FAITH THROUGH THE LENS OF FORMS: A STUDY ON THE SIGNIFICANCE OF RELIGIOUS ARCHITECTURE OF SINGAPORE IN FOSTERING INTERFAITH UNDERSTANDING

BY

NOR AINAH BINTE MOHAMED ALI

A thesis submitted in fulfillment of the requirement for the Degree of Master in Islamic Thought and Civilisation

International Institute of Islamic Thought and Civilisation International Islamic University Malaysia (ISTAC-IIUM)

DECEMBER 2021

ABSTRACT

The inception of the colonial past led to an impetus to the growth of Singapore to be home to a highly heterogeneous population that had travelled from across the seas. Since their arrivals, the small island had transformed into a dynamic and remarkably unique island, exemplary of a multi-racial, multi-lingual and multi-religious society where the community live harmoniously together. Bridging the differences across cultures and religious beliefs while fostering a healthy and flourishing plural society that embraced peaceful co-existence had never been an easy task for everyone. The spectrum of challenges that spawned from a multitude of differences could be daunting and equally monumental. It required not only an excellent foresight from the pioneering populace, but also an abundance of dedication, diligence, empathy, and sensitivities. It was undoubtedly the result of a sound education supported by the inculcation of shared values and attitudes within a common space that Singaporeans came to have the confidence, trust, and mutual respect for one another in order to co-exist in the same environment. Given the existing backdrop, the topic had been carefully studied with the intent to position religious architectural forms, as a beacon and a tool to support the understanding of the religious faiths. With a hybrid research methodology, it attempted to articulate the manifestations of the architecture of faiths and documenting the understanding and observations of the community in relation to the message of the religion and the religious architecture. Subsequently, it explored the effectiveness of the architectural forms, as a significant source of knowledge in understanding the respective religious faiths. With the knowledge harnessed and harvested, the outcome of the study sought to uncover the role religious architecture plays and can play in fostering interfaith understanding and cultivating mutual respect among the racial communities. Notwithstanding the abundance of research studies on this subject matter, many of the prior research studies seemed to be very limited in scope, focusing more on the visual and aesthetic appearance of the architecture itself without positioning the forms of religious architecture as a source of knowledge on the religious faiths. There were many narratives dedicated to religious architectures and these may and often do, serve as a ground for further analysis of the relationship between faith and various aspects of what constitutes architecture. What followed from this exercise was certainly not a completed account of the ways how knowledge could be derived from the architectural forms to forge and facilitate understanding, but rather a platform that others can build on and around to spring-board further research.

خلاصة البحث

لقد أدت بداية الماضى الاستعماري إلى دفع عجلة نمو سنغافورة لتصبح موطنًا لسكان غير متجانسين للغاية سافروا عبر البحار. منذ وصولهم، تحولت الجزيرة الصغيرة إلى جزيرة ديناميكية وفريدة من نوعها بشكل ملحوظ، وهي نموذج لمجتمع متعدد الأعراق واللغات والأديان حيث يعيش المجتمع في وئام معًا. لم يكن تجسير الاختلافات عبر الثقافات والمعتقدات الدينية مع تعزيز مجتمع تعددي صحى ومزدهر يتبنى التعايش السلمى مهمة سهلة للجميع. إن مجموعة التحديات التي نتجت عن العديد من الاختلافات قد تكون شاقة وهائلة بنفس القدر. ولم يتطلب الأمر بعد نظرًا ممتازًا من الجماهير الرواد فحسب، بل تطلب أيضًا وفرة من التفاني والاجتهاد والتعاطف والحساسيات. لقد كان بلا شك نتيجة تعليم سليم مدعومًا بغرس القيم و المواقف المشتركة داخل مساحة مشتركة، حيث أصبح السنغافوريون يتمتعون بالثقة والثقة والاحترام المتبادل لبعضهم البعض من أجل التعايش في نفس البيئة. بالنظر إلى الخلفية الحالية، تمتُ دراسة الموضوع بعناية بقصد وضع الأشكال المعمارية الدينية كمنارة وأداة لدعم فهم المعتقدات الدينية. ومن خلال منهجية بحثية هجينة، حاولت صياغة مظاهر عمارة الأديان وتوثيق فهم وملاحظات المجتمع فيما يتعلق برسالة الدين والعمارة الدينية. بعد ذلك، استكشف فعالية الأشكال المعمارية، كمصدر مهم للمعرفة في فهم المعتقدات الدينية المعنية. مع المعرفة التي تم تسخيرها وحصادها، سعت نتيجة الدراسة إلى الكشف عن الدور الذي تلعبه العمارة الدينية ويمكن أن تلعبه في تعزيز التفاهم بين الأديان وزراعة الاحترام المتبادل بين المجتمعات العرقية. على الرغم من وفرة الدراسات البحثية حول هذا الموضوع، بدا أن العديد من الدر اسات البحثية السابقة كانت محدودة النطاق للغاية، مع التركيز بشكل أكبر على المظهر المرئى والجمالي للعمارة نفسها دون وضع أشكال العمارة الدينية كمصدر للمعرفة حوّل المعتقدات الدينية. كانت هناك العديد من الروايات المكرسة للهندسة المعمارية الدينية، وقد تكون هذه الروايات، وغالبًا ما تفعل ذلك، بمثابة أساس لمزيد من التحليل للعلاقة بين الإيمان والجوانب المختلفة لما يشكل العمارة. ما أعقب هذا التمرين لم يكن بالتأكيد سردًا كاملاً للطرق التي يمكن من خلالها اشتقاق المعرفة من الأشكال المعمارية لتكوين وتسهيل الفهم، بل بالأحرى منصة يمكن للآخرين البناء عليها و من أجل بدء المز بد من البحث.

ABSTRAK

Zaman penjajahan mencetus pertumbuhan Singapura sebagai tempat bermaustautin para penduduk yang majmuk yang datang dari merata benua. Ramai yang mengembara dari rantau Asia yang berhampiran. Semenjak kedatangan mereka, kepulauan kecil Singapura telah berubah menjadi sebuah pulau yang dinamik dan berkelbagaian. Ia menjadi contoh masyarakat berbilang kaum, bahasa dan 'agama di mana masyarakat hidup harmoni bersama. Merapatkan jurang perbezaan antara budaya dan memupuk masyarakat majmuk yang sihat dan berkembang yang berteraskan kedamaian bukanlah tugasan yang mudah. Ia penuh dengan cabaran yang bukan hanya memerlukan pandangan jauh dari warga perintis, tetapi juga dedikasi, kerja keras dan sensitiviti yang mendalam yang terbit dari wujudnya banyak perbezaan. Untuk memupukkan nilai dan sikap sepadu dalam ruangan umum, warga Singapura perlu saling menghormati antara satu sama lain untuk wujud bersama dalam persekitaran yang sama. Memandangkan latar belakang yang sedia ada, topik yang dipilih telah dikaji dan disaring dengan terperinci dan dipilih dengan tujuan untuk menggunakan senibina, iaitu, bentuk senibina keagamaan, sebagai wadah dan alat untuk menyokong pemahaman keagamaan dari pelbagai kaum. Ia bermula dengan usaha untuk mengartikulasikan senibina yang berbeza dari pelbagai agama, mendokumentasikan pemahaman dan pengalaman masyarakat kaum yang berkaitan dengan mesej agama dan senibina agama. Seterusnya, ia menerokai keberkesanan bentuk senibina, sebagai sumber pengetahuan yang penting dalam memahami kepercayaan agama tertentu. Dengan pengetahuan yang dimanfaatkan dan didapati, hasil kajian menjurus kepada mendedahkan peranan senibina agama yang dapat dimainkan dalam memupuk pemahaman antara agama dan menanamkan rasa saling menghormati di kalangan masyarakat majmuk. Walaupun terdapat banyak kajian penyelidikan mengenai topik ini, banyak kajian penyelidikan terdahulu amat terhad dalam skop dan memberi tumpuan lebih kepada penampilan visual dan estetik senibina itu sendiri tanpa memposisikan bentuk senibina keagamaan. Kajian ini pastinya bukanlah satu yang muktamad tentang cara pengetahuan dapat diperoleh dari bentuk- bentuk senibina, tetapi satu papan pemangkin bagi hala-tuju penyelidikan selanjutnya.

APPROVAL PAGE

I certify that I have supervised and read this stud to acceptable standards of scholarly presentation quality, as a thesis for the degree of Master of Ar (Research).	n and is fully adequate, in scope and
	Associate Prof. Dr. Spahic Omer Supervisor
I certify that I have read this study and that in r standards of scholarly presentation and is fully add for the degree of Master of Arts in Islamic Though	equate, in scope and quality, as a thesis
	Associate Prof. Dr. Kabuye Uthman Sulaiman Internal Examiner
	Prof. Dr. Ahmad Sanusi Hassan External Examiner
This thesis was submitted to the International Civilisation (ISTAC-IIUM) and is accepted as a degree of Master of Arts in Islamic Thought and	fulfilment of the requirement for the
	Prof. Dr. Abdelaziz Berghout Dean, International Institute of Islamic Thought and Civilisation (ISTAC-IIUM)

DECLARATION

I hereby declare that this dissertation is the result of my own investigations, except where otherwise stated. I also declare that it has not been previously or concurrently submitted as a whole for any other degrees at IIUM or other institutions.

Nor Ainah Binte Mohamed Ali

Jan / i am ! /	21 January 2022
Signature	Date

1.

INTERNATIONAL ISLAMIC UNIVERSITY MALAYSIA (IIUM)

DECLARATION OF COPYRIGHT AND AFFIRMATION OF FAIR USE OF UNPUBLISHED RESEARCH

I declare that the copyright holders of this dissertation are jointly owned by the student and IIUM.

Copyright © 2021 Nor Ainah Binte Mohamed Ali and International Islamic University Malaysia. All rights reserved.

No part of this unpublished research may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording or otherwise without prior written permission of the copyright holder except as provided below

- 1. Any material contained in or derived from this unpublished research may be used by others in their writing with due acknowledgement.
- 2. IIUM or its library will have the right to make and transmit copies (print or electronic) for institutional and academic purposes.
- 3. The IIUM library will have the right to make, store in a retrieved system and supply copies of this unpublished research if requested by other universities and research libraries.

By signing this form, I acknowledged that I have read and understand the IIUM Intellectual Property Right and Commercialization policy.

Affirmed by Nor Ainah Binte Mohamed Ali

Jan Jim Ji	21 January 2022
Signature	Date

ACKNOWLEDGEMENTS

In the Name of Allah, the Most Beneficent, the Most Merciful.

All Praise belongs to Allah (SWT), the Almighty, the One without Whose Guidance this thesis would not have been possible. The One who journeyed me to destinations, left alone I would never find. The One who guided me to the bearers and inheritors of 'ilm, left alone, I would never meet. Blessings and peace upon our beloved Prophet Muḥammad (SAW), his family and his Companions.

This thesis marks a milestone of my learning journey. It presents the culminations of many travel experiences and encounters with dozens of remarkable individuals who I met along the way. I would like to acknowledge everyone who played a role in this journey.

To my parents, thank you for instilling in me that my purpose in life was to acquire knowledge, to be grateful, to appreciate the beauty of God's creation, and fundamentally to submit to the will of my Creator. With that, I could understand and value my existence. To my family, thank you for assisting and inspiring me in my pursuits and the encouragement to journey on.

I would like to express my sincere gratitude to Dr Spahic Omer, my supervisor, who accepted to supervise this thesis. I thank him for the continuous support of my research, the indulgence of his time, his patience, encouraging words, enthusiasm, and most importantly, the generous sharing of his immense knowledge. His pristine guidance helped me navigate, especially during the challenging time of research and writing of this thesis. My sincere gratitude also to Dr Kamar Oniah Kamaruzaman, who has inspired me in many ways and sharing her knowledge without borders, and Dr Thameem Usama for his sharing of knowledge, concern, and perseverance. And I am grateful to Siti Elmi, Farah Zidah, Haseena, anyone and everyone else, who has rendered me support at different stages of this research - showered me with encouragement, useful critiques, quality time, assistance and also a shoulder to lean, a place to rest, and simply a warm genuine smile.

May Allah (SWT) bestow us with beneficial knowledge and the wisdom to allow us to truly acknowledge His constant Blessings and Favours, so that we could forever be in a state of expressing gratitude. Aamiin ya Rabbal 'alamin.

Table of Contents

ABSTE	RACT		ii
سة البحث	خلام		iii
ABSTE	RAK		iv
APPRO	OVAL F	PAGE	v
DECLA	ARATIO	ON	vi
COPYI	RIGHT	PAGE	vii
ACKN	OWLE	DGEMENTS	viii
LIST C	F FIGU	JRES	xii
LIST C	F TAB	LES	. xxiv
LIST C	F ABB	REVIATIONS	. xxiv
CHAP	ΓER ON	NE : INTRODUCTION	1
1.1	BACE	KGROUND OF STUDY	2
	1.1.1	Concept of Religion, Faith and Spirituality	7
	1.1.2	Religious Architecture – Salient Manifestations of Faiths	11
	1.1.3	The Articulations of Forms	27
	1.1.4	Knowledge Management	35
	1.1.5	Ignorance Management	37
	1.1.6	The City State of Singapore	38
	1.1.7	The Context	42
1.2	STAT	EMENT OF THE PROBLEM AND JUSTIFICATION	44
1.3	PURP	OSE AND OBJECTIVE OF THE STUDY	46
1.4	RESE	ARCH QUESTIONS	48
1.5	SIGN	IFICANCE OF THE STUDY	49
1.6	SCOP	E AND LIMITATIONS OF THE STUDY	54
1.7	CONG	CLUSION	56
CHAP	ΓER TV	VO : CONTRIBUTIONS TO THE BODY OF KNOWLEDGE	58
2.1	INTR	ODUCTION	58
2.2	LITEI	RATURE REVIEW	61
	2.2.1	KM, Data, Information, Knowledge and Wisdom ("DIKW")	64
	2.2.2	Architectural Literacy and Appreciation	71
	2.2.3	Reading Architecture and the Related Forms	72
	2.2.4	Cross-Studies & Explaining Religion Across Cultures	74
	2.2.5	Can Architecture Bridge and Promote Interfaith Understanding?	79

	2.2.6	Conceptualising Mosque Tourism	82
	2.2.7	Islamic Architecture: Language, Unity, Diversity & Community	86
	2.2.8	The Church and Christian Architecture	96
	2.2.9	Buddhist Architecture and the Mandala	98
	2.2.10	The Temple and Hindu Architecture	. 108
	2.2.11	Interfaith Relationships in a Plural Environment	. 111
2.3		OSPECTIVE OBSERVATIONS: VISITS AND TRAVELS LLECTIONS	. 119
	2.3.1	Architecture Of Faiths: Within and Beyond the Shores	. 120
	2.3.2	The Four Monuments – Visits and Observations	. 125
	2.3.3	Retrospective Observations of Architecture via Traveling	. 142
	2.3.4	Pyramids, Pyramidal Roofs and Pagodas	. 157
2.4	CONC	CLUSION	. 164
CHAP	TER TH	REE : RESEARCH METHODOLOGY	. 166
3.1	INTRO	ODUCTION	. 166
3.2	RESE	ARCH STRATEGY	. 168
3.3	RESE	ARCH FRAMEWORK	. 169
	3.3.1	Case Study	. 171
	3.3.2	Readings, Retrospective Observations Via Visits & Travels	. 172
	3.3.3	Literature Reviews	. 173
3.4	RESE	ARCH APPROACH	. 173
	3.4.1	Quantitative Approach	. 174
	3.4.2	Qualitative Approach	. 174
	3.4.3	A Hybrid Approach	. 175
	3.4.4	Intuition: Knowledge, Vision And View of The World	. 175
3.5	DATA	COLLECTION METHOD AND TOOLS	. 176
	3.5.1	Informal Interviews	. 176
	3.5.2	Survey questionnaire	. 178
3.6	ETHIC	CAL CONSIDERATIONS	. 179
3.7	DATA	ANALYSIS	. 180
3.8	CONC	CLUSION	. 180
CHAP	TER FO	UR : RESULTS, FINDINGS AND DISCUSSION	. 181
4.1	INTRO	ODUCTION	. 181
4.2	OVER	VIEW OF STUDY	. 182
4.3	BACK	GROUND KNOWLEDGE/ CASE STUDY	. 185
	431	Historical Exuberance of Monuments and Diversity	185

4.4	SURV	EY QUESTIONNAIRE	188
	4.4.1	Section 1: Responses to Questions	190
	4.4.2	Section 2: Identification of Houses of Worships	200
4.5	ARCH	IITECTURE OF FAITHS - REMAINING FAITHFUL	205
	4.5.1	Are Mosques Define by Domes, Arches and Minarets?	206
	4.5.2	Chinese Cultural Significance and Climatic Conditions	220
	4.5.3	The Indian Labour and the Use of New Building Materials	225
4.6	COGN	NISANCE OF FAITH THROUGH ARCHITECTURE	229
	4.6.1	Preservation Of Knowledge Through Religious Architecture	230
	4.6.2	The Articulation of Forms in Relation to Faiths	233
	4.6.3	The Language of Islamic Architecture	242
4.7	HARV	ESTING KNOWLEDGE, ERADICATING IGNORANCE	246
4.8	SECU	LARISM, MODERNISM AND THE BORDERLESS WORLD	246
4.9	CONC	CLUSION	251
СНАРТ	ER FIV	/E : CONCLUSION AND RECOMMENDATIONS	255
5.1	COGN	VISANCE OF THE FAITH AND WORLDVIEW OF OTHERS	256
5.2	CONC	CLUDING REMARKS	257
	5.2.1	The Micro and the Macro World	257
	5.2.2	Religion and Pluralistic Co-Existence	262
	5.2.3	Circumambulation	264
	5.2.4	Iconography	268
	5.2.5	KM, Architectural Forms and the Ethics of Authenticity	269
5.3	CLOS	ING STATEMENT	278
	5.3.1	Interfaith Understanding in a Shared Space	278
5.4	RECO	MMENDATIONS	284
	5.4.1	Form, Faith and Modernity	284
	5.4.2	Form, Faith, Religious Harmony and Pluralism	285
	5.4.3	Form, Faith and COVID-19	287
BIBLIC	GRAP:	HY	292
APPEN	DICES	- ISOMETRIC VIEW	309
APPEN	DIX I:	THE SULTAN MOSQUE	309
APPEN	DIX II:	THE THIAN HOCK KHENG CHINESE TEMPLE	310
APPEN	DIX III	: THE SRI MARIAMMAN HINDU TEMPLE	311
APPEN	DIX IV	T: THE ST ANDREW'S CATHEDRAL	312
ΔΡΡΕΝ	DIX V	SURVEY OUESTIONNAIRE	313

LIST OF FIGURES

Figure 1.1	Unveiling Ihsan: From the Cosmic view	11
	Retrieved October 07, 2021, from https://doi.org/10.1057/978-1-137-54832-0_5	
Figure 1.2	The Taj Mahal, Agra, India (2019).	12
	Retrieved June 20, 2020, from https://curiosity.com/topics/nobody-knows-who-designed-the-taj-mahal-curiosity/	
Figure 1.3	The Omar Sharifuddin Mosque, Brunei Darusalaam (2012)	13
	Photo by the researcher	
Figure 1.4	The Sultan Mosque, Singapore (2020)	14
	Photo Credit: Siti Jasmah Jasmani	
Figure 1.5	The Hagia Sophia, Turkey.	16
	Retrieved April 20, 2020, from https://istanbulclues.com/hagia-sophia-architecture,	
Figure 1.6	The Mihrab: Hagia Sophia (2011)	17
	Photo by the researcher	
Figure 1.7	The Ceiling, Hagia Sophia (2015)	18
	Retrieved February 14, 2020, from https://www.economist.com/the-economist-explains/2015/01/19/why-islam-prohibits-images-of-muhammad.	
Figure 1.8	The Xi'an's Great Mosque	20
	Retrieved September 20, 2020, from https://en.wikipedia.org/wiki/File:1_great_mosque_xian_2011.JPG	
Figure 1.9a	The Parthenon, Acropolis, Athens, Greece	23
	Photo by the researcher	
Figure 1.9b	The Parthenon, Acropolis, Athens, Greece (Front View)	23

	Retrieved June 20, 2020, from https://www.goldennumber.net/parthenon-phi-golden-ratio/	
Figure 1.10	Frank Lloyd Wright: The Unity Temple	30
	Retrieved February 15, 2020, from https://en.wikipedia.org/wiki/Unity_Temple)	
Figure 1.11	The Hukuru Miskiiy (Old Friday Mosque), Male, Maldives (2013)	31
	Photo by the researcher	
Figure 1.12	The Ant Hill Basilica of the Sagrada, Spain	34
	Retrieved June 14, 2020, from https://insidr.co/sagrada-familia/	
Figure 1.13	KM Value Chain	36
	Diagram by the researcher	
Figure 2.1	The Data-Information-Wisdom Hierarchy as a Pyramid	65
	Retrieved June 14, 2020, from https://journals.lib.washington.edu/index.php/nasko/article/viewFile/12806/11288	
Figure 2.2	The Semiological Triangle, showing an indirect relationship between "forms" and "things"	74
	Retrieved June 14, 2020, from http://frontdesk.co.in/theory-of-design/semiotics-and-architecture/	
Figure 2.3	The Chapel of Notre Dame du Haut, Ronchamp, France	98
	Retrieved June 14, 2020, from https://architectureau.com/articles/le-corbusier-niemeyer-buildings-earn-world-heritage-gong-frank-lloyd-wrights-snubbed/	
Figure 2.4a	The Stupas at the Borobudur, Jogjakarta, Indonesia	99
	Photo by the researcher	
Figure 2.4b	The Rituals at the Borobudur, Jogjakarta, Indonesia	100
	Retrieved June 20, 2020, from https://www.sorin.tv/traveling-around-indonesia-worlds-largest-buddhist-temple-borobudur/	

Figure 2.5	Batu Caves entrance with Murugan Deity (2017)	109
	© Hendraxaverius, Batu Caves entrance with Murugan Deity Retrieved September 19, 2020, via dreamtime.com	
Figure 2.6	Diagram showing the differences between the Nagar Style and the Dravidian Style	110
	Retrieved June 20, 2020, from https://www.jagranjosh.com/general-knowledge/what-is-the-difference-between-dravida-and-nagara-style-of-architecture-1552983274-1	
Figure 2.7	Mohd Kamal Hassan's Graphical Representation of the Concept of Wasatiyyah	115
	Retrieved October 23, 2021, from https://www.jstor.org/stable/ 26351233?seq=3#metadata _info_tab_contents	
Figure 2.8	Mosque in Campong Glam (The Sultan Mosque) (1846)	121
	Retrieved June 20, 2020, from http://www.nlb.gov.sg/biblioasia/2019 /11/29/on-paper-singapore-before-1867/	
Figure 2.9	Chinese Temple to the Queen of Heaven "THK Chinese Temple" (1847)	122
	Retrieved June 20, 2020, from http://www.nlb.gov.sg/biblioasia/2019/11/29/on-paper-singapore-before-1867/	
Figure 2.10	Hindoo Pagoda and (Chulia) Mosque (1846)	123
	Retrieved June 20, 2020, from http://www.nlb.gov.sg/biblioasia/2019/11/29/on-paper-singapore-before-1867/	
Figure 2.11	The Esplanade from Scandal Point1(1851)	124
	Retrieved June 20, 2020, from https://www.roots.sg/learn/stories/the-esplanade/story	
Figure 2.12	The Sultan Mosque (2020)	126
	Photo by the researcher	
Figure 2.13	The Sultan Mosque – the Prayer Hall (2020)	128
	Photo by the researcher	

Figure 2.13a	The Dome (2020)	128
	Photo by the researcher	
Figure 2.13b	The Mihrab and Mimbar	129
	© Imran Ahmed, Mihrab prayer niche, Sultan Mosque Singapore, retrieved April 26, 2020 via dreamtime.com	
Figure 2.13c	The Minaret (2020)	129
	Photo Credit: Siti Jasmah Jasmani	
Figure 2.13d	The Entrance Portico	130
	Retrieved July 27, 2020, from https://theroyaltourblog.com/2018/05/07/singapore-top-cultural-attractions/	
Figure 2.14	The Thian Hock Keng Chinese Temple	130
	© Val_th, Thian Hock Keng Temple of Singapore, retrieved April 26, 2020 via dreamtime.com	
Figure 2.15	The Thian Hock Keng Chinese Temple: Courtyard	131
	© Joel Chua DY, retrieved June 25, 2020 from https://www.visitsingapore.com/see-do-singapore/culture-heritage/places-of-worship/thian-hock-keng-temple/	
Figure 2.15a	Colourful pagoda and gourds	133
	©Lavendertime, Thian Hock Keng Temple, retrieved July 27, 2020 via dreamtime.com	
Figure 2.15b	Dragon forms on eaves and columns	133
	©Lavendertime, Thian Hock Keng Temple, retrieved July 27, 2020 via dreamtime.com	
Figure 2.15c	Dragon forms on eaves and columns	133
	Retrieved July 27, 2020 from https://en.wikipedia.org/wiki/File:Thian_Hock_Keng_Temple,_Jan_06.JPG	
Figure 2.15d	Entrance Doorway	134
	Retrieved July 27, 2020 from https://lightslant.wordpress.com/2013/08/11/thian-hock-keng/	

Figure 2.15e	Entrance Doorway	134
	Retrieved July 27, 2020 from https://heartlandertourist.wordpress.com/2014/02/05/thian-hock-keng-temple/	
Figure 2.16	The Sri Mariamman Hindu Temple	134
	Retrieved June 25, 2020 from https://www.ibtimes.sg/singapore-hindu-devotee-falls-into-firepit-sri-mariamman-temple-33423	
Figure 2.17	The Sri Mariamman Hindu Temple – The Sacred Cow	135
	Retrieved July 27, 2020, from https://www.mileswithvibes.com/singapore/sri-mariamman-temple-hindu-spiritual-destination/	
Figure 2.17a	The Gopuram (grand tower entrance)	136
	Retrieved July 27, 2020, from https://www.mileswithvibes.com/singapore/sri-mariamman-temple-hindu-spiritual-destination/	
Figure 2.17b	The Doorway	136
	© Natalia Sokolovska, retrieved July 27, 2020 via dreamtime.com	
Figure 2.17c	Vimana(s) (Shrine)	137
	Retrieved July 27, 2020, from https://www.newsgram.com/sri-mariamman-temple-all-about-the-oldest-hindu-temple-in-singapore/	
Figure 2.17d	The Mandapa	137
	Retrieved June 25, 2020, from https://www.roots.sg/Content/Places/national-monuments/sri-mariamman-temple	
Figure 2.18	The St. Andrews Cathedral	138
	Retrieved June 25, 2020, from https://www.roots.sg/Content/Places/national-monuments/saint-andrews-cathedral	
Figure 2.19	Interior of the St. Andrews Cathedral	140
	© Phuongphoto, Interior of St. Andrew Cathedral in Singapore. Retrieved April 26, 2020 via dreamtime.com	

Figure 2.19a	Towers – Steeple and Spire	141
	Retrieved July 27, 2020, from http://worldexpatbanks.com/travel/images/st-andrews-cathedral.jpg	
Figure 2.19b	Arched portico	141
	© Bill Roque, retrieved July 27, 2020, via dreamtime.com	
Figure 2.19c	The Pulpit	142
	Retrieved July 27, 2020 from https://cathedral.org.sg/page/tour-the-cathedral	
Figure 2.19d	Stained Glass and Baptismal Font	142
	Retrieved July 27, 2020 from https://cathedral.org.sg/page/tour-the-cathedral	
Figure 2.20	Dome of the Rock, Jerusalem (2015)	145
	Photo by the researcher	
Figure 2.21	The Hagia Sophia, Turkey	148
	Retrieved June 25, 2020, from https://www.maa.org/sites/default/files/pdf/meetings/minis/Mini4HagiaSophia.pdf	
Figure 2.22	The Süleymaniye Mosque	149
	Retrieved October 23, 2021, from https://www.eliteworldhotels.com.tr/blog-en/travel/the-history-of-suleymaniye-mosque-and-its-architectural-features.5.3440.aspx	
Figure 2.23	The Süleymaniye Mosque - Interior	150
	Retrieved October 23, 2021, from https://www.eliteworldhotels.com. tr / blog-en/travel/the-history-of-suleymaniye-mosque-and-its-architectural-features.5.3440.aspx	
Figure 2.24	The Blue Mosque, Turkey	151
	Retrieved June 25, 2020, from https://theistanbulinsider.com/the-blue-mosque-one-of-the-most-famous-misunderstandings/	

Figure 2.25	The Blue Mosque -The Dome (Interior), Turkey	152
	© 2020 TripAdvisor, retrieved June 25, 2020, from https://www.tripadvisor.com/ LocationPhotoDirectLink-g293974-d11962915-i243456105-Tours_Turkey-Istanbul.html	
Figure 2.26	La Mezquita (Great Mosque of Cordoba), Spain	153
	Retrieved June 25, 2020, from https://miviaje.com/wp-content/uploads/2018/02/cordoba.jpg	
Figure 2.27	The Arches of La Mezquita, Córdoba, Spain (2011)	154
	Photo by the researcher	
Figure 2.28	La Mezquita, The Horse Shoe Mihrab	156
	Photo Credit: Bongo Vongo, CC BY-SA 2.0. Retrieved September 28, 2020,	
	https://www.khanacademy.org/humanities/ap-art-history/introduction-cultures-religions-apah/islam-apah/a/introduction-to-mosque-architecture	
Figure 2.29	La Mezquita: The Nave (2011)	157
	Photo Credit: © Ahmad Al-Kastalani	
Figure 2.30	The Pyramids of Giza, Egypt	158
	Retrieved June 25, 2020, from https://cdn.audleytravel.com/-/-79/1491822010942 53065247123008090213234110041099141.jpg	
F' 2.21	• • •	150
Figure 2.31	The Al-Azim Mosque, Melaka	159
	© Muhd Imran Ismail, retrieved August 1, 2020, via shuttlecock.com	
Figure 2.32	Pura Ulun Danu Beratan, Bali, Indonesia	161
	Retrieved June 25, 2020, from https://www.prettyopinionated.com/wp-content/uploads/2019/06/Bali-Botanic-Garden-800x451.jpg	
Figure 2.33	Exterior view of the Wat Phra Kaew, Thailand	162
	Photo by the researcher	

Figure 2.34	Huanglong Temple, China behind the travertine terraces of Huanglong National Park	163
	Retrieved October 17, 2020, from https://blogs.transparent.com/chinese/files/2017/10/DSC_0282.jpg	
Figure 2.35	Huanglong, Yellow Dragon Terraces, China	164
	Photo by the researcher	
Figure 3.1	Research Framework	170
	Diagram by researcher	
Figure 3.2	The Three Sources of Information that drive growth insight	176
	Retrieved August 6, 2020, from https://brianbalfour.com/essays/growth-insights	
Figure 4.1	How Singapore ranked in terms of diversity of the population	182
	Retrieved August 6, 2020, from https://www.pewforum.org/2014/04/04/global-religious-diversity/	
Figure 4.2	General Household Survey of Resident Population Aged 15 and above by Religion and Ethnic Group	183
	Generated by researcher with data from Singapore Department of Statistic. Retrieved 11 September 2020, from https://www.singstat.gov.sg/find-data/search-by-theme/population/population-and-population-structure/latest-data	
Figure 4.3	Racial Composition	191
	Generated from the Survey Questionnaire	
Figure 4.4	Religious composition	192
	Generated from the Survey Questionnaire	
Figure 4.5	Age Group	193
	Generated from the Survey Questionnaire	
Figure 4.6	Familiarity with architecture of houses of worships	194
	Generated from the Survey Ouestionnaire	

Figure 4.7	Visits of House of Worship of Other Religious Faiths	195
	Generated from the Survey Questionnaire	
Figure 4.8a	Identification of Architectural Forms	195
	Generated from the Survey Questionnaire	
Figure 4.8b	Identification of Architectural Forms	195
	Generated from the Survey Questionnaire	
Figure 4.9	Visitations to Houses of Worships	196
	Generated from the Survey Questionnaire	
Figure 4.10	Willingness to receive of information on religious forms	196
	Generated from the Survey Questionnaire	
Figure 4.11	Explaining Architecture of Faiths	197
	Generated from the Survey Questionnaire	
Figure 4.12	Query - A person should not visit the house of worship of other religion.	197
	Generated from the Survey Questionnaire	
Figure 4.13	Brunelleschi's Dome	208
	Retrieved October 4, 2020 from https://italy.queenofclubs.com/story/93-did-you-know-brunelleschi-s-dome-is-the-world-s-biggest-dome-entirely-made-of-bricks-ever-built	
Figure 4.14	Sultan Salahuddin Abdul Aziz Shah Mosque	211
	© Prasit Radpan via Shutterstock	
Figure 4.15	The National Mosque, Malaysia	212
	© Abdul Razak Latif via https://www.shutterstock.com/photos	
Figure 4.16	The original Sultan Mosque in 1825 Singapore	213
	Retrieved October 27, 2021 from https://t0urwithus.wordpress.com/2012/02/02/masjid-sultanmosque/	

Figure 4.17	The Old Siglap Mosque, Singapore	214
	© Yusoff Abdul Latif . Retrieved October 27, 2021 from https://www.flickr.com/photos/al_yus/4630672037	
Figure 4.18	The New Siglap Mosque, Singapore	215
	Retrieved October 27, 2021 from https://www.seekislam.sg/mosque/masjid-kampung-siglap/	
Figure 4.19	The Tengkera Mosque, Melaka.	218
	Retrieved June 25, 2020, from http://2.bp.blogspot.com/_Xpmm0Inq_hI/TPslnVoh0zI/AAAAA AAABL8/pNyvQHCuLvU/s1600/06_Transquerah+Mosque.png	
Figure 4.20	The Miyun Mosque	221
	Retrieved August 13, 2020, from http://malay.cri.cn/381/2012/08/01/41s133174.htm	
Figure 4.21	The Miyun Mosque – the Minaret	222
	Retrieved August 13, 2020, from http://malay.cri.cn/381/2012/08/01/41s133174.htm	
Figure 4.22	The Niujie Mosque	223
	Photo by the researcher	
Figure 4.23	Al-Azhar Mosque- Courtyard	224
	Retrieved October 31, 2021 from https://www.posterazzi.com/several-groups-of-theologians-many-seated-some-writing-in-the-courtyard-of-the-al-azhar-mosque-poster-print-item-varbll0587540511/	
Figure 4.24	Hajjah Fatimah Mosque	227
	Retrieved August 28, 2020 from https://traveltriangle.com/blog/places-to-visit-near-buddha-tooth-relic-temple-bdp/	
Figure 4.25	The Buddha Tooth Relic Temple & Museum	228
	Retrieved August 28, 2020 from https://thesmartlocal.com/reviews/singapore/shop/government-organizations/religious-sites/mosques/masjid-hajjah-fatimah/	

Figure 4.26	The SECI Model	231
	Retrieved September 21, 2020, from http://cosent.nl/en/blog/change-factory-knowledge-platform	
Figure 4.27	Floor Plan of the St Andrew Cathedral	235
	Retrieved September 21, 2020, from https://cathedral.org.sg/page/tour-the-cathedral	
Figure 4.28	Congregational prayers at Masjidil Haraam	236
	Retrieved September 21, 2020 from https://webspace.science.uu.nl/~gent0113/islam/qibla.htm	
Figure 4.29	Original Ma'arof Mosque, Singapore	247
	Retrieved October 27, 2021 from http://mushollamasjid.blogspot.com/2016/08/maarof-mosque-jurong-west.html	
Figure 4.30	The New Ma'arof Mosque, Singapore	249
	Retrieved October 27, 2021 from https://www.muis.gov.sg/mosque/Our-Mosques/Mosque-Directory/Maarof	
Figure 5.1	Diagram showing connection of the environment-Mosque- Cemetery- Ka'bah as world macrocosm	259
	Retrieved August 28, 2020 from https://www.e3s-conferences.org/articles/e3sconf/pdf/2018/42/e3sconf_i-trec2018_04037.pdf	
Figure 5.2	Circumambulation, with social distancing during the Covid 19 pandemic (2020).	265
	© AFP Press https://www.scmp.com/news/world/middle-east/article/3097591/saudi-appoints-10-women-senior-religious-roles-rare-show	
Figure 5.3	The Miyun Mosque: Prayer Hall.	274
	Photo by the researcher	

Figure 5.4	Main Prayer Hall of Yusoff Ishak Mosque, featuring the mimbar.	276
	Retrieved September 21, 2020, from https://www.tnp.sg/sites/default/files/styles/rl680/public/articles/2017/04/15/NP_20170415_DAMOSQUE15_1537213.jpg?itok=OSTQ8spS	
Figure 5.5	Isometric view of The Sultan Mosque	309
	Retrieved from "The religious monuments of Singapore: Faiths of our forefathers. Singapore: Preservation of Monuments Board".	
Figure 5.6	Isometric view of Thian Hock Keng Chinese Temple Retrieved from "The religious monuments of Singapore: Faiths of our forefathers. Singapore: Preservation of Monuments Board".	310
Figure 5.7	Isometric view of Sri Marriaman Hindu Temple Retrieved from "The religious monuments of Singapore: Faiths of our forefathers. Singapore: Preservation of Monuments Board".	311
Figure 5.8	Isometric view of St. Andrew's Cathedral Retrieved from "The religious monuments of Singapore: Faiths of our forefathers. Singapore: Preservation of Monuments Board".	312

LIST OF TABLES

Table 1	Figures for respective religion for the past three decades (Source: 2014 Pew Research)	42
Table 2	Axial/Centralized Plan and Platform of selected religious architecture	101
Table 3	Man-made Mountains and Entrances	102
Table 4	Halls and Enclosures	103
Table 5	Forms that could be seen at Borobudur	105
Table 6	Illustrations of some of the rituals practiced at Borobudur	106
Table 7	Brief description of selected <i>forms</i> of the Sultan Mosque architecture	128
Table 8	Brief description of selected <i>forms</i> of the Thian Hock Kheng Chinese Temple architecture	133
Table 9	Brief description of selected <i>forms</i> of the Sri Mariamman Hindu Temple architecture	136
Table 10	Brief description of selected <i>forms</i> of the St Andrew's Cathedral architecture	141

LIST OF ABBREVIATIONS

SWT Glory to Him, the Exalted	
SAW Peace be upon him	
AS May Allah be pleased with him	
DIKW Data, Information, Knowledge, Wisdo	m
KM Knowledge Management	
IKM Islamic Knowledge Management	
BTRTM Buddha Tooth Relic Temple and Muse	um
ATMT Awareness through Mosque Tour	
HDG Harmony in Diversity Gallery	