A SINGULAR ROOM

AN EXPLORATION OF BAHÁ'Í HOUSES OF WORSHIP

SAMA SHODJAI

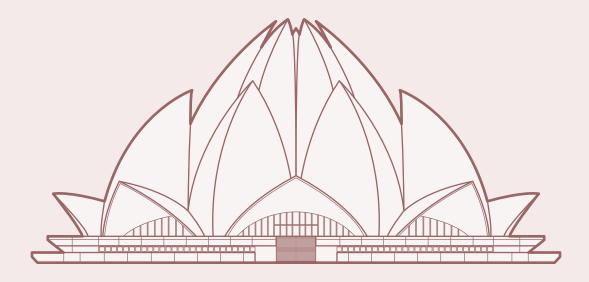
B.ENDS, University of British Columbia, 2018

Submitted in partial fulfillment of the requirements for the degree of Master of Architecture in The Faculty of Graduate Studies, School of Architecture and Landscape Architecture, Architecture Program

COMMITTEE

Matthew Soules (Chair) Neda Samimi Sarvenaz Amanat

© December 2023



ii

Figure 1.Continental House of Worship of Asia in India

ABSTRACT

Architecture has long served as a means to express spiritual teachings through the built environment. The Bahá'í Faith, the most recent world region, teaches the oneness of God, of religion, and of humanity. Over the past century and a half, the Bahá'í community has been exploring how to express these teachings through the architecture of its places of worship, called Bahá'í Houses of Worship. Between 1912 and 2016, eight continental Houses of Worship were constructed worldwide. A new phase of development is now under way focusing on Houses of Worship at the local and national levels. Designing at the national level presents a unique challenge for the Bahá'í community, as there are limited existing examples to draw from. Notably, the first national temple was recently completed in the Democratic Republic of the Congo, a temple is currently under construction in Papua New Guinea, and Canada has been selected as the next country to house a national temple.

This project aims to explore the intricacies and considerations involved in the design process of a national level House of Worship, using Canada as a case study. By examining the design principles, cultural integration, and inclusivity within the defined spatial parameters, this research seeks to shed light on the architectural expressions of the Bahá'í Faith's teachings and their embodiment in a proposed design for the national temple of Canada.

iii

A SINGULAR ROOM

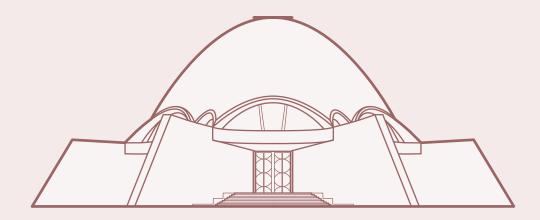


Figure 2.Continental House of Worship of Central America in Panama

TABLE OF CONTENTS

TABLE OF CONTENTSv
LIST OF FIGURESvi
ACKNOWLEDGEMENTx
DEDICATIONxi
THESIS STATEMENTxiii
METHODOLOGYxiv
BASIC CONCEPTS1
THE BAHÁ'Í FAITH
WHAT BAHÁ'ÍS BELIEVE4
WHAT BAHÁ'ÍS DO8
EMERGING BAHÁ'Í ARCHITECTURE
PROJECT INTENT
BAHÁ'Í HOUSES OF WORSHIP25
BAHAT HOUSES OF WORSHIP 25
DEFINED PARAMETERS
DEFINED PARAMETERS
DEFINED PARAMETERS
DEFINED PARAMETERS
DEFINED PARAMETERS 28 NATIONAL AND CONTINENTAL 49 NATIONAL AND LOCAL 65 CONCLUSION 80
DEFINED PARAMETERS
DEFINED PARAMETERS
DEFINED PARAMETERS 28 NATIONAL AND CONTINENTAL 49 NATIONAL AND LOCAL 65 CONCLUSION 80 DESIGN PROPOSAL 83 INTRODUCTION 84 SITE 86
DEFINED PARAMETERS 28 NATIONAL AND CONTINENTAL 49 NATIONAL AND LOCAL 65 CONCLUSION 80 DESIGN PROPOSAL 83 INTRODUCTION 84 SITE 86 DESIGN CONCEPT 88

iv

LIST OF FIGURES

Figure 1. Continental House of Worship of Asia in India	Author	ii
Figure 2. Continental House of Worship of Central America in Panama Autho		iv
Figure 3. Continental House of Worship of Europe in Germany Author		xii
Figure 4. Socio-Cultural and Typological Context	Author	xvi
Figure 5. Local House of Worship in Norte del Cauca, Co	olombia Author	xviii
Figure 6. The Earth is One Country	Ilsur Aptukov, Noun Project	3
Figure 7. One God, One Religion	Author	5
Figure 8. Fruits of One Trees	Kristina Margaryan, Noun Project	6
Figure 9. Education	Author	7
Figure 10. Community Building Programs	Author, icons by Noun Project	9
Figure 11. Places of Prayer	Author, icons by Noun Project	10
Figure 12. Devotional Gathering, Mongolia	© Bahá'í International Community, Bahai.org	11
Figure 13. Devotional Gathering, United Kingdom	© Bahá'í International Community	11
Figure 14. Continental House of Worship of Australasia	in Australia Author	12
Figure 15. Collage, Shrines and Holy Places	© Bahá'í International Community	15
Figure 16. Collage, Administrative Buildings	© Bahá'í International Community	17
Figure 17. Collage, Bahá'í Centres	Google Maps Street View	19
Figure 18. Bahá'í Houses of Worship Au	thor, photos from © Bahá'í International Community	21
Figure 19. Construction Timeline	Author	23
Figure 20. Continental House of Worship of Africa in Ug	ganda Author	24
Figure 21. Map of Bahá'í Houses of Worship	Author	26
Figure 22. Basic Requirements	Author	29
Figure 23. The Number Nine	Author	30
Figure 24. Level Plan Compared to other Places of Wors	ship Author	31
Figure 25. Form	Author	32
Figure 26. Style	Author	35

Figure 27. Scale	Author	37
Figure 28. Program	Author	38
Figure 29. Temporal Occupancy	Author	41
Figure 30. Interior Adornment, View of Ceiling	© Bahá'í International Community	43
Figure 31. Light in Houses of Worship	© Bahá'í International Community	45
Figure 32. Subsidiary Branches	Author	47
Figure 33. Houses of Worship, Papua New Guinea and South America	© Bahá'í International Community	48
Figure 34. House of Worship of Papua New Guinea: Siting	Author	52
Figure 35. House of Worship of South America: Siting	Author	53
Figure 36. House of Worship of Papua New Guinea: Size, Mass, Form	Author	54
Figure 37. House of Worship of South America: Size, Mass, Form	Author	55
Figure 38. House of Worship of Papua New Guinea: Floor Plan	Author	56
Figure 39. House of Worship of South America: Floor Plan	Author	57
Figure 40. House of Worship of Papua New Guinea: Seating Layout	Author	58
Figure 41. House of Worship of South America: Seating Layout	Author	59
Figure 42. House of Worship of Papua New Guinea: Ceiling Plan	Author	60
Figure 43. House of Worship of South America: Ceiling Plan	Author	61
Figure 44. House of Worship of Papua New Guinea: Landscape	Author	62
Figure 45. House of Worship of South America: Landscape	Author	63
Figure 46. Houses of Worship, DRC and Tanna	© Bahá'í International Community	64
Figure 47. House of Worship of DRC: Siting	Author	68
Figure 48. House of Worship of Tanna: Siting	Author	69
Figure 49. House of Worship of DRC: Size, Mass, Form	Author	70
Figure 50. House of Worship of Tanna: Size, Mass, Form	Author	71
Figure 51. House of Worship of DRC: Floor Plan	Author	72
Figure 52. House of Worship of Tanna: Floor Plan	Author	73

vii

igure 53. House of Worship of DRC: Seating Layout Author		74
Figure 54. House of Worship of Tanna: Seating Layout Author		75
Figure 55. House of Worship of DRC: Ceiling Plan Author		76
Figure 56. House of Worship of Tanna: Ceiling Plan Author		77
Figure 57. House of Worship of DRC: Landscape Author		78
Figure 58. House of Worship of Tanna: Landscape Autho		79
Figure 59. Local House of Worship in Battamban	g, Cambodia Author	81
Figure 60. Design Proposal: Elevation	Author	82
Figure 61. Defined Parameters Summarized	Author, images from © Bahá'í International Community	85
Figure 62. Context Map: Toronto	Author	86
Figure 63. Site Plan	Author	87
Figure 64. Historical Context Timeline	Author, images from © Bahá'í International Community, R. D. Barry, tablets-divine-plan.blogspot.com, bahai.ca	
Figure 65. Study Models 1	Author	
Figure 66. Study Models 2	Author	91
Figure 67. Study Models 3	Author	92
Figure 68. Early Development Sketches 1	Author	93
Figure 69. Early Development Sketches 2	Author	94
Figure 70. Early Development Sketches 3	Author	9!
Figure 71. Study Models 4	Author	96
Figure 72. Study Models 5	Author	97
Figure 73. Exterior Render: Temple Approach	Author	99
Figure 74. Site Plan and Roof Plan	Author	100
Figure 75. Ground Floor Plan	Author	101
Figure 76. Elevation	Author	103
Figure 77. Section A	Author	105
Figure 78. Section B	Author	107

Figure 79. Exploded Isometric Diagram	Author, images from © Bahá'í International Community, unsplash.com	
Figure 80. Renderings	Author	111
Figure 81. Physical Model Photos 1	Author	113
Figure 82. Physical Model Photos 2	Author	114
Figure 83. Physical Model Photos 3	Author	115

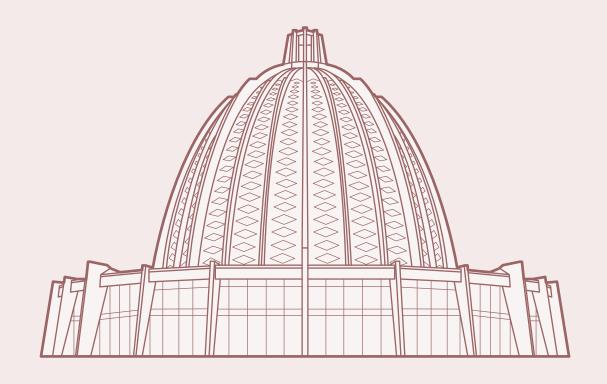
viii

Thank you to my dedicated committee members–Matthew, Neda, and Sarvenaz–for their invaluable guidance and contagious enthusiasm that propelled this project forward.

X

This project is dedicated to my parents, whose unwavering support, love, and endless encouragement have been the cornerstone of my academic journey.

хi



THESIS STATEMENT

Within the defined spatial parameters of a Bahá'í House of Worship lies the challenge of designing a singular room that is deemed sacred to all–regardless of race, gender, age, or religious background–while also embodying cultural elements that tie the temple to its site and the population it seeks to welcome.

Figure 3.Continental House of Worship of Europe in Germany

xii

METHODOLOGY

QUALITATIVE (MIXED METHOD) RESEARCH

A qualitative research approach is suited to my project due to its interpretive nature. Researching architecture that is expressive of spiritual principles and teachings will require the consideration of multiple perspectives, since there are countless ways that these can be expressed in built form (a holistic approach); flexibility and adaptability will be essential both during the research and design phases, as there is no single solution to the issue (an open-ended approach); a full acknowledgement of my own biases and perspectives will also be essential, since the conclusions of my research will be based on my own personal experiences and understanding.

xiv

TACTICAL SEQUENCE OUTLINE

1. Data Collection A: Conceptual Research

- A. Defining and describing the core principle and tenets of the Bahá'í Faith
- B. Identifying relevant key literature at the level of ideas and concepts

2. Data Collection B: Case Study Research

- A. Identifying selected existing projects that express the ideas and concepts identified above in built form
- B. Analysis and comparison of identified projects
- C. Interviews with architects of related projects

3. Synthesis: Drawing Conclusions

- A. Analysis of both conceptual and case study research
- B. Extraction of key conclusions

ΧV

ONGOING:

4. Mapping and Diagraming

- A. Visually mapping and drawing key findings
- B. Identifying a specific site for the project based on a defined list of criteria

SPATIAL / TYPOLOGICAL CONTEXT



xvi

BAHÁ'Í HOUSES OF WORSHIP **HUMAN-CENTRIC DESIGN**

INCLUSIVE DESIGN

HUMAN SCALE

CULTURAL EXPRESSION

COMMUNITY SPACES

HOME

VILLAGE

GARDENS

TEMPLE

PLACES OF WORSHIP

COURTYARDS

MICRO-COMMUNITY

OPEN

LIGHT

SHARED SPACES

FREE OF SPATIAL HIERARCHY

SPACE FOR GATHERING

SPACE FOR SHARING

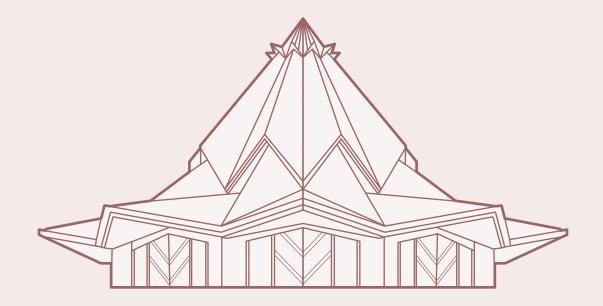
SPACES FOR FAMILIES

EXTERIOR VS. INTERIOR

COMMUNITY BASED DESIGN

Figure 4.Socio-Cultural and Typological Context

xvii



CHAPTER 1

BASIC CONCEPTS

Figure 5.Local House of Worship in Norte del Cauca, Colombia

xviii

THE BAHÁ'Í FAITH

The Bahá'í Faith is a religion founded in the mid-19th century in Iran that teaches the spiritual unity of humanity and the oneness of God. The teachings of Bahá'u'lláh, the founder of the Bahá'í Faith, have spread across the globe in last century and a half, reaching over 8 million followers to date, spread throughout most of the world's countries and territories.

The Bahá'í Faith is, at its heart, a Faith of inclusion, a religion of unity in diversity, based on the recognition that the human race is approaching a stage of maturity. In the words of the Faith's founder, Bahá'u'lláh, "the earth is but one country and mankind its citizens." The mission of the Bahá'í community is to give active meaning to this belief, in all aspects of its work.¹

The Bahá'í Faith is different from traditional religions, as it does not have a central focus on laws and authority. Instead, it centers around the concept of equality of all people, and thus there are no spiritual leaders within the community. The community believes in promoting the oneness and unity of humanity by actively eliminating all forms of prejudice, building meaningful relationships with people from different backgrounds, and making efforts to learn from the communities they reside in.

"The earth is but one country, and mankind its citizens."²

3

2

Figure 6. The Earth is One Country

¹ Hariri Pontarini Architects, Embodied Light: The Bahá'í Temple of South America (Basel, Switzerland: Birkhauser, 2018), 13.

² Bahá'u'lláh, Gleanings from the Writings of Bahá'u'lláh(Bundoora, Australia: Baha'i Publications Australia, 2011), 282.

WHAT BAHÁ'ÍS BELIEVE

Bahá'í beliefs address themes such as freedom from prejudice, the equality of the sexes, the harmony and agreement between science and religion, the centrality of justice to all human endeavours, and the importance of education.³

ONE GOD

The Bahá'í teachings explain that there is only one God. God is called by different names throughout history. While the nature of God is beyond human understanding, we may learn about Him through the teachings of the Messengers He has sent to educate and guide humanity.⁴

ONE RELIGION

Humanity's spiritual, intellectual, and moral capacities have been cultivated through the successive teachings of the Founders of the world's religions. Among Them are Krishna, Abraham, Moses, Zoroaster, Buddha, Jesus Christ, and Muhammad. Bahá'u'lláh, the latest of these Messengers, explained that each religion originates from the same Source and is suited to the age and place in which it is revealed. In essence, the religions of the world are successive chapters of one religion.⁵

"...view all the Prophets and Messengers of God as one soul and one body, as one light and one spirit..."

5

ABRAHAM

-5000 B.C.

-5000 B.C.

-1330 B.C.

-700 B.C.

^{3 &}quot;The Bahá'í Faith," The Bahá'í Faith, accessed February 19, 2023, https://www.bahai.org/.

^{4 &}quot;The Bahá'í Faith."

^{5 &}quot;The Bahá'í Faith"; "Bahá'ís of the Unites States," accessed February 21, 2023, https://www.bahai.us/beliefs/.

⁶ Bahá'u'lláh, Gems of Divine Mysteries (Bundoora, Australia: Baha'i Publications Australia, 2007), 33.

Figure 7. One God, One Religion

ONE HUMAN FAMILY

From a Bahá'í perspective, the diversity that characterizes mankind, far from contradicting its oneness, endows it with richness. Unity, in its Bahá'í expression, contains the essential concept of diversity, distinguishing it from uniformity. This core belief in oneness calls us to actively root out our prejudices and the systematic inequalities that divide people of different ethnic backgrounds, national origins, genders, and social classes. 8

Beyond all differences of race, culture, class, or ethnicity, regardless of differences in customs, opinions, or temperaments, every individual is a member of one human family.⁹

"Ye are the fruits of one tree, and the leaves of one branch. Deal ye one with another with the utmost love and harmony, with friendliness and fellowship." 10



Figure 8. Fruits of One Trees

EDUCATION

The Bahá'í Faith places a strong emphasis on the value of education as an essential means of spiritual and intellectual development, both at an individual and societal level. The Faith's teachings stress the need for education that fosters independent thinking and the acquisition of practical skills, in addition to moral education. The Bahá'í community has established numerous educational institutions worldwide, ranging from preschools to universities, and encourages all individuals to pursue education throughout their lives. Furthermore, the Bahá'í community has developed educational programs for various ages. These programs aim to integrate moral and academic education as complementary schools of knowledge and are primarily carried out in neighbourhood settings as community-building activities.

"Regard man as a mine rich in gems of inestimable value. Education can, alone, cause it to reveal its treasures, and enable mankind to benefit therefrom."

11

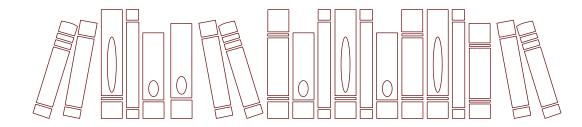


Figure 9. Education

⁷ The Universal House of Justice, "Message on World Peace" (Bahá'í International Community, January 18, 2019).

^{8 &}quot;Bahá'ís of the Unites States."

^{9 &}quot;Bahá'ís of the Unites States."

¹⁰ Gleanings from the Writings of Bahá'u'lláh, 326.

¹¹ Gleanings from the Writings of Bahá'u'lláh, 294.

WHAT BAHÁ'ÍS DO

COMMUNITY BUILDING PROGRAMS

Across the globe, Bahá'ís are collaborating with their friends and neighbors to create patterns of community life that promote spiritual and material progress for all. The Bahá'í approach to community-building places special emphasis on the role of education. As part of this approach, educational programs for different age groups have been established: classes for children focus on teaching universal values like honesty, kindness, humility, and compassion; programs for adolescents provide spaces for meaningful conversations, aim to improve their literacy skills, and offer opportunities for exploring their unique talents and abilities through community service projects. Study groups for adults are designed to develop their capacity to serve their communities in meaningful ways. The purpose of these programs is to encourage more and more people to take ownership of the betterment of their communities, regardless of whether they are Bahá'í or not. In fact, a notable proportion of participants in these programs are not Bahá'í.

CHILDREN'S CLASSES

Classes for children ages 5-11 that focus on teaching universal values like honesty, kindness, humility, and compassion.



JUNIOR YOUTH SPIRITUAL EMPOWERMENT PROGRAM

Programs for adolescents aged 12-15 that provide spaces for meaningful conversations, aim to improve their literacy skills, and offer opportunities for exploring their unique talents and abilities through community service projects



STUDY CIRCLES

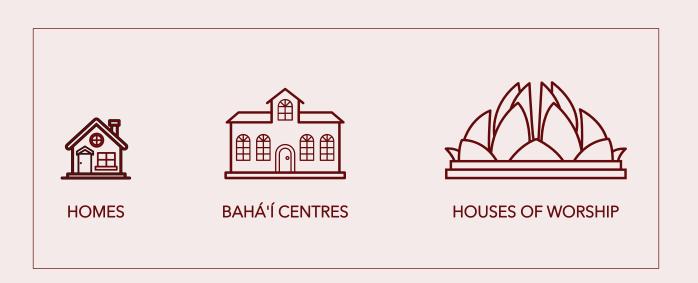
Study groups for youth and adults designed to develop their capacity to serve their communities in meaningful ways.

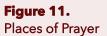


Figure 10.Community Building Programs

PRAYER

The Bahá'í teachings explain prayer is essential for spiritual growth and well-being, just as food is necessary for physical development. Bahá'ís often hold informal prayer gatherings in their homes with their friends and neighbors. There are no specific rituals or designated roles. These gatherings usually involve reading prayers and passages from the Bahá'í texts in an informal yet respectful atmosphere. Additionally, uplifting music and songs are often incorporated into the gatherings. Some people may choose to incorporate their local culture, such as chanting prayers in different styles or singing to traditional drumming rhythms. These prayer gatherings help to create a positive community spirit that can influence collective efforts. Nowadays, thousands of such devotional meetings are held regularly in localities across the globe. ¹²





12 "The Bahá'í Faith."

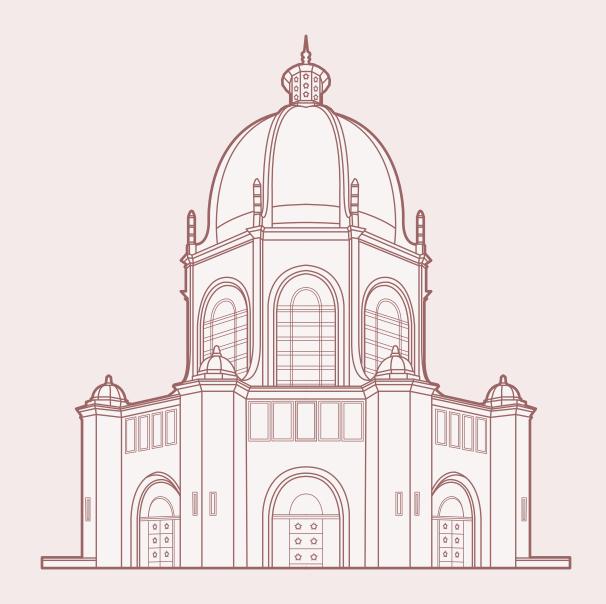


A devotional gathering in Erdenbulgan, Mongolia



A devotional gathering in London, United Kingdom

Figure 12.
Devotional Gathering, Mongolia
Figure 13.
Devotional Gathering, United Kingdom



12

Figure 14.Continental House of Worship of Australasia in Australia

EMERGING BAHÁ'Í ARCHITECTURE

While previous religions have had thousands of years to develop their own unique architectural styles, the Bahá'í Faith, which is only 180 years old, has not yet established a distinct style or type of architecture that can be called "Bahá'í architecture". Nonetheless, there are several buildings around the world that are associated with the Faith, which can be roughly grouped into four categories:

- 1. Shrines and Holy Places
- 2. Administrative buildings at the Bahá'í World Centre
- 3. Bahá'í Centres
- 4. Bahá'í Houses of Worship

SHRINES AND HOLY PLACES

The majority of Bahá'í Holy Places are located in the cities of Haifa and Akká in Israel. These Holy Places include the Shrines of Bahá'u'lláh, who is the founder of the Bahá'í Faith, and other important figures of the Faith. There are also several heritage buildings that have played a significant role in the religion's history. Bahá'ís from around the world visit these Holy Places as part of a pilgrimage to reflect, meditate, and pray at these sites. Most of these Holy Places have been beautified with vast gardens surrounding them.

























Figure 15. Collage, Shrines and Holy Places

ADMINISTRATIVE BUILDINGS AT THE BAHÁ'Í WORLD CENTRE

The Bahá'í World Centre is located on Mount Carmel in Haifa, Israel, and serves as the international administrative centre of the Bahá'í Faith. The buildings that make up the centre were built over several decades and are arranged in the shape of an arc. More than 600 volunteers from around the world work in these buildings, which house offices, auditoriums, conference rooms, research facilities, libraries, and archives of the Faith's historical artifacts. The exterior design of the buildings draws inspiration from the Classical Orders, reflecting their enduring beauty. 13





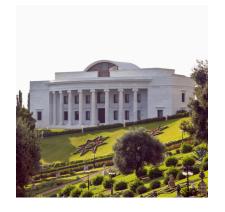






Figure 16.Collage, Administrative Buildings

17

13 Heba Maleki, "Progressive Formation" (Vancouver, BC, The University of British Columbia, 2014), 82.

BAHÁ'Í CENTRES

Bahá'í Centres are places of gathering in whichever city they are situated. They serve as hubs for various activities and events, including prayer gatherings, meetings, Bahá'í elections, and social gatherings. These Centres are often spatially adaptable to cater to various programs. Since there are no rituals in the Bahá'í Faith, the architectural expression among the Centres varies across the globe. Hahá'í Centres are not merely traditional community centres; rather, they are envisioned to be a physical reflection of the love, unity, and diversity that exist in the Bahá'í community. At this early stage of the Bahá'í Faith's development, most Bahá'í Centres are existing buildings that have been purchased and retrofitted to serve as provisional Bahá'í Centres.

18



















14 Maleki, 84.

Figure 17. Collage, Bahá'í Centres

BAHÁ'Í HOUSES OF WORSHIP

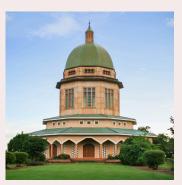
One of the major undertakings pursued on a global level by the Bahá'í community has been the construction of places of worship. This process began with establishing central "Houses of Worship" to serve each continent. Plans for national and local temples are now also underway.¹⁵

Bahá'í Houses of Worship are a relatively modern architectural typology that embody the principle of the oneness and unity of mankind. These edifices are places of worship for peoples of all faiths and backgrounds, not just Bahá'ís. It is envisioned in the Bahá'í teachings that, in the future, a House of Worship would be built in every town and village.¹⁶

CONTINENTAL



House of Worship of North America Chicago, Illinois 1953



House of Worship of Africa Kampala, Uganda 1961



House of Worship of Australasia Sydney, Australia 1961



House of Worship of Europe Frankfurt, Germany 1964



House of Worship of Central America Panama City, Panama



House of Worship of the Pacific Apia, Samoa 1984



House of Worship of Asia New Delhi, India 1986



House of Worship of South America Santiago, Chile 2016

LOCAL



House of Worship of Battambang, Cambodia 2017



House of Worship of Norte del Cauca, Colombia 2018



House of Worship of Matunda Soy, Kenya 2021



House of Worship of Tanna, Vanuatu 2021



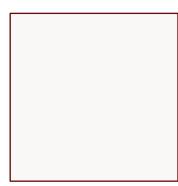


House of Worship of the Democratic Republic of the Congo 2023



NATIONAL

House of Worship of Papua New Guinea (under construction)



House of Worship of Canada

15 Embodied Light: The Bahá'í Temple of South America, 13.

16 "The Bahá'í Faith."

Figure 18. Bahá'í Houses of Worship

20

PROJECT INTENT

Among the various architectural expressions of the Bahá'í Faith, Bahá'í Houses of Worship stand as the most representative examples, explicitly designed to embody the Faith's fundamental principle of the oneness and unity of mankind. With eight continental Houses of Worship constructed worldwide between 1912 and 2016, a new phase of development now focuses on building Houses of Worship at the local and national levels. Designing at the national level poses a distinct challenge for the Bahá'í community due to the limited existing examples to draw from. Notably, the recent completion of the first national temple in the Democratic Republic of the Congo, the ongoing construction of a temple in Papua New Guinea, and the selection of Canada as the next country for a national temple exemplify the momentum in the development of such temples. Therefore, this project aims to provide a timely analysis and exploration of the design processes involved in national level Houses of Worship.

The objective of this thesis project is to delve into the intricacies and considerations of designing a national level House of Worship, using Canada as a compelling case study. By examining the design principles, cultural integration, and inclusivity within the defined spatial parameters, this research seeks to shed light on the architectural expressions of the Bahá'í Faith's teachings and their embodiment in a proposed design for the national temple of Canada. With the anticipated construction of more national temples in the future, it is hoped that this investigation will contribute valuable insights to inform and inspire the design processes of upcoming Houses of Worship.

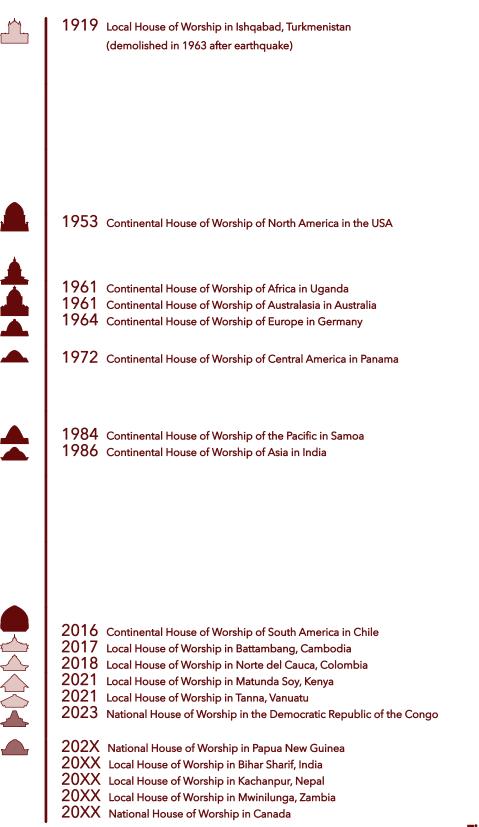
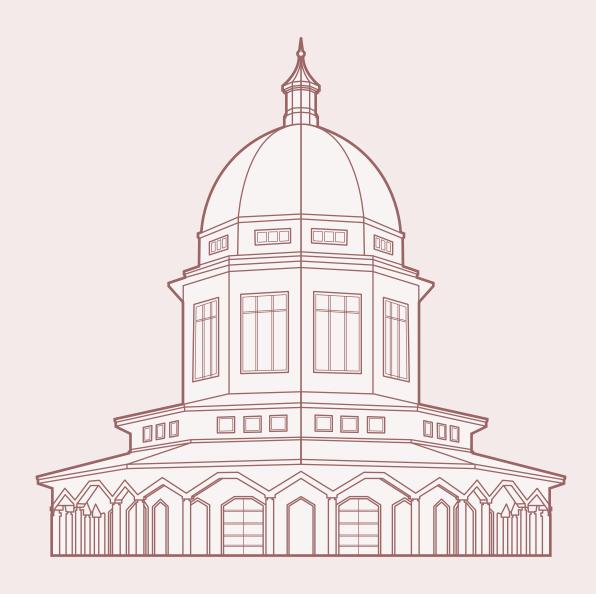


Figure 19.Construction Timeline



24

Figure 20.Continental House of Worship of Africa in Uganda

CHAPTER 2

BAHÁ'Í HOUSES OF WORSHIP

This chapter explores the different design elements and attributes of Bahá'í Houses of Worship. The architecture of these edifices, in a sense, is explicitly Bahá'í in nature, since they are carefully designed based on Bahá'í teachings and principles, particularly those around the role of prayer and the concepts of unity and oneness. The sites chosen for these temples are generally empty with no pre-existing buildings, providing the architects with a tabula rasa on which to design a form inspired and guided by the Bahá'í teachings.

Houses of Worship are being developed around the world through two phases:

Phase 1: Continental Houses of Worship (completed in 2016) Phase 2: National and Local Houses of Worship (in progress)

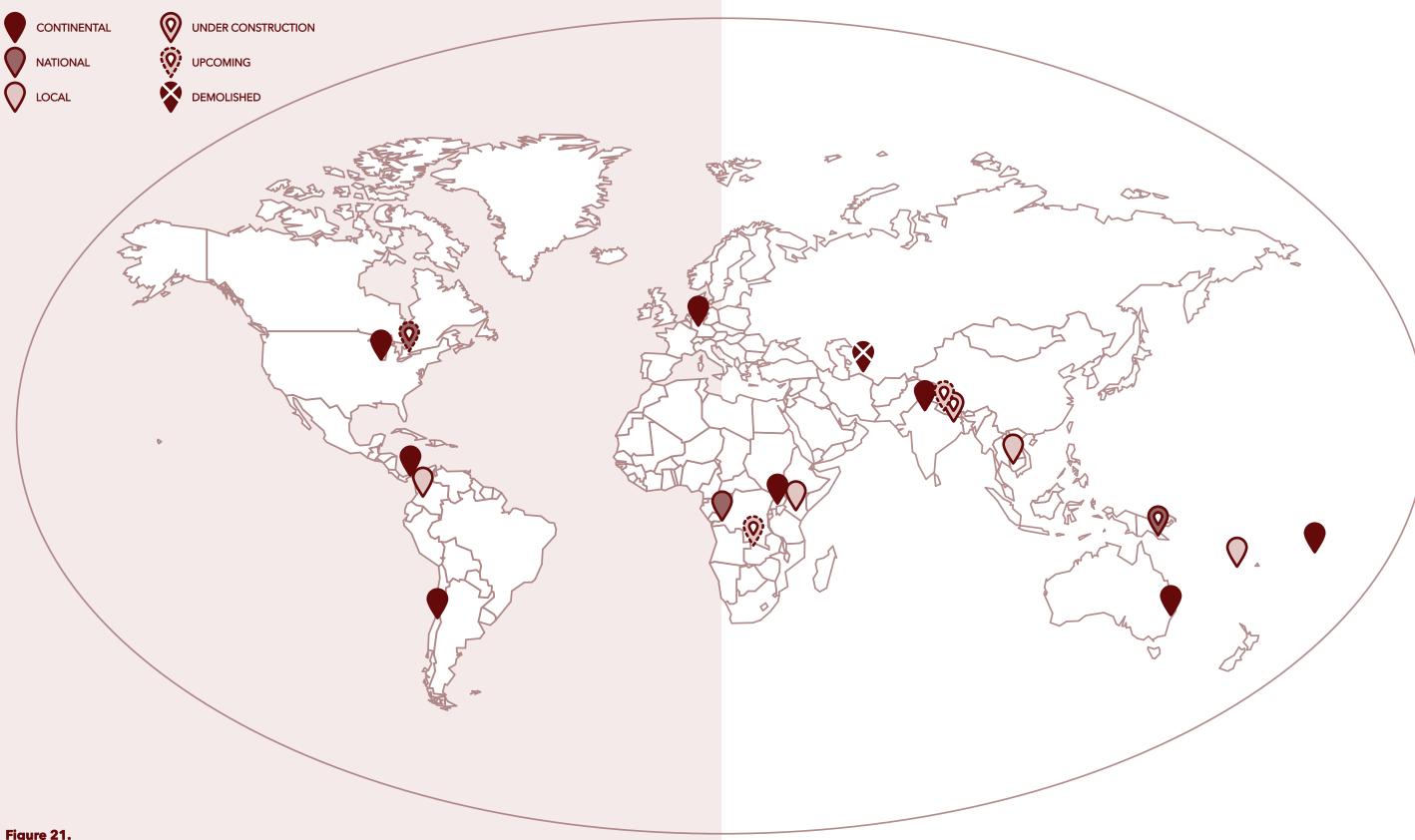


Figure 21.Map of Bahá'í Houses of Worship

DEFINED PARAMETERS

SPATIAL REQUIREMENTS

The Bahá'í teachings provide a few basic requirements for the physical form of temples: they are required to have a round, nine-sided shape, nine pathways leading outwards, and nine gardens surrounding them. This radial symmetry creates a space that is centrally focused through its circular arrangement and represents people coming together from all directions of the world. While not explicitly specified, most Houses of Worship have a pedestrian path that leads visitors to the temple. The path's length is long enough to allow visitors to enter a reflective state before approaching the temple. Additionally, most Houses of Worship are connected to a separate welcome and information centre.

"...the original purpose of temples and houses of worship is simply that of unity" 18

29

Figure 22. Basic Requirements

NINE SIDES NINE GARDENS WELCOME CENTRE

¹⁷ Maleki, "Progressive Formation," 90.

^{18 &#}x27;Abdu'l-Baha, The Promulgation of Universal Peace(Wilmette, IL: Bahai Publishing Trust, 2007), 65.

NINE

The number nine appears in various ways in the Bahá'í Faith: there are nine Holy Days which commemorate significant events in Bahá'í history, Bahá'í institutions and administrative bodies are comprised of nine members or representatives, and Houses of Worship are nine-sided with nine points of entry.

According to the Bahá'í teaching, the number nine symbolizes the unity and equality of the nine major Religions that have brought humanity to this stage in its evolution. ¹⁹ Further, in the Abjad system—the Arabic system of numerology—nine is the numerical value of the root word "Bahá", meaning "glory". "Bahá" is also the root word of the name of the Bahá'í Faith as well as the name of its Founder, Bahá'u'lláh. "Besides these two significances the number nine has no other meaning. It is however enough to make the Bahá'ís use it when an arbitrary number is to be chosen." ²⁰ Naturally then, Bahá'ís have come to associate the nine-pointed star with their Faith, and it is frequently used as a Bahá'í emblem.



Figure 23. The Number Nine

LEVEL PLAN

The interior of Houses of Worship consists of an open space that is equally leveled throughout, further emphasizing the unity and oneness of all those that enter the space. There is no pulpit or elevated platform, as there are no clergy or preachers in the Bahá'í Faith.

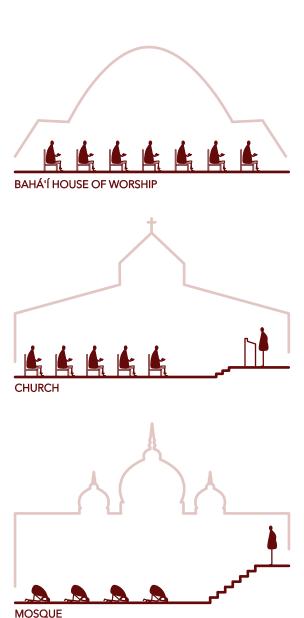


Figure 24.Level Plan Compared to other Places of Worship

¹⁹ Embodied Light: The Bahá'í Temple of South America, 13.

²⁰ Helen Bassett Hornby, Lights of Guidance: A Bahá'í Reference File, 1st ed. (New Delhi: Bahai Publishing Trust, 1983), 415.

FORM

Aside from the basic requirements, Bahá'í Houses of Worship can be designed with any form. Therefore, such buildings do not have a particular architectural typology, and much freedom is given to the architect to creatively translate the teachings of the Faith into a physical form that is dignified and befitting of its context. Considering the existing Houses of Worship, their form in elevation varies drastically, yet their form in plan is essentially one—circular and nine-sided.

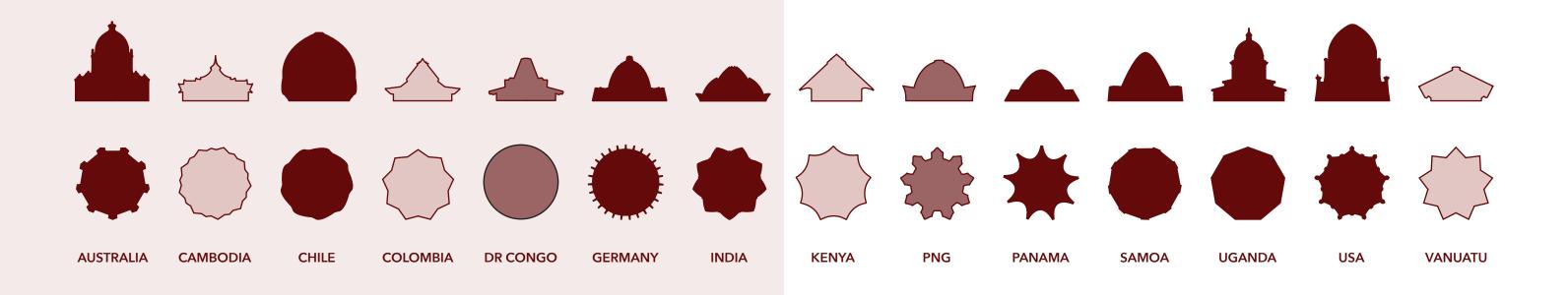


Figure 25. Form

32

CONTINENTAL

NATIONAL (

LOCAL (

STYLE

The architectural style of Houses of Worship is highly diverse and varies significantly from one temple to another. For instance, some draw inspiration from local cultural elements, such as the one in India that is designed in the shape of a lotus flower, the country's national flower which holds significance in the country's cultural history. On the other hand, some Houses of Worship adopt entirely new styles of architecture that do not necessarily conform with any existing styles of buildings, such as the temple in Chile.

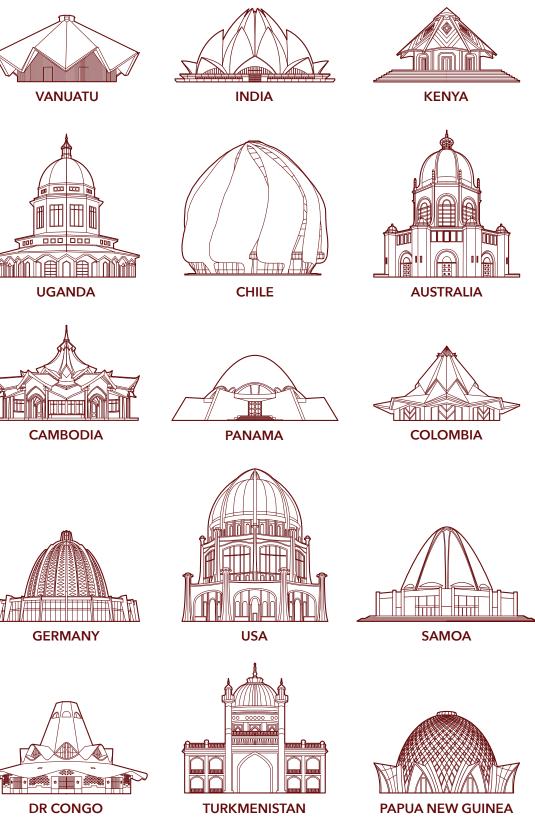
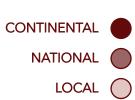


Figure 26. Style

SCALE

The size of continental Houses of Worship is naturally larger than that of local ones, given their function of serving a larger geographic area. However, the size of a temple is not necessarily correlated with the size of the population of the country or locality in which it is located.

36



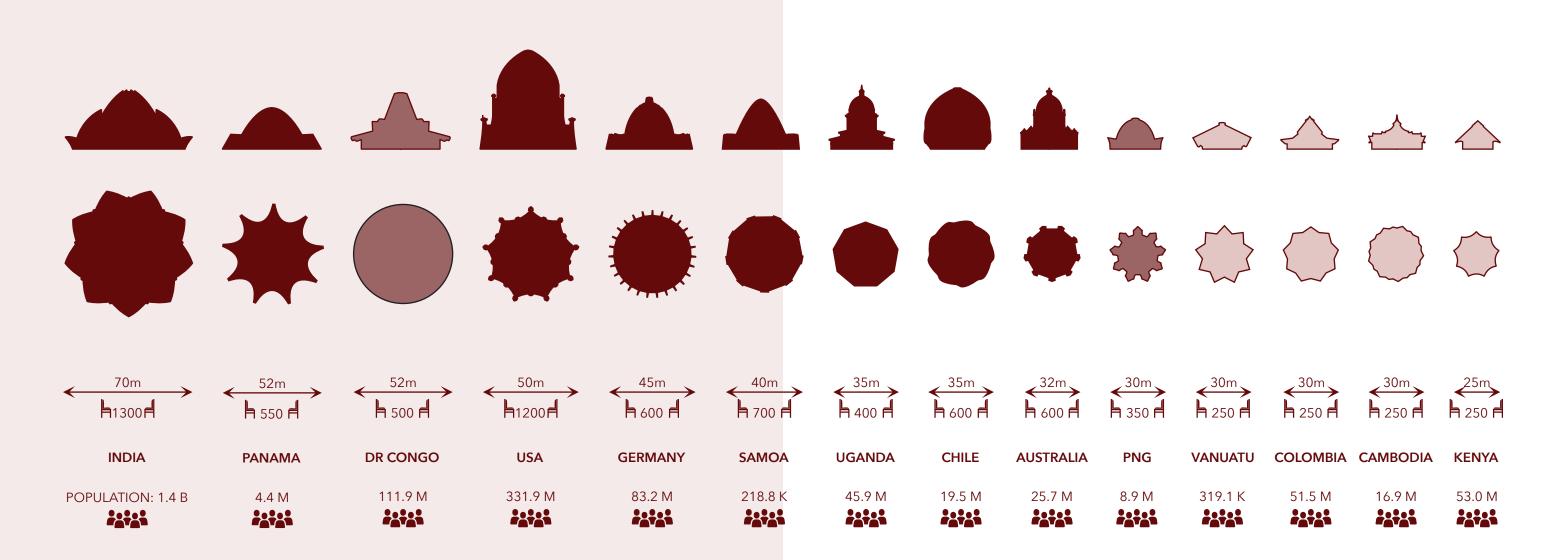


Figure 27. Scale

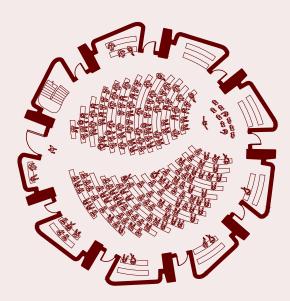
BAHÁ'Í HOUSES OF WORSHIP A SINGULAR ROOM

PROGRAM

Houses of Worship are intended for prayer, meditation, and reading of writings from the Scriptures of the Bahá'í Faith and other religions. There are no sermons, hymns, or instrumental music during services, although choirs may sing or chant verses from various religious texts. The gatherings are simple, dignified, and designed to uplift the soul.²¹



INDIVIDUAL SILENT PRAYER & REFLECTION



ORGANIZED EVENTS WITH COLLECTIVE PRAYERS

MEDITATION IN

SURROUNDING GARDENS

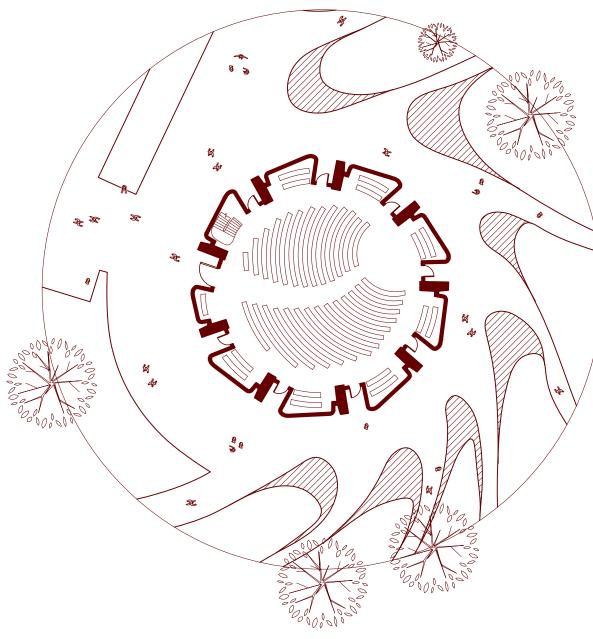


Figure 28.

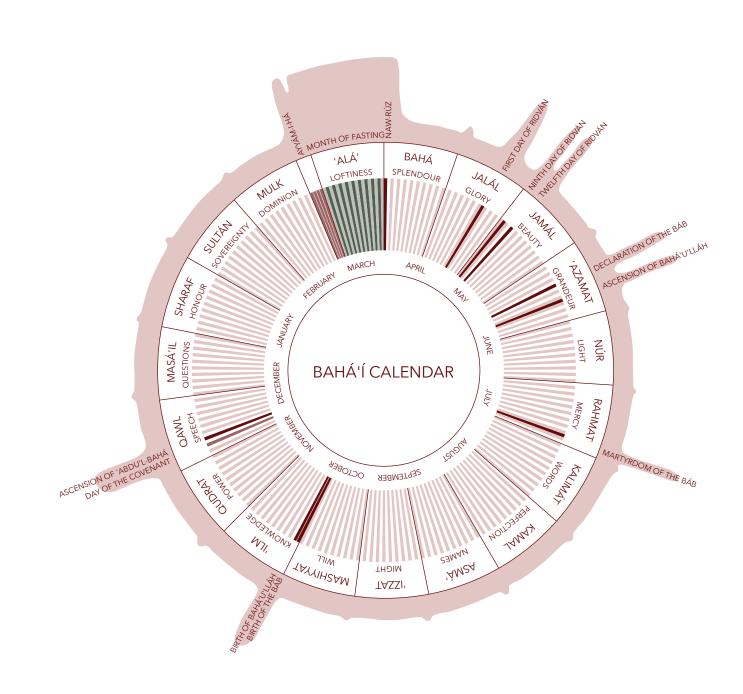
Program

21 Hornby, Lights of Guidance: A Bahá'í Reference File, 608.

38

TEMPORAL OCCUPANCY

Houses of Worship typically receive visitors every day, but there are certain times throughout the year when there are notably more visitors, particularly during significant periods in the Bahá'í calendar. The Bahá'í calendar is made up of nineteen months, each with nineteen days. The remaining five days of the year are outside of these months and are known as Ayyam-i-Há or Intercalary Days. This is a period of celebration, of acts of service, gift giving, and fellowship for Bahá'ís around the world. Houses of Worship often receive more visitors during this period, as well as during other significant times such as Bahá'í Holy Days and the month of fasting. In fact, Houses of Worship may hold special prayer programs for these occasions. Additionally, on the first day of every Bahá'í month, Bahá'ís in each locality gather together, which could also result in more visitors to the House of Worship.



HOLY DAYS
OTHER SIGNIFICANT DAYS
FASTING DAYS
EXPECTED OCCUPANCY IN HOUSE OF WORSHIP

Figure 29. Temporal Occupancy

INTERIOR ADORNMENT

Houses of Worship are founded on the tenet of oneness and universality. Therefore, the challenge faced in designing a House of Worship is creating a space that is welcoming by peoples of diverse backgrounds, irrespective of their faith, beliefs, and traditions, including the nature of prayer and worship, whether it be collective or private. Therefore, they should be void of reference to any established iconography associated with a particular religious practice or ritual. In fact, the Bahá'í teachings explicitly indicate that there should be no images or effigies within Houses of Worship.

The only symbol that appears in these temples, at the apex of the ceiling, is that of an Arabic calligraphy reading "Yá Bahá'u'l-Abhá", which is an invocation meaning "O Thou Glory of Glories." The word "Bahá", or "glory", is a reference to Bahá'u'lláh, the founder of the Bahá'í Faith. ²⁵ This phrase in its traditional Arabic calligraphy is often used as a symbol of the Bahá'í Faith.









42

²² Karla Britton, Constructing the Ineffable: Contemporary Sacred Architecture (New Haven: Yale University Press, 2010), 176.

²³ Maleki, "Progressive Formation," 85.

²⁴ The Kitáb-i-Aqdas: The Most Holy Book(Wilmette: Bahá'í Publishing Trust, 1993), 29.

²⁵ Hornby, Lights of Guidance: A Bahá'í Reference File, 267.

Figure 30. Interior Adornment, View of Ceiling

LIGHT

A metaphor that appears with particular frequency in the Bahá'í writings is "light," often drawing attention to the transforming power of unity. Naturally, therefore, every effort is made by the community to give expression to the element of light in Bahá'í structures and most particularly in the design of Houses of Worship.²⁶

"So powerful is the light of unity that it can illuminate the whole earth."²⁷

44









²⁶ Embodied Light: The Bahá'í Temple of South America, 13-14. 27 Gleanings from the Writings of Bahá'u'lláh, 326.

Figure 31. Light in Houses of Worship

SUBSIDIARY BRANCHES

While the House of Worship is comprised of a focal building in a geographical area, its purpose is not solely to provide a place for prayer; the Bahá'í teachings describe that "through the provision of education, healthcare and other services it is also to support the social and economic progress of the community and afford shelter, relief and assistance to those in need. In this connection, [it is anticipated] that subsidiary branches—such as a hospital, school, university, dispensary, [orphanage,] and hospice—would gradually be added to a House of Worship."²⁸

28 "The Bahá'í Faith."

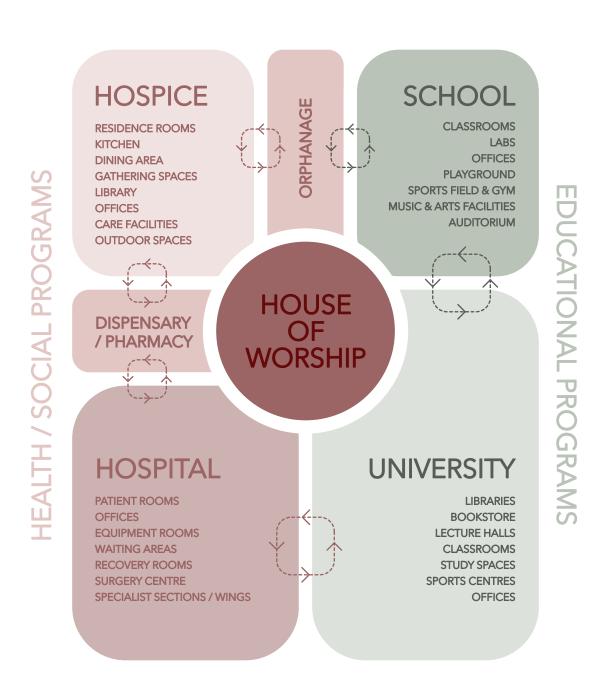


Figure 32. Subsidiary Branches



Figure 33.Houses of Worship, Papua New Guinea and South America

NATIONAL AND CONTINENTAL

A closer analysis of a national and continental House of Worship provides further insight into the patterns of design that are consistent among all Houses of Worship. The following analysis takes a closer look at the last continental temple to be completed in South America and one the first national temple to start construction in Papua New Guinea. Key differences between these temples are observed in the following analysis, mainly those to do with siting, size, and the level of expression of local culture.

NATIONAL: Bahá'í House of Worship of Papua New Guinea

Architect: Henry Lape, Saeed Granfar Location: Port Moresby, Papua New Guinea Date of completion: currently under construction

CONTINENTAL: Bahá'í House of Worship of South America

Architect: Hariri Pontarini Architects

Location: Santiago, Chile Date of completion: 2016

NATIONAL HOUSE OF WORSHIP OF PAPUA NEW GUINEA

The National Bahá'í House of Worship of Papua New Guinea was among the first two national temples to be announced to be built in 2012, and it is currently under construction. It is located in Port Moresby, the capital city, on the apex of a hill next to one of the major streets spanning the entire city. The concept of the temple's design stems from the art of weaving, which permeates every-day life in the country, ranging from traditional village life weaving practices to urban household setting where woven surfaces and objects are found in abundance. The architectural team, which included a local indigenous architect, explained that the "search for a universal theme for the temple was a profound challenge in a country with more than 700 distinct cultural groups". However, the woven pattern is "an image which resonates closely with 'home' for many [in the country], a functional and inherently beautiful art form which [they] interact with daily." Further, the nine gable-roofed entrances surrounding the temple reflect a traditional structure that is associated with the sacred throughout several major regions of the country.²⁹

Although not yet completed, the construction site of the temple has received much attention and engagement from the local population. The site receives various "groups of visitors eager to learn about the significance of the temple and the innovative approaches being taken for its construction". Recent visitors have included members of the PNG Institute of Architects and journalists from different media outlets.³⁰

50

CONTINENTAL HOUSE OF WORSHIP OF SOUTH AMERICA

The Bahá'í House of Worship of South America is the last of eight continental temples built by the Bahá'í community. It is nestled between the Andes Mountains and the border of the metropolis of Santiago. The temple follows a unique modern style, unlike any traditional architectural styles found in the region. It uses the element of light as an inspiration for its design. Nine arched structures made of casted glass and marble surround an open place of worship. The materials used diffract and diffuse passing light, creating varying effects and colors of light within the building as the sun rises and sets. ³¹ The temple design "uses cutting edge digital technology and advanced engineering solutions to create a design that 'helps lift the spirit'." ³²

The impact of the temple on the city's population has been noticeable since its inauguration. The informal spaces surrounding the temple have become a gathering place for visitors to learn about the purpose of the House of Worship and reflect on spiritual concepts.³³ The temple's programs have been particularly beneficial for young people, as they learn how personal development goes hand-in-hand with the development of their communities. Families and various religious groups also visit the temple to pray together, and elderly individuals enjoy spending time there together. As a result, the House of Worship has become a central hub for the local community, and many people have come to see the House of Worship more and more as their own temple.³⁴

^{29 &}quot;Design of National Temple Unveiled at Naw-Ruz amidst Great Joy,"Bahá'í World News Service, March 21, 2018, https://news.bahai.org/story/1246/.

^{30 &}quot;Papua New Guinea: House of Worship Superstructure Completed," Bahá'í World News Service, August 15, 2021, https://news.bahai.org/story/1524/.

³¹ Embodied Light: The Bahá'í Temple of South America, 141.

^{32 &}quot;'Embodied Light' Exhibition Features Chile House of Worship," Bahá'í World News Service, November 5, 2015, https://news.bahai.org/story/1080/.

^{33 &}quot;Temple for South America Awakens Sense of the Sacred," Bahá'í World News Service,

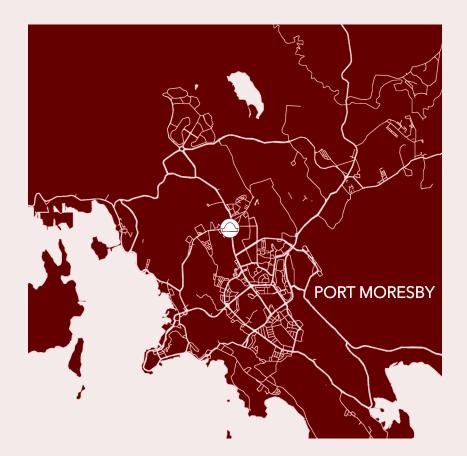
December 6, 2016, https://news.bahai.org/story/1141/.

^{34 &}quot;South America Temple Bridges Two Eras,"Bahá'í World News Service, May 11, 2018, https://news.bahai.org/story/1262/.

NATIONAL HOUSE OF WORSHIP OF PAPUA NEW GUINEA

SITING

2.5km FROM CITY CENTER



52

CONTINENTAL HOUSE OF WORSHIP OF SOUTH AMERICA

SITING

14km FROM CITY CENTER



53

Figure 34.House of Worship of Papua New Guinea: Siting

Figure 35. House of Worship of South America: Siting

NATIONAL HOUSE OF WORSHIP OF PAPUA NEW GUINEA

SIZE, MASS, FORM

30m

CONTINENTAL HOUSE OF WORSHIP OF SOUTH AMERICA

SIZE, MASS, FORM

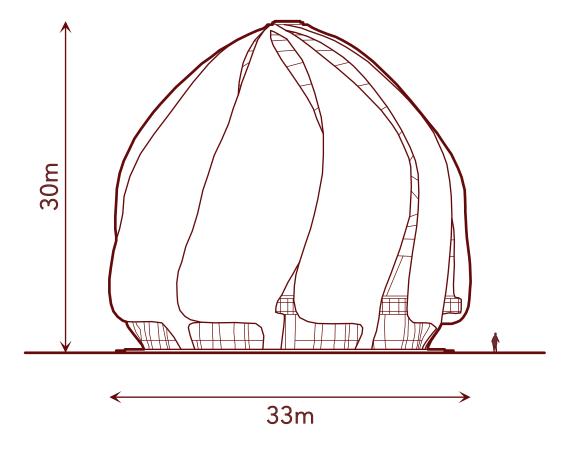
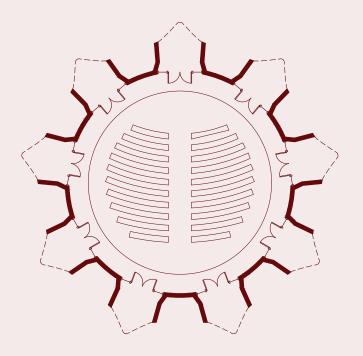


Figure 36.House of Worship of Papua New Guinea: Size, Mass, Form

Figure 37. House of Worship of South America: Size, Mass, Form

NATIONAL HOUSE OF WORSHIP OF PAPUA NEW GUINEA

FLOOR PLAN 9 SIDES, 9 DOORS



56

Figure 38.House of Worship of Papua New Guinea: Floor Plan

CONTINENTAL HOUSE OF WORSHIP OF SOUTH AMERICA

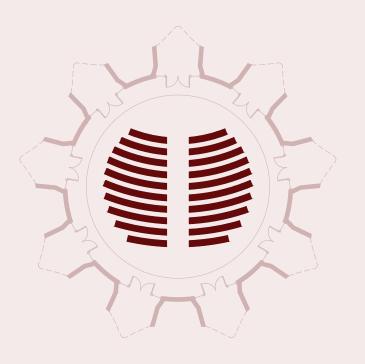
FLOOR PLAN 9 SIDES, 9 DOORS



Figure 39. House of Worship of South America: Floor Plan

NATIONAL HOUSE OF WORSHIP OF PAPUA NEW GUINEA

SEATING LAYOUT CAPACITY: 350



CONTINENTAL HOUSE OF WORSHIP OF SOUTH AMERICA

SEATING LAYOUT CAPACITY: 600

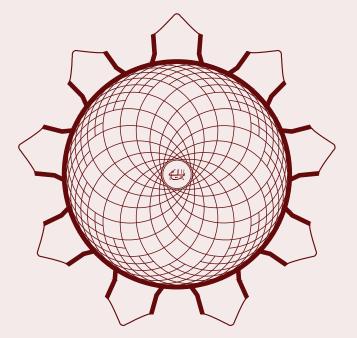


Figure 40.House of Worship of Papua New Guinea: Seating Layout

Figure 41.House of Worship of South America: Seating Layout

NATIONAL HOUSE OF WORSHIP OF PAPUA NEW GUINEA

CEILING PLAN



CONTINENTAL HOUSE OF WORSHIP OF SOUTH AMERICA

CEILING PLAN

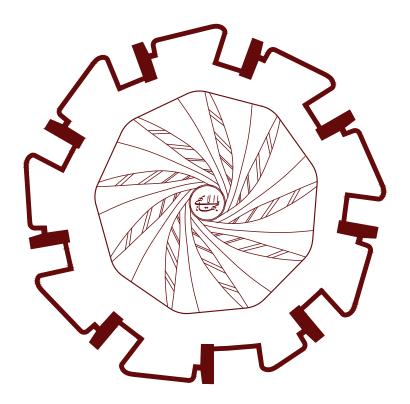
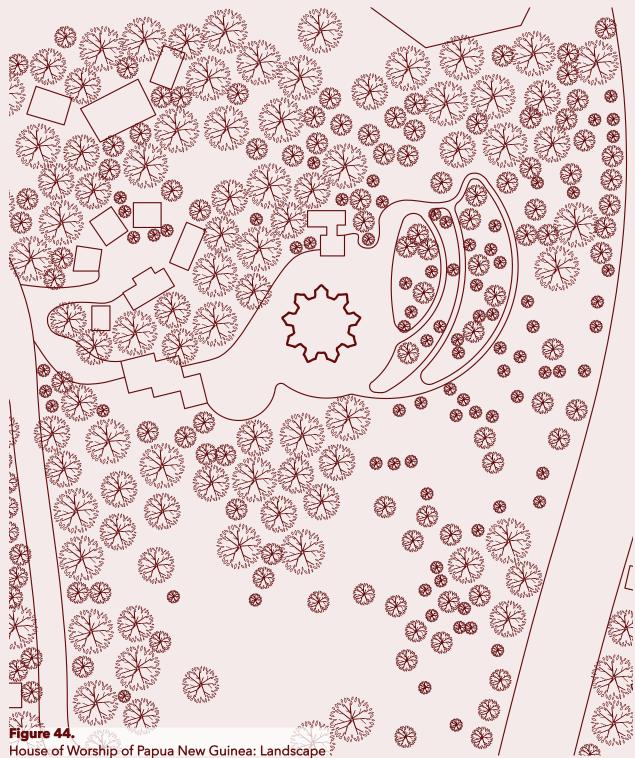


Figure 42.House of Worship of Papua New Guinea: Ceiling Plan

Figure 43.House of Worship of South America: Ceiling Plan

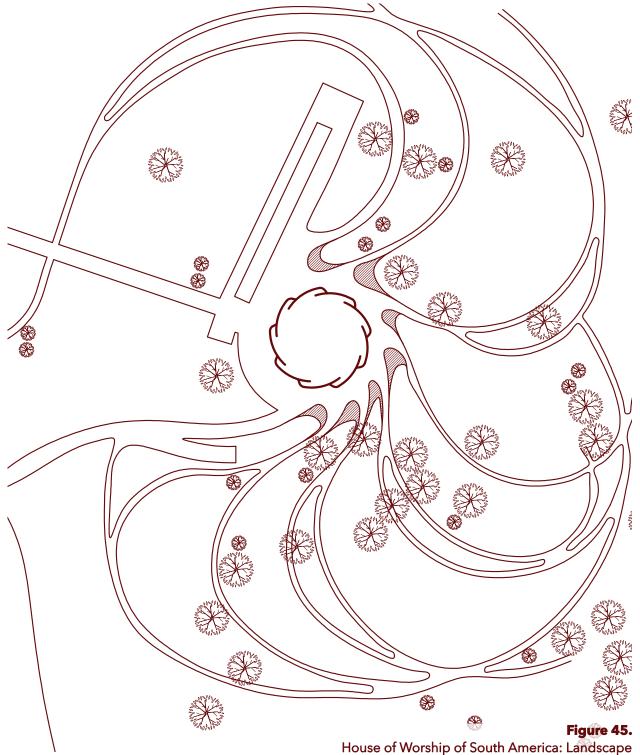
NATIONAL HOUSE OF WORSHIP OF PAPUA NEW GUINEA

LANDSCAPE



CONTINENTAL HOUSE OF WORSHIP OF SOUTH AMERICA

LANDSCAPE



63





























64



Figure 46.Houses of Worship, DRC and Tanna

NATIONAL AND LOCAL

This section provides an analysis between a national and local House of Worship. The analysis takes a closer look at the most recently completed local temple in Tanna, Vanuatu, and the first national temple to be completed located in the Democratic Republic of the Congo.

NATIONAL: Bahá'í House of Worship of the Democratic Republic of the Congo (DRC)

Architect: Wolff Architects

Location: Kinshasa, Democratic Republic of the Congo

Date of completion: 2023

LOCAL: Bahá'í House of Worship of Tanna

Architect: Ashkan Mostaghim Location: Tanna, Vanuatu Date of completion: 2021

NATIONAL HOUSE OF WORSHIP OF THE DRC

The National Bahá'í House of Worship of the DRC, similar to other temples, holds an emphasis on the element of light in its design. The architects explained that "the desire for expressions of equality in the religion informed the decision to create low glare light that will illuminate the interior in an equivalent manner." The exterior design of the temple is inspired by traditional Congolese textile art, which is historically produced in a collaborative manner. These textiles are made to be wrapped around a body, on undulating surfaces, and in motion. The art produced for the building's exterior was made collaboratively, and in the form of an undulating surface that wraps around the temple. The patterns on the dome "represent the Congo River, whose tributaries gather rain from every part of the country into one great stream, [providing a powerful image of the coming together of all people and reflects the Bahá'í principle of the oneness of humanity."

The House of Worship has engaged many segments of the population. For example, Chiefs of various tribes have come together to discuss the impact of prayer on the patterns of community life. In one instance, Chief Bope Ngokadi of Mpempe village said, "We see in the Bahá'í devotional gatherings the involvement of diverse people; we are all walking together in unity. Praying has brought a positive impact, the village has changed. I have changed. ... Even as the chief of this locality I was not always united with other officials, but we have become so through devotional gatherings. This is what has allowed us to live as one community. This is what the House of Worship represents." 37

As a local temple, the architecture of the Bahá'í House of Worship of Tanna is heavily expressive of the local culture: it "reflects aspects of Ni-Vanuatu culture and tradition. ...The shape of the House of Worship itself is reminiscent of a volcano, and the nine wings of the roof represent the land and valleys, and the riverbeds that run between them. Other elements of the roof also reflect the feather worn by the head chiefs of tribes, and the dancing sticks used by toka dancers, which point to the apex of the temple's dome as a sign of respect." Similar to other temples, the interior space is defined by light: throughout the day, light streams into the interior through the open screens and the delicate glass oculus at the center of its ceiling. The temple's design symbolizes the unity of all people. 39

The building has had a notable influence on the culture of worship among the local population. It has become a place where the entire community has been welcomed and engaged: peoples of varying Faiths, Chiefs of local tribes, and members of various institutions gather there for prayer, reflection, and meetings on topics concerned with the well-being and progress of the town's community.⁴⁰

66

LOCAL HOUSE OF WORSHIP OF TANNA

^{35 &}quot;Wolff Architects," Wolff Architects, n.d., https://www.wolffarchitects.co.za/.

^{36 &}quot;Houses of Worship: Intricate Exterior Design of DRC Temple Comes into View,"Bahá'í World News Service, August 3, 2022, https://news.bahai.org/story/1609/.

^{37 &}quot;Groundbreaking for House of Worship Celebrated across DRC,"Bahá'í World News Service, October 18, 202AD, https://news.bahai.org/story/1460/.

^{38 &}quot;Vanuatu: First Local Bahá'í Temple in the Pacific Opens Its Doors,"Bahá'í World News Service, November 14, 2021, https://news.bahai.org/story/1550/.

^{39 &}quot;Design of Vanuatu Temple Unveiled," Bahá'í World News Service, June 18, 2017, https://news.bahai.org/story/1175/.

^{40 &}quot;United in Its Embrace': Chiefs in Vanuatu Reflect on Temple's Unifying Role," Bahá'í World News Service, September 5, 2021, https://news.bahai.org/story/1530/.

NATIONAL HOUSE OF WORSHIP OF THE DRC

SITING

20km FROM CITY CENTER



68

LOCAL HOUSE OF WORSHIP OF TANNA

SITING

1.5km FROM TOWN CENTER



Figure 47.House of Worship of DRC: Siting

Figure 48. House of Worship of Tanna: Siting

NATIONAL HOUSE OF WORSHIP OF THE DRC

SIZE, MASS, FORM

52m

LOCAL HOUSE OF WORSHIP OF TANNA

SIZE, MASS, FORM

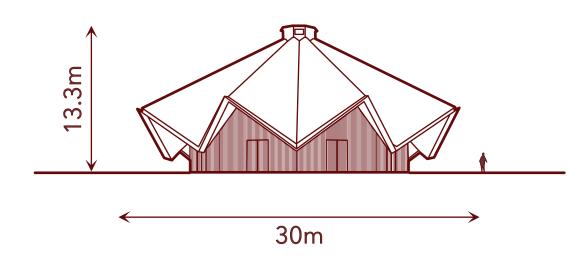
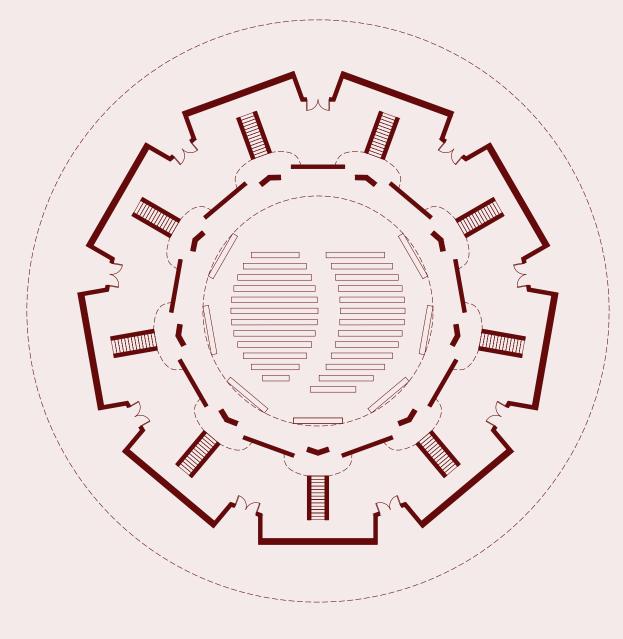


Figure 49.House of Worship of DRC: Size, Mass, Form

Figure 50. House of Worship of Tanna: Size, Mass, Form

NATIONAL HOUSE OF WORSHIP OF THE DRC

FLOOR PLAN 9 SIDES, 9 DOORS



72

Figure 51.House of Worship of DRC: Floor Plan

LOCAL HOUSE OF WORSHIP OF TANNA

FLOOR PLAN 9 SIDES, 9 DOORS

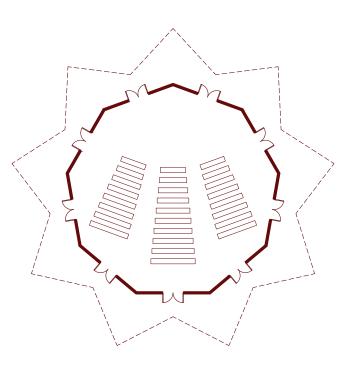
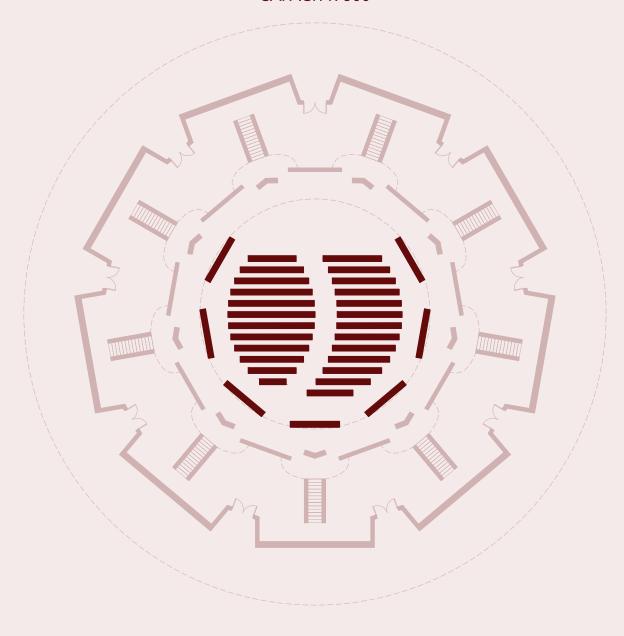


Figure 52. House of Worship of Tanna: Floor Plan

NATIONAL HOUSE OF WORSHIP OF THE DRC

SEATING LAYOUT
CAPACITY: 500



74

Figure 53.House of Worship of DRC: Seating Layout

LOCAL HOUSE OF WORSHIP OF TANNA

SEATING LAYOUT
CAPACITY: 250

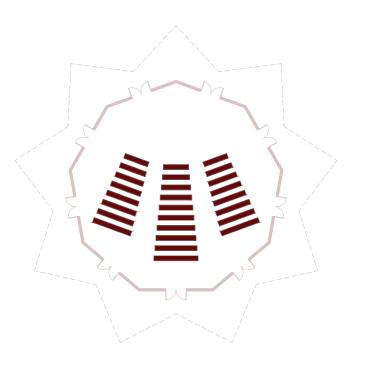
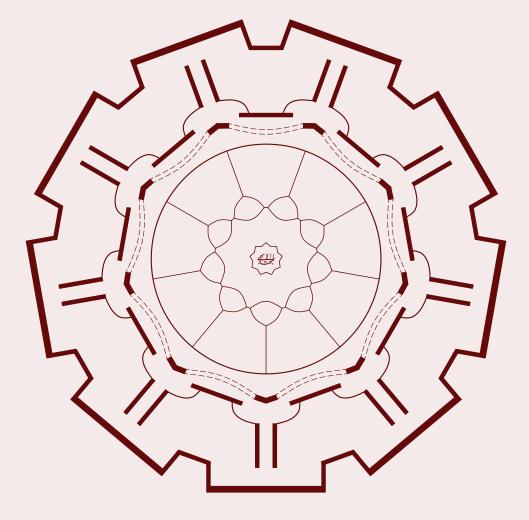


Figure 54. House of Worship of Tanna: Seating Layout

NATIONAL HOUSE OF WORSHIP OF THE DRC

CEILING PLAN

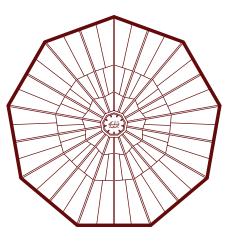


76

Figure 55.House of Worship of DRC: Ceiling Plan

LOCAL HOUSE OF WORSHIP OF TANNA

CEILING PLAN



77

Figure 56.House of Worship of Tanna: Ceiling Plan

NATIONAL HOUSE OF WORSHIP OF THE DRC

LANDSCAPE

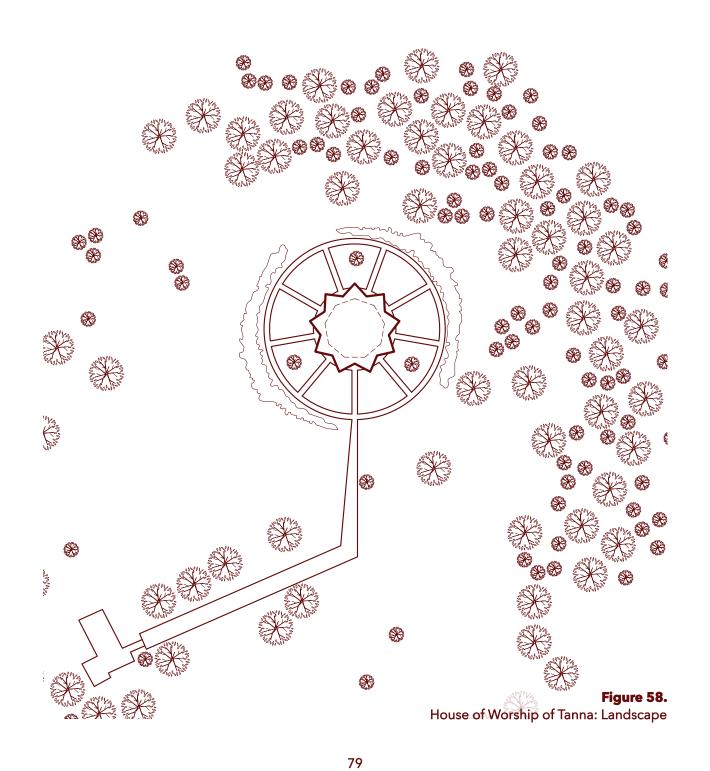


78

House of Worship of DRC: Landscape

LOCAL HOUSE OF WORSHIP OF TANNA

LANDSCAPE



CONCLUSION

From the exploration of Bahá'í Houses of Worship outlined in this chapter, a number of essential design components of Houses of Worship-whether local, national or continental-can be identified:

- The repetition of the number nine—as a symbol of the Bahá'í Faith and the unity of religion and of humanity—both structurally and spatially
- **Radial symmetry** symbolic of bringing people from different walks of life together at its center
- Open, flexible, and level plan, free of ritual or hierarchies
- **Incorporation of natural light** into the interior spaces as a metaphor for unity
- **Cultural elements** celebrated through architectural expression
- Porosity and visibility into the interior space
- **Surrounding gardens** for beautification and for reflection and meditation
- Connection with educational and social facilities as future subsidiary branches

80



Figure 59. Local House of Worship in Battambang, Cambodia



82

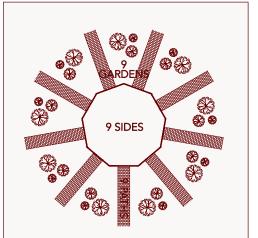
CHAPTER 3

DESIGN PROPOSAL

Figure 60.Design Proposal: Elevation

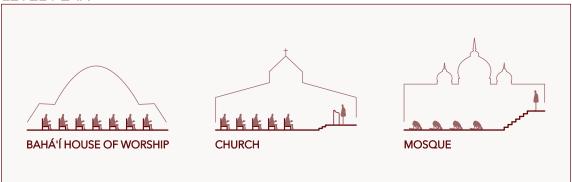
DEFINED PARAMETERS

SPATIAL REQUIREMENTS



INTERIOR ADORNMENT

LEVEL PLAN



PROGRAM



Figure 61. Defined Parameters Summarized

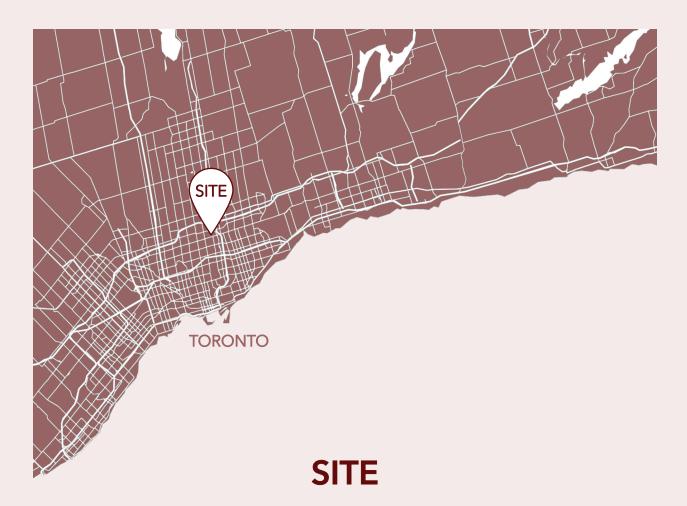
INTRODUCTION

In April 2023, Canada was selected as the next country to build a national Bahá'í House of Worship. The building of such a temple is a testament to the growth and vibrancy of the Bahá'í community in Canada, standing at over 35,000 in more than 1000 localities, who together reflect Canada's rich cultural and linguistic diversity."⁴¹ As a Bahá'í myself, and an aspiring architect, this news prompted me to embark on this project. Within the global context of Bahá'í temples, the design portion of this thesis sets out to find a fitting contemporary form for a national temple in Canada, integrating the appropriate level of cultural specificity and history while still maintaining the universal nature of such temples.

From the outset, I decided to function within the defined parameters of Bahá'í Houses of Worship, which are outlined in the Bahá'í texts (see Chapter 2: Bahá'í Houses of Worship, Defined Parameters).

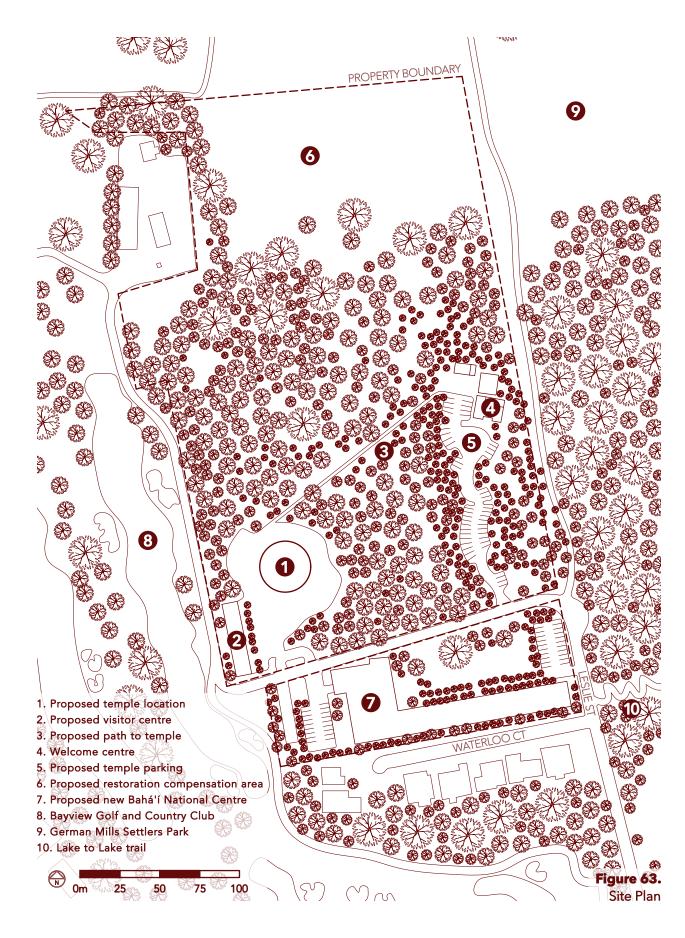
84

^{41 &}quot;The Bahá'í Community of Canada," The Bahá'í Community of Canada, accessed March 1, 2023, https://www.bahai.ca/.



I also chose to operate on the selected site where the actual Temple will be built. The site is 0.5km away from the city's border and approximately 20km away from Downtown Toronto. It consists of a 25 acre lot, covered in old growth forest, home to a variety of native Canadian trees spanning up to 30m high. This land was acquired by the Bahá'í community of Canada in 1968 as a future temple site. The specific positioning of the temple on the property was chosen due to its high altitude, its stable soil conditions, and its concentration of invasive species that will be cleared for the construction. In addition to the site, I also chose to respect the height and capacity parameters that had been pre-defined for the Canadian temple: the temple is to be between 20-22m in height (maintained under the tree-line) and should have a seating capacity of 350-400.

Figure 62.Context Map: Toronto



DESIGN CONCEPT

The history of the history of the Bahá'í faith in Canada naturally became the main informant of the project, as it directly combines country-specific details with the Bahá'í Faith. The narrative of the Bahá'í Faith in Canada begins in 1898. Picture a vibrant London, Ontario, where an eighteen-year-old, Edith Magee, returns from Chicago, her mind ignited by the discovery of the Bahá'í Faith. She was excited to tell her family about this new Faith and, soon, Edith's family accepted the Bahá'í Faith. Little by little, word of this new religion started spreading through towns in Ontario, Alberta, Manitoba, and Quebec. The beginnings of a fledgling Bahá'í community began in Canada.⁴²



THE BAHÁ'Í FAITH WAS FOUNDED IN PERSIA

1844



THE BAHÁ'Í FAITH COMES TO CANADA

1898

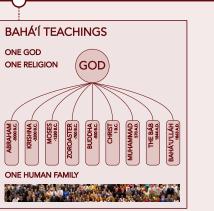


Figure 64. Historical Context Timeline

88



project.

LETTERS FROM 'ABDU'L-BAHÁ TO THE BAHÁ'ÍS OF CANADA

1916





2023

One event stood out as a key defining moment in the role and

legacy of the Bahá'í community in Canada. In 1916, 'Abdu'l-Bahá, the

successor, wrote a set of letters to the Bahá'ís of North America, some of

Canada as a country, but he also entrusts the recipients of his letters to

Bahá'í Faith. In this context, He describes the Bahá'ís of Canada as "rays

the **motion of outward movement** became the driving concept for this

of the Sun". 43 Based on these letters, the element of light paired with

travelling abroad to diverse countries to spread the teachings of the

eldest son of the Founder of the Bahá'í Faith and His appointed

which were specifically directed to the Bahá'ís of Canada. In these

letters, He not only speaks about the great and glorious future of





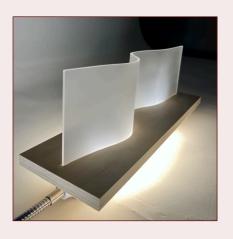
⁴² Will C. van den Hoonaard, The Origins of the Bahá'í Community of Canada, 1898-1948 (Waterloo, Ontario, Canada: Wilfrid Laurier University Press, 1996), 22-29.

^{43 &#}x27;Abdu'l-Bahá, Tablets of the Divine Plan (Wilmette, Illinois, USA: Bahá'í Publishing Trust, 1918).

PROCESS WORK

My process began with a set of study models exploring how these "Canadian rays of the sun" can be captured in a space. Different qualities and moments of light were explored, ranging from looking at how light can be casted on a surface two-dimensionally in different patterns, to experimenting on bringing light into a three-dimensional volume in experiential forms.

From these explorations, selected qualities of light were further tested in plan and section drawings of early iterations of the temple form, which then led to the final design.





90













Figure 65.Study Models 1

DESIGN PROPOSAL A SINGULAR ROOM

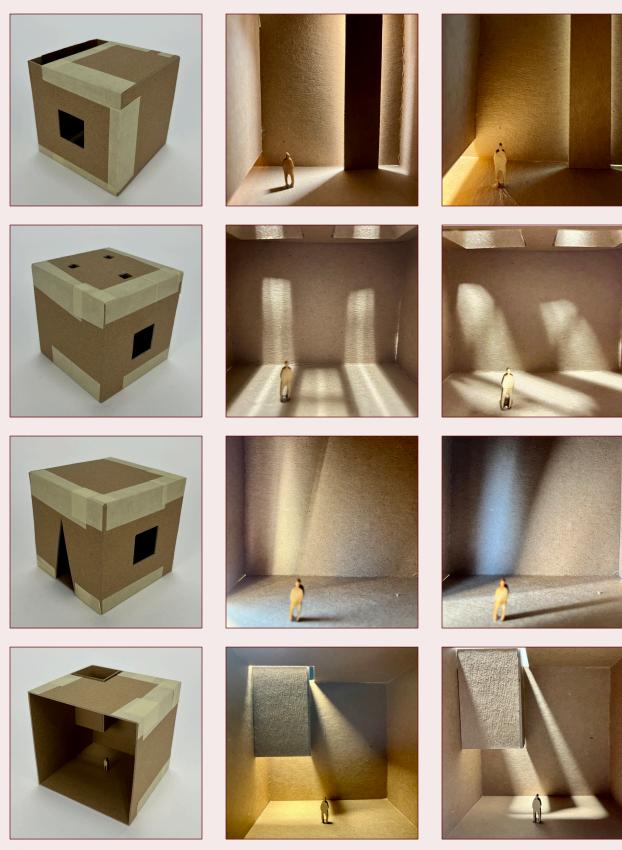
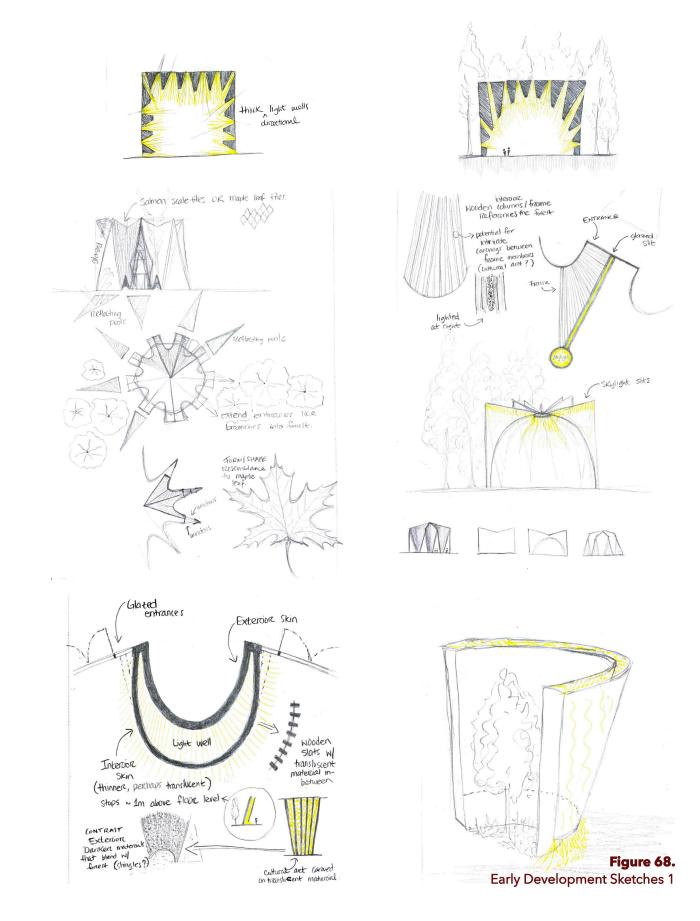
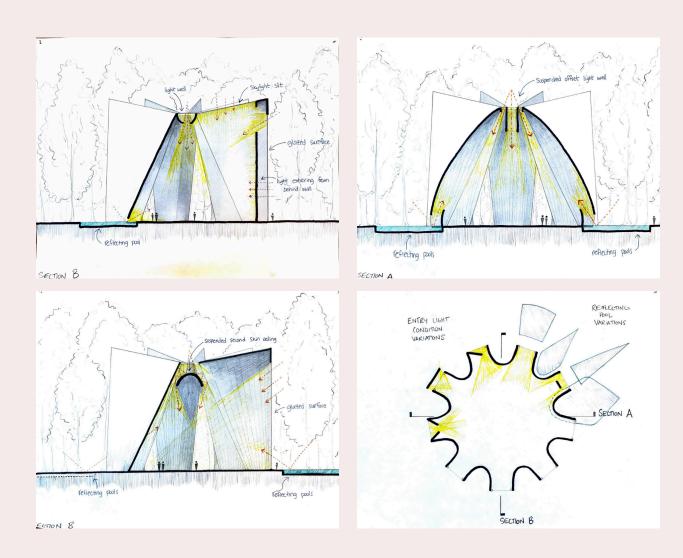


Figure 67. Study Models 3 92





94

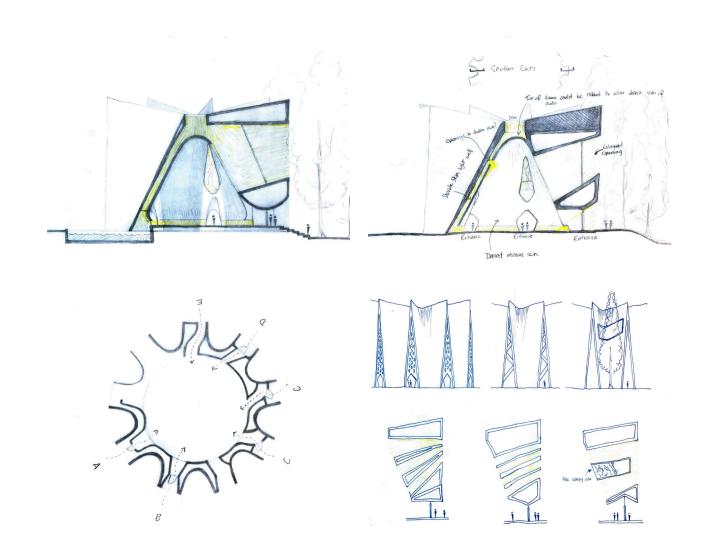
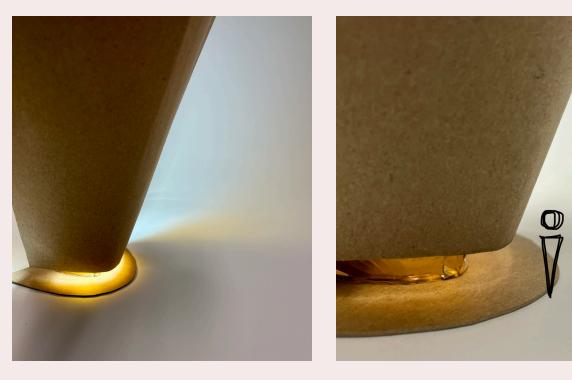
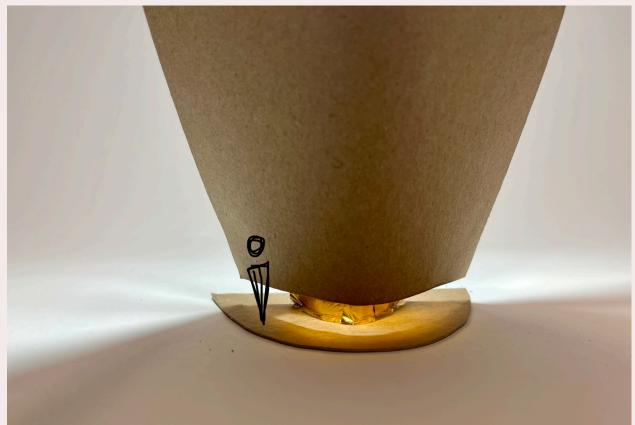


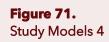
Figure 69.Early Development Sketches 2

Figure 70. Early Development Sketches 3





96









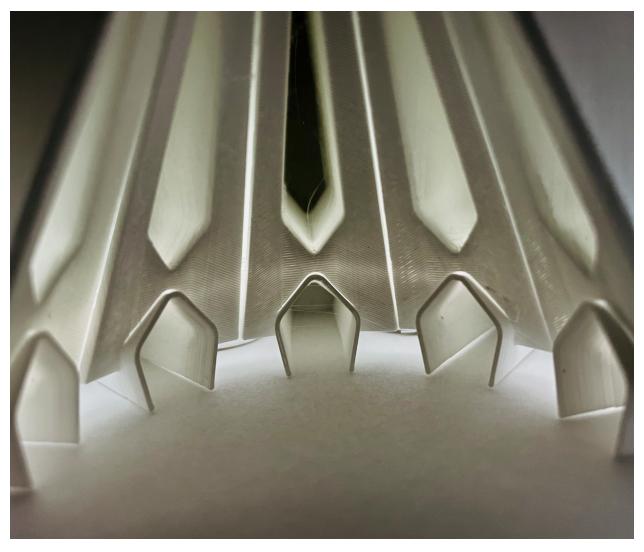


Figure 72. Study Models 5

FINAL DESIGN

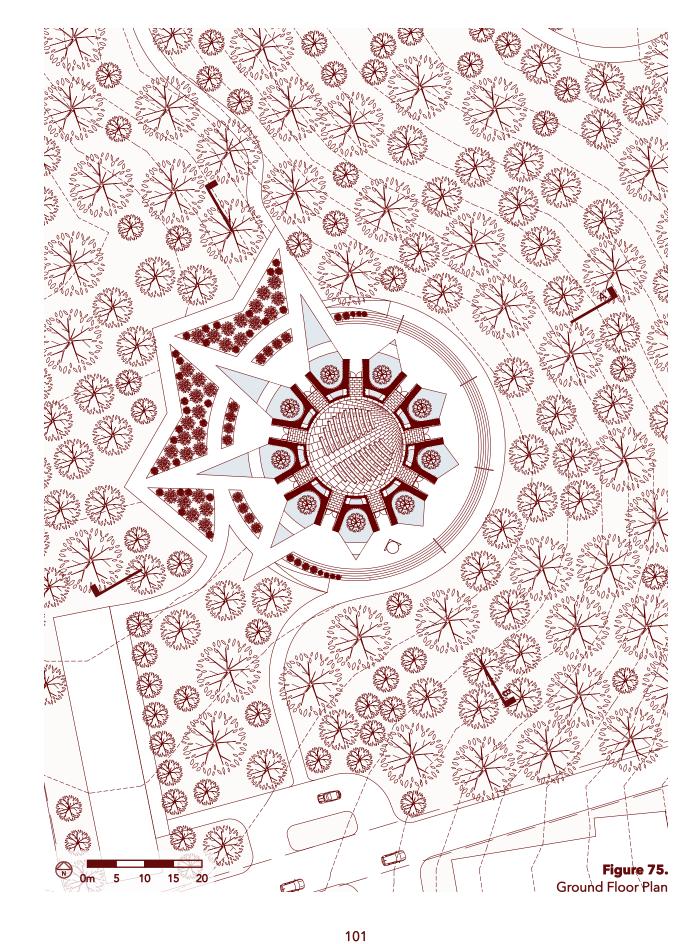
"...the original purpose of temples and houses of worship is simply that of unity—places of meeting where various peoples, different races and souls of every capacity may come together in order that love and agreement should be manifest between them."44



Figure 73. Exterior Render: Temple Approach

⁴⁴ The Promulgation of Universal Peace, 90.







0m 5 10 15 20

Figure 76. Elevation

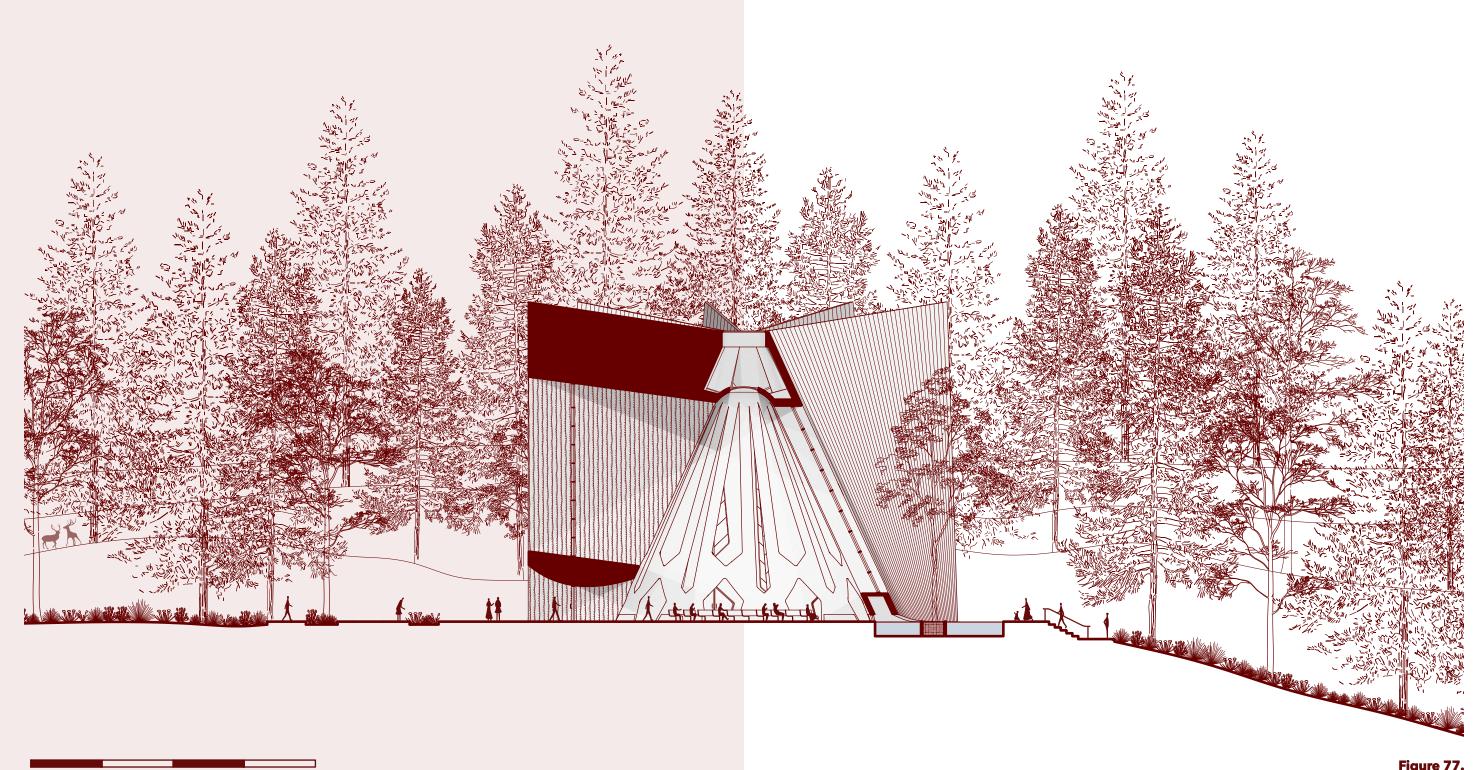
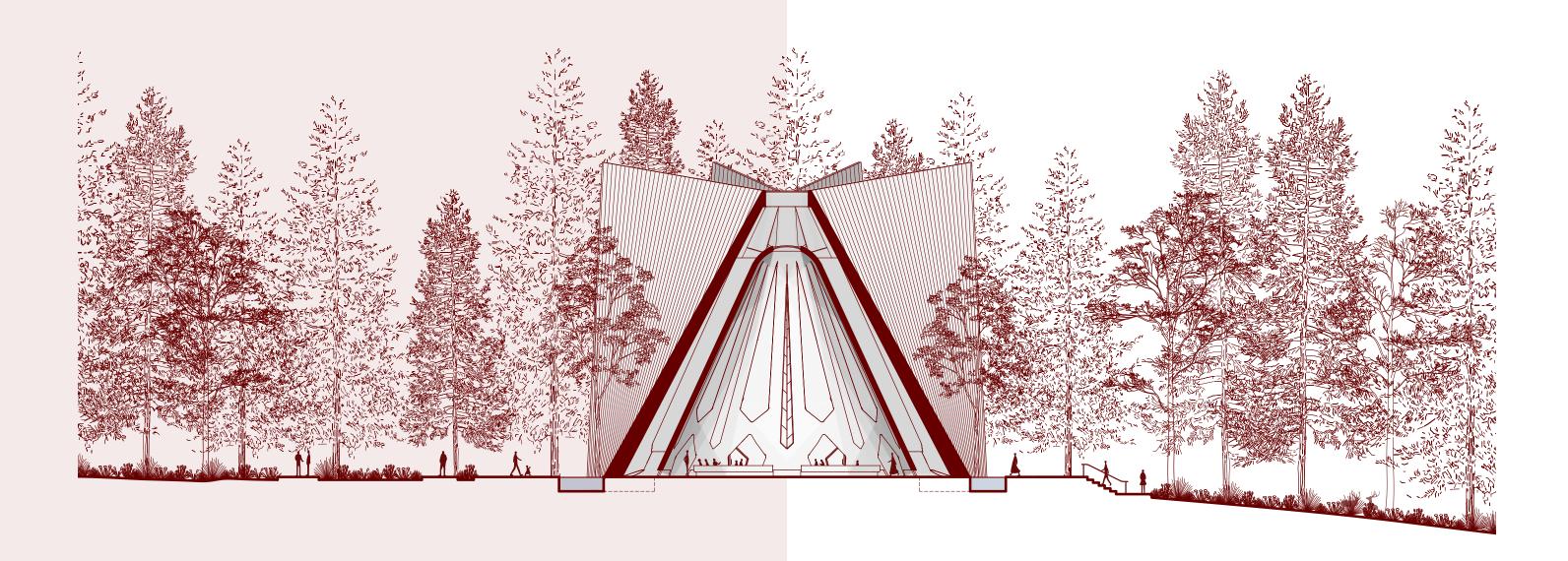


Figure 77. Section A



0m 5 10 15 2

Figure 78. Section B

The exterior form emulates the outward movement of "rays of the Sun" radiating from a focal point. This outward motion also grounds the temple in its context—the forest—as its spreading wings echo the spreading of the branches of a tree. In plan view, the silhouette of the temple alludes to the repeating curves of a Canadian maple leaf.

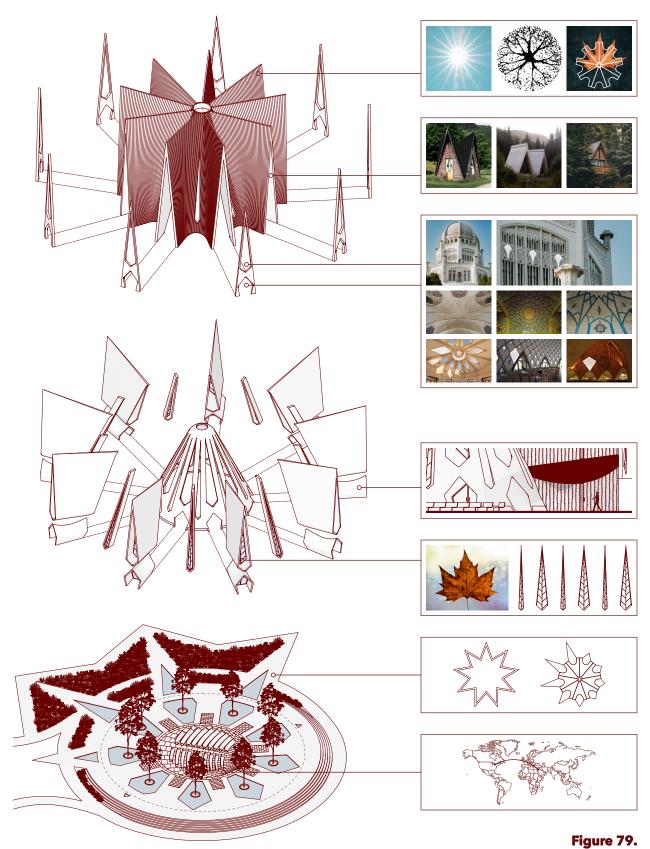
The A-frame sides mimic Canadian rural vernacular architecture, while their notable height directs the gaze upward in a motion of worship as one approaches the temple.

The shape of the entrances and window openings pays tribute to the North American temple in Chicago, considered to be the mother temple of the continent from which other temples will emerge—the Canadian national temple being the first. The elongated diamond shape is often found in repetition in traditional Iranian architecture, which naturally has also been replicated in the architecture of other Bahá'í temples as a reference to the birthplace of the Bahá'í Faith.

As one transitions into the interior, there is a break from the angular forms of the exterior through an entryway that contracts and gradually expands, suddenly revealing the grandeur of the dome as one crosses the threshold into the central space. The outer form makes no reference to a domed interior, thus creating an element of surprise and discovery. The dome carries the forms from the exterior openings inward, while continuing to pay tribute to the white dome of the mother temple in Chicago. The window glazing also follows the vein patterns of a Canadian maple leaf.

The seating is non-hierarchical, oriented towards the holiest spot for Bahá'ís, the resting place of Bahá'u'lláh, the Faith's founder, located in Akka, Israel.

The surrounding gardens, pathways, and reflecting pools follow the temple's outward movement, and at the same time begin forming a nine pointed star—a symbol of the Bahai faith. The formal landscape begins to break from the hard symmetry of the temple itself as it transitions into the more organic and asymmetric forest landscape.



Exploded Isometric Diagram

The interior space features three distinct moments of light:

- 1. The oculus brings in natural light directly from above forming a central well of illumination.
- 2. The windows frame the forest canopy, which changes in color and texture throughout the seasons, and allow soft diffused natural light into the central space from all directions. At certain times during the day, direct light shines through one of the windows as the sun progresses along its path.
- 3. The interior dome levitates about half a meter above the ground. Directly below the levitating dome lie reflective pools of water that extend inward from the exterior. Light is channeled down from behind the dome's skirt by a reflective cladding, shines onto the pools, and creates a glow along the interior's perimeter. The levitating effect also extends to the outer skin of the temple to allow the pools to extend underneath the temple, while also alluding to spiritual qualities that lift the spirit above the ground.

Back to the exterior, the reflecting pools enhance the light shining onto the skin and reflect compelling traces of the temple from different angles as one passes by, echoing one's state of contemplation and reflection.









Figure 80. Renderings

The temple, standing at 22 meters in height, is nestled just below the forest canopy. The approach is a meditative walk through the woods. As one traverses the winding path, the temple gradually unveils itself. Emerging from the dense forest onto the temple's open platform offers a sense of arrival.

Inside, the central room embodies the inclusivity and harmony cherished by the Bahá'í Faith, which closely resonates with Canadian culture—a country that prides itself as one of the most culturally diverse countries in the world. It's within this singular room that these spiritual and cultural values converge and find their tangible form.









Figure 81. Physical Model Photos 1









Figure 82.Physical Model Photos 2









Figure 83. Physical Model Photos 3

A SINGULAR ROOM
BIBLIOGRAPHY

BIBLIOGRAPHY

'Abdu'l-Bahá. The Promulgation of Universal Peace. Wilmette, IL: Bahai Publishing Trust, 2007.

Bahá'í World News Service. "Design of National Temple Unveiled at Naw-Ruz amidst Great Joy." March 21, 2018. https://news.bahai.org/story/1246/.

Bahá'í World News Service. "Design of Vanuatu Temple Unveiled." June 18, 2017. https://news.bahai.org/story/1175/.

Bahá'í World News Service. "'Embodied Light' Exhibition Features Chile House of Worship." November 5, 2015. https://news.bahai.org/story/1080/.

Bahá'í World News Service. "Groundbreaking for House of Worship Celebrated across DRC." October 18, 202AD. https://news.bahai.org/story/1460/.

Bahá'í World News Service. "Houses of Worship." n.d.

Bahá'í World News Service. "Houses of Worship: Intricate Exterior Design of DRC Temple Comes into View." August 3, 2022. https://news.bahai.org/story/1609/.

Bahá'í World News Service. "Papua New Guinea: House of Worship Superstructure Completed." August 15, 2021. https://news.bahai.org/story/1524/.

Bahá'í World News Service. "South America Temple Bridges Two Eras." May 11, 2018. https://news.bahai.org/story/1262/.

Bahá'í World News Service. "Temple for South America Awakens Sense of the Sacred." December 6, 2016. https://news.bahai.org/story/1141/.

Bahá'í World News Service. "'United in Its Embrace': Chiefs in Vanuatu Reflect on Temple's Unifying Role." September 5, 2021. https://news.bahai.org/story/1530/.

Bahá'í World News Service. "Vanuatu: First Local Bahá'í Temple in the Pacific Opens Its Doors." November 14, 2021. https://news.bahai.org/story/1550/.

"Bahá'ís of the Unites States." Accessed February 21, 2023. https://www.bahai.us/beliefs/.

Bahá'u'lláh. Gems of Divine Mysteries. Bundoora, Australia: Baha'i Publications Australia, 2007.

Bahá'u'lláh. Gleanings from the Writings of Bahá'u'lláh. Bundoora, Australia: Baha'i Publications Australia, 2011.

Britton, Karla. Constructing the Ineffable: Contemporary Sacred Architecture. New Haven: Yale University Press, 2010.

De Botton, Alain. The Architecture of Happiness. New York: Vintage International, 2006.

Effendi, Shoghi. The Light of Divine Guidance: The Messages from the Guardian of the Bahá'í Faith to the Bahá'ís of Germany and Austria. Vol. 1. Bahá'í-Verlag, 1985.

116

Hariri Pontarini Architects. Embodied Light: The Bahá'í Temple of South America. Basel, Switzerland: Birkhauser, 2018.

HCMA Architecture and Design. Designing for Inclusivity. Canada: HCMA Architecture and Design, 2018.

Heppenstall, Rayner. Architecture of Truth. London: Thames and Hudson, 1957.

Hoonaard, Will C. van den. The Origins of the Bahá'í Community of Canada, 1898-1948. Waterloo, Ontario, Canada: Wilfrid Laurier University Press, 1996.

Hornby, Helen Bassett. Lights of Guidance: A Bahá'í Reference File. 1st ed. New Delhi: Bahai Publishing Trust, 1983

'Abdu'l-Bahá. Tablets of the Divine Plan. Wilmette, Illinois, USA: Bahá'í Publishing Trust, 1918.

Madathil Thankamoniyan, Nandana, and Sharmila Jagadisan. "Enhancing Oneness through a Co-Housing Community." Space and Culture, India 9, no. 1 (June 25, 2021): 111-37. https://doi.org/10.20896/saci. v9i1.1126.

Maleki, Heba. "Progressive Formation." The University of British Columbia, 2014.

Meizler, Michael Steven. "Baha'i Sacred Architecture and the Devolution of Astronomical Significance: Case Studies from Israel and the US." University of Arkansas, 2016.

Montgomery, Charles. Happy City. Canada: Doubleday Canada, 2013.

Sabet, Shahrzad. "The Crisis of Identity." The Baha'i World, Justice, Unity & Peace, January 17, 2023. https://bahaiworld.bahai.org/library/the-crisis-of-identity/.

Sahba, Fariburz. "Art and Architecture: A Bahá'í Perspective." The Journal of Bahá'í Studies 7, no. 3 (September 1, 1997): 53-82. https://doi.org/10.31581/jbs-7.3.4(1997).

Sheldrake, Philip. "Placing the Sacred: Transcendence and the City." Literature and Theology 21, no. 3 (September 1, 2007): 243–58. https://doi.org/10.1093/litthe/frm023.

Talen, Emily. Neighborhood. New York: Oxford University Press, 2019. doi:10.1093/oso/9780190907495.001.0001.

The Bahá'í Community of Canada. "The Bahá'í Community of Canada." Accessed March 1, 2023. https://www.bahai.ca/.

The Bahá'í Faith. "The Bahá'í Faith." Accessed February 19, 2023. https://www.bahai.org/.

"The Institution of the Mashriqu'l-Adhkár A Statement and Compilation Prepared by the Research Department of the Universal House of Justice." Bahai.org, September 2017. https://www.bahai.org/library/authoritative-texts/compilations/institution-mashriqul-adhkar/1#250953299.

The Kitáb-i-Aqdas: The Most Holy Book. Wilmette: Bahá'í Publishing Trust, 1993.

The Universal House of Justice. "Message on World Peace." Bahá'í International Community, January 18, 2019.

Weightman, Barbara A. "Sacred Landscapes and the Phenomenon of Light." Geographical Review 86, no. 1 (January 1996): 59. https://doi.org/10.2307/215141.

Whitmore, Bruce W. The Dawning Place. Bahá'í Publishing Trust, 1984.

Wolff Architects. "Wolff Architects," n.d. https://www.wolffarchitects.co.za/.

