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CREATING PLACE FOR MEDITATION

by
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DEDICATION

This thesis would not have been possible without the grace of God, and the love and support provided to me by my family, friends, professors, and fiancée Cecilia. Thank you. I wish you all a life filled with health and many special moments with those people closest to your hearts.

I leave my career as a student with a message given to me by one of my employers, and good friend Sjoerd Soeters: "Remember that students tend to lose themselves, and are educated to it, expressing in Architecture only what the elitist cultural community asks of them. Do not lose confidence in your ideas as a designer, but you must think and feel for yourself where your contribution to Architecture is to be made, and how it is you will express it. You only become a great architect by becoming happy."

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ABSTRACT

How can architecture support individuals and groups who wish to meditate on the Dalhousie University, Sexton Campus, in Halifax, Canada?

This thesis is a means of meeting the meditative needs of individuals and groups who presently meditate within the Sexton campus in spaces which were never designed for such a function. It is also a means of providing a place of retreat from the daily demands of school life, where students and teachers alike can ease their tensions and perhaps think more clearly. In response to this question a Reflection Chapel was designed. It does not ignore the primary function of the campus as a university, but adds to it a new role as a place in support of meditation.

The thesis began to take form through an examination of the essential programmatic needs and ritualistic sequencing of spaces required by these various individuals and groups in order to meditate. With an understanding of these diverse forms of meditation across cultures and religions, a meditative space was created with a flexibility and quality which allows for reinterpretation and appropriation of the space for varying meditative needs. A study of the campus layout and circulation helped to develop an urban strategy in support of a meditative environment, along with creating an architectural intervention which considered existing urban massing and materials.

Ultimately, the thesis design focuses on the development of spatial sequencing, where each sequence of space serves a purpose in moving a person from the hectic world of school life into that of the quiet Reflection Chapel. A light study model was used to test the quality of space within the Reflection Chapel, as it is the measure of success for an architectural space which is trying to transmit feelings of security, detachment, and focus.

INTRODUCTION

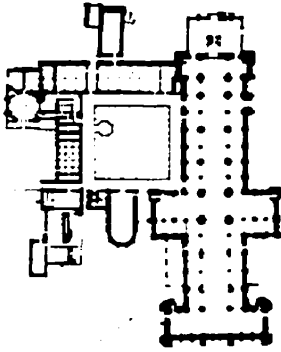


Fig. 1. Durham Cathedral, England. From Braunfels.

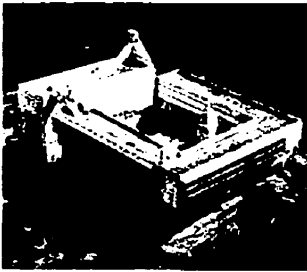


Fig. 2. Le Corbusier, La Tourette, France. From Henze.

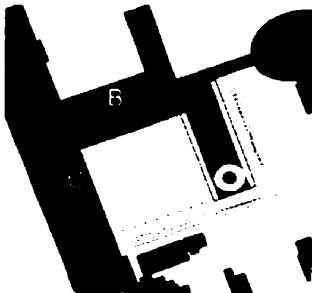


Fig. 3. Nolli plan showing site strategy for developing a cloister form.

This thesis examines the Sexton Campus as a place of meditation, without ignoring its shared functions within the city as a residence, cemetery, courthouse, and site for future commercial expansion. To develop an architectural design which is well suited to its surrounding context, a multi-level approach was used to analyze and prioritize the design moves.

At the programmatic level, matrixes were developed to chart and decipher the essential features and needs of each major group of individuals who presently meditate on the campus, or who wish to meditate on campus, but do not because of the lack of facilities. Also, a flow chart was developed to chart the ritualistic sequence of each group through various spaces, until they reach their ultimate destination for quiet reflection. With these two programmatic charts in hand, the essential features, needs, and movement through spaces became very clear. They soon became the driving checklists for designing an effective place for meditation.

At the urban level, a study of the present configuration of campus buildings allowed for a strategic location for a Reflection Chapel to be made, a location that took advantage of, and created new possibilities out of, the perceived "ordinary" spaces on campus. Making reference to the early organization of medieval monasteries, the cloister, with its clear form and purpose, became the initial urban strategy for knitting a place for meditation into the life of the campus. Looking also at the primary circulation paths on the site, a place less traveled and tranquil became an important factor in choosing a specific site. Ultimately, a quiet and secluded location up on a higher plateau behind the main B and C buildings was selected. It clearly offered the opportunity of creating, with the addition of a new building, a well-defined cloister form.

At the aesthetic level, one can argue that it is possible to meditate in many conditions, yet it would be unfair to say that such a rela-

tive approach to architectural design would ensure an adequate place for meditating. Many fine examples of architectural work demonstrate that well designed architecture has the ability to evoke emotions and create an environment conducive to contemplation. The volumetric, material and lighting conditions by which we experience a sequence of spaces are an essential part of a design, and our sense of security, detachment from the profane, and inwardness are essential to creating a phenomenological journey in support of contemplation. These sequences of spaces were thereby studied carefully through sections, models, and a good understanding of architectural precedents. These include the Chapel at MIT by Eero Saarinen, the Chapel of St. Ignatius by Steven Holl, and the many works of Tadao Ando.

Through the completion of this multi-level approach, an architectural design for a Reflection Chapel, which is well suited to its surrounding context, has been developed. Effective urban, programmatic, and aesthetic design moves have been applied to this thesis, ultimately giving the Sexton campus a new role as a place in support of meditation.

Theoretical context

Who meditates? What is meditation? When did the practice of meditation originate? Where do people meditate? Why do people meditate? How do people meditate?

Meditation is part of being human, that is, to contemplate the awe and complexity of our own existence, and to be aware of ourselves in it "now." Meditation is a deep act of thinking. Meditation is an act of mental discipline. Meditation is practiced across cultures and religions. Meditation is practiced in many forms of environments and places. Meditation is practiced in large groups, in soli-

tude, in open spaces, in closed spaces, in the light, and in the dark. Meditation is often used as a thinking tool. Meditation can help develop respect and bring out good qualities that we have within us. Meditation can influence the way we experience life. Meditation is a means of obtaining knowledge through the senses: to see, hear, or feel and ultimately understand the things around us. Meditation has manifested itself into various forms of movement, body postures and religious prayers. These include movements such as Tai Chi and Yoga, body postures such as the sitting lotus and kneeling, and prayers such as mantras and chants. Meditation challenges us not to accept things the way we have been brought up to accept them, but rather to detach ourselves from them, to understand them in new ways. Meditation has no fixed origin in history; its methods have been developed within many cultures over thousands of years. Meditation is practiced by millions of people around the world, from a variety of backgrounds and religions. Meditation is prescribed by doctors as a means of reducing stress, preventing high blood pressure, and improving blood circulation. Meditation transcends religion with its ability to focus on bringing balance to people's lives, as it offers a relief from the hasty dot-com world we often find ourselves trapped in.

Throughout my university education, it has been often quite easy for my deepest thoughts and questions about life to be replaced by hectic work schedules, formulas, doctrines, and artificial goals and meanings. It is clear to me from my own experience that creating a fitting place on campus to meditate would stimulate creativity and contribute to a clearer sense of purpose, faith, and connection within a larger world. How else can a university produce the leaders of the 21st century if the resources and insights of a spiritual life are not nurtured alongside educational goals?



Fig. 4. Study of various forms of meditative postures.

One only needs to look at the university's coat of arms and seal to read the words written in Gaelic, "Ora et labora" (Pray and work).



Fig. 5. Dalhousie's coat of arms and seal. From Dalhousie University, convocation programme, May 2001.



Fig. 6. The Dalhousie crest traces its roots from Scotland. From Miller.

These few words are a clear message that the Dalhousie University founders wished for us to remember and follow throughout our long history. Truly, ours is a university which understands the virtues of prayer, as a form of meditation: a practice which can play a helpful role in the development of young students entering the work force of tomorrow.

A Reflection Chapel, with an added function as a refuge for those students who are facing difficulties in their lives, and require a quiet place to rest their minds or find counseling, has the ability to meet such demands. Through a deeper understanding of each group's meditative needs, a multiplicity of practices and rituals can be embraced. Ultimately, an architectural space can be designed to offer clues and transform within each user's eyes to fit their personal meditative needs. A Reflection Chapel will then have the ability to unite students across the campus, learning and developing a greater respect for one another's beliefs, and questioning together how to combine our true goals in life with those of our professional practice.

Site

Dalhousie University, Sexton Campus is located in downtown Halifax. It is the size of four city blocks, and surrounded by city life. Offices, restaurants, residences, retail businesses, and religious institutions all touch its outer edges. Originally the campus block was put to use as a garden for the Governor of Canada and his stables, while its edges served as a cemetery, county jail, courthouse, and residences in much the same way it does today. By 1907, Nova Scotia Technical College first opened its doors to Spring Garden Road. As the need for engineers proliferated during the war years, Nova Scotia Tech expanded its facilities into the Governor's garden. During much of this time the campus was the

home of the Department of National Defense. Slowly, after the Second World War, threats of yet another war lessened, and the military relocated. The campus slowly shaped itself into its present form.

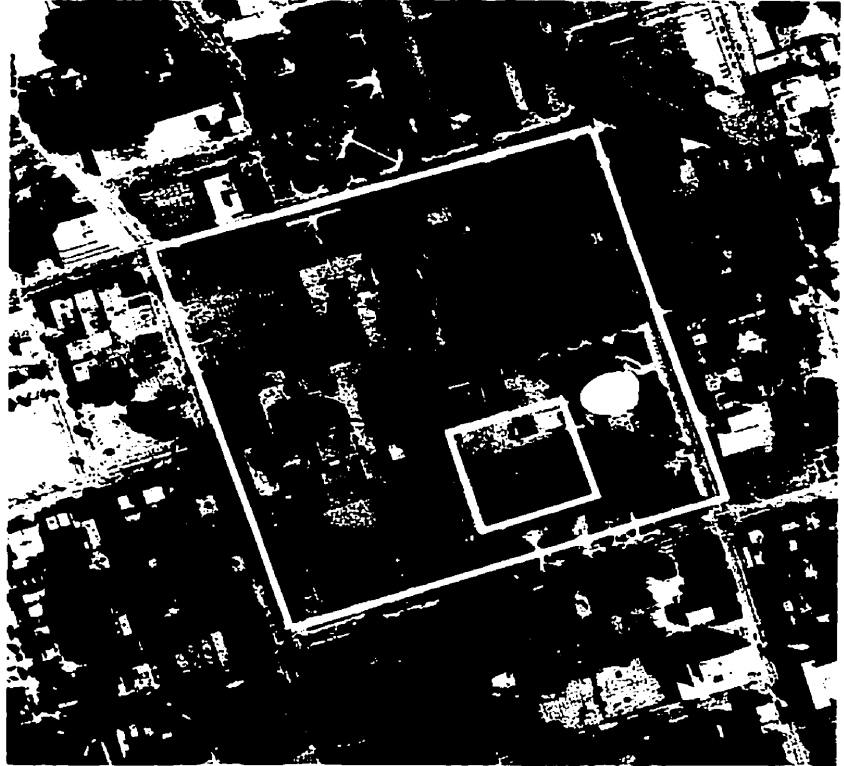


Fig. 7. The large square marks the edges of the Sexton Campus block. The smaller square marks the site selected for this thesis study. From Nova Scotia Geomatics Centre.

To understand the Sexton Campus within the process of it becoming a place in support of meditation, a variety of studies were made. The campus's awkward pedestrian and vehicular paths, poorly defined open spaces, views, sun paths, uses, and material context were studied carefully, and an appropriate site for a Reflection Chapel was made.

The site is located up on a sun-lit plateau. Its tranquil detachment from major circulation paths and its large field of grass make it an ideal place to seek solitude. Occasionally during the summer months the green area is used to play pick-up sports, although it



Fig. 8. Material study



Fig. 9. Circulation study

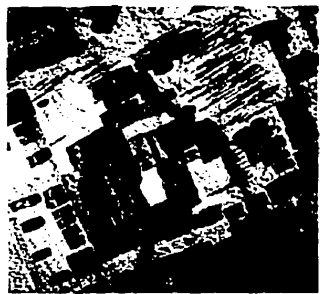


Fig. 10. Heliodon study



Fig. 11. The campus bookstore presently ignores the presence of its adjacent green space.

is not of any official size to serve as a field for any varsity sport. The configuration of the nearby buildings, along with the growth of trees growing along the perimeter of the plateau's edges, began to suggest an enclosed space, similar to that of a cloister: truly, a clear symbol of meditative activities. Given these observations, an urban design strategy in support of creating a cloister form was fixed as an important design criterion when adding the Reflection Chapel. For these reasons the new chapel takes up a long form, which stretches out from the school's bookstore. For the purpose of this thesis the bookstore will be relocated within Sexton House, which is located at the heart of the campus, and is sure to generate a greater deal of student interest and sales than its present condition.

The campus bookstore is now the primary link between the Reflection Chapel and the larger body of school buildings. Because of the school's evident attachment to the "profane" world of campus life, the chapel itself is placed as far as possible from it. An arm stretches out to connect these two worlds. Evidently, this arm defines the cloister form of the site, and becomes the mediator and ritualistic procession for shedding the layers of the profane world, prior to entering the main chapel.



Fig. 12. The green space, with adjacent buildings.

PROGRAM

There are various individuals and groups on the Sexton campus to be served by the design of a Reflection Chapel. Subsequently, a matrix and ritual sequence chart was developed to compare and decipher the essential spaces and elements required by each specific group to meditate.

The matrix and ritual sequence chart represented the 5 major world religions, along with other groups who would benefit from a space designed for meditative practices. These other groups included a memorial group which gathers on December 6, around a memorial tree planted on campus in memory of the Montreal Massacre and violence against women. Then there are those students and professors who are faced with difficult moments or suffering from various forms of depression, high stresses, and anger. Presently, counseling for such cases are found at the Studley Campus, Student Union Building (a 15-minute walk from the Sexton Campus).

Ultimately, the matrix and ritual sequence chart generated a minimum number of spaces and elements needed to induce a particular group to appropriate the chapel to serve their meditative or ritual practices. Some of these essential elements included an eastern facing wall for Jews, and a northeastern wall for Muslims to suggest the proper orientation of the body when praying. A water basin for religious washing is part of another important sequence of events for Hindus and Muslims alike, prior to entering the innermost sanctuary. An altar, which can act as a lectern, is used by Jews and Christians as the center of their ceremonial activities.

Matrix

User needs	User groups										
	Buddhist	Christian	Hindu	Jewish	Muslim	Memorial	Non-religious	Support group	Counseling	Tai Chi	Yoga
Altar		■									
Bell											
Candles											
Change room											
Coat room											
Conference rm.											
Cushions											
Foyer/reception											
Garden											
Gender division											
Gathering place	■	■	■	■	■	■	■	■	■	■	■
Eastern wall				■	■						
Kneelers											
Lectern/pulpit				■							
Floor mats											
Office(s)								■			
Seating											
Storage				■							
Stupa											
Symbols/icons											
Table/shrine	■	■	■								
Memorial tree						■					
Waiting area											
Washrooms											
Water fountain			■		■						

LEGEND



Essential



Important



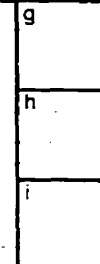
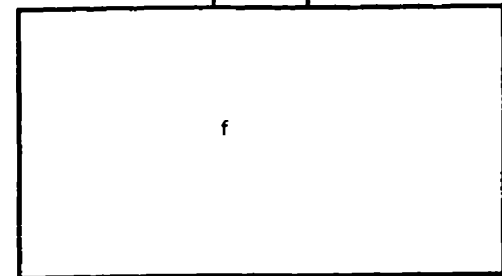
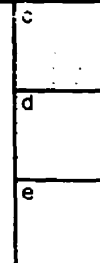
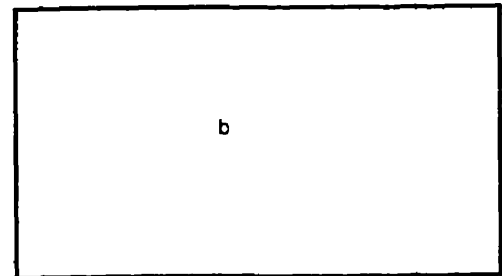
Negligible

Ritual sequence

1 2 3 4 5 a 6 7 8 9 10 11

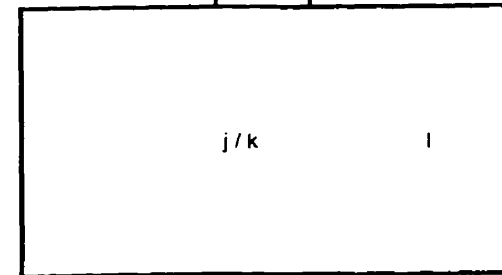
Users

- 1. Buddhist
- 2. Christian
- 3. Hindu
- 4. Jewish
- 5. Muslim
- 6. Memorial
- 7. Non-religious
- 8. Support group
- 9. Counseling
- 10. Tai chi
- 11. Yoga



Spaces

- a. Entrance
- b. Reception
- c. Coat room
- d. Change room
- e. Washrooms
- f. Waiting room
- g. Gender division
- h. Water fountain
- i. Storage
- j. Gathering space
- k. Garden
- l. Office(s)
- m. Exit



m

Spatial requirements

	sq.m	sq.ft
Entrance	19	200
Waiting area	37	400
Offices (3)	9	100
Storage	6	60
Coat room	4	40
Washrooms (2)	2	25
Change rooms (2)	15	160
Chapel	149	1600
Altar (Bimah Table)		
Bell tower		
Eastern wall		
Eternal light		
Gender division	19	200
Northeastern wall (Qibla)		
Storage (Ark/tabernacle)		
Shrine		
Water fountain (Ablution stall)		
Meditation garden (Zen)	74	800
Memorial Tree (Gathering space)	19	200
Total	334	3685



Fig. 15. Model showing the long corridor space.



Fig. 16. Model of meditation hut.

Early on in the year this modular was applied to the design of a meditation hut on the water, for one person, where a long corridor acted as the main meditating space. This long form was used for its innate high reverberation time, which was a desired characteristic for reciting mantras and chants. It was also imagined that a person would meditate while walking up and down this long corridor.

The proportion system was then used to guide a series of cuts made in the skin of this long corridor, so as to let natural light penetrate. A light study model proved to be a successful method of testing the quality of space created by the cuts, and it was subsequently used in the study and design of the main Reflection Chapel space of this thesis.

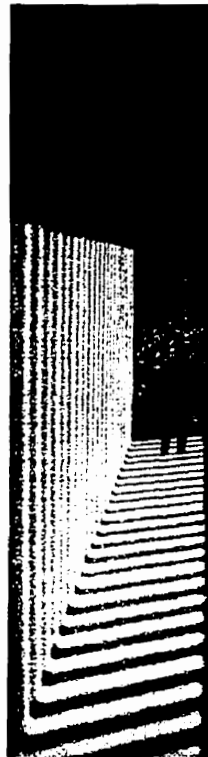


Fig. 17.



Fig. 18.

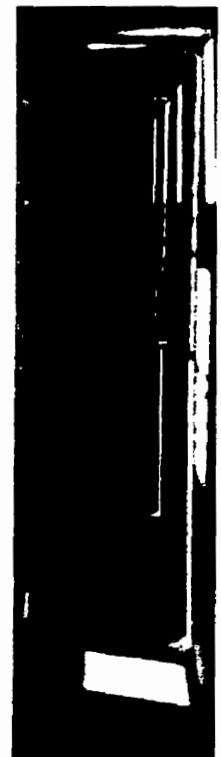


Fig. 19.

Figs. 17-19. A series of light models testing the quality of light within the corridor space.

Directory of Existing Buildings

- A. Ira MacNab Building
 - bookstore
 - dean of Engineering
 - library
 - printing centre
- B.
 - computer services
 - financial services
 - CAD/CAM centre
 - student lounge
- C. Electrical Engineering
 - C1 Mechanical
- D. A.L. MacDonald Bldg.
 - Institute of Fisheries
 - Civil Engineering
- E. Sexton House
 - research council
- F. Chemical Engineering
 - energy studies
- G. G.H. Murray Building
 - Mining Engineering
 - Mineral Engineering
- H. School of Architecture
 - Urban and Rural Planning
- J. Sexton Gym
 - T-room lounge
 - alumni affairs
 - athletics dept.
 - student union
- K. Industrial Engineering
- L. University House
 - faculty club
- M. M.M. O'Brien Hall
 - residences
 - food services
- N. Agricultural Engineering
- O. Graduate Residence
- P. A.E. Cameron Building

Site

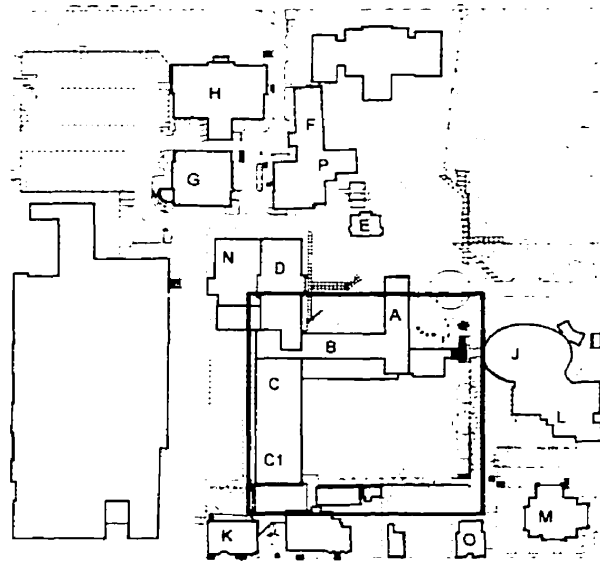


Fig. 20. Existing campus site plan. From Dalhousie Architectural Services Department, Facilities Management.

The urban strategy of placing the Reflection Chapel onto the Sexton Campus utilized the existing campus structure to create a cloister form with distinct architectural characteristics to separate it as a place of refuge from campus life. Functionally, the support facilities were tucked back into the existing Ira MacNab building, while the main Chapel space was placed in the far southeast corner of the plateau. This separation of sacred and profane enabled a transitory procession to be developed between the two spaces. Once again the idea of sacred and profane was used in the design representation of the eastern and western facades. The eastern facade towards the parking lot used a wooden screen to block views and create a greater sense of privacy within the courtyard, while the western facade remained open with glazing which looked into the adjacent green courtyard space.

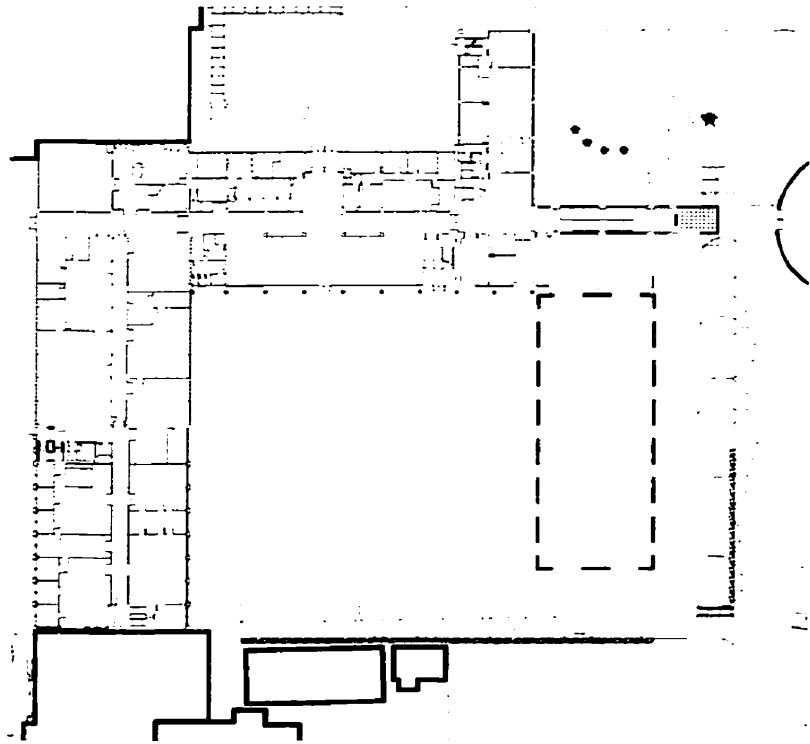


Fig. 21. Existing. From Dalhousie Architectural Services Department, Facilities Management.

Directory of Zones

- 1. Support facilities
 - storage
 - coat room
 - washrooms
 - change rooms
 - offices
 - secondary entrance
- 2. Entrance and waiting
- 3. Corridor
- 4. Reflection Chapel
- 5. Garden

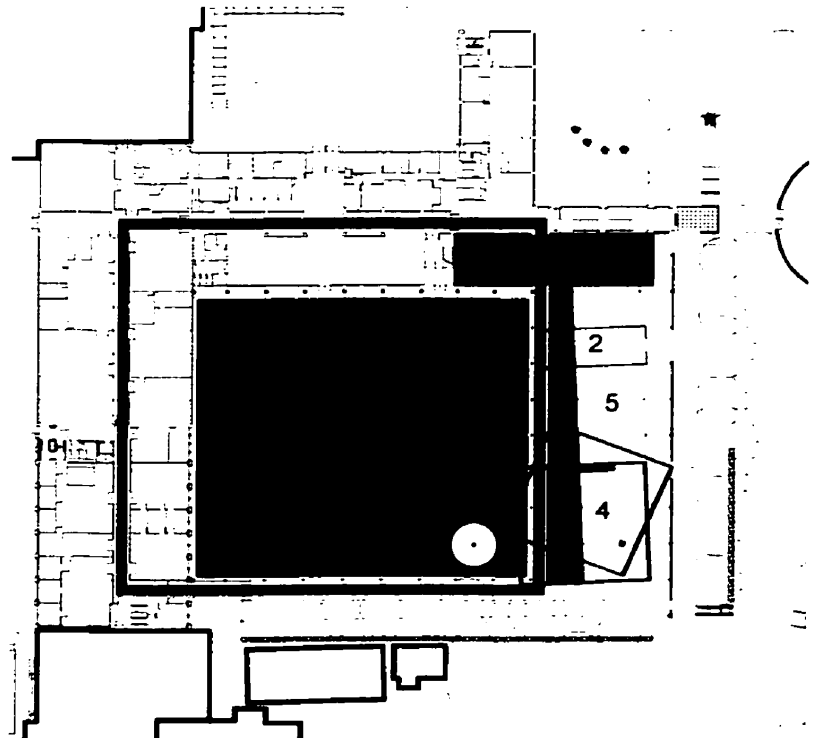


Fig. 22. Proposed.

Plans

Program

1. Entrance
2. Waiting area
3. Office
4. Storage
5. Coat room
6. Washroom
7. Changeroom
8. Reflection Chapel
9. Garden

Directory of Elements

- a. Water fountain
- b. Bell tower
- c. Storage (Ark / Tabernacle)
- d. Eastern wall
- e. Alar (Bemah Table)
- f. Northeastern wall (Kibla)
- g. Shrine
- h. Memorial tree

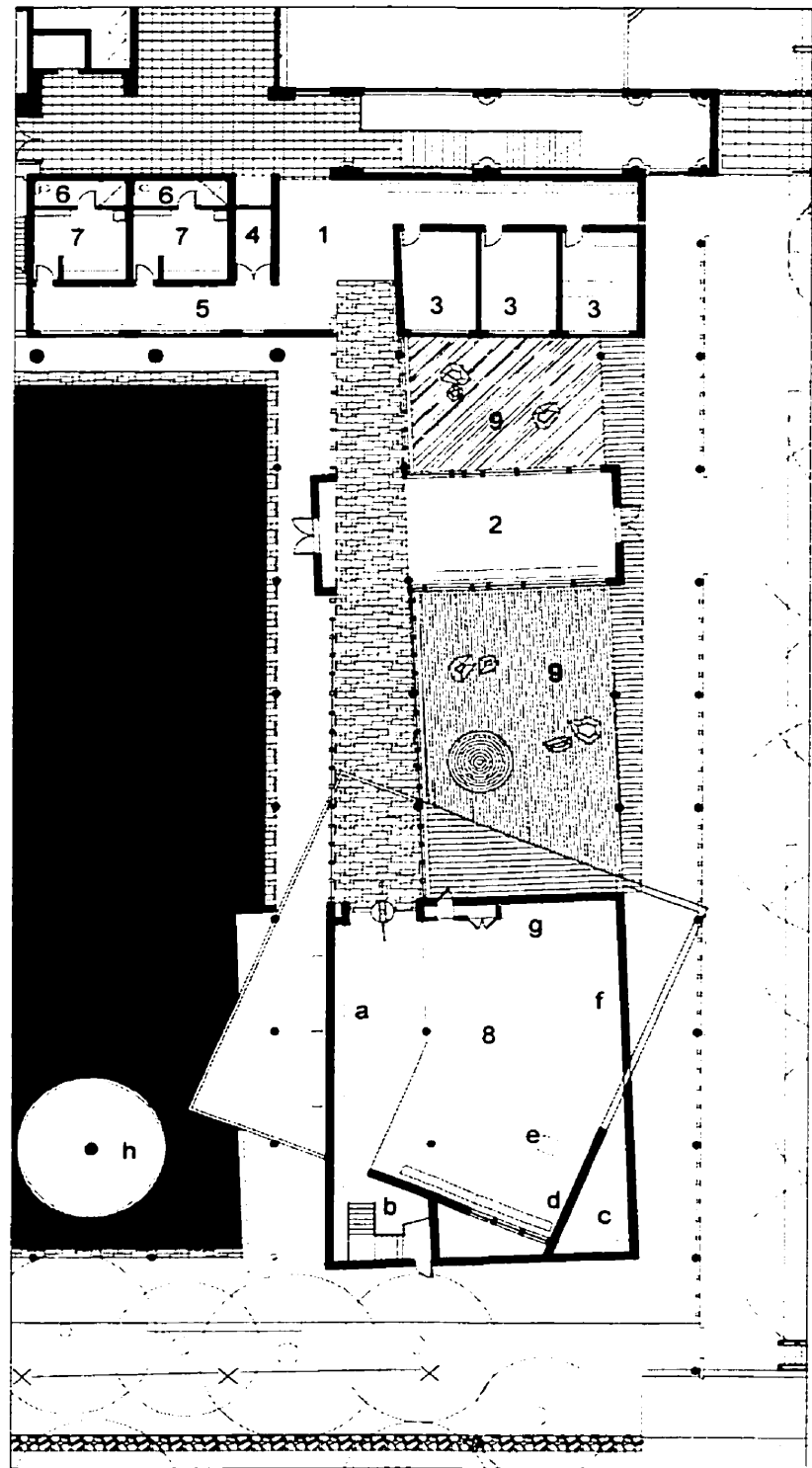


Fig. 23. Ground floor plan. The form of the chapel was derived from the precise placement of the eastern and northeastern walls. These two walls were envisioned more as intersecting squares, which could then be used to guide the placement of the other elements.

Program

1. Reflection Chapel
2. Terrace

Directory of Elements

- a. Bell tower
- b. Eastern wall
- c. Northeastern wall (Kibla)
- d. Gender division
- e. Memorial tree

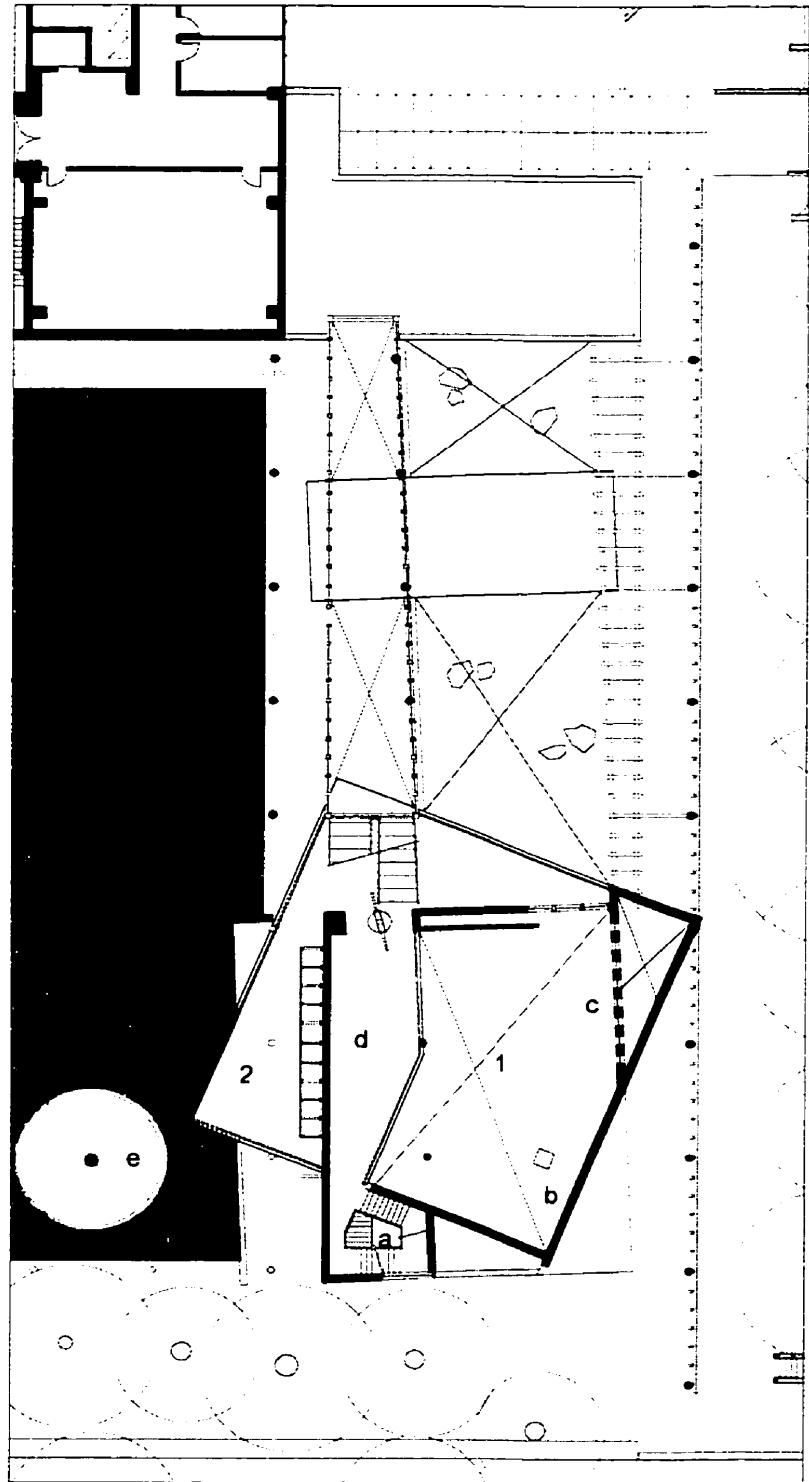


Fig. 24. Second floor plan. The chapel space is clearly a strongly enclosed space. Its heavy concrete walls block outside noise, and frame a series of controlled views of tree tops and sky.

Directory of Elements

- a. Bell tower
- b. Eastern wall
- c. Northeastern wall (Kibla)
- d. Memorial tree

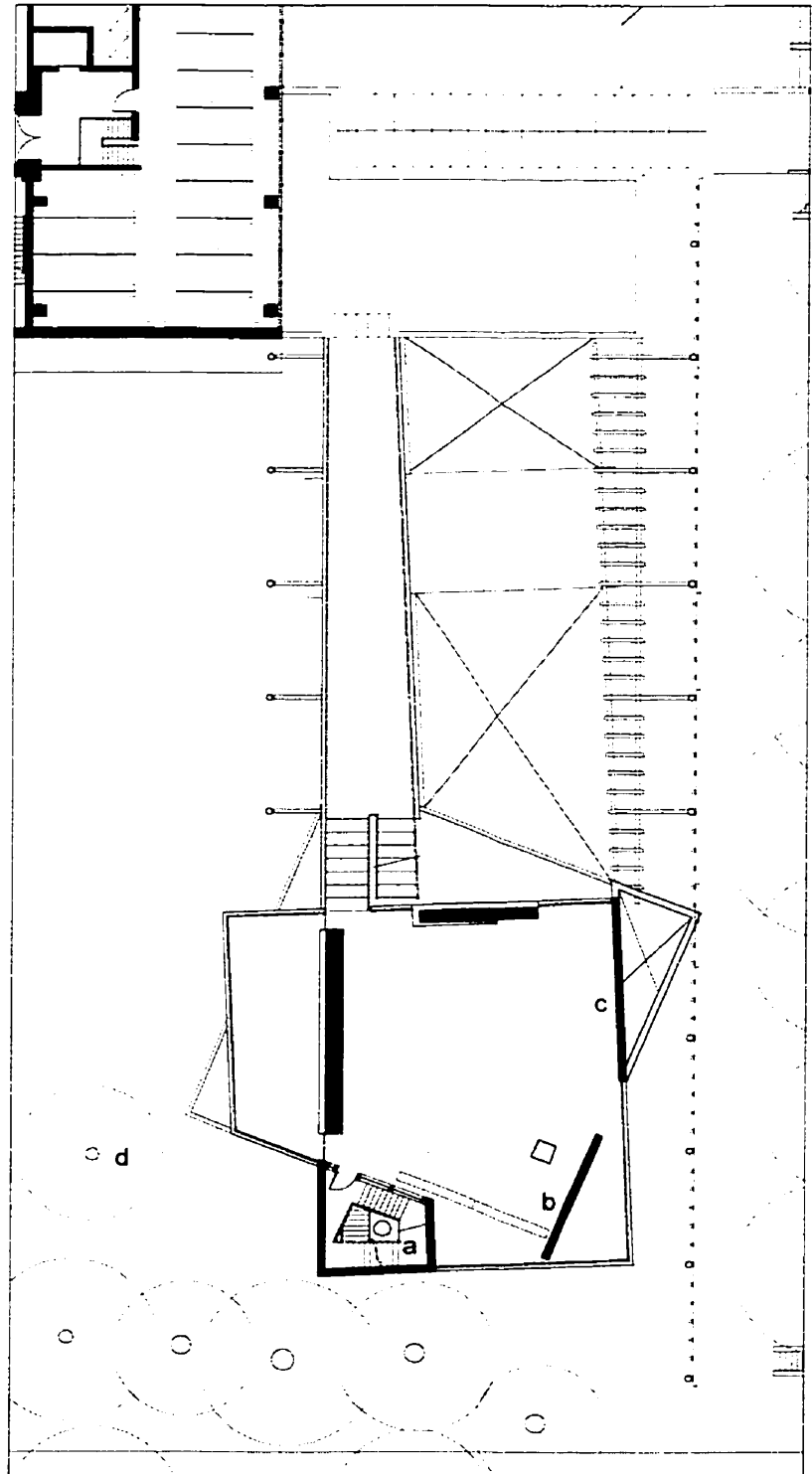


Fig. 25. Roof plan. The roof plan further expresses the essential elements of the design as sculptures and skylights protruding from the main building. Here a person can find another place of detachment, as the rooftop offers itself as a form of garden space.

Elevations

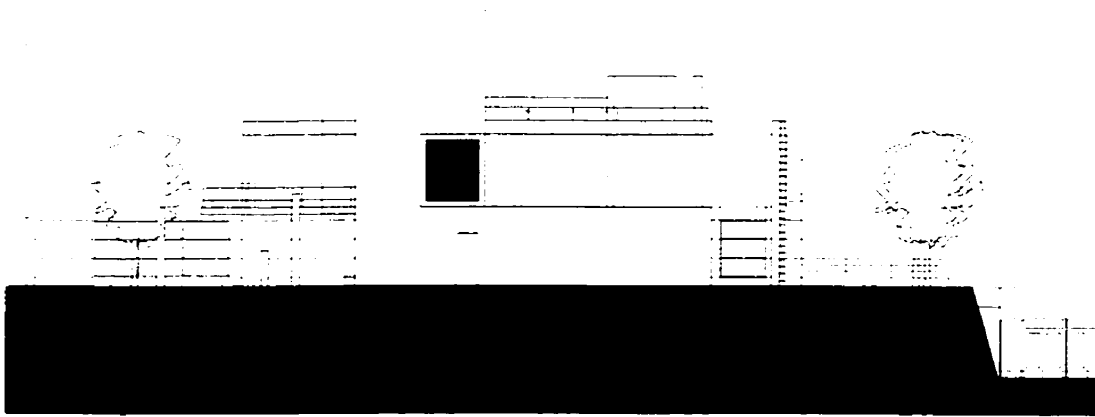


Fig. 26. South elevation. The bell tower rises above the main chapel space, and serves as a datum to complete the interior courtyard. It is also a continuation of the horizontal circulation present in the long corridor, which is carried vertically to the other floors of the chapel.

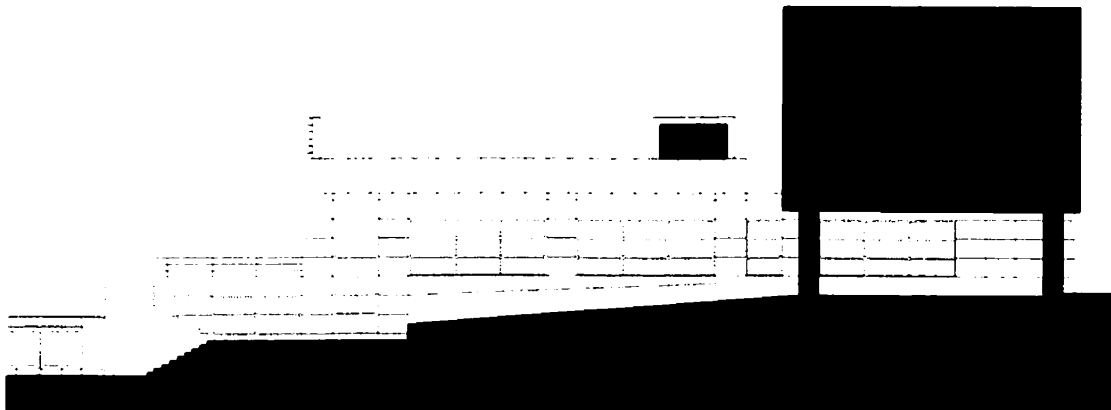


Fig. 27. North elevation. To provide a visual presence towards the more travelled circulation paths on the campus, a coloured skylight and portion of wooden screen rise over the stairway of the Ira MacNab building.

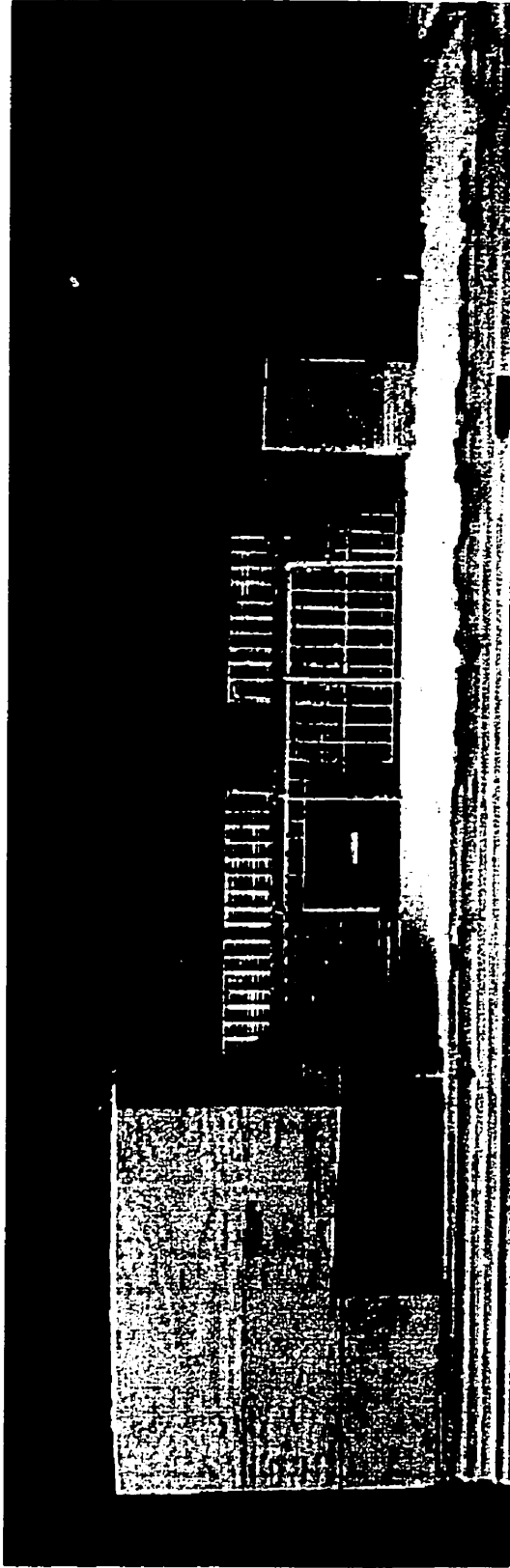


Fig. 28. West elevation. This elevation is largely glazed to provide views out into the courtyard.

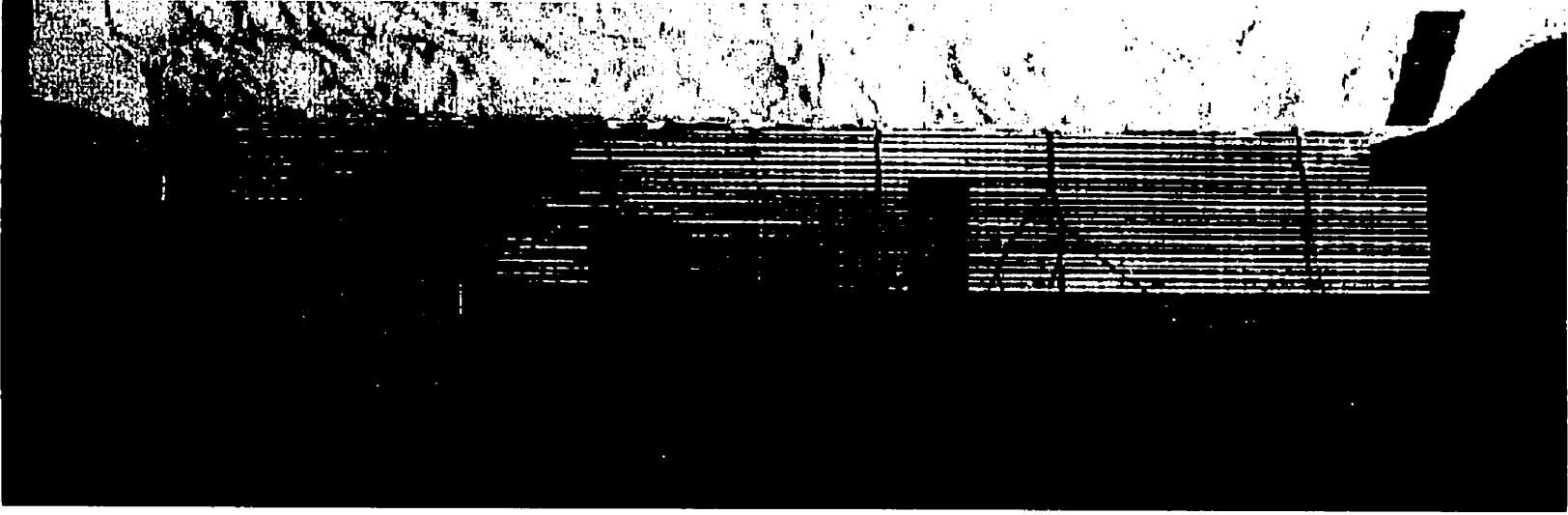


Fig. 29. East elevation. This elevation uses a wooden screen to minimize views out into the parking lot.

Model



Fig. 30. Rooftop terrace showing design elements protruding from the building, and a clear transformation of the two intersecting squares.

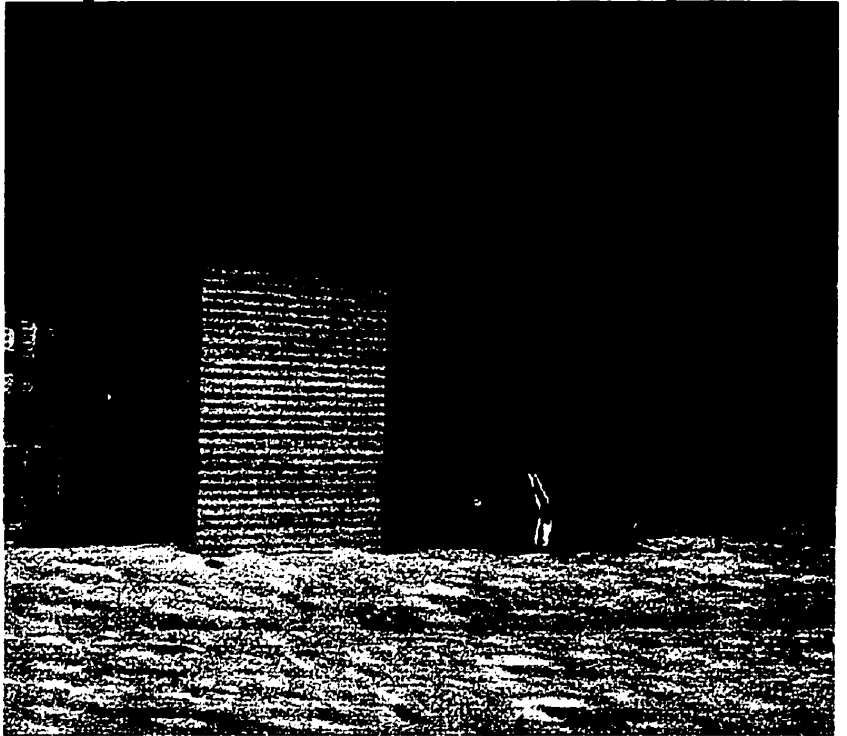


Fig. 31. West elevation showing a person protected under the second floor terrace, and viewing towards the memorial tree.



Fig. 32. Trellis and interior Zen garden. The trellis is used to scale down the experience of the large screen and sky, and focus it to the more intimate experience of the Zen garden and ground.



Fig. 33. Pedestrian path and courtyard. A path travels around the courtyard, with benches for sitting under the trees.

Fig. 35. A concrete facade protrudes from the repetitive glazing to mark the entrance from the courtyard green space.

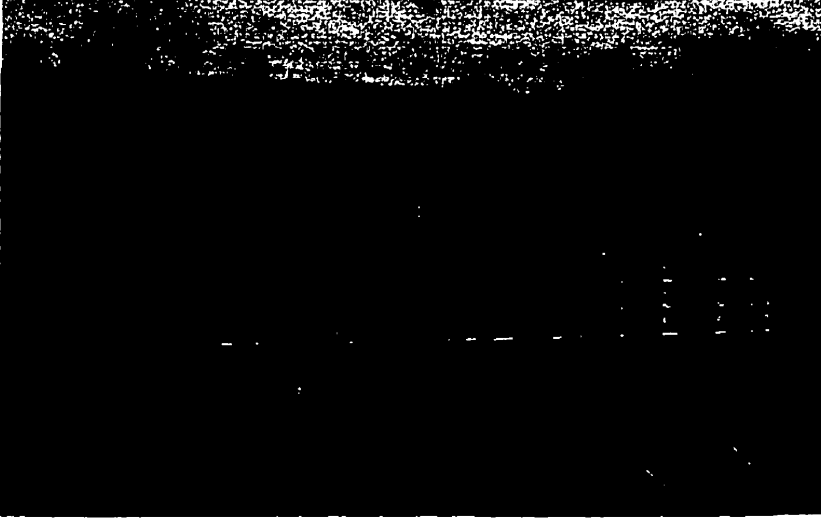
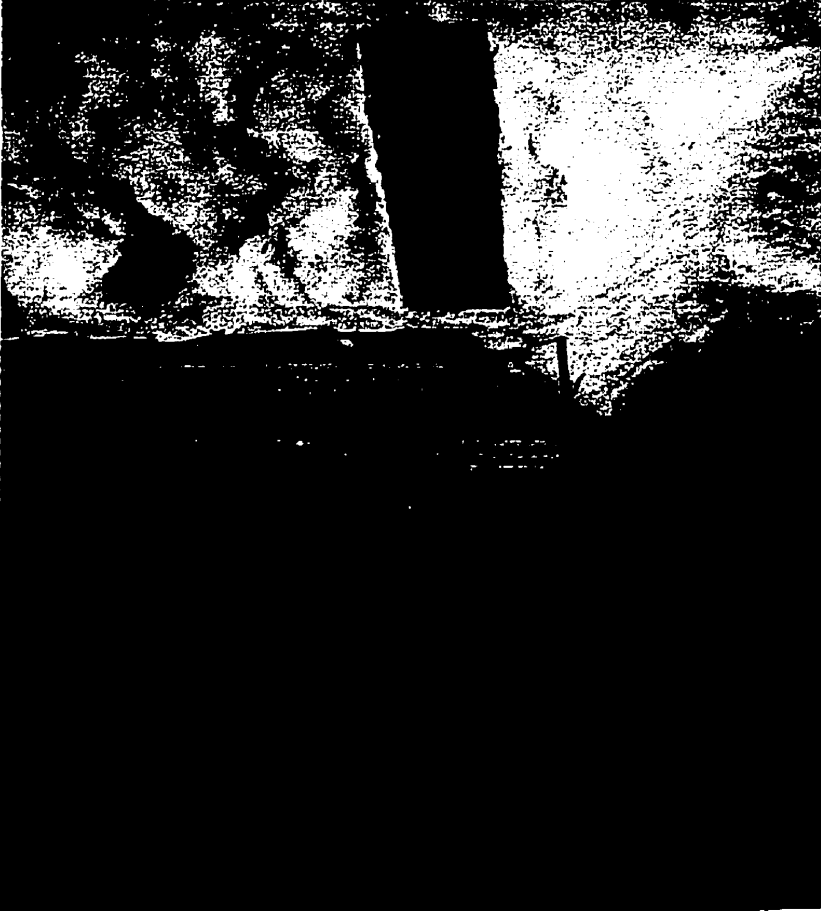


Fig. 34. Existing stairs leading up to the screen and into the courtyard.



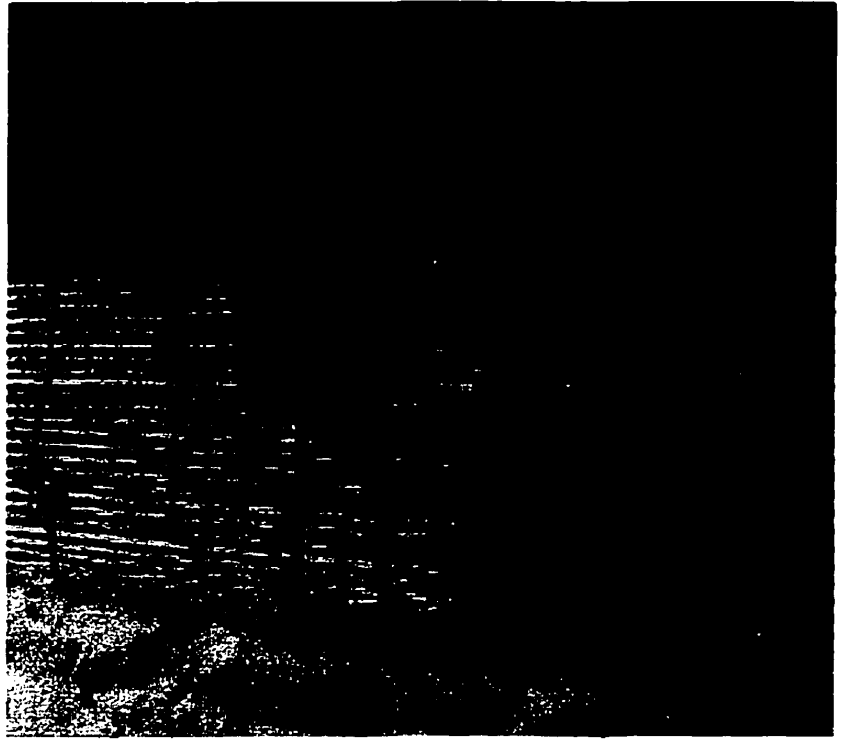


Fig. 36. Cuts are made in the screen to frame various entrances and pertinent views such as the tree tops seen from within the Zen garden.

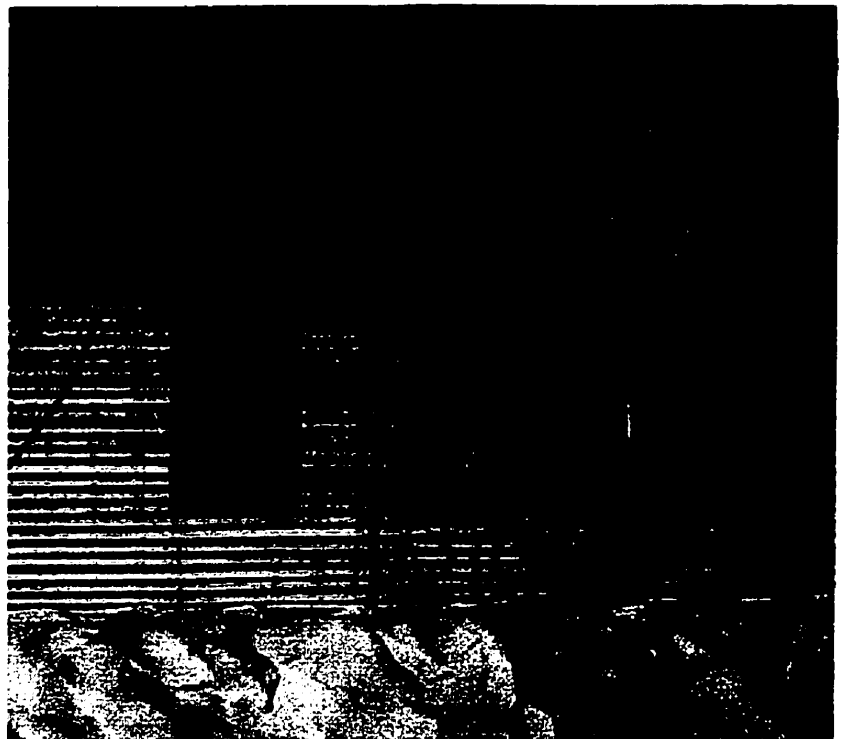
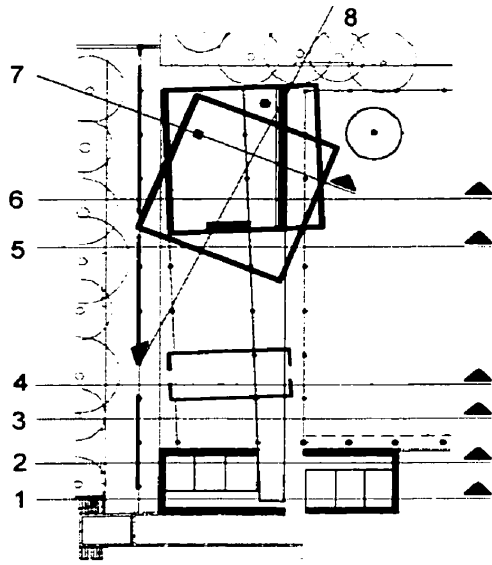


Fig. 37. A cut is made in the screen to frame building elements protruding through the screen.



Sections

A series of sections illustrate the sequence of spaces as a person moves from the mundane parts of the support facilities to that of the Reflection Chapel.

Fig. 38. Key plan of section cuts.

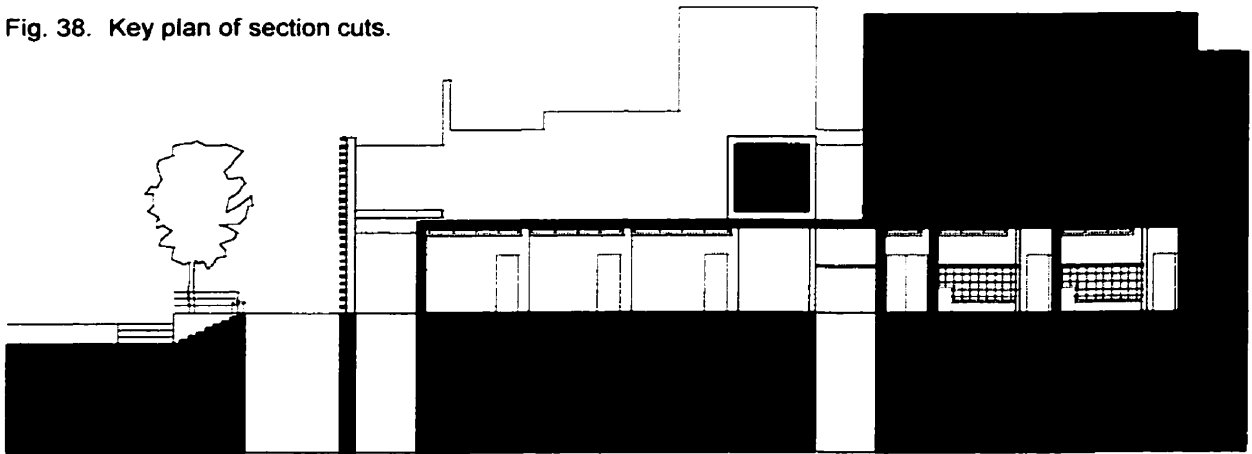


Fig. 39. Section 1. A low and ample space with concrete floors. A light shines down from a skylight above a stone path ahead.

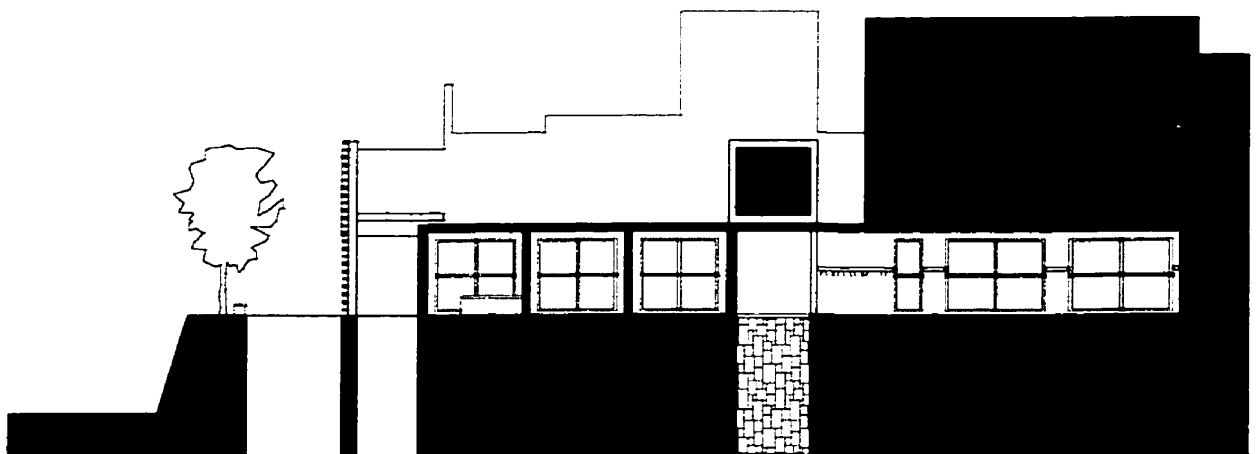


Fig. 40. Section 2. A coat rack invites the visitor to dress comfortably before proceeding.

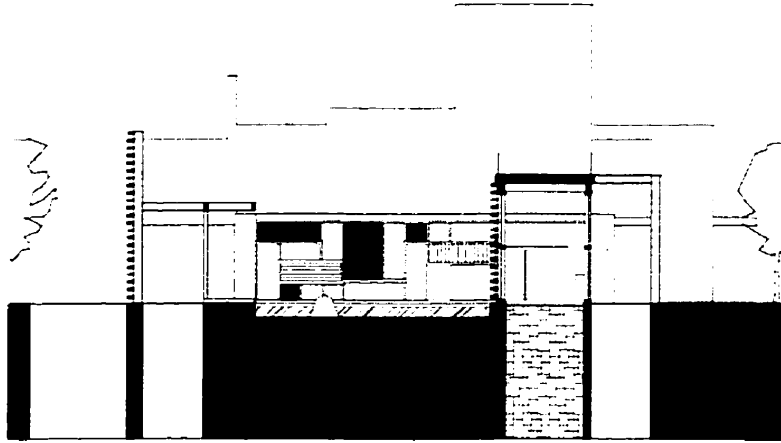


Fig. 41. Section 3. A narrow yet tall path with views into the courtyard and reflecting pool.

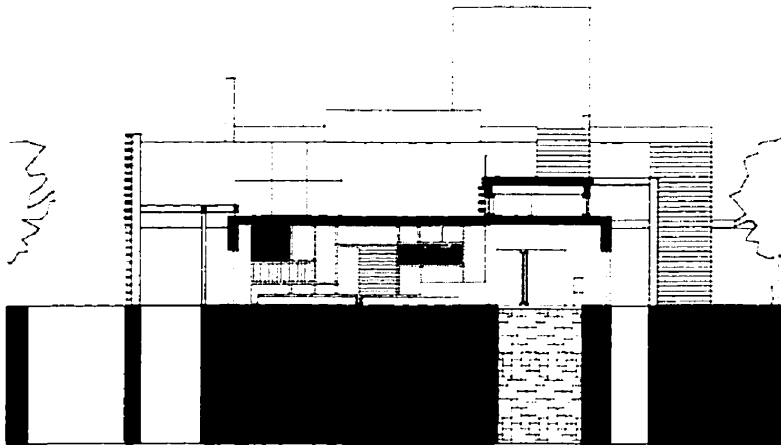


Fig. 42. Section 4. A lower waiting area is defined by concrete floors and wooden benches. This space provides the person with limited views into the Zen garden.

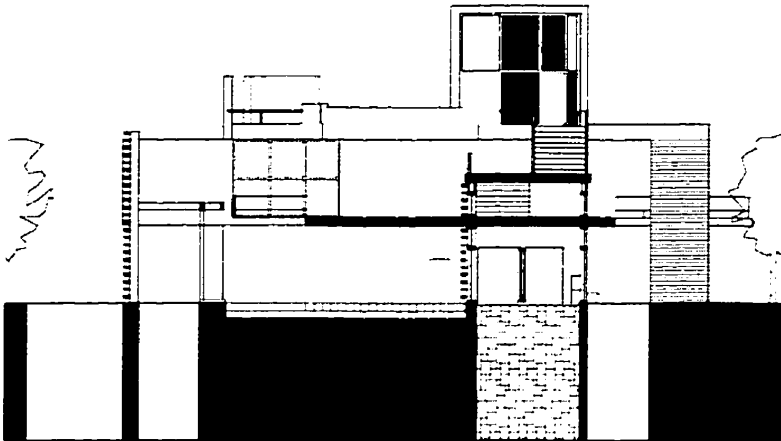


Fig. 43. Section 5. The traveller continues the path through heavy wooden doors.

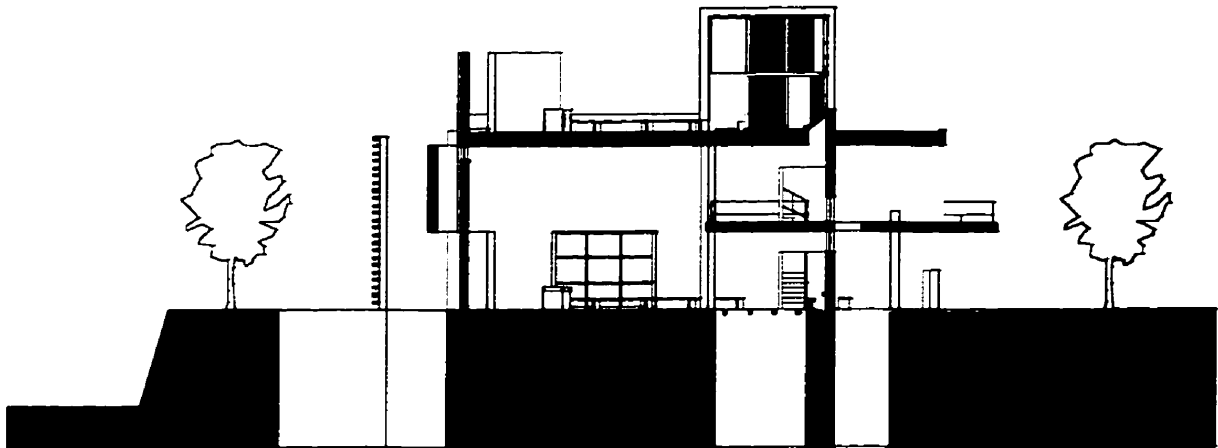


Fig. 44. Section 6 highlights the space looking out to the memorial tree (to the right), and the Kibla wall for Muslim prayer (to the left).

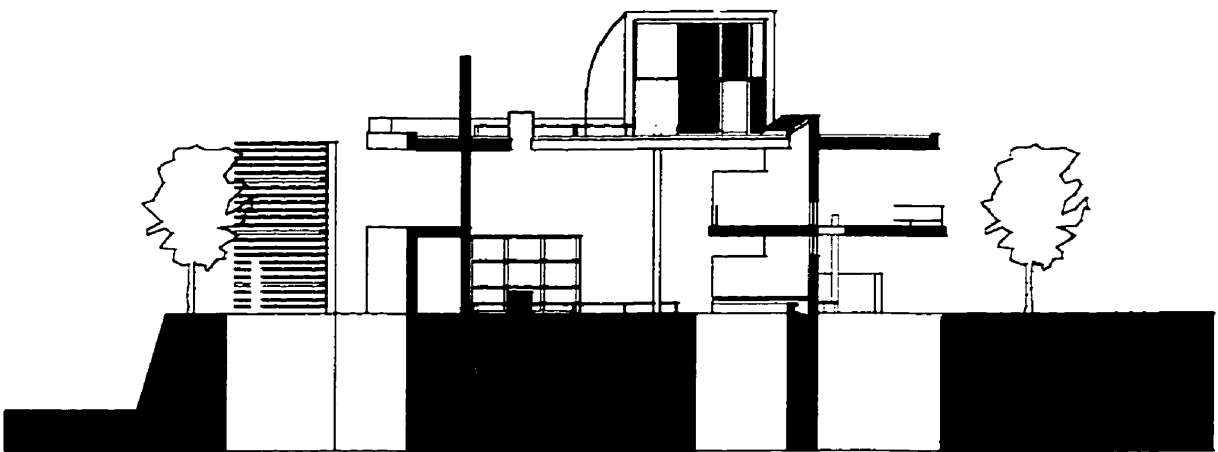


Fig. 45. Section 7 highlights the altar, storage, and eastern wall for both Christians and Jews (to the left), and a second floor balcony for gender division of more orthodox practices (to the right).

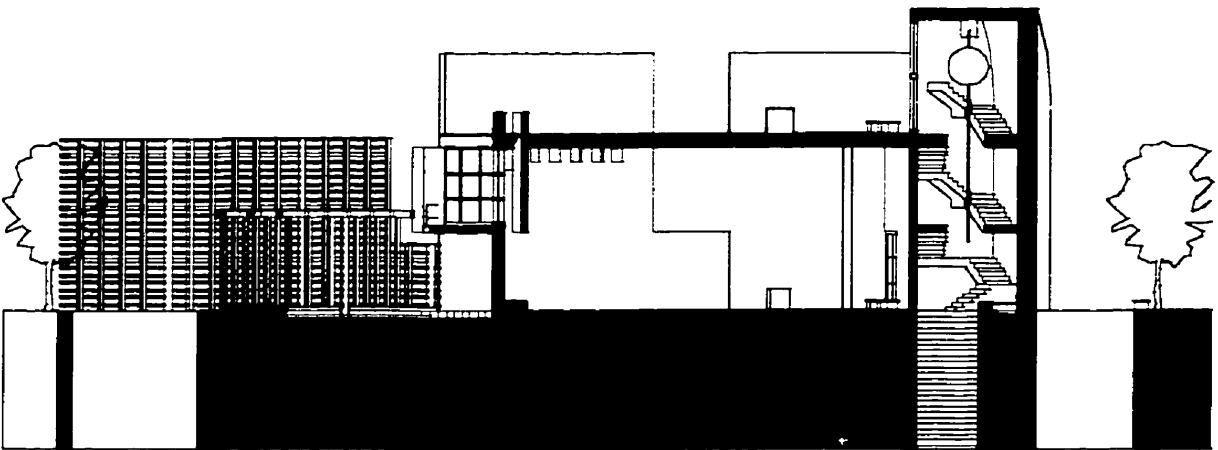


Fig. 46. Section 8 highlights the shrine for Buddhists and Hindus, along with the garden and bell tower.

Light study

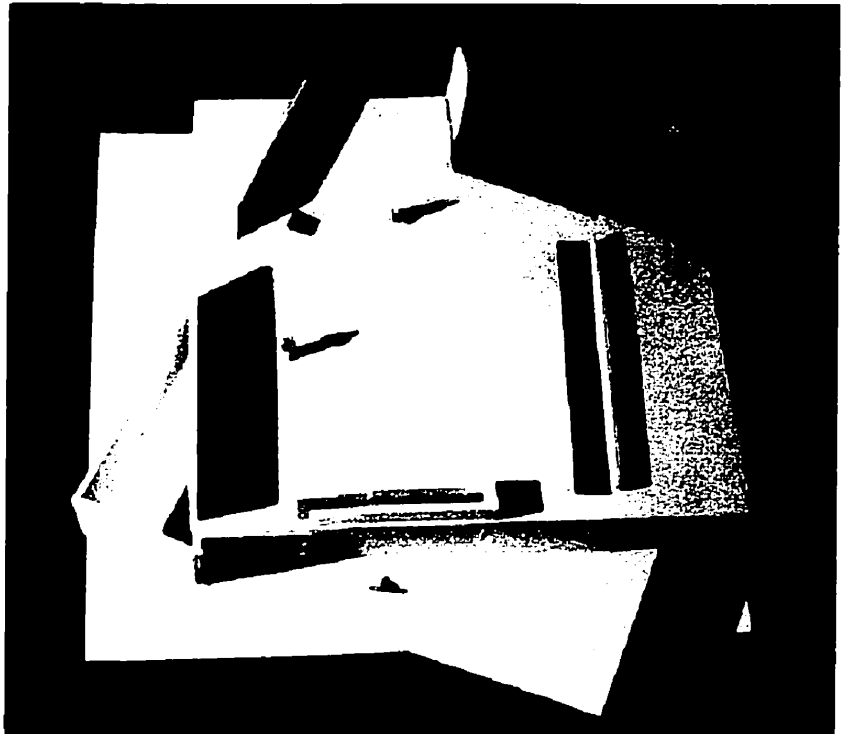


Fig. 47. View of the light study model used to test the quality of light.



Fig. 48. View of water fountain leading to the stairwell and bell tower.



Fig. 49. View showing muslim prayer directed toward the Kibla wall.

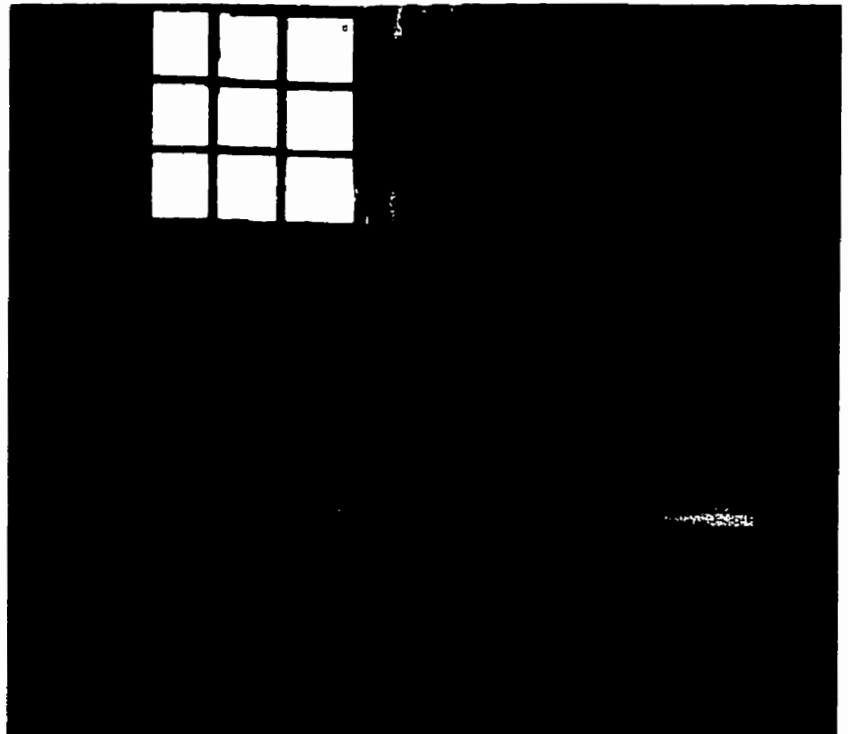


Fig. 50. View of light patterns created by the various cuts within the walls.

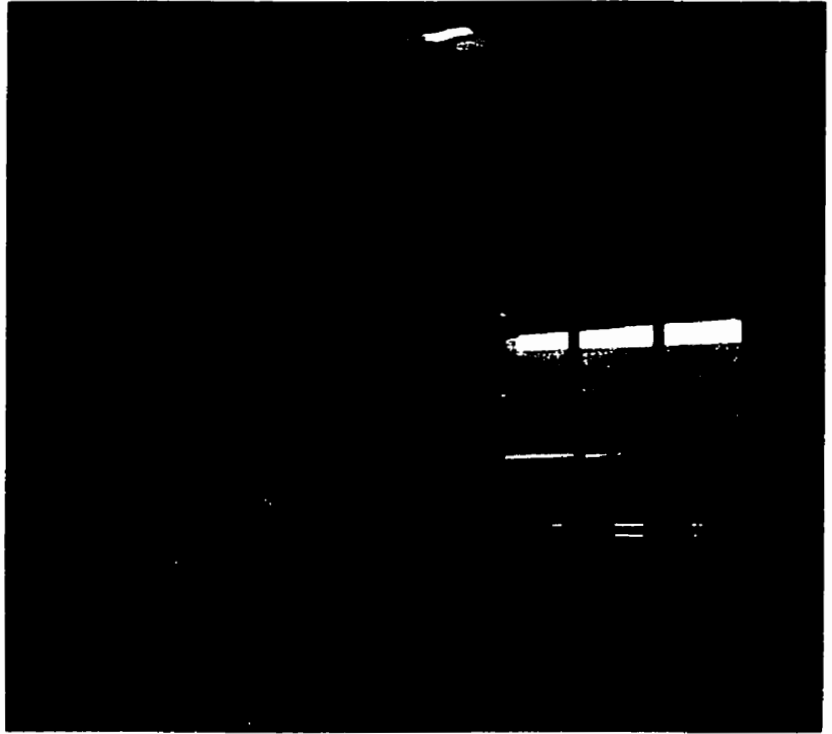


Fig. 51. Light shines onto a person in the lotus position.

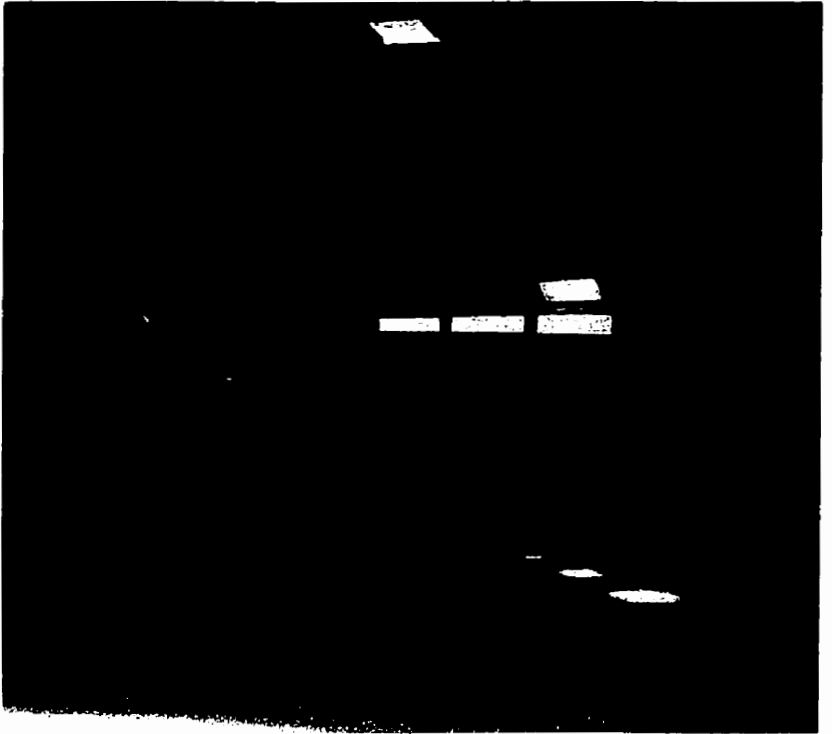


Fig. 52. Candle light glows from the storage room to the left.

From the darkness of the photographs the soothing quality of the Reflection Chapel is evident, in contrast to the often over-lit spaces of everyday offices and classrooms. The coloured glass is another means for specific groups to associate with the Reflection Chapel: orange (as a colour of enlightenment for Buddhists), purple (the colour of ribbons worn on the memorial day), and red (representative of the Hindu god Shiva). As different levels of coloured light enter the space throughout the day, the focus upon a specific element moves and blurs the emphasis on any one group. It is clear through the sections and interior light modeling that feelings of security, detachment from the daily life, and opportunity for focus and quiet reflection have been achieved in this thesis.



Fig. 53. View upon entering the main Reflection Chapel, while lit by artificial lighting.



Fig. 54. Aerial view of the meditation space, with a view of a small pocket of space designed to capture instances of rain and changes of winds as leaves collect in the space.

SUMMARY

The goal of this thesis was not to transform the very nature of the site from a university campus into a monastic retreat, but rather to create a place, using the existing structure of the campus, where meditation could take place. Spaces which were often ignored and unseen became a rich place for meditative gathering.

Studying the needs of the various groups on campus who meditate and would use a Reflection Chapel was an important stage in developing a minimum set of programmatic and spatial requirements for the thesis. Although these programmatic requirements became the leading pieces for the chapel's design, its success was judged by its architectural experience. Case studies of various successful chapels and places of meditation helped to develop an architectural palette of materials, lighting details, and sequences of spatial movements supportive of a meditative environment. Through the use of sequential sections and light study models, an architectural space and experience which is conducive to meditation was achieved.

My own insight (from practicing and observing various forms of meditation) derived three basic integrated principles for meditation to be authentically present within architecture. The first principle is to create a sense of security and stability. The second is to create a sense of detachment and removal from the routine demands of daily activity and thought. The third is to create a sense of order and focus with those things around you and within your mind. The design of this Reflection Chapel uses these principles and expresses them through the architecture, through procession, material, and light.

APPENDICES

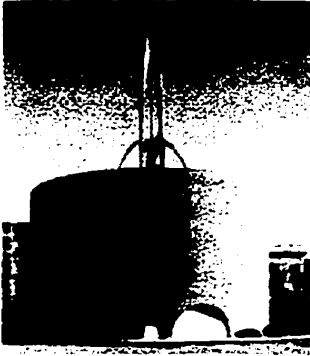


Fig. 55. Elevation of chapel.
From Shear.



Fig. 56. Interior view of corridor leading into the chapel.
From Shear.

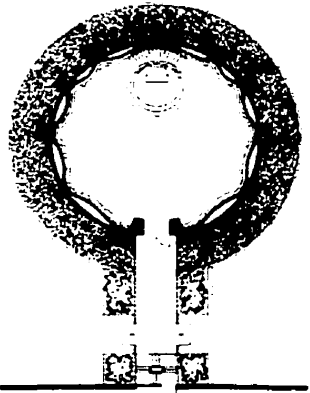


Fig. 57. Plan. From Shear.

Case study 1: M.I.T. Kresge Chapel

Cambridge, Massachusetts

by Eero Saarinen, 1950-1955

The chapel at MIT is located in a central part of the campus, making it accessible to everyone. However, its design speaks of a clear detachment from the profane. A pool of water, a moat, surrounds the main drum-like structure. The chapel itself is only accessible through one end of the drum, which is attached to a glazed corridor that acts as a bridge across the moat. This corridor also separates the functions of the "sacred" chapel from the routine functions of the other building attached to its other end.

The design's main features are its procession into the chapel itself and the play of light, volume and material that gives the space a calm and detached sensibility that is conducive to meditation. The experience of moving from a bright and colorful, yet confined space (the corridor) into a darker yet expansive cylindrical volume filled with mystical light during the entering procession prepares the user for meditation. The natural light in the chapel comes mainly from an oculus situated at the end of the processional aisle, above the altar, and secondly from reflections from the water up onto the interior undulating brick walls. The light that passes through the gaps between the interior brick walls gives form and texture to the wall. The light that falls onto the altar brings attention to its essential significance to the ritual practices of a Christian celebration.

The quality of space achieved through the procession and the manipulation of natural light, materials and form give meaning to the MIT Chapel as a safe haven from the outside world, and as a place of meditation.

Case study 2: La Tourette

Eveux-sur-l'Arbresle, France

by Le Corbusier, 1956-1960

The monastery of La Tourette stands strong with its monolithic concrete structure, not giving a hint or association to traditional monasteries, except for the clear presence of a rectangular cloister when seen from the air. Its enclosure, strong arms that accommodate the various functions of the monastery, serves as a barrier from the outside world, resulting in the entire complex functioning in part as a fortress. An invitingly large entrance amidst the pilotis that hold the structure contrasts this appearance of isolation and harshness. However, its strong concrete walls succeed in creating detachment, and, together with the play of light in the enclosed spaces in the interiors of the arms, create the calm atmosphere necessary to direct the user to meditation.

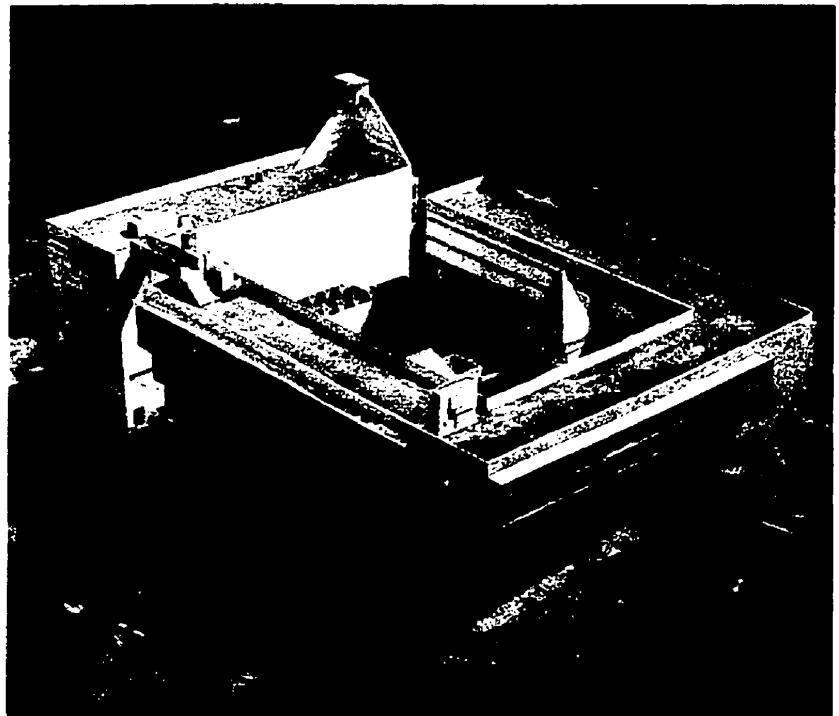


Fig. 58. Aerial view showing the cloister form. From Henze.



Fig. 59. Interior view of church, facing the altar. From Henze.



Fig.60. Interior view of church, from behind the altar. From Henze.

The cloister itself results in an isolated volume of space that does not allow for free wandering and contemplation as in some medieval monasteries. Its space is rigidly distributed and divided up by enclosed corridors and other volumes which contain most important functional spaces, such as the oratory. The most sacred of spaces limit the amount of views to the outside world and utilize its openings for creating a strong, prayerful and spiritual quality of light. The rough concrete that makes the structure and serves as an interior and exterior finish transmits the feeling of austerity and permanence. This material allows the spaces to be defined by how light washes down its walls. This results in an atmosphere that is very focused on the purpose of one's presence in the complex: to pray and to study.

The special place for free contemplation is located on the rooftop. Here, the individual is connected with the surrounding landscape. The entire complex acts as if it was just another rolling hilltop, providing a wide range of visual and physical connections with the natural environment. One may also feel as if they are standing up on a broad watchtower looking out. This feeling and the austerity of the rooftop landscape are most conducive to a form of appreciative meditation, although on a hot sunny day it may be limited in time.

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