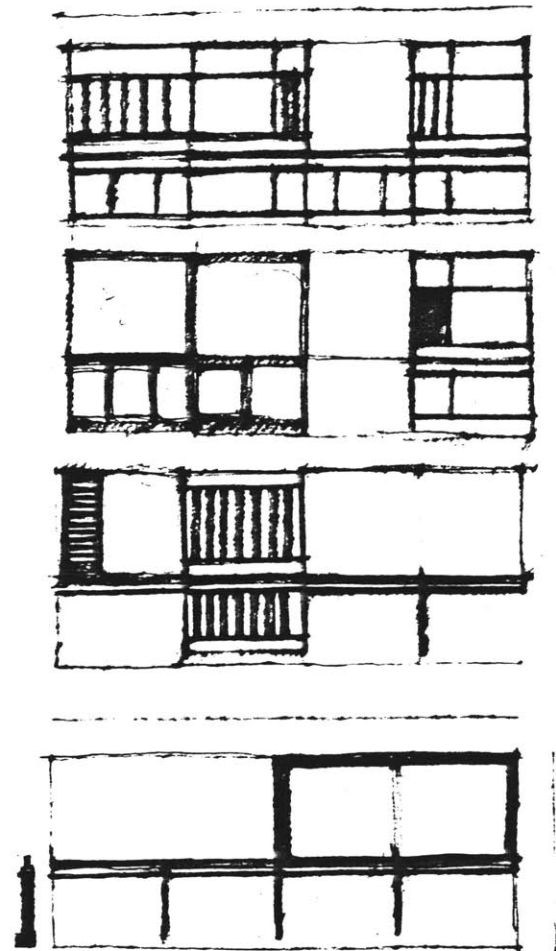
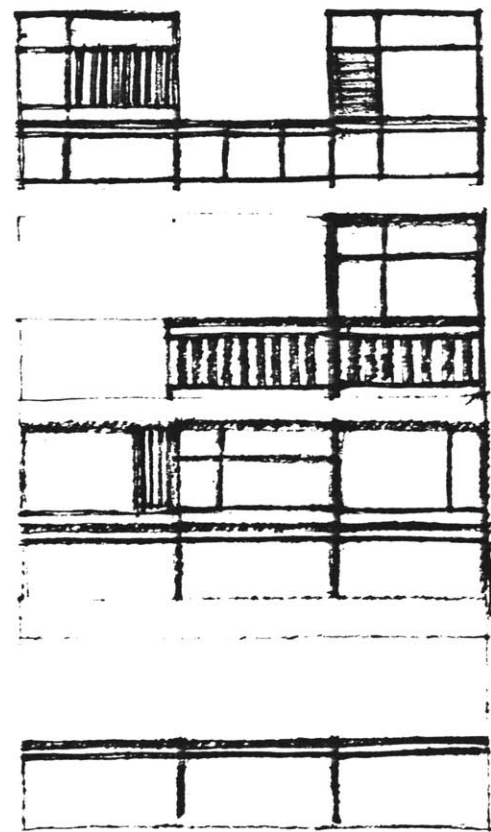
View from the sunk reading-room towards the supervision desk and the circulation desk. Entrance to the dictionary and textbook section and administrative quarters. In far background, the card files



elevator. Study carrels occupied the north and east edges. A more continuous wall surface was necessary for the Limited Access Collection and third floor entrance which called for less exposure to the court. The task was to develop a vocabulary which would accommodate all these needs.

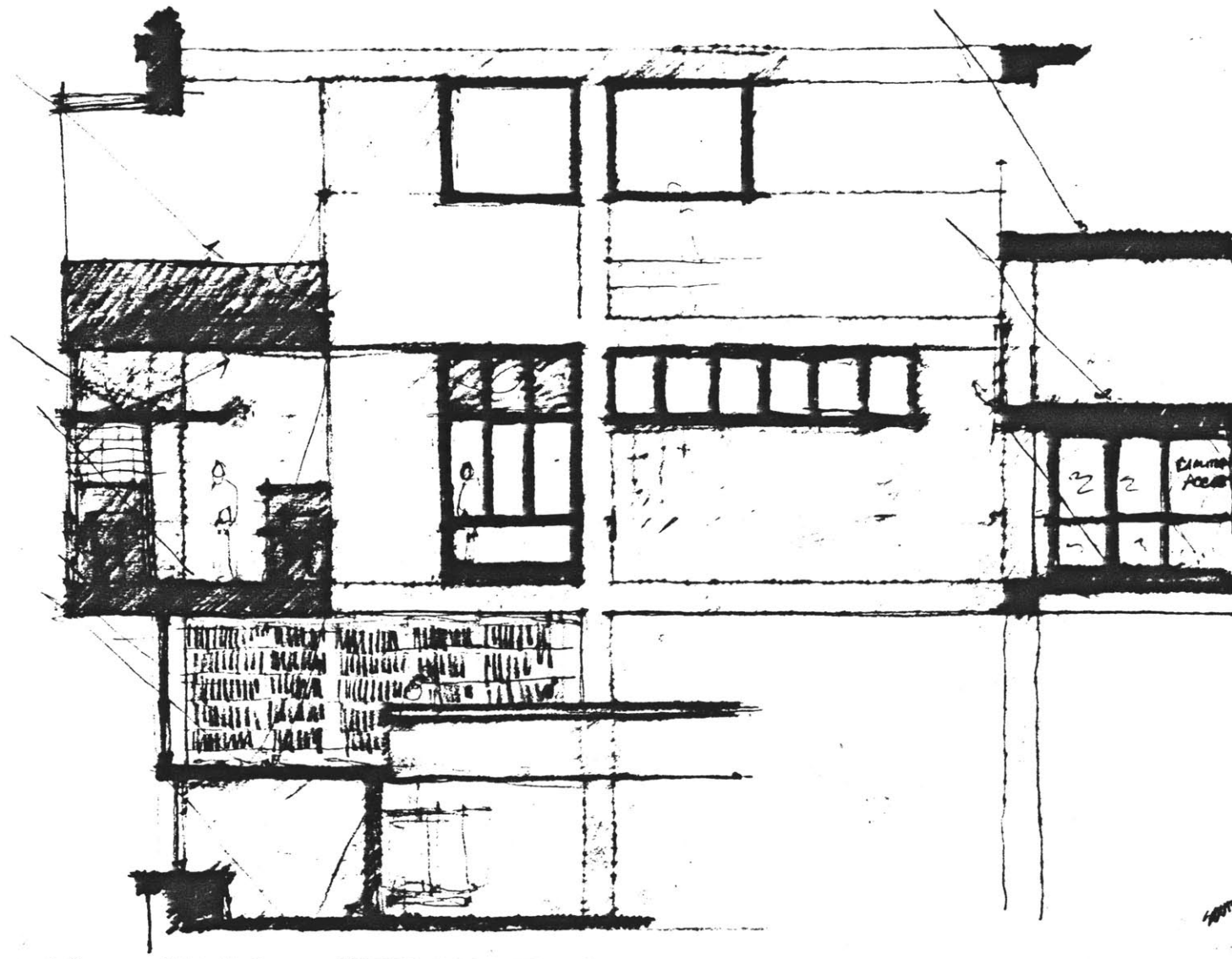
The structure became the framework for the elevation, much as the it had in my references. The existing structure, however, was not the silky concrete of Kahn, more something which had once had roof drains attached to it. Columns and edge beams were clad in white plaster. In the earlier context studies, handrails had been used as the generic edge condition in the court, avoiding architectural expression. Walls along all but the south elevation negated my intention to bring light to the edge of the court. Handrails alone do not have the capacity to sustain individual activities. A carrel pushed up against its edge does not seem very inviting; there was a need for enclosure without obscuring the light.

Screens were the answer. In a basic sense the modulate the light through the use of 25



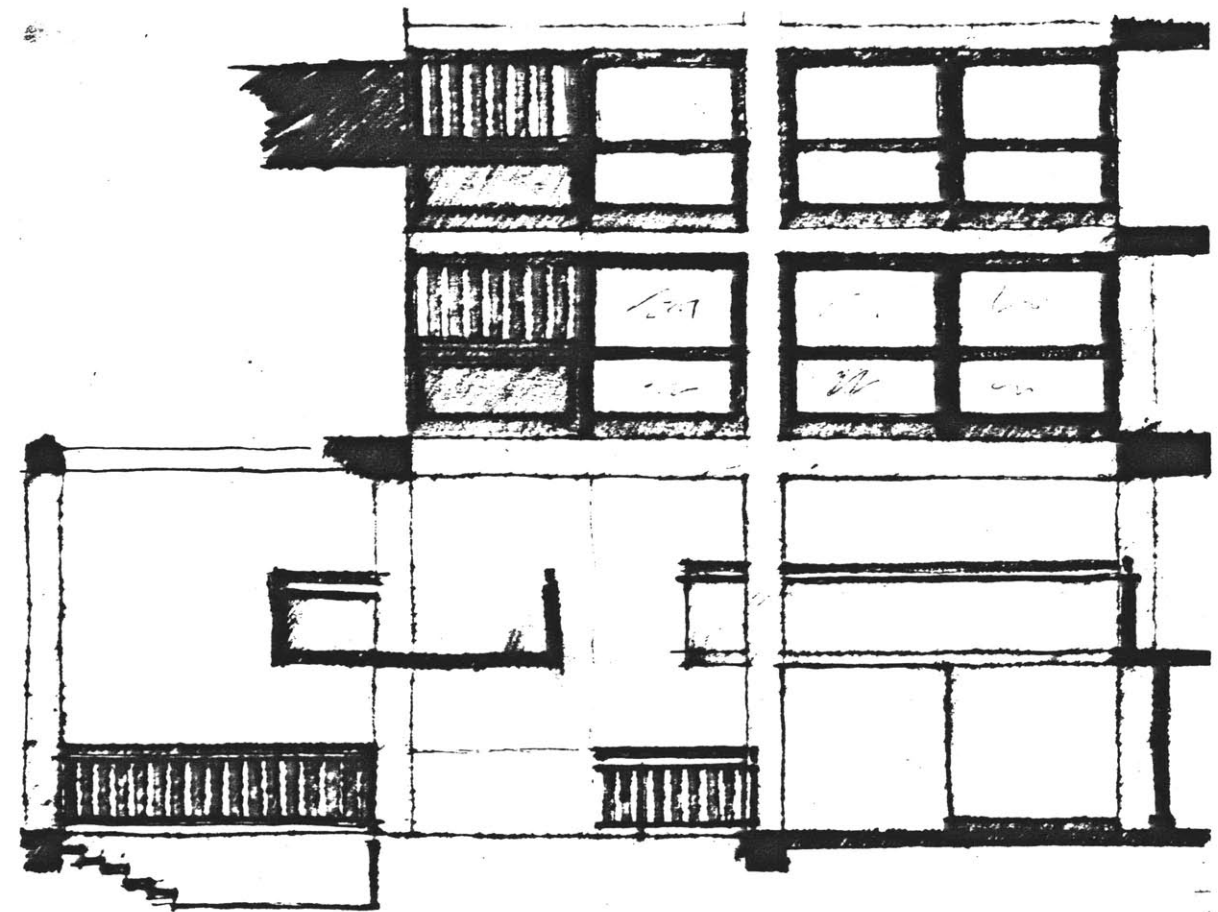
STUDIES

WEST



SOUTH

STUDIES



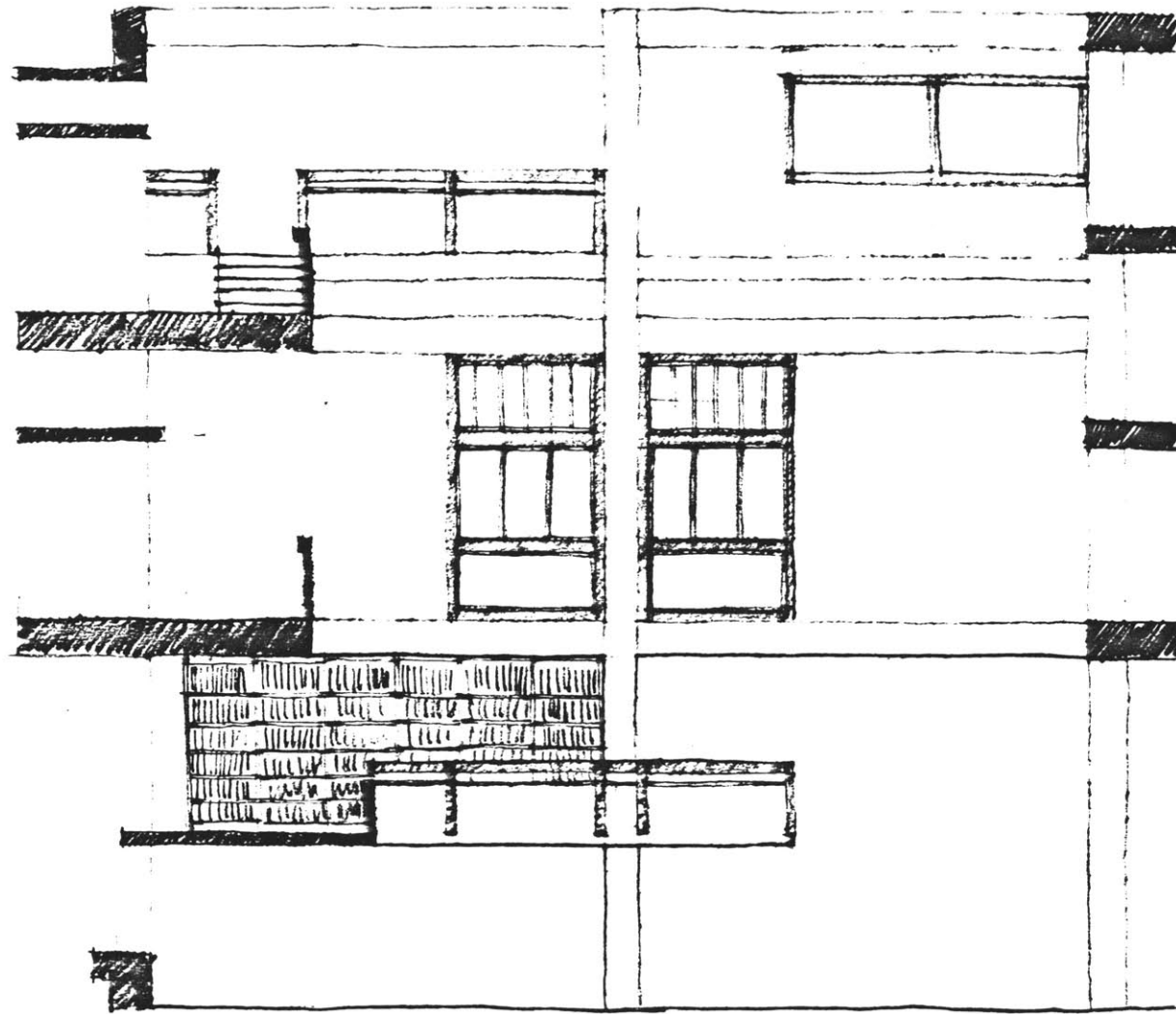
WEST

material. My first attempts at screens were the placement of vertical slats filling the void above the handrail, recalling pieces of images from Aalto. This gave rise to issues of continuity and containment of the screen. How could screen be used to define a space? A hierarchy of order, initiated by a frame, was the answer to the problem.

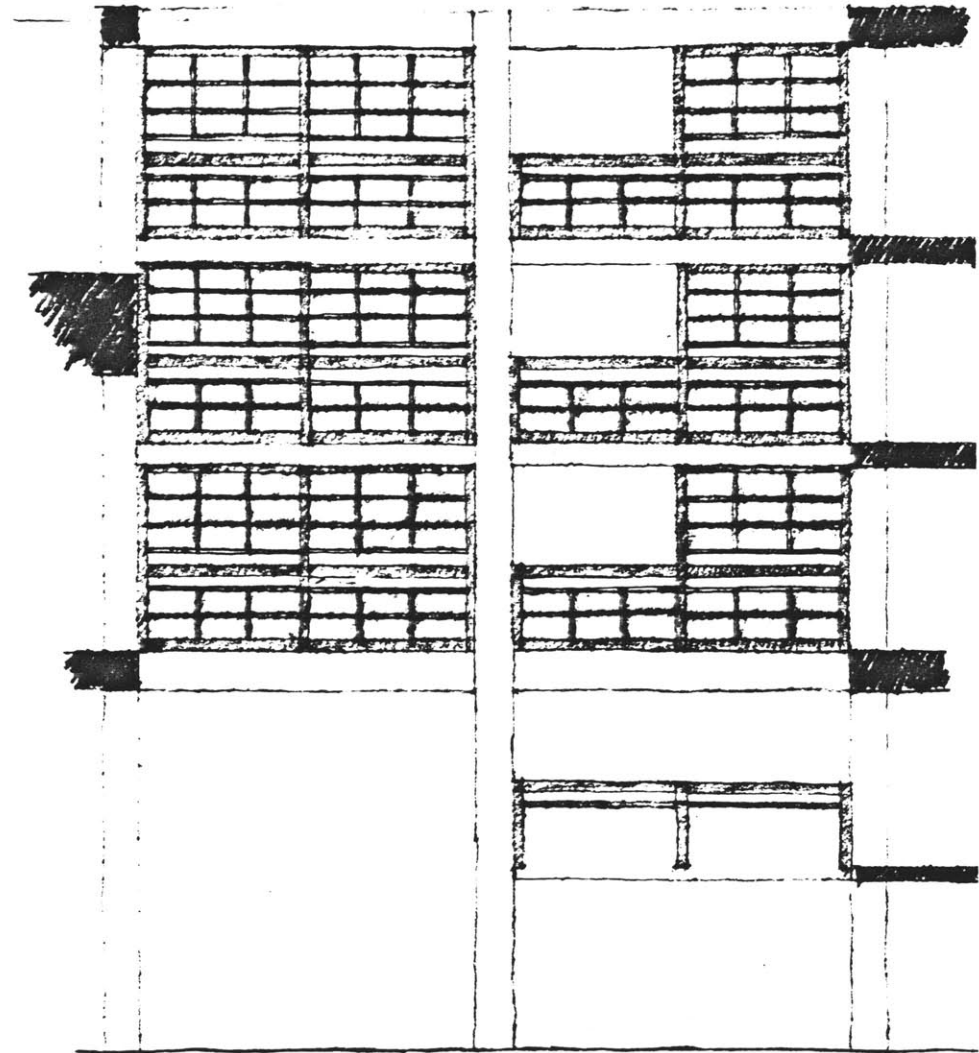
New issues. Frame - how heavy? Vertical accent or horizontal? How large a frame? What is the dialogue between a frame and a continuous wall? Some of these questions were resolved through frame studies originally done at 1/4" scale. Some began as a way to sort out ideas. Others are particular to a location within the library. All wood frames gave way to frames which included translucent panels. The panels had the advantage that their light surface would reflect light within the court and light its exterior edge. Studies eventually began to be evocative of something which was expressive of the nature of a library. The pattern that was selected to be studied further spoke very much of shelves, and the importance of storage as character of the library, and the intimacy of everything having its own place.

Refinement of the screen system involved the narrowing of the framing members to keep it from competing with the larger order of the structural system. Color studies were done to further my own thoughts about pattern and light and material. While I had originally conceived the screens as having a warm, teak-like character to the frame, the reflective quality of light colored materials pushed my thinking into honey-colored woods, or pale gray woods. Alvar Aalto painted much of the wood in his buildings white to increase their light reflective quality. Unfortunately, none of these studies can be adequately rendered for this text.

The next step in the exploration was the deployment of the screen system on all four elevations. The four freehand elevations were one of a series of studies done for this purpose. The screen-frame system selected was actually a bit smaller than the scheme shown. While the whole thing had a nice appeal, it was difficult to imagine what actually happened as the two sides of the court met, especially in instances of differences in floor heights. The other problem was how to maintain a sense of

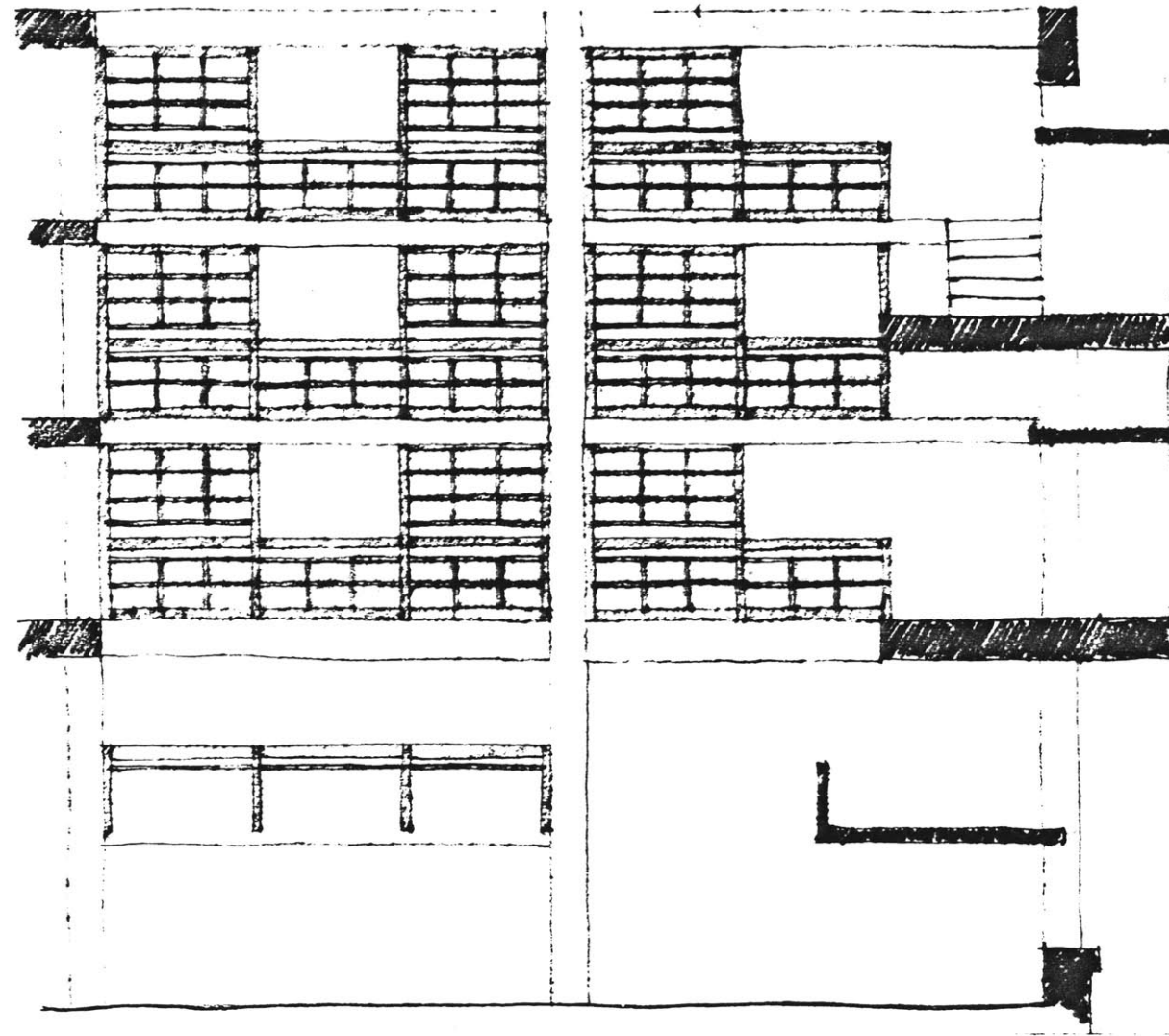


SOUTH

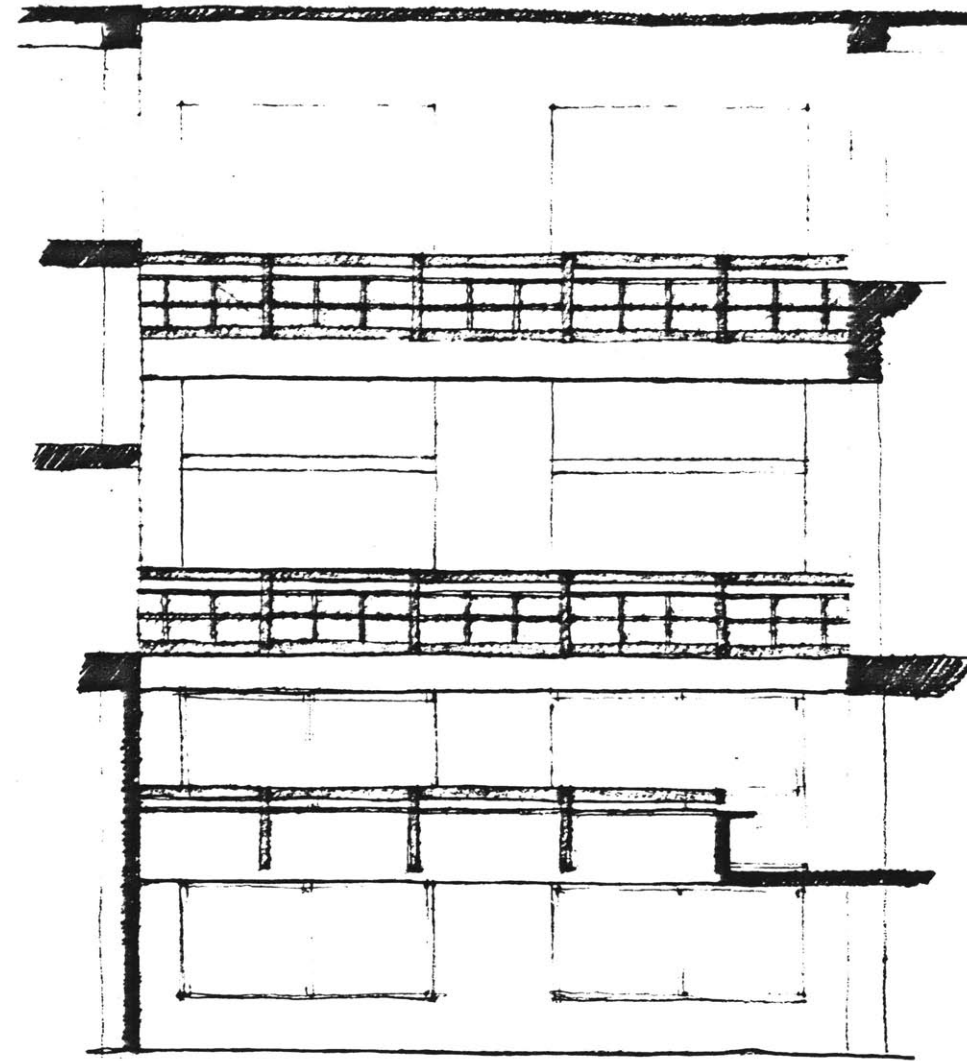


WEST

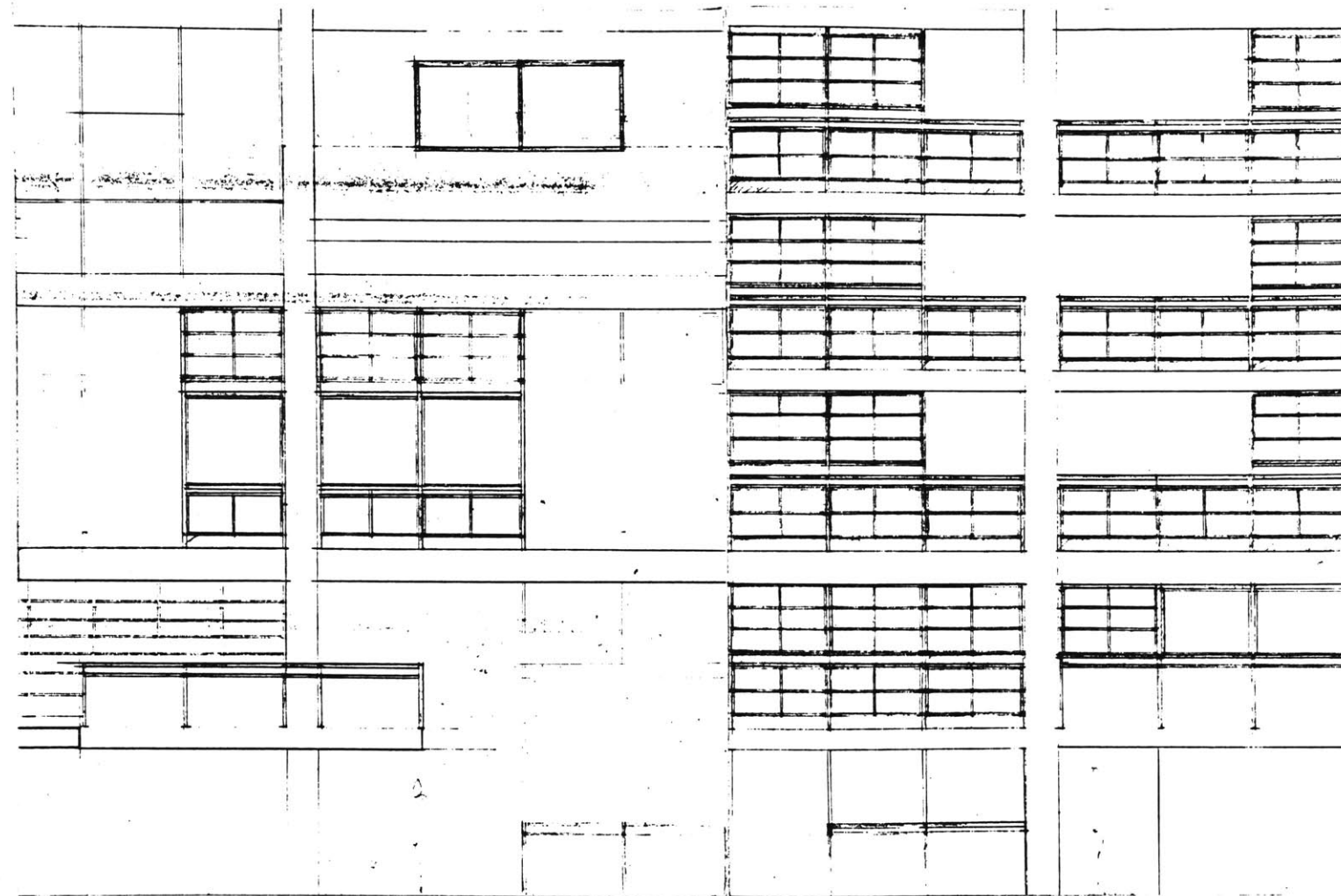
INTERIOR COURT ELEVATION STUDY



NORTH



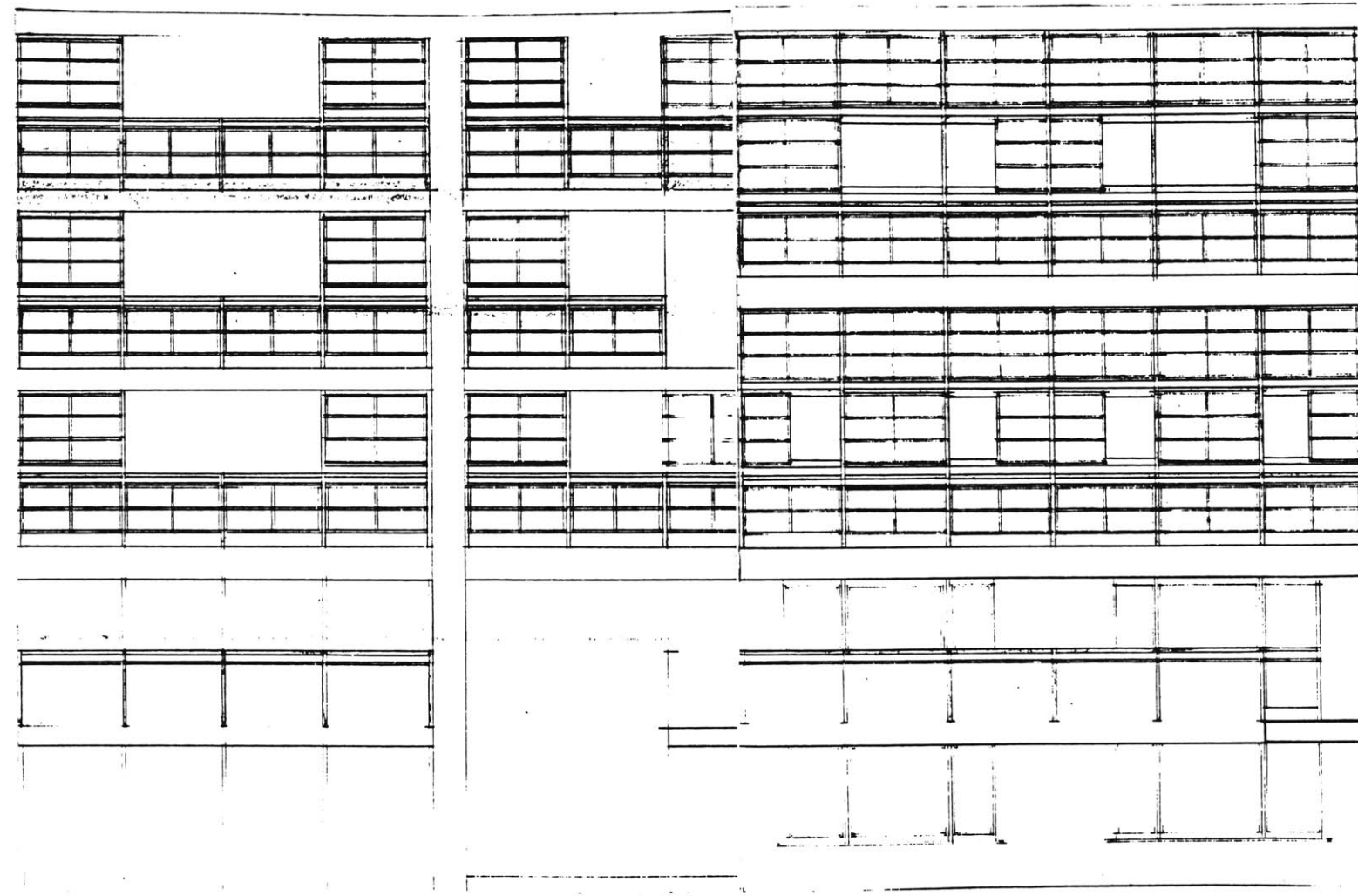
EAST



SOUTH

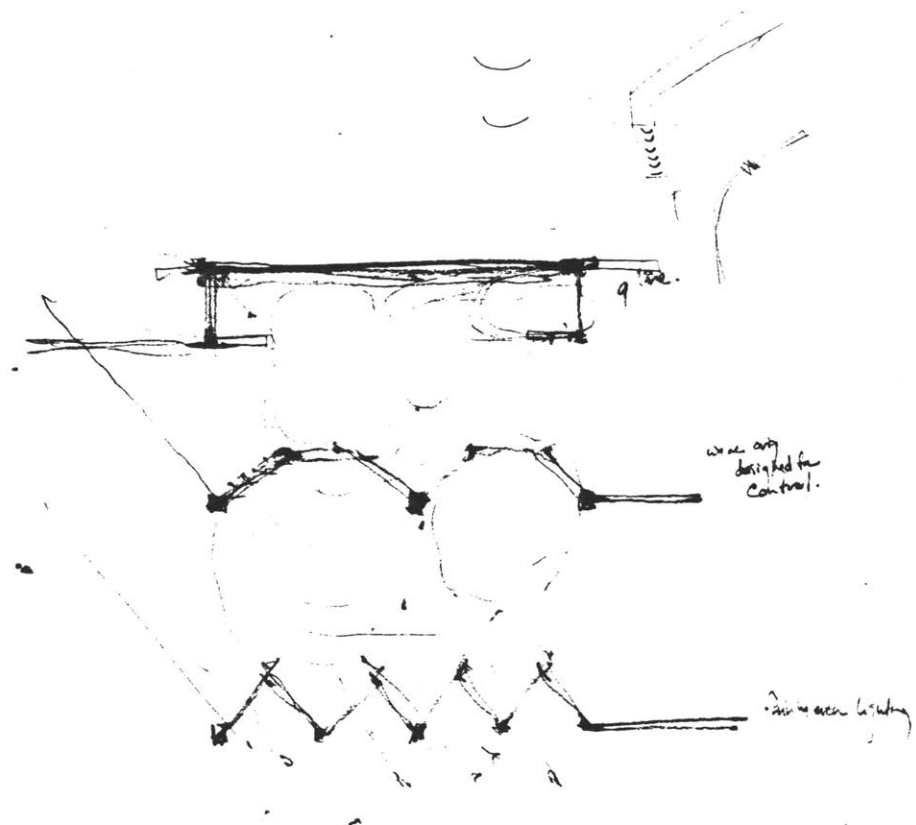
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INTERIOR COURT ELEVATION STUDY



NORTH

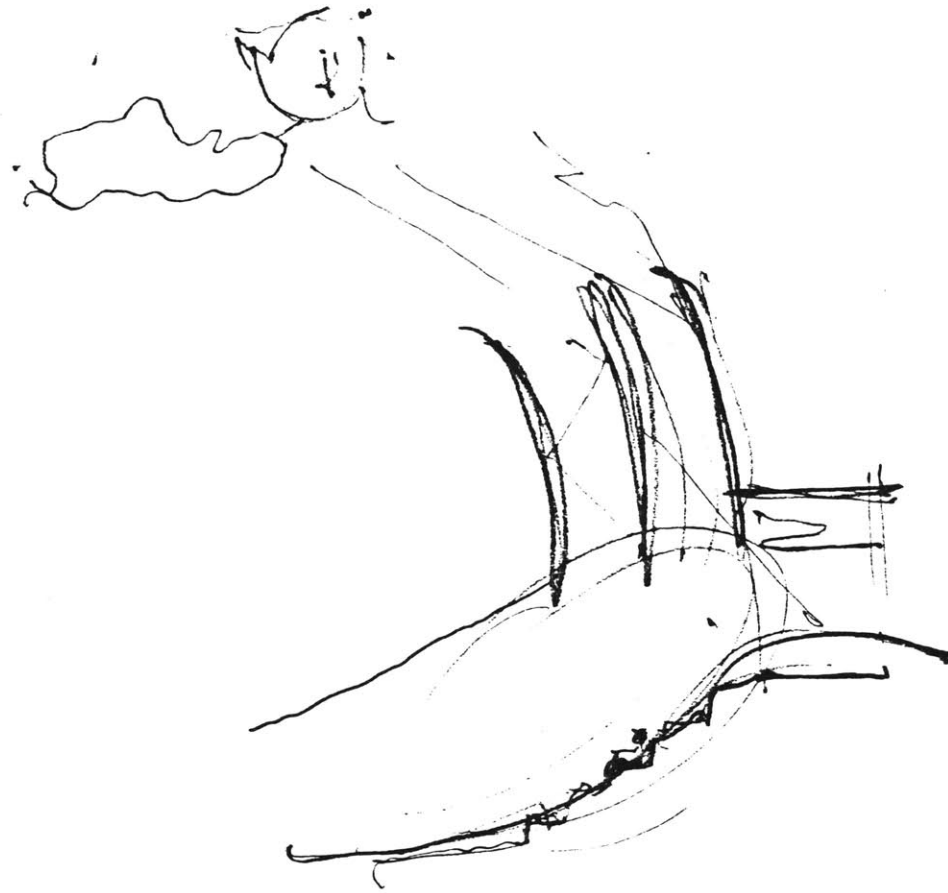
EAST



scale with the more continuous wall surface at the south elevation.

To simplify matters, a quick study model was made. Xerox copies of trace sketches were applied to chipboard in a manner that only the court elevations were depicted. They were then taped together so they could be examined as a run of things. Changes were made by pasting-up or whiting-out. This model was disassembled and included with the text.

It was not that light was totally forgotten during this period. A search for an appropriate means of bringing light in through the top of the building was always in the back of my mind. The accordion-type skylight shown in initial sketches seemed to conflict with the interior elevations. A clerestory system never appealed much to me because of the potential for glare on the top floors, and I felt a direct opening to the sky would be more appropriate. A coffered skylight system, such as the one in Kahn's building, seemed too weighty if it was allowed to span one entire bay in this smaller building. Aalto's solutions for more crystalline-type skylights combatted with the orthagonal

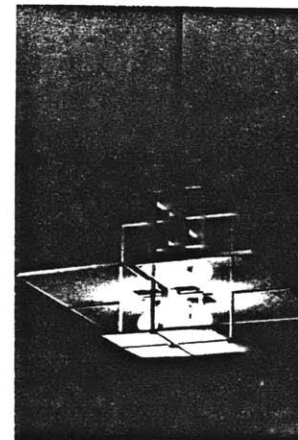


Sketch by Jack Myer

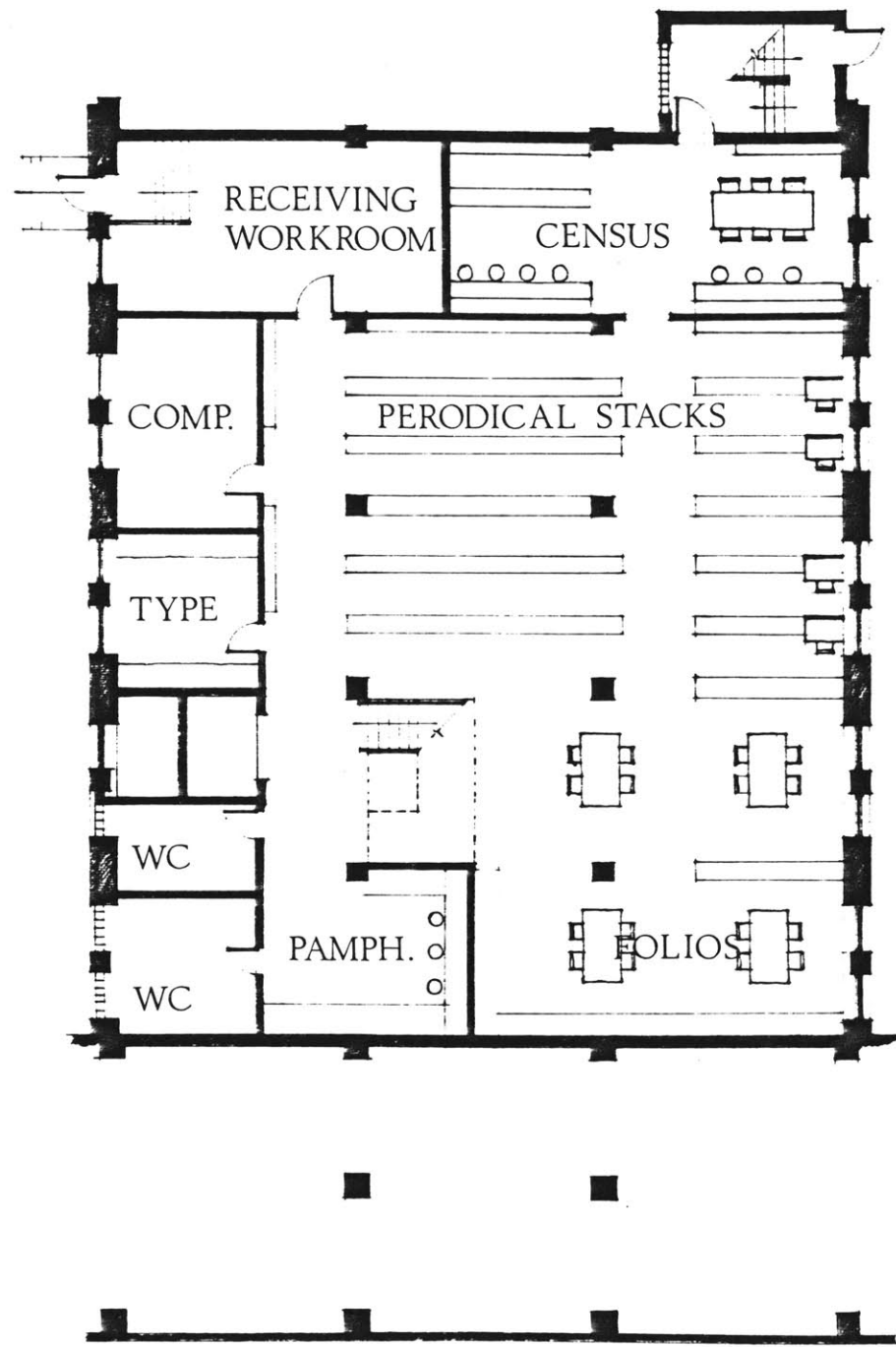
geometries which had been established. The skylight must be supportive of the whole.

Jack Myer brought up the need for a holistic relationship between the way light is brought into the building and the form of the building itself. He drew an impressionistic sketch of an Aalto auditorium where the sense of place and quality of light were intertwined.

The evolution of the court indicated which skylight would be appropriate. Earlier, as I began to work with the translucent panel system, the surface of the court became a light fixture, much in the same way as the stair in Maki's building existed as a lantern. Maki's own development of light fixtures for his buildings also supported this idea. Here planes of translucent materials were used to guide and direct light. My solution for the skylight was to create a lantern top with a pyramidal skylight. The singular opening symbolizing the unity of the court, the light, the library.



FINAL DRAWINGS



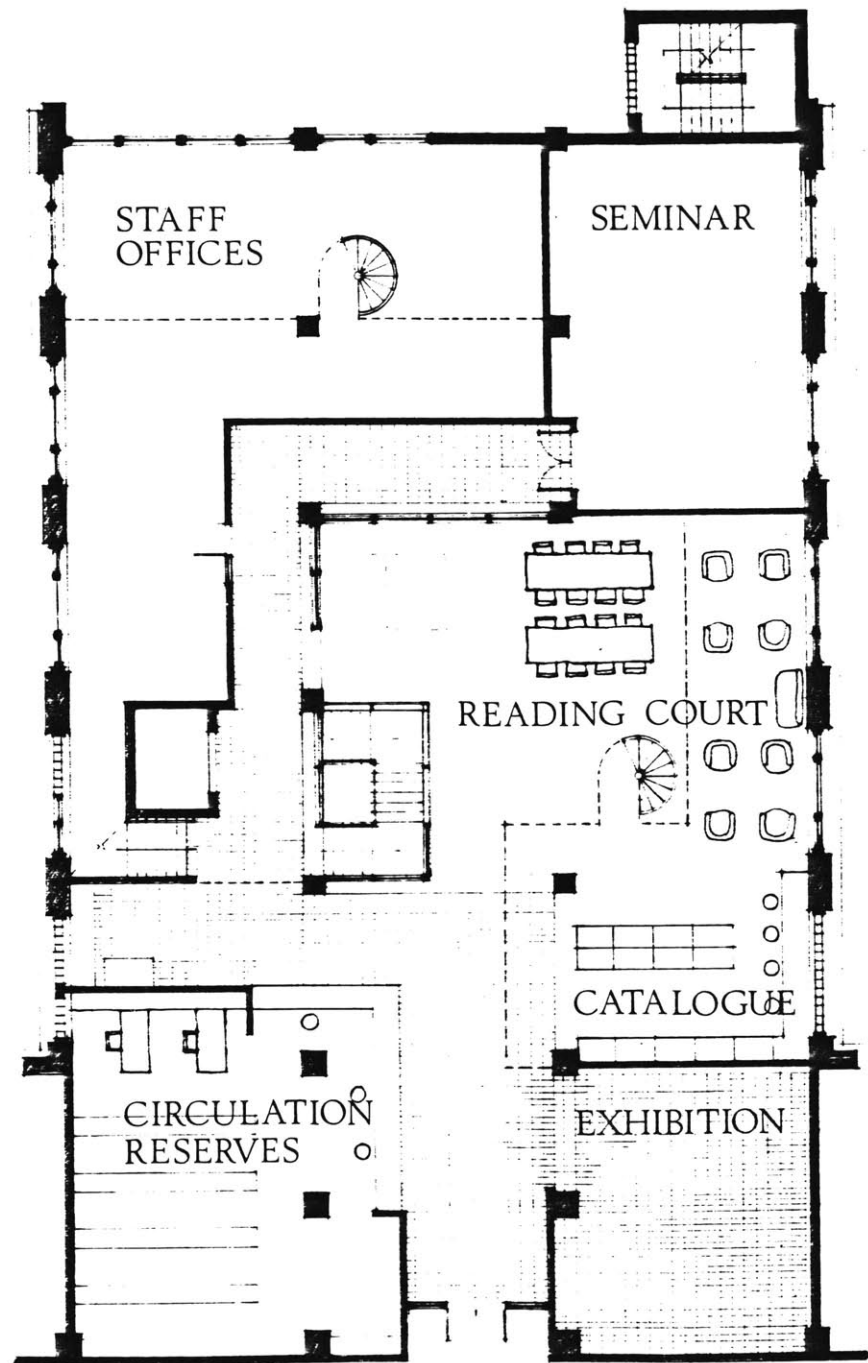
GROUND LEVEL



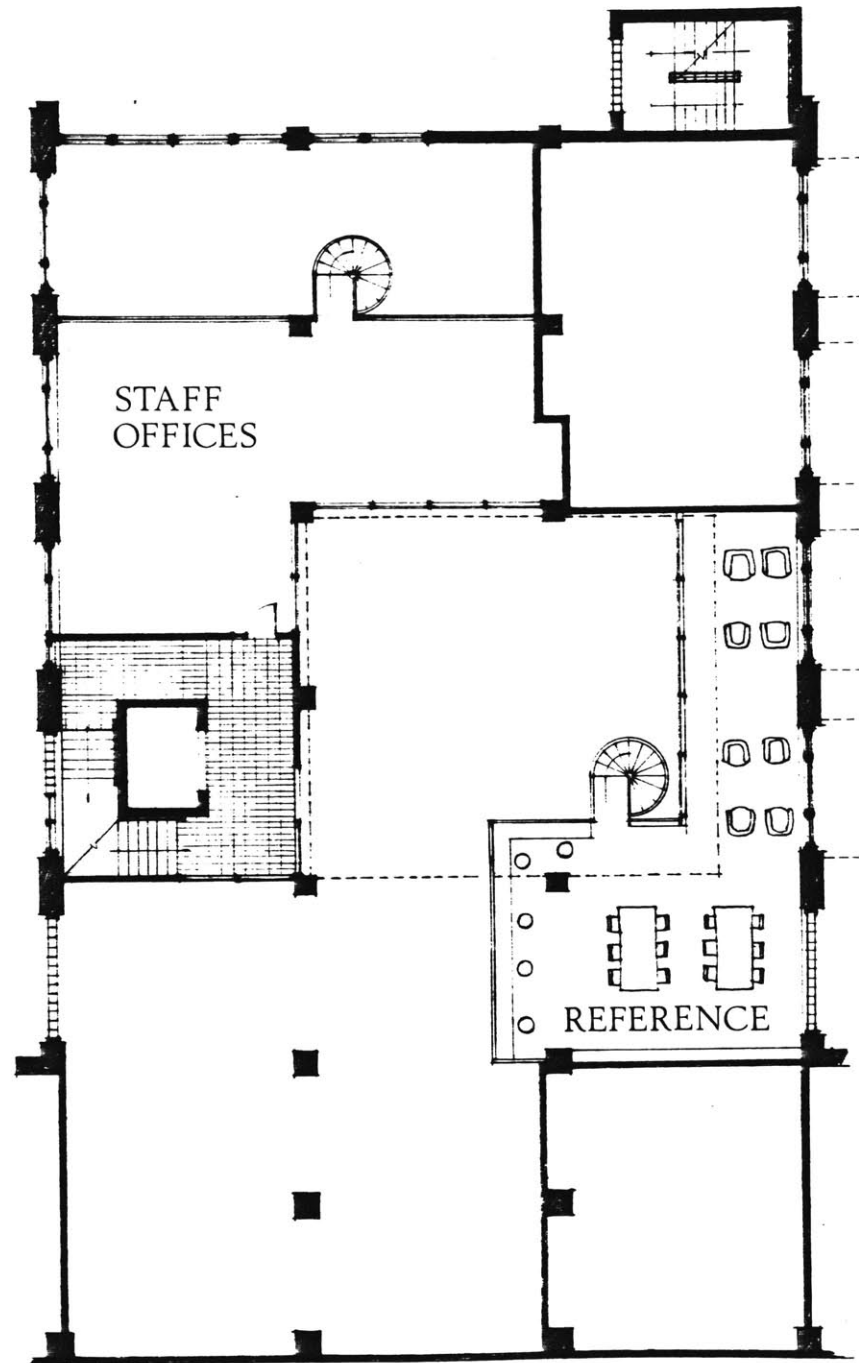
FINAL DRAWINGS
PLANS

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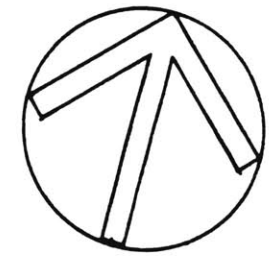




FIRST FLOOR

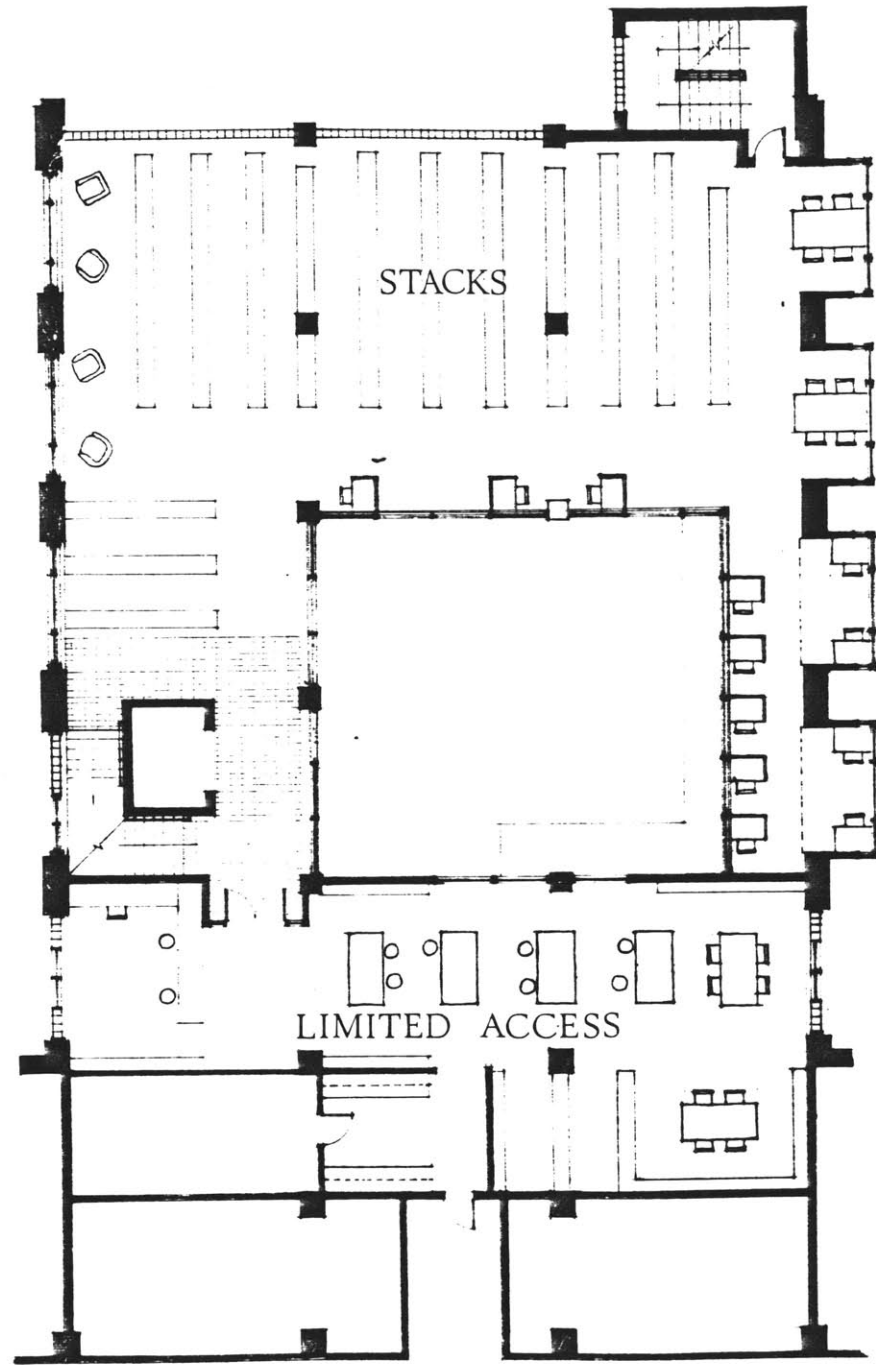


FIRST MEZZANINE

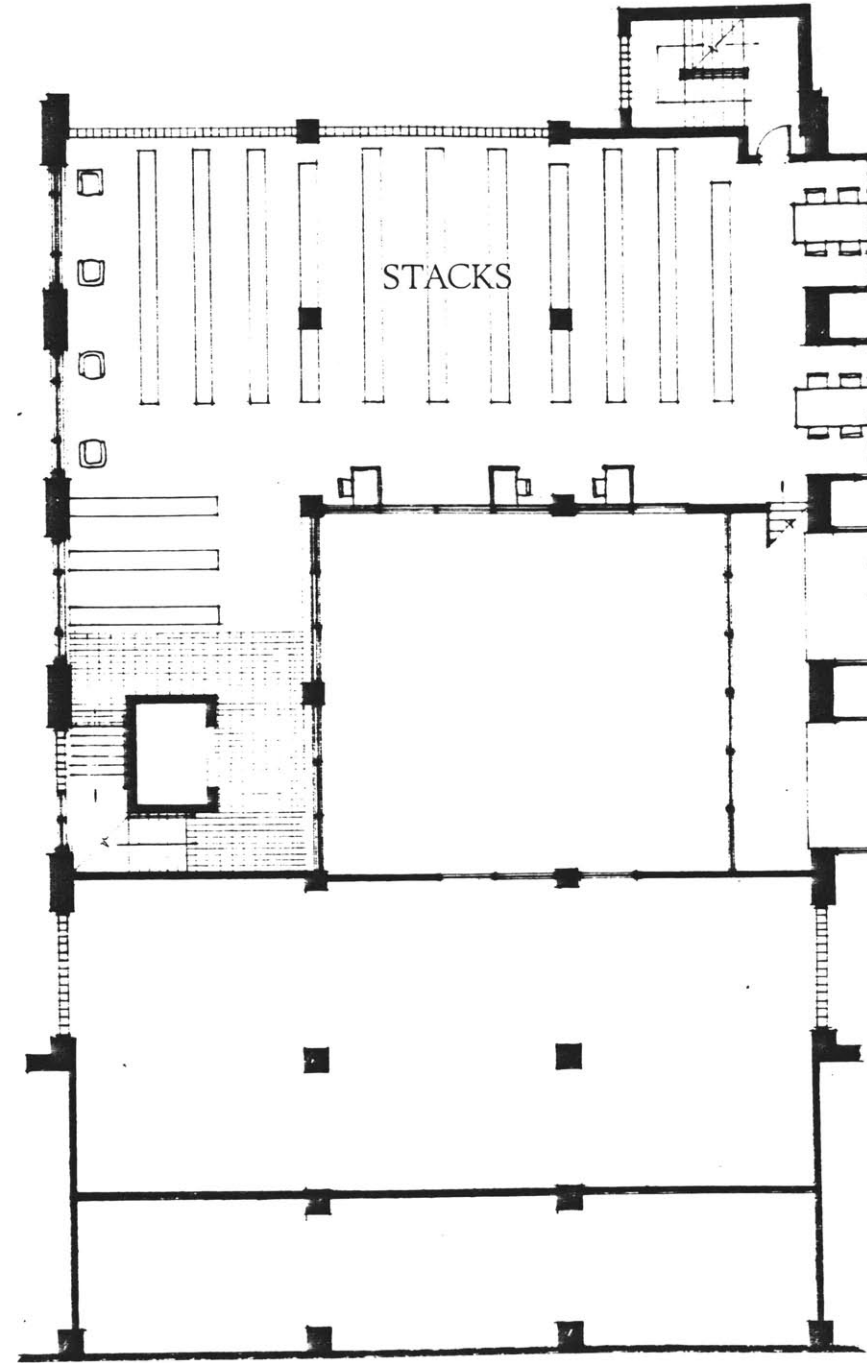


FINAL DRAWINGS
PLANS

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SECOND FLOOR

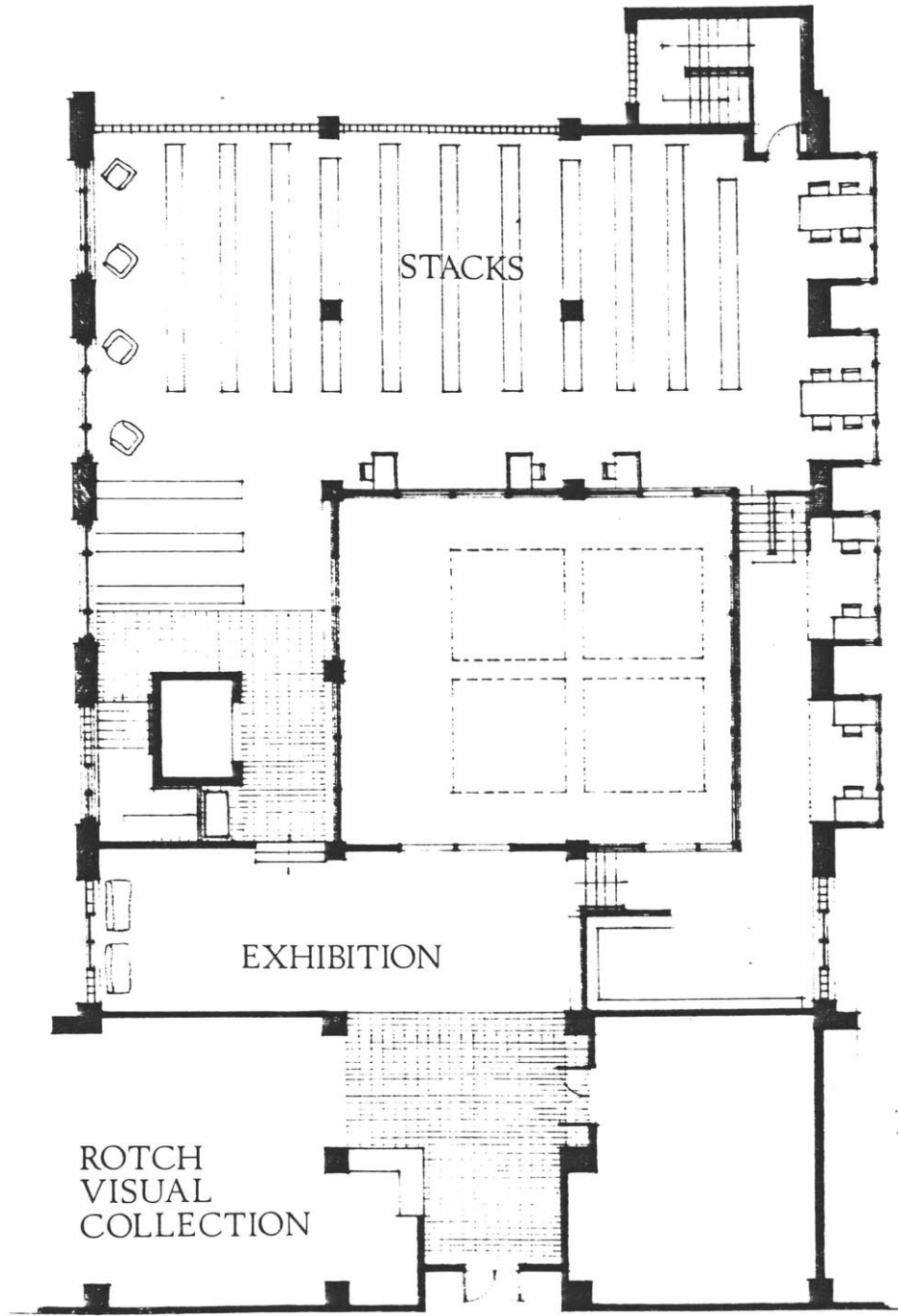


SECOND MEZZANINE

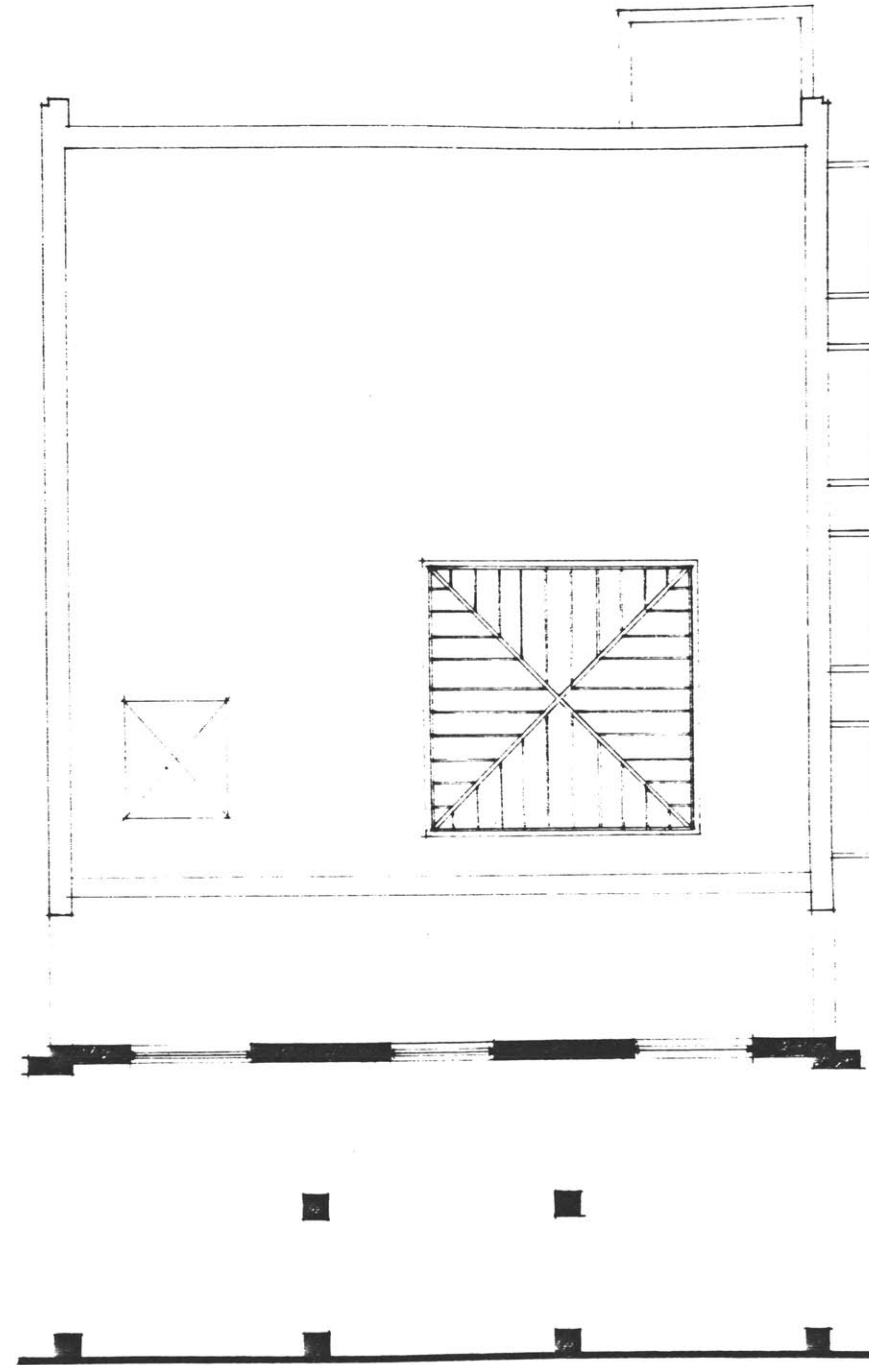


FINAL DRAWINGS
PLANS

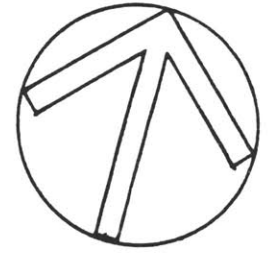
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THIRD FLOOR

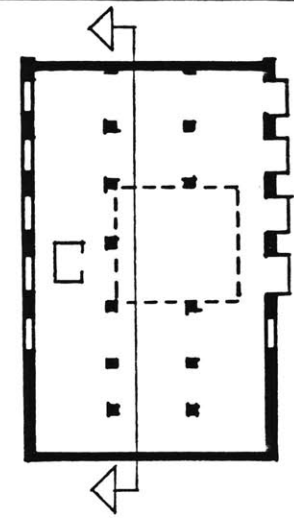
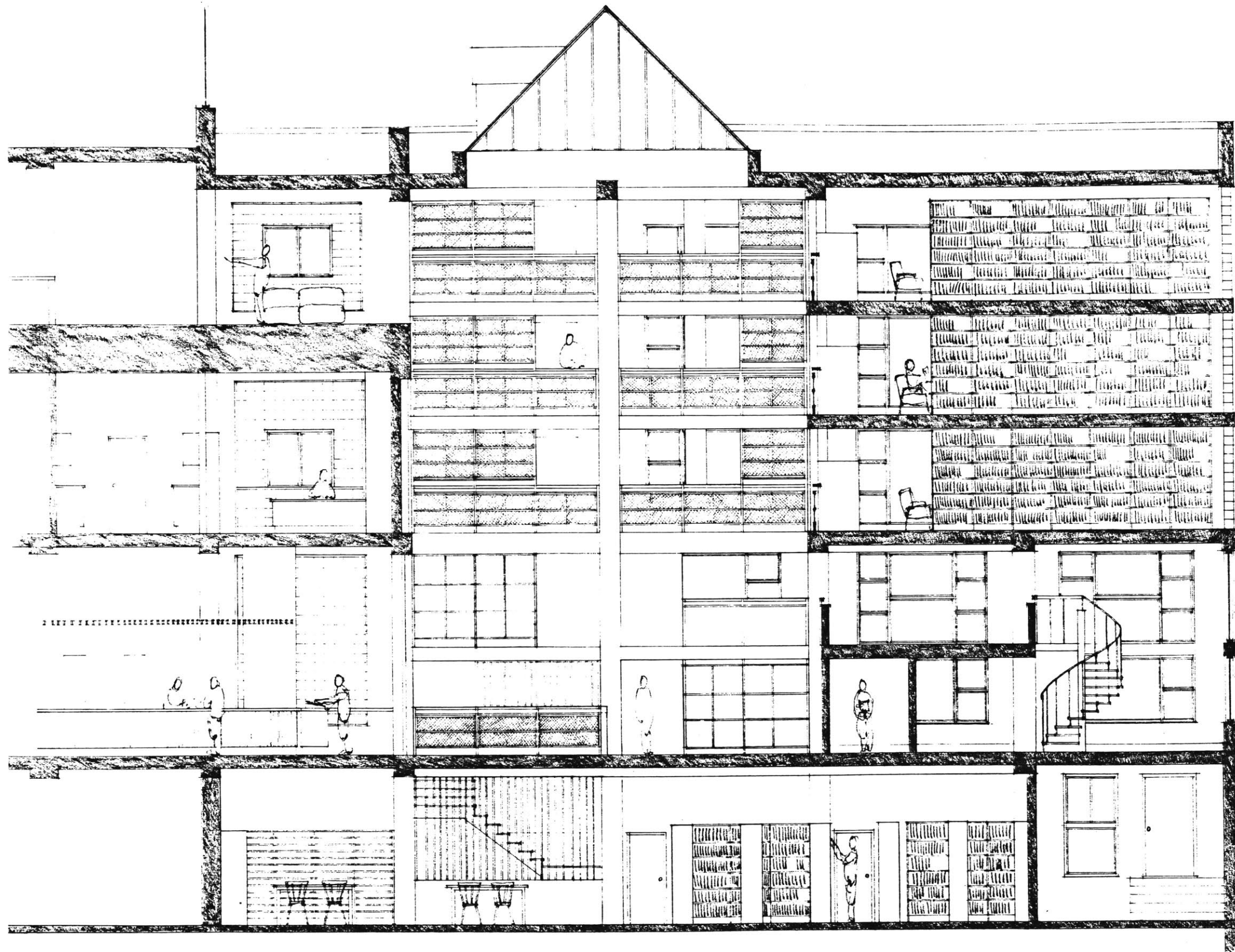


ROOF PLAN



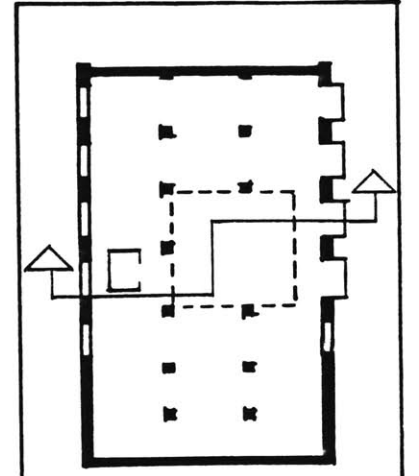
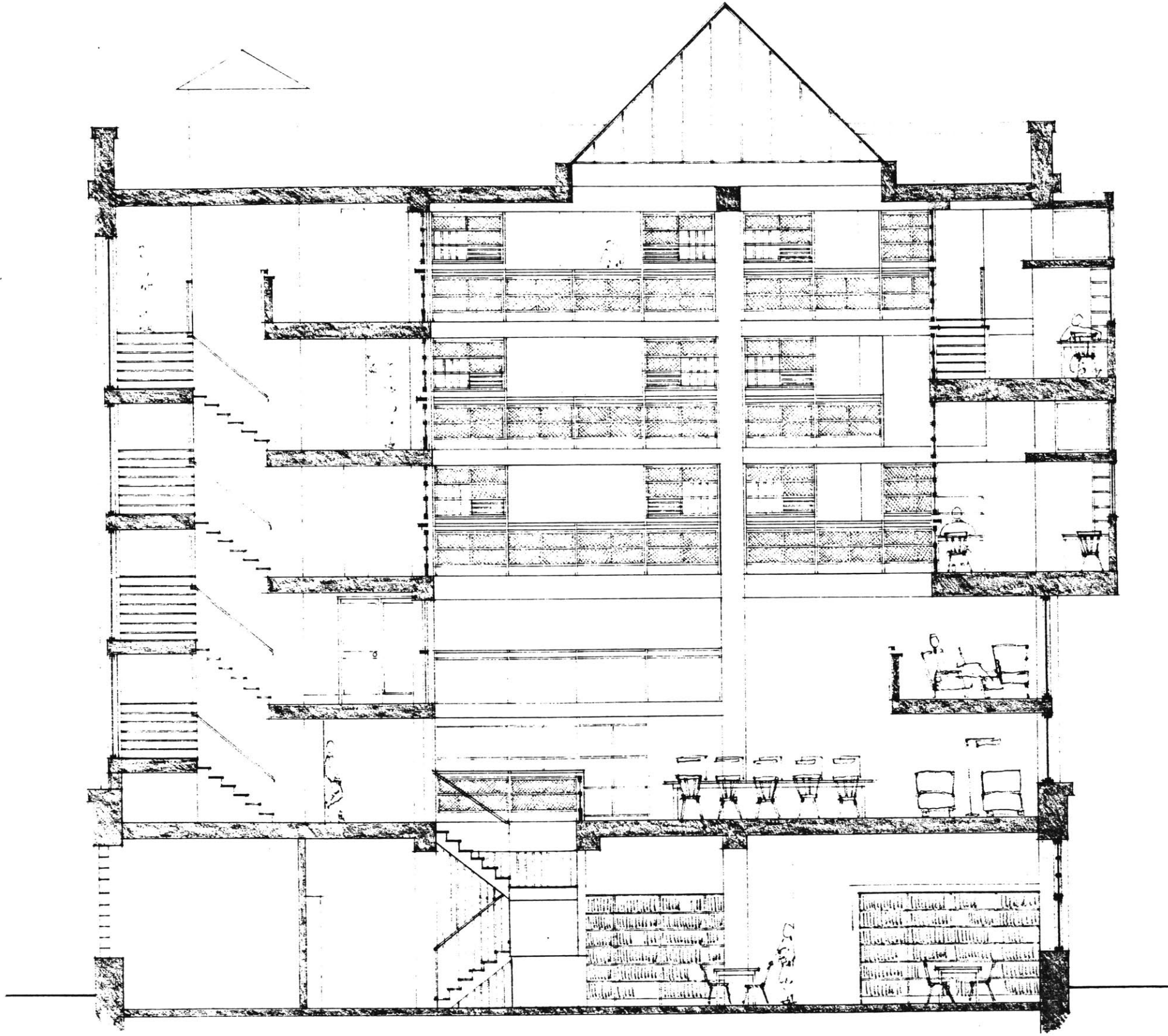
FINAL DRAWINGS
PLANS

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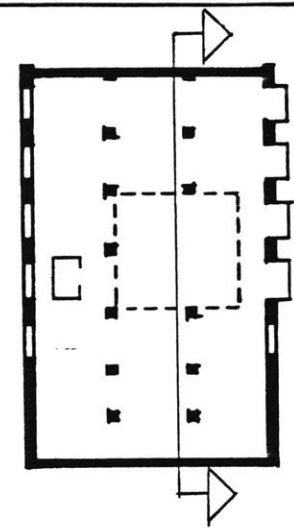
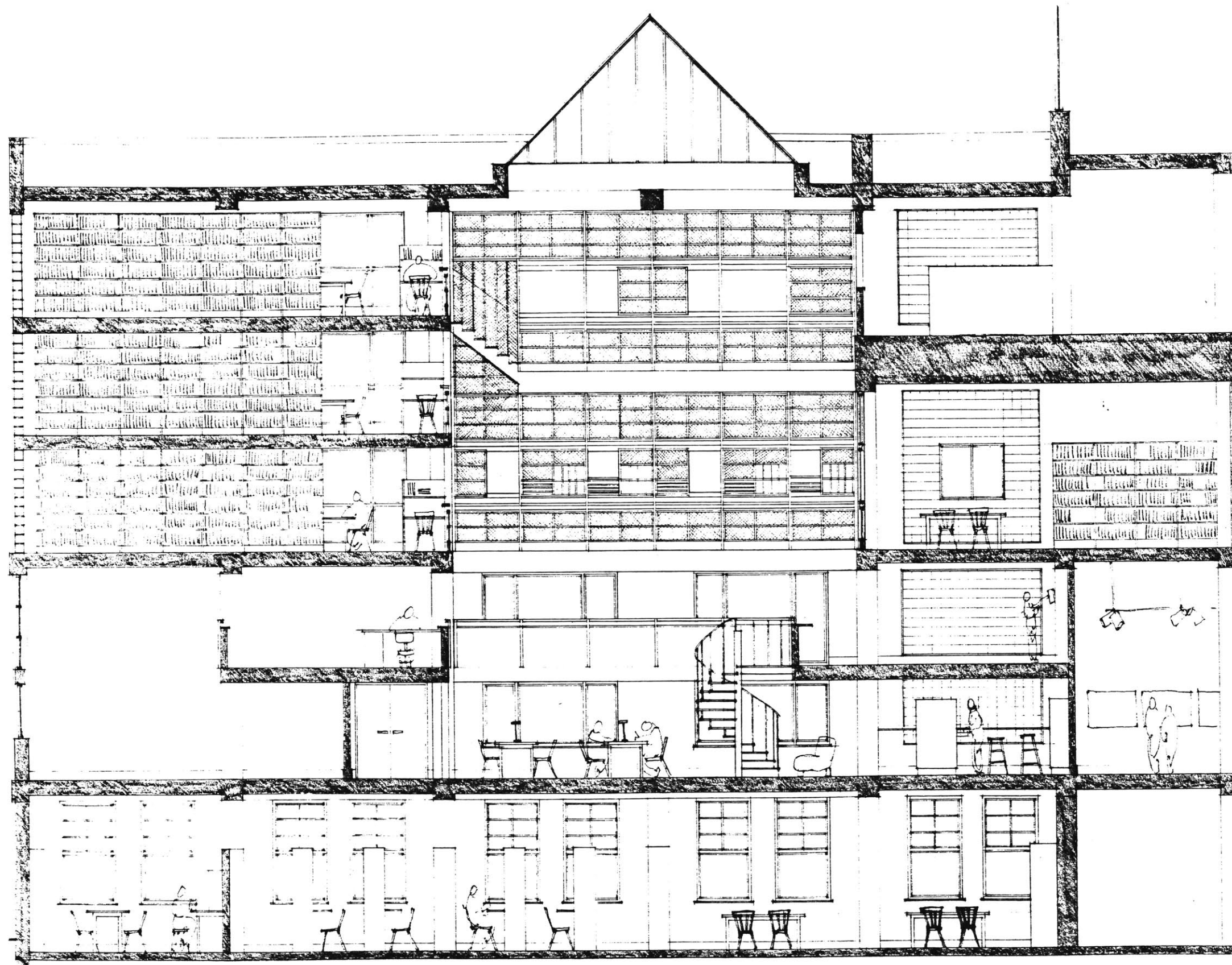
FINAL DRAWINGS
SECTIONS

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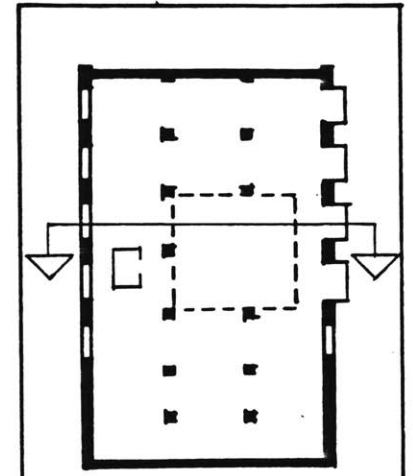
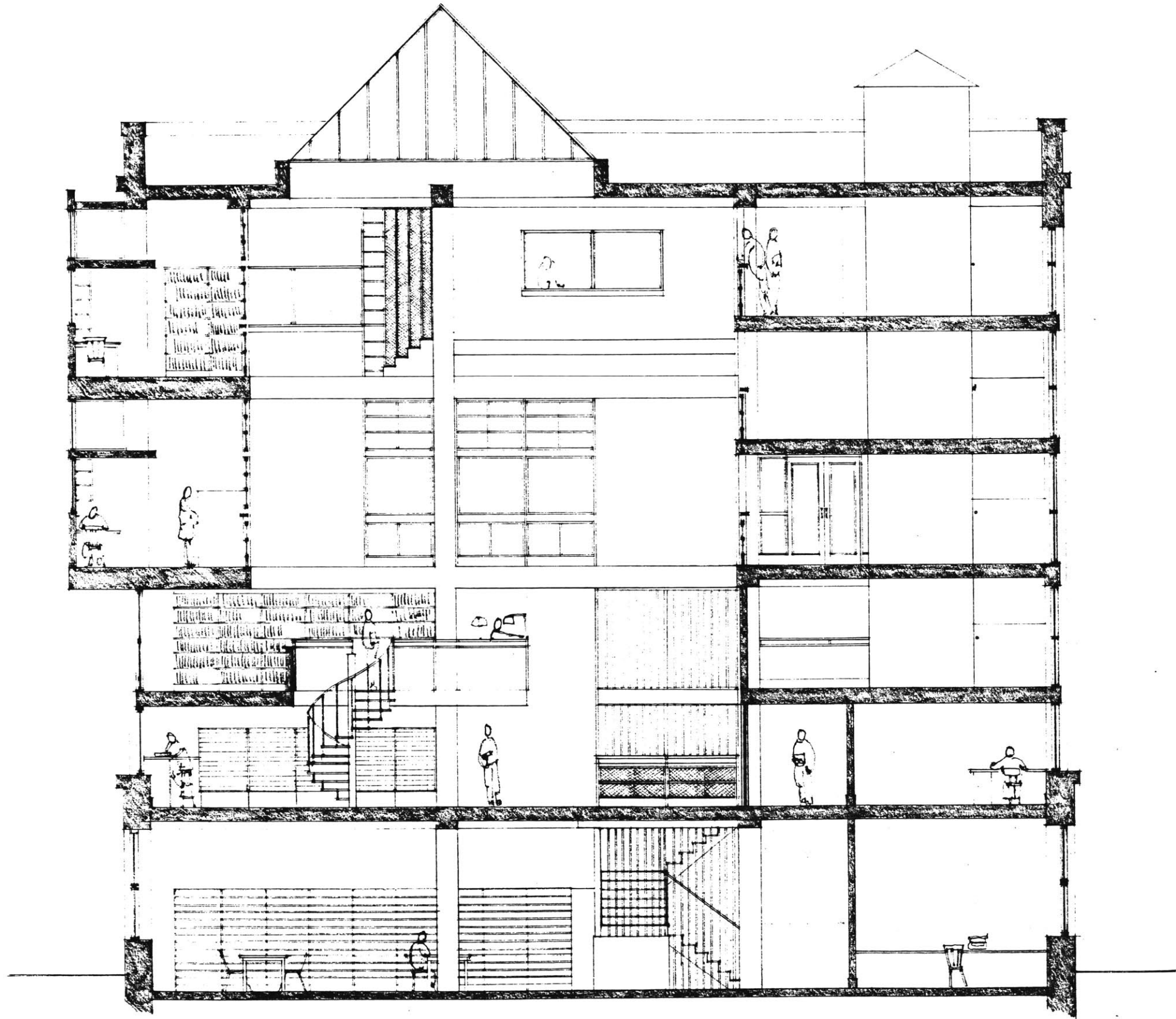
FINAL DRAWINGS
SECTIONS

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FINAL DRAWINGS
SECTIONS

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FINAL DRAWINGS
SECTIONS

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EPILOGUE

Jan Wampler put before his thesis prep class his own definition of a thesis: a transition, a bridge between school and our future. As the future is a very uncertain thing for most of us, this was not an easy concept to grasp. Perhaps the future is time distancing the past and learning.

This thesis was a lesson in limits. The goal was to define a problem in which the solution could be arrived at in one semester. Overly optimistic, I had hoped that I would have been able to study portions of the exploration in larger detail.

Even now I can see the irresolution in my own working method in attempting to incorporate light as a design tool. Somehow in the last rush, the final sections were not rendered with respect to light as I had intended. Light would better illuminate my intentions, shadows in contrast to hide my mistakes.

APPENDIX

Space Review Rotch

WORKABLE PROGRAM - 10 YEAR GROWTH

Housing for the Collections		
Open Stacks: Books and Theses		4,805
Folios		220
Periodicals (Bound)		1,050
Reference		<u>350</u>
Subtotal		6,425
Limited Accesses Collections		<u>1,760</u>
	Total	8,185
Reading Accomodations		
100 Study spaces @ 25 sq. ft. average		2,750
10 Lounge chairs @ 35 sq. ft. average		350
16 Special purpose @ 25 sq. ft. average		<u>400</u>
	Total	3,500
Public Service Facilites (circulation and reserves)		
	Total	1,220
Special Facilites		
Census room		400
Seminar room		300
Typing/Terminal room		<u>400</u>
	Total	1,100
Staff Facilites		
Workroom, Storage, Worktable		450
Office space 15 @ 150 sq.ft.		<u>2,250</u>
	Total	2,700
Subtotal		16,705
Unassignable space, est. at 10%		<u>1,670</u>
ROTCH LIBRARY TOTAL		18,375
ROTCH VISUAL COLLECTIONS		<u>2,625</u>
	TOTAL	21,000

Jay K. Lucker
 Margaret E. DePopolo
 February 15, 1979
 Revised, January 2, 1980, to include Aga Khan
 Library Program - Collections and Staff (MD)

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