

**Where the Sacred Meets the Everyday:
A Pilgrimage in the City**

by

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ABSTRACT

This thesis seeks to provide a sacred space in the city; a pilgrimage for the body, mind and soul. Pier Vittorio Aureli identifies it as “a space set apart within an open territory and as such the safe meeting point for different clans”. As contemporary life causes a constant search for meaning, identity and authenticity, it is through sacred architecture within the urban realm that community, participation and publicness acquire an intense meaning. Architecture can challenge the current condition of religious space in contemporary urban society. A study of the sacred encountering and engaging with the everyday. The thesis seeks to clarify the relationship that sacredness has to the modern world, allowing the urban dweller to consider one’s meaning in existence and their relationship to oneself, the world and with one another; an experiment in embodied sacredness in self, site and city.

This thesis attempts to uncover the universal route of religious architecture by identifying and deconstructing the archetypes that formed and established a religion’s architectural expression at one time. The intention would be to then interpose elements in the streets of the city in order to establish a new public space for the everyday that serves the city and the spirit.

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CHAPTER 1: INTRODUCTION

The Need for Sacred Places

The sacred is relevant and cities should nurture and support human spirituality. All beings are spiritual and sacredness is an essential dimension in human community. The spirit is what connects all of humanity to the world and with one another, therefore there should be a place in the everyday for intimate spirit engaging activity to be experienced and shared. There is an innate need for the spiritual to be encountered daily in the urban realm.

In the context of this thesis the sacred needs to be defined. Le Corbusier calls it the ‘ineffable’, Rudolf Otto refers to it as the ‘numinous’ and Louis Kahn defines it as the ‘immeasurable’¹. In the architectural realm the perception and sense of transcendence could be the way “a building’s geometric proportions turn into shivers, light into joy, space into contemplation and time into heightened presence”². The sacred provokes an awareness which goes beyond a physical realm and into another reality that architecture has the power to influence.

It is also true that the human spirit needs to engage and be engaged with by the city, and the city is required to immerse itself in the spirit philosophically, psychologically, intellectually, aesthetically, and architecturally. Within this thesis the sacred or spiritual removes all religious connotations and declares one can exist without the other within the everyday realm of the city. Architecture plays a critical role in the way in which contemporary society engages with the spirit. Karsten Harries claims that “the sacred needs

1. Julio Bermudez, *Transcending Architecture Contemporary Views on Sacred Space* (Washington DC: The Catholic University of America Press, 2015), 2.

2. *Ibid.*, 3.

architecture if it is not to wither, and similarly architecture needs the sacred.”³ It is thought that architecture has the power to help one find their way in the complex world in which one lives through the awareness of self, and community.

According to Harvey Cox, author and recognized theologian at Harvard University, the ‘post-secular city’ needs to adjust to a ‘new emerging spirituality’⁴. This new spiritual individual is open to the mystical and transcendent, responds to experience and the senses, thrives on questioning, is suspicious of exclusiveness, and has a deepened sense of responsibility for the marginalized⁵. Traditional religious practice and religious institutions are failing to accommodate this. In 1944 Dietrich Bonhoeffer, German pastor and theologian wrote “the church must escape its stagnation. We must come back out into the open and engage in spiritual confrontation with the world”⁶. In other words, in order to identify what is most valuable in life one must interact with others and the community one is surrounded by and adopt openness. Architecture can challenge religious stereotypes and the current condition of religious space in contemporary urban society. The urban landscape requires re-evaluating.

The Everyday

Swiss architect Mario Botta wrote “every so often there is a compelling need for sacred space within everyday life, an

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3. Karsten Harries, “Untimely Meditations on the Need for Sacred Architecture” in *Constructing the Ineffable Contemporary Sacred Architecture* (Connecticut: Yale School of Architecture, 2010), 48.
 4. Harvey Cox, *The Monastery, the City, and the Human Future* from ACS 5 Symposium: Urbanism, Spirituality and Well-being (February 9 2014), http://www.acsforum.org/usw_symposium/usw_lectures/June_1.html.
 5. Ibid.
 6. Gregor Hohberg and Stolte Roland, *The House of Prayer and Learning [Das Haus Der Drei Religionen]* . Translated by Mariangela Palazzi-Williams (Berlin: DOM Publishers, 2013), 14.

incontrovertible necessity that has been confirmed over the centuries by sublime examples, and that has now re-emerged decisively, perhaps in an extreme attempt to respond to the incompleteness of the contemporary dimension”⁷. Botta is convinced of the importance of sacred space and writes about encountering sacredness in “everyday life”, implying a level of engagement beyond a weekly religious service or ceremony. Peter Eisenman also writes about this in explaining his intentions for the Holocaust Memorial in Berlin: “a place that was both different from the experience of everyday but also had the possibility of the ordinary”⁸. He says “I have seen people take lunch there, I have seen people sunbathing there, I have seen people in love there - all of the things that make it part of the everyday, of the ordinary”⁹. Eisenman feels convicted to make the memorial part of the everyday in order to carefully consider the relationship the memorial has to the city. A proposal for sacred space in the city needs to carefully consider the relationship between city dweller and the spiritual. Based on Botta and Eisenman’s observations there appears to be a need for a re-evaluation and new interpretation of public space and its definition, meaning and intention within the city.

Norberg-Schulz writes about urban space in *The Concept of Dwelling*: “meeting and choice are the existential dimensions of the city. Through meeting and choice we gain a world. When we have a world, we dwell, in the sense of gaining an individual identity within a complex and often contradictory fellowship. Fellowship

7. Karla Cavarra Britton, “The Case for Sacred Architecture.” in *Constructing the Ineffable Contemporary Sacred Architecture* (Connecticut: Yale School of Architecture, 2010), 20.

8. Peter Eisenman, “Is there a Religious Space in the Twenty-First Century?” in *Constructing the Ineffable Contemporary Sacred Architecture* (Connecticut: Yale School of Architecture, 2010), 208.

9. Ibid.

means sharing in spite of diversity”¹⁰. In the book he goes on to describe meeting as a way of orientation and identification in the world.

Fellowship, community and participation allows one to identify with an activity or role. By interpreting and reiterating Schulz findings, it is evident that public space has a role in breaking barriers, uniting differences and confronting some of the social walls various sects, tribes and associations that have been inserted into our culture and civilization. In the case of this thesis religion could be considered at the forefront of what are being considered barriers. The thesis strives to encourage inclusion and the inherent focus would be on a space designed and considered for everyone.

10. Christian Norberg-Schulz, *The Concept of Dwelling: On the Way to Figurative Architecture* (New York: Rizzoli, 1985), 51.

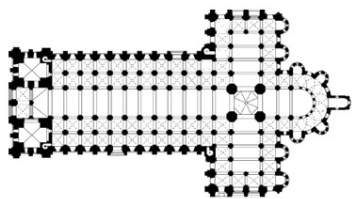
CHAPTER 2: TOPIC

The Architecture of the Sacred

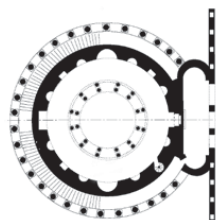
The initial research established and synthesized an architectural expression and vocabulary for religion. For centuries there has been an intimate connection between architecture and religion. The goal of religious buildings for the ages has been to facilitate an individual or group in the advancement of transcendence and to promote the sacred dimension. 'Religious' individuals most often encounter what is to be considered the sacred within the walls of their respective church, synagogue, temple or mosque. It is also possible that individuals with no religious affiliation can sense spirituality within a religious building. This makes the study of religious architecture critical to the thesis. The physical attributes of Christianity, Islam, Judaism, Hinduism, Buddhism and Sikhism were analyzed in order to get a sense of a religious architectural language.

Typology and form attempt to categorize and diagram a synthesis of an architectural and spatial understanding of places of worship belonging to each faith. Commonly this has a close relationship to the formal qualities, religious acts and theology representing a sequence of rituals. Closely related to form are the acoustic qualities and quality of light and shadow achieved. Typology and geometry can work together at all dimensions. Geometry can be seen in many applications within a religious building including screens, fenestrations, floor patterns and tiling to name a few methods in which it is used. Lastly, the human body plays a role in the rituals of any given religion and the posture of an individual within ritual is often prescribed. To map these movements and dimensions brings to light a new understanding of the individual spatial movements.

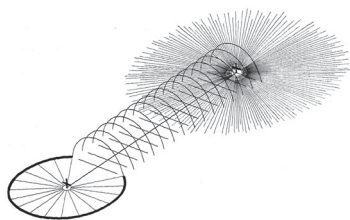
Faith, Form and Typology



Typical cathedral axial plan;
from Rudolf Stegers, *A Design Manual - Sacred Buildings*



Radial Plan, Santa Constanza
Mausoleum; from Rudolf
Stegers, *A Design Manual - Sacred Buildings*



The cathedral for all time; from
Rudolf Schwarz, *The Church Incarnate*

Unlike the present day, in the Middle Ages the Christian church stood at the centre of the town in a strictly eastward axial orientation¹¹. Today the church rarely is given such a dominant position in the urban landscape and instead the city skyline is dominated by commercial and business towers. In the early fourth century the most common church plans were arranged either longitudinal or circular (axial or radial) based on the development of the Christian gathering known as “Holy Mass” with an evolving critical spatial relationship between the elements, the pulpit and the altar¹². At the end of the century large basilicas or ‘market halls’ were dispersed across the Roman Empire, taking on a longitudinal form with a high central nave, aisles separated by columns, and a semicircular form at one end known as the apse¹³. By the twelfth century the Romanesque basilica was scattered across western Europe with the addition of a transept; a rectilinear protrusion at right angles to the nave. At the turn of the sixteenth century there were rigorous attempts to understand the opposition and conceptualization of axial and radial arrangements with the evolution of the design of St. Peter’s Basilica¹⁴, a plan that once built took on some of the formal ideas of both.

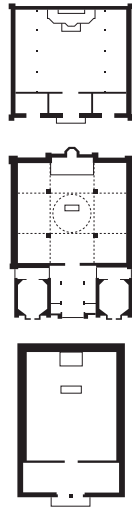
By the 19th century there was a conceptual shift in ecclesiastic architecture from liturgical to aesthetic. For example the shape of the arch, whether pointed or round was a constant source of conflict, and had very little to do with theology. Concepts of modernism had a significant influence on religious architecture and Rudolf Schwarz’s book ‘*The Church Incarnate*’ played a

11. Rudolf Stegers, *A Design Manual - Sacred Buildings* (Germany: Birkhauser, 2008), 12.

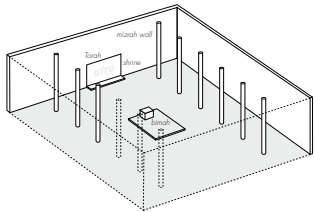
12. Ibid., 15.

13. Ibid.

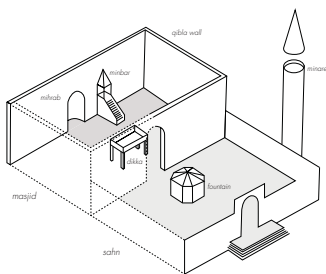
14. Ibid., 16.



Three Types of Synagogues;
from Jacobs, *Jewish
Encyclopedia*



Typical synagogue formal
arrangement; data from
Rudolf Stegers, *A Design
Manual - Sacred Buildings*



Mosque and its formal elements;
from Rudolf Stegers, *A Design
Manual - Sacred Buildings*

significant role. He abstracted the church plan and illustrated the spatial relationship between God and man and the general religious experience. Post-World War Two brought a resurgence of church architecture with some notable buildings being built at that time. Christian architecture cannot be mentioned without considering and appreciating the work of Le Corbusier in France: Chapel of Notre Dame du Haut in Ronchamp completed in 1954 and La Tourette Monastery in Evieux-sur Arbresle in 1960.

The synagogue is flexible and needs to facilitate very few important religious elements, therefore its building typology is not nearly as prescribed as in other religions. The Jewish service is centred on the Torah readings and communal prayer. The spatial arrangement of the synagogue is less important but commonly translates into a hybrid of a centralized yet elongated building with a symmetrical sanctuary¹⁵. The *bimah* is a central platform located in the middle of the sanctuary where the Torah is read and the platform is directly aligned with the shrine where the Torah is kept while not in service¹⁶. Members of the service are positioned on either side and the path between the bimah and the Torah Ark makes a natural aisle. Jewish tradition requires there should be no distractions during prayer, therefore generally there are no windows and a traditional synagogue configuration also includes a *Mehitza*, a deliberate division between man and woman¹⁷.

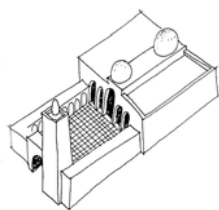
Although Muslims are less devoted to a building for worship since prayer occurs throughout the day at home and in the open, the mosque represents an important symbol of Islam and is considered a virtuous place for group prayer. Prayer being one of the pillars of

15. Ibid., 38.

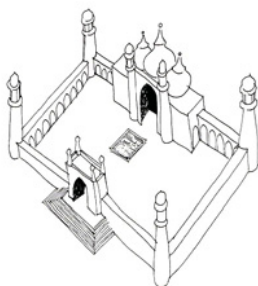
16. Ibid., 40.

17. David Dernie, *New Stone Architecture* (USA: McGraw-Hill, 2003).

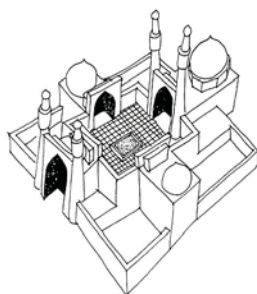
Islam along with faith, fasting, charity and pilgrimage¹⁸.



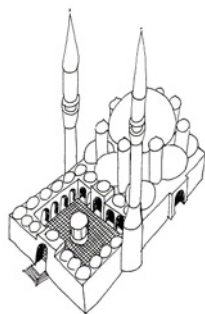
Arab Hypostyle Mosque



Indian three-dome Mosque



Persian four-iwan Mosque



Turkish central-dome Mosque

Four types of Mosques; from
Rudolf Stegers, *A Design Manual*
- *Sacred Buildings*

In the sixteenth century all the great buildings being built in the Ottoman Empire were mosques. The Ottoman mosque consisted of an open prayer hall - a perfect cube with a perfect hemisphere shaped dome, a covered portico, a courtyard with an arcade, a fountain and a minaret - a tower used for the call to prayer¹⁹. Within the prayer hall is where men and women would kneel on the floor in rows and pray in the direction of Mecca - being the holiest city and where the prophet Muhammad was born. All mosques must contain a qibla wall with a mihrab, an indent in the wall indicating the direction towards Mecca. There are three other types of mosques besides the Turkish central dome: the Arab hypostyle mosque, Persian four-Iwan mosque, and Indian three-dome mosque²⁰. All types have a predominant and sizable courtyard with one or several buildings arranged around it.

Regardless of the architectural implications of a mosque the ritual of prayer is consistent. Once the sounds of the call to prayer are made the faithful make their way to the mosque. The path to the prayer hall is not a straight line, and instead one is lead indirectly through a forecourt, corridors, and stairs finally arriving at the hall where one washes and removes their shoes²¹. Some prayer halls will have separate entrances for men and women. The rectangle oriented towards Mecca is the most common geometry used for the form of the prayer hall but the polygon or rotunda are not completely unfamiliar or unseen.

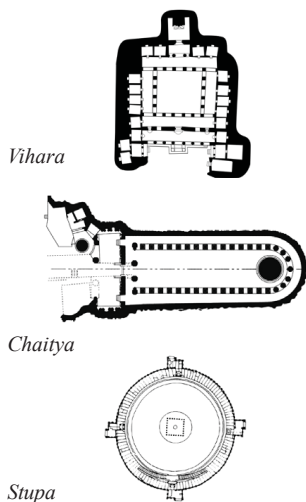
Buddhism, a more difficult religion to synthesize basic building

18. David Macaulay, *Mosque* (Boston: Houghton Mifflin Company, 2003), 7.

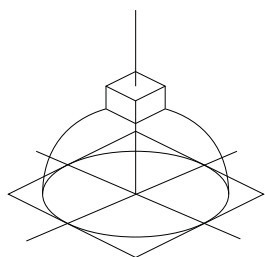
19. Ibid.

20. Ibid., 47.

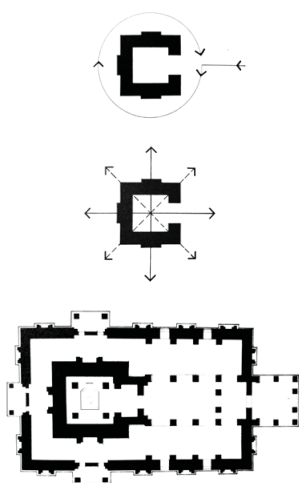
21 Ibid.



Three types of Buddhist architecture; from Lin, *Buddhist Architecture*



The axial pillar and stupa symbolism; from Antariksa, *Buddhist Architecture*



Hindu temple dynamics and form; from Michell, *The Hindu Temple*

typology and principles for because its origins and movement through South Asia vary dramatically. Indian Buddhism transformed and evolved into Mahayana Buddhism, and Japan produced Buddhist sects including Zen Buddhism. The common goal is to attain enlightenment.

From the first through to the fifth centuries A.D. the most common vessel for Buddhist ritual was the stupa. These domed, round structures contained relics and are the most sacred space on a Buddhist pilgrimage site²². Historically Buddhist monks retreated to monasteries called viharas, another religious building type. The organization of it includes a central great hall for gathering with a shrine pulled away at one end and a series of individual cells for seclusion and meditation²³. The chaityas, also originating from India is the Buddhist temple or hall often housing the stupa.

Founder, Sidharta Gautama, discovered the way to deliverance is through the Holy Eightfold Path: righteous belief, righteous intention, righteous word-truth and openness, righteous conduct-peaceful and pure, righteous living-causing no injury, righteous effort towards self-control, righteous thinking and righteous meditation²⁴. The Eightfold Path can be derived onto the basic concept of temple and Pagoda, the Pagoda plan being octagonal.

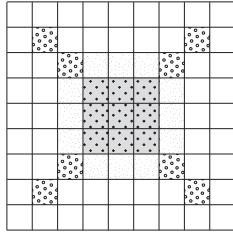
The Hindu Temple functions as a place of transcendence and enables contact between man and the gods. Symbolically the architecture of the temple is believed to represent a release from the world, a place where gods make themselves visible²⁵. The

22. Antariksa, *Space in Japanese Buddhist Architecture* (Dimensi Teknik Arsitektur 29, no. 1, 2001), 75.

23. Ibid., 75

24. Ibid.

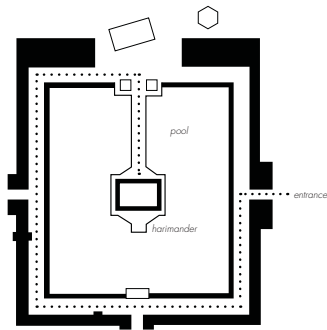
25. George Michell, *The Hindu Temple: An Introduction to its Meaning and Forms* (USA: University of Chicago Press Edition, 1988).



The Mandala temple plan; from Michell, *The Hindu Temple*

form is a small temple within a large building. The small sanctuary within the temple is called the womb chamber, and is where the essence of the temple is contained²⁶. Worship ceremonies consist of evocation, reception and entertainment of gods or goddesses²⁷. The temple priests deliver ceremonies on behalf of the people and rituals involve four celebrations: sunrise, noon, sunset and midnight²⁸. The first act of the celebration is the opening of the womb chamber in order to attract the attention of the gods followed by offerings made to the awakened god²⁹. In addition to ceremonies, both private and congregational worship occurs in the temples.

Pilgrimage to sacred place is a festival associated with the temple. Spiritual journeys through states of consciousness can be represented by movement through the temple and doorways become important thresholds between the temporal and eternal³⁰. The circumambulation is a movement of prayer where one circulates around the sanctuary in a clockwise direction as energy radiates outward from the sanctuary, a symbolic ritual of movement³¹.



Darbar Sahib plan; data from Owen, *Understanding Sikhism*

To understand the most famous gurdwara in the world, the Harimandir Sahib or Golden Temple, is to understand the Sikh faith. The Harimandir Sahib stands in the middle of the Darbar Sahib, the Divine Courts at a pilgrimage site in Punjab. The town in which it is situated was founded by the Guru Ram Das, and he

26. Ibid., 60.

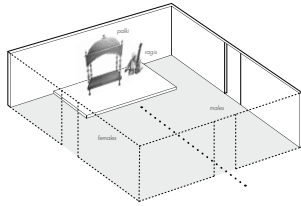
27 Ibid.

28. Ibid., 61.

29. Ibid., 62.

30. Ibid., 63.

31. Ibid.



Darbar Sahib formal elements;
from Owen, *Understanding
Sikhism*

called it “the waters of eternal life”³². Upon entering the courts, barefoot, one will circumambulate clock-wise around a massive pool which the Golden Temple sits in the middle of. The pool is known to provide healing if bathed in and music of the rajis is projected across the courts³³. Unlike the Hindu temples which have one entrance that faces the rising sun, Sikh places of worship have four entrances, representing an openness to all four corners of the earth³⁴.

It was the Guru Arjan who built the Harimandir Sahib and the daily routine and rituals have hardly changed since his time. Langar is a beautiful Sikh tradition: the custom of feeding those who come to receive grace from the Guru³⁵. It is believed that the act of eating with everyone unites and equalizes all humankind. Everyone partakes and helps in preparation as an act of service or sewa³⁶. The Guru empowered a deep sense of community in his followers and wherever he preached a sangat was formed, a place in which to live as a community and deepen ones faith³⁷. Dharamsala describes a hostel often attached to the community and Sikh worship occurs in a gurdwara, the room where the scripture is kept³⁸.

32. Cole Owen, *Understanding Sikhism* (Edinburgh: Dunedin Academic Press Limited, 2004), 5.

33. *Ibid.*, 6.

34. *Ibid.*, 10.

35. *Ibid.*, 13.

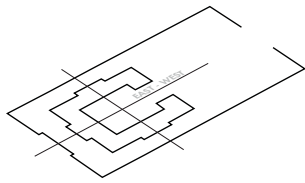
36. *Ibid.*

37. *Ibid.*, 14.

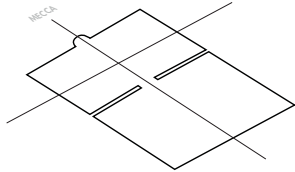
38. *Ibid.*

Orientation

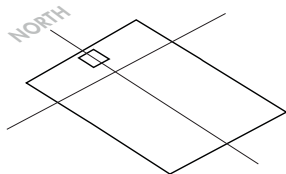
In the Middle Ages the Christian church stood in the centre of its town or city with an eastward orientation. The altar always pointed towards Palestine; the “Holy Land”. The Mosque orients towards Mecca, regarded as the most holy city of Islam and within the prayer hall there is always a clear indicated orientation so one can pray towards Mecca. The synagogue orients the Torah Ark towards Jerusalem. Buddhist guidelines are not completely specific on this topic, but in Zen Buddhism the shrine should be set up on the north side of the room. The Hindu faith requires an opening to the temple in the East-West axis toward the rising sun. Lastly, the Sikh faith specifies an opening on all sides of the typical gurdwara implying openness to all sects and religions.



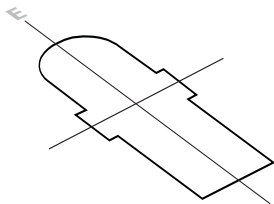
Buddhist Temple



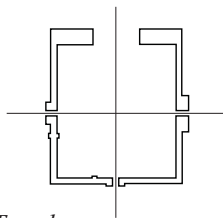
Mosque



Synagogue



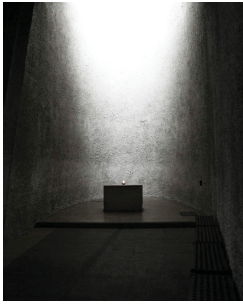
Church



Hindu Temple

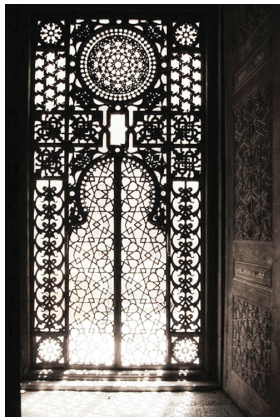
Orientation diagrams

Light and Shadow



Ronchamp Pilgrimage Chapel,
Le Corbusier; from *Experiencing
Architecture*

Light and shadow has a fundamental effect on the atmosphere of sacred space and can determine the spatial quality, and atmosphere of the architecture³⁹. Almost every theology of every faith has an association and affiliation to light and shadow and has significant meaning. Daylight, whether soft or hard, direct or indirect, can determine how a sacred space and the liturgical activities are perceived⁴⁰.



Al-Rifa'i Mosque in Cairo; from
Schmidt on Flickr

Steven Holl writes that “The perceptual spirit and metaphysical strength of architecture are driven by quality of light and shadow shaped by solid, voids, by opacities, transparencies and translucencies. Natural light, with its ethereal variety of change, fundamentally orchestrates the intensities of architecture and cities.”⁴¹



Hurva Synagogue by Louis
Kahn; from *Subtilitas*

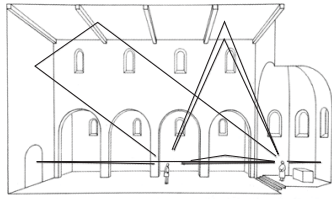
39. Rudolf Stegers, *A Design Manual - Sacred Buildings* (Germany: Birkhauser, 2008), 60.

40. *Ibid.*, 60.

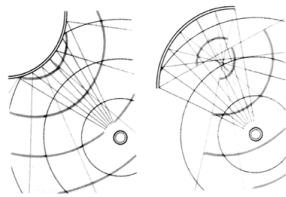
41. Steven Holl, “Phenomenal Zones of Light and Shadow.” in *Questions of Perception - Phenomenology of Architecture* (Japan: A+U, 1994), 22.

Acoustics

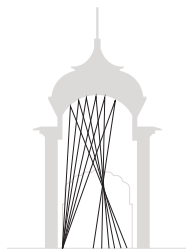
The sound of a sacred space is fundamental to the overall experience. A variety of acoustic requirements have been asked of sacred architecture over time including congregation and individual prayer, readings, and sermons and have led to design characteristics for form, space, and shape⁴². Not only does form and shape determine the quality of sound but materiality, geometry and even the number of people within a prescribed space can have an effect on an acoustic quality. Cathedrals and churches are understood to exhibit a particular sound quality. Domes are common in sacred architecture as a symbol of the heavens and a connection to God, but also have success acoustically⁴³. Niches and side aisles create more intimate spaces from an architectural and formal standpoint but also provide a different acoustic quality than the main nave or great prayer hall, which is desired.



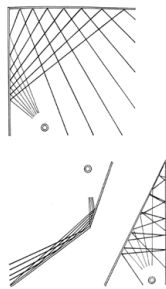
Christian church acoustics diagram; from Rudolf Stegers, *A Design Manual - Sacred Buildings*



Convex and concave acoustics; from Rudolf Stegers, *A Design Manual - Sacred Buildings*



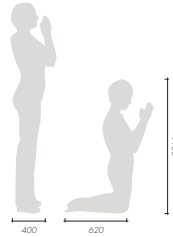
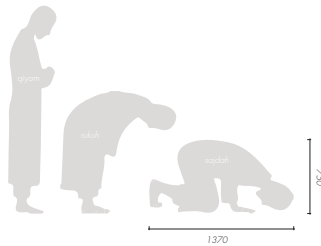
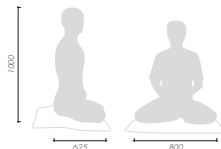
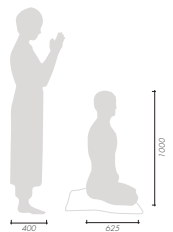
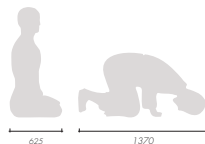
Dome acoustics; data from Rudolf Stegers, *A Design Manual - Sacred Buildings*



Acoustics; from Rudolf Stegers, *A Design Manual - Sacred Buildings*

42. Rudolf Stegers, *A Design Manual - Sacred Buildings* (Germany: Birkhauser, 2008), 54.

43. *Ibid.*, 55.

*Christian**Muslim**Jew**Buddhist**Sikh**Hindu*

Posture

Posture

The language of the body in a state of worship, contemplation, prayer and meditation sets a tone for the understanding of one's religion. In a traditional Catholic mass service there is ritual and a sequence of when one stands, sits, or kneels.

Islam prayer is a sequence of prayer positions one does each time they come to pray. The ritual of prayer is sacred in the Islamic culture. The first position is Takbir, a state of entering prayer⁴⁴. Qiyaam is the second position when one places their right hand over their left on their chest or navel while in the standing position while the first chapter of the Qur'an is read. Ruku, the third position, means bowing⁴⁵. The fourth position is Sujud, which means to prostrate. Palms, knees, toes, forehead and nose must be the only body parts touching the ground⁴⁶. This series is repeated in multiple variations and patterns.

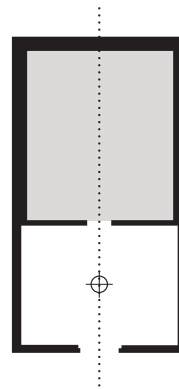
44 BBC, *Religion and Ethics*, last modified October 14, 2014, <http://www.bbc.co.uk/religion/galleries/salah/>

45 Ibid.

46 Ibid.

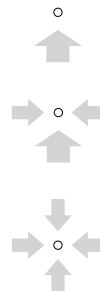
Translation

Through the study of religion and the understanding and interpretation of their spatial and formal qualities a translation of its true, basic elements revealed itself. Cross-religious relationships, concepts and ideas formalized and a pattern was realized. Procession, pilgrimage, sequence and axis all had implications in each religion studied. The act of procession has a role in the sacred and repeatedly the line or path through space or ritual becomes an attribute to embrace and celebrate. An axis is often established as a way of promoting and encouraging ritual.

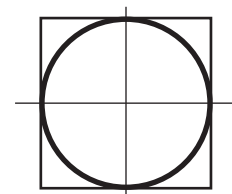


Path or Line

Along with the linear path, there is the point or centre. It is both a symbolic and spatial idea in religious architectural language. The centre can represent a number of different ideas and qualities according to a religious experience - centre in body, mind and spirit and a spatial focus on a centre aisle, altar, pulpit or idol.

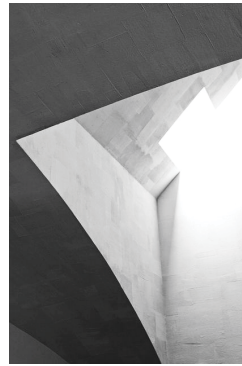


Point or Centre

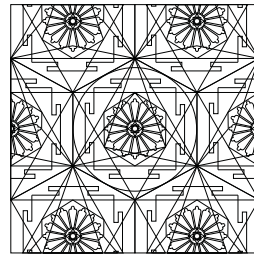


Point or Centre

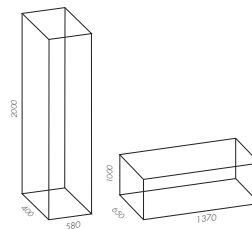
Building form has an influence on the acoustics of a sacred space as well as its quality of light and shadow. Openings allowing light from above are a common attribute of sacred space. Geometries made up of lines and patterns are used as another form of religious language and lastly a synthesis of the human body and rituals were mapped.



The light in the chapel of St. Ignatius; from *Steven Holl Architects*



Geometry



Posture

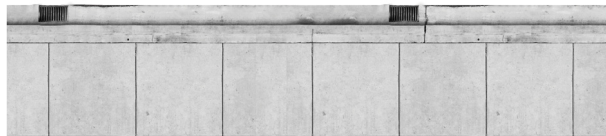
The Architecture of the Common

Just as a vocabulary for the sacred was established ‘the common’ or everyday must also be considered and defined for this thesis. The study of the city manifested into a series of representations - moments to consider within the urban realm, especially those that the thesis will inevitably engage with. In a sense this study is a representation of the ‘Pattern Language’ for this thesis.

A pattern language has the structure of a network, it identifies the ones which create structure, to those which embellish those structures⁴⁷. In *A Pattern Language*, Christopher Alexander explains how “this sequence of patterns is also the “base map”, from which you can make a language for your own project, by choosing the patterns which are most useful to you”⁴⁸. The everyday of the urban landscape are the streets and sidewalks meant for crossing, following, connecting and travelling along. The street is mostly a place for cars, bikes, and streetcars while the sidewalk carries city dwellers travelling by foot. The sidewalk is a path in which one can follow, transect or connect along.



Street; from *Google Maps*



Sidewalk

The facade is the wall of the urban landscape; a method for scale within the common realm. It is the threshold for entering and

47. Christopher Alexander, *A Pattern Language* (New York: Oxford University Press, 1977), xviii.

48. *Ibid.*, xix.

existing between the public and private realm. The park is an open public space most often inhabited with trees, grass, organic paths and benches. The park creates a moment within the dense urban metropolis where the city opens up and there is a feeling of clarity and exposure. It is a place for the city dweller to retreat from the hardness and the noise of the streets and sidewalks.



Facade



Park

The public steps are a natural gathering place in any outdoor space. They can give city dwellers a vantage point or place to casually perch. Alexander suggests that in any public place where people loiter, add a few steps at the edge where stairs come down or where there is a change of level and make them accessible so that people may congregate and sit to watch goings-on.⁴⁹



Public Steps

49. Christopher Alexander, *A Pattern Language* (New York: Oxford University Press, 1977), 605.

“Water plays a fundamental role in our psychology” states Alexander and it is important to express the connection between people and water⁵⁰. Public fountains and pools add an important quality to the public realm. It can provide an added acoustic quality to the city with a continuous sound of running water, or add reflectivity to a space as light and building reflections bounce off the water surface. The fountain is also a meeting place, a marker in the city and a central focal point to a public space.



Public Fountain

The public bench and the table provide moments to stop in the city. They provide a seat for the city dweller to rest ones feet, soak up the sun or eat ones lunch. They also can provide a moment for more than one city dweller to gather or meet. Public benches are most commonly found in large public spaces or squares, along sidewalks or in parks. Pattern Language states that “somewhere in every garden, there must be at least one spot, a seat, in which a person or two can reach into themselves and be in touch with nothing else but nature.”⁵¹ In the short film *The Social Life of Small Urban Spaces* William Whyte describes the movement and rituals of those that come to sit in the square.



Public Table



Public Bench

50. Christopher Alexander, *A Pattern Language* (New York: Oxford University Press, 1977), 323.

51. *Ibid.*, 816.

The street food vendor is a significant addition to the public realm. Alexander claims that public gathering places draw life from the food stands and contribute significantly to city life⁵². They can create ‘activity pockets’ in the city, an on-the-go activity or a destination for city dwellers. If located strategically the food stand can have an influence on how city dwellers gather in public space. A hot dog stand located near benches, park, public steps and other successful public amenities and spaces can enhance the overall experience and use of that space. A thoughtful program for public space looking forward.



Hot Dog Stand

In Pattern Language, Alexander describes the bus stop as a shabby experience for most city dwellers where very little thought has ever been given to the experience - a place for waiting, anticipation and anxiety⁵³. Alexander suggests that the relationship the transit system has to the city should be knit together, reinforced by one another and add choice and shape to the experience in order to better the city dwellers experience⁵⁴. The possibility of the streetcar shelter being an intricate part of the public realm has the potential to influence the city in a meaningful way.



Bus Stop

52. Christopher Alexander, *A Pattern Language* (New York: Oxford University Press, 1977), 455.

53. Ibid., 452.

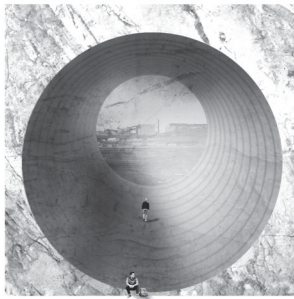
54. Ibid., 452.

The Sacred to the Everyday

Archetypes

Through the research and exploration it became clear to represent and further explore the ideas and concepts interpreted using architectural archetypes as a fundamental basis for design.

Moving forward the research and design further identified the common elements within religious architecture that provoke this feeling of deep inner reflection, contemplation and transcendence. Intuitively through the research and exploration a set of archetypes presented themselves as architectural elements to be used as a vocabulary for the thesis. These familiar elements, iconic in form and scale once situated in the city, along the streets and in the everyday, become inhabitable spaces to be occupied. The architectural elements are used as a way to reach another reality, inviting the city dweller to engage with them in the day-to-day, consciously and subconsciously interacting with the basic service each provides, as well as inviting a feeling of reflection, refuge and sense of the spiritual.



Portal



Arcade



Arcade

The *Portal* is a boundary archetype. At any scale, the appropriate use for the form recalls a place at an end or edge. Conceptually it presents itself as a place for the city dweller to reflect, both looking out and looking in as one identifies with a spatial end point or beginning point in a journey.

The *Arcade* is a formal archetype with multiple implications depending on how it is used within the streets and walls of the city. It can provide a series of niches if placed against a wall, or a series of views and a focused, intentional perspective if placed in the open. It provides shelter and direction. In religious architecture the arcade along a nave in a cathedral promotes and delineates a path.



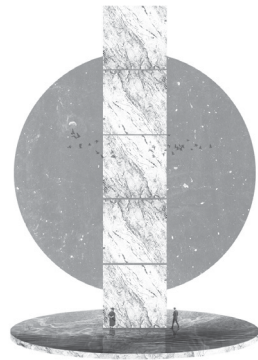
Room

The *Room* considers and confronts scale, enclosure and intersection. The placement, order and orientation of the room can be determined by an intersection or a point where corridors cross and convene. The room provides an opportunity and invitation to be inside, and to dwell. The form asks for a program that encourages a sanctuary. The city dweller might find themselves retreating to refuge within the room. The translation in the city could be equated to a bus shelter, another element in the urban realm where the city dweller is tempted to stop, a time to be in transition.



Courtyard

The *Courtyard* is a room of a larger scale and can provide a space to walk through in the urban realm. It is a public plaza or square for the city dweller to engage with in a basic and fundamental way. The courtyard can also provide a sanctuary and refuge off of the public street. With a cleared space in the urban fabric it encourages and enables light to reach the ground. Public seating invites the city dweller to stop and encounter what the courtyard has to offer.

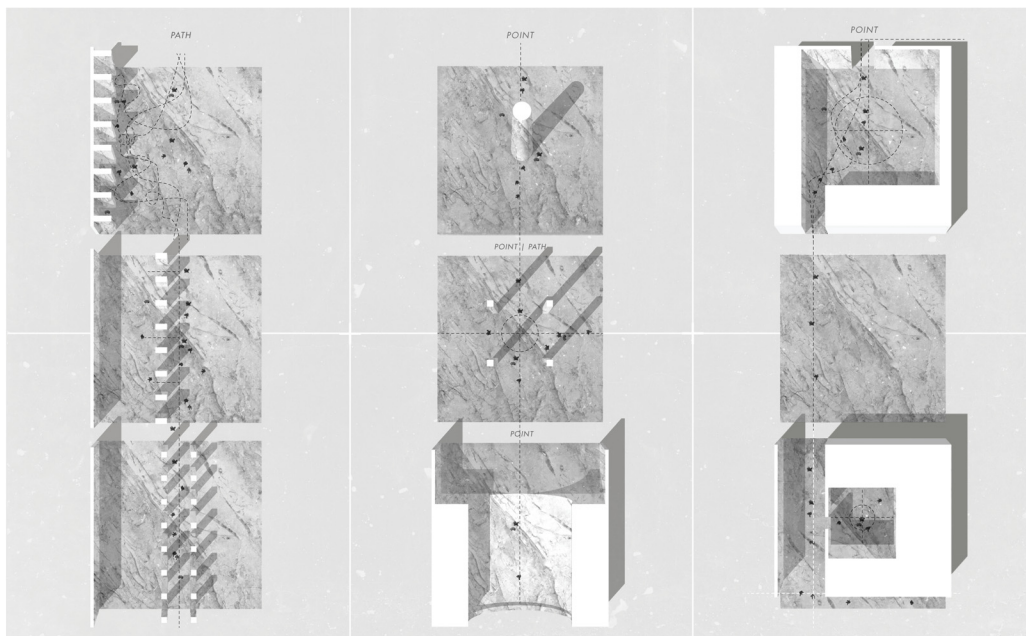
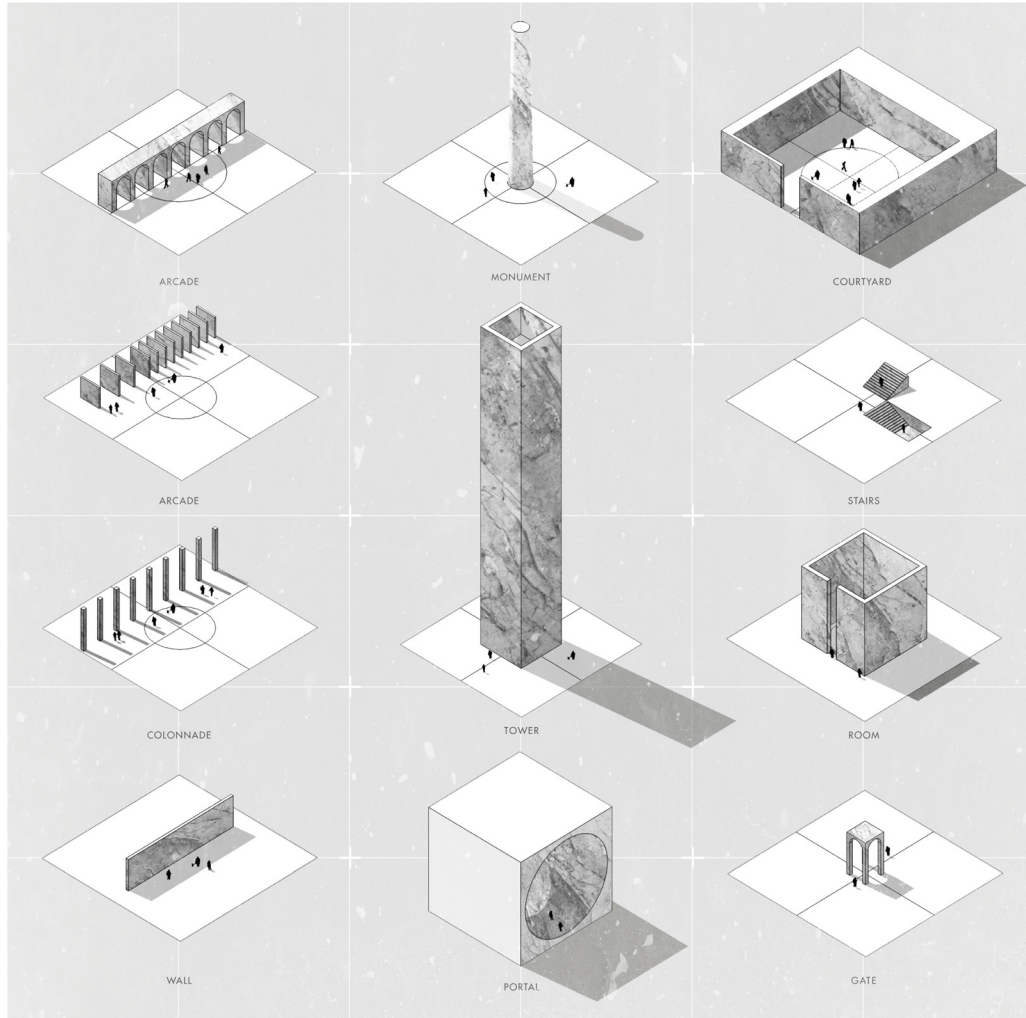


Tower

The *Tower* is a way-finding instrument and a marker in the skyline of the dense urban tower system. The form represents a point in the journey to ascend, the purpose being to climb up through a series of spaces, and continually experience new perspectives at new levels in order to engage with the city in a dynamic way. Once at the top of the tower a vista is provided for the city dweller. A new vantage point is given and a unique perspective of the city is established.

Each archetype based on its form, scale and how it is situated stimulates a certain situation and use. The Arcade and the Colonnade are path definers. The Monument, and the Portal create points, and have a centre. The Courtyard and The Room are

also points with defined gates or openings. They provide a centre within an enclosed space. The Tower is an amalgamation of all of these ideas, being a point, moment or centre in the sky. What exists in between is the critical formal idea being a vertical path.



Archetypes

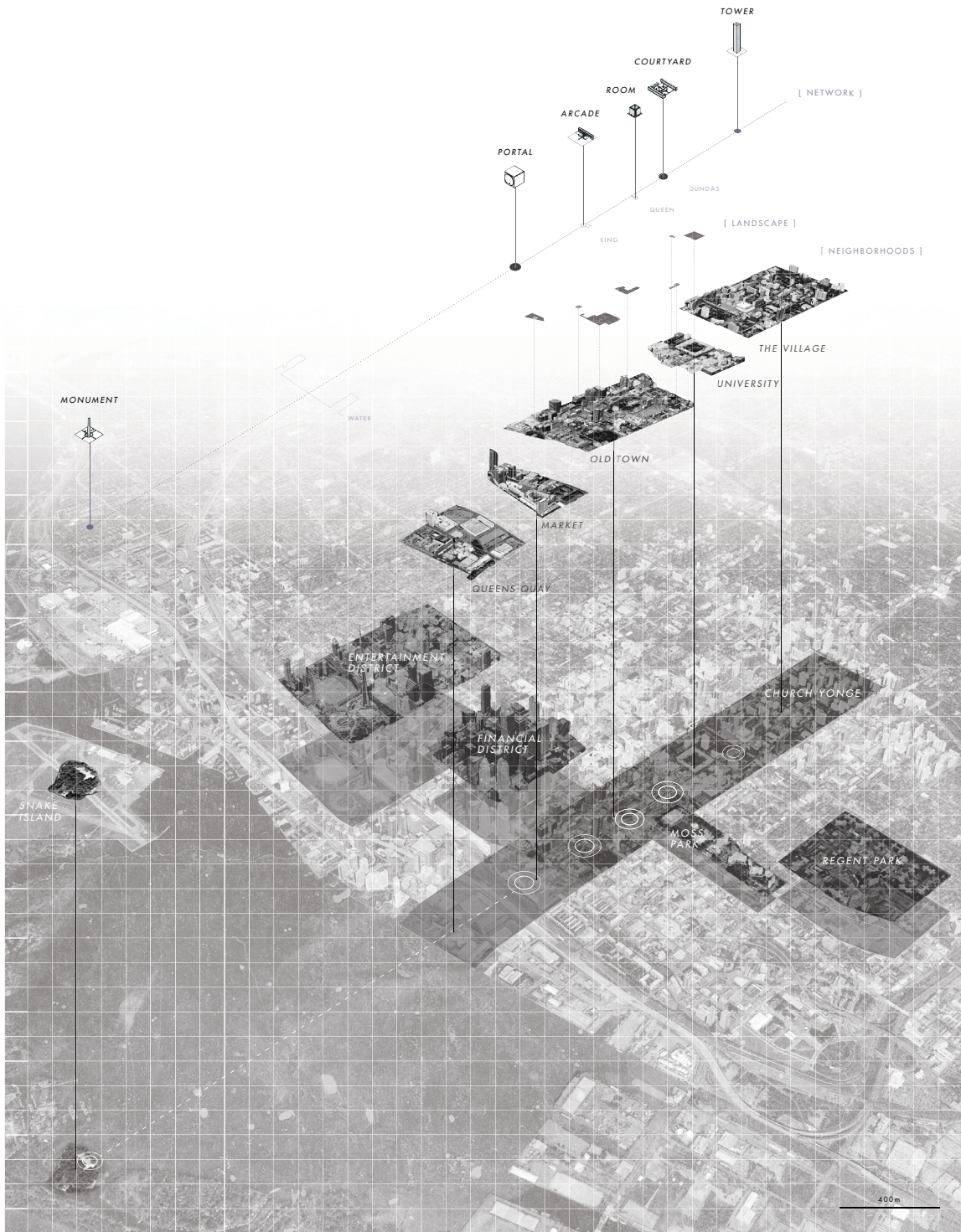
CHAPTER 3: SITE

Toronto: Church Street

Toronto is the city in which the project has been tested, a city with layers and diversity. It is in fact the most culturally diverse city in the country and one of the most multicultural cities in North America. The Church Street corridor will be the route along which the architecture will be developed along. The interventions have formed a network along Church Street which focus on major intersections. This network represents a proposed layer of public infrastructure to serve the city.

Communities and demographic converge in this area of the city. With the business district towering over the south east side, and Moss and Regent Park stretched across the east side, they meet at Church Street. As you head north in-between Queen and Dundas lies the commercial hub of the city. The Eaton Centre stretches across the west side of the neighbourhood, while lower income - public housing projects pop up all around the east side. This is an intersection point and the architecture has the possibility of reaching city dwellers from all walks of life.

The thesis manifested into six individual sites on Church Street, each being an illustration of a different archetype as well as demonstrating a way of integrating into the urban infrastructure.



Yonge-Church Corridor; base map from Google Maps

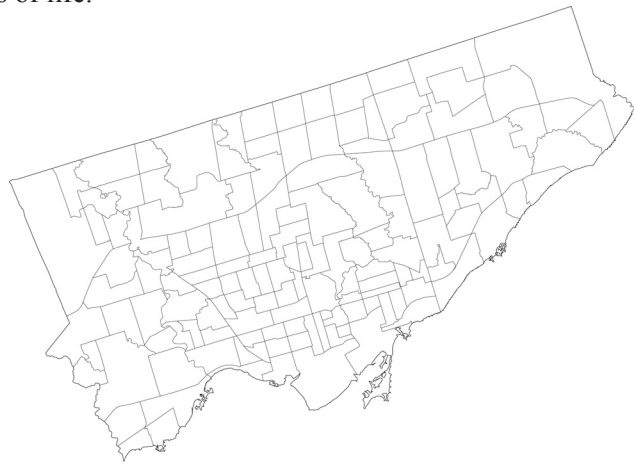
Pilgrimage

A criteria and foundation was established for how this typology of public space should manifest itself in the city. The concept of pilgrimage or the journey has loose implications on some of the formal and spatial decisions made in the thesis. Pilgrimage is a concept that extends to all faiths in some form, and is primitively religious. The Hajj is a mandatory Islamic pilgrimage to Mecca achieved by Muslims, while the el Camino de Santiago is an extremely popular Catholic pilgrimage route in Spain and the Harmandir Sahib being the primary pilgrimage site for the Sikhs. The spiritual journey has neither beginning or end, is not linear, is filled with distraction, reiterations, epiphanies and stops along the way. With all this in mind establishing a network that integrated with the common and public infrastructure of the city became part of the frame work for the thesis. It became clear for focus to be established on the critical intersections in the urban condition. The network has the ability to speak to multiple scales and becomes a narrative for the building, the site, the block, street and for the city.



Neighborhood

Establishing a network provides a sense of order and identifying specific conditions along the route are critical to the context of the thesis in the urban realm. In order for the project to be tested the condition should be at a location in the city where culture and demographics intersect, overlap and integrate. This would be a potential moment where the architecture has the possibility of reaching the greatest number of city dwellers from all different walks of life.



Toronto Neighborhoods; Toronto Open Data Catalogue

Landscape

Lastly it is important to understand and define the relationship the city has to the landscape and how it is implemented in the urban realm, whether it be park, garden, plaza, or public square.



Toronto Parks; Toronto Open Data Catalogue



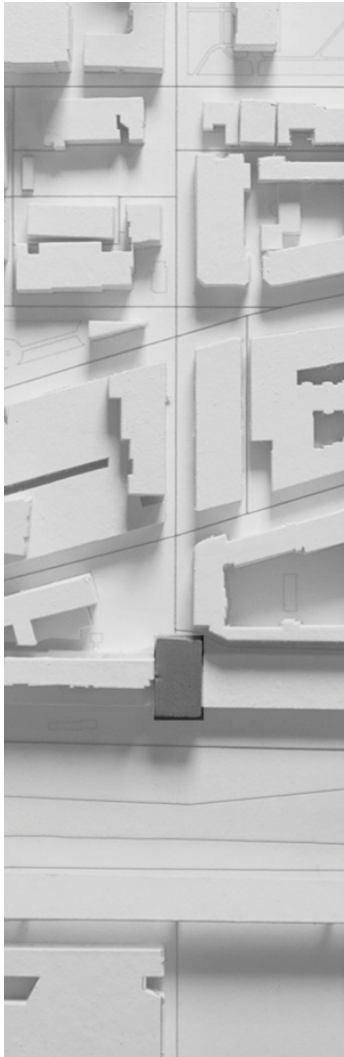
Church Street; base map data from Toronto Open Data Catalogue

CHAPTER 4: DESIGN

Portal

The site at the most southern point of Church Street is the Portal. The built form attempts to integrate and use the existing space within a parkade structure situated at the foot of Church Street. The linear path or axis established by Church Street and the urban grid currently stops abruptly at this point. With this insertion the axis continues and the path extends beyond the grid. Therefore the architectural intervention represents both end, beginning and in between. Conceptually it is about both looking out and looking within as you are placed at what feels like an edge of the city. At this point in the journey you could be unaware of what is in front of you or behind you as you look out onto industrial sites, the Gardiner expressway, the train tracks and the water beyond.

The physical manifestation of a conceptual idea is a literal hole or opening through a solid structure. A new view is established here.



Site model
Portal



Portal



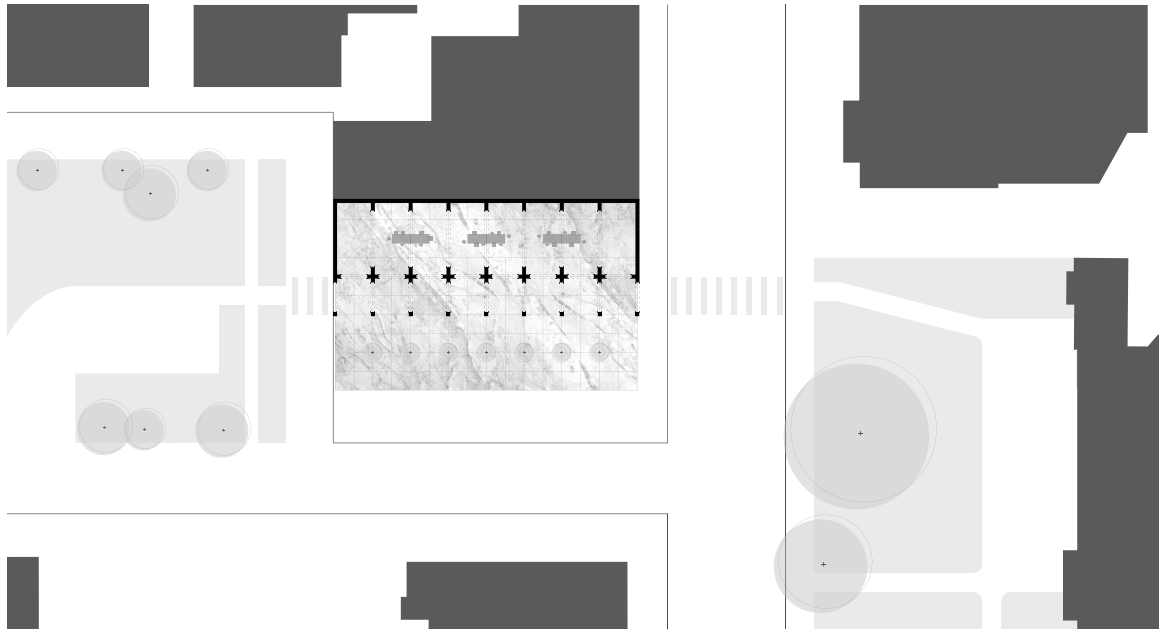
Site model
Arcade

Arcade

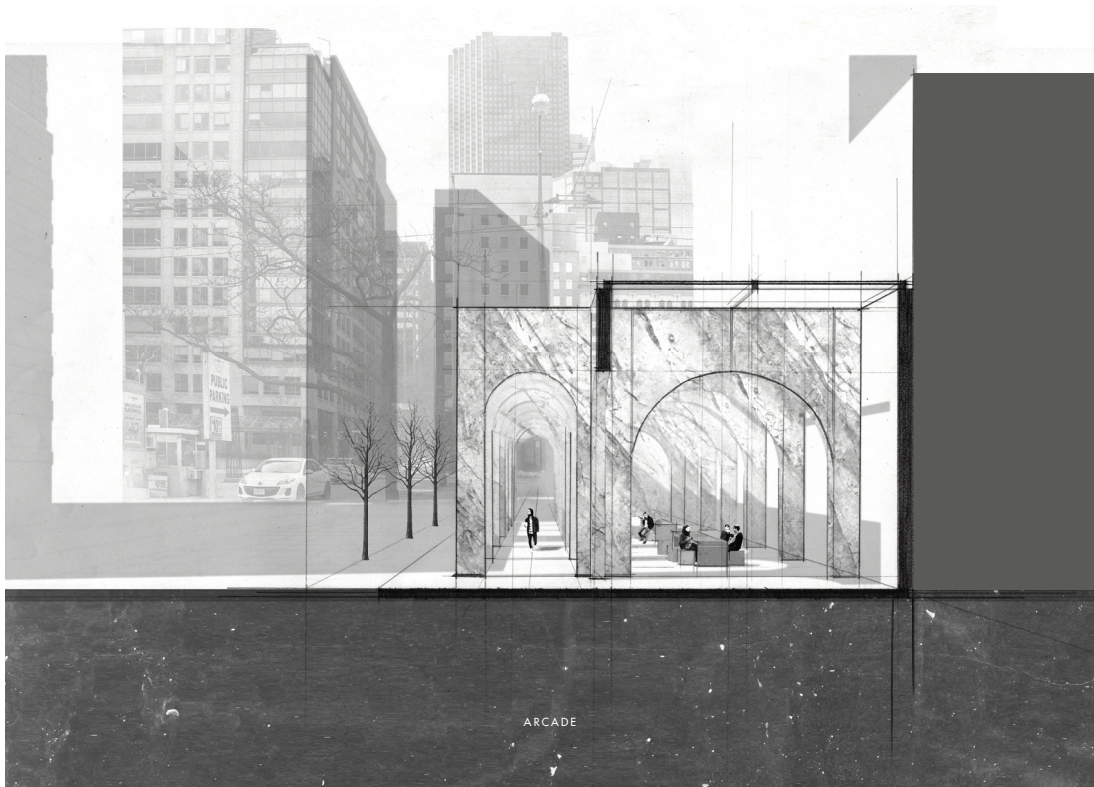
Further up Church Street north of King Street situated between two public parks stands the Arcades. On the east side of the street is St. James Park, a public space associated with the adjacent church. On the west side is Court House Square Park, a public park acknowledging the historic elements from the area including the old Courthouse on Adelaide Street.

The arcade archetype is a path definer, delineating a lane or passage. The design uses the arcade element. The repetition of this universal archetype forms an enclosed ‘interior’ space as well as a path. The outer archway makes a path which promotes a connection between the two parks on either side. The second archway creates an enclosed space for a public dining hall with community tables.

Within the context of the city, this design could be most equated to a public picnic area in a park. This space serves the city dweller escaping the office for lunch, or those seeking a shelter from the elements, be it wind, rain or snow. The space has the potential to allow family and friends to meet and share a meal. It is open air, but has a transparent canopy allowing light through while keeping the elements out. Even within the winter months, the sun reaches this room, and the large stone wall on north face can absorb and radiate the sun's warmth. Communal eating and nourishing the body is a sacred and everyday act that is celebrated within this space.



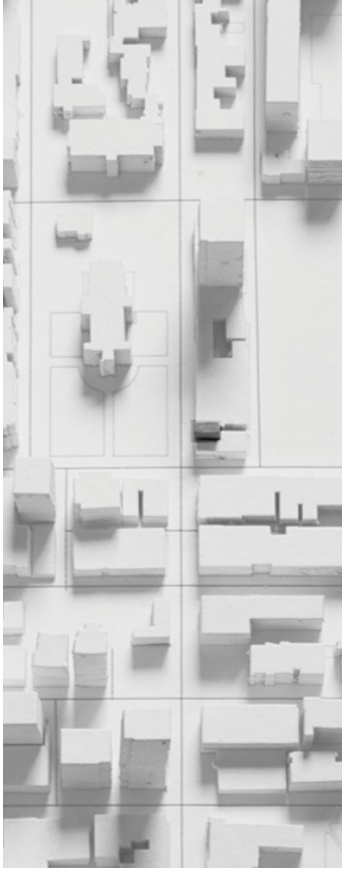
Plan



Section



Arcade in Context

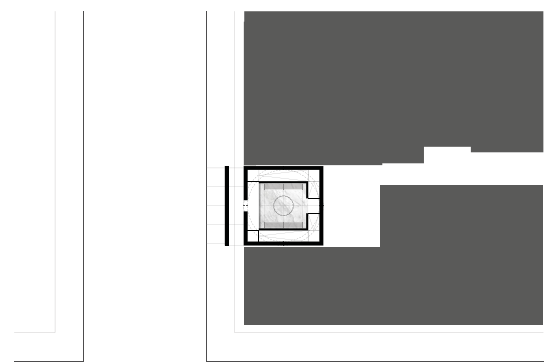


Site model
Room

Room

At Queen and Church Street is where the Room has been situated. Queen Street being a high traffic transit route for buses and streetcars makes for an appropriate place for the Room considering the amount of city dwellers who wait along these transit lines. Squeezed between a Shawarma shop and an odd retail store on the east side of Church Street sits the Room. A place provided to the city dweller in transition. It establishes a point between destinations, a pause in ones journey, and an alternative to the bus shelter.

The inhabitant enters through a small but tall opening behind a pulled out wall. The first interior wall you face is a screen allowing for a glimpse or reveal into the space. A ramp brings you around and up into an interior room lined on the perimeter with benches. Light spills into the space through a gap between the wall and roof. The roof is a convex sphere shape with an oculus open to the sky in the middle inviting the elements in to enhance the experience. On a rainy day the sound of the water falling and hitting the bed below provides a sense of peace and tranquility. Here one waits.

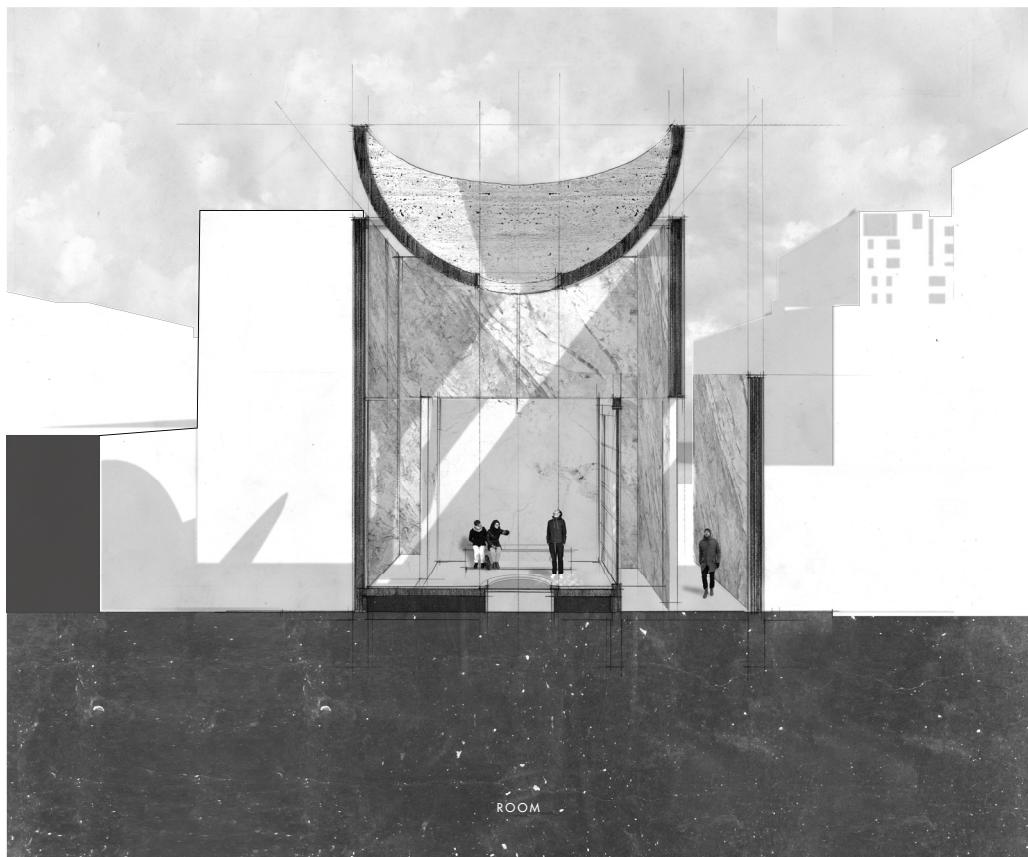


Plan





Room in Context

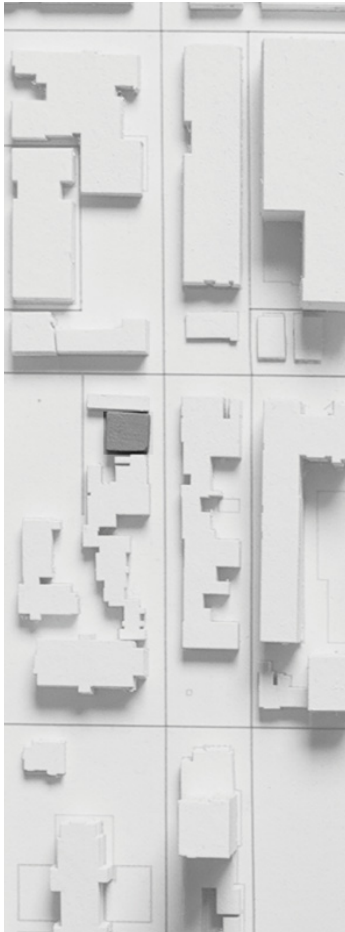


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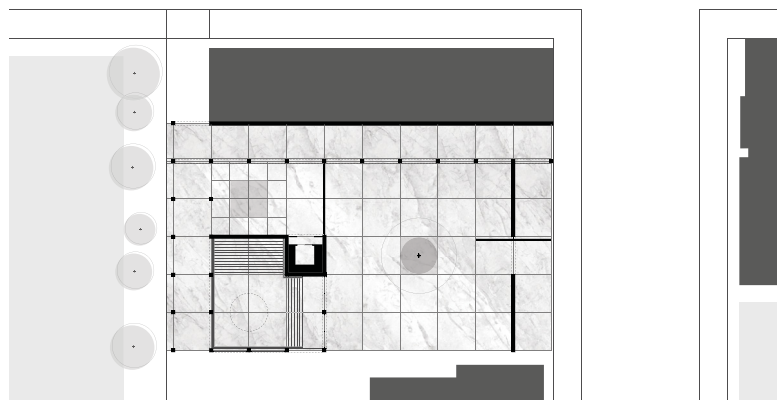
Courtyard

Dundas Street is what separates ‘Old Town’ from the Ryerson University campus and the Village. Dundas represents a commercial route extending east and west in the city from the Eaton Centre and Dundas Square.

At Church and Dundas, the proposal is for a Courtyard. The courtyard is a demonstration of enclosure and centre but at a greater scale than the Room. Once again situated tightly into the Church Street context between a Pizza-Pizza and a wax bar sits the courtyard. The courtyard is comprised of archetypes in order to establish itself as an archetype. From Church Street an opening or gate invites the city dweller to enter into the space. There is also a colonnade creating a walk-through as well as a great sense of enclosure inside the courtyard. The other two sides are created by a pavilion-like room that connects the city dweller to the proposed underground PATH system and to the subway station at Yonge and Dundas. The courtyard provides a space to walk through as a shortcut or to the underground system below.



Site model
Courtyard

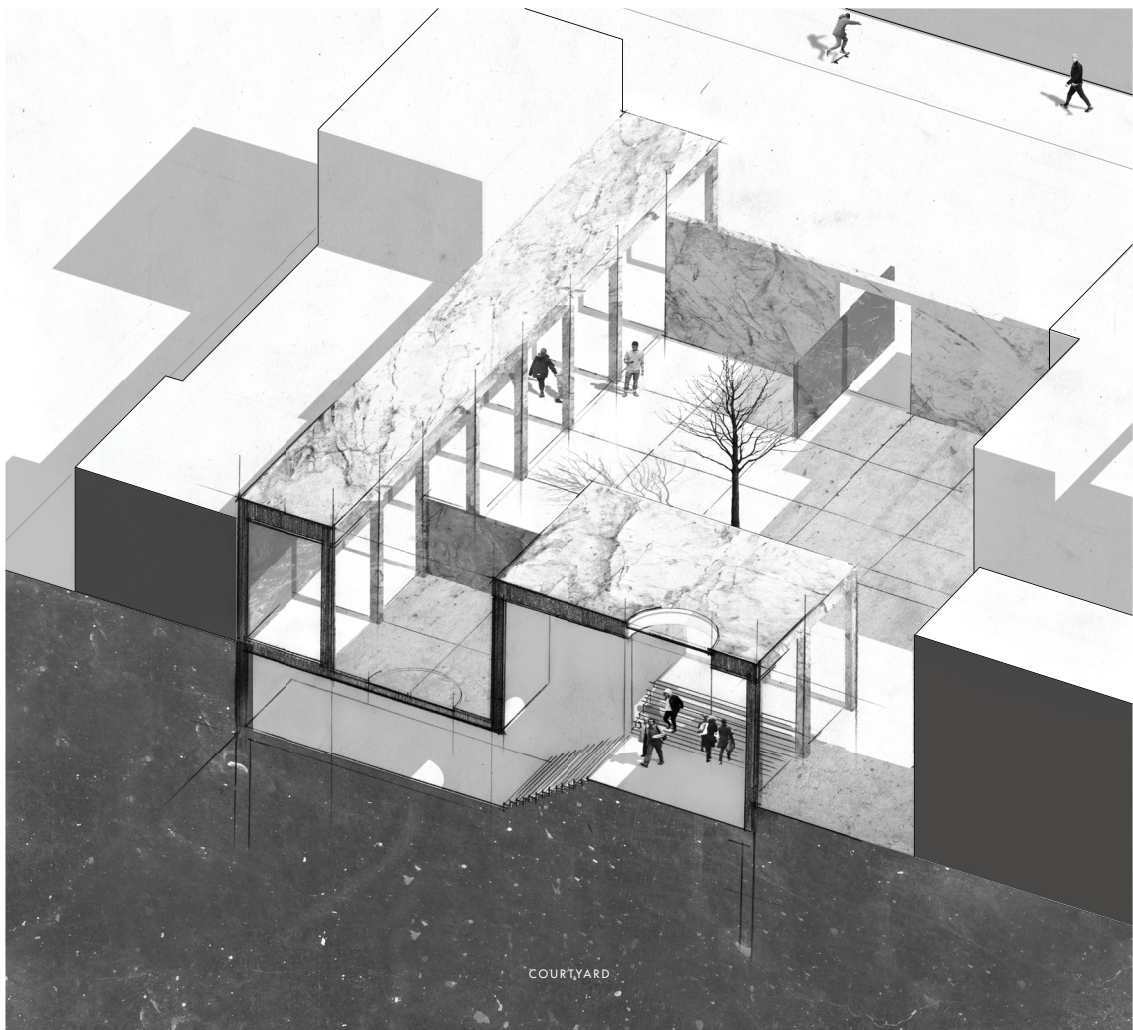


Plan

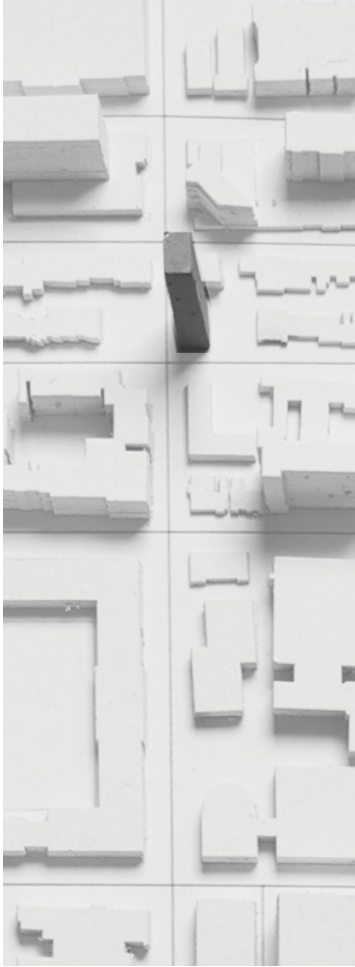




Courtyard in Context



Section

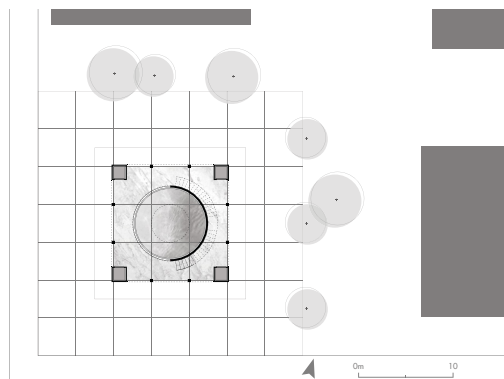


Site model
Tower

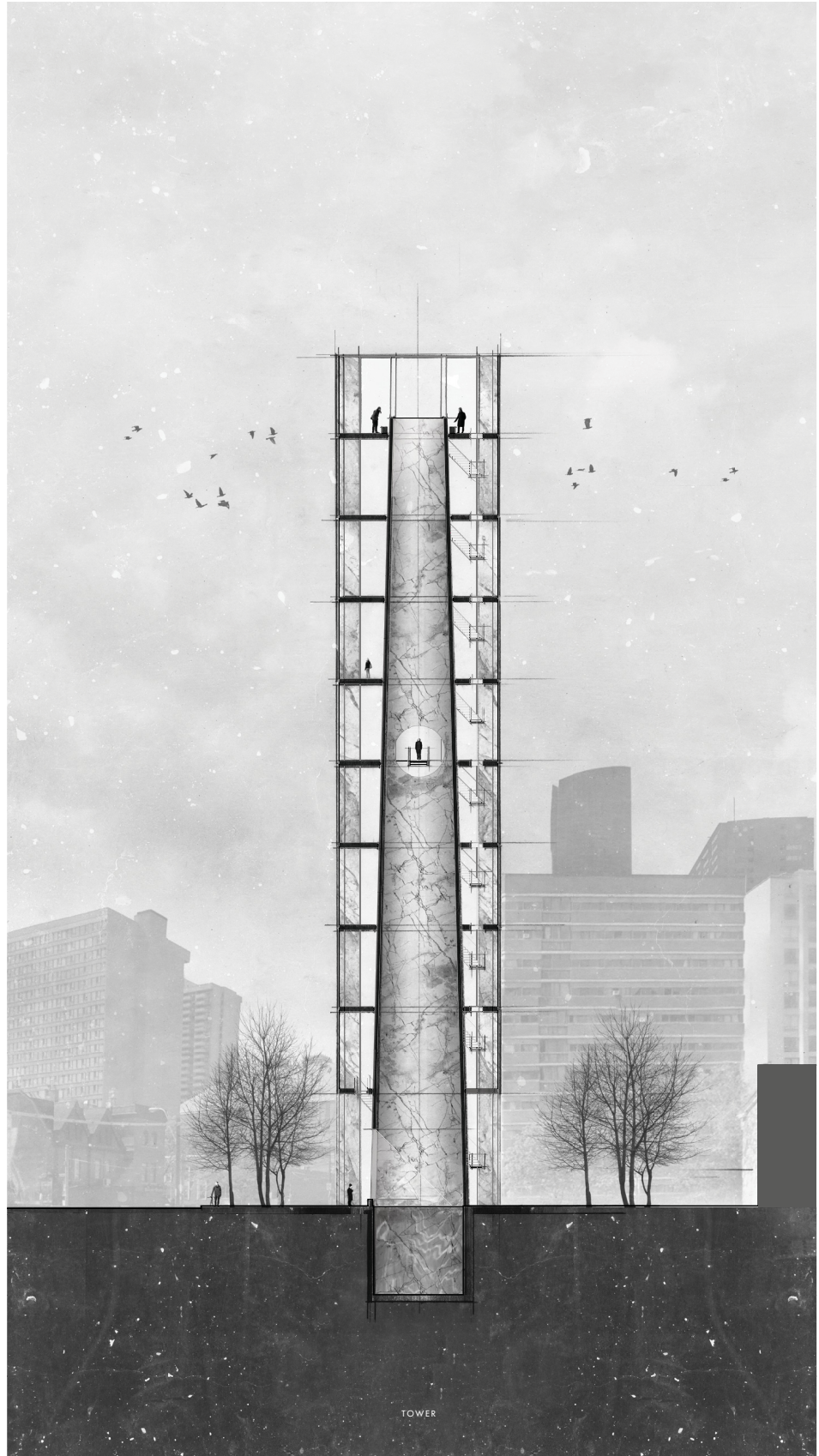
Tower

The Tower is situated on Church Street near Carlton in the Village. The Tower is an opportunity for the path to extend vertically and connect two points, one at the ground and one in the sky. It also represents a point in the journey to ascend for the purpose of experiencing a series of spaces and allowing the city dweller to observe new perspectives of their context through the journey upward.

The design consists of a pool of water placed in the middle of the ground floor plan. A cylinder of stone wraps around it extending upward creating a void that continues to the top floor. Openings at the base allow light into the void and surrounding the pond is a row of public seating. As the inhabitant ascends the airy staircase at each level one experiences the city at a new level. On the sixth level in the middle of the building the stone cylinder form is penetrated with a bridge, giving one the opportunity to cross the bridge and situate themselves at a critical point between water below and sky above. It is a particular moment on the journey for quiet and reflection. At the top of the tower the city dweller is given a full view of the urban realm around them. Highlighted is the view of the Toronto Harbour, Toronto Island and the horizon beyond. An expression and representation of the natural world. It is at this point in the journey that the inhabitant will notice the archetype situated on the island known as the Monument.



Plan



Section



Tower in Context

Monument

The Monument is a point in the landscape amongst the Toronto Islands. It's form is inherited from the Tower, being an exact replica or representation of the void in the middle of The Tower. It is a reference point from the perspective of the city. From Snake Island you can engage with the monument out in the water through a long pier. It is at this point that you can also look back onto the city and experience the skyline.



Site model
Monument



Monument in Context

CHAPTER 5: CONCLUSION

The design proposals initiated along Church Street are examples of one understanding of the sacred. It is a single interpretation of the meaning and definition of sacredness and what it could mean when placed in the public realm of the city. The interpretation is based on a religious vocabulary, which is where the design inherently was drawn from. At the same time that it represents sacred space, it also is an interpretation of a particular type of public space needed in our cities. The decision was made to design public space with a particular set of motives; to engage with the city infrastructure and at the same time evoke a particular feeling to the city dweller who experiences it.

It is important to note that each intervention of the project or pilgrimage can be experienced without the series and each intervention can be re-imagined in other locations in the city. Simultaneously it becomes part of the pilgrimage established along the street and represents an even greater network of public space that can exist throughout the urban realm and integrate with infrastructures, programs, neighbourhoods and layers of the city in various ways.

Furthermore, the ideas and concepts brought about in this thesis are meant to be transferable. Other cities and communities can integrate this approach to future public space as the need for inclusion and community becomes greater and there is an obligation for the city to serve the human spirit.

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