# Space-provider or invader? The identity of community built mosques in multi-cultural suburbs of Johannesburg

Ву

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#### **ABSTRACT**

After the Group Areas Act of 1950 was abolished on the 5<sup>th</sup> of June 1991 in South Africa, non-white Muslims were able to reside in suburbs that were regarded previously as white only suburbs. As Muslim families moved into these suburbs, a need for local mosques to be built arose. This was to facilitate the five daily prayers and the religious education of the Muslim community. These new mosque were built in a space that previously had no Muslim presence and as such took on a far deeper meaning the historically accepted symbol of Islamic identity. Grabar (2004:40) states, "the building known as a mosque is permanently and appropriately associated with the presence of Islam". This symbolism has not changed, however the mosque now faces the challenge of associating itself with the community it serves.

This study aims to critically analyse existing mosques from the last 10 years to determine how multicultural communities have influenced the interior design and architectural identity of the mosques based on the challenges faced when developing the mosque. As the presence of mosques have been a key point of debate in Europe, as stated by Allievi (2010:13) "conflicts over building mosques in Europe are multiplying", considerable research has been undertaken in that part of the world, however here in South Africa no research has been done in the field of interior design and detailing on local mosques.

To identify the challenges in developing a community built mosque three case studies from locations in Johannesburg have been selected for this study. These mosques located in Greenside, Auckland Park and Houghton have been selected as they are funded by the Muslim communities they serve, were built in the last 10 years, serve Muslim communities that are fairly young and are located in suburbs that represent diverse cultural and social backgrounds. Mulugeta (2009) indicates that "since the 1994 democratic elections, affluent Muslims have increasingly been moving into formerly exclusively white neighbourhoods, where mosques were forbidden under the old system". Three international mosques have been selected with similar criteria to that of the local case studies. This was done to assist in developing an understanding of the strategies being employed in mosque design.

Through an interpretivist approach, this qualitative research aims to create a deeper understanding of the challenges that architects and designers face when designing community built mosques in Johannesburg. Qualitative research methodologies such as visual analysis and textual analysis shall be used to investigate the knowledge required. Thereafter interviews with architects and designers

of mosques as well as with the mosque representatives and members of the communities surrounding the case studies will be performed to arrive at an understanding of the issues involved with the design process. The interviews will also provide information on the communities' opinion concerning the mosque. The anticipated output from this research is to be a dissertation outlining the positive and negative aspects of concepts and techniques used in designing mosques that attempt to embrace contemporary architectural and interior design trends, yet keep an Islamic identity. This study could be of interest to architects, interior designers and local Muslim communities that are yet to build a mosque, or for communities in which mosques are already located.

# **TABLE OF CONTENTS**

		Page
DECLA	RATIONError! Bookmark not defi	ned.
ABSTR	ACT	i
TABLE	OF CONTENTS	iii
ACKNO	OWLEDGMENTS Error! Bookmark not defi	ned.
LIST OF	FIGURES	vii
LIST OF	TERMINOLOGY	vii
LIST OF	APPENDICES	. xiv
1	CHAPTER 1: INTRODUCTION AND OVERVIEW OF THE STUDY	1
1.1.	Introduction	1
1.2.	Context of the study	1
1.3.	Research Question	2
1.4.	Research aims and objectives	2
	1.4.1. Research aim	2
	1.4.2. Research objectives	2
1.5.	Research Methodologies	3
	1.5.1. Introduction	3
	1.5.2. Qualitative research	
	1.5.3. Interpretivist framework	5
	1.5.4. Case study method	7
	1.5.5. Local case studies	9
	1.5.6. International case studies	11
	1.5.7. Data collection strategies	13
	1.5.8. Organising and preparing data	15
	1.5.9. Data analysis	16
	1.5.10. Validity	16
	1.5.11. Ethical considerations and participation	17
1.6.	Contribution of the study	18
1.7.	Chapter Outline	
	1.7.1. Chapter 1: Introduction and overview of the study	18
	1.7.2. Chanter 2: Literature Review	19

		1.7.3. Chapter 3: South African Case Studies	19
		1.7.4. Chapter 4: International Case Studies	19
		1.7.5. Chapter 5: Conclusion	19
	1.8.	Reflective Note	19
2		CHAPTER 2: LITERATURE REVIEW	21
	2.2.	Mosques as a building type	21
	2.3.	Muslim communities in the post-apartheid South Africa	23
	2.4.	Debates around mosques	25
	2.2.	Key architectural and interior design elements in mosque design	26
	2.3.	The interior design and architectural identity of the mosque	39
	2.4.	Hybridity in mosque design	42
	2.5.	Orientalism and the 'Other'	45
	2.6.	The social and political impact of the mosque on the surrounding urban fabric	49
	2.7.	Reflective note	51
	3.1.	Introduction	53
		3.1.1. Masjid-ur-Rahmah (Greenside Mosque)	53
		3.1.2. Masjid-ul-Furqaan (Houghton Mosque)	54
		3.1.3. Auckland Park Mosque	55
	3.2.	Identity	56
		3.2.1. Site Orientation and spatial planning of case studies	56
		3.2.2. Key architectural elements and motifs of the local case studies	58
		3.2.3. Key interior elements and motifs	66
		3.2.4. Perception of case studies' identity by their surrounding communities	82
	3.3.	Hybridity	83
		3.3.1. Openness to surrounding community	83
		3.3.2. Inclusivity	88
	3.4.	The Muslim 'other'	91
		3.4.1. Objections to the construction of the mosques	91
		3.4.2. Effect of Muslims on community dynamics	94
	3.5.	The impact of the local case studies on their surrounding urban fabric	95
		3.5.1. Muslim presence in the urban fabric	95
		3.5.2. Property values around case studies	98
		3.5.3. Parking, traffic and street activity	99
	3.6	Reflective note	100

	4.1.1.	Al-Irsyad Mosque, Indonesia	103
	4.1.2.	Cologne Central Mosque, Germany	104
	4.1.3.	Cambridge Mosque, England	105
4.2.	Iden	tity	106
	4.2.1.	Spatial planning of case studies	106
	4.2.2.	Key architectural elements and motifs	108
	4.2.3.	Key interior elements and motifs	113
	4.2.4.	Perception of case studies' identity by their surrounding communities	121
4.3.	Hyb	ridity	122
	4.3.1.	Openness to surrounding community	122
	4.3.2.	Inclusivity	124
	4.3.3.	Spirituality	126
	4.3.4.	Sustainability	126
4.4.	The	Muslim 'other'	127
	4.4.1.	Objections to construction of the mosques	127
	4.4.2.	Effect of Muslim presence on community dynamics	128
4.5.	The	impact of the case studies on their surrounding urban fabric	130
	4.5.1.	Muslim presence in the urban fabric	130
	4.5.2.	Property values around case studies	132
	4.5.3.	Parking, traffic and street traffic	132
	4.5.4.	Sustainability	133
4.6.	Refl	ective Note	134
5.2.	Influ	uence of the community on the visual identity of the mosques	136
	5.2.1.	Response to the community in the architectural identity	136
	5.2.2.	Response to the community in the interior design identity	137
5.3.	Inclu	usion of the concepts of hybridity in the mosques	138
	5.3.1.	Openness of the mosques to the surrounding community	139
	5.3.2.	Inclusivity in the mosques	140
	5.3.3.	Additional concepts of hybridity included in the mosques	141
5.4.	Add	ressing The Muslim 'other' through the mosques	141
	5.4.1.	Effect of the case studies' identity on perception of Islam	141
	5.4.2.	Change to community dynamics	142
5.5.	The	influence of the muslim presence in the community	143
5.6.	Reco	ommendations	144

	5.7.	Advantages and limitations	145
	5.8.	Further research possibilities	146
	5.9.	Reflective note	146
S	OURCES	CONSULTED	148
	Appen	dix A: Letter of Introduction	154
Appendix B: Informed consent form for community members			156
	Appendix C: Interview questionnaire outline for community members		
	Appen	dix D: Informed consent form for architects and designers	158
	Appen	dix E: Interview questionnaire form for architects and designers	159

# LIST OF FIGURES

ge
8
0
LO
1
2
2
L3
21
22
23
24
26
27
28
80
32
34
35
36

Figure 2.13: Inside of main dome in the prayer hall of the Nizamiye Mosque, Midrand,  Johannesburg, South Africa, 2015	37
Figure 2.14: Chandelier below the main dome of the Nizamiye Mosque, Midrand,  Johannesburg, South Africa, 2015	38
Figure 2.15: The Turkish Mosque, Kew Gardens, London, UK, 1762, Sir W. Chambers	45
Figure 2.16: The Mosque, Schloss Schwetzingen, Germany, Nicholas de Pigage, 1775,  Photograph by Peter Richter	46
Figure 3.1: North and East Façade of <i>Masjid-ur-Rahmah</i> , Greenside, Johannesburg, 2017	54
Figure 3.2: North facade of <i>Masjid-ul-Furqaan</i> showing the dome and the <i>minaret</i> , Houghton,  Johannesburg, 2017	55
Figure 3.3: North East Facade of the Auckland Park Mosque, Johannesburg, 2017	56
Figure 3.4: Aerial view of <i>Masjid-ur-Rahmah</i> in Greenside using Google Earth, Greenside,  Johannesburg, 2017	56
Figure 3.5: Aerial view of <i>Masjid-Ul-Furqaan</i> in Houghton using Google Earth, Houghton,  Johannesburg, 2017	57
Figure 3.6: Aerial View of Auckland Park Mosque taken from Google Earth, Johannesburg,  2017. Photograph sourced from Google Earth	58
Figure 3.7: East facade of <i>Masjid-ur-Rahmah</i> as well as the dome and <i>minaret</i> , 2017,  Greenside, Johannesburg	62
Figure 3.8: Minaret of Masjid-ul-Furqaan as seen from inside the mosque staircase, Houghton,  Johannesburg, 2017	63
Figure 3.9: Auckland Park Mosque's <i>minaret</i> and entrance, Johannesburg, 2017	64
Figure 3.10: South Facade of Greenside Mosque showing the main entrance, Greenside,  Johannesburg, 2015	65
Figure 3.11: Entrance arches and column supports of <i>Masjid-ur-Rahmah</i> , Greenside,  Johannesburg, 2017	65
Figure 3.12: Interior of <i>Masjid-ur-Rahmah</i> , Greenside, Johannesburg, 2017	67
Figure 3.13: Interior of <i>Masjid-ul-Furqaan</i> , Houghton, Johannesburg, 2017	67
Figure 3.14: Interior of Auckland Park Mosque, Auckland Park, Johannesburg, 2017	68

Figure 3.15: Courtyard of <i>Masjid-ur-Rahmah</i> showing the attempted canopy design,  Greenside, Johannesburg, 201769
Figure 3.16: Transitional courtyard between mosque and <i>madressah</i> of <i>Masjid-ul-Furqaan</i> as seen from East secondary entrance, Houghton, Johannesburg, 201769
Figure 3.17: Courtyard of <i>Masjid-ul-Furqaan</i> , Houghton, Johannesburg, 201770
Figure 3.18: Auckland Park Mosque courtyard, Auckland Park, Johannesburg, 201771
Figure 3.19: Auckland Park Mosques' shoe racks and multi-use space, Johannesburg, 201772
Figure 3.20: <i>Qiblah</i> Wall, <i>Mihrab</i> and <i>Mimbar</i> of Greenside Mosque, Greenside,  Johannesburg, 201773
Figure 3.21: <i>Qiblah</i> wall, <i>mihrab</i> and <i>mimbar</i> of Masjid-ul-Furqan, Houghton,  Johannesburg,201774
Figure 3.22: Auckland Park Mosques' qiblah wall, mihrab and mimbar, Johannesburg, 201775
Figure 3.23: Musalla at the Greenside Mosque, Greenside, Johannesburg, 201777
Figure 3.24: Musalla pattern of Masjid-ul-Furqan, Houghton, Johannesburg, 2017
Figure 3.25: Auckland Park Mosque's <i>musalla</i> pattern, Johannesburg, 201779
Figure 3.26: Inside of the dome of the <i>Masjid-ur-Rahmah</i> in relation to the <i>qiblah</i> wall,  Greenside, Johannesburg, 200580
Figure 3.27: Inside of the main dome of <i>Masjid-ul-Furqaan</i> , Houghton, Johannesburg, 201781
Figure 3.28: Domed ceiling in Auckland Park mosque, Auckland Park, Johannesburg, 201783
Figure 3.29: Football field behind <i>Masjid-ul-Furqaan</i> , Houghton, Johannesburg, 201487
Figure 3.30: Classroom wing with additional facilities of <i>Masjid-ur-Rahmah</i> , Greenside,  Johannesburg, 200590
Figure 4.1: North and East facades of the Al-Irsyad Mosque, Indonesia, 2011104
Figure 4.2: South East Facade along <i>Innere Kanal</i> Street of the Cologne Central Mosque,  Cologne, Germany, 2016. Photograph by Benedict Force
Figure 4.3: Artistic Impression of Cambridge Mosque, Cambridge, England, 2017. Image produced by Marks Barfield Architects
Figure 4.4: Plan of Al-Irsyad Mosque by the Architect, M. Ridwan Kamil, Bandung, Indonesia,
2012.

Figure 4.5: Ground Floor Plan of Cologne Central Mosque complex, Cologne, Germany, 2015.  Plan drawn by Paul Böhm Architects	107
Figure 4.6: Floor Plan of Cambridge Mosque, Cambridge, England, 2017. Plan drawn by Marks  Barfield Architects	108
Figure 4.7: North Entrance of Al-Irsyad Mosque, Indonesia, 2012. Photograph by Emilio Photoimagination	111
Figure 4.8: North West Facade of the Cologne Central Mosque, Cologne, Germany, 2017.  Photograph by Benedict Force.	112
Figure 4.9: Interior of the Al-Irsyad Mosque, Indonesia, 2012. Photograph by Emilio Photoimagination	113
Figure 4.10: Interior of the Cologne Central Mosque, Cologne, Germany, 2017. Photograph by  Benedict Force.	114
Figure 4.11: Artistic Impression of the atrium and covered portico of the Cambridge Mosque,  Cambridge, England, 2017. Image produced by Marks Barfield Architects	115
Figure 4.12: Artistic Impression of Cambridge Mosque's main prayer hall interior, Cambridge, England, 2017. Image produced by Marks Barfield Architects	115
Figure 4.13: <i>Qiblah</i> wall and <i>mihrab</i> of the Al-Irsyad Mosque, Indonesia, 2012. Photograph by Emilio Photoimagination.	117
Figure 4.14: Interior of mosque, <i>qiblah</i> wall, <i>mihrab</i> and <i>mimbar</i> of Cologne Central Mosque,  Cologne, Germany, 2017. Photograph by Benedict Force	118
Figure 4.15: Artistic Impression of the Cambridge Mosque <i>qiblah</i> wall, <i>mihrab</i> and <i>mimbar</i> ,  Cambridge, England, 2017. Image produced by Marks Barfield Architects	119
Figure 4.16: Artistic Impression of the pattern developed by Professor Keith Critchlow for the mosque ceiling, dome and columns, Cambridge, England, 2017. Image produced by Marks Barfield Architects	121
Figure 4.17: Presentation session in the Al-Irsyad, Mosque, KBP, Indonesia, 2012. Photograph  by Emilio Photoimagination	124

# **LIST OF TERMINOLOGY**

Term	Definition
Adhaan	Arabic term for Islamic call to prayer, announced from the <i>minaret</i> of the mosque, through loudspeaker or through a transmitter system (The Adhan 2017).
Allah	Arabic term for the one and only God in Islam (Allah 2017).
Ghusl	Arabic term for ritual bath that is a more extensive ablution needed after sexual relations, childbirth, or menstruation (Wudu 2017).
Hadith	Arabic term for the various collected accountings of words, actions and habits of the Prophet Muhammed (p.b.u.h.), literal meaning is account (What is the 2017).
lmam	Arabic term for person who leads prayers in the mosque, literal meaning is leader (Weisbin 2013:[sp]).
lwan	Arabic term for a vaulted space that opens on one side to a courtyard, mainly used in monumental architecture of Islam (Weisbin 2013:[sp]).
Jamaat Khana	Urdu Term for temporary prayer spaces often found in repurposed houses, factories, warehouses and offices (Dassetto 2010:60)
Janazah	Arabic term for funeral, can also be used to refer to the deceased person (Islamic Funeral Rites 2017).
Madressah	Arabic term for school or any place of learning (Glossary: Madrassa 2017).
Makkah	Arabic term for Islam's holiest city located in the Kingdom of Saudi Arabia (Mecca 2017).
Masjid	Arabic term for mosque, a gathering place for Muslims to pray, literal meaning is place of prostration (Weisbin 2013:[sp]).
Term	Definition

Masjid-ul-Furqaan Official Arabic name for Houghton Mosque, literal meaning is Mosque of

Evidence (Masjid-ul-Furgaan 2017:[sp]).

Masjid-ur-Rahmah Official Arabic name for Greenside Mosque, literal meaning is Mosque of

Mercy (Masjid ur Rahmah 2017:[sp]).

Mihrab Arabic term for a niche in the giblah wall that the imam stand in front of

(Weisbin 2013:[sp])

Mimbar Arabic term for a type of pulpit consisting of a short flight of stairs and a

platform used by the *Imam* to deliver the sermon in the mosque (Weisbin

2013:[sp]).

Minaret Arabic term for a tower that is adjacent or attached to a mosque from which

the Adhaan announced (Weisbin 2013:[sp]).

Musalla Arabic term for prayer rug or carpet, also refers to the carpets of the mosques

(Islamic prayer rug ... 2017).

Qiblah Arabic term for the direction towards Makkah from anywhere on Earth, the

direction changes based on an individual's location in the world (Weisbin

2013:[sp]).

Qiblah Wall Term for wall in a mosque that indicates the direction of Makkah, often

regarded as the front of the mosque (Weisbin 2013:[sp])

Qubba Arabic term for a dome structure usually above the mosque, some mosques

have more than one dome (Weisbin 2013:[sp]).

Quraan Arabic term for the holy book of Islam (Quran ... 2017).

Saffs Arabic term for rows formed during congregational prayers at the mosque

(Islamic Prayer ... 2017).

Sahn Arabic term for courtyard, a fundamental part of the congregational mosque,

often adjoined to the main prayer hall (Weisbin 2013:[sp]).

Term Definition

Salaah

Arabic term for Islamic prayer to be performed five times a day. The prayer is to be performed in congregation by men and women can perform the prayer at home or any other place of prayer (Islamic Prayer ... 2017).

Şawāmi

Ummayad Era

The Umayyad epoch was a 90-year period of Islamic history beginning in 661 A.D. The Umayyad Empire was established by Muawiya bin Abu Sufyaan after the death of the fourth Caliph, Ali bin Abu Talib. The capital of the empire was setup in Damascus and made a significant contribution the cultural and artistic heritage of Islam (The Umayyads [sa]).

Wudhu

Arabic (also found in Urdu language) term for ritual ablutions or cleansing using water prior to prayers (Weisbin 2013: [sp]).

Wudhu Khana

Urdu term for room to perform the ritual ablutions or cleansing, usually found as a room opening onto the courtyard of the mosque (Weisbin 2013: [sp]).

# LIST OF APPENDICES

Appendix A Letter of Introduction

**Appendix B** Informed Consent Form for community members

**Appendix C** Interview Questionnaire Form for community members

**Appendix D** Informed Consent Form for architects and designers

**Appendix E** Interview Questionnaire Form for architects and designers

#### 1. CHAPTER 1: INTRODUCTION AND OVERVIEW OF THE STUDY

#### 1.1. Introduction

I begin Chapter 1 by describing the context of the study and the criteria used for selecting the local and international case studies. The research question, aims and objectives guiding the study are presented followed by a discussion on the research methodology, my theoretical position used for this study, the criteria used for selecting the case studies and a brief outline on each of the case studies. I then discuss the data collection strategies and themes of research that emerged from collecting the data. Thereafter I discuss the validity and ethical considerations of the study followed by the chapter outline. I complete the chapter with a reflective note on the information discussed in the chapter.

# 1.2. Context of the study

This study is primarily located in South African post-apartheid suburban communities in Johannesburg that currently have a Muslim presence that has been established after the democratic elections of 1994. The study is supported by the observation that there is currently no detailed research in the field of interior design or architecture in South Africa on this topic. The study is primarily based on mosque interior design spaces, relating exterior spaces and the visual identity of mosques that have been developed in these communities since 1994. The study will reflect on design, development and community influence pertaining to case studies developed over the past 10 to 20 years during the post-apartheid period.

I would like to state that I have a personal interest in the topic of this dissertation that allows me to provide insight on the topic as well as the discussions and activities that take place within the Islamic community. I form part of a Muslim family that relocated from Lenasia to a neighbourhood defined as a *white suburb* prior to the abolishment of the Group Areas Act of 1950. My family were role-players in the establishment of a new mosque in the area and I therefore gained personal insight into the challenges that the mosque leadership faced and continue to address on a daily basis. Through my experience (lived experience), I have observed changes, adaptations as well as tensions that contribute to the challenges that this study aims to investigate and discuss.

The study will therefore focus on the suburbs and mosques familiar to me and relevant to the criteria identified for this study as described later in this chapter. In these examples, mosques such as the *Masjid-ur-Rahmah* in Greenside/Emmarentia attempts to blend eastern and western styles of architecture and interiors into one space. Mulugeta (2009:1) states, "with its modernist skylight, bouquet of metal arches reaching to the heavens and expanse of plush carpets, the Mosque of

Mercy in Emmarentia is a monument to Islam's aspirations in the new South Africa and the religion's harmonious integration into the nation's life".

#### 1.3. Research Question

The primary research question that prompts this study is: How is the mosque identity presented in multi-cultural suburbs of Johannesburg through the design of the interior and exterior spaces?

In order to answer the primary research question, the following secondary questions need to be considered.

- What constitutes the multi-cultural community that surrounds the case studies?
- In what way does a multi-cultural community influence the interior and exterior spaces of the community-built mosque?
- In what way has cultural traditions influenced the visual identity and spatial planning of the community-built mosque?
- In what way have the architects and designers chosen to address misconceptions of Islam through the design of the community-built mosque?
- In what way has the community-built mosque influenced the surrounding urban fabric?

# 1.4. Research aims and objectives

#### 1.4.1. Research aim

The central aim of this study is to critically analyse existing mosques from the last 10 years to determine how multi-cultural communities have influenced the interior design and architectural identity of the mosques based on the challenges faced when developing the mosque.

# 1.4.2. Research objectives

The objectives below have been formulated in order to answer the previously mentioned research questions:

- Conduct a literature review in order to understand the existing academic theories and discussions around the architecture, interior design and influence of mosques on the surrounding community.
- ii. Identify three South African and three international mosques, which fulfil the criteria of community built structures that have been constructed within the last 10 years.

- iii. Collect data concerning the South African mosques through existing literature, written notes and photographs derived from visiting the spaces personally.
- iv. Collect data through online journals and websites of the three international mosques in order to gain an understanding of the interiors and exterior spaces and document observations in the form of written notes and images sourced online.
- v. Conduct interviews with the designers of the selected mosques in an attempt to gain further understanding of the concepts implemented in the design of the structures that address the multi-cultural community.
- vi. Conduct open-ended interviews with community members surrounding the mosques in order to understand the impact of the mosque on the surrounding urban fabric.
- vii. Analyse and compare the collected data of the South African case studies to the international case studies in order to understand how the identity of community-built mosque interior and exterior spaces have had an influence on the surrounding urban space of multi-cultural communities.

#### 1.5. Research Methodologies

#### 1.5.1. Introduction

The methodology section of this dissertation expands on the methods used within this particular study. The notions of qualitative research and an interpretivist framework are discussed along with a description of the case study method that has been utilised to obtain data.

The data collection methodology is described and includes the use of sample groups, published texts, observations, photographs and interviews. As interviews play an important role in obtaining data on the case studies for this study, the interview process is described in depth. Lastly, the concept of validity and reliability that were used in the study are discussed.

#### 1.5.2. Qualitative research

I have chosen to use qualitative research methodologies to answer the research questions and subquestions of this study. As a researcher, I have chosen to use this method as it allows for an array of options to be used to conduct the research as stated by Creswell (2007:236). Furthermore Creswell (2007:37) defines qualitative research as a method to inquire into the meaning individuals or groups ascribe to a social or human problem. Various frameworks currently exist as a way to conduct qualitative research. According to Creswell (2007:36) traditional approaches to qualitative research includes an interpretive, naturalistic approach. Denzin & Lincoln (cited by Creswell 2007:36)

qualitative researchers study things in their natural settings, attempting to make sense of, or interpret phenomena through the meanings people bring to them. As the case studies and communities selected cannot be moved in anyway, it is required to study these in their natural settings.

The following are nine common characteristics of qualitative research as identified by Creswell (2007:37-38) and how they apply to this study:

- According to Creswell (2007:37) during the qualitative research process, the data is most
  often collected at the site where the participants' experience the issue or problem that is
  being studied. In the case of this study, the case studies are physical structures that occupy a
  set space. They have a direct and indirect impact on the surrounding space and thus it is best
  suited to study these in their natural setting.
- According to Creswell (2007:38) qualitative researchers are a key instrument of the study as
  they collect data, examine documents, observe behaviour and interview participants
  personally. The researchers do not rely on questionnaires or instruments developed by
  other researchers. This suits the study as much of the research is new and had to be
  developed by myself, especially with regards to the South African case studies.
- Creswell (2007:38) states that qualitative researchers generally gather multiple forms of data and then review the data, organizing it in themes rather then depend on a single source of data. For this study, I have collected data from existing literature, personal photographs of the South African case studies, published photographs of the international case studies, interviews with participants and personal observations of the case studies. Thereafter I organized and analysed the data as discussed in section 1.5.7 and 1.5.8 of this chapter.
- Creswell (2007:39) states that qualitative researchers work from the bottom-up by
  organizing the data into increasingly abstract units, which often involves an interactive
  process whereby the participants of the study shape the themes that, emerge during the
  data collection and analysis process. As this study is addressing a topic that is relatively
  unaddressed, the themes developed were constantly evolving as data was collected and
  analysed. This was especially true for the South African case studies.
- According to Creswell (2007:39) the focus of the qualitative researcher should always be on learning the meaning that the participants hold about the problem and not on the meaning that the researcher brings to the study from the literature. During this study, it became evident that there was very little research on the topic and much of the research was

- developed by observing the case studies and surrounding spaces as well as through the interviews with members of the communities.
- Creswell(2007:39) mentions that research process for qualitative researchers is an emergent one as the initial plan of research may change or shift once the data is being collected. The researcher is to learn about the problem or issue from the participants in order to address the research. In this study, the research process was constantly changing, as new data was required to further understand and explain the topic being researched. As the topic is new, the process was kept fluid in an attempt to explore the topic in the best possible way.
- Creswell (2007:39) states that qualitative researchers often use a lens to view their studies
  that is central to the theoretical discussions around the topic of the study. The study may
  often be organized around these theoretical discussions. This study has been structured
  around key theoretical concepts of identity, hybridity, the Muslim 'other' and the social
  impact of the case studies in order to explore the complex layers of the study.
- According to Creswell (2007:39) qualitative research is a form of inquiry that allows the
  researcher to interpret what they see, hear and understand. The researcher's interpretation
  cannot be separated from their personal background and knowledge. As such, at the end of
  each chapter I have chosen to include a reflective note on the discussion contained within
  that chapter. In this way, I attempt to give the reader an indication of my own interpretation
  of the study.
- Creswell (2007:39) mentions that qualitative researchers try to develop a complex picture of the problem or issue under study in order to sketch a larger picture to the reader that includes the many factors and perspectives of the study. To achieve this I have engaged with multiple stakeholders of the various case studies. This included the architects, designers, Muslim and non-Muslim members of the communities surrounding the selected case studies. Local and international literature was also used during the data collection process. The data was than coded and analysed to identify and discuss the themes in a holistic manner to provide the reader with a full understanding of the discussion contained within this study.

#### 1.5.3. Interpretivist framework

The interpretive paradigm was chosen as the study's main framework. It is based on a relativist ontology, which assumes that reality is constructed subjectively through meanings and understandings that are developed socially and experientially (Cohen and Crabtree 2008). I chose this paradigm, as I was interested in developing an understanding of how architects and designers

approached the design of mosques to communicate a uniquely South African identity in the selected case studies.

This has been chosen, as it is very difficult to quantify visual identity, creativity and the outputs that derive from it. The study is to primarily focus on the visual identity, interior design and detailing of the mosques as well as key architectural elements of the mosques. Due to the nature of religious architectural styles, various design movements could be looked at depending on the style of the case study. This approach is often associated with an "interpretivist framework" according to Henning (2004:20).

According to Cohen & Manion (in Thanh & Thanh 2015:24) interpretivist researchers attempt to understand the world of human experience. Furthermore Creswell and Yanow & Schwartz-Shea (in Thanh & Thanh 2015:26) state that interpretivist researchers discover reality through the participants views, backgrounds and experiences. This study is focussed on the challenges faced by designers and architects when developing a community built mosque in an established multi-cultural suburb of Johannesburg that did not previously have a Muslim presence. The study therefore aims to critically analyse existing mosques from the last 10 to 20 years to determine how multi-cultural communities have influenced the interior design and architectural identity of the mosques based on the challenges that are encountered when developing the mosque.

The purpose of this study is to create a knowledge base through critically analysing the chosen examples that would serve to assist future designers and architects in their understanding of an identity for the South African community built mosque. This knowledge base could reflect the intentions, beliefs, values and motivation of the designers, architects and community members towards the design of the interiors of the selected examples. The proposed framework for this study is thus an interpretivist one.

According to Cohen (2006:[sp]) the interpretivist paradigm is based on relativist ontology, which assumes that reality, as we know it, is constructed through meaning, and understanding is developed socially and experientially. The epistemology is subjectivist and as such presupposes that the researcher cannot be separated from what is revealed through previous experience, especially as there is a personal involvement in the subject.

Cohen (2006:[sp]) indicates that in this type of framework, findings are considered as an investigation that may precede and emerges during the dialogue between the researcher and the participants of the interviews. Henning (2004:20) has further indicated that the research conducted within this type of framework is sensitive to the influence and interaction of the participant's context on the observed examples and subjects. In this study, the aim is to capture knowledge from the

designers, architects and community members that could be viewed as insider knowledge. This is to be done by conducting semi-structured interviews. My own personal experience will aid in understanding and presenting this insider knowledge.

The primary tools of research for local case studies are visual analysis through the means of photographs and site visits. To further supplement findings, interviews with community members around the case studies and the architects and designers of the mosques were undertaken. A copy of the interview forms is included as Appendix B and C. The interviews have been recorded as transcripts. As suggested by Babbie and Mouton (2004:271), "the qualitative researcher should attempt to position him/herself in the shoes of the people being interviewed, within the natural setting that is being investigated, and strive to understand their actions, decisions and behaviour from their perspective". Through my personal observation of the case studies, I aim to present an insightful and critical analysis of the case studies. Further supporting data has been derived by analysing published information in a literature review.

The primary tools of research for the international case studies are visual analysis through the means of photographs and websites. An analysis of text taken from websites act as a supplementary tool to the visual analysis. Where communication has been established via email with representatives of the international case studies, digital interview questionnaires have been conducted and analysed as an additional form of analysis.

The information researched was put through a qualitative content analysis, a method according to Coolican that is "broadly used to analyse meanings in texts or transcripts" (2004:555). I present the analysis of the local case studies in Chapter 3 and of the international case studies in Chapter 4.

# 1.5.4. Case study method

The case study method is used for this study as it is a suitable method of research that is "used in city and regional planning research, such as studies of plans, neighbourhoods or public agencies" (Yin 2009:1). Case studies allow the researcher to understand "complex social phenomena and retain the holistic and meaningful characteristics of real-life events" (Yin 2009:3). Furthermore according to Yin (2009:6) 'how' and 'why' questions are more explanatory and likely to lead to the use of case studies. The case study method is used to investigate how the chosen mosques have responded to the research questions of this study. To obtain information on the chosen case studies, a variety of data collection strategies were used in this study.

The greatest concern with case studies as a research method is the lack of consistency which according to Yin (2009:14) can be resolved through systematic procedures. During this process

researchers are unbiased and not influence the direction of the findings. The second concern with case studies according to Yin (2009:10) is that they provide little basis for scientific generalization. This can be remedied through the use of multiple case studies which provide a variety of data to analyse. According to Yin (2009:10) scientific facts are rarely based on single experiments but are usually based on a multiple set of experiments. Yin (2009:10) further states that the same approach can utilised with multiple case studies.

As such, the multiple case study method was chosen for this study in an attempt to provide a range of data from the chosen case studies. Another benefit of the multiple case study method as mentioned by Yin (2003:53) is that the contexts of multiple case studies are likely to differ to some extent and if under these circumstances a researcher can still arrive at common conclusions in all the case studies, the researcher will have immeasurably expanded the external generalizability of the findings when compared to a single case study. However, the disadvantage to the multiple case study method according to Yin (2009:10) is that the collecting of data takes very long and results in massive, unreadable documents. This has not proved a problem in this study as six case studies were chosen and the research was spread across a substantial period.

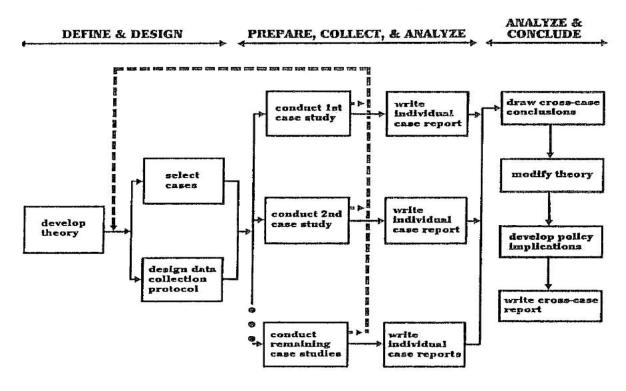


Figure 1.1: Multiple case study method process diagram (Yin 2003:50)

A method to remedy this situation is through the replication approach to the logic of the study. According to Yin (2003:50) each case study consists of a whole study with each case's conclusions being considered as the information that needs to be replicated and should be the focus of the

summary report. As can be seen in Figure 1.1 this process has been illustrated by Yin (2003:53) in an attempt to summarise the process that is to be used by researchers.

The case studies chosen for this dissertation were intentionally selected to share a set of attributes as a start point for the research and to ensure that the focus of the study is not lost. The criteria are as follows:

- The local case studies had to be located in a suburb of Johannesburg that has a multicultural, multi-faith community.
- The case study is to be a funded by the surrounding Muslim community making it a community purpose built mosque.
- The case study had to have been conceived within the period of 1994 to the current date.
- The local case studies had to be familiar to me to draw on my personal experience of the interior and immediate relating exterior spaces.

# 1.5.5. Local case studies

The following is a brief description of the three selected local case studies:

• Masjidur- Rahmah (Greenside Mosque) in Emmarentia/Greenside which can be seen in Figure 1.2. This mosque was opened in September 2005 and has been chosen as it is the first mosque built in the northern suburbs of Johannesburg and was designed by SAB Architects. The architecture and interior design of the mosque attempts to break the more traditional styles of older mosques by not including the typical arches and floral motifs that have become common in traditionally styled mosques. The community is a mixed community with residents from various faiths such as Christianity, Judaism and Hinduism as well as varying cultural and racial backgrounds. Emmarentia is also home to a repurposed Synagogue and the Emmarentia Shul. There are churches in the neighbouring suburb of Linden such as the St. Charles Catholic Church which is less than 1.5km from Masjid-ur-Rahmah. There are no religious structures for people of the Hindu faith though I personally know of numerous Hindu families in the community.



Figure 1.2: Exterior Façade of *Masjid-ur-Rahmah*, Emmarentia/Greenside, Johannesburg, 2005 (Photograph by author).

• Masjid-ur Furqaan in Houghton which can be seen in Figure 1.3. The mosque was opened in July 2011 as a purpose built mosque serving the Houghton community. The mosque was designed by SAB Architects who also designed Masjidur-Rahmah in Greenside. In terms of the architecture and interior design, the mosque is an attempt to blend traditional Islamic architecture with contemporary materials and finishes such as frameless glass and polished stainless steel. The community that surrounds the mosque is a mixed community, a community made up of residents from various faiths, cultural backgrounds and race groups. Evidence of the other faiths in the community can be found in the form of the Bethesda Methodist Church, the Catholic Church of St. Jerome and the Oxford Synagogue Centre.



Figure 1.3: Exterior of Masjid-ul-Furquan, Houghton, Johannesburg, 2017 (Photograph by author).

Auckland Park Masjid in Auckland Park which can be seen in Figure 1.4. This mosque was
opened in October 2011 and has been chosen since it is a new mosque built in an area that
has a mixed community similar to that of the Greenside/Emmarentia community. The
mosque has an adjacent Islamic primary and secondary school. The architecture and interiors
of the mosque is loosely inspired by the mosques of the Arabian Peninsula. Evidence of
Christianity in the suburb is in the form of Dutch Reformed Church that is located a block
away from the mosque on the same road.



Figure 1.4: Exterior façade of the Auckland Park Masjid in Auckland Park, Johannesburg, 2017. (Photograph by author).

The local case studies are discussed in Chapter 3 in greater detail according to the themes established during the collection and analysis of the data process.

#### 1.5.6. International case studies

Internationally, mosque design has shown a trend towards reinterpretation of the key structural and visual elements of a traditional mosque as well as a response to social fears of isolation within the communities. Beyert (2013:2) states, "the classic forms of mosques such as pillars, an *iwan* (a three sided closed hall which is open at the front) and a dome have been completely reworked by architects around the world". This has resulted in many architects and designers, especially in Europe, developing a mosque identity that attempts to remain Islamic yet integrate local architectural and design identity. The following three international mosques have been selected as case studies:

• Al-Irsyad Mosque in Indonesia which can be seen in Figure 1.5. This mosque was completed in November 2010 and has been chosen as it is a new mosque built in a country with a majority Muslim population. The country is generally very traditional with regard to the Islamic faith yet this mosque breaks with that approach. The mosque is also designed in such a manner that it attempts to deal with the environmental concerns of the site by means of the façade and the interior layout of the mosque.



# Figure 1.5: Urbane Indonesia (Architects), Emilio Photoimagination (photographers), Al-Irsyad Mosque Exterior. 2013 [O].

• Cologne Central Mosque in Cologne, Germany which can be seen in Figure 1.6. According to Böhm (2017) the mosque was opened in July 2017. It has been chosen due to its contemporary architectural aesthetic and the fact that the mosque is built in a country that does not have majority Muslim population. The mosque attempts to create an atmosphere that is both open and inviting to members of the community, be they Muslim or non-muslim. According to Böhm (2017) this was achieved by providing community focussed facilities within the mosque complex which is discussed in detail in Chapter 4. There are also facilities for both men and women.



Figure 1.6: Paul Böhm (architect), Benedict Kraft (photographer) Cologne Central Mosque during Construction. 2013 [O].

• Cambridge Eco Mosque in Cambridge, England, which can be seen in Figure 1.7. According to Murad (2017), this mosque is currently under construction and has not yet been opened for use. Site analysis and clearing had begun in November 2016. This mosque has been chosen for its contemporary interpretation of a mosque and the fact that according to Murad (2017) it is the first sustainable mosque in Europe. The design of the mosque has attempted to address issues of inclusion and site usage by engaging with the local community as mentioned by Murad (2017). The mosque is to include facilities such as a café, meeting rooms and teaching venues for use by both the local Muslim and non-muslim communities.



Figure 1.7: Marks Barfield (architects) Artistic impression of the Cambridge Mosque. 2017 [O].

The international case studies are discussed in Chapter 4 in greater detail according to the themes established during the collection and analysis of the data on the case studies.

# 1.5.7. Data collection strategies

I have chosen to use qualitative data for this study as it can present itself in the form of observations, open-ended interviews, photographs and published texts. To collect the data that is consistent with an interpretivist approach, I have used qualitative observations on site, conducted interviews with the principle architects and designers and produced a literature review of existing texts around the topic of this study (Cohen and Crabtree: 2008). The chosen methods for data collection have ensured that there is a dialogue between myself, the researcher, and the subjects of this study in order to co-construct knowledge. This research makes use of case studies which according to Yin (2003:85) makes use of six sources of data which are in the form of documentation, archival records, interviews, direct observations, participant-observation and physical artefacts. This study makes use of documentation, interviews and direct observations.

#### Documentation

The majority of the documentation is in the form of formal studies sourced from books, journals, internet articles and electronic books. These studies were reviewed and analysed in chapter two with the purpose of providing a deeper understanding into the themes of this study (Taylor-Powell & Renner 2003:2). This allowed me to develop my existing knowledge and understanding on the topic of this study. This is summarised in a literature review which is presented in chapter two and is referred to in the dissertation when required (Creswell 2009:175).

# • Direct Observations

This method of collecting data was used for the selected local case studies. As I am Muslim and live nearby to the selected mosques I used the opportunity to visit the buildings on multiple occasions to

use and experience the interior and exterior spaces. During this time I gained permission to document my observations of the building's interior and exterior spaces in detailed notes. The data obtained in this manner thus took on the form of descriptive accounts in field notes (Taylor-Powell & Renner 2003:2). This study aims to present a rich description of the case studies developed through personal observation in the field of my experience when visiting the local case studies.

# Photographs

The building typology of this study is such that a detailed visual and written description of the case studies is required to allow readers to gain a full understanding of the interior and exterior spaces of the selected mosques. For the local case studies I took a series of photographs which are presented in chapter three of the study along with the findings on the local case studies. For the international case studies I sourced photographs from websites and gained permission from the principal architects and designers to use the photographs. These are presented in chapter 4 of the study along with the findings on the international case studies.

#### Interviews

Interviews were conducted with the principal architects and designers of the selected case studies. Further interviews were conducted with members of the selected mosques committee members. Where possible, interviews were conducted with members of the community surrounding the mosques. The interviews were structured to be open-ended and guided by a list of questions that was prepared and sent to the participants in advance, see Appendices C and E.

For the local case studies, the interviews were conducted at a location determined by the participants. For the international case studies, the interviews were conducted through a series of emails between the participant and myself, the researcher. Interviews were transcribed and emailed through to the participants for verification. Thereafter I analysed the transcribed interviews and present the findings in chapters three and four.

The interview questions determined the following themes which had been identified during the qualitative data analysis:

# Theme 1 – Background

I began the interview by establishing the background of the participants in relation to the selected case studies. The discussion allowed the participants to share some of their history and background and their level of interaction with the case studies.

# Theme 2 – Location

I then continued the discussion with a focus on the location of the case studies in relation to the

urban fabric surrounding the case studies. This allowed for a discussion on the impact of the case studies on the urban fabric.

Theme 3 – Visual Identity of the exterior spaces

The discussion then continued onto the visual identity of the case studies. The discussion focussed initially on the exterior identity of the case studies with initial discussions on the interior spaces of. This provided insight into the participant's views on aesthetics and some background on the buildings itself.

Theme 4 – Interior design identity, spatial planning and impact of the interiors

The main part of the discussion focussed on the interior spaces of the case studies in detail. The participants were able to provide in-depth information into the interior design identity, spatial planning and visual impact of the interiors. Further information on the daily use of the interiors and the effectiveness of the spatial planning was discussed.

Theme 5 – Community Involvement and impact on public spaces

The discussion thereafter went on to the extent of the community's involvement in the design and construction of the case studies. This provided information on the funding of the cases studies, the debates, objections and suggestions that originated from the surrounding community and the impact of the case studies on the community itself.

Theme 6 – Future recommendations

The interview was concluded with a discussion on recommendations for future mosque projects that the participants may have had. The purpose of discussing this was to establish common themes of change that mosques may be facing in the future.

# 1.5.8. Organising and preparing data

As the data was collected, the process of organising and analysing it occurred concurrently.

According to Mariano (in Jacelon & O'Dell 2005:217) the data collection and data analysis process occurs "hand in hand". The data collected was formalised as transcribed notes which was then organized and compared through the means of a table. The comparison allowed for identification of gaps in the data obtained and prompted further investigation to answer any outstanding questions. Where documentation of formal studies required additional information, books, journals, internet articles and electronic books were referred to. Information required from participants of interviews was collected through e-mails between the participants and myself, the researcher. This method of collecting and preparing the data followed the procedure as mentioned by Creswell (2007:148).

During this process, to organise the data and streamline my search for additional data, common

themes within the research were established by coding the data that had been tabulated. These themes were chosen to address the research questions of this study. According to Creswell (2007: 148) the process of collecting and preparing the data is generally followed by reducing the data into themes through a process of coding.

#### 1.5.9. Data analysis

The data collection for this study allowed for an "insider perspective" on the topic by reconstructing important structures and understanding the subject of the study. This however resulted in a challenging and complex data analysis process. As stated by Creswell (2007:147) the data analysis process in qualitative research can present a challenging task to researchers as they determine the best possible way to represent the data collected. As such in this study, I have attempted to ensure that the analysis is holistic, interpretative and supported by quotations from transcripts. At all points of the data analysis process, the overall meaning of the data took precedence over the specific meaning of its parts. According to Jacelon and O'Dell (2005:217) data analysis in qualitative research is a creative process that allows the researcher to explore and reflect on the meaning of the data.

For this study, the data was summarised and categorised through identification of underlying subthemes and patterns which emerged during the process of reading through the data. The subthemes were then organised into categories for purposes of summarising further and adding meaning to the text. Keywords were established at this stage and assigned to the subthemes previously established thus "coding" the data. The "coded" data was compared for consistencies and variations between the case studies. As the information was tabulated, exploration of the connections, patterns and relationships of the subthemes were investigated. During this iterative process, subthemes were adjusted as the data was revisited. The subthemes were then finalized to inform the structure of chapters two, three and four and the interview process.

# 1.5.10. Validity

The interpretivist position as described by Cohen and Crabtree (2008) is that reality is socially constructed and fluid, it is negotiated within cultures, social settings and relationships. Due to this, validity or truth cannot be grounded in a single objective reality. According to Neuman (2011: 164) this leads to the concept of triangulation which is typically used in qualitative research to validate data by building on the principle that we learn more by observing the same phenomenon from multiple perspectives instead of observing from a single point of view.

For this study, validity is achieved through interviewing the architects and designers of the mosques directly and thus gathering the data directly. Consistency is ensured by asking the same questions to

the participants of the interviews meaning the same instrument is being used. Mouton (2001:145) suggests that the reliability of the data could be influenced by the researcher's characteristics and orientations as well as the participant's. However interpretivist research is such that the researcher brings their own subjective experience to the interpretation of the data. Ellingson (2009:15) notes that by surrendering objectivity, the researcher is able to make more probable recommendations and theoretical insights due to the depth of consideration. In this study I have endeavoured to remain true to the context and the concepts the participants have used to describe themselves and construct interpretations and theories that retain internal meaning and social coherence of the subjects of the study.

# 1.5.11. Ethical considerations and participation

As a researcher, I have endeavoured to provide an accurate account of the data collected for this study and of all sources consulted. I have also signed a declaration that this work is my own work. The proposal was submitted to the University's Ethics committee for clearance. All participants were contacted in advance to clarify their willingness to participate in this study. The study has at all times been as transparent as possible to demonstrate fairness in the research.

As outline by Mouton (2001), the following ethical considerations were considered during the process of this research:

- The researcher is to act objectively and with integrity while conducting the research and disclose the limits of the findings and constraints of the methodologies.
- Data findings are to be reported in full and not be altered to suit the needs of the research.
- Data collected is to be analysed by the researcher and a conscious effort must be made to be unbiased in the process of data analysis.
- All sources are to be acknowledged and correctly referenced to avoid plagiarism.
- Participants are informed that participation in this study is voluntary and they may terminate the interview at any stage.
- Participants are to be provided with an informed consent form and an interview outline form prior to the actual interview.

Copies of consent forms and preliminary outline of the interviews were presented to the Faculty Higher Degrees Committee prior to the execution on the interviews. The informed consent forms as seen in Appendices B and D has been based on the guideline by Mouton (2001) and includes the following:

- The name of the university that the researcher attends
- An outline of the aim of the research
- A list of participant rights as mentioned previously
- A description of the interview process and duration of the interview
- An offer to provide a copy of the research findings and summary of the dissertation when completed
- The participant's signature and the date and location of the interview.

#### 1.6. Contribution of the study

This research is important to the field of Interior Design and Architecture as religious structures carry with them a strong representation of the communities they serve as they represent the ideals and philosophies of those communities. In South Africa, there has been no detailed research done on the interior design of mosques or how the surrounding community influences the visual identity of the mosque.

In Europe and North America authors such as Allievi (2010), Beyert (2013), Landman (2010), Gale (2002) and Grabar (2004) have written in regards to mosques and the roles that the mosque plays in communities. It has become a much-heated debate in Europe with some countries banning key architectural elements of the mosque. Beyert states (2013:2) "Islamic places of worship often cause controversy: Take the construction of Cologne's Central Mosque as seen in Figure 1.9 or the ban on *minarets* in Switzerland". However, there has been little to no research done on the interior design of mosques and how these may or may not be influenced by environment and communities. It is my intention to respond to this gap with particular focus on the interior and architectural design of mosques.

# 1.7. Chapter Outline

#### 1.7.1. Chapter 1: Introduction and overview of the study

In this chapter, I introduce the research area of this study and discuss the motivation behind the study. This chapter will contain the research question, aims and objectives and place the study in context as a specific time period is being researched. Furthermore, the criteria of selection for the case studies will be discussed. In this chapter, the research methodologies and design will be discussed in depth. Lastly, the chapter breakdown will be presented in the introduction.

# 1.7.2. Chapter 2: Literature Review

In this chapter, I refer to international and local published works that include books, academic journals and conference papers in an attempt to gain an overview of the literature in this area of study. I reflect on critical theories and literature relating to mosque design, the social and political impacts of the mosque, the notion of identity as represented by mosques, the theories around the Muslim 'other' and the concept of hybridity. As there is limited literature on the topic of mosque interiors, I have referred to websites for current data. Through academic databases such as JSTOR and the academia.edu website, I have found academic papers regarding the literature for this dissertation.

# 1.7.3. Chapter 3: South African Case Studies

In this chapter, I examine and explore the design of the mosques chosen for the South African case studies. I do this through visual analysis and discuss the implications the mosques have had on their surrounding urban fabric. I further discuss the findings of the interviews conducted with members of the surrounding residential and Muslim communities as well as the architects and the mosques representatives.

# 1.7.4. Chapter 4: International Case Studies

In this chapter, I examine and explore the design of the mosques chosen for the international case studies. I do this through visual analysis and discuss the implications the mosques have had on their surrounding urban fabric. I further discuss the findings of the interviews conducted with the architects and designers of the three selected case studies.

# 1.7.5. Chapter 5: Conclusion

In this chapter, I conclude the dissertation with a summary of the findings that have been discussed in the preceding chapters. I also offer overall conclusions to answer the research question and reflect on the research contained within the dissertation as well as review the limits of the study. Based on this reflection, I consider the possibility of further research in this field of study.

#### 1.8. Reflective Note

In concluding this introductory chapter, I wish to present the reader with my position and motivation for undertaking this study. I am a South African born, second-generation Indian male, practising as an interior designer and educator. I am of the opinion that much of the interior design work done in South Africa is a response to international trends and not informed by the challenges and experiences of our own environments. My interest in providing suitable solutions to local design

problems and understanding the challenges faced by local designers and architects has made this research important and interesting for me.

In my personal design work, I have had the opportunity to design the mosque called *Masjid-ut-Taqwa* in Homestead Park, Johannesburg. While designing this mosque the interest in the topic of this study was sparked and provided me with some insight into this area of interior design and architecture. Adding to that, my personal experience in the development of the mosque, *Masjid-ur-Rahmah* has proved invaluable in my understanding of the topic for this study.

As a practising Muslim and interior designer within South Africa, I have been aware of the influence the chosen case study mosques from South Africa have made on the design of future mosques within the city. This influence has also informed the design choices I had made when designing *Masjid-ut-Taqwa* in 2013. This study has granted me the opportunity to critically explore the challenges faced by interior designers and architects in South Africa when designing community built mosques.

#### 2. CHAPTER 2: LITERATURE REVIEW

#### 2.1. Introduction

In this chapter, I refer to local and international literature that is relevant to the themes and topics of this study. I discuss current issues of mosque architecture and interior design as well as the social and political impact of mosques and the identity of the mosque. I will attempt to explain how this study can build upon the existing body of knowledge and stimulate ideas through my understanding of the topic. This review commences with an overview of mosque design and architecture with regard to the key elements of a mosque. These will be considered when comparing the case studies, followed by a discussion regarding the social and political impact and role of mosques on the surrounding urban fabric. Thereafter I discuss the concepts of identity and hybridity in relation to mosque architecture and interior design. In this review, it is my intention to focus on literature that is recent and relevant to the context of this dissertation.

# 2.2. Mosques as a building type

Religious structures such as mosques, churches, synagogues and temples form a crucial part of the faiths they represent. The mosque in particular is key to the faith of Islam and is vitally important to the Muslim community. In Europe and the Middle East the mosque does not only serve as a centre for the daily prayer rituals, called *salaah* in Arabic, but also serves as a social space in which the surrounding community can share common interests in their religious ideals. Özoluglu & Güral state when discussing mosques in Europe, "historically, the mosque has been not only a place for religious practices but also a social space, allowing the formation of individual, social, and collective memories" (2011:28).



Figure 2.1: Quwatul Islam Mosque in Lenasia Extension 1, Johannesburg, 2016. (Photograph by author).

The importance of the mosque in the Muslim community has resulted in the appearance of various types of mosques. Allievi (2010:15) in an attempt to define mosques in Europe says that a mosque is "not necessarily a building with a *minaret*, dome and half-moon". There are essentially two main categories within the typology of a mosque. The 1<sup>st</sup> category and most commonly identified is the purpose built mosque. Allievi (2010:16) refers to these as "ad hoc, or purpose built mosques, usually with visible signs of a dome and one or more *minarets*". An example of a purpose built mosque in Johannesburg can be seen in Figure 2.1.

The 2<sup>nd</sup> category is the *Musalla/Jamaat Khana/*Prayer room that uses an existing space for its purposes as can be seen in Figure 2.2. Dassetto (2010:60) refers to these spaces in Belgium as being "established inside houses, former cafes, cinemas, factories or office buildings". These are popular in South Africa, especially in communities that have relatively small and new Muslim residents. These types of spaces often precede the establishment of the purpose built mosque.



Figure 2.2: Interior of Hursthill Musalla, Johannesburg, 2016. (Photograph by author).

Within the 1<sup>st</sup> category, two types of mosques exist. According to Allievi (2010:15) "the first element is that of the Islamic centre". Usually these centres are run by institutions or organisations that act on their own accord with little to no input taken from the local community. The centres do not simply provide a space for prayer but also include elements such a library, teaching facilities, sports facilities, medical facilities, retail stores and burial facilities. Dassetto (2010:60) states that in Belgium the "majority of these establishments are legal entities". An example of this type of the mosque in South Africa is the Nizamiye Complex in Midrand as can be seen in Figure 2.3.

The second type of mosque within the purpose built category is that of the community built mosques. These mosques tend to be smaller in size than the Islamic centres and are primarily funded

by the surrounding Muslim community. The community appoints a committee to represent its interests and to manage the daily running of the mosque. Allievi (2010:18) refers to these mosques in Europe as "grass root mosques, being created from below and self-financed". A typical example of this type of mosque can be seen in Figure 2.1.



Figure 2.3: Photographer unknown, Aerial photograph of Nizamiye Complex, Midrand, 2016.

However in South Africa, the newer community built mosques are including facilities such as burial facilities, classrooms, libraries and sports facilities that are found in Islamic centres, yet they remain funded by the local Muslim community.

# 2.3. Muslim communities in the post-apartheid South Africa

Prior to 1994 Muslim communities were found within the so-called "Indian" areas of Johannesburg and South Africa as a whole. This had resulted in Muslim communities forming a well-organised religious environment with the mosque as the central focus. According to Vahed, "residential clustering through the Group Areas Act allowed Muslims to practise Islam in a value-friendly environment" (2000:b). With the political freedom that came post 1994, Muslim families began to relocate closer to the Johannesburg Central Business District (CBD) in an attempt to provide a more convenient life for their families. My family were one of those that relocated, particularly from Lenasia in the south of Johannesburg to Linden, a previously white suburb in the north of Johannesburg. Roy refers to these spaces as "liberated zones, spaces where the ideals of a future society can be implemented" (1996:80). In Figure 2.4 the most popular of these 'liberated zones' of Johannesburg can be seen as highlighted blocks.

At that time, I remember the criteria that my parents would use to determine if a community was suitable for our family. The first and most important requirement was the presence of a mosque or

musalla in the community or nearby to it. The second was the presence of a *madrassah* in the community, which in most cases was part of the mosque or *musalla* facilities.



Figure 2.4: Aslam Mahomed (designer), graphic map of Johannesburg showing 'liberated zones' and mosques, 2016 (image by author).

This was a common set of requirements of families whom were relocating from the traditional Indian suburbs of Johannesburg to northern suburbs of the city. The majority of the Muslim communities today that are found within the "liberated zones" have the largest concentration of Muslim families "in proximity to mosques and *madrassahs*" (Tayob 1996). This has resulted in the homes nearest to the mosque being the most sort after within the community. The resulting effect is that property prices around the mosques have increased exponentially. Again, I have personal experience of this phenomenon. The home in which I currently reside had doubled in value due to the establishment of the local mosque, *Masjid-ur-Rahmah* in Emmarentia. My father had purchased the home when the mosque was still a *musalla*, yet today the properties surrounding ours are fetching premium prices due to the proximity to the mosque. In my case, I live a mere 130 meters from the mosque.

Currently, many of the Muslim communities that formed soon after the 1994 elections have become well established within the existing urban fabric as can be seen by the establishment of the community built mosques in these suburbs. However, other younger Muslim communities in Johannesburg are trying to find their place within their local communities as Muslim families continue to relocate into suburbs that previously did not have a Muslim presence. As this is

happening, conflicts have arisen with objections "to mosques and madrassahs being built in predominantly white areas" Vahed (2005:279). This is because Muslims "are largely viewed as a monolith" (Vahed 2005:252). The portrayal of muslims in popular media as 'extremists' and 'fundamentalists' has resulted in these opinions being applied to these fledgling communities and the proposed mosques within these spaces. The reality of Muslim communities within the post-apartheid South Africa is that they are being "constructed using global and local symbols, which produce specific and hybridised Muslim identities" (Vahed 2005:276).

#### 2.4. Debates around mosques

In countries that do not have a predominantly Muslim population such as Europe, North America and even in South Africa, the presence of mosques in locations that previously did not have a mosque can be a subject of debate and conflict between the residents and the muslim community. Sulimen (2013:1) cites Aboo Bakr who comments on the Valhalla mosque in Pretoria "a lady says she'll fight us tooth and nail to make sure the mosque doesn't come up. She'll bomb it". However before the mosque is built, the presence of Muslim residents in the local community is existent with a *musalla* being established by the residents. These spaces do not face the challenges that confront a purpose built mosque. Dassetto (2010:53) mentions that in Belgium "the creation of prayer rooms/mosques in existing buildings has not caused any major conflict". The purpose built mosque is the successor to the prayer rooms as the number of Muslim residents increase in the communities, but also the mosque becomes an issue of debate within the community as the greater community now feels the Muslim presence. Dassetto (2010:53) states further "the situation however changes when Muslims ask to make their presence more visible through the construction of more Islamic architecture or architectural elements".

In Johannesburg, an increase in the appearance of mosques can be seen in the northern suburbs or 'liberated zones' of the city. Examples of these mosques are the Greenside Mosque, Houghton Mosque, the Auckland Park Mosque and the Northcliff Mosque. All these have been built after 1998 in suburban areas that were predominantly non-muslim areas and without a Muslim community. Through personal experience I have seen these mosques develop from prayer rooms to purpose built mosques that are funded by the local Muslim community. They only faced opposition to their construction when the proposal had been established to build them. Mia states in an interview about the Greenside Mosque with Mulugeta (2009:1) "when we first proposed building the mosque here, there were serious objections". This is not unique to South Africa but is also prevalent in Europe. Allievi (2010:13) reflects on the increase of mosques in Europe and explains that Muslim prayer

rooms are spreading rapidly, conflicts over the building of mosques in Europe are multiplying in their turn, at both the local and national level.

### 2.5. Key architectural and interior design elements in mosque design

Most mosques would have certain key architectural elements that are unique to their design and are easily associated with the mosque and Islam. These exterior and interior elements such as the dome, *minaret, qiblah* wall, *mihrab, mimbar* and *musalla* are found in both models of the purpose built mosque, the Islamic centres and the community built mosque. To some degree, some of these elements can also be found in the temporary prayer spaces such as *musallas*.

The most recognisable of these elements as mentioned by Grabar (2004:44) in his article on the history of the mosque, is the *minaret*, usually considered the place from which the faithful are called to prayer. Al Sulaiti (2013:01) describes the *minaret* as a tall, slender tower that is a significant feature of every mosque, and is one of the essential characteristics of Islamic architecture. As can be seen in Figure 2.5, the *minaret* appears in the center of the photograph as a slender white tower with highlights in gold forming a striking feature.



Figure 2.5: Minaret of the Sheik Zayed Grand Mosque, Abu Dhabi, 2016, [O].

The *minaret* though was not part of the original mosque of the Prophet Muhammed (peace be upon him/p.b.u.h.) which was built during his lifetime as can be seen in Figure 2.2 which shows an artist's impression of the mosque based on narrations of the Prophet's life known as *hadiths* in the Islamic faith. The mosque shown in Figure 2.6 is a simple mud structure that lacks formal symbolic structures of current mosques such as domes, *minarets* and arches. The mosque did have a large covered area at the one side of the space, which was facing towards Mecca as shown on the right side of the

structure in Figure 2.6. The center and left side of the space was mostly an open-air courtyard with a small covered area in the corner opposite the Prophet's house, which was attached to the mosque as can be seen in the bottom center of the image. These features have become part of mosque spatial planning and interior design, even in contemporary mosque designs. One of the key features of the Prophet's mosque in the Figure 2.6 is that the mosque was built in the traditional Arab style of architecture found in the city of *Madinah*.

The origin of the *minaret* according to Al Sulaiti (2013:1) can be found in the Umayyad epoch <sup>1</sup> and offers the explanation that these *minarets* were a copy of church steeples found in Syria. Furthermore, in his article on the origins of the *minaret*, Creswell (1986:48) elucidates that the four *Ṣawāmi* constructed on the roof of the Umayyad mosque in Fustat, were the first *minarets* to be built.

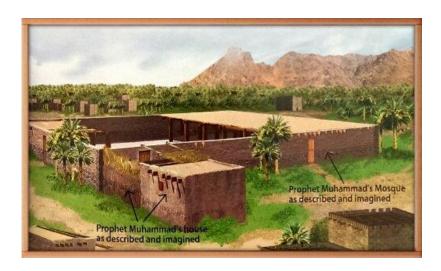


Figure 2.6: Artistic impression of the Prophet Muhammed's (p.b.u.h) mosque in Madinah during the 6th Century BC. (Artist Unknown).

Creswell (1986:48) suggests the *minaret* was inspired by a Damascan prototype and named *Sawma'a* due to its stocky appearance and similarity to the hermit cube, a secluded space housed within the towers of Damascan churches. This can be seen in Figure 2.7 showing one of the *minarets* of the Umayyad mosque in Damascus, Syria. The *minaret* can be seen in the centre of the image above the roof of the mosque appearing as an oddly designed tower lacking the elegance of the slender *minaret* seen in Figure 2.5. This is because the *minaret* was originally built as a steeple of the church of St. John the Baptist during the 2<sup>nd</sup> Century BC (The Great Mosque of Damascus [sa]). The church

27

<sup>&</sup>lt;sup>1</sup> The Umayyad epoch was a 90-year period of Islamic history beginning in 661 A.D. The Umayyad Empire was established by Muawiya bin Abu Sufyaan after the death of the fourth Caliph, Ali bin Abu Talib. The capital of the empire was setup in Damascus and made a significant contribution the cultural and artistic heritage of Islam (The Umayyads [sa]).

was then purchased during the 6<sup>th</sup> Century BC by the Caliph Walid I for use as a mosque. It was at this point that the steeple was modified to create the *minaret* by the addition of the slender sections at the top. I had the opportunity to visit the mosque in 2008 and discussed the history of the building with the tour guide that was taking me around Damascus.



Figure 2.7: *Minaret* of *Al-Arussa* of the Umayyad Mosque, Damascus, Syria, 2008, (Photograph by author).

The original purpose of the minaret was to provide a visual cue or presence as stated by Grabar (2004:44). The minaret indicated the location of the Muslim community as the mosque is often recognised as the center of the Muslim community. The minaret is often built as the tallest structure within the community, which further enhances the visual presence of the mosque in the urban space. The second purpose of the minaret was to provide a raised space for the muezzin, the person performing the call to prayer known as the adhaan. This allowed him to project his voice as far as possible to announce to the surrounding community that the time to pray at the mosque has begun. This was achieved by the construction of a gallery at the top of the minaret as stated by Al Sulaiti (2013:01). As the adhaan, an essential part of the prayer rituals of the Islam, established during the 2<sup>nd</sup> Year of the Islamic calendar, the *minaret* would later became an essential element of mosque architecture that would facilitate the required duties of the muezzin. This was especially necessary because loudspeakers and transmitters were not available for use until much later. According to Al Sulaiti (2013:1), the minaret soon adorned the skylines of Muslim cities and developed a signature style and identity as part of the mosque design. These structures were greatly influenced by the region's society, culture and context, which determined their shape, size and form. This was achieved through the fact that the Islamic faith does not have any limitation as to the size, number or style of the *minaret*.

The second key architectural element of the mosque that is most recognizable is the dome or *qubba*. A mosque could have one or more domes in its design with the largest of these domes being built over the main prayer hall as can be seen on the *Quwatul Islam* Mosque in Figure 1.1. The larger of

two domes can be seen in the centre of the image. The dome is purposefully contrasted in colour to the mosque walls to emphasize the symbolic nature of the dome. Smaller domes adorn the tops of the *minarets* to tie in the overall aesthetic of the mosque. In Figure 1.3 of showing the Nizamiye complex in Midrand, it can be seen that the complex has multiple domes in grey with the largest dome being built centrally above the main prayer hall shown just above the center of the photograph. The dome is contrasting in colour to the mosque walls though in this case it determines the size of the vaulted prayer hall below it. The four pencil style minarets that are built at the corners of the prayer hall further emphasize the dome. The smaller domes are built over the spaces at the back of the mosque to further enhance the Islamic aesthetic of the structure.

According to Weisbin (2013:1) in her essay on mosque architecture, she mentions that the dome does not have ritual significance like the *mihrab* within the interior of the mosque, though it is a symbolic representation of the vault of heaven. The dome as an element is highly ornate in design both on the interior and exterior. The exterior of the dome is often covered in intriquite mosaics or metal plates to create a striking element that is often in contrast to the colour of the mosque walls. In contemporary mosques, the dome has become less ornate yet remains a key element of mosque architecture. Weisbin (2013:1) mentions that the interior decoration of the dome often emphasizes the symbolism of the space below it, using intricate geometric, stellate, or vegetal motifs to create patterns meant to awe and inspire. The shape, size and decoration of the dome is influenced in the same manner as the *minaret* as stated by Al Sulaiti previously.

Another key architectural element of mosque architecture is the *sahn* or courtyard. This element finds its roots in the original mosque of the Prophet Muhammed (p.b.u.h) and can be seen in Figure 2.2 as the uncovered space of the mosque shown in the center and left side of the image. Weisbin (2013:1) refers to the courtyard as a space that adjoins to the main prayer hall. Within the courtyard one often finds a fountain, its waters both a welcome respite in hot countries and important for the completion of the ablutions or *wudhu* (ritual cleansing) done before prayer. This type of setup according to Weisbin (2013:1) is found mainly in the congregational mosques. From personal experience, the courtyard is a space in which not only are prayers performed but can also be used for community meetings, teaching facilities, contemplation and meditation. However due to local climatic conditions, most mosques in South Africa have enclosed courtyards that attempt to create the open feel yet provide protection from the elements.

The most influential of elements within mosque architecture and interior design is the *qibla* wall, which also houses the *mihrab* or prayer niche as can be seen in Figure 2.4. The *qibla* wall in Figure 2.4 can be seen as the highly ornate wall with four windows at the back of the photograph. The *qibla* 

wall is punctuated by the *mihrab*, which in Figure 2.4 is the white niche with gold highlights centred in the *qibla* wall and framed by the windows and adorned with Arabic scripts.



Figure 2.8: Qiblah Wall and Mihrab of the Nizamiye Mosque, Midrand, South Africa, 2014, (Photograph by author).

Weisbin (2013:1) discusses the *mihrab* as an essential element of a mosque's architecture that indicates the direction of Mecca, towards which all Muslims pray. This has the resulting effect of controlling the orientation of the mosque in relation to its surroundings. Muslims form rows or *saffs*, as they are called in Arabic that is formed parallel to the *mihrab* and the *qibla* wall. Due to this, all spaces and activities in the mosque are influenced by the position and orientation of the *mihrab* and the *qiblah* wall. Weisbin (2013:1) states that no matter where a mosque is, its *mihrab* indicates the direction of Mecca. Therefore, a *mihrab* in India will be to the west, while a *mihrab* in Egypt will be to the east. This is the reason that mosques around the world are orientated differently. In South Africa, mosques and other prayer spaces of Muslim's are orientated in a North Easterly direction at around fourteen degrees to the right of magnetic north. (The *qiblah* walls and *mihrabs* of South African mosques are therefore built accordingly.)

Grabar (2004:44) states that the *mihrab* was first developed around 700BC and can be found in all mosques around the world. In regards to the interior of the mosque, Grabar (2004:44) further mentions that the *qiblah* wall as well as the *mihrab* is the most decorated part of the building. Lamps are positioned in this location symbolising the divine presence and the universality of the Muslim message. In Figure 2.4, both elements are highly decorated with lamps on the wall and suspended from the roof adding to the symbolism of the space. Weisbin (2013:1) describes the *mihrab* as a relatively shallow niche, as can be seen in Figure 2.4. The *mihrab* is placed within the centre of the *qiblah* wall to centre the *imam*, the man leading the congregational prayer. The *mihrab* itself is not

regarded as sacred but rather serves a practical and symbolic purpose in the mosque interior. The practical purpose is to give the *imam* and the congregation focus during prayer and indicate in the direction of Mecca. A secondary purpose that is often ignored due to current sound system technology is the acoustic properties of the *mihrab*. As the *imam* faces Mecca during the prayers, his back would be facing the congregation, the *mihrab* acts like an amplifier reflecting his voice back towards the congregation. As sound systems have been installed in mosque interiors, the need for the *mihrab* to act as an amplifier has been negated. The minaret, dome and *mihrab* are elements that are only found in purpose built mosques and not in the temporary prayer spaces called *musallas* and *Jamaat Khanas*. In majority of temporary prayer spaces, the *qiblah* wall is indicated through ornamentation and the direction of prayer is further indicated through the floor finish in the form of patterned carpets.

The key elements of mosque interiors are the *qiblah* wall, *mihrab*, *mimbar*, *musallas* and *wudhu* rooms. These are found in all types of congregational prayer spaces for Muslims whether the space is purpose built or temporary. In purpose built mosques, these elements are formalised and ornate structures however in the temporary spaces these elements take on a more informal appearance with a lack of decoration. According to Verkaaik (2012:171) the interior of many a temporary mosque may indeed look non-descript and plain. Nonetheless, these elements according to Verkaaik (2012:171) have an impact on the sensory of religious practice.

The *mimbar* or pulpit is an interior element of the mosque that finds its roots in the very first mosques of Islam. Grabar (2004:44) mentions that the *mimbar* dates back to the time of the Prophet (p.b.u.h.). Its first form was a three-stepped stool that was used for sermons, proclamations and readings. This became the basic requirement of the *mimbar*. As Islamic architecture and art developed, the *mimbar* rapidly acquired additional steps and in some examples a seat at the top with a canopy. Grabar (2004:44) mentions further that elaborate examples with decorated sidewalls of carved wood or sculptural stone have been constructed, but the simple ones do remain. These simple *mimbars* are found in temporary prayer spaces or within mosques where funds are limited. As the *mimbar* is an interior element that is not viewed by the public, the *mimbars* in community built mosques tend to be small structures with little to no ornamentation that attempts to represent the cultural identity of the Muslim community funding the mosque. Communities with larger budgets tend to spend more funds on the *mimbar* compared to this with lower budgets, which can result in structures that are more ornate.

In purpose built mosques, the *mimbar* is a fixed structure that is incorporated into the design of the *qiblah* wall. In the larger, monumental style mosques, especially those following the Umayyad style

of design, the *mimbar* is a large structure that is highly ornate and is never moved in the life of the mosque. These *mimbars* are regarded as pieces of art and are unique to each mosque. In contrast to this, *mimbars* in temporary prayer spaces are much smaller and are movable structures. This allows for flexibility in the interior layout of these spaces. The *mimbars* in these spaces are simple, lack ornamentation and are not made of expensive materials such as solid timber, marble or granite.

An example of a traditional *mimbar* in a community built mosque can be seen in Figure 2.9. In the photograph, the *mimbar* of the Northcliff mosque is shown. It is a timber structure made up of three steps with the third step serving as a seat. The steps are clad in a deep red high loop carpet picking up the colour and texture of the main carpet of the mosque. The timber is ornately carved with traditional geometric patterns. It is placed in front of the prayer hall along the *qiblah* wall to the right of the *mihrab* when facing in the direction of the *qiblah*.

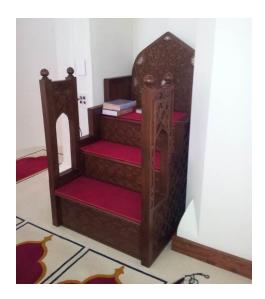


Figure 2.9: Mimbar of the Northcliff Mosque, Northcliff, South Africa, 2015, (Photograph by author).

It is common practice to always place the *mimbar* to the right of the *mihrab* along the *qiblah* wall or close to it, regardless of the type of prayer space. The *mimbar* is used by the *imam* to stand or sit upon while giving sermons to the congregation. The *mimbar* is an essential part of the Friday *Jummah* congregational prayer as it is used as part of the prayer. This practice was established during the life of the Prophet Muhammed (p.b.u.h) through his own actions. In most South African mosques, the *minbar* would also serve the purpose of housing the sound equipment for the imam, though in some of the newer mosques, this equipment is kept in a separate room.

Another key interior element of the mosque and temporary prayer spaces are the carpets within the main prayer hall, secondary prayer spaces and in some mosques, the courtyard area. The carpets or as they are called by Muslims, the *musallas* are essential as Muslims pray without footwear. This is

because according to Muslim belief, the shoes may have traces of impurities on them. I was taught that when praying in spaces other than mosques and temporary prayer spaces, a prayer rug/musalla is to be placed on the floor in the direction of Mecca. This would apply when praying in a space that has no dedicated prayer room.

According to Sauod (2004:1), Muslims hold the *musalla* in special esteem as it was the centre of Arab Bedouin life. The *musalla* provided a floor covering in the Bedouin tent from the desert sand. As such, it was common practice to remove ones shoes when entering the tent to protect the musalla from sand and other impurities. In the mosque this tradition continued as users of the mosque are required to remove their shoes before entering into the mosque. The *musalla* of the mosque also continued the purpose of protecting the devout from the cold, hard stone and concrete floors of the mosque, and provides a cushioned surface to sit upon during sermons and other religious functions held within the mosque.

The second purpose of the musalla is to assist in emphasizing the prayer direction or qiblah; the majority of musallas have a pattern replicating the columns and arches of mosque architecture or representations of the mihrab or prayer niche. According to Sauod (2004:1), the Ottomans were the first to introduce the idea of the *mihrab* pattern in the *musalla* during the 17<sup>th</sup> century. This was done for two reasons. The first according to Sauod (2004:1) was to reinforce the orientation of the qiblah wall. Even though the building is orientated to face Mecca in larger, monumental mosques, it can be hard to see the qiblah wall in which case the musalla assists as an indication to which direction to face. In temporary prayer spaces such as Jamaat Khanas and prayer rooms, the qiblah direction is often at an odd angle to the walls of the space. The musalla pattern then becomes the primary method of indicating which direction the qiblah wall would be. The patterns of the musalla will include lines parallel to the qiblah wall to aid the congregation in forming neat rows, which is a requirement for congregational prayer. These lines emphasize the prayer direction in a simple, yet effective manner. The second reason for the Ottomans including the mihrab pattern in the musalla design was to enhance the sense of spirituality and symbolism in the act of prayer. According to Sauod (2004:1), the mihrab symbolised the sacredness of Mecca and including it in musalla design is an attempt to transfer that sacredness to the *musalla*.

The third purpose of the *musalla* was to provide an acoustic layer to the prayer space. According to Elkhateeb (2016:1), the mosque is a space in which 'hearing' and sound play a vital role and the *musalla* provides a much-needed acoustic layer, absorbing sound at the floor level. Elkhateeb (2016:01) mentions that community built mosques have little with regards to acoustic considerations save for the *musallas*. As clarity of the sound in the mosque is vital, reverberations of sound on hard

floor surfaces such as stone and ceramic tiles would cause the space to be noisy and cold. The *musallas* absorb some of the sound eliminating the reverberations within the prayer spaces. This creates quiet spaces that facilitate contemplation and prayer.

The majority of the mosques would have *musallas* that have some sort of arch related to Islamic art and architecture in an attempt to provide a more aesthetically pleasing, familiar and 'Islamic' space for the congregation (Verkaaik 2012:171).

In Figure 2.10, a typical *musalla* can be seen. This particular *musalla* is a highly ornate example. The colour scheme has natural tones of beige with gold and royal blue highlights. The colour scheme was chosen to emphasize the highly ornate patterns to give the feeling of grandeur and a sense of the divine. The concept of the *mihrab* is represented in the centre of the *musalla* as an arched shape with a light cream background and darker brown flower shapes. Columns on both sides hold up an arch and frame the *mihrab*. This is to represent the mosque structure. At the bottom of the *musalla*, a rectangular shape represents the floor.



Figure 2.10: Typical *musalla* used to pray on, Johannesburg, South Africa, 2017, (Photograph by author).

In Figure 2.11, the *qiblah* wall, *mihrab* and *musallas* of the Northcliff Mosque can be seen. The *musallas* are placed parallel to the *qiblah* wall emphasizing the direction of prayer with a single *musalla* placed in line with the *mihrab* for the *imam* to use during congregational prayer. The colour scheme of the *musalla* uses the wall colour as a base colour to give a sense of lightness and tranquillity. The maroon center grounds the pattern, which is kept simple yet referring back to the lines of the mosques arches. The use of maroon in the *musalla* is a reference once again to the divine as Kosorok (Visual Cues in Islamic Art [sa]) explains that the colour represents the divine gift of blood and the life force it carries. As the *musalla* covers a large area of the mosque, it is an element that

plays a vital role in the interior design of the mosque and the atmosphere that is created within the space. The designs of *musallas* can vary, as there are no rules that govern the design of the pattern except that representations of animals or people are not allowed so as to prevent the idea of worshipping another being other than God/*Allah*. The patterns are often chosen by the community funding the mosque through the decisions made by the mosque-building committees. These committees would provide samples for the community to choose from.



Figure 2.11: *Qiblah* wall, *mihrab*, and *musallas* of the Northcliff Mosque, Northcliff, Johannesburg, South Africa, 2016, (Photograph by author).

The samples would be supplied by the chosen carpet contractors and the architects and designers of the mosque. The *musalla* is a good indication of the mind-set of the community, as more traditional communities would choose traditional patterns as seen in Figure 2.6.

The next key interior element that can be found in mosques is the ablutions area or as it is commonly referred to by Muslims, the *wudhu* room. The position and format of this element varies greatly in mosque design but it is found in all mosques and it is always situated before the main prayer hall. Grabar (2004:44) refers to these structures as practical elements such as fountains, sometimes of considerable artistic merit, either in the courtyard of the mosque or at the side. The size of the *wudhu* area is directly related to the size of the mosque and the anticipated congregation. In the last 30 years the *wudhu* area has transformed into a room with purpose built structures that can facilitate the act of *wudhu* as can be seen in Figure 2.12 showing the *wudhu* facilities at the Northcliff Mosque. The facilities include two rows of seating made up of low stools with wood seats and stainless steel bases. Each stool aligns to a tap in the wall, which supplies pre-mixed water. Below the tap and placed between the wall and the tap is a trough to catch the used water. There is also an

angled shelf, which acts as a support for the user's feet when performing ablutions. In this space, this element is clad in black granite tiles. The space is regarded as a wet room and all finishes are chosen to keep the space hygienic and prevent slipping.

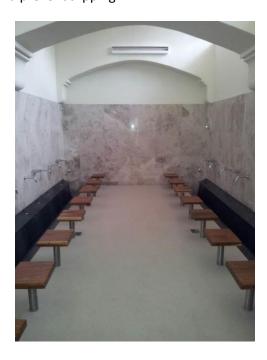


Figure 2.12: Wudhu Khana of Northcliff Mosque, Northcliff, South Africa, 2015, (Photograph by author).

The purpose of the *wudhu* room is to facilitate the ritual act of *wudhu*, an act of purifying oneself using water before one performs prayers, which if not done, renders the prayer invalid. The act of *wudhu* includes passing water over the hands, face, arms, hair and feet. This to ensure that when entering the mosque prayer hall to perform prayers, the users are cleansed so as not to bring impurities into the prayer space or offend fellow worshippers. It is also to ensure that the individual is clean before praying to God. There the act is both practical and spiritual as it is regarded as an act of virtue to perform the *wudhu*. Due to this, most ablutions areas would be spaces filled with natural light and neutral colour schemes to facilitate the concept of cleanliness and spirituality.

In the temporary prayer spaces, the *wudhu* areas are much more informal effectively being modified bathroom spaces with stools and some taps. The act of ablution though is such an important part of the faith that even in these temporary spaces these facilities are essential. The importance of these elements is so essential to Muslim practises that miniature versions of these spaces catering for one user can be found in many Muslim homes.

Unlike churches and synagogues, mosques do not contain much with regards to furnishings such as benches and sculptures. In fact sculptures of animates objects such as humans, animals and mythological creatures are not permitted in mosques as this would be regarded as idol worshipping

which is forbidden in Islam. The spaces do have other decorative elements, for instance, a large calligraphic frieze or a cartouche with a prominent inscription often appears above the *mihrab* as stated by Weisbin (2013:1). In most cases the calligraphic inscriptions are quotations from the *Quraan* and thus are treated sacredly. The choice of the inscription is left to the *imam* and the building committee of the mosque. In many cases, there would also be large friezes of calligraphy of the word *Allah* and the name of the Prophet Muhammed (p.b.u.h) along the *qiblah* wall. In some mosques, smaller calligraphic friezes of the Prophet's (p.b.u.h) companions are included around the mosque. The inside of the main dome if visible can also have these artworks along with geometric or floral based patterns that accentuate the shape of the dome.

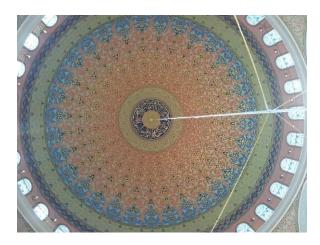


Figure 2.13: Inside of main dome in the prayer hall of the Nizamiye Mosque, Midrand, Johannesburg, South Africa, 2015, (Photograph by author).

In Figure 2.13 a close up of the inside of the main dome of the Nizamiye Mosque in Midrand can be seen. The dome has an intriquite floral based pattern radiating from the centre to the edges of the dome. Around the centre of the artwork is an inscription of the *Quraan* in Arabic calligraphy. Around the edges, the ninety-nine titles of *Allah* are included. The colours of the artwork were chosen to represent the sky and heaven. In the case of this mosque, there is a large chandelier suspended below the dome to provide lighting and sound equipment to the centre of the prayer hall.

The inclusion of ornate lamps and chandeliers in mosques similar to other elements are included for practical, symbolic and aesthetic purposes. Generally, light from natural and artificial sources in religious structures has always been a vital interior element. Weisbin (2013:1) mentions that light is an essential feature for mosques, since the first and last daily prayers occur before the sun rises and after the sun sets. She further goes on to state that before electricity, mosques were illuminated with oil lamps, creating a glittering spectacle, with soft light emanating from each, highlighting the calligraphy and other decorations such as ornate tiles on the lamps' surfaces. In contemporary

mosques there is a focus on lights that are more practical than decorative though in an attempt to provide energy efficient lighting.

In Figure 2.14 the chandelier below the main dome of the Nizamiye Mosque in Midrand can be seen. The chandelier is an elaborate fitting with multiple tiers in concentric circles. The fitting holds lamps and speakers that form part of the sound system of the mosque. It serves the purpose of bringing light into the centre of the mosque along with sound during sermons and prayers. The fitting is made from solid brass and polished to a mirror finish. The fitting does give the impression of stars in the night sky with the finish being symbolic of the divine, which is often associated through golden elements. As this fitting is suspended in the centre of a large vaulted space, the fitting is quite prominent and plays an important part in promoting the spirituality of the space.



Figure 2.14: Chandelier below the main dome of the Nizamiye Mosque, Midrand, Johannesburg, South Africa, 2015, (Photograph by author).

Through reviewing the literature on the key elements of a mosque design, it is clear that a common standard was established after the first mosques were built. These standards have dictated the form of the mosque and its key elements that are currently being developed today as mentioned by Johns (1999:71). Apart from the orientation of the *qibla* wall and the position of the *mimbar*, the rest of the key elements of the mosque are open to interpretation by the architect and designer. Verkaaik (2012:172) states that the stubborn insistence that a mosque is a building featuring a dome and a *minaret* can be taken as an effort to reconstruct the past. This attempt of recreating the past has influenced many mosques in South Africa and internationally as the communities attempt to portray an Islamic identity through an aesthetic that may not always be appropriate to the surrounding urban fabric. The reality is that the faith itself does not insist on continuing a specific aesthetic style and is open to developments in the key elements of the mosque.

In chapters three and four I will be analysing the case studies by looking at the key elements of mosque design and how these have attempted to address the notion of identity, hybridity and the social impact of the mosque on the surrounding urban fabric.

### 2.6. The interior design and architectural identity of the mosque

The interior design, visual identity and interior detailing of a mosque are an accurate measure of the thoughts and principles of the Muslim community the mosque serves. Verkaaik (2012:172) states that mosques in Netherlands have well-proportioned designs and experienced craftsmanship that gives the prayer room an aura of authenticity. The interior is the part of the mosque, that the nonmuslim community do not get to see and thus allows the Muslim community to truly express their beliefs. Verkaaik (2012: 172) states further that "non-muslim society do not usually get to see the inside". This can be seen in Figures 1.6 and 1.7 which due to the design do not really allow the public to view the mosque interior without entering the structure. This has resulted in many mosques having quite conventional interiors even though the exterior facades take on a contemporary architectural aesthetic. Verkaaik (2012:172) mentions that the interior of new purpose-built mosques are often quite conventional, even if the exterior is experimental and innovative. In some communities where innovation is favoured over convention, an emphasis on concepts of sustainability can help create mosques that enhance the space they are constructed in. Murad (2017) states that with its emphasis on sustainability and almost total reliance on green energy, the new Cambridge Mosque will be Europe's first eco-mosque and a truly landmark building for the city of Cambridge and its residents. This is due to the fact that the mosque is meant to be a showcase of British Islam to the world.

Thus the interior design, visual identity and interior detailing of the mosque are influenced by the ideas, social perceptions and the actions of the multi-cultural community surrounding the mosque. However in non-Muslim countries this influence is seen as more of a compromise between the two communities instead of the result of mutual input. Kreutz and Sarhan (2010:102) in their paper on mosques in Germany state that the preference for a more Western style was lastly the result of a compromise between the mosque committee and the surrounding community. This was done in an attempt to create a German Islamic identity instead of imposing a traditional Islamic identity on the community. However Rashid (2014:68) argues that the mosque is the one structure that the Muslim community has that provides a sense of an imaginary homeland. The challenge faced by architects and designers is balancing the identity of the mosque to be a valid representation of a people yet still assimilate into the surrounding urban fabric and provide a sense of identity for a Muslim community Rashid (2014:73).

The interior of the mosque can also be deemed as crucial to enhancing or distracting from the experience and spirituality of the mosque as Friedow (2012:4) states that "designers have always intuitively acknowledged the value of design decisions on the quality of human experiences". The designer therefore has the responsibility of creating a space that according to Verkaaik (2012:173) is

a familiar, homely atmosphere, a religious enclave if you wish, that is an invitation to body and mind to relax and perform religious duties". The interior designer therefore can play with elements such as volume, lighting, acoustics, finishes and daylight to further enhance the act of praying through the use of traditional and visual elements of mosque design. Verkaaik (2012:173) discusses this in his paper on mosques in Netherlands by stating that "together with other structural and decorative elements, volume, space, light, acoustics, material and colour adds an aesthetic dimension to the act of praying". Verkaaik further states that "the aesthetic dimension, although rooted in convention, functions to contribute to the timeless act of praying". This leads to mosques such as the ones chosen for this study to embody some sort of 'hybrid identity' in their architectural and interior design styling. The interior spaces use this to enhance the act of praying yet reflect the Muslim community's thoughts and principles that differentiate one community from another.

Architects and designers attempt to portray the identity of the mosque in a positive manner. Abbany (2014:1) cites Böhm, the architect of the Cologne Central Mosque, as stating that "the very design of the building aims to communicate a sense of openness and invitation". The architectural and interior design identity of the mosque has always been an aspect of the structure that has been open to interpretation. According to Badat (2011:1), a mosque has very few doctrinal guidelines as to what specifically constitutes the structure with the core guideline being its orientation towards Mecca. Rashid (2014:72) mentions that elements of the design may be shared between cultures, regions and contexts however, the morphology that combines these elements into a system should be consistent within a particular architectural tradition. This morphology contains a system of variables and invariables. According to Rashid (2014:73) as long as the invariables remain expressed as in the original system, a sense of identity persists. This has resulted in the architectural and interior design identity of the mosque being able to change based on how the various groups have chosen to materialize the philosophies and values of Islamic architecture. This view aligns to that of Weisbin (2013), Al Sulaiti (2013), Verkaaik (2012) and Grabar (2004).

Badat (2011:1) further states that many mosques are magnificent and innovative examples of architecture that are paradoxically original through the way they borrowed from other cultures. This has led to the mosque identity becoming something of a symbol of multi-culturalism as the identity of the mosque has the ability to change to suit its surrounding environment. Badat (2011:1) mentions that the most obvious example of adaptive architecture is in Istanbul, Turkey, where the old and the new have sat opposite each other for almost 500 years. On one side is the magnificent sixth-century Hagia Sofia, and on the other is the early 17th-century Blue Mosque, a monument that bears a startling resemblance to its Byzantine predecessor yet remains unequivocally unique in appearance.

However as Islam spreads in South Africa, the mosque interior design and architectural identity struggles to adapt itself to the multi-cultural communities it serves. This is due to the fact that mosques in South Africa are being built with preconceived ideas from members of the mosque committees as they attempt to create a symbol of their homeland (Rashid 2014:71). According to Badat (2011:1), Muslim communities are being accused of self-marginalisation as well as social and religious "backwardness". This trend seems to be something that is not unique to South Africa but is also being dealt with in Muslim communities of Europe, North America and Australia according to Verkaaik (2012:60). This has led to objections being primarily targeted at the mosque identity as Connolly (2012:1) in her article on the Cologne Central mosque states "the anti-immigrant movement Pro Köln and the writer Ralph Giordano, who argue that it is a political symbol that does not belong in the city". This type of attitude and opinion has led to mosques in Europe and South Africa being viewed as space-invaders instead of space-providers.

However, synagogues have not been viewed in the same light yet the two structures often bear a striking resemblance in some of their key elements. Johns (1999:96) has made an interesting comparison between the mosque and the synagogue in his paper on the concept of the mosque. Johns (1999:97) has stated that the formal parallels between the synagogue at Dura-Europos and the mature stage of the mosque are immediately apparent. These similarities were found in the orientation upon a direction of prayer or qibla, the mihrab and the Torah-niche, the mimbar and the 'seat of honour' and the ablution facilities in the forecourt. Even though there are similarities, the mosques receive far more objections to their construction then the synagogues do. These objections seem to be rooted in a deep sense of identity and the surrounding urban fabric's ability to facilitate it. Rashid (2014:73) believes that a mosque can be a social, political and religious center and not just a sacred or sanctified space for ritual worship. However many mosques are viewed in the mystical and sacred sense. Saleem (2013:189) mentions that the architecture became the carrier of embodied notions of home as well as the 'other'. Saleem (2013:189) also mentions that community members are willing to accept migration and cultural practices of newer minorities in their communities however these same community members are intolerant to a physical change to the local landscape.

This change to the local landscape is not simply a result of the mosque but also of Muslim businesses that cater for the Muslim community. Rashid (2014:72) mentions that the evidence of the Muslim community is evident in the opening of a Halaal shop and a *madrassah* or type of religious school in the locality around the mosque. Even though this is the case, it has become common practice to associate the dome and the *minaret* with the mosque. Saleem (2013:190) refers to the fact that the

default signage for mosques worldwide is the dome and *minaret* and this is then regarded as shorthand for a muslim presence and thus representing a preconceived notion of identity that is often associated with the mosques. It does seem though that the current opinion is that the dome and *minaret* are looked upon as the space invaders representing a foreign culture instead of the actual mosque and the activities that occur within.

In an attempt to address this, architects and designers have attempted to use the concept of hybridity in their designs for the mosques.

## 2.7. Hybridity in mosque design

The concept of hybridity in mosque design seems to be a recent phenomenon. Rashid (2014:66) states that the celebration of hybrid design in Islamic architecture, or indeed the hybridity of Muslim communities, is a recent phenomenon that is not limited to postcolonial cities. Rashid (2014:66) refers to these types of mosques as "architectural hybrids". These mosques are not unique to specific spaces or cities but seem to be found worldwide in young Muslim communities. Rashid (2014:66) explains the existence of these architectural hybrids as being a result of the intersection and combination of identities with other identities which determines the level of social integration. This has been especially prominent in Islamic architecture as Rashid (2014:67) has mentioned that this phenomenon goes hand in hand with the mobility and diffusion of Islam from the Muslim enclaves to the non-muslim spaces within cities. As the mosques in many of these spaces often serve a Muslim community that in itself is a hybrid community of Muslim people from various backgrounds the mosques are imbued with hybridized forms and architectural narratives as stated by Rashid (2014:73). Deagan (2013:262) further states that hybridity is generated in settings of pluralistic cultural engagement. These new hybrid forms that have been developed in mosque design through the cultural exchange are greatly affected by migration, trade, political alliances and intermarriage patterns as mentioned by Deagan (2013:263).

With regards to hybridity in mosque design currently it can be found in the exterior facades of the mosque and in the finishes of the interiors as the architects and designers attempt to create a space that is more inclusive of the surrounding urban fabric. Mulugeta (2009:1) in his article on Greenside Mosque states that with its modernist skylight, bouquet of metal arches reaching to the heavens and expanse of plush carpets, the Mosque of Mercy in Emmarentia is a monument to Islam's aspirations in the new South Africa and the religion's harmonious integration into the nation's life. This attempt to integrate or assimilate the structure of the mosque into the surrounding urban fabric can be seen as an attempt to define its identity while becoming deeply rooted in the locale (Rashid 2014:71). In most cases Rashid (2014:73) mentions that an over, religious consciousness may shape the visible

superstructure of the mosque, it is the underlying vernacular ideas define the true nature of the space.

The most challenging form of this hybridity regarding mosques is the concept of inclusivity. Alomari (2010:1) identifies hybridity as being indicative of "inclusivity, embracing what is trivial, to have more sense". Furthermore Young (1995:2) defines hybridity as "the course of action that encompasses a combination of two different cultures which then produces a third culture that maintains a clearly defined dissimilarity from either of the two original cultures". The visual identity of mosques built in multi-cultural suburbs may attempt to fulfil Young's definition of hybridity allowing the mosques to portray an aesthetic that does not represent the traditional Muslim community.

The concept of multi-culturalism would best suit the architectural typology of the mosque in a multicultural suburb. Alomari (2009:8) states that multiculturalism, in this context, might refer to the existence of multiple cultures within a community". The difficulty that the Muslim community faces in a multi-cultural community is that a truly authentic representation of their culture cannot be present as Alomari (2010:6) states that "semiotics confirms that authentic cultures cannot be present". This results in the Muslim community struggling to find an identity as they try to establish themselves in their new environment. This is then passed on to the mosques which struggle with the visual identity within the space the structure occupies. Young (1995:23) does however view the term hybridity or hybrid in this sense to imply "negativity". In this sense hybridity is referring to a newborn cultural and social space that is viewed as a form of colonisation and immigration of a foreign people into the northern suburbs of Johannesburg. The people referred to in this case are the Muslim residents that have moved into the community after the abolishment of the Group Areas act. Cantone (2016:1) mentions that the symbolism associated with the transformation of spaces and buildings can be considered in this case as colonial urbanism at work. Deagan (2013:262) states that colonization always involves asymmetrical power relations that seemingly generate new hybrid forms in spaces. Along with these new hybrid forms, all new identities are formed and as Deagan (2013:270) states they become normative to their users as time goes on. It is this change that the mosque brings about that the surrounding community either welcomes or rejects.

The mosque, its design and presence is therefore viewed as a symbol of this colonisation through urbanism. The architects and designers of the mosques in these spaces attempt to dispel these fears of colonisation by designing spaces that integrate with the surrounding space. Murad's (2014:1) comment on the Cambridge Mosque proposal indicates that this building will be truly inclusive, sustainable, safe, secure and respectful of the neighbourhood. In the case of the Cambridge Mosque, the physical presence of the mosque, its volume and exterior façade, will not impose a foreign

architectural identity to the community. These attempts at integrating mosque design and architecture into the surrounding urban fabric does not always result in the intended outcome.

Historically in South Africa, mosques have been built with a hybrid style that seems to have a heavy influence from the Indo-Pak subcontinent and the Malay Archipelago as well as the Middle East. This was due to the fact that majority of Muslims in South Africa are either regarded as Indians or Malay in South African demographics (Vahed & Jeppe 2005:253). The designers and architects of the mosques in South Africa come from these ethnic groups and together with the committees of the mosques tend to choose a building typology that they associate with from a grass roots level and are comfortable with. Verkaaik (2012:197) has termed this as the architecture of homesickness. This has led to the mosques and Muslim communities that build them being viewed in a negative manner even though they have attempted to embrace the concept of hybridity in the design.

Due to this form of hybridity being adopted in mosque design in South Africa, the concept of Orientalism and the 'Other' along with the fears that stem from it have been associated with the mosques and the muslim communities that are found in the multi-cultural suburbs of Johannesburg. According to Acquarone (2016:1), the term hybridity in this context starts to acquire political significance. As the mosques are being constructed in what has previously been called 'white suburbs' of the city, the mosques attempt to signify the tolerance of postmodernism through the hybrid nature of the mosque's identity. Acquarone (2016:9) mentions that the hybrid aspect of postmodernism sustains tolerance and the coexistence of diversity. This tolerance and coexistence is only one side of hybridity in postmodernism. The second side is the essentialist concept within hybridity that according to Acquarone (2016:3) results in a discriminatory reaction to identity and culture. This reaction was commonplace in the colonial encounter that led to division and oppression and as Acquarone (2016:2) has mentioned was erected by the 'white man' in an attempt to judge other cultures as inferior. Current human culture across the world is inherently hybrid in its nature as according to Acquarone (2016:1) no scientific study has been able to ascertain the concept of different races with the 19th century imperial biological sciences being developed as a need to justify policies on inferiorization of the 'other'. The ideology of fearing the 'other' has remained in certain political and social circles which according to Acquarone (2016:2) has led to division and oppression. It can be noted though that Acquarone (2016:2) has also mentioned that the encounter with the 'other' can also result in the celebration of differences. It is clear that the resulting effect concerning the muslim communities is the inclusion of hybridity in the design of the mosques to address either the celebration of the 'other' or the inferiorization of the 'other'.

### 2.8. Orientalism and the 'Other'

Orientalism and the concept of the 'other' are closely linked to each other especially concerning the design of mosques in spaces that did not have a Muslim presence historically. Said (1995:15) has shown that Orientalism led the West to view Islam, or the East, as static both in time and place and being incapable of defining 'itself'. Said (1994, xiii) has described this ideological construction of culture as a source of identity geared to differentiate 'us' from 'them', almost always with some degree of xenophobia. Currently Orientalism in a post-modern sense can be found under the guise of cosmopolitanism as stated by Avcioglu (2007:1). It is often picked up in questions and comments regarding mosque architecture and design with specific focus on the dome and the minaret. Avcioglu (2007:2) argues that the minaret and the dome have become structural metonyms of Muslim and Islamic identity even though there exist mosques both old and new in Muslim countries that do not have minarets and domes. According to Avcioglu (2007:3), the association of the minaret and the dome to the Muslim 'other' began in the second half of the eighteenth century and has continued onwards. Initially, the concept of the Muslim 'other' was viewed as something of a novelty. Avcioglu (2007:3) mentions that Mosque-like buildings, often based on the Turkish model and style of a mosque were transfigured into garden ornaments all over Europe. These structures were built to exhibit the style of architecture seen at the time in Turkey. The buildings borrowed key elements of mosque design such as the dome, minarets and arches. A few examples of these transfigurations as seen in Figures 2.15 and 2.16 include the Turkish 'Mosque" at Kew Gardens in London built in 1762, the 'Mosque' at the Schloss Garten in Schwetzingen, Germany, built in 1776 and the 'Mosque' at Armainvilliers, near Paris that was built in 1785.

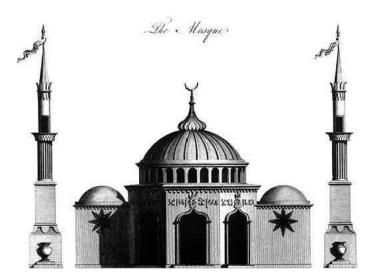


Figure 2.15: The Turkish Mosque, Kew Gardens, London, UK, 1762, Sir W. Chambers



Figure 2.16: The Mosque, Schloss Schwetzingen, Germany, Nicholas de Pigage, 1775, Photograph by Peter Richter.

None of these buildings were functional mosques however as Avcioglu (20017:6) has mentioned, they were partly responsible for the gradual opening up of Europe to other cultures. Before the construction of these ornamental mosques and outside of the imperial context, Avcioglu (2007:3) argues that much of Western Europe had not been exposed to the experience of multi-religious and multi-cultural existence, unlike the Middle East, where it would be unthinkable to be unaware of the co-existence of synagogues, churches and mosques. This was because the Muslims of Europe were historically perceived as transient immigrants, refugees or negligible ethnic minorities. They were not seen as being part of communities or deserving of their own places of worship. Avcioglu (2007:3) refers to this mind-set as a result of the Orientalist discourse symbolising the distance between the dominant center and the dominated periphery.

The current situation in South Africa is very similar to that of Western Europe as the history of Islam in South Africa is a direct result of the colonization of the country by Imperial Europe, specifically the United Kingdom. Bham (2008:1) states that the first Muslims to arrive in South Africa were political exiles of the British and Dutch colonizers of their lands. Bham (2008:2) further states that the second phase of muslims to come to South Africa were indentured labourers brought from India by the British to work in the sugar-cane fields as slavery had been abolished and an alternative system of labour was required. Similar to other non-muslim countries of Europe and the Americas, South African Muslims are regarded as a minority within the population. Bham (2008:2) states that Muslims number over 1 million citizens, representing around two to two and a half percent of the country's population. Further similarity to Europe and the Americas is the challenge of Muslim's being viewed in a negative manner in spaces that were historically 'white' suburbs due to the remaining influences

of the imperial colonizers. The mosques being built in these spaces are then looked upon as representations of the Orient and the Muslim 'other'. Kramer (2000:57) states that the unreformed orientalist defines Muslims simply by them being Muslim.

Even though in South Africa, there are people of Middle Eastern and Asian descent that follow faiths other than Islam, it is common practice for non-muslims to assume they are all Muslim. According to Said (1995:116), this is because Islam is regarded as the essential representation of the Orient and its people. The common misconception is that Islam is an Indian religion even though there are members of the faith from all types of cultures and backgrounds. Furthermore, Muslims are assumed to have a single architectural style and identity that cannot be influenced by the surrounding environment. According to Avcioglu (2007:6), this is due to the overloaded process promoting Islam in the West as if it is a nationality with one culture, one language, one identity and one form. The form associated with Islam and the Muslims can be found as key religious motifs in the mosque design. According to Avcioglu (2007:6), these motifs are the dome and *minaret*. Similarly, to Europe and North America, these motifs become targets for objections to the construction of the mosques. Avcioglu (2007:6) states that these motifs were more often than not subjected to hostile and racist attacks.

In South Africa though, unlike in Europe, the ornamental mosque did not precede the purpose-built mosque within the urban fabric of the cities. These ornamental mosques had played the part of being a precedent to the purpose built mosques of Europe. The resulting effect was that the purpose built mosques of Europe were influenced and judged by the aesthetic and key architectural motifs of the ornamental mosques. Avcioglu (2007:8) states that it is not the knowledge of the original that holds authority but rather the precedent that sets the standard for what is and is not aesthetically acceptable. The South African precedent for mosque design and identity was not established through the construction of ornamental mosques but rather through the construction of community-built mosques. Initially these mosques were influenced heavily by the cultural background of the community members that would fund the mosques and were constructed within multi-cultural spaces of the city with permission from the government.

However as Avcioglu (2007:8) has mentioned, these types of mosques would have to be built with an underlying tone of declarative, self-evident architecture of the other. Avcioglu (2007:8) further mentions that the chosen architectural style was usually determined by the colonial presence in that region. The current dogmatic design of mosques with at least one *minaret* and dome according to Avcioglu (2007:12) belongs to the legacy of the Ottomans, the longest-lived Muslim imperial power. Due to this influence of Turkish culture on Islam and mosque design, even contemporary mosques

include the *minaret* and dome. These key architectural motifs have become an almost sacred part of the identity of Islam. The Muslim community often views the exclusion of these motifs as scandalous. Avcioglu (2007:13) the sheer idea of a mosque lacking a *minaret*, dome or other key motifs has presented a challenge of an existential kind. This insistence on the inclusion of these elements into mosque design can be seen as an attempt to establish a monument of power representing the imperial power of the Ottoman Empire. Frishman and Khan (1994:245) have mentioned that most contemporary mosques no longer involve the makings of a place of worship but rather are in service of a monument symbolizing power as culture. This results in the mosque's symbolising the power of political Islam to both the Muslim community as well as the non-Muslim communities that surround the mosques. According to Avcioglu (2007:14), the problem with attaching so much value to forms established by the Imperial powers is that even Orientalist representations of the form are being recoded into consecrated forms and are reclaimed by Muslim minorities as their own. Avcioglu (2007: 14) further states that this is leading to the mosques and the related forms being viewed as a threat to the non-Muslim communities.

It can be stated though that viewing all mosques in this manner can fall prey to the Orientalist paradigm as well as being partial to the notions of the 'other' as mentioned by Avcioglu (2007:14). The stereotypical view of the mosque and by extension the Muslim community around it are viewed as representations of the Orient and the 'other'. This type of approach is not unique to mosque architecture and interior design but has also been seen in popular media.

Reference can be made to the movie *300* (Snyder 2007), which uses the concepts of Orientalism and the 'Other' to create a view of the Persians and by extension the Arabs and any culture stemming from it to be a culture of mystism and evil. Kunucen (2010:188) states that "filmmakers have portrayed Arabs and Middle Easterners in exotic ethnic terms. This is presented as the perfect background for film industry productions in which they have played the villain opposite Western 'good guys' and so created a stereotypical image of 'Otherness'." The movie dramatizes the conflict between the West and Persia and as such by extension, plays on people's misconceptions of the Arabs and their society, culture and faith to further fuel conflicts in society. This misconception is then materialized in the objections to the design and construction of the community-built mosques as the mosques become the symbol of this so called 'foreign' culture and 'otherness'.

As such it is clear the mosque in contemporary non-Muslim society is viewed as a symbol of the Muslim 'other'. Avcioglu (2007:16) believes that this 'otherness' should not be viewed as a cultural dead-end, burdened by an over-determining sense of identity, but rather as an opportunity to participate in an open-ended narrative of belonging within the urban fabric.

## 2.9. The social and political impact of the mosque on the surrounding urban fabric

The mosque and other religious buildings have always had an influence on the surrounding urban fabric as they serve as a gathering point for the community. The mosque in particular has always been the central gathering point and attraction of the Muslim community as the mosque creates a space for Muslims within the existing urban fabric. Verkaaik (2013:8) writes that religious buildings may not be crucial for religious reasons but are important in a social or political sense. The reality of Verkaaik's words is that there are non-muslims that do not really care about the religious activities that occur within the mosque but rather are concerned by the presence of the mosque and the impact it has on the urban fabric.

Verkaaik further writes that religious buildings represent religious identity and power. The emergence of this new religious identity and power can then be seen as a threat to the existing religious identity as it begins to influence the urban fabric around it. Saleem (2013:190) mentions that usually mosques emerge in areas of high Muslim populations, which in turn attracts other Muslims to the area. The resulting effect is a visual and social impact on the streets; leading to what Saleem, (2013:190) has called the 'Islamisation of space'. This concept is something that occurs in most spaces where Muslims essentially have migrated to from their traditional communities.

In South Africa, this migration has been an internal one, with Muslim communities migrating from the suburbs established during apartheid to the so-called 'white' suburbs that are closer to the various CBD's. My own family went through this process of migration twice. However, in South Africa and in Johannesburg in particular, the Islamisation of space has been more subtle. Muslims did not need to establish suitable food outlets, supermarkets, clothing outlets and services in these new spaces as the existing infrastructure needed could be found as close as the Mayfair and Fordsburg areas, a mere 15 minute drive away. The only visible symbol of Muslims in these communities before the establishment of the mosque was the increase in parked cars on Fridays around the *musallas* that pre-dates the mosques in these suburbs.

Saleem (2013:191) states though that the mosque is not the only, or indeed the primary way in which Muslim space is constructed. He further mentions that the mosque fulfils a symbolic role within the urban fabric establishing a variety of messages from presence to permanence. The construction of *madrassahs* and Islamic schools also play a part in the Islamisation of spaces. In some case these would be built prior to the mosque or built after the mosque and are a natural progression of the facilities provided for the Muslim community. When built before the mosque, the impact on the urban fabric is not as great as that of the mosque. This is due to the fact that the madrassahs and islamic schools would be housed in existing buildings just as the temporary prayer

spaces are found in existing buildings According to Allievi (2010:64) the creation of prayer rooms in existing buildings has not caused any major conflict or impact on the spaces as these are viewed as temporary facilities.

The mosque on the other hand has a much more profound impact as Allievi (2010:25) states that mosques like any form of construction proposed in an area where it was not present previously, it will constitute a form of ownership of the land. Throughout history, the ownership of land has been a source for conflict which Allievi (2010:25) has described as a genuine conflict of power. The mosque therefore has both a social and political impact on the surrounding urban fabric as it is viewed as the form by which Islam is establishing itself in that space. In South Africa, the mosque suggests social change by bringing in a new group in the form of Muslim families and at the same time emphasising the political change that the country has undergone with the fall of apartheid. The impact the mosque could have on the politics of a community was noticed quite recently in the suburb of Valhalla. According to Smith (2016:14), a group of people decided they would fight to keep their suburb inclusive, because anti-Islamic behaviour, like anti-Semitism, usually comes with race hate. This showed that even though South Africa has been racially democratic for over 20 years, there are still enclaves that have not fully accepted political change. The mosque appears to be the structure that they view will bring this political change to their space.

Many mosques are looked at as being the structures that are going to change the urban landscape and represent themes of inclusivity in the urban fabric. However as Kahera (2010:375) has mentioned, the likelihood of altering social conditions through an institution whose constituents have been alienated and rejected has many difficulties. However, he has also stated that the 'social efficacy' of the urban mosque introduces a novel concept, which incites a new debate about 'grass roots' activism. He argues that in some cases the urban mosque has contributed to the local economy by aiding the development of small business and charity organisations.

The mosque has become a symbol of cultural openness and globalization both in South Africa and internationally. Allievi (2010:25) states that even some non-Islamic authorities are beginning to view the presence of mosques as a sign of cultural openness and globalization. The mosque should not be viewed as the only symbol of change in communities. The reality is that communities and society as a whole is not something that is fixed. Allievi (2010:48) states that societies change, they evolve, they have a history, they take concrete form in institutions and in values that all need to be respected. The impact of the mosque on the urban fabric is further emphasized by the change that the community undergoes due to natural evolution as people migrate to and from suburbs in the city, based on their jobs and social requirements. It is the mosque though that primarily attracts Muslim

families into specific communities as it provides a religious infrastructure to maintain and transfer traditions and values that would otherwise be lost in a community without a mosque as stated by Saleem (2013:190).

It could be noted though that community built mosques that have emerged in suburbs that did not have a Muslim presence before are often looked at as spaces that offer transforming social and religious order within the Muslim community itself as stated by Saleem (2013:191). Saleem also states that these mosques serve as hubs that facilitate a shift towards a form of religious practice that leaves behind regional and denominational differences as they serve communities that are no longer from a single ethnic background. Saleem terms these Muslim communities as 'border populations' as they represent faith in an environment where they are not the majority. It is the mosques that Saleem argues that can be reinvented both functionally and visually, thus improving their impact on the urban fabric.

#### 2.7. Reflective note

The concern of this study is the identification of strategies and techniques employed in the design of the community built mosques in South Africa when compared to those employed internationally. This is seen as a response to the global issues that minority Muslim communities are facing in spaces where a Muslim presence was not found historically. Through the literature presented in this chapter, certain themes are evident and have offered insight into the discussion that I will undertake in Chapter 3 and 4 when discussing the local and international case studies.

It is clear that all mosques constructed in South Africa and globally contain certain key architectural and interior design elements in their design as presented in the literature review. These elements or motifs may not be prescribed in the tenets of the faith as mandatory however, it is clear that through the inclusion of these elements over time, they have become synonymous with the mosque and Islam in general. Two of these elements, the *minaret* and the dome, have been singled out as the target for objections and attacks on the mosque. The role of these two elements in the design of the contemporary mosque is more symbolic than it is practical. This symbolism is the threat that has been clearly mentioned as a predominant theme in the literature presented.

In the discussion around the key architectural and interior design elements of the mosque, the identity of these elements has been shown to be influenced by the surrounding urban fabric, the cultural background of the designers, the mosque committee members and the community around the mosque. The concept of hybrid architecture and interior design plays a large role in the aesthetic appearance of the mosque. It can be noted though that currently most community built mosques can be referred to as architectural hybrids because they serve multicultural communities. Concepts of

Orientalism and the Muslim 'other' clearly define the negative feedback mosques tend to receive in spaces where the Muslim community is in the minority. It is also clear that the potential for a positive outcome to be derived from the concepts of Orientalism and the Muslim 'other' is possible. The mosques, regardless of where they are built, clearly do have an impact on the surrounding social and political conditions of the urban fabric. This is represented through the religious identity and power the mosques portray. The presence of the community built mosque also signifies a change in the social and political order of the community.

The one theme that has been constant in all the literature reviewed with regard to the design of mosques is the focus on the exterior. Even in the more complex issues, elements such as the dome and *minaret* are referred to often however the interior design of mosques and the interior elements are rarely discussed. I wish to address both the exterior and the interior design of the mosque in the analysis of the case studies chosen for this dissertation.

#### 3. CHAPTER 3: SOUTH AFRICAN CASE STUDIES

#### 3.1. Introduction

In this chapter, I intend to analyse the three South African mosques chosen as case studies for this dissertation. The analysis of these case studies will be done using photographs of each mosque taken by myself, notes of my observations when visiting the mosques and interviews that were done with the members of the communities that surround the mosques. Where necessary, reference will be made to available literature that has been either published in journals or online. The interviews were designed to be open-ended and were formulated to initiate conversations relating to the interior design of the mosques. The analysis of the mosques in this chapter will be done according to the overriding themes of the dissertation. These themes are namely identity, hybridity, the Muslim 'other' and the impact of the mosque on the surrounding urban fabric. Further themes, which became apparent in the literature review and the data analysis, will be discussed as sub-themes.

All three case studies have been built on sites within suburbs of Johannesburg that were historically zoned as residential spaces. The sites of the mosques have been rezoned for religious and educational use as per the municipal guidelines of the city of Johannesburg. The case studies are to be discussed in chronological order of when the dedicated mosque structure was built on the various sites.

### 3.1.1. Masjid-ur-Rahmah (Greenside Mosque)

Masjid-ur-Rahmah or as it is commonly known among the Muslim community, Greenside Mosque, is located on the border of the suburbs of Emmarentia and Greenside in northern Johannesburg at the corner of Barry Hertzog and Ingalele Roads. The community officially inaugurated the current structure that is regarded as the mosque complex in 2005. The structure includes facilities such the prayer hall, courtyard, ablution room, shoe room, classrooms, an Islamic library, a kitchen, bathrooms, storerooms and a Janazah Ghusl room. The family uses the Janazah Ghusl room to perform the final washing of a deceased Muslim's body. Not all mosques have the Janazah Ghusl room.

The Greenside Muslim Association (GMA), an organisation comprised of Muslim members of the surrounding community, runs the mosque complex. Within the GMA, there are various committees that deal with the funding and maintenance of the mosque complex. The funds for the construction of the *Masjid-ur-Rahmah* were sourced from donations collected from the local Muslim community as well as Muslim communities within South Africa. At the time of the collections (I was in secondary school and I had assisted on various occasions with collection drives in other Muslim communities).

The current costs of running the mosque are sourced from voluntary donations by members of the surrounding Muslim community and funds collected on a Friday after the midday prayer.

SAB Architects whose principal architect is Sabir Ahmed Bham designed the mosque. As can be seen in Figure 3.1 the structure is made from a combination of cream facebrick and plastered or tiled walls. The overall colour scheme is cream and grey and is used throughout the structure. The mosque stands out as a light coloured structure among the trees.



Figure 3.1: North and East Façade of *Masjid-ur-Rahmah*, Greenside, Johannesburg, 2017. (Photograph by author).

# 3.1.2. Masjid-ul-Furqaan (Houghton Mosque)

Masjid-ul-Furqaan or as it is commonly known among the Muslim community, Houghton Mosque, is located at 52 2<sup>nd</sup> Avenue in the Johannesburg northern suburb of Houghton opposite the Houghton Estate Golf Club. The community officially inaugurated the current structure that is regarded as the mosque complex in July 2011. The structure includes facilities such the prayer hall, courtyard, ablution room, shoe room, classrooms, a kitchen, bathrooms, storerooms. Unlike Masjid-ur-Rahmah, this mosque does not have a library and a Janazah Ghusl room as it is not needed.

The Houghton Muslim Association (HMA), an organisation comprising of members of the surrounding Muslim community, runs the mosque complex. Similar to the GMA, the HMA have various committees that deal with the funding and maintenance of the mosque complex. The funds for the construction of the Houghton Mosque and its monthly running costs have been sourced in a similar manner to that of Greenside.

The mosque complex was also designed by SAB Architects, with Sabir Ahmed Bham again being appointed as the principal architect on the project. As can be seen in Figure 3.2 the exterior of the structure is made from a combination of beige facebrick with a band of light brown granite cladding the lower one meter of the walls.



Figure 3.2: North facade of *Masjid-ul-Furqaan* showing the dome and the *minaret*, Houghton, Johannesburg, 2017. (Photograph by author).

There are bands of stucco plaster with Islamic detailing painted in a camel beige colour to accentuate the facebrick. The overall colour scheme is cream, white and gold and this is used throughout the structure.

## 3.1.3. Auckland Park Mosque

The Auckland Park Mosque is located in Auckland Park, Johannesburg at 48 Richmond Avenue. The community officially inaugurated the current structure that is regarded as the mosque complex in October 2011. The structure is made up of the main prayer hall, courtyard, wudhu khana, toilets and classrooms that are used for the education of Muslim children as part of the Auckland Park Academy of Excellence or APAX and an afternoon religious school called the *madressah*. The academy was founded in 2011 as a formal private school.

Unlike *Masjid-ur-Rahmah* and *Masjid-ul-Furqaan*, the Auckland Park mosque is run by APAX instead of a dedicated organisation that represents the Muslim community in the suburb. Within APAX, there is an internal committee that represents the interests of the mosque and the community surrounding the mosque. The funding for the construction of the mosque was provided through a combination of funds saved from school fees and through donations received from the Muslim members of the community as well as from neighbouring Muslim communities such Emmarentia, Fordsburg, Greenside, Mayfair, Mayfair West, Melville and Northcliff. The monthly running costs of the mosque are funded by APAX and through donations from users of the mosque. The structure is made up of primarily light beige facebrick for the external structure as can be seen in Figure 3.3 and plastered and painted walls for the interior of the mosque complex.



Figure 3.3: North East Facade of the Auckland Park Mosque, Johannesburg, 2017. (Photograph by author).

### 3.2. Identity

# 3.2.1. Site Orientation and spatial planning of case studies

Masjid-ur-Rahmah is built across two properties that were purchased by the Greenside Muslim Association. The mosque complex is generally centred on the two sites following their shape while at the same time allowing the entire structure to face in the *qibla* direction. This can be seen in Figure 3.4, which shows an aerial view of the mosque complex derived from Google Earth.



Figure 3.4: Aerial view of *Masjid-ur-Rahmah* in Greenside using Google Earth, Greenside, Johannesburg, 2017.

The architect borrowed from the typical Ottoman mosques of Turkey for the spatial planning of the main mosque structure. According to Grabar (2004:44), this style was characterized by a single central dome that generates a huge internal space with minimal columns used for the main prayer hall as a response to the communities need for large gatherings. In Figure 3.1 and 3.4, this concept can be seen from the outside of the mosque as the large dome built above the square like structure, which is the main prayer hall.

Masjid-ul-Furqaan is built on a single property that was purchased by the Houghton Muslim Association. On the property to the South of the mosque, the HMA have started the Houghton Muslim Academy which according to the vice chairman of the committee, Dr Yusuf Dassoo (2017), is a self-funded community based educational institution that was established in 2012 to fulfil the need of providing higher learning for the Muslim community of Houghton.



Figure 3.5: Aerial view of *Masjid-Ul-Furqaan* in Houghton using Google Earth, Houghton, Johannesburg, 2017.

*Masjid-ul-Furqaan* is built on the lower end of the site and is at a slight angle to allow the entire mosque complex to face in the *qibla* direction. This can be seen in Figure 3.5, which shows an aerial view of the mosque complex derived from Google Earth. The mosque stands out in the community in a similar manner to that of *Masjid-ur-Rahmah*.

The spatial planning of *Masjid-ul-Furqaan* also borrows from the Ottoman style. The mosque itself is however smaller than *Masjid-ur-Rahmah* in terms of its capacity and the floor area the mosque takes up. The architect again chose to create a single dome above a large prayer hall that has minimal internal columns. According to Bham (2017), the mosque committee chose this style as it allowed for a more efficient use of the space within the main prayer hall. The mosque does have a secondary smaller dome that is completely separate from the area of the main dome of the mosque. This smaller dome sits atop the staircase of the mosque and is mainly there an as aesthetic feature to further enhance the Islamic identity of the mosque.

Auckland Park mosque is built on a single property, is positioned in the South West corner of the site, and is orientated longitudinally on the site. The longer side of the structure runs parallel to the longer boundaries of the site as can be seen in Figure 3.6. The site is conveniently orientated towards *qiblah*, which allowed for an efficient use of the site compared to other chosen case studies, which tend to have wasted spaces around them.



Figure 3.6: Aerial View of Auckland Park Mosque taken from Google Earth, Johannesburg, 2017. Photograph sourced from Google Earth.

The spatial planning of the Auckland Park mosque is derived from the typical hypostyle mosque of the Middle East as can be seen in Figure 3.6. This layout was characterised by a large covered hall or *haram* on the qibla side of the structure that is used as the primary prayer space with an inner courtyard, which is surrounded by arcades, or *riwaqs* on three sides as stated by Kavuri-Bauer (2012:1). The Auckland Park Mosque follows this style by the main prayer hall being placed in the front towards the *qiblah* side of the complex with the courtyard and *riwaqs* situated at the back of the complex. In Figure 3.6, this can be seen as the rectangular part of the building with the concrete slab roof representing the mosque itself. The *riwaqs* in the case of the Auckland Park Mosque house the classrooms and the toilet facilities of the mosque. The *riwaqs* can be seen in Figure 3.6 as the part of the building under the terracotta roof tiles.

# 3.2.2. Key architectural elements and motifs of the local case studies

# Overall architectural identity

The exterior identity of *Masjid-ur-Rahmah* makes use of simple geometric shapes in the form of vertical and horizontal elements as well as in the arches of the mosque which are simple curves spanning from one support to the next. The identity developed by the architect uses a more modernist approach rather than the traditional approach of most mosques of South Africa.

The typical pointed arch synonymous with the mosques of the Abbasid era was not used in the design of this mosque. To continue with the modernist approach to the design of this mosque, the architect chose to use a combination of masonry walls with large expanses of aluminium and glass. The masonry walls are either facebrick or plastered and painted. This provides some texture as well as a softer surface appearance as the aluminium with glass panels creates a cold and crisp finish to

the exterior. According to Bham (2017) due to his choice of creating an aesthetic for the mosque structure that did not borrow directly from the recognized styles of mosque architecture, the mosque committee requested that the dome and the *minaret* of the mosque be more traditional in their design. These elements can be seen in Figure 3.1 and 3.7, and clearly identify this structure as a mosque.

The exterior identity of *Masjid-ul-Furqaan* is more traditional than that of *Masjid-ur-Rahmah*According to Dassoo (2017) the committee members had been to *Masjid-ur-Rahmah*, which was opened a few years prior to *Masjid-ul-Furqaan* and had felt that without the dome and *minaret* the mosque lacked an Islamic identity. In Figure 3.2, we can see the North facade of the mosque showing the dome above the main prayer hall with the *minaret* to the right of the dome. The *qiblah* wall is framed by arched windows and is interrupted by a semi-circular protrusion that forms the *mihrab* internally. This is a common feature found on most mosques in the world. The arches found in Abbasid era mosques have inspired the arches around the windows.

The more traditional style continues on the other facades of the mosque with windows being kept long and narrow. Most windows are framed in a manner similar to the pointed arches as seen in Figure 3.2 except for the windows looking into the mosque courtyard. These have been framed by slender columns that seem to support the concrete slab above.

According to Bham (2017), *Masjid-ul-Furqaan* is as light filled as *Masjid-ur-Rahmah* even though the windows are narrower. The lack of trees immediately around the mosque allows for the maximum amount of natural light to enter the structure. The committee also chose not to allow passers-by to look into the mosque. At this stage, the Islamic presence in the suburb had already been established and according to Dassoo (2017), there were no objections to the construction of the mosque in this location.

The exterior identity of the Auckland Park mosque is much simpler than that of the other local case studies. It is built from clay facebrick that was sourced locally in Johannesburg. The exterior lacks any elaborate form of decoration except for simple and elegant pointed arches that have been built into the walls. These pointed arches frame the large aluminium windows that bring natural light into the mosque. They are reminiscent of those found in mosques of the Abbasid era of Islam. According to Saoud (2002, 2) the Ibn Tulun Mosque of Tunisia, built during the rule of the Abbasid caliphate, remains the first building where the pointed arch was used constructively in the design of the mosque. As can be seen in Figure 3.3 and 3.6, the mosque has three domes, a large central dome that is built above the haram with a smaller half dome built above the mihrab and another dome built on top of the minaret.

The purpose of the inclusion of the arches in the front part of the structure is clearly an attempt at creating an Islamic identity. Talia (2017) mentioned that the decision not to use arches as structural elements in the design was merely to save costs even though many of the community members wanted structural arches to be included. According to Yunus Gangat (2017), a founding member of APAX, the committee chose to create an Islamic identity using these pointed arches, domes and the *minaret*.

As with the *qibla* wall of *Masjid-ul-Furqaan*, the *qiblah* wall of the Auckland Park Mosque is stepped with two sets of windows on either side of the *mihrab*, which is centred on the *qiblah* wall. The Islamic identity of the *qibla* wall is further punctuated by the *mihrab*, which projects from the wall. Pointed arches that are built onto the qiblah wall face to create a stepped appearance and to accentuate these arches frame the windows. The plinth that surrounds the mosque attempts to further accentuate the importance of the *mihrab* by following the shape of the structure and provide a level base from which the mosque has been built.

A common theme in the exterior identities of the local case studies is the use of arches in the design. Aesthetically all three mosques have different styles for the arches. The purpose of these arches is mainly to create an Islamic identity and not for structural support. *Masjid-ul-Furqaan* however does make use of the structural arch in the transitional courtyard.

### Qubba/Dome

The *qubba* or dome of *Masjid-ur-Rahmah* as seen in Figure 3.1 is a copper clad metal framed structure appearing brown in colour that sits on steel columns that rest on the roof of the mosque. The base of the dome has glass panels that fill the spaces between the columns. Aluminium louvres that have been left in their natural colour screen the glass. According to Bham (2017), the dome is a hybrid design of traditional Islamic architecture and a modernist approach using contemporary materials to achieve the desired effect. He also identified a stainless steel spire that marks the center of the dome and represents the mosques link to the heavens above as well as borrowing from Ottoman architecture. The decision to contrast the colour of the dome to that of the structure was taken to enhance the visual impact of the dome.

The dome of *Masjid-ul-Furqaan* as seen in Figure 3.2 is a more elongated dome compared to the semi-circular dome of *Masjid-ur-Rahmah*. It is clad in the same copper sheeting with the same colour being achieved by allowing the metal to oxidise. This colour choice also allows the dome to stand out as it contrasts with the rest of the mosque colours. The choice of the dome shape for the mosque was left to the architect as mentioned by Dassoo (2017). The committee felt that the architect had developed the traditional styling of the mosque and his decision was best concerning the aesthetic of

the dome. The architects also made a decision to place the dome on a square concrete slab base with arch shaped windows between the dome slab and the roof slab of the mosque. These provide a series of clear-storey windows that bring natural light into the mosque.

The domes of the Auckland Park mosque are simple and elegant in their design. The shape of the domes continues the style established by the pointed arches. According to Gangat (2017), the architect chose to design the domes to further enhance and provide links with the aesthetic developed for arches. However according to Talia (2017) the committee requested that the domes would be merely decorative and not form internal volumes within the mosque. The exterior of the domes are finished in an ivory metal sheeting to pick up the colour of the facebrick finish. The largest dome is adorned by a stainless steel spire that is decorated with two spherical elements and a stylized form of the crescent moon as seen in the two previous mosques. The *minaret's* dome has a smaller version of the same symbolic spire, which according to Bham (2017) represents the connection between the heavens and the mosques.

#### Minaret

The *minaret* of *Masjid-ur-Rahmah* can be seen to the left of the dome in Figure 3.7. A light grey tiled structure is built from the roof of the mosque, rises above the dome, and overlooks the surrounding area. According to Bham (2017), the height of the *minaret* was intentionally chosen to be higher than the dome to allow the mosque to be seen from a distance. He also stated that the city council did not object to the height of the *minaret* when it was initially proposed. Unlike the rest of the mosque, the *minaret* was designed to have a traditional Islamic identity. According to Bham (2017), the base is a square, which develops into an octagon shaft that holds a larger octagon shaped platform. The shaft of the *minaret* is thin and does not allow for a staircase within it but rather a ladder runs through the centre of the shaft.

The platform is then covered by eight thin columns, which are joined with arches typical of the Umayyad style architecture of Jerusalem. This holds up the roof element of the *minaret*, which is cone shaped and finished in the same copper cladding as the dome. The *minaret* is then topped with the same stainless steel spire detail as the dome. This ties the dome and the minaret together visually. Bham (2017) further mentioned that the copper cladding on the dome and *minaret* was not polished but rather left in its natural state and allowed to oxidise to create the brown colour that can be seen in Figures 3.4 and 3.7.



Figure 3.7: East facade of *Masjid-ur-Rahmah* as well as the dome and *minaret*, 2017, Greenside, Johannesburg. (Photograph by author).

Like many mosques in the northern suburbs of Johannesburg, the *minaret* is a symbol and does not fulfil its original purpose of providing an elevated space to perform *adhaan*. Mulugeta (2009) states that the *Masjid-ur-Rahmah* is unique because the mosque is silent. No calls to prayer emanate from the mosque's *minaret*. Instead, an antenna is mounted to the *minaret*, which transmits the *adhaan*, the *salaah* and other events occurring in the mosque. Mosques in communities that were established during the apartheid era and have a predominantly Indian population generally have loudspeakers in the *minarets* to broadcast the *adhaan* to the community.

At the *Masjid-ur-Rahmah*, *Masjid-ul-Furqaan* and the Auckland Park mosque community members can purchase a receiver unit to listen to the broadcast, which, according to Mulugeta (2009) is the size of a paperback novel. This system has resulted in the *minarets* not having to cater for loudspeakers in the design as well as staircases that would allow a person to access the platform at the top of the structure.

The *minaret* of the *Masjid-ul-Furqaan* as seen in Figure 3.8 has also been constructed from the roof slab of the mosque and has a square base, which becomes more intricate and slender in shape as it rises upwards. Similar to the rest of the structure, the *minaret* has been designed with the same attention to detail using similar shapes and materials. The *minaret* is topped with a copper clad cap that does not mirror the shape of the dome in any way though.



Figure 3.8: *Minaret* of *Masjid-ul-Furqaan* as seen from inside the mosque staircase, Houghton, Johannesburg, 2017. (Photograph by author).

The structure appears to allow a person to stand and call out the *adhaan* as would be done in mosques before loudspeakers were invented. However, *Masjid-ul-Furqaan* also makes use of the same transmitter system. According to Dassoo (2017), this is due to the same by-law applied to *Masjid-ur-Rahmah*.

In the case of *Masjid-ul-Furqaan*, the *minaret* enhances the Islamic identity developed for exterior facades of the mosque and its dome. Bham (2017) stated that, as he was responsible holistically for harmonising the aesthetics to establish an Islamic style. Therefore, the exterior façade of the mosque and the interiors continued the aesthetic seen in the dome, *minaret*, *qiblah* wall, windows, entrances and doors.

The Auckland Park mosque's *minaret* is a simple, short structure that is more symbolic than it is practical as seen in Figure 3.9. The architect chose to position of the *minaret* above the entrance of the mosque, setting it behind the central dome. This results in the central dome being the primary identifier and symbol of the mosque and not the *minaret*. Unlike the two previous mosques, this mosque's *minaret* is fairly short and wide and does not taper from the base to the top. Due to the shortness of this *minaret*, the palm tree in front of it obscures it from view as can be seen in Figure 3.3. Even when viewing the mosque from another position, the palm tree and the *minaret* seem to compete for visual importance. The palm tree in this case also becomes symbolic providing a link with the *minaret*.



Figure 3.9: Auckland Park Mosque's *minaret* and entrance, Johannesburg, 2017. (Photograph by author).

According to Talia (2017), this specific palm tree was added to the site upon completion of the mosque complex. Prior to that, the site had large pine trees along the North, East and West borders. The committee requested of the architect to add the palm tree to evoke connections of the Arabian Peninsula. For me personally, each time I have visited the mosque, the palm tree has evoked memories past journeys to historical and spiritual monuments to Islam. Like the previous two mosques, a transmitter system is used to broadcast to receivers.

# Exterior Facades and Entrance

The main entrance to *Masjid-ur-Rahmah* can be seen in Figure 3.10 on the south façade of the complex as three large aluminium and glass double doors framed at the top by metal and tiled arches. There are masonry walls that protrude from the structure on either side of the entrance. This gives depth to the entrance of the mosque and is enhanced by the glass canopy above the arches, which is meant to protect the entrance from rain and wind. This aesthetic has been carried throughout the mosque complex both internally and externally.

According to the architect, Ahmed Sabir Bham (2017), the use of the glass was an attempt at bringing natural light into the structure to enhance the spiritual nature of the space and to create visual and spiritual lightness to the users of the mosque. Bham (2017) further mentioned that the added benefit of using such large expanses of glass is that passers-by can see from the street into the mosque to the *qiblah* wall of the structure. This proved to be both a disadvantage and an advantage to the mosque. As I was personally attend this mosque on a daily basis since it was opened, I have found that the entrance needed to be screened to around eye level through the application of frosted vinyl to the entrance doors and some of the internal glass partitions.



Figure 3.10: South Facade of Greenside Mosque showing the main entrance, Greenside, Johannesburg, 2015. (Photograph by author).

This was because having the entire mosque visible from the street was proving to be a security risk. There had been some instances of opportunistic thieves entering the mosque while the congregation were praying so that they could steal personal belongings. The frosted vinyl panels were kept simple with no pattern work on them so as not to distract from the already established identity of the mosque.

The rest of the exterior façade is quite simple with hardly any decoration except for a few arches that adorn the various glass windows and doors that lead into the mosque. The mosque does not have the intriquite geometric and floral patterns accompanied by Arabic inscriptions that have become commonplace in mosque design. In fact, in an interview with another architect, Muhammed Patel (2016), he stated that if the dome and *minaret* were removed from this structure, there would be no indication that this was actually a mosque.

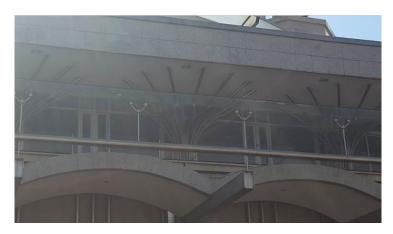


Figure 3.11: Entrance arches and column supports of *Masjid-ur-Rahmah*, Greenside, Johannesburg, 2017. (Photograph by author).

He went on to further state that it reminded him of a car showroom with all the aluminium and glass that had been used. It could be argued though that the arches and steel column supports seen in

Figure 3.11 are an attempt to portray an Islamic identity in the structure of the mosque. However, these are only found at the entrance of the mosque resulting in the message being lost on the other parts of the structure.

Masjid-ul-Furquan has two entrances for the men to use, one on the East façade and one on the West façade of the structure. The entrances were designed to quote the entrances of Abbasid mosques with a protruding archway supporting a roof above the entrance. The doors at these entrances are made of highly ornate solid wood. Bham (2017) mentioned that these entrances were placed here to allow worshippers to quickly access the mosque through the upper end of the courtyard similar to some of the entrances found in mosques of the Arabian Peninsula. Above the doors of these entrances are large panels of glass in anodized bronze aluminium frames. The glass panels have a geometric pattern in frosted vinyl that was inspired by traditional Islamic art. This pattern has been used extensively in the mosque on most windows and glass surfaces to either act as a screen or simply as decoration in the mosque. I have visited the mosque on many occasions and have found though that these entrances are not being used, but rather entrances to the rear of the courtyard are kept open. These entrances are smaller and less monumental in their design as according to Bham (2017) these were meant as secondary entrances to be used in times of large crowds of worshippers. These entrances were also meant to be used to access the classrooms at the rear of the courtyard.

Apart from the pointed arches, the dome and the *minaret*, the Auckland Park mosque's exterior has no other visual Islamic identity. To add an Islamic identity to the entrance doors frosted vinyl with cut-out patterns have been applied to the doors. This also serves the purpose of providing some privacy to the mosque interiors. This can be seen in Figure 3.9, below the *minaret*. The pattern is a geometric pattern derived from the *musalla* of the mosque.

### 3.2.3. Key interior elements and motifs

### Overall interior identity

Upon entering *Masjid-ur-Rahmah*, it is clear that the architect has carried through the exterior identity to the interior of the mosque though there seems to be elements that are out of place in the mosque interiors. The same light grey and cream colour scheme continues on the interior with accents of cherry wood and maroon of the *musallas*. These accents give the space a warmer and softer feel in contrast with the cold grey of the exterior. The same proportions and lines have been used on the interior as on the exterior as can be seen in Figure 3.12. Bham (2017) stated that the same modernist approach was taken on the interior with a focus on creating a space that was open and filled with light. The frosted vinyl panels are not needed on the interior and thus the architect's

vision of an open feel was achieved. As with all mosques, there are no images or representations of living beings within the interior. According to Bham (2017), he based the internal layout of *Masjid-ur-Rahmah* on the typical Ottoman era mosques of Turkey.



Figure 3.12: Interior of *Masjid-ur-Rahmah*, Greenside, Johannesburg, 2017. (Photograph by author)

Upon entering *Masjid-ul-Furqaan*, it is also clear that the architect has carried through the exterior identity to the interiors. The colour scheme is varied slightly from the exterior with the introduction of white walls instead of the beige facebrick. Accents of gold, cherry wood and maroon add to the palette of the interior colour scheme. Geometric patterns inspired by Islamic art adorn the glass panels of the interiors. This can be seen in Figure 3.13, which shows a view from the mosque courtyard into the main prayer hall. According to Bham (2017), the interiors reflect the holistic approach he chose when designing the mosque. The internal layout of the mosque shares a similar resemblance to that of *Masjid-ur-Rahmah*.



Figure 3.13: Interior of *Masjid-ul-Furqaan*, Houghton, Johannesburg, 2017. (Photograph by author).

The interiors of the Auckland Park mosque as seen in Figure 3.14 are as simple as the exterior of the mosque. There are no arches except for that of the *mihrab* on the interior of the structure. The walls lack any significant form of Islamic design and décor. The cream colour scheme of the exterior is also continued on the interior with the use of dark woods, maroon and teal accents on various elements. The lines and aesthetic of the interior seems to be segmented from that of the exterior as well. According to Talia (2017), the interiors were not designed by the architect but were informally designed by the committee as the various elements were implemented as funds were collected.



Figure 3.14: Interior of Auckland Park Mosque, Auckland Park, Johannesburg, 2017. (Photograph by author).

# Courtyard

The most striking feature of the interior of *Masjid-ur-Rahmah* is the large covered courtyard that takes up almost half the floor area of the structure as seen in Figure 3.6. In the centre of the courtyard are two marble clad columns supporting stainless steel arms that were meant to create a set of canopies for the courtyard. According to Bham (2017), these were meant to resemble the palm trees in the city of Madinah in Saudi Arabia and provide the same functional purpose of providing shade for the worshippers during the summer months. As the surrounding Muslim community mainly funded the mosque, the committee chose not to complete the canopies as they deemed it a waste of the community's funds due to the complex nature of the shading cloth that was required. Instead, the cost effective solution was to apply perforated metal sheets to the inside of the skylight, which provided the required solar protection but still allowed light to pass into the courtyard.

Unlike the mosques of the Middle East, there is no fountain or pond in the centre of the courtyard that can be used for passive cooling or for the purposes of *wudhu*. To facilitate the *wudhu* ritual, a *Wudhu* room to the right of the courtyard was built. It is completely tiled and treated as a wet room to allow for ease of cleaning. There are no artworks or decorations within the room either. There are pedestal stools bolted to the floor that align to taps mounted onto a stainless steel band that wraps around three sides of the room. In the centre of the room are two cherry wood units that have shelves for clean face towels and enclosed baskets at the bottom for used face towels. The lighting of

the space has been kept simple in the form of recessed downlights. However, the identity of the space is instantly recognisable to worshippers as it is quite unique compared to the other spaces of the mosque.



Figure 3.15: Courtyard of *Masjid-ur-Rahmah* showing the attempted canopy design, Greenside, Johannesburg, 2017 (Photograph by author).

However, in mosques that are heavily based on the traditional styles of Islamic architecture and design, the *wudhu* room would be embellished with Islamic motifs and floral patterns. According to Bham (2017), there was a consideration for adding such motifs to the space however he felt this would detract from the clean modernist lines of the mosque.

At *Masjid-ul-Furqaan*, the entrances that are usually open are the secondary entrances. These lead onto an internal courtyard made of rows of columns holding up what appears to be a contemporary version of the classic vaulted ceilings found in the mosques of Spain as can be seen in Figure 3.16.



Figure 3.16: Transitional courtyard between mosque and *madressah* of *Masjid-ul-Furqaan* as seen from East secondary entrance, Houghton, Johannesburg, 2017. (Photograph by author)

This internal courtyard is actually a transitional space between the actual mosque and the *madressah* section of the complex. To the left of the vaulted ceilings is a skylight that brings a wash of light into the space, as there are few windows. Underneath the skylight, a lowered area of the floor is tiled in a black and white check pattern with three pedestals creating an interior reminiscent of classical architecture. From this courtyard, centred on the wall to the right is a double volume entrance to the mosque itself. The arches used in the transition space frame the entrance and there are anodised aluminium doors with glass panels. The doors are kept open most of the year except in the winter months when the doors add a layer of insulation between the mosque and the entrances.

A large courtyard equal to the size of the main prayer hall leads worshippers from the entrance into the mosque. The courtyard of *Masjid-ul-Furqaan* is also an enclosed space instead of the open-air courtyards of the Ottoman mosques. According to Bham (2017), a concrete slab instead of a skylight covers the courtyard, as it was a cheaper option. Wide columns that hold up both the first floor of the mosque surround the courtyard at Masjid-ul-Furqaan and the roof slab of the mosque as can be seen in Figure 3.17.



Figure 3.17: Courtyard of *Masjid-ul-Furqaan*, Houghton, Johannesburg, 2017. (Photograph by author).

The relatively wide and thick columns enclose the courtyard create a grandiose feel. The architect chose to use the beams of the concrete slab to create a pattern to frame the chandelier in the center of the courtyard. To further, enhance this royal atmosphere, the point where the chandelier and ceiling meet has been adorned with a traditional Islamic pattern using the colour scheme of the mosque *musallas*. The clear storey windows allow light to fill the courtyard and give the impression

that the space is larger than it is. The courtyard clear storey windows do not follow the established aesthetic of arch framed windows that the rest of the mosque has. From the central arch of the courtyard seen in Figure 3.13, the main prayer hall of the mosque begins. To the left of the courtyard is the *Wudhu Khana*, which is almost identical in form and function to that of *Masjid-ur-Rahmah*. The units for the towels are identical in both mosques.

There are differences in the Auckland Park Mosque layout to that of a typical hypostyle mosque layout of the Middle East. According to the chairperson of the APAX committee, Nazir Talia (2017) it was not possible for all elements of the hypostyle mosque to be used in the design of the Auckland Park mosque. The first element of the hypostyle mosque that is different in this space is the fountain in the courtyard of Auckland Park Mosque According to Talia (2017) it is there for aesthetic and auditory purposes instead of being used to perform the ritual of *wudhu*. The *riwaqs* in the Auckland Park mosque are a combination of narrow passageways and classrooms instead of hall like structures around the courtyard. As the mosque is not large, there is no *Dikka* or raised platform structure in the courtyard.

The courtyard of the Auckland Park mosque is an open air space that is not used on a daily basis for prayers, which differs greatly from the previous two mosques. This can be seen in Figure 3.18, which shows the courtyard of the mosque with the *riwaqs* appearing on all three sides of the courtyard starting from the brick columns and the grey tiled floors. The fountain is in the centre of the courtyard and is clad in mint green and light blue mosaic tiles with stonework forming the surrounds.



Figure 3.18: Auckland Park Mosque courtyard, Auckland Park, Johannesburg, 2017. (Photograph by author).

A small single volume area is placed between two sets of aluminium and glass doors to create a small prayer space that is separate from the main prayer hall of the mosque. In Figure 3.19 we can see this

space which also provides the space for the shoe racks, notice boards and the staircase to go up to the mezzanine level of the mosque. From this multipurpose space, a set of doors to the right of the image leads into the main prayer hall of the mosque and an opening on the lower level to the right of Figure 3.19 leads to the *Wudhu Khana*. The *Wudhu Khana* is very similar to that of the previous two mosques though with a different colour scheme. It does not have the large units for towels, as these are simply some stainless steel shelves in the space. Posters on the wall containing supplications to be made when performing the *wudhu* are the only form of Islamic identity that can be seen.



Figure 3.19: Auckland Park Mosques' shoe racks and multi-use space, Johannesburg, 2017. (Photograph by author).

The prayer hall has no internal columns and is basically a box allowing for the maximum amount of worshippers to be housed in this space. At the front of the prayer hall like in all mosques is the *qiblah* wall, *mihrab* and *mimbar* of the mosque as seen in the Figure 3.14 and 3.22.

# • Qiblah wall and mihrab

The next element of the mosque that reinforces the identity of the space is the *qiblah* wall and the *mihrab*. In traditionally styled mosques, these elements are highly ornate and are filled with detailed patterns and Arabic calligraphy.

In *Masjid-ur-Rahmah*, the architect chose to continue with the restrained design aesthetic that is evident throughout the structure. The *qiblah* wall can be seen in Figure 3.20 as the light grey marble structure surrounded by vertical panels of glass and punctured with three slender niches that are topped with the same arches as the entrance of the mosque. The marble used in this area is different to the sidewalls where a beige travertine marble was used. All three niches are the same height and size with the centre niche representing the *mihrab* of the mosque and the right niche housing the *mimbar*. At the very top of the *qiblah* wall there is an Arabic inscription in traditional styled calligraphy of the first *Kalima* or Islamic proclamation that all Muslims are to believe in. The Arabic

script translates to the words that "There is none worthy of worship besides God and that Muhammed (p.b.u.h) is the messenger of God." On right of the *Kalima* is the Arabic calligraphy of the word *Allah* or God in English and on the left of the *Kalima* is the Arabic calligraphy of the word *Muhammed* for the Prophet of Islam. These are formed in aluminium cut-out letters that are mounted to the wall and finished in a gold anodized colour. The other element on the *qiblah* wall that tends to stand out is the thick canopy that cantilevers from the *qiblah* wall out over the *mimbar* of the mosque. According to Bham (2017), the canopy is clad in the same marble as the *qiblah* wall giving it the appearance that a part of the wall is extending to create the canopy yet at the same time to utilise the modernist concept of cantilevers. There are not chandeliers or pendant lighting in the niches but rather spotlights that light up at night. There is also a clock and two speakers on the *qiblah* wall of the mosque.



Figure 3.20: *Qiblah* Wall, *Mihrab* and *Mimbar* of Greenside Mosque, Greenside, Johannesburg, 2017. (Photograph by author).

Currently the niche on the left houses a portable bookcase with copies of the *Quraan* for worshippers to read. Patel (2016) states that, the first thing that most people notice is the lack of visual hierarchy when it comes to the threes niches. In most mosques, the *mihrab* would be the most prominent of the elements and only one niche would be placed into the *qiblah* wall. In terms of visual hierarchy, the *mimbar* would follow on from that, indicating its importance through visual hierarchy. In the case of Greenside Mosque, Patel (2016) argues that by placing three niches of identical size, shape and finish with little consideration to lighting further confuses the viewer. The recommendation he gave was to have hung a pendant or chandelier light in the centre niche therefore giving that niche prominence over the other three. He also mentions that he believes the canopy was not required and seems out of place in the mosque where the rest of the cantilevered structures are all arches. When interviewing Rashid Ahmed Karolia, a user of the mosque and a local resident, he stated that the three niches make sense to him in emphasizing the direction of *qiblah* 

but he is unsure about the shape and size (2017). Karolia went on to state that if the Arabic calligraphy was removed, apart from the *mimbar's* shape the *qiblah* wall would appear to simply be another wall of the structure that happens to be a different colour.

In Figure 3.21, we can see the *qiblah* wall, *mihrab* and *mimbar* of Masjid-ul-Furqaan. The *qiblah* wall follows the lines as seen from outside the mosque that creates a stepped space at the front of the mosque. The wall is white with light cream marble cladding that wraps around the entire mosque walls. There are two slender columns holding up beams for the roof slab and two niches on either side of the *mihrab* for storage of books.



Figure 3.21: Qiblah wall, mihrab and mimbar of Masjid-ul-Furqan, Houghton, Johannesburg, 2017. (Photograph by author).

The *mihrab* is a large structure with a semi-circular niche topped by a half dome and arch reminiscent of the great mosques of the Middle East. According to Bham (2017), he intended for the *mihrab* to be the focal point as it is meant to be and chose to make this element highly elaborate. Above the *mihrab* is the Arabic inscription of the first *Kalima*, which fills the space between the *mihrab* and the arch above. On either sides of the *mihrab* are the Arabic inscriptions for the words Allah and Muhammed (p.b.u.h). The calligraphy is a classic style and the similar to the calligraphy used in *Masjid-ul-Furqaan*.

The *qiblah* wall of Auckland Park mosque is simple, being finished in the same cream paint as the rest of the interiors with the focus being the *mihrab* and the *mimbar*. Talia (2017) stated that the committee felt the mosque needed something unique, as the rest of the structure did not have anything exciting especially when viewed on the inside. In that case, the *mihrab* and *mimbar* became elements to try something not seen in other mosques of Johannesburg.

The *mihrab* seen in Figure 3.22 still forms a niche in the *qiblah* wall as seen in mosques that are more traditional however, the framing element has a more contemporary style. It plays on the concept of the arch and the columns of the arch rising from the floor of the mosque. The shape is elegantly finished in a teal paint allowing it to stand out on the plain *qiblah* wall. The top corners of the shape have Arabic calligraphy engraved into the material with names of Allah and the Prophet Muhammed (p.b.u.h). The *mihrab* niche is finished in a gold wallpaper to draw attention to the space and to give a spiritual richness. One drawback the *mihrab* has though is that the shape of the arch is not seen anywhere else in the mosque and almost seems unrelated to the space unlike the *mihrabs* of *Masjidur-Rahmah* and *Masjid-ul-Furqaan*, which continue the architectural style of the mosque in the *mihrab*.



Figure 3.22: Auckland Park Mosques' *qiblah* wall, *mihrab* and *mimbar*, Johannesburg, 2017. (Photograph by author).

#### Mimbar

The *mimbar* of the *Masjid-ur-Rahmah* as seen in the center right of Figure 3.20 continues the same design identity as discussed previously. It is a simple structure clad on the sides with light grey marble and maroon carpet. The initial carpet was a continuation of the *musallas* used for the interior of the mosque. According to Mia (2017), the traditional floral patterned rug was later added to give the *mimbar* a more traditional Islamic feel. This was after members of the Muslim community requested the committee to add some elements to the mosque that were more typical of an Islamic identity as they understood it. According to Bham (2017), he intentionally kept the *mimbar* very simple in an attempt to save on costs and not to compete with the *imam* who would be delivering his sermon from there. He wanted the canopy to frame the *imam* during sermons and have the added benefit of providing illumination for the *imam*.

To the right of the *mihrab* of *Masjid-ul*-Furqaan is the *mimbar*, which can be seen in the center right of Figure 3.21. It is almost identical to the one used at *Masjid-ur-Rahmah*. These elements when put together form a cohesive element in the mosque that is easily identifiable by users of the space. According to Soni (2017), a resident of Houghton and regular of the mosque, the *mihrab* and the surrounding elements give him the impression of the mosques found in Saudi Arabia and Jordan. He immediately identifies himself with the space as being an Islamic environment. It is clear that these element have been designed using a more traditional Islamic style which seems to appeal to the majority of the community.

The *mimbar* of the Auckland Park mosque can be seen in the center right of Figure 3.22. Similar to the *mihrab* the *mimbar* is styled very differently to the rest of the mosque's architectural and interior elements. The structure is constructed from moulded plastic walls that wrap around the steps of the element. It is a freestanding element unlike the *mimbars* of *Masjid-ur-Rahmah* and *Masjid-ul-Furqaan* that are built into the *qiblah* wall. According to Gangat (2017), this was intentional as the committee chose to exclude the design of the *mihrab* and *mimbar* from the design proposed by the architect. Gangat (2017) further stated that the committee worked on two options, which then resulted in a freestanding unit being more practical as it could be installed in at a later stage when sufficient funds were available. The mosque committee has imported both elements from Turkey and these had been based loosely on the *mihrab* and *mimbar* of the Sakirin mosque in Istanbul, which has also reinterpreted the shapes of these two elements into a more contemporary Islamic identity.

# Musallas

At *Masjid-ur-Rahmah*, the *musalla* is striking compared with the rest of the mosque, the *musalla* does not continue with the austere modernist identity created by the architect. It does not follow the same colour scheme of the mosque design either. The *musalla* is a high pile fabric backed carpet in a deep maroon base colour with pattern work done in navy blue and beige. In Figures 3.12, 3.15 and 3.20 the *musalla* can clearly be seen to contrast with the colour scheme of the interiors. According to Bham (2017) the colours of the *musalla* was based on the *musallas* of the Grand Mosque of Makkah. The deep maroon adds vibrancy to the restrained interiors established by the architect. As the colour of the interior tends to reflect light, the deep maroon of the *musalla* tends to absorb it and reduce glare. The colour also invokes the sense of the divine and emotions of exclusivity. In Figure 3.23 a close up of the *musalla* shows the traditional nature of the floral patterns and motifs used in its design. The current *musalla* has a pattern reminiscent to that of the vaulted mosques of the Middle East.

The side of the pattern represent columns wrapped in flowering vines that continued above the arches. The pinnacle of the arch pointed in the direction of the *qiblah* wall. According to Bham (2017) this assists the worshippers in focussing on their. The *musallas* were purchased from a South African carpet wholesaler who had the carpet manufactured in Belgium.



Figure 3.23: Musalla at the Greenside Mosque, Greenside, Johannesburg, 2017. (Photograph by author).

The *musallas* of *Masjid-ul-Furqaan* form the base of the mosque and its interior decorations. It also contrasts the colour scheme of the walls though picks up the cream colour of the stucco and marble cladding as well as the gold accents of the calligraphy of the *mihrab*. This can be seen in Figures 3.13, 3.17 and 3.21. According to Dassoo (2017), the committee found that the impact of the *musallas* of *Masjid-ur-Rahmah* on its identity was so profound that they chose to use the same colour scheme. He also mentioned that the base maroon colour was also chosen as it gave a regal quality to the space. The pattern of the *musalla* was chosen to be different to that of the Greenside Mosque, as the committee according to Dassoo (2017) wanted to continue the arch aesthetic from the mosque structure. In Figure 3.24, a close up of the *musalla* shows the pointed arch and floral patterns used in its design. This specific pattern is not a unique pattern for *Masjid-ul-Furqaan*. It has been used in many other mosques in Johannesburg such *Nurul-Islam Masjid* in Lenasia and the Newtown Mosque. The carpet has a high pile similar to the one used in *Masjid-ur-Rahmah* and gives the space a luxurious feel. This enhances the rich identity that the committee were intending to portray within the mosque.



Figure 3.24: *Musalla* pattern of Masjid-ul-Furqan, Houghton, Johannesburg, 2017. (Photograph by author). According to Bham (2017), the committee chose not to use a carpet that was specifically designed for the mosque as the timelines were not suitable and the mosque having a traditional Islamic style from the start, allowed the committee to choose the *musalla* from existing stock at the supplier. My personal observation when visiting the mosque is often one of nostalgia as the *musalla* reminds me

of the Nurul-Islam Masjid in Lenasia which I used to visit as a child.

The *musalla* of the Auckland Park mosque as in the previous two mosques plays a huge part in further enhancing the Islamic identity of the space. In Figure 3.25, the *musalla* can be seen as a beige carpet with brown, white and blue lines that forming an arch shaped pattern. This pattern is not as traditional as the patterns seen in other mosques, as it is very geometric in nature. It is unusual that the mosque committee would chose this type of pattern as it bears no relation to the arch shapes of the exterior or the shapes of the *mihrab* and *mimbar*. The only parts of the mosque that seem to echo this shape are the frosted vinyl's found on the doors and some metal work in the *riwaqs* of the mosque complex. According to Talia (2017) the vinyl was installed after the carpets, which indicate the pattern for the vinyl, was derived from the *musalla* patterns.



Figure 3.25: Auckland Park Mosque's musalla pattern, Johannesburg, 2017. (Photograph by author).

The colour scheme of the *musalla* continues the colour scheme of the mosque's interiors as can be seen in Figures 3.14 and 3.22. Due to this colour scheme, the element does not really add much with regards to vibrancy in the interior but rather seems to be aimed at creating a tranquil environment for worshippers to contemplate.

### Interior of Qubba/Dome

The inside of the dome is an element that is often highly decorated in mosque design. In the case of Masjid-ur-Rahmah, the committee wanted a simple and elegant structure that portrayed an Islamic identity. On the exterior, this was achieved easily through the semi-spherical shape of the dome and spire with moon crescent at the top. On the interior, the only suggestion that the architect used a modernist approach in the design is the glass panels at the base of the dome that fill the spaces between the supporting posts of the dome as can be seen in Figure 3.26. The glass panels do not form arches or have ornate patterns applied to them and are there to fulfil the function of allowing light to enter the space below. The rest of the soffit of the dome is covered in white painted ceiling boards. The cut-out for the dome in the concrete roof slab was adorned with Arabic calligraphy of the 99 qualities of God that are mentioned in the Quraan and painted on a beige background using maroon letters and patterns. The colours were chosen to match the *musalla* of the mosque. However, due to a water leak, the calligraphy was damaged and repairs had to be done to that area. As such, the calligraphy was painted over when the inside of the dome was painted as the mosque committee could locate the artist who did the calligraphy when the mosque was built. This calligraphy can be seen in Figure 3.26 as a double boarder surrounding the dome in the image. The dome also has been fitted with internal lighting. According to Bham (2017), this adds to the spirituality of the space as the dome reminds him of heaven and enlightenment. He also mentioned

the image of a lightbulb switching on above a person's head when they have identified a correct answer.



Figure 3.26: Inside of the dome of the *Masjid-ur-Rahmah* in relation to the *qiblah* wall, Greenside, Johannesburg, 2005. (Photograph by author).

Currently the calligraphy has been painted over with white paint due to damage that had occurred to the surface. The loss of the calligraphy on the inside of the dome has affected the identity of the mosque, especially for regular worshippers. When interviewed, members of the Muslim community felt that the calligraphy had added the much-needed Islamic identity to the mosque that was lacking due to the modernist identity that the architect had developed. They recognized the fact that the exterior had not changed and thus the mosque was still recognizable from outside, however many felt that the emotions they would experience when looking up at the dome during their visits to the mosque had changed since the removal of the calligraphy. According to Mia (2017), the committee had been trying to source an artist who would be able to recreate the calligraphy.

At *Masjid-ul-Furqaan*, the inside of the main dome has the most intricate decoration within the interior. This is in the form of artwork inspired by traditional Islamic art as seen in Figure 3.27. This artwork and the others found throughout the mosque have further enhanced the Islamic identity of the interiors .According to Dassoo (2017) comments received show that the mosque feels traditional though it is much brighter and airier than older mosques. The traditional Islamic style followed includes floral and Arabic inscriptions that contain the 99 qualities of Allah similar to that found on the inside of the dome at *Masjid-ur-Rahmah*. In the courtyard, calligraphy of the Prophet Muhammed's (p.b.u.h.) closest companions embellishes the walls. This would be commonplace in most contemporary mosques of the Middle East as mentioned by Bham (2017).



Figure 3.27: Inside of the main dome of *Masjid-ul-Furqaan*, Houghton, Johannesburg, 2017. (Photograph by author).

At the Auckland Park mosque other than the *mihrab* and *mimbar* there are other interior elements that add to the Islamic identity of the space. The most impressive of these, is the domed ceiling that is in the centre of the double volume section of the main prayer hall as can be seen in Figure 3.28. It is not the inside of the dome though as according to Talia (2017) they did not have the budget to create a vaulted dome like that of other mosques (so initially they laid the concrete roof slab and added the dome onto it when funds were available). To give the feeling that the mosque has a vaulted dome ceiling, the contractor was tasked with constructing a faux ceiling. The surface of the ceiling was painted in an intricate pattern based on traditional Islamic art. The pattern includes Arabic inscriptions around its circumference to enhance the Islamic identity. From the centre of this ceiling, a large contemporary crystal chandelier hangs to create a sense of grandeur.



Figure 3.28: Domed ceiling in Auckland Park mosque, Auckland Park, Johannesburg, 2017. (Photograph by author).

Other elements in the mosque that have been added to enhance the Islamic identity of the space are aluminium cut-outs of Arabic calligraphy similar to those found in the previous mosques. These have

been mounted onto the sidewalls of the mosque as seen in Figure 3.28 below the domed ceiling and between the tan coloured columns.

# 3.2.4. Perception of case studies' identity by their surrounding communities

After looking closely at the identity of the *Masjid-ur-Rahmah*, it is clear that it is made up of complex layers starting from the first impression of the mosque as you approach the structure to the interaction with the *musalla* during prayers. The architectural and interior design narrative that was developed by the architect and the mosque committee allows the initial interaction to be less influenced by tradition. According to Rene Brummage (2017), a non-muslim resident of Emmarentia, the mosque is representative of the Muslim community in the area and does not seem out of place. The mosque's exterior seems to introduce a new identity to the space that is attempting to represent a young Muslim community that is not constrained to the traditions of their ancestors.

This has been achieved through the architect's decision to create a modernist interpretation of the typical mosque. However, the interior is a combination of the restrained exterior with a touch of a traditional identity that is experienced on an intimate level by the worshippers. As users of the mosque can experience the space in full as they pray, this experience is influenced by the traditional elements of the interiors. The combination of these themes in the identity of the mosque has created a structure that has become a local landmark and influenced the local residential architecture. According to Brummage (2017), she often uses *Masjid-ur-Rahmah* when giving directions to her friends and family.

A more traditional group of Muslim individuals from within the Houghton Muslim community influences the architectural and interior design identity of *Masjid-ul-Furqaan* heavily. There are hints of modernism in some parts of the mosque structure such as the clear-storey windows of the courtyard, the entrance doors from the mosque courtyard to the transitional courtyard and the *Wudhu Khana* however; these are overshadowed by the traditional Islamic architecture and interior design of the mosque. According to Helena Nossel (2017), a resident of Houghton, *Masjid-ul-Furqaan* is clearly an Islamic structure due to the use of the dome, *minaret* and arches.

The architectural and interior design narrative that was developed by the architect and the mosque committee portrays a more traditional experience when visiting the mosque and using its facilities. As the identity of the mosque is a cohesive narrative that links the exterior facades through to the *musalla*, the experience of traditional Islam does not change as visitors and users of the mosque move from the street front all the way through to the main prayer hall. This does not mean that the experience gained by viewing the exterior of the mosque is all that is needed to fully understand the mind-set of the Muslim community. According to Nossel (2017), most non-Muslim residents have no

idea what the inside of the mosque looks like or how it functions. The mosque interiors further enrich and provide an intimate understanding of the identity that the committee and architect intended to convey.

The architectural and interior design identity developed for the mosque does appear to be foreign to the surrounding community. The construction of the exclusive apartments on the Houghton Golf Course that is directly opposite has established an opposing identity to that of the mosque. Furthermore, the residential architecture of the surrounding homes does not match the mosque nor has the mosque influenced the design of these homes in any way. According to Nossel (2017), the mosque does not blend into the urban fabric due to its Islamic architecture. In many ways *Masjid-ul-Furqaan* is a mosque that stands out in the suburb simply because it is a very different kind of structure. It does not fit in with its surroundings and appears to showcase an Islamic identity that has been developed in the Middle East. The mosque is imposed on the urban landscape much like the architecture of Victorian colonialism was imposed on the city centres of South Africa's major cities and many of the government buildings developed at the time.

The architectural and interior design identity of the Auckland Park Mosque is struggling to find its own identity in the community. According to Thomas Mbele (2017), a resident of Auckland Park, at first he did not know the Auckland Park mosque was a mosque until he looked closely at the structure and noticed the arches, dome and *minaret*. The mosque seems to be a conglomeration of traditional Islamic and Western visual identities. These identities seem to compete with each other instead of working together to create a new identity for the mosque complex. This has resulted in the Auckland Park mosque not really having a cohesive architectural and interior design identity but rather is an example of the uncertainty the young Muslim community was feeling at the time of the construction. Omarjee (2017) explained that the committee was made up of members of the community that had not really been involved in the design and construction of a mosque before and were unsure of their decisions. Omarjee (2017) further explains that the architect that was commissioned to design the mosque was inexperienced in mosque design. This inexperience and uncertainty in both the committee and the architect has created a mosque with uncertain competing identities.

# 3.3. Hybridity

### 3.3.1. Openness to surrounding community

The Muslim community of Greenside and Emmarentia comprises of a large number of young Muslim families that have been in the area since 1996. As a young teenager, my parents had chosen to move from the comfort of Lenasia, a predominately Indian community south of Johannesburg to Linden, a

predominately White community near Greenside in 1996, two years after the first democratic elections of South Africa and then later to Emmarentia in 2001. At the time, the suburbs of Greenside, Emmarentia and Linden were unknown to most Muslim families. The Muslim community in these suburbs at that stage was in its infancy and was made up of families from the traditional Muslim communities of Johannesburg. A common thread that ran between all families was the desire to form a new Muslim community in these existing suburbs. This resulted in the Muslim community of Greenside and Emmarentia being a hybrid Muslim community from its beginning. The general community of the suburbs is also a hybrid community made of families from different faiths and cultural backgrounds. Thus, the mosque committee being made up of members of a hybrid community would in essence be a committee that would be inclined to make decisions that are influenced by the varying backgrounds of the committee members. According to Karolia (2017), the various backgrounds of the mosque committee members had brought with it a variety of ideas and opinions on what the mosque should be.

During the inception of *Masjid-ur-Rahmah*, the Muslim members of the community were few in number compared to the non-Muslim members. As the Muslim members of the community interacted with the non-Muslim members of the community, a pluralistic cultural engagement occurred which lead to the further development of a hybrid community. According to Karolia (2017), the mosque committee had made a decision at this point that the mosque would need to be a space that would represent inclusivity. The committee chose to portray this in various ways when it came to the design of the mosque complex.

Two main themes were identified at the time. The first theme according to another member of the community, Moosa Jeena (2017) who stated that the mosque site is bordered by two of the busiest roads in the area which afforded the committee the opportunity to open the mosque to the full view of the public who in most cases had no idea what actually occurs in the mosque. This concept resulted in the large glass and aluminium areas on the mosque façade and the low boundary wall that was constructed around the North East boundary of the site. Along the South boundary of the site, the choice to have no wall and the all glass entrance and internal glass screen was meant to further this opportunity to open the mosque up to the surrounding community. According to Brummage (2017) one of the features that non-Muslim residents appreciate is that the entrance of the mosque is close to the street and not hidden away.

Initially this proved to be a good idea as it intrigued members of the community to see what would happen in the mosque. Later however, the frosted vinyl panels discussed earlier were applied to add some privacy as there had been instances in other mosques where the congregation was robbed

during the *salaah*. The concept of opening the mosque up to the community is not essentially a new concept as the mosque was always meant to be a space for the community to use, essentially almost like a community centre would function in a non-Muslim community. The choice to open up the mosque greatly affected its identity, as the traditional styles developed for mosques in India and later in the predominantly Indian communities did not work well when tested by the architect. This resulted in a new identity being developed by the architect for the mosque design.

The Muslim community that *Masjid-ul-Furqaan* serves formed around the same time that the Muslim community in Greenside. Unlike Greenside, Emmarentia and the surrounding suburbs, Houghton was well known to most Muslim families in Johannesburg and in my own experience has always been viewed in high esteem by Muslim communities. At the time of my family moving to Linden, my closest friend's family had moved to Houghton. As children, we would always play together which meant I would visit his house often and through those interactions got to visit the site for *Masjid-ul-Furqaan*. At the time, the mosque was a *Jamaat Khana* like the one in Greenside. I also interacted with quite a few of the boys my age from Houghton during weekend soccer matches held informally between the boys of the Greenside and the boys of Houghton.

From this interaction, I learnt that the Houghton Muslim community was also a hybrid community made up of families from various backgrounds and communities. The difference I personally found was that the Houghton community was made up of wealthier families who were more traditional in their thinking. Most men were second-generation business owners who would continue their father's business or company and did not seem open to change like the more flexible community members of Greenside. I also found that due to the large properties and high walls, families did not interact much with their neighbours, which resulted in less influences by other cultures. Karolia (2017) explains that when he would interact with men he knew from Houghton, they would find it strange that the non-Muslim neighbours would come and visit and share experiences with Muslim neighbours. Karolia (2017) further mentions that this resulted in the mosque committee being formed by individuals who were very traditional in their mind-set. This had a direct effect on the outcome of the mosque project.

The inception of *Masjid-ul-Furqaan* was started around the same time as *Masjid-ur-Rahmah*. Initially the two committees were interacting to develop both mosques in such a way that the Muslim communities in each space would be represented in a manner that would allow the mosques to be part of the greater community. However, during this period a difference of opinion had occurred in the Houghton committee. According to Dassoo (2017) almost half the committee were of the opinion that the mosque should not be community funded but rather funded by the Saudi Arabian

government, whereas the rest of the committee felt it should be community funded so as to remain autonomous and truly serve the surrounding Muslim community and Houghton community. This difference of opinion had resulted in a delay to the construction of the mosque. According to Bham (2017), it proved to be beneficial as the committee that made the decisions with regards to *Masjid-ul-Furqaan* in its current state were more decisive and had had time to determine what was necessary in the mosque complex based on the development of *Masjid-ur-Rahmah*. A member of the mosque committee, Nazir Saley (2017) explains that the committee looked at *Masjid-ur-Rahmah* closely in an attempt to understand the decisions of the committee in that community.

Saley (2017) further explains that in Houghton interactions in the community were limited to public spaces like the local stores or the gym. This seems to have resulted in the pluralistic cultural engagement being minimized to the extent that the mosque committee were not really influenced directly or subtly by non-Muslim members of the community. According to Gangat (2017), the committee did not really want to go down the route the Greenside committee chose of having a mosque influenced by other cultures. Gangat (2017) further explains that the committee felt a more traditional identity was needed for the mosque and not a hybrid identity, as they did not want the mosque to be confused with a structure from another faith though they did want the mosque to represent the concept of inclusivity. The resulting mosque design discussed earlier shows this concept was clearly interpreted by the architect as the mosque has a traditional Islamic aesthetic in almost every part of the complex and does provide facilities to include all members of the Muslim community. However, the mosque does not really provide facilities for inclusion of non-Muslim members of the local community. According to Nossel (2017), there is no need for non-Muslim residents to use the mosque itself in Houghton.

The committee attempted to address to include the broader community in facilities outside the actual mosque complex. This was achieved by the construction of a six-a-side football field behind the mosque as can be seen in Figure 3.29. According to Saley (2017), the field is open to all members of the community as long as the sanctity and respect of the mosque is maintained. Gangat (2017) explains that the committee chose to include the football field in an attempt to provide a safe space for the children of the community to interact and exercise. Nossel (2017) states that non-Muslim teenagers do not use the football facilities unless they have Muslim friends who are using the facilities at the same time.



Figure 3.29: Football field behind *Masjid-ul-Furqaan*, Houghton, Johannesburg, 2014. (Photograph by author).

The circumstances and decisions made by the mosque committee through the duration of the mosque project combined with the identity that the architect has developed has resulted in a mosque the follows the traditional hybrid mosques found in predominantly Indian communities of Johannesburg. Bham (2017) explained that he had hoped the committee was going to ask for a mosque that would break the boundaries of design regarding traditional mosque architecture and interiors; however, he was requested to design a mosque with a traditional identity that made use of contemporary materials and finishes.

It is clear from the identity of *Masjid-ul-Furqaan* that the mosque is a prime example for the 'architecture of homesickness' in Johannesburg and represents a current version of mosques that attempt to replicate the identities of mosques found in the Middle East and the Indian sub-continent.

The Muslim community in Auckland Park is the youngest of the three Muslim communities in Johannesburg considered for this dissertation. The community formed due to the increase in property prices of the Greenside and Emmarentia suburbs and the desire of Muslim families to move out of the traditional Indian suburbs of Johannesburg. The Auckland Park mosque did not follow the same route of development as that of *Masjid-ur-Rahmah* and *Masjid-ul-Furqaan* as there was no *Jamaat Khana* on the property that predated the mosque complex. The APAX School had purchased the property and began the process of developing the mosque complex. According to Talia (2017) there was no need for a *Jamaat Khana* on the property as this was already located nearby behind the Melville Shell Garage. The mosque committee, which had been appointed by the APAX school body, were tasked with representing the community, school and mosque with regard to the mosque complex project. According to Mbele (2017), the site was developed into a mosque without any prior indication that it was being used for prayers by Muslims of the community.

The members of the mosque committee were all residents of Auckland Park at that stage though similar to the previous mosques came from a variety of backgrounds and communities. Gangat (2017) mentioned that the committee members were chosen in such a way so as to have a variety of

skills and knowledge available to the community for the mosque project. This committee is in fact a good representation of the hybrid nature of the Muslim community that had begun in Auckland Park.

Talia (2017) explains that the committee and the local Muslim community had one goal in mind when the project was initially conceptualized. That goal was to provide a safe location for a school that viewed the mosque as the community centre it had originated from. The complex to be built was to be an Islamic centre that would provide a space for prayer as well as an Islamic education for the local community. He further explains that the committee looked at the *Masjid-ur-Rahmah* and *Masjid-ul-Furqaan* as inspiration to assist in developing the Auckland Park mosque. By doing so, the project immediately began to take on a hybrid identity.

The Auckland Park mosque committee made a decision to create a mosque that would best represent the hybridity of the community it serves. According to Omarjee (2017), a resident of Auckland Park, the committee proposed a mosque that would blend the traditional with the contemporary in terms of its design. To that effect, the committee had tasked the architect with developing the identity of the mosque. Talia (2017) explains that the committee provided the architect with images of mosques from Turkey, Jordan, Saudi Arabia and Egypt to use as inspiration. The architect to develop the key elements of the mosque as discussed earlier then used these images. The problem that the mosque faces is that this development was done in stages. Gangat (2017) stated that the mosque was designed in stages and at the end; everything was merged to form a complete structure.

The mosque design is essentially a hybrid, however the design narrative is unclear as the key architectural and interior design elements that make up a mosque compete with each other for importance. Talia (2017) mentioned that the mosque complex was never meant to be as easily accessible as the mosque in Greenside due to safety concerns brought up by parents of APAX students.

### 3.3.2. Inclusivity

During the planning phase of *Masjid-ur-Rahmah*, the second theme of inclusivity that the committee chose to address was that of allowing all members of the Muslim community to use the mosque facilities. Jeena (2017) explains that the committee found that Muslim families visiting the malls close by would often stop at the mosque to perform prayers before leaving for home, especially during the late afternoons and evenings. At the time, the mosque was an informal prayer space called a *Jamaat Khana*, which allowed men to easily pray but did not have similar facilities for women. It was also found that as the Muslim community was relatively small compared to its current size; Muslim women did not have alternative spaces to pray besides the mosque. Traditionally, Muslim women

would perform their prayers at the homes of their relatives while the men would go to the *Jamaat Khana*. This led to the committee making a decision to include a prayer section in the mosque for women to use. Karolia (2017) mentions that at first this space was not open all the time and there were no sound equipment. He further explains that later Muslim members of the community as well as visiting Muslim families requested this. The result was *Masjid-ur-Rahmah* became the unofficially first mosque in Johannesburg that would provide facilities for women. This led to many mosques new and old providing a space for women to pray and by doing so create a truly inclusive mosque for the Muslim communities that use them. Nina Diayar (2017) a resident of Emmarentia stated in an interview that she often notices Muslim women and children using the mosque which she found unusual compared to mosques in predominantly Indian areas of Johannesburg.

As stated earlier, the mosque complex includes other facilities that are not always directly linked to the act of formal prayers. These facilities such as the classrooms and *Janazah Ghusl* Room were included to provide the Muslim community with these much-needed facilities. According to Jeena (2017), the *Janazah Ghusl* Room was especially important as the Muslim burial section at Westpark cemetery was being used for funerals. There are no funeral homes for Muslims as the deceased must buried as soon as possible. The closest *Janazah Ghusl* facilities were in Mayfair thus delaying the process. Jeena (2017) explains that the decision to include the facility was made in the initial planning stages as the committee realised it is would bring the Muslim community closer together. Currently the facility is open to all Muslim communities.

The classrooms within the mosque complex are built to the West of the main mosque structure as can be seen in Figure 3.30 on the left of the image. These classrooms are currently used for *madressah* classes for the local Muslim community in the afternoons. In the future, they will be used in the mornings for a secular school that will be run by the GMA and will be open to the entire community surrounding the mosque. Muhammed Ameen Ravat (2017) an *Imam*, stated in an interview that the GMA is planning to open an Islamic school for girls in the near future. There have been occasions where these classrooms were also used in the evenings and weekends by local NGO's for workshops and group meetings that were open to all members of the community. Brummage (2017) stated that her son had attended a few functions at the mosque classrooms in the past. In effect, these classrooms reinforce the concept of inclusivity through hybridization that the mosque design had envisaged.



Figure 3.30: Classroom wing with additional facilities of *Masjid-ur-Rahmah*, Greenside, Johannesburg, 2005. (Photograph by author).

At the ground floor of the classroom wing of the mosque is a small hall and an Islamic themed library. The local Muslim community to hold mass suppers and congregational night prayers during the holy month of Ramadhan has used the hall like space. Normally in other more traditional Muslim communities, the congregational night prayers would be held in halls, warehouses, classrooms and other large spaces. During any of these events, except the *Janazah Ghusl*, the facilities are open to all members of the local community. According to Jeena (2017), the mosque committee has always viewed this as a method to be as inclusive as possible to the community.

These decisions by the committee from the onset of planning as a design project allowed the architect to look at the mosque in a different manner. Bham (2017) explained that initially he expected the committee to want a typical Indian mosque but during the briefing, he realised that the committee were looking for a structure that would represent their young hybrid community to its fullest yet still be recognised as a mosque. During the design process, the committee to address some of the community's desires for a more traditional mosque changed aspects of the mosque. These can be seen in the *minaret* and *musalla* design that was approved for final implementation. As mentioned in Chapter 2, this aspect of the mosque design could be seen as an attempt to address the homesickness that some Muslim families were feeling at the time after leaving the communities they grew up in. However, the continuous message that the mosque conveys through the architectural and interior design identity is essentially a hybrid identity of modernism with elements of traditional Islamic design, which had not been seen in mosques built in traditional Indian communities of Johannesburg.

The committee of *Masjid-ul-Furqaan* had also made a decision to attempt to provide facilities at the mosque that would provide for the greater needs of the community. This was done by including a prayer area for women and classrooms. According to Gangat (2017), the committee were not as

open to the idea as the community had thought which resulted in the committee allowing the space but not providing sound equipment for the women to join in the congregational prayer of the men. Women of the Houghton community and other Muslim communities contested this as they felt that other mosques have included the sound equipment in their facilities. The equipment has been added to the women's prayer space to fully include women in the mosque complex.

The classrooms *Masjid-ul-Furqaan* are at the back of the complex though linked directly to the mosque as discussed earlier in this chapter. Due to this, the local community does not really use these spaces for anything other than the *madressah* that is provided by the HMA. According to Nossel (2017), community members rather use the Houghton Primary School to hold workshops, group meetings and other such events than use the mosque classrooms. The HMA has also chosen not to utilise the classrooms for a secular school as they have purchased the property behind the mosque and build a school on that property called the Houghton Muslim Academy. Gangat (2017) explains that the school is aimed at providing a secular school with an Islamic environment for the Muslim children of the community and not for the rest of the community as the Houghton Primary School is providing this service.

The concept of inclusivity was a part of the Auckland Park mosque from the inception of the mosque design phase. According to Gangat (2017) many women from the surrounding universities and offices visit the mosque during the course of the day to perform their prayers and sometimes to wait for family to pick them up, therefore it is important that the mosque is inclusive of their needs. The committee chose to address this need by including a section for women within the western *riwaq* of the mosque complex. This provided a safe space to pray during the day as has happened at *Masjid-ur-Rahmah* and *Masjid-ul-Furgaan*.

### 3.4. The Muslim 'other'

# 3.4.1. Objections to the construction of the mosques

Masjid-ur-Rahmah, like all South African community-built mosques, has a dome and minaret that is instantly recognised by Muslim and non-Muslims as a metonym for the Muslim presence in the urban environment. As Avcioglu (2007:3) explains, the presence of these elements is also a representation of the presence of the "other" in the community. As the Greenside and Emmarentia communities had not had the presence of the Muslim "other" prior to the construction of the mosque, community members were intimidated and fearful of the mosque. Mulugeta (2009:1) explains that according to the *Imam* of the mosque, there were serious objections to the construction of the mosque at first. Through careful negotiations with the local community, the mosque committee resolved these issues. According to Jeena (2017), two of the biggest issues were

the height of the *minaret* and the sound of the *adhaan*. The resulting compromise was to shorten the *minaret* and to have a transmitter installed to broadcast the *adhaan* to receivers that could be purchased from the mosque. An interesting fact that I have observed is that there is no ringing of church bells within Greenside and Emmarentia or any other calls to prayers. According to Brummage (2017), the closest church that rings a bell as a call to prayer is in Linden. If these had been established before the building of the mosque, there could have been justification for the broadcasting of the *adhaan* over loudspeaker.

It is also to be understood that the construction of *Masjid-ur-Rahmah* occurred shortly after the attack on the World Trade Centre after which, according to Mulugeta (2009:2) there was a clash of civilisations that had portrayed Muslims as terrorists that were seeking to destroy the Christian and Jewish peoples. The mosque as an icon had by proxy become the representation of the Muslim community in the urban fabric. *Masjid-ur-Rahmah* is a good example as to how this Islamaphobia had influenced the design and functions of the mosque. In traditionally Indian communities, such as Lenasia, objections such as those received for *Masjid-ur-Rahmah* are non-existent. This is due to the mosques not being viewed as a representation of the Muslim "other" but rather as a representation of the surrounding community as a whole.

The architect of *Masjid-ur-Rahmah* had selected a modernist approach to the identity of the mosque in an attempt to address the concept of the Muslim "other". According to Bham (2017), the design was crafted to prevent the mosque from being viewed as a representation of traditional Islam. The intention of the architect seems to have worked as Brummage (2017) stated that the mosque appears distinguished but not intimidating within the community. The mosque by default has also fallen prey to the Orientalist paradigm that most mosques in South Africa have. This is simply because the mosques tend to follow the same strategies in regards to their identity. These strategies result in mosques that attempt to recreate the nostalgic designs found in the Middle East and parts of India as mentioned by Avcioglu (2007:12). The architect and the committee at *Masjid-ur-Rahmah* had unintentionally taken the mosque down a political path by using the traditional Ottoman spatial layout and basic form of a mosque. Even though the mosque is fully autonomous and funded by the local Muslim community, the potential will always be there for it to be viewed as an indirect representation of the imperial power of the Ottoman Empire.

Masjid-ul-Furqaan like Masjid-ur-Rahmah also has a dome and minaret, which is instantly recognised in the community as the symbols of an Islamic structure. However, the identity of Masjid-ul-Furqaan was crafted in such a way that the entire mosque structure is a symbol of the Muslim presence in the community and therefore a celebration of the Muslim "other" instead of only the dome and minaret.

According to Dassoo (2017), the committee made a conscious decision to celebrate the traditional architecture of Islam through the mosque itself. The committee could do this as the opinion of the Muslim community had changed by the time the construction of *Masjid-ul-Furqaan* had occurred. According to Nossel (2017), the residents of Houghton did not feel that the mosque was a danger to the community.

Masjid-ur-Rahmah was instrumental in the first aspect of change in the Houghton community. According to Dassoo (2017) the mosque in Greenside had shown surrounding communities that the mosque was not a threat and promoted peace for all. This was very different to the opinion the Greenside and Emmarentia communities had when Masjid-ur-Rahmah was first proposed. The second aspect that had change at the time of construction of Masjid-ul-Furqaan was the world's view off Islam. Islamaphobia was and still is an issue that needs to be resolved; however, there were a greater percentage of people in the world that were seeing through the media's portrayal of Islam as the Muslim "other". According to Dassoo (2017) the residents committee of Houghton were quite open to the construction of the mosque, as they believed it would allow Houghton to be viewed as a community for all cultures.

Masjid-ur-Rahmah was again used as a precedent for Masjid-ul-Furqaan. According to Dassoo (2017), the city council and residents committee had made a decision that the mosque would not be allowed to broadcast the adhaan through loudspeakers and that the transmitter system should be used as it was done at Masjid-ur-Rahmah. In this case, it could be seen, as the adhaan has become a representation of the Muslim "other" as much as the dome and minaret. This change stems from the human tendency to divide the world in Self and "Other" as explained by Karim (2012:10). As it is part of human nature to have divisions, it seems inevitable that every aspect of a Muslim community cannot be accepted and integrated into another community.

Auckland Park Mosque has a dome and *minaret* included in the design of the mosque though in the case of this mosque it is merely there to facilitate the symbolism that is attached to these elements. According to Mbele (2017) the arches, dome and *minaret* indicate to the community that the structure is a mosque. The fact that the dome and *minaret* are not elements that stand out due to their size and finish suggest that these elements were not intended to be the sole identifiers of the mosque as an Islamic structure. According to Talia (2017), the committee were unsure of the dome and *minaret* during the development of the mosque though senior members of the committee felt it was necessary. This uncertainty can be seen in the design as the *minaret* has a wide base, which suggests an originally taller *minaret* was considered.

The Auckland Park Mosque unlike *Masjid-ur-Rahmah* did not receive any objections to the dimensions of the dome and *minaret*, which suggests that the mosque was, not viewed as a representation of the Muslim "other". This could be because the suburbs of Mayfair, Mayfair West and Crosby with a strong Muslim base had been established years ago. The establishment of the Greenside and Emmarentia Muslim community could also have an effect on the Auckland Park community by introducing a Muslim presence to the suburb prior to the mosque. The view of Muslims following a strange and mystic faith which according to Avcioglu (2007:3) stems from the similarities of transient immigrants to the eastern European gypsies has changed as Muslim communities become integrated into Western communities. This seems to be the case in the Auckland Park community where the Muslim presence was easily accepted into the community rather than that of Greenside, Emmarentia and Houghton. This acceptance of the Muslim 'other' by the Auckland Park Mosque allowed the committee freedom to develop a mosque that was not attempting to address the fears of the community. Talia (2017) explains that the mosque committee did not really have any limitations on the design of the mosque, except for the requirements of city council, which all mosques need to abide by.

The issue of the Muslim 'other' and orientalism that has influenced the mosques identity is the result of the opinions of the committee members. According to Talia (2017), the committee were often divided on the design of the mosque, as the older members wanted a more traditionally styled mosque. This can be seen in the conflicting identities of the exterior of the mosque to its interior design. This could be due to the elder members of the committee being influenced by the notions of the Muslim 'other' and their desire to hold onto traditions that the younger committee members found unnecessary. According to Avcioglu (2007:8), the chosen architectural style is often determined by experiences of the past. The elder committee members were clearly influenced by the past and in their minds, the mosque should appear traditional.

### 3.4.2. Effect of Muslims on community dynamics

As the Greenside and Emmarentia communities have changed due to residents moving in and out of the suburbs, the dynamic of the community has changed. The percentage of Muslim families in the community has increased and as such, the Muslim "other" has now become the Muslim norm.

According to Karolia (2017) when the mosque was built, most Muslim families knew each other, which has changed, as there are now so many more families in the community. The knock on effect of this change has been the decrease in the non-Muslim percentage of the community, which has also resulted in a change to the urban fabric of the suburbs. According to Brummage (2017), the

community has changed from a predominantly Jewish one to a more culturally diverse one after the construction of *Masjid-ur-Rahmah*.

The percentage of Muslim residents in the Houghton community has affected the perception of *Masjid-ul-Furqaan* concerning the Muslim "other". At the time of the mosques construction, the percentage of Muslim residents had increased which had allowed for the perception that the Muslims are part of the community and not a representation of Muslim colonialists who were going to impose a major change to the urban fabric of Houghton. According to Dassoo (2017) the residents committee did not feel that Houghton was becoming a Muslim suburb and were open within the community and urban fabric of Houghton. Furthermore, Nossel (2017) stated that she had noticed a larger number of Muslim residents in the community prior to the construction of the mosque.

The Auckland Park mosque also faced the same scenario as *Masjid-ul-Furquan* in that due to changes in the social landscape of Johannesburg, the Auckland Park Muslim community was not viewed as a threat. It could also be that in general, the Auckland Park community is more diverse than Emmarentia and Greenside were when the mosque was built. The community was also exposed to Muslim communities nearby which allows for a greater tolerance of Islam. According to Mbele (2017) Auckland Park has always been a community that was culturally diverse due to its proximity to the city center and the non-white suburbs of the city. This however has also proved a challenge for the committee of the Auckland Park mosque as it provided an opportunity that was historically only available in predominantly Muslim communities. This opportunity was to design and build a mosque with no limitations on its identity and purpose and to decide the extent of impact the mosque was going to have on the surrounding urban fabric.

# 3.5. The impact of the local case studies on their surrounding urban fabric

### 3.5.1. Muslim presence in the urban fabric

Masjid-ur-Rahmah has the most prominent location in the urban fabric of the three South African mosques chosen as it is on the corner of two main roads in the Greenside/Emmarentia area. These roads are used 24 hours a day and provide key routes for transport to the city. The Muslim community at that stage consisted of approximately six families in Greenside, Emmarentia, Linden and Victory Park. The men of the families would gather at the home of Ebrahim Aarif on the corner of Judith and Orange Roads.

As families that are more Muslim moved into the suburb, the need for a larger space was quickly identified. During 1996 the families worked together to collect money to purchase a property in the area for the *Jamaat Khana*. During this time, my parents were looking actively for a home in the area.

I recall going to see the property with my parents and meeting the men of the newly formed mosque committee as they came to view the property. At that point, I remember my father saying that if the committee was choosing this property for the mosque, he would not put in an offer, as he believed the property was an excellent location for a mosque to be built on in the future.

Once purchased, the mosque committee made minor changes to the house to turn it into a *Jamaat Khana* for the growing Muslim community. Eventually a decision was taken to purchase the second property that compromises the current mosque site. This was due to the impact the *Jamaat Khana* was already having on the urban fabric. According to Jeena (2017) the parking facilities on the one property was not sufficient for Friday prayers as well as during the month of Ramadhan. Jeena (2017) also explained that at that stage the GMA were looking for a home for the newly formed *madressah* and the property next to the *Jamaat Khana* was the perfect choice.

The GMA knew a mosque complex would be needed as the community was continuing to grow. At this time, my family were often at the mosque and my parents made a decision to move closer for convenience. A few months after we moved into Emmarentia, the mosque committee announced the construction of *Masjid-ur-Rahmah* on the two sites. The sites were rezoned and the plans were submitted to council so that all necessary paperwork was in place. The day the first foundations were laid, the mosque committee held a small prayer session to bless the construction process and the future mosque. During this period, the mosque committee had been collecting funds for the mosque. Jeena (2017) mentioned that the laying of the foundations was an important step to realizing the goal that had been set when the committee first purchased the property for the mosque. It was this event that sparked a change in the Muslim presence of Emmarentia and Greenside.

The resulting effect on the surrounding urban fabric has been the increase in amenities catering for Muslims, which had been previously catering for Jewish and Christian members of the community. According to Jeena (2017), initially there were no Halaal restaurants or food stores in the area and residents would need to go to Fordsburg to purchase meat and groceries unless it was items they could buy at the local supermarket. Currently the retail space in Emmarentia is filled with Halaal restaurants, a butcher, an Indian grocery store and two bakeries. Many others stores in the area are being run by Muslim owners who themselves live in the community. According to Brummage (2017), the need for Muslim run businesses was fuelled by the ever-increasing percentage of Muslim residents in the community. However, as these have increased to provide for the ever growing Muslim community, the amenities that used to cater for the Jewish and Christian members of the community has decreased. According to Jeena (2017) there used to be a Christian butcher, a Jewish butcher and a Muslim butcher in the retail area of Emmarentia. Currently the Muslim butcher is only

one left as the other two butchers have moved to other suburbs to be closer to their clientele that had moved out of Greenside and Emmarentia.

The mosque is a silent reminder of this Muslim presence in Greenside and Emmarentia and due to its size and location, it cannot be missed. However, a more subtle indicator of the Muslim presence in the community is the increase in Muslim families dressed in traditional Islamic garb that can be seen driving and walking on the streets and shopping at the local stores. According to Diayar (2017) the sight of women in traditional Islamic dress has increased over the years and has now become commonplace in the community. The displaying of Halaal signs on store windows and the lack of alcohol at these establishments further enhance this. According to Jeena (2017), the mosque in his view has had a profound impact on the surrounding urban fabric in that it has changed the dynamics of the suburbs by providing a space for the Muslim community to grow. Furthermore, *Masjid-ur-Rahmah* has become a local landmark for the community. According to Diayar (2017) the mosque is recognized by her Muslim and non-Muslim friends and is often referred to when giving directions to visitors.

The location of *Masjid-ul-Furqaan* in Houghton is not one of high visual impact, as the mosque property is not situated on any of the major roads in the area. However, it has become a location of significance as the biggest development in Houghton is directly opposite the mosque. This development is the Houghton Hotel and exclusive apartments that are being built on the Houghton Golf Course. According to Nossel (2017), this development is the largest and most exclusive in the community. The history of how the mosque came about is different to *Masjid-ur-Rahmah* in that the Muslim community grew quicker than that of Greenside and Emmarentia. The mosque committee in Houghton had purchased the property for the mosque relatively quickly compared to the purchasing of the Greenside property. According to Dassoo (2017), the money for the property was not needed as it was donated by a member of the Muslim community. The decision to build a mosque on the property was taken around the same time as that of Greenside.

However, the purchasing of the property behind the mosque for the Houghton Academy has added to the Muslim presence in the community. This academy has impacted on the urban fabric by introducing an Islamic school that would cater for a younger generation than what was previously provided. Soni (2017) explains that for him it is convenient to live in the apartment building nearby as it provided easy access to the Islamic school for his daughter. The presence of the Houghton Academy is as much a draw card to the Muslim presence in Houghton as the mosque is. *Masjid-ul-Furqaan* however is not as prominent a landmark as *Masjid-ur-Rahmah*. According to Nossel (2017)

most people use the Houghton Golf course and the Old Edwardians Sports club as landmarks as these are much larger and on busier roads.

Auckland Park Mosque had its roots established differently to that of the other two mosques. As the mosque was established as part of the school, the initial phase of the *Jamaat Khana* did not occur. However, the movement of Muslim families into the suburb had already happened. Most of the families would either use the mosque in Mayfair or go to *Masjid-ur-Rahmah* for their prayers. The school had been established prior to the mosque, which had allowed for the Muslim presence and impact on the surrounding urban fabric to occur. Mbele (2017) stated that most residents assumed the construction of the mosque was a part of the APAX facilities. This seemed to make it easier for the community to accept the construction of the mosque. According to Talia (2017), it was common to see Muslim families driving through the area to the suburbs of Mayfair and Fordsburg, which are nearby.

The APAX School did try to purchase a vacant plot of the land directly opposite the mosque in an attempt to provide a larger property for the school. However, this was unsuccessful as the property belongs to the church nearby, who were not prepared to sell it to the school. If the school had managed to purchase the property, the school and the mosque potentially could have had a greater impact through a more prominent presence in the urban fabric.

Of the three mosques looked at the Auckland Park mosque has had the least impact on the surrounding community compared with the other two mosques. This seems to be the case as the committee chose to keep the mosque more private and not open the facilities up to the public in an attempt to protect the children who are attending the school.

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## 3.5.2. Property values around case studies

The laying of the mosques foundations had an unforeseen impact on the surrounding urban fabric. According to Mia (2017), the value of properties closest to the mosque had doubled overnight as the announcement of the mosque project was made. My family had experienced this first hand as the property next to ours had gone from R450 000 to R850 000 in one week. According to Brummage (2017), the value of her property had increased the week after the construction of the mosque had officially begun. This phenomenon has continued in Greenside and Emmarentia to this day as the mosque is seen as a major drawcard to Muslim families wishing to move into the suburb.

Similar to the Greenside and Emmarentia scenario, the property prices around the mosque escalated as soon as the foundations were laid. However, the property prices in Houghton did not escalate as

drastically as in Emmarentia and Greenside as the suburb was already viewed as a premium location. Furthermore, community members were comfortable using a car to come to the mosque for prayers. According to Dassoo (2017) majority of the users of the mosque come by car as they mostly live a considerable distance away from the mosque.

Once the mosque foundations were laid and the school had announced the building of the mosque, the property prices had increased. Mbele (2017) mentioned that properties on his street had doubled in prices once the estate agents realised a mosque was being built in the suburb. This was similar to Greenside and Emmarentia, where properties closest to the mosque had increased drastically as estate agents took advantage of the desire of Muslim families to be close to the mosque. According to Talia (2017) property prices in Auckland Park are not as high as in Emmarentia but the properties closest to the mosque do sell really quickly at quite high prices compared to properties further away. The Muslim presence on the streets of Auckland Park is not really felt compared to that of Emmarentia. According to Talia (2017) most worshippers at the mosque prefer to come by car as they do not feel very safe walking on the streets of Auckland Park. This could be due to the fact that the streets closest to the mosque are not very well lit. It can also be due to the fact that around the mosque, the houses are being used for non-residential purposes

#### 3.5.3. Parking, traffic and street activity

The next impact the mosques had on the surrounding urban fabric came in the form of parking facilities. During the month of *Ramadhan* and on a Friday, the amount of worshippers attending the mosque increases dramatically. This has had a direct impact on traffic passing through the area as the roads around the mosque are filled at these times by parked cars. According to all participants of the interviews, parking around the mosques during larger congregations is always a problem.

The committee of *Masjid-ur-Rahmah* attempted to ease this by providing more off-street parking. The mosque committee approached the city council to use some of the vacant pavement spaces for parking. Jeena (2017) explains that along Linden road and at the junction of Komatie and Marico Roads there vacant land that was difficult for the municipality to maintain. The land was also attracting vagrants at night that would use these spaces as shelter. The municipality was open to the idea of the land being used for parking spaces though the concern was the effect this would have on the appearance of the space. According to Jeena (2017), the mosque committee had to keep as many of the trees as possible and also had to fund the upgrades to these spaces. The change was welcomed by the local community both Muslim and non-Muslim as it provided a safer environment that is also aesthetically pleasing.

There has also been an impact on the safety and security around the mosque. As worshippers, both community members and passers-by visit the mosque for prayers, *madressah*, workshops, group meetings and other such events the activity on the streets around the mosque has increased. According to Diayar (2017), the street activity around the mosque due to pedestrians and vehicles has created a safer environment. Furthermore, according to Jeena (2017) a non-Muslim neighbour of the mosque had not installed an electric fence around his property as he felt quite safe due to the constant activity around the mosque.

As *Masjid-ul-Furqaan* follows a more traditional identity, the presence of Islam is easily noted. Similar to the Greenside community, the presence of Islam was further enhanced by the movements of Muslim men and women through the suburb. However, unlike Greenside and Emmarentia this type of presence was not highly visible as most members of the Muslim community would not walk to the mosque but rather come by car. According to Dassoo (2017), most families go to Emmarentia, Fordsburg, Rosebank or Sandton for their shopping and walking on the streets is not very common. As Houghton does not have the retail spaces that Emmarentia and Greenside does, the Islamic presence cannot be enhanced through Halaal restaurants and shops.

There are also no vacant pieces of land that the mosque committee could use for parking or request to upgrade as was done in Greenside. The academy has also allowed for additional off-street parking within the site for times when the mosque's congregation reaches its peak capacity. There are still cars that are parked on the street though these do not create a problem, as the road is not a very busy road. Nossel (2017) stated in her interview that the parking has been an issue though it is not disruptive to the entire community as the mosque is not located on busy roads or bus routes.

The Auckland Park mosque has not had a huge impact on the traffic going through the suburb as it is on a road that is not often used. According to Talia (2017), they have not had any complaints when it comes to parking as the road is empty. The mosque has not really had an impact on the retail spaces around Auckland, specifically Campus Square Mall and Melville which do not have the Muslim presence as seen in Emmarentia. According to Talia (2017), most of the residents either shop in Fordsburg or Emmarentia as they work there or pass through the areas on a regular basis.

## 3.6. Reflective note

In concluding this chapter, it is clear that all three South African mosques have faced a different set of circumstances prior, during and after their construction. As *Masjid-ur-Rahmah* chronologically was developed during a period of negative views of Islam both globally and in South Africa it has faced the most objections. The identity of the mosque and its impact on the surrounding urban fabric was heavily influenced by these objections as the mosque committee attempted to create an identity of

inclusivity. This has resulted in a mosque identity that has challenged the notions of what a mosque should look like in both the Muslim and non-Muslim communities of Johannesburg. According to Brummage (2017), the presence of the mosque has introduced Islam into the community and allowed for interaction between Muslims and non-Muslims. However, the potential to portray an identity that would truly take the mosque into contemporary society was lost due to the conservative nature of the committee and the reluctance of the Muslim community at the time.

Masjid-ul-Furgaan on the other hand, was developed in a period where the views of Islam and the Muslim community in Johannesburg had changed to become more accepting. The mosque has clearly benefitted from the development of Masjid-ur-Rahmah in Greenside and the impact that the mosque has had on the urban fabric and community that surrounds it. According to Nossel (2017), the mosque was built at a time where the community was more open to change than it had been in the past. The design of the mosque does not attempt to portray a contemporary Islamic visual identity but rather chooses to celebrate the traditional identity of Islam. The mosque does not challenge the notions of what a mosque should look like but rather stands as an example of Islamic architecture that can be appreciated by the surrounding community. The impact the mosque has made on the Houghton community is not as drastic as the impact of Masjid-ur-Rahmah on its surrounding community. According to Bham (2017), the mosque was always intended to be a showcase of traditional Islamic architecture in the urban fabric of Johannesburg. Masjid-ul-Furquan clearly stands as a symbol to a traditional Islamic identity for a community that is viewed by many as the epitome of success in Johannesburg. It is clear though that the architect had based some of the design on that of Masjid-ur-Rahmah as well as being affected by the changing political and social landscape.

Of the three mosques discussed, the Auckland Park Mosque had the greatest potential to portray an identity that could learn from the past but take the mosque into the future. According to Mbele (2017), the mosque is missing the character and flare of mosques in surrounding suburbs. This flare can be seen in the design of the *mihrab* and *mimbar* of the mosque as they embody the current trend of contemporary Islamic architecture. It is sad that the only people who really get to experience these elements are the users of the mosque and not the greater community. The rest of the mosque design seems to be portraying an uncertain identity as the styles conflict with each other from the exterior facades to the interior detailing. This could be a reflection of the struggle the Muslim community in South Africa is facing, as the older generations look to preserve the traditions and values taught to them in their youth. The younger generations instead look to develop their own Islamic identity in a space where the limitations of the past are no longer applicable.

It is clear that mosque design in Johannesburg is in a period of flux due to the ever-changing social and political status of Muslim communities. In the past, the Muslim communities were limited by the Group Areas act and as such they have worked together to create an unhindered cohesive community that caters for their needs. According to Diayar (2017) the Muslim communities formed in these previously 'White' suburbs of Johannesburg has developed considerably since 1996. Currently the social, political and religious freedom that is enjoyed by the country has facilitated this change resulting in new challenges being faced by these young Muslim communities. The greatest challenge being faced by Muslim communities is finding an identity in the urban fabric that is different from that of the restricted past, yet embracing the freedom of democracy. However this not unique to Johannesburg but can be found in Western Europe, North America and other non-Muslim countries.

The architects and designers seem to have chosen various themes to address this challenge, which range from developing hybrid identities, celebrating Islamic heritage or attempting to portray a conservative reinterpretation of an Islamic identity in contemporary society.

#### 4. CHAPTER 4: INTERNATIONAL CASE STUDIES

#### 4.1. Introduction

In this chapter, I intend to analyse the three international mosques chosen as case studies for this dissertation. The analysis of these case studies will be done using official photographs and concept drawings of each mosque downloaded from the architect's webpages and online architectural websites that have documented the mosques. Literature published online through websites and online journals will also be used to analyse the case studies. Interviews with the architects and committee members of each case study will also be used in this chapter. The interviews were designed to be open-ended and were formulated to initiate conversations relating to the architecture and interior design of the mosques. The interviews were carried out through Email correspondence between the participants and myself. The analysis of the mosques in this chapter will be done using a similar structure to Chapter 3.

All three case studies have been proposed and built on sites that were being used for purposes other than religious activities in the community. The sites of the mosques have been rezoned for religious and educational use as per the municipal guidelines of the city.

# 4.1.1. Al-Irsyad Mosque, Indonesia

Al-Irsyad Mosque is located in the township of Kota Baru Parahyangan (KBP) near the city of Bandung, on the island of West Java which lies south of mainland Indonesia. The mosque is a major part of the Al-Irsyad Islamic School complex, which services the surrounding community. According to Eskandari (2012:62), the current structure that forms the mosque was officially inaugurated in August 2010. The mosque has a capacity of 1000 to 1500 worshippers. Unlike the mosques analysed in South Africa, the Al-Irsyad Mosque is a stand-alone structure that serves mainly as a prayer space with additional facilities being incorporated into other buildings surrounding the mosque itself.

According to Eskandari (2012:61), the Al-Irsyad Islamic School has funded the mosque as it forms part of the school facilities. It is not entirely clear in the existing literature how the funds for the mosque were raised by the school. One of Indonesia's top architects designed the mosque according to Eskandari (2012:61) in Bandung, M.Ridwan Kamil, the principal architect at Urbane Indonesia, an architectural and urban design consultancy firm. According to Li Za (2016: 1), the architect is also the mayor of Bandung and has won numerous awards in Indonesia and Asia as a whole.

According to Kamil (2010:2), the architecture of the mosque is quite unique in that it uses stacked stones in two tones as the main façade. The structure is located on an artificial pond that surrounds it with water. As can be seen in Figure 4.1, the mosque as a simple square shaped building in earthy

tones with contrasting white tunnels protruding from the structure. The entire mosque structure is orientated to face the *qibla* direction unlike the buildings that surround the mosque.



Figure 4.1: North and East facades of the Al-Irsyad Mosque, Indonesia, 2011.

# 4.1.2. Cologne Central Mosque, Germany

The Cologne Central Mosque is located in the suburb of Ehrenfeld in North West Cologne on the corner of Inner Canal and *Venloer* Streets. The current structure that is regarded as the mosque complex was inaugurated in June 2017 during the Islamic month of *Ramadhan* in which Muslims observe the yearly fast. According to Böhm (2017) the mosque complex is comprises two parts, the Cologne Central Mosque and the Cultural Center which can be seen in Figure 4.2. Together the two structures contain the main prayer hall, ablution facilities, toilets, offices, an academy, seminar and meeting rooms, an exhibition hall, a museum, a library, a youth and sports center, a guesthouse, television and radio studios, a conference hall and a covered bazaar. The complex is constructed on a seventeen thousand square meter site with the structures arranged around an open-air courtyard that opens to *Venloer* Street. Underneath the two structures, an underground carpark has also been built. The Diyanet Isleri Turk Islam Birligi (DiTiB), an umbrella organisation representing the various Muslim communities in Germany, runs the mosque. According to the DiTiB website, the funds for the mosque were acquired through the DiTiB's own resources and donations from the various communities that it serves.

The mosque complex was designed by the architect Paul Böhm of Böhm & Partners Architects who developed the design in 2006 for a competition held by DiTiB in an effort to address the needs of the Muslim community of Cologne. Böhm is also known in Germany for his church designs.



Figure 4.2: South East Facade along *Innere Kanal* Street of the Cologne Central Mosque, Cologne, Germany, 2016. Photograph by Benedict Force.

## 4.1.3. Cambridge Mosque, England

The Cambridge Mosque is located on Mill Road in the Romsey area of the city of Cambridge. The structure that can be regarded as the mosque complex is currently under construction and an opening date is yet to be established. According to Marks (2017), the mosque complex will contain a dedicated prayer hall, ablution room, a covered portico, an atrium, a café, a teaching area and meeting rooms. The site will also provide gardens for relaxation, space to park bicycles and an underground carpark. The Muslim Academic Trust, a charity organisation that represents the Muslim community in the city of Cambridge, runs the Cambridge Mosque.

According to Murad (2016), the funding of the Cambridge mosque was derived from donations received from the local community as well as Muslim communities around the world. This was achieved by the means of collection drives and promoting of the mosque project on social media platforms.

The mosque complex is to be constructed on a single site with an adjacent site being left as an open field which could house additional parking when needed as seen in Figure 4.3. The site is within a residential suburb and has been rezoned for religious and educational use. The architect chosen for the project is David Marks from Marks Barfield architects. Marks Barfield Architects are a well-known, award-winning architectural firm in the United Kingdom, whose most prominent project is the London Eye and the University of Cambridge Primary School.



Figure 4.3: Artistic Impression of Cambridge Mosque, Cambridge, England, 2017. Image produced by Marks Barfield Architects.

## 4.2. Identity

## 4.2.1. Spatial planning of case studies

The shape of the *Ka'bah* in Makkah has inspired the architectural identity and layout of the Al-Irsyad mosque. According to Eskandari (2012:63), the mosque takes the form of a simple square, which was inspired by the shape of the *Ka'bah*. This is quite evident in the plan of the structure as can be seen in Figure 4.2. The chosen shape of the mosque as a square structure is often found in the main prayer halls of mosques around the world and influences the interior layout greatly. According to Kamil (2012:2), this is the most efficient shape to use as Muslims pray in straight rows facing in the direction of the *qiblah*. As can be seen in Figure 4.4, the mosque is basically a prayer hall with all other facilities being included in the other structures nearby. These facilities include the *Wudhu Khana* and the toilets. In Figure 4.4 these can be seen outside the structure to the top right of the mosque. To the far right of the mosque is the parking lot and to the left is the gardens that surround it. The *minaret* can be found to the bottom left of the mosque and forms part of the gardens.



Figure 4.4: Plan of Al-Irsyad Mosque by the Architect, M. Ridwan Kamil, Bandung, Indonesia, 2012.

The Cologne Central Mosque is made up of two structures linked by a plinth structure below. The bulk of the complex is the prayer hall, which is used mainly for congregational and individual prayers and can be seen in Figure 4.5 as the curved wall structure. According to Böhm (2017), the mosque complex is mainly characterized by the prayer hall, which is made up of several shell-like walls constructed from reinforced concrete, which have been left unfinished. The voids between the walls are filled with glass panels that follow the lines of the walls. This can be seen in Figure 4.5 showing the plan of the mosque complex. In the centre of these walls is a concrete dome like structure with glass panels meeting up with the glass dome that allows light to fill the prayer hall. The rest of the mosque complex continues the concrete and glass aesthetic of the mosque prayer hall structure though in a more linear style as seen in Figure 4.2.

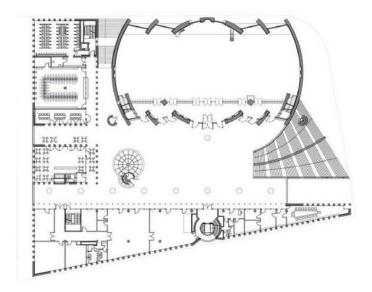


Figure 4.5: Ground Floor Plan of Cologne Central Mosque complex, Cologne, Germany, 2015. Plan drawn by Paul Böhm Architects.

The Cultural Centre building wraps around the mosque prayer hall and follows the shape of the site to make best use of the available land as seen in Figure 4.5. A courtyard separates the Cultural Centre from the mosque prayer hall. The prayer hall can hold up to 1200 people and if the entire site is used, 2000 people can be easily accommodated in the mosque complex for prayers. As can be seen in Figure 4.2, the mosque prayer hall is the dominant structure on the site when compared to the Cultural Center that surrounds it through height as well. The mosque itself is orientated in the *qiblah* direction, which in this case is parallel to Inner Canal Street.

The Cambridge Mosque as seen in Figure 4.6 has been designed to make best use of the rectangular site chosen for the mosque. According to Marks (2017) the mosque complex fills the site with the street facing façade being stepped back to soften the interaction between the mosque complex and the street. This can be seen in Figure 4.3, which shows an artistic impression of the Cambridge

Mosque and the use of materials in the design of the mosque. According to Marks (2017), the structure of the mosque complex is to be made of primarily local gault bricks, which are a popular material for houses in the area surrounding the mosque complex and laminated timber columns giving a natural colour scheme. The main prayer hall is under the gold dome and is orientated towards the *qiblah* direction as seen in Figure 4.3. In Figure 4.6, the main prayer hall stands out as part of the complex that angled differently on the site compared to the rest of the mosque complex.



Figure 4.6: Floor Plan of Cambridge Mosque, Cambridge, England, 2017. Plan drawn by Marks Barfield Architects.

### 4.2.2. Key architectural elements and motifs

# Overall architectural identity

The architectural identity of the Al-Irsyad Mosque is a simple yet striking aesthetic that is embodied in the façades of the structure. The chosen aesthetic is both contemporary and Islamic as can be seen in Figure 4.1. According to Eskandari (2012:62), the use of stacked stones as the main façade has created a tectonic effect, along with the embedding of Islamic calligraphy expressing the Islamic declaration of faith, which is also called the Kalima. This calligraphy has been created using darker stones with voids, which contrast to the lighter grey tones of the solid stones. According to Kamil (2012:2), the inclusion of this *Kalima* is also a reminder prayer and sets the tone of the purpose of the mosque as a space dedicated to the worshipping of God. The style of the Islamic calligraphy chosen is called the square Kufic script as can be seen in Figure 4.1. According to Majeed (2006:20) straight lines that are kept parallel to each other or meet at right angles when needed characterize the square Kufic script in Islamic calligraphy. The script does not have any curvilinear features like other Islamic scripts used for calligraphy. From my own experience of using Islamic calligraphy in

design, the square Kufic script is easily incorporated in architectural schemes due to its geometric nature. This identity is carried through to elements such as the *minaret*, *musallas* and the entrances of the mosque.

The architectural identity of the Cologne Central Mosque's main prayer hall can best be described as a contemporary interpretation of the traditional Ottoman mosques found in Istanbul, Turkey. The Islamic Cultural Centre that surrounds the mosque's main prayer hall has been designed to evoke the lines found in many buildings across Germany. According to Böhm (2017) the entire building complex and the dome hall is a development from the traditional building culture of Islam to a contemporary one. It is also clear from Figure 4.2 and 4.5 that the mosque prayer hall is the focus of the site and as such, the architect has created an architectural identity for the structure that is visually dynamic. The main prayer hall with its large dome structure is further inspired by the Ottoman mosques as Figure 4.5 shows an unhindered interior space in which worshippers can easily pray.

The architectural identity of the Cambridge Mosque is of one that portrays a unique Islamic aesthetic in an attempt to represent the diverse Muslim community and the greater Cambridge community. Marks Barfield Architects has chosen to use a contemporary interpretation of traditional Islamic architecture to achieve this theme. According to Butt (2011:1), the structure will attempt to answer the question of what an English mosque should look like. To do this the committee along with the architect looked at the way mosques are being used in England and through that determined what is needed to best represent the architectural identity of the structure in the city.

As can be seen in Figure 4.3 the most striking feature of the mosques exterior is the lack of a *minaret* in the design and the presence of a gold dome above the main prayer hall. This is because there is no need for a *minaret* as the mosque has a transmitter system, which broadcasts the call to prayer and events within the mosque through receivers purchased by the community from the mosque.

According to Butt (2011:1) aside from the gold dome, there are no external markings or *minarets* that will signify the function of the complex. The mosque is being built in a residential part of Cambridge in which no building exceeds a double storey height.

### Qubba/Dome

One of the unique features of the Al-Irsyad Mosque is the lack of a dome. According to Kamil (2012:1), the dome is not an essential feature in the design of an Islamic place of worship and could be eliminated from the design. In fact, the *Ka'bah*, which has inspired the Al-Irsyad Mosque design, does not have a dome that crowns it. Furthermore, it is clear from the existing literature and historical evidence that the original mosque built by the Prophet Muhammed (p.b.u.h.) had no dome included in its design.

As can be seen in Figure 4.2 the main prayer hall of the Cologne Central Mosque is a combination of glass and concrete with a single large dome surrounded on either side by shell-like concrete walls and curving glass infill panels. An irregular shape that seems to be inspired by the lines of Arabic letters slices the dome. According to Böhm (2017) instead of simply placing a regular shape for the opening, one inspired by the elegant lines of the Arabic alphabet was used which also gives the facade a more Islamic quality. The architect chose to leave the concrete of the mosque exterior unfinished to contrast with the polished appearance of the glass panels. This contrast further emphasises the contemporary architectural identity of the mosque.

The dome of the Cambridge Mosque is an easily recognisable symbol of the mosque. The shape chosen by the architect and the mosque committee is as much an icon of mosque design as the presence of a *minaret* would have been. The architect elected to keep a traditional Islamic shape to the dome's identity so as not to have the complex mistaken for another religious building.

According to Murad (2017), the committee were open to a contemporary styled dome however; the architect felt the complex might be misread as something other than a mosque.

#### Minaret

To the left of Figure 4.1, the *minaret* of the Al-Irsyad Mosque can be seen as a long independent structure that continues the geometric style established for the mosque's architectural identity. According to Eskandari (2012:63), the *minaret* is a tall pole-like structure next to the square building of the mosque. The *minaret* uses the same stacked stones, combining the lighter and darker greys to create a linear pattern. Kamil (2012:3) states that he believes the *minaret* is an important element of mosque design as it has become somewhat of an icon that acts as a location marker for the mosque. Thus, it was vital to include the *minaret* in a manner that would still be visible but also not to distract from the design of the mosque itself. Kamil (2012:3) also states that the *minaret* holds loudspeakers to call out the *adhaan* allowing the *minaret* to serve its original purpose providing a higher level from which to call out the *adhaan*.

The Cologne Central Mosque has two *minarets* that can be seen behind the main prayer hall on either side of Figure 4.2. Similar to the Al-Irsyad Mosque, the *minarets* are positioned away from the main mosque structure and serve more as icons or ornamental structures rather than practical structures that can be used. According to Böhm (2017), the 36.5m high transparent dome is bordered by two filigree 55-meter high *minarets*. The *minarets* are slender and made from the same unfinished concrete as the mosque itself with two gilded metal rings and a single gilded crescent crowning the tops of each *minaret* (Hummel, 2017:1). This continues the contemporary interpretation of the architectural identity of the mosque as an Islamic structure.

As mentioned before, the Cambridge Mosque has no *minaret*. The architect and the committee did this intentionally.

### • Exterior facades and entrances

The Al-Irsyad Mosque facades are made up of a combination of dark and light stones that were sourced from surrounding environment. According to Kamil (2012:3), the natural stones used in the façade were chosen to allow the mosque to 'blend in' with nature as the stones are widely used in the local community. In Figure 4.1, we can see the two entrances to the mosque. These appear as crisp white linear bands that puncture the facades of the mosque. The contrasting white entrances give the visitors to the mosque an immediate location. According to Kamil (2017), the notions of purity and tranquillity that are associated with it inspired the use of white, and his intention was to create a transitional space on entering the mosque that represented this, allowing worshippers to connect with spirituality of the space. We can see a close up of the North entrance in Figure 4.7 showing the contrasting white entrance walls to that of the darker interior.

We can also see the gaps between each band allowing light to fill the entrances and further enhance the notion of peace and tranquillity as suggested by Kamil (2017). At the end of the entrance in Figure 4.7, frameless glass doors can be seen which are used to close off the mosque when needed. The glass doors were kept clear to allow light to filter through the entrances and into the mosque, thus fulfilling the concept of bringing the exterior into the interior. Kamil (2012:3) states that once inside, the users of the space are able to look out and appreciate the external scenery through the various openings in the exterior facade.



Figure 4.7: North Entrance of Al-Irsyad Mosque, Indonesia, 2012. Photograph by Emilio Photoimagination. To the right of the main prayer hall of the Cologne Central Mosque in Figure 4.2, the South wing of the Islamic Cultural Centre can be seen. The materials of this structure repeat the concrete and glass chosen for the mosque itself. According to Böhm (2017), the Islamic Cultural Centre is used to house

facilities that require a practical approach to the space layout, which meant the unusual design of the mosque prayer hall, could not be employed, as the spaces would not be functional. The plan of the complex seen in Figure 4.5 clearly shows the difference between the shapes of the two structures.



Figure 4.8: North West Facade of the Cologne Central Mosque, Cologne, Germany, 2017. Photograph by Benedict Force.

All entrances to the mosque prayer hall can be accessed from the courtyard level as can be seen in Figure 4.8. According to Böhm (2017), all entrances to the mosque are situated on the higher level's courtyard. The main entrance is made of a monumental double leaf solid wood door that mirrors the shape and position of the *qiblah* wall, creating the Arabic inspired shape in the North West facade as can be seen in Figure 4.8. The other entrances are smaller double leaf aluminium and glass doors that allow for entry and exit with ease. The doors also serve as natural ventilation openings during the summer months. The doors are plain with no ornamentation as can be seen in Figure 4.8. According to Böhm (2017), the lack of external ornamentation and use of glass fronts gives the building a contemporary and inviting character allowing the visitor the possibility to glimpse the complex interior.

The architects wanted the Cambridge Mosque to appear as if it belonged in the urban fabric and was not imposing its presence on the street front. To achieve this, the architect chose to use the traditional facebrick found in Cambridge for most residential and academic structures. According to Lomholt (2017:1), the enclosing diaphragm walls are faced in local gault brick and step back from the building perimeter up to the central prayer hall. To soften the street front of the mosque complex and create a more inviting space the architect chose to create a gradual transition from street front all the way through to the central prayer hall that is orientated towards the *qiblah*. According to Lomholt, (2017:1) visitors will be able to experience a gradual transition through a garden, progressing to a covered portico, then an atrium and then into the main prayer hall which is

orientated towards *Makkah*. In Figure 4.3 and 4.6, we can see the transition as the scale of the spaces change in relation to their usage

## 4.2.3. Key interior elements and motifs

# Overall interior identity

The interior design identity of the Al-Irsyad Mosque continues the same geometric aesthetic established for the architectural identity of the mosque. As can be seen in Figure 4.4 and 4.9, the interior space is unhindered by columns or internal walls.



Figure 4.9: Interior of the Al-Irsyad Mosque, Indonesia, 2012. Photograph by Emilio Photoimagination.

Eskandari (2012:63) states that the special arrangement of the structural columns on the interior makes the facade look like it is not supported by any frame. The internal walls become sources of light during the day as it flows through all the openings in the walls adding to the spirituality of the interior as can be seen in Figure 4.9.

Eskandari (2012:62) describes this as bars of light streaming through the voids illuminating the entire wall with the words of the *Qur'aan*, creating visual impact and drama. Due to the climatic conditions surrounding the mosque, the architect chose not to include windows in the external walls so as not to hinder the natural ventilation to the interior. As the mosque has no dome, the interior ceiling is a flat plane with protruding LED lights as can be seen in Figure 4.9.

The interior design identity of the Cologne Central Mosque developed for the *qiblah* wall is continued throughout the mosque as can be seen in Figure 4.10. The walls are decorated with 1800 stucco panels that combine oriental elements with contemporary Islam according to Hummel (2017:2). Within the stucco panels are Arabic inscriptions which according to Alboga (2017) contain the Arabic names of prophets that have played an important role in Jewish, Christian and Islamic history in an attempt to stimulate interreligious discussion.

The female prayer space is housed on the mezzanine floor of the Cologne Central Mosque. As can be seen in Figure 4.10, it is not completely enclosed and continues the same interior design identity as the main mosque area. According to Böhm (2017), it was important to provide the women with a separate space due to requirements and the mosque committee wanted the space to have a view to the *imam*.

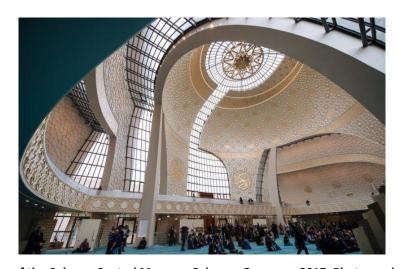


Figure 4.10: Interior of the Cologne Central Mosque, Cologne, Germany, 2017. Photograph by Benedict Force. This allowed for a space that is not completely blocked off by glass panels or walls and as such is much more integrated into the overall design of the mosque. Böhm further mentions that it was vital

that the same stylistic elements be used, as it is highly visible from most areas of the mosque.

Key elements of the Cambridge Mosque interiors, which can be seen in Figure 4.3 and 4.11, are the columns repeated throughout the mosque complex. In fact, these columns have determined the architectural and interior design identity of the mosque more than that of the exterior walls or the dome. According to Murad (2017) the columns, lattice-work and geometric patterns were designed by Professor Keith Critchlow based on his study of Islamic and European Gothic art and architecture in an attempt to develop a unique aesthetic for the mosque. The trees in traditional Islamic gardens inspired the column arrangement and shapes and the pointed arch so often found in Islamic architecture. According to Murad (2017), the columns are to be made from laminated timber and open up to the heavens creating a forest like effect.

The columns merge into latticework that forms the structural support for the roof. The latticework was designed to represent the typical geometric patterns found in Islamic art. The columns and latticework have been used from the covered portico through to the main prayer hall of the complex to continue the identity of the mosque from the exterior through to the interior. The concept of trees being used as structural columns refers back to the Prophet Muhammed's mosque as mentioned in chapter 2 of this dissertation.



Figure 4.11: Artistic Impression of the atrium and covered portico of the Cambridge Mosque, Cambridge, England, 2017. Image produced by Marks Barfield Architects.

Above each column is a round skylight allowing natural light to stream into the covered areas of the complex. According to Murad (2017), the worshippers will be able to look up to see the ceiling criss-crossed with laminated timber supports above which large oculi provide pools of light into the space. This approach of bringing natural light into the space is one of the techniques used in the Cambridge Mosque that addresses the sustainability. The columns and oculi form part of a natural ventilation system, which allows air to circulate through the mosque. The shapes developed for the columns have been included in the design of the perimeter fence, gates and the interiors.



Figure 4.12: Artistic Impression of Cambridge Mosque's main prayer hall interior, Cambridge, England, 2017.

Image produced by Marks Barfield Architects.

Currently in the proposed design, the interior walls of the mosque are kept simple with little decoration on the walls. As can be seen in Figure 4.12 the base colour of the walls has been proposed as a crisp white to enhance the spiritual identity and natural light filling the mosque interior.

Along the walls of the interior of the prayer hall, large Arabic inscriptions of the qualities of God are used as decoration with the pattern developed by Professor Critchlow for the exterior brickwork being replicated at the bottom of the walls in stucco. According to Murad (2017), the presence of

these elements adds to the architectural and interior design identity of the mosque to create a truly unique space for Muslims and non-Muslims to visit.

### Courtyard

The Al-Irsyad Mosque has no courtyard due to the nature of its spatial planning and inspiration for its architectural and interior identity that was chosen by the architect.

The courtyard of the Cologne Central Mosque is an open-air space that links the Islamic Cultural Centre to the main prayer hall. According to Böhm (2017), the buildings are grouped around the courtyard, which opens to both streets in an attempt to open the mosque complex to the public and create a meeting point. The courtyard is higher than the street which necessitated the use of stairways which according to Böhm (2017) connect the levels and invite passers-by to venture into the space. Like many courtyards of the Ottoman era, there is a fountain, however in this case it is not used to perform ablutions. According to Böhm (2017), the fountain in the centre of the courtyard connects the two levels and creates a pleasant atmosphere. Below the courtyard, on the street level and contained within the mosque prayer hall structure is a community hall and shopping space. According to Böhm (2017), the street level contains the bazaar and hall used for community events and allows the mosque to serve the greater community and not only the Muslim community of Ehrenfeld.

The Cambridge Mosque also has no courtyard in its spatial planning. In Figure 4.3 we see that the closest element to a courtyard is the atrium space. However it is not orientated towards the *qiblah* which makes it harder to use the space for prayers. Added to that, the space facilitates movement between the public café and the community garden. By using the atrium during large gatherings, the function of the public café will greatly be affected.

## • Qiblah wall and mimbar

The *qiblah* wall and the mihrab of the Al-Irsyad Mosque are contemporary interpretations of the traditional *qiblah* wall and *mihrab* found in most mosques though it has been reduced down to its basics as can be seen in Figure 4.13. According to Eskandari (2012:63) as an alternative to the traditional *mihrab*, here it is in the form of an open-ended façade finished in a contrasting white, angled to focus on the mimbar, and emphasized by a sculptural globe placed within the opening. The opening that forms the *mihrab* frames a view of the surrounding landscape, providing the primary source of natural lighting and ventilation for the mosque as well as continuing the concept of the architectural identity of blending in with the surrounding landscape. According to Eskandari (2012:63), the wide opening in the façade enables the users of the mosque to connect and

appreciate the beautiful surrounding landscape, while also representing the concept of blending into nature that is embodied in the exterior façades.



Figure 4.13: *Qiblah* wall and *mihrab* of the Al-Irsyad Mosque, Indonesia, 2012. Photograph by Emilio Photoimagination.

As can be seen in Figure 4.13, the *mimbar* of this mosque is not the traditional step like structure found in other mosques. Rather is made up of two podium-like structures that the *imam* would stand at and address the congregation. According to Kamil (2012:3), the core purpose of the *mimbar* is to elevate the *imam* from the congregation to project his voice further. In this case, these podium-like structures elevate the *imam* and house the sound equipment, which allows the *imam's* voice to be projected through the speaker system. According to Eskandari (2012:63), the *mihrab* has been placed on a platform extending into the pond under the *mihrab* and *qiblah* wall to enhance the spiritual effect of the space. The globe-like structure within the opening of the *qiblah* wall according to Eskandari (2012:63) completes the drama of the mosque as it is inscribed with the Arabic word *Allah*, referring to the one and only God all Muslims believe in and worship.

Due to the design and layout of the concrete shell-like walls, worshippers and visitors to the Cologne Central Mosque get an unhindered view of the mosque's interior and specifically the *qiblah* wall. The *qiblah* wall is part of the South East facade of the mosque and is made up of glass panels between concrete walls decorated with elaborate stucco panels in traditional Islamic geometric patterns and calligraphy (Hummel, 2017:2). In Figure 4.14, the *qiblah* wall can be seen as the white curved wall punctured by the fronts of the South East facade. The *qiblah* wall like in most Ottoman era mosques is highly decorated with Islamic patterns though in this case they are kept in a neutral tone with accents of silver and gold. According to Böhm (2017), Turkish artisans who understand traditional decoration, yet still wanted to accentuate the contemporary lines of the structure did this.



Figure 4.14: Interior of mosque, *qiblah* wall, *mihrab* and *mimbar* of Cologne Central Mosque, Cologne, Germany, 2017. Photograph by Benedict Force.

Included within the patterns are examples of Islamic calligraphy depicting the Arabic words for Allah and Muhammed (p.b.u.h). The prominence of these artworks is enhanced by the sheer size compared to other examples of Islamic calligraphy that can be seen on the rest of the interior walls. Along the *qiblah* wall is the *mihrab*, the main *mimbar*, seen on the right of the *mihrab* in Figure 4.14 and a secondary *mimbar*, seen on the left of the *mihrab* in Figure 4.14. According to Böhm (2017), the DiTiB's request for two *mimbars* to be included is common practice in most Turkish mosques.

The *mihrab* of the Cologne Central Mosque has a traditional identity when compared to the rest of the mosques architectural and interior design identity. As can be seen in Figure 4.14, the *mihrab* is in the centre of the *qiblah* wall and forms part of the Arabic inspired shape that is so striking. The actual *mihrab* is styled on the *mihrabs* found in many Ottoman era mosques found mainly in Turkey. Above the *mihrab* are two Arabic inscriptions of the first *Kalima* in varying styles of calligraphy. Both inscriptions are gilded which according to Böhm (2017) symbolises their importance and sacredness in the mosque. The *qiblah* wall and *mihrab* as in all mosques are orientated towards *Makkah*, which in this case is in a South Easterly direction.

In the Cologne Central Mosque, there are *mimbars* along the qiblah wall on either side of the *mihrab*. This is common practice in Turkish mosques and the two structures serve similar purposes though are used at different times during the prayers. As can be seen in Figure 4.14 the *mimbar* on the right is much larger and taller than that on the left. According to Asikoglu (2017), the taller *mimbar* is only to be used on a Friday during the formal sermon recited in Arabic by the *imam* while the smaller *mimbar* is used for general sermons, announcements and on a Friday for the sermons spoken in Turkish and German.

In the case of this mosque, the interior design identity of the *mimbars* is a contemporary interpretation of the classic *mimbars* found in most Ottoman era mosques. They continue the neutral colour scheme and are made up of alternating cream and brown side panels that echo the curved

shape of the exterior walls of the mosque. According to Böhm (2017), the design of the *mimbar* continues with the themes developed for the mosque exterior and the *minarets* thus completing the visual experience that begins when approaching the mosque. Both *mimbars* consist of a series of steps with a platform that the *imam* stands or sits on while addressing the congregation. The taller *mimbar* has more steps, which are also placed in a straight line parallel to the *qiblah* wall as is done in traditional *mimbars* of most mosques. The smaller *mimbar* has fewer steps that are placed perpendicular to the *qiblah* wall and are hidden from view within the *mimbar* structure. Each *mimbar* has Arabic inscriptions placed along a back panel that protects and frames the *imam* during his address to the congregation. They also contain sound equipment.

In Figure 4.15, we can see the *qiblah* wall of the Cambridge Mosque. Due to the intricate design of the columns and latticework of the ceiling, the rest of the mosque interior has been kept simple. However, we can see the influence of the timber elements in the materials and shape of the *mihrab* and the *mimbar* of the mosque.



Figure 4.15: Artistic Impression of the Cambridge Mosque *qiblah* wall, *mihrab* and *mimbar*, Cambridge, England, 2017. Image produced by Marks Barfield Architects.

The *mihrab* is a simple niche in the *qiblah* wall with a pointed arch and stucco artwork with a border and an Arabic inscription of the Islamic declaration of faith typically found in many mosques around the world. Murad (2017) states that the *mihrab* has been designed to reflect the simple elegance of Islamic design and not overshadow the intricate timber roof structure and decorations on the inside of the dome. This same thinking has also been applied to the *mimbar*, which can be seen to the right of the *mihrab* in Figure 4.18. The *mimbar* is made from the same timber as the columns and latticework and has the same aesthetic as that of the *mihrab*.

#### Musallas

The *musallas* of the Al-Irsyad Mosque have been kept simple by choice of the architect and the community. As can be seen in Figures 4.9 and 4.13, the *musallas* are alternating black and light grey rows of carpets with no patterning. This emphasizes the geometric aesthetic of the mosques identity and continues the contrasting theme that was developed for the exterior facades of the mosque. This minimal interior according to Laube (2016:74) provides the worshippers a space in which they can engage in intimate, contemplative prayer in a sheltered interior.

The *musallas* of the Cologne Central Mosque are simple with minimal decoration. As can be seen in Figure 4.10, the *musalla* is a pale teal colour with patterns being used to form parallel lines to the *qiblah* wall. From my own personal experience, these lines are used to form the rows for congregational prayers. In Figure 4.10, this can be seen as the men in the main mosque area are seated in congregation listening to a talk from the *imam*. The colour of the *musalla* and its simplicity do not distract form the beauty of the interior design and seem to provide a softer, luxurious feel to the space (Hummel, 2017:3).

The *musalla* of the Cambridge Mosque is kept traditional and simple in the sense that the committee chose to use a deep red carpet with little decoration, save for the lines to define the rows of the congregation as seen in Figures 4.12 and 4.15. This is similar to the *musalla* of the Cologne Central Mosque. Murad (2017) further states that the committee, architect and the local community believed the *musalla* should be more traditional to ground the interior identity and remind the worshippers of their deep and rich history as Muslims.

# • Interior of qubba/dome

As stated before, the Al-Irsyad Mosque has no dome. A domed ceiling has not been created like that at the Auckland Park Mosque. Instead as can be seen in Figure 4.9, the ceiling is kept simple. It is a flat, flush plastered element with protruding light fittings. No artworks or intricate Islamic décor adorns the ceiling of the mosque.

The most striking feature of the Cologne Central Mosque's interior is the amount of natural light that fills the space through the large quantity of glass infills and the glass dome. As can be seen at the top of Figure 4.10 the glass panels that form the Arabic inspired shape on the South East and North West facades of the mosque meet up at the top to form a glass dome. Underneath the glass dome is a star shaped chandelier. A crescent shaped feature of Arabic inscriptions that is lit up by LED strip lights frames the chandelier and glass dome. According to Böhm (2017), this interior of the dome and the chandelier were from Turkey where it was hand made specifically for the mosque to enhance the atmosphere within the space.

A feature in the Cambridge Mosque that is often associated with mosques that are more traditional is the presence of the dome both as an architectural and interior element. As stated previously the dome provides a recognisable symbol to the surrounding community. As the exterior is a symbol for the community, the interior of the dome has been designed to further entrench an Islamic identity to the space. The interior of the dome is covered in Islamic patterns designed by Professor Critchlow. In Figure 4.16, we see an artistic impression developed by Marks Barfield Architects showing the ceiling layout around and including the dome. According to Murad (2017) the 16 pointed star used by Professor Critchlow is typical of Islamic artworks especially those found in Cordoba, Spain. The use of this shape has been applied throughout the interior of the mosque on elements such as the doors, privacy screens and on the timber elements screening off the mezzanine floor openings in the women's area.

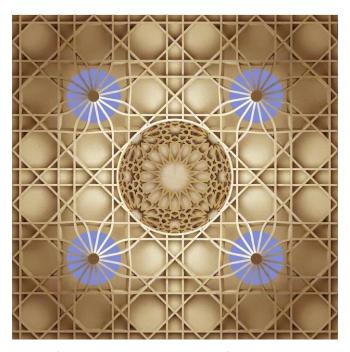


Figure 4.16: Artistic Impression of the pattern developed by Professor Keith Critchlow for the mosque ceiling, dome and columns, Cambridge, England, 2017. Image produced by Marks Barfield Architects.

# 4.2.4. Perception of case studies' identity by their surrounding communities

It is clear that the identity of the Al-Irsyad Mosque has been created by the architect to represent a contemporary interpretation of the mosque in which the traditional symbols and architectural icons that are associated with mosques are stripped down to their most basic uses. Laube (2016:74) states that the refutation of any historical reminiscence lends the building a contemporary appearance, without neglecting the most important structural elements of sacred buildings in the Islamic world as the building perfectly fulfils its purpose.

The architectural and interior design identity of the Cologne Central Mosque has through the various forms and materials used in the design addressed the need for a contemporary aesthetic to be developed that is neither purely German nor Turkish but rather a blending of the two cultures.

According to Böhm (2017), the mosque is a beautiful space to pray that he hopes will also be visited by majority of the citizens so that they can experience its openness and beauty for themselves. The architectural and interior design identity of this mosque is clearly unique.

The architectural and interior design identity of the Cambridge Mosque is attempting to explore the identity of Islam in a western society. This has been done through the development of an identity that according to Lomholt (2017:1) strives for an English idiom while drawing inspiration from the natural world and acknowledges Islamic art as a living tradition. It does so without resorting to the clichéd English or Islamic references found in other mosques of England.

## 4.3. Hybridity

# 4.3.1. Openness to surrounding community

The community surrounding the Al-Irsyad Mosque forms part of the greater Kota Baru Parahyangan community, which is nearby to the city of Bandung. It is a well-established Muslim community made up of native Indonesian families as Kamil (2017) mentions that the community has been formed by families attracted to the Al-Irsyad Islamic School as well as families that have settled in the area for generations prior to the construction of the mosque. The one thing that is clear is that the community surrounding the Al-Irsyad Mosque is not a hybrid community as majority of the community follow the faith of Islam and are Indonesian by decent. Current literature that was acquired does not give details on any other cultural groups within the community surrounding the mosque. As the mosque is part of the Al-Irsyad Islamic School and is built on the school grounds, there was no need for the architect to address issues stemming from the influences of various cultural groups within the community. The nature of the structure lends itself to a space that is open to all around it. Furthermore, the façades and entrances allow for views into the mosque at all times and thus promote the concept of openness.

The Cologne Muslim community finds its official roots with the DiTiB being formed to represent the various Muslim communities around Germany in 1996 (The Central Mosque, 2017:[sp]). This places the formation of the Cologne Muslim community around the same time as that of the Muslim community of Greenside and Emmarentia and due to its age allowed for the community to be well established in the city. During this time, the community grew from Turkish roots to a multi-cultural Muslim community that needed a place to hold religious, cultural and social gatherings (Hummel,

2017:1). Due to the multi-cultural nature of the Muslim community and the city, the Cologne Central Mosque was designed and built to reflect this hybrid community.

The first theme that the architect chose to address the hybrid nature of the community was in the identity of the mosque. Unlike most mosques, the Cologne Central Mosque does not have the traditional arches and domes that are commonly associated with an Islamic identity. According to Böhm (2017), the identity of the mosque is a development from the traditional building culture to one of a contemporary nature. This was achieved through the re-interpretation of the dome, *minarets* and exterior facades of the mosque as fluid elements that did not need to conform to a specific aesthetic. The design introduced organic architecture with an Islamic theme to the urban fabric that could represent the Cologne Muslim community. This was continued in the choice of materials as Böhm (2017) mentioned that they and the form of the complex were created to reshape the impression of Islamic architecture.

The second theme employed by the architect was that of openness. Due to the effects of Islamophobia on Muslim communities across Europe, the design of the mosque allows for views into the mosque complex from the public space. This was achieved through the inclusion of large glass infills throughout the complex which when combined with the concrete shells gives an open spatial quality (The Central Mosque, 2017:[sp]). As discussed previously, the mosque also contains facilities that are to invite non-muslims to use the spaces such as the shopping centre, conference hall, library and the open courtyard. The courtyard has been particularly designed to address the issue of Islamaphobia by allowing various approaches from the street front according to Böhm (2017). This is further enhanced by the various entrances to the spaces surrounding the courtyard and especially by the large double wooden door to the mosque prayer hall as can be seen in Figure 4.2 and 4.8.

The Cambridge Muslim committee is a well-established community with its roots in the 1960's. It is also a multi-cultural community within the city of Cambridge, which is home to various cultures. According to Murad (2017), the Cambridge Muslim community is made up of around 60 to 70 cultural groups in a city that is as culturally. This has resulted in the Cambridge Muslim community being a well-established hybrid community that is also recognised by the greater community of the city.

The architect has designed carefully and the committee to best represent the hybrid community and attempt to not represent a solely English or traditionally Islamic identity. According to Marks (2017), it was vital for the identity of the mosque to speak to the Muslim community's sense of heritage and its traditions but also marries with it the English traditions of Cambridge. The design of the mosque is also aimed at creating an identity for Islam that can be referenced by other mosque designs, which

can respond to the issues facing Muslims of Western Europe. The identity created by Marks controls the views of the public into the mosque complex. As can be seen in Figure 4.3, the main prayer hall is shielded from the public domain. According to Marks (2017), this was done to create a contemplative space that was not interrupted by the street activity. By allowing only portions of the mosque complex to be open to the entire community, Marks has both addressed the need for interactions to occur between the Muslim community and the non-Muslim communities yet still maintain the privacy of the main prayer hall that the Cologne Central Mosque and *Masjid-ur-Rahmah* has failed to do.

## 4.3.2. Inclusivity

The design of the Al-Irsyad Mosque attempts to address the concept of inclusivity through allowing the mosque to be used by all members of the community. As can be seen in Figure 4.9 there are no internal walls or screens in the mosque and there are *wudhu* rooms and toilets for both males and females. This indicates that both male and females use the mosque for prayers. Further evidence of both genders using the mosque can found in Figure 4.1 and 4.17, which shows males and females around and inside the mosque. In Figure 4.17, we can see the mosque being used for a presentation session to the women of the community.



Figure 4.17: Presentation session in the Al-Irsyad, Mosque, KBP, Indonesia, 2012. Photograph by Emilio Photoimagination.

According to Kamil (2017), the mosque is mainly used by the men for congregational prayer, with the females using the mosque at for individual prayers and events organised by the Al-Irsyad School. This follows on from the traditions found in most mosques around the world. The difference that is found in the Al-Irsyad Mosque is the lack of permanent separate male and female prayer areas that attempts to deal with the issue of inclusivity by providing a space that is less constrictive and more flexible.

As can be seen in Figure 4.17, the entire space within the mosque is being used for the presentation session to the female members of the community. In Figure 4.9 and 4.13, we can see the alternating light grey and black *musallas* that according to Kamil (2017) are not fixed to the floor but can be rolled up and placed on one side. This allows the mosque to be used for other events and not solely for prayers. According to Laube (2016:74), the community, thus making best use of the open interior layout, uses the space for different religious ceremonies.

The concept of inclusivity was paramount from the inception of the Cologne Central Mosque. The committee took the decision upfront that the mosque was to be built to represent all Muslim communities of Cologne (The Central Mosque, 2017:[sp]). The chosen design is representative of this, as it does not highlight one single cultural group or community within Cologne. Furthermore, the glass infills and staircases according to Böhm (2017) are an attempt at creating a feeling that the public space extends into the building complex instead of shutting it out. The female prayer space on the mezzanine floor is not completely screened off, thus including this space in to the main prayer hall. As can be seen in Figure 4.10 there are no screens or solid panels above the balustrade of the mezzanine floor. This affords the women an unobstructed view of the imam while he is leading the congregational prayers (Hummel, 2017:2).

The interior of the mosque further cements the hybridity of the space. As can be seen in Figures 4.10 and 4.14 the space is decorated with contemporary and traditional motifs in the form of the 1800 stucco panels and Arabic inscriptions created by Muslim artisans that have been expertly applied to the curved concrete walls. The interior design of the mosque further enhances the inviting nature of the space through the finishes that have been employed. According to Böhm (2017), he would like to have completed the interiors as he did the exterior, however the completed design and decorations showcases Islamic art and also stimulates inter-religious discussions. This prestigious building has created an iconic mosque and community centre, which offers space for various activities and for cooperation beyond religious, social and sociocultural services (The Central Mosque, 2017:[sp]).

The Cambridge Mosque also seeks to answer the theme of hybridity through that of inclusivity. From the outset, the design of the mosque has included facilities for both male and females equally. Murad (2017) has explained that the design maximises women's access to the building with special prayer spaces for those with small children as well as special bicycle racks and entrances to be used exclusively by women and children, which can be seen in Figure 4.6. The mosque design attempts to further address the theme of inclusivity by having facilities that can be used by the local community such as a café, kitchen, library and teaching rooms. The teaching rooms can also be used for community events or exhibitions. Marks (2017) mentions that during the planning phase, non-

muslim members of the local community would regularly provide input in the design of the mosque, which has been vital to the success of the project. According to Murad (2017)The mosque design further attempts to be inclusive of the community by providing facilities for the disabled and allowing for access to public transport systems and pedestrians.

## 4.3.3. Spirituality

The most essential theme used by the architect to address the concept of hybridity at the Al-Irsyad Mosque is that of the spirituality. All mosques and religious structures by nature are intended to be spiritual refuges from the urban fabric. According to Laube (2016:74), the space satisfies the classical requirements of mosque design and provides a contemplative interior that establishes various relationships with the outside world. This has been achieved through the stacked stone facade with voids that allow for natural ventilation of the structure but also allows worshippers to peer through the voids to the world outside the mosque. The *qiblah* wall and *mihrab* opening both add to this effect by framing the view of the surrounding landscape. The inclusion of water around the mosque and *mihrab* area further enhances this spiritual effect of the design. The presence of these elements touch on the hybridity of the space as a space for congregational prayer, individual contemplative and silent prayer, inner reflection and organised community gatherings and ceremonies.

## 4.3.4. Sustainability

The design of the Cambridge Mosque seeks to use sustainability to address the theme of hybridity by using technologies not often associated with mosque design. According to Murad (2017), the Cambridge Mosque is to be the first truly sustainable mosque in Western Europe. The architect has achieved this through the inclusion of sustainable technologies in the design of the mosque in an attempt to reduce the mosque's carbon footprint. According to Lomholt (2017:1), the structure is highly energy-efficient with heat pumps, heat recovery systems, water recycling and green roofs ensuring a minimal carbon footprint, emphasizing humanity's role as a responsible custodian of creation. To include these technologies in the mosque design, the architect has had to create a hybrid structure that still represents an Islamic identity.

The Cambridge Mosque is currently destined to become an excellent example of hybridity in contemporary mosque architecture and interiors through the themes discussed in this section. This fresh approach to the issues facing mosque design in Western society could be the spark required to fuel further development of hybridity in Islamic structures. According to Lomholt (2017:2) the mosque complex will act as an oasis that celebrates the miracle of nature and subtly expresses the mathematical order which underlies it through is architectural and interior design.

#### 4.4. The Muslim 'other'

## 4.4.1. Objections to construction of the mosques

The Al-Irsyad Mosque is unlike the other mosques discussed in this dissertation as it has been built in a predominantly Muslim community on the land of an Islamic school. As such, the mosque did not receive objections to its presence in the urban fabric but was rather welcomed by the community. This is common in mosques that are found in predominantly Muslim communities, as the concept of the Muslim 'other' is non-existent. However, the mosque lacks the recognized symbols of mosque architecture and design in the form of a dome, a traditional *minaret* or arches above the entrances. According to Kamil (2017), the decision to omit key elements of mosque architecture was not due to political issues but rather as an attempt to create a mosque that is the embodiment of Islam's ability to adapt to the environment around it.

The Cologne Central Mosque has received the most objections to its construction compared to the other mosques discussed in this dissertation. According to de Quetteville (2008:1), the mosque was the target of a series of vigorous protests that has featured both Jewish intellectuals and the political far-right parties of Cologne. The protests were such that they were taken before the city council in an attempt to influence the design and identity of the mosque. According to de Quetteville (2008:1), some reports have suggested that the city's council only agreed to the project after the architect agreed to lower the height of the mosques *minarets*. The protesting groups went as far as organising a conference to protest against the construction of the mosque as a representation of the presence of Islam in the city of Cologne. According to de Quetteville (2008:1), the far-right group Pro Köln hosted an anti-Islamisation conference in Cologne, with far-right politicians from across Europe, including France's Jean-Marie Le Pen attending. These protests seem to be representative of Muslim communities in Europe being viewed in fear and suspicion by some groups and therefore by extension the mosques like the Cologne Central Mosque are then viewed as representative of the Muslim 'other'.

The design of the Cologne Central Mosque can be seen as a direct response to the negative opinion of Muslims in Germany. According to de Quetteville (2008:1), the vast majority of Muslims in Germany are of Turkish origin and they constantly have to deal with issues of immigration and integration. The identity of the Cologne Central Mosque attempts to address the topic of integration by portraying a contemporary identity for the mosque that is neither Turkish nor German. The architect chose to represent the community through the design of a mosque that portrays an identity of Islam that can adapt to the changing urban and social landscape. According to de Quetteville

(2008:2), the mosque is a symbol of fearless, trusting and peaceful coexistence, a place of communication between the various communities.

The organic nature of the mosque, through the dome, *minarets*, *qiblah* wall and the inclusion of large glass fronts as well as the multiple community focussed facilities and entrances that open to the street front are evidence of the architect's and the committee's attempt at inviting the greater community of Cologne to interact with the Muslim community and the mosque. This can be seen as an attempt to provide further understanding of Islam and its followers. According to de Quetteville (2008:2), the Cologne Central Mosque is here for all of Cologne, not only for Muslims.

The Cambridge Mosque project is unique in the urban fabric of England, as it has not received the objections and protests that have obstructed the planning and construction phases of the other mosques such as the proposed mosque in Camberley, Surrey and the Abbey Mills mosque. According to Butt (2011:2) in this respect, the enthusiasm of the East Mill Road Action Group is a rarity. The primary reason for this is the fact that the Muslim community in Cambridge is a well-established community that has been active since the 1960's. Furthermore, Cambridge is a cosmopolitan city due to the international reputation of the university. According to Murad (2017) Cambridge is an intellectual crossroads, a global city with a cosmopolitan community that includes many cultural groups from around the city, which is reflected, by the Muslim community.

As such, the Muslim community in Cambridge does not face the effects of preconceived notions brought about by the concepts of the Muslim 'other' and of Orientalism. However, this did not stop the committee from addressing these concepts in the design of the mosque, which will provide a showcase as to how Islamic architecture and design is not to be feared in western society. According to Murad (2017), it was necessary to create a purpose-built mosque that would not only keep the worshippers out of the rain but would also be a showcase of Islamic civilisation in Western society.

# 4.4.2. Effect of Muslim presence on community dynamics

As stated before, the lack of traditional symbols in the identity of the Al-Irsyad Mosque is not due to the architect attempting to address the concept of the Muslim 'other' but rather it is an attempt to represent the ability of the faith to adapt to the current global circumstances. According to Kamil (2017) elements such as a dome, *minaret* and arches are not an essential for the mosque to function as a prayer space. As can be seen in Figure 4.1 the only traditionally symbolic element included in the design of this mosque is the *minaret* though it has been represented in its most basic form as a slender tower that provides a visual marker as to the mosque's location. The inclusion of the Arabic inscriptions on the façade can also be seen as a substitute for the dome and arches that have been excluded from the design. As the community is mostly Muslim, it is already structured to cater for

their needs and as such, the presence of the mosque has no change on the dynamics of the community except for the introduction of a contemporary Islamic identity.

The open design of the Cologne Central Mosque site and the courtyard facilitates the engagement of cultures in a single space allowing visitors to the space to discover and understand the Muslim 'other'. According to Böhm (2017), the visitor can follow and guide each of his steps as much as his individual expectations allow. This can be done through the various approaches that are on offer thus, dismantling their perceived threshold and allowing the inviting character of the building and community to be emphasized.

Through these various approaches to the design of the mosque and its conjoining cultural centre, the DiTiB as well as the architect seeks to eliminate the preconceived notions of Orientalism and the Muslim 'other' that has been established in the past. When combined with the welcoming nature of Islam and its focus on equality among all of creation, the Cologne Central Mosque can be viewed as an excellent example of how architects and designers could address the concept of the Muslim 'other'. According to Böhm (2017) before the mosque was completed, non-Muslim members of the community were interacting around the site due to their curiosity brought about by the exposure from the media that the project received. This had begun a change to the community dynamics, which is continuing to change as the mosque remains open.

The committee of the Cambridge Mosque decided from the beginning that it should include the local community of East Mill Road in the design and mosque proposal. According to Butt (2011:1), the most distinguishing feature of the mosque is the support it enjoys from the non-Muslims living and working in Mill Road who have been involved from the outset. This initial choice was administered through a national competition held by the mosque committee with consultation from the local community in which the design proposed by Marks Barfield Architects was chosen. According to Butt (2011:2) it did not hurt that the appointed architects are behind one of the most popular visitor attractions in Britain, or that the 'face' of the project is Abdal Hakim Murad, a renowned Cambridge academic and Muslim convert.

The committee along with the architect and local community actively made a decision to provide facilities in the design of the mosque that could be used by the non-Muslim members of the community in an attempt to include them. These facilities are the café, teaching rooms, public garden and atrium space. According to Lomholt (2017:1), the site accommodates a community café, teaching rooms, two residential units, 120 bicycle parking spaces and an underground car park in an attempt to include the local community to its fullest. These facilities, which can be seen in the plan

view shown in Figure 4.6, are placed closer to the street front so as to allow community members to access these facilities easily.

The committee also made an active decision to exclude any *minarets* symbolically or physically in the mosque structure. According to Marks (2017), the mosque will not have *minarets* or any external markings but will have a gold dome to signify its function. As discussed previously, the presence of elements such as a dome and *minarets* are not essential in the designing of a mosque and have become symbols instead of functional pieces of architecture, as they were their initial intention. Marks (2017) further states that there is a significant Muslim community in the UK, as such the community has the time to work out what it means to have an English mosque, which could mean not having minarets, or domes on the structures. Due to the perception originating from Orientalism and Islamaphobia, the dome and *minaret* that are targeted in protests and objections.

These decisions taken by the Cambridge Mosque committee have resulted in a surprisingly positive support from the local Cambridge community unlike other mosques in England. According to Lomholt (2017:2) the committee has spent time consulting with the local community and local stakeholders to ensure this building will be truly inclusive and respectful of its context. It is hoped that the positive effect of the mosque will continue once the mosque has been completed.

## 4.5. The impact of the case studies on their surrounding urban fabric

## 4.5.1. Muslim presence in the urban fabric

The Al-Irsyad Mosque does have an impact on the urban fabric in that it has introduced a new style of mosque design to the community. Eskandari (2012:60) mentions that the Al-Irsyad Mosque has revealed a renaissance of creativity in contemporary mosque architecture. Most mosques built in Indonesia and in many parts of the world subscribe to the same formula of having a dome and *minaret* as core features of the design; however, the Al-Irsyad Mosque has changed this outlook. The design of the mosque has also shown that an Islamic structure can be minimalistic in its identity and still include Arabic inscriptions. It has also shown that the Arabic inscriptions can be used to create both an interesting facade and respond to climatic conditions facing the community.

The response of the architect to the local climatic conditions is the greatest impact of the mosque on the surrounding urban fabric. As mentioned by Laube (2016:74) the mosque offers a sheltered prayer space that establishes various relationships with the environment. The design does this through the vented facades, the *mihrab* opening and the encircling pond that allows the mosque to remain cool without the need for expensive air-conditioning systems. This allows for a smaller carbon footprint and therefore has less of a negative impact on the surrounding urban fabric and environment.

The Cologne Central Mosque is built on the land of an old factory in the district of Ehrenfeld. As part of the design phase, this piece of land was rezoned to cater for the needs of the mosque and the facilities that are housed in the mosque complex. According to Böhm (2017), the site had been rezoned with support from the city council, as the existing structures on the site were not suitable for the use by the Muslim community. This rezoning was the first impact the mosque complex had on the surrounding urban fabric as an active decision and steps had been taken to realise a purposebuilt mosque for the city. At the same time, this rezoning also resulted in being the catalyst for the protests and objections as mentioned before.

The second impact the mosque has had on the urban fabric is the realisation of the Muslim presence in the city of Cologne. Due to the nature of the previous building on the site, the presence of Islam and its most iconic structure the mosque was not really felt. The factory building was also not inviting from the outside. According to Böhm (2017), the mosque was more like a backyard facility that was not inviting due to the layout of the building structure. In my own personal experience of travelling to Copenhagen in 2009, the central mosque there was also housed in an old factory, which had few Islamic markings on the exterior causing me to initially doubt the presence of a mosque at that location. The Cologne Central Mosque with its contemporary interpretation of traditional mosque design brings a new aesthetic and identity to the urban fabric of the city. It has had a profound impact on the identity of the city and in particular on the district of Ehrenfeld. It provides a space that is to be respected by the surrounding community. According to Böhm (2017), the prestigious new building was meant to provide a dignified mosque and community centre for Muslim community of Cologne.

The inclusion of the Islamic cultural centre has also had an impact on the urban fabric. It has allowed for the introduction of an Islamic culture into a space that was traditionally Christian. It has further catered for the experience to be shared across multiple levels of the structure through the various public facilities on the street and courtyard levels. According to Böhm (2017), the construction reduces the inhibition thresholds while simultaneously increasing curiosity and fascination.

The Cambridge Mosque is not the first mosque to be built in England but it is the first purpose-built mosque to be built in Cambridge. This is despite the fact that the city of Cambridge has had a Muslim presence since the early 1960's. According to Murad (2017) Cambridge is one of the few towns in Britain that does not have a purpose-built mosque. Historically, the Muslim community would use repurposed buildings as prayer spaces, which often were insufficient for the entire congregation leading to members praying on the pavement and streets outside the venues. According to Murad (2017), the existing facilities are not sufficient for the numbers of worshippers and as such during

larger gatherings, alternative venues are sourced through the university or the local Christian churches. This has had a profound impact on the urban fabric of Cambridge as the non-Muslim community became indirectly involved in the affairs of the Muslim community. The mosque complex is to be built on Mill Road in the city of Cambridge. Currently according to Butt (2011:1), there are no landmarks or attractions nor does Mill Road feature heavily on the tourist guides to the city.

As the mosque is meant to provide a landmark to Mill Road, the impact of the mosque's identity was a vital step in addressing the needs of the community. According to Marks (2017), the identity of the mosque was first and foremost to be respectful of its neighbourhood and is meant to inject new life into the Mill Road area of Cambridge. As discussed previously the mosque facades makes use of locally sourced gault bricks and steps back to keep the mosque in the same scale as the surrounding residential buildings. The lack of a *minaret* was also in response to the scale of the surrounding buildings and the impact the mosque would have on the urban fabric. The inclusion of public gardens along the street front of the mosque and the community café is a further attempt at the mosque design being focused on providing a landmark within the urban fabric of Cambridge.

The impact of a Muslim presence on the urban fabric in the Mill Road area is not something new to the space. The current improvised mosque according to Lomholt (2017:1) is situated a few hundred yards away from the site of the Cambridge Mosque and has been operating for a number of years. This fact and the support garnered from the local community suggest that a Muslim presence in Mill Road has already been established and has been welcomed by the local community.

## 4.5.2. Property values around case studies

The Al-Irsyad Mosque is located in a predominantly Muslim area of KBP. As such, the mosque has not really had an effect on property prices compared to the effect of the South African mosques have had on the property prices. According to Kamil (2017), the mosque simply fulfils the need of a prayer space closer to the homes of those families in the area. It also seems the mosque serves to provide a prayer space for the students and teachers at the Al-Irsyad Islamic School.

At the time of this study, no information on the property values around the Cologne Central Mosque and the Cambridge Mosque could be verified or accessed.

# 4.5.3. Parking, traffic and street traffic

One of the negative impacts of most mosques around the world on the urban fabric is that of parking on a Friday during the mid-day prayers and during other events attended by large numbers of the Muslim community. This is usually a point of objection for most parties when attempting to prevent or halt the construction of a new mosque. The Al-Irsyad Mosque does not face this issue as it is built

in a predominantly Muslim community. The mosque also has considerable parking as can be seen in Figure 4.1 as well as having access to the Al-Irsyad Islamic School's grounds for larger gatherings.

In the case of the Cologne Central Mosque, this issue was resolved in the design phase and realised in its final construction as an underground carpark (Hummel, 2017:2). The carpark can be accessed from an entrance next to the staircase along *Verloer* Street and can be seen in Figure 4.10 in the bottom right corner of the mosque complex plan. As urban space was limited, the construction of the carpark under the complex was justified.

Through these effects on the surrounding urban fabric, it is clear that the identity of the Cologne Central Mosque and the facilities included within the mosque complex have the potential to influence the response to Islam in the city and in Germany. The mosque complex symbolises in this case the promise of an Islam that is open towards German society and the urban fabric (Hummel, 2017:3).

The impact of parking on the local community has also been addressed in the design of the Cambridge Mosque as well. Much like the Cologne Central Mosque, the Cambridge Mosque has included an underground carpark. According to Lomholt (2017:1), the underground carpark has a capacity for 80 vehicles. As can be seen in Figure 4.3, there is also an open piece of land next to the mosque, which could potentially be used for additional parking. The mosque committee took the decision to further cater for alternative modes of transport in the design of the mosque. According to Murad (2017), the mosque complex will be easily accessible by public transport, by bicycle and on foot to ensure that parking does not become an issue for the local community. As can be seen in Figure 64 there is parking facilities for bicycles all around the mosque site with a ramp leading to the underground car park in the bottom left of Figure 64.

# 4.5.4. Sustainability

The purpose of using stacked stones with voids in the façade of the Al-Irsyad Mosque was not only for aesthetic purposes. According to Kamil (2012:3), the façade has been designed to allow for natural ventilation to cool the mosque interior instead of using air-conditioning. Geographically, Indonesia lies along the equator and unlike South Africa or Europe, the country does not really experience low winter temperatures. The climate can become hot and humid resulting in spaces that require cooling and free flow of air to remain usable. The architect's choice of façade design is a direct response to the climatic conditions around the mosque. Kamil (2012:3) further states that the mosque is surrounded by water so as to lower the ambient temperature within the mosque especially during the hot season. In Figure 4.4, we can see the water surrounding the mosque as the light blue circle encircling the structure.

The mosque committee at the Cambridge Mosque also chose to continue the sustainable philosophy established by the introduction of bicycle parking and the use of locally sourced materials. According to Lomholt (2017) the mosque is to be Britain's first 'eco-mosque' being highly energy efficient with heat pumps, heat recovery systems, water recycling, green roofs, solar technologies and a slew of other 'green' technologies being including in the design. This sensitivity to the impact the mosque could have on the resources of the surrounding urban fabric is a strategy that has further entrenched the support of the local community for the mosque and also supports the philosophy of the faith in reduction of wastage. According to Murad (2017) it is hoped that the inclusion of sustainable technologies in the design of the Cambridge Mosque will further inspire architects and designers to include these technologies in their designs and through that, the Cambridge Mosque can have a positive impact on the urban fabric.

#### 4.6. Reflective Note

In concluding this chapter, it is clear that the international case studies have all faced different circumstances in regards to the political and social settings around the mosques as have those case studies in Johannesburg.

The Al-Irsyad Mosque being designed and built in a predominantly Muslim community has faced no significant objections or protests that could have affected its identity. Rather the architect chose to explore the concepts of mosque design in an attempt to present a unique Islamic identity to a traditional community. As the mosque addresses the climatic conditions in an interesting and unique manner, the identity of the mosque as an Islamic structure has been entrenched. I believe that if the Al-Irsyad Mosque has been built in a non-Muslim community the impact of the mosque's identity on the surrounding urban fabric would have been much greater than the current impact the mosque is having.

The Cologne Central Mosque has been designed to address the protests and objections to its construction and cater for the needs of the Muslim community. These protests have gone to a national level in an attempt to gain support though it eventually failed as the mosque committee had received the support of the city council. The mosque has made use of an opportunity to present a contemporary identity of Islam to western society in the form of the organically shaped prayer hall. The architect chose to include the key elements such as the dome and *minarets* in a manner that allows the mosque to portray a unique identity to the local community. The inclusion of various public facilities has further attempted to address the issues of integration in Germany by allowing non-Muslims into the mosque complex and providing an opportunity for members of the community to interact with each other. The presence of the objections and protests seems only to have

benefitted the design of the mosque as it pushed the committee and architect to develop a unique contemporary identity instead of a traditional identity that is merely a copy of another mosque.

The Cambridge Mosque is unique in this dissertation in that it is to provide prayer facilities for a Muslim community that is well established in the urban fabric of the city compared to those of the South African case studies. The mosque committee through its interactions with the architect and local community has managed to gain support for the construction of the mosque, yet has chosen to portray a contemporary Islamic identity that is challenging the notions of mosque design through the inclusion of a dome but also the exclusion of a minaret. Instead, the committee chose to celebrate nature and subtly express its mathematical order as is celebrated in Islam through its intricate artworks that makes use of geometry and floral motifs. These artworks became the inspiration for a structural system that is included in the design of the mosque and shows the flexibility of an Islamic identity in contemporary architecture and interior design. The design team and committee in conjunction with the surrounding community have chosen to include sustainable technologies in the mosque in an attempt to further entrench the notion of man's responsibility to nature as stipulated in the teachings of Islam.

It is clear that the design teams of the mosques being developed internationally have identified the challenge of creating an Islamic identity that is sensitive to the surrounding urban fabric and existing community. The design teams have chosen to address this by returning to the original purpose of the mosque as a prayer space and a community centre that fulfils the needs of the local community as a whole and not only the Muslim community that use the mosques. Inclusion of community focused facilities, sustainable technologies, locally sourced materials and allowing the mosques to include all members of the community are some of the strategies being used internationally to address the issue of developing an Islamic identity in a mixed faith community. The circumstances faced by each mosque concerning the response from the community have clearly influenced the architectural and interior design identity of the each mosque. In the circumstances of the international case studies, this influence in my opinion has had a positive effect on mosque design as it has allowed for new aesthetics to be introduced into this field of design. These new identities are changing the perception of Islamic architecture and interior design when compared to the traditional identities of mosques around the world.

#### 5. CHAPTER 5: CONCLUSION AND RECOMMENDATIONS

#### 5.1. Introduction

The aim of this study was to determine how multi-cultural communities have influenced the interior design and architectural identity of community built mosques in South Africa. In this chapter, I have identified themes in order to conclude the findings presented in the previous chapters and to fulfil the aim of the study. I also reflect on the advantages and limitations of the study and present a personal reflection of the research process undertaken.

## 5.2. Influence of the community on the visual identity of the mosques

The identities of the chosen mosques in this study have been influenced by the support or objection of the community to the presence of the mosque in the urban fabric. This influence can be seen in the facilities included within the mosque complex such as classrooms, community halls. libraries and even cafés. It can further be seen in the orientation and identity of the entrances to the street fronts. The inclusion or exclusion of the dome and *minaret* in the design of the mosque as well as their dimensions of the elements is further evidence of this influence. It is clear from this study that the identities of community-built mosques in multi-cultural suburbs of Johannesburg are struggling with the notion of a uniquely South African identity.

The international case studies have also been affected by the cultural heritage of the community using the mosque. In the case of the Cologne Central Mosque, the shape of the mosque was inspired by the mosques of Turkey with its interior design being heavily influenced by Turkish Islamic patterns as seen on the walls and in the shape of the *mihrab* and *mimbar*. This had occurred due to majority of Muslims in Cologne being of Turkish heritage. Where the international case studies differ to the local ones is in the influence of the architect and designers on the identity of the mosque.

The Cologne and Cambridge mosques have been designed by non-Muslim architects who were not part of the community using the mosques, nor did they share a cultural heritage with the Muslim community. This allowed for the architects and designers of these mosques to approach the concept of identity with fresh ideas and influence stemming from other cultural backgrounds. The result of this approach is the introduction of identities that challenge the notions of what a mosque should look like yet at the same time is sensitive to the Islamic nature of the building.

## 5.2.1. Response to the community in the architectural identity

The architectural identities of the case studies have varied greatly from the traditional aesthetic of *Masjid-ul-Furqaan* through to the contemporary aesthetic of the Cologne Central Mosque. The finishes of the case studies have also varied greatly. Their spatial planning has however not varied as

much as the aesthetic. The mosques tend to follow a similar formula for their spatial layouts. Slight variations in the location of the *Wudhu Khana*, courtyard, toilets and the supporting spaces occur due to conditions of the various sites. Key architectural elements such as the dome, *minaret*, *qiblah wall*, and entrances have been interpreted with the same variation in aesthetics as that of the exterior facades. The inclusion and exclusion of these elements has varied as well from mosque to mosque with the common trend internationally being to exclude either the dome or the *minaret*. The exclusion of these elements has most often been as a response to objections received from the local community. This has in turn has been applied to the arches and entrances as these elements also make up the architectural identity of the mosque.

Interestingly the non-Muslim community members of the local case studies had indicated that the inclusion of key architectural elements such as the *minaret* and dome were essential to the design of a mosque. Brummage (2017) stated that according to her knowledge, a mosque has to have a *minaret* and dome just as a church has a bell tower. For this reason, the local case studies had never received objections such as those seen in Europe. In fact, the non-Muslim members of the community have in most part welcomed the local case studies. According to Nossel (2017), the mosque was required in Houghton to facilitate the needs of the Muslim community. Furthermore, the architectural identities of the local case studies appear to represent the economic standard of the surrounding community. According to Ellis (2017) both *Masjid-ur-Rahmah* and *Masjid-ul-Furqaan* fit well within their suburbs as they reflect the choices of the community with Houghton being the more exclusive space and thus it shows in the style of the mosque. This was reflected in the more traditional identity that was developed for *Masjid-ul-Furqaan* by the architect as a response to the brief of the mosque committee.

### 5.2.2. Response to the community in the interior design identity

The same conceptual ideas have been carried through to the interior design identity of the mosques. Key elements of the interior spaces such as the *qiblah* wall, *mihrab*, *mimbar*, *musalla* and Arabic scripts have been included in a combination of traditional and contemporary styles. The common thread through all the mosques of this study is the inclusion of these elements. Even though the forms may vary, the position and orientation of these elements is universal in all the mosques studied.

The interior design identity of the mosques studied seems to be influenced by three primary factors. These are the cultural background of the Muslim community, the cultural background of the architect and designers and the available funds collected by the community. In most cases, the greatest influence on the identity of the structure has originated from the cultural background of the

community. In communities where the Muslim members originate from a single cultural group, the identity of the interiors is reminiscent or inspired by the identity associated with that specific cultural group. In the case of the South African mosques, the association with the Indian sub-continent and the Middle East has allowed for these mosques to be developed with stylistic cues from these regions. However as the interior of the mosques are rarely seen by non-Muslim members of the community, their influence is negligible to the interior design identity. According to Brummage (2017), she has never been inside *Masjid-ur-Rahmah* nor does it concern her how the interior has been designed. The influence of the Muslim community is more active here as according to Jeena (2017) the mosque is a deeply spiritual space that he believes should be comfortable and welcoming to its users. As the Muslim communities look to find an identity for themselves, the mosques are poised to introduce this identity to the community.

The architects and designers of the local case studies are from the same cultural background as that of the Muslim community, unlike those of the international case studies. For this reason, the mind-set of the design team is the same as that of the community. This further reinforces the influence of the cultural heritage on the interior design identity of the local case studies. According to Mbele (2017), he was surprised to learn the non-Muslims have designed mosques internationally as he believed only Muslims are allowed to design the mosques. The international case studies have dealt differently with the interior design identity in the sense that the design team has developed interior layouts and aesthetics that are not influenced by specific cultural heritages. Marks (2017) stated that the interior of the Cambridge mosque was based on the study of geometry and nature in Islam in an attempt to create a unique identity for the space.

As the Muslim community around the selected case studies support and fund them, the availability and use of funds plays a major role in determining the outcome of the design. The communities that tend to have the ability to access funds quickly, also tend to have more cohesive interior design identities for the mosques. According to Marks (2017), the interiors of the Cambridge mosque were designed and costed as part of the initial project and not as an add-on to the project. This is in contrast to the local case studies where the projects are completed in stages with the interior design identity losing some of its relevance. This was seen especially in the Auckland Park Mosque where the *mihrab* and *mimbar* contrast entirely to the identity developed for the carpets and frosted vinyl panels.

# 5.3. Inclusion of the concepts of hybridity in the mosques

The concept of hybridity has been found in all the mosques discussed in this study. In the local case studies, this hybridity is explored through the identity of the buildings. However, as the architects

and designers are struggling to find a South African identity for community-built mosques, the effect of hybridity is not as deeply explored as it could potentially have been. This has resulted in a superficial attempt at addressing the hybrid nature of Islamic structures in a non-Islamic space.

According to Brummage (2017), most mosques in Johannesburg tend to look similar to her except for *Masjid-ur-Rahmah*, which seems to blend western architecture with Islamic architecture.

In the international case studies, the concept of hybridity is far more deeply entrenched in the identity of the mosque. This could be due to the influence of debates around the identity of Islam and the mosques and the response by the architects and designers in addressing these debates. It is clear though that the cultural background of the design team and the issues facing the international case studies have allowed for better exploration into the concepts of hybridity. This can be seen in the architectural and interior design identity, spatial planning and the facilities of the case studies. According to Böhm (2017), the Cologne Central Mosque was designed to represent a hybrid identity of Islamic and German cultures in a single space.

## 5.3.1. Openness of the mosques to the surrounding community

The concept of openness in the selected case studies has varied based on the political climate at the time of the selected case studies inception. *Masjid-ur-Rahmah* and the Cologne Central Mosque have embraced the concept of openness through the design of their facades. This was done as a response to the objections that arose during the planning and design of the mosques. The committees of both case studies have attempted to use glass infills to allow all members of the community to look into the structure in an attempt to dispel any misconceptions of Islam. Furthermore, these two case studies attempted to draw people into the structure by creating public spaces accessible to the entire community. To further enhance this aspect of the design, the entrances were chosen to open up to these public spaces. According to Brummage (2017), *Masjid-ur-Rahmah* is unusual in that the main entrance to the mosque is close to the street though this is an aspect of the mosque that is appreciated by the non-Muslim members of the community, as the space appears welcoming.

In contrast to those two case studies, *Masjid-ul-Furqaan* and the Cambridge Mosque have chosen to include a less open façade and set of entrances. The biggest change was the political climate and objections to the mosques. Both mosques were developed at a period where Islam was no longer as mysterious as it had been due to the communities' interaction with Muslims. Furthermore, both mosques received no objections to their development. According to Nossel (2017), the Houghton community had lived with Muslims far longer than the community of Emmarentia which had allowed them to learn more about Islam before the mosque was developed. As such these two case studies did not need to draw non-Muslim members of their communities into the structure.

The Auckland Park Mosque and the Al-Irsyad Mosque have both been built on the grounds of Islamic Schools. According to Mbele (2017) he has always understood that the Auckland Park mosque is part of the Islamic School and did not warrant any objections. The Al-Irsyad Mosque is also in a predominantly Muslim community, which resulted in the mosque not receiving any objections to its construction. This has allowed the design team a degree of flexibility, which they would not have received previously.

## 5.3.2. Inclusivity in the mosques

The concept of inclusivity is common through all the selected case studies. The design teams and committees have attempted to address this in a variety of ways. The first of which is inclusivity of all members of the Muslim community in the facilities at the mosque. This was achieved by all case studies catering for female members of the Muslim community. In all the case studies except the Allrsyad Mosque, there are designated spaces within the mosque that are only to be used by females. This also included designated toilets and *Wudhu Khanas*. The inclusion of *madressahs* in the mosque complex can also be seen as an attempt to include all members of the Muslim community. According to Ellis(2017) most non-Muslims within the community know the mosque caters for the spiritual and religious needs of all members of the Muslim community.

The selected case studies have also sought to provide facilities that could be used by the entire community. By doing so, the case studies have sought to fulfil the original purpose of the mosque as a community centre that is to develop the people it serves. Some of the facilities included across the selected case studies are classrooms, meeting rooms, libraries, community halls and a café. However, with the local case studies the non-Muslim members of the community have no knowledge of these facilities. According to Diayar (2017) the mosque may have facilities for the entire community, however it is not publicised or currently even used by non-Muslim members of the community. The local case studies rarely hold open days where all members of the community are invited to come see the mosque and interact with users of the mosque. It does seem though internationally these types of events are happening frequently. This is an attempt to address Islamaphobia and the misconceptions about Muslims and Islam. According to Böhm (2017) the mosque complex at the Cologne Central Mosque has always been a space for all of the community to use.

At the Al-Irsyad Mosque the circumstances are different to the other case studies. As this mosque is essentially the main prayer hall with no courtyard or adjoining facilities, the structure is primarily used for *salaah*/prayers. Instead of having individual spaces for men and women, there is stipulated times for both genders to use the space especially as it is part of the Islamic School. The space is also used for other community functions and celebrations, which allows it to serve the community.

### 5.3.3. Additional concepts of hybridity included in the mosques

Apart from the previously stated concepts of hybridity included in the case studies. The Al-Irsyad Mosque, the Cambridge Mosque and *Masjid-ur-Rahmah* have all attempted to include other concepts of hybridity in the mosques. The concept of the Muslim 'other' has been addressed by all mosques discussed in this study except for the Al-Irsyad mosque due to it being built in a predominantly Muslim community. As such, the architects, designers, and committee members have influenced the manner in which each of the mosques address this concept. The political and social circumstances at the time of the design phase of each mosque have played a major role in influencing the parties involved in the designing of each mosque. The Al-Irsyad Mosque attempts to enhance the spirituality of the space with water, filtered natural light and framed views of the surrounding landscape.

All three case studies have included aspects of sustainability in the design and functionality of the structure. The structures make use of passive cooling, solar and LED technologies in an attempt to lower their carbon footprint. Cambridge Mosque and *Masjid-ur-Rahmah* also make use of borehole water, grey water recycling, heat pumps and heat recovery systems to further lower the carbon and water footprint of the complex. As these technologies are not often found in mosques it allows the structures to address the concept of hybridity. Unfortunately, Cambridge Mosque is the only case study that is actively promoting the sustainable technologies used within the structure. According to Ellis (2017) most community members do not know the mosque has such technology and is trying to reduce its energy and water usage, which shows consideration for the community.

# 5.4. Addressing The Muslim 'other' through the mosques

#### 5.4.1. Effect of the case studies' identity on perception of Islam

The selected case studies have all had an effect of the perception of Islam in their communities. This can be seen as either a positive or a negative effect on the communities. In both cases this is linked to non-Muslim member's perception of the mosques, which in the case of a negative effect is linked to the portrayal of Islam in popular media as well as misconceptions of the faith and its people due to a lack of information. In spaces where Islamaphobia is an issue, this is a common challenge faced by mosques. In the case of the selected case studies the architectural identity of the mosque becomes a target as a representation of the Muslim 'other'. The element of the architectural identity that is targeted is the dome, *minaret* and the *adhaan*. To remedy this, the design teams and committees of the case studies come to a compromise with the community in an attempt to change the perception of Islam to a positive one. From the selected case studies, the Cologne Central Mosque and *Masjid-ur-Rahmah* have had to deal with this. The resulting effect was a change to the design of the

*minarets* of both mosques as well as the implementation of a transmitter system to broadcast the *adhaan*. The design of the facades tends to be more open with large glass fronts to facilitate views into the mosque. This seems to be an attempt by the design teams to dispel the fears often associated with mosques.

In the case of a positive effect, this is also linked to the perception of Islam by the non-Muslim members of the community. However, in this case, interaction with Muslim members of the community on a daily basis and the construction of mosques in nearby suburbs facilitate a positive perception of the Islam. The resulting effect is that there are no objections to the construction of the mosque in those communities. From the selected case studies, the Auckland Park Mosque, Cambridge Mosque and *Masjid-ul-Furqaan* have had the benefit of this scenario. It has resulted in the design teams and committees developing an architectural identity that is a celebration of Islamic architecture and design instead of structures that are attempting to be politically correct. The facades of the mosques tend to be a bit more shielded, allowing selected views into the structure. It is evident that the main prayer halls in these mosques are the spaces that are shielded from view in an attempt to provide a more private space for worshippers. Even though these case studies did not face the objections of the previous case studies, they still use the transmitter system to broadcast the *adhaan* instead of calling it out over the loudspeaker.

It can be noted that in the Al-Irsyad mosque, the concept of the Muslim 'other' is not present yet views into the interior of the mosque have been carefully crafted to provide a private space for worshippers. This shows that in a community where the Muslim presence is not viewed as a threat the focus of the mosque prayer hall is to provide a secluded space from daily life for members of the Muslim community who wish to use the space.

# 5.4.2. Change to community dynamics

In the communities of all the case studies, prior to the construction of the mosque, the percentage of the Muslim residents in the community was low. Once the construction of the mosque begun in these communities, the percentage of Muslim residents in the community increases as well. This process continues as properties change hands resulting in a reduction in the percentage of other cultural and religious groups within the community. According to Brummage (2017) the community around *Masjid-ur-Rahmah* was once mainly made up of Christian and Jewish residents, which has now change to mainly Christian and Muslim residents. As this happens, it necessitates a change to the facilities and amenities within the communities to cater for the Muslim residents. It can be said that the Muslim 'other' now becomes the Muslim norm for the community. According to Nossel (2017) it is now normal to see residents dressed in Islamic garb within the community.

## 5.5. The influence of the muslim presence in the community

As with most public buildings regardless of their use, the case studies discussed in this study have had an impact on the surrounding urban fabric. The impact has varied from the subtle changes brought about in the urban fabric by *Masjid-ul-Furqaan* in Houghton to the celebrated changes brought about in the urban fabric by the Cambridge mosque.

The most common influence the mosques have had on the urban fabric is to symbolise the introduction and continued presence of a Muslim community. According to Brummage (2017) the construction of Masjid-ur-Rahmah signalled the presence of Muslims in Emmarentia and it continues to draw in Muslim families. In most cases once the mosque is built, the Muslim presence has been established and promoted within the community. It is at this point that the far-reaching impact of the mosque can begin to take effect. As is the case with the local case studies, the percentage of Muslim residents in the surrounding urban fabric increases rapidly as Muslim families migrate to these spaces to be near to the mosques. This in turn has a knock on effect to the property prices, which usually increase with the presence of the mosques. As the Muslim community grows the community changes to facilitate the needs of the Muslim community as mentioned before. Halaal food outlets and other amenities develop to ease the lives of the Muslim members of the community. In the case of the Greenside/Emmarentia area, Muslim individuals who are also members of the local community and make use of the mosque in the suburb run most of these new businesses. According to Nossel (2017) the Houghton community does not have as many Halaal food outlets or Muslim owned businesses as Emmarentia, however some businesses are owned by Muslims. It is the aim of the Cambridge Mosque to have such a far-reaching and profound impact on the surrounding urban fabric.

However, the case studies also have a negative impact on the surrounding urban fabric. All the mosques except for the Al-Irsyad mosque have an issue with parking. This is especially prevalent on a Friday during the midday *Jumaah* prayers when the mosques are usually full to capacity with worshippers, as Muslim men are required to attend this congregational prayer. According to Ellis (2017) there has been constant issues with parking around the mosque on a Friday. The Cambridge and Cologne Central Mosques have sought to address this through the inclusion of underground parking facilities in an attempt to address the parking issue that was identified during the planning phase. In South Africa, it is not common practice to include such parking facilities though mosques in predominantly Muslim communities have managed to acquire large plots of land for parking

purposes. The South African mosques in this study all struggle with the parking facilities and as the communities grow, even the daily prayers gather large groups of worshippers which results in parking issues. However the mosque committees have organised security guards to aid with parking.

The Cambridge Mosque's impact on the surrounding urban fabric with regards to the mosque's usage of electrical and water resources are an interesting development in mosque design. The mosque is hailed as Britain's first sustainable mosque. It is being viewed by many Muslim communities around the world as a sustainable solution to the monthly expenses of the mosques. According to Murad (2017) it is the hope of the committee that the sustainable technologies employed at the Cambridge Mosque inspired other monumental structures to become more sustainable. *Masjid-ur-Rahmah* has currently retrofitted solar systems to power the lights and sound systems on a daily basis allowing the mosque to have a minimal electrical and water footprint. Based on the performance of these technologies at the Cambridge Mosque, the future community-built mosque could be run off grid and thus have less of an impact on the electrical and water resources of the community. It could also result in the promotion of sustainable technologies to Muslim communities who use mosques like the Cambridge Mosque.

#### 5.6. Recommendations

Muslim communities in Johannesburg will continue to grow as young Muslim families migrate from the traditional Muslim communities' setup during the Apartheid era of South Africa to newer communities such as Auckland Park, Emmarentia, Greenside, Houghton, Linden, Northcliff and Victory Park. They choose to do so as these communities are seen to be well established, safe for Muslim families to establish themselves and these areas are located centrally within the city, making travelling around the city easy. According to Soni (2017) states that living in Houghton allows for him to travel shorter distances to work in less traffic, which results in less stress. However, younger Muslim communities are being established in other parts of the city such as Fourways, Kelvin, Montgomery Park, Morningside, Norwood, Roosevelt Park and Sunninghill as young members of the previously established Muslim communities begin to build their own families in these fledgling Muslim communities. Through my personal experience of having many of my close friends move out of the established Muslim communities of Northern Johannesburg to the fledging communities mentioned previously, I have come to understand that these communities face the same challenges that were faced previously. As the fledging communities develop the need for mosques in those communities becomes greater.

Through this study I have attempted to highlight the challenges faced by the communities around the case studies, the techniques that have been used to address these challenges and the resulting

effects that these have had on the surrounding communities. It is my hope that the examples discussed in this study serve as inspirational models to architects and designers of future mosques in their attempt at developing an Islamic identity for the current fledgling Muslim communities of Johannesburg.

I would specifically recommend that the international case studies be looked at as models to addressing the issues of identity, hybridity, the Muslim 'other' and the social impact of the mosque on the urban fabric. Techniques such as, addressing the climatic conditions of the various sites, addressing the street fronts and public spaces around the mosques as well as addressing the concept of inclusivity are essential in the success of future mosque projects in Johannesburg. The architects and designers of the international case studies have developed unique solutions that are suited to the urban fabric surrounding each mosque and the community that it serves. This approach to dealing with each new mosque site could potentially yield better creative outputs for architects and designers.

# 5.7. Advantages and limitations

The most prominent limitation that was faced during the process of completing this study was the lack of written documentation in regards to the case studies and particularly, in regards to the interior design of the mosques. It is most evident in the local case studies, which has not been reviewed or documented in any local or international architecture or interior design journals. This resulted in a lack of imagery of the local case studies.

The international case studies were better documented through digital articles and websites, which proved helpful. As the mosques were better documented it was also easier to find images of the mosques. The other limitation faced in regards to the international case studies was contact with the communities and the mosque committees. As I had to communicate through email, I had to wait for the various individuals to reply to emails, which delayed the process compared to the South African case studies.

The limitations faced did prove to be an advantage concerning the local case studies as I personally got to photograph and physically experience each one. Through the interviews, I was also able to gain an in depth understanding of the case studies, which would not have been achieved by reading through journals. The sourcing of information on the international case studies through email correspondence allowed me to gain in depth information direct from the architects and mosque committees even though I could not meet with them personally. This has resulted in development of my professional network as an interior designer and academic.

## 5.8. Further research possibilities

In the South African case studies, the mosques were designed solely by the architects with input from the mosque committee and with little interaction with the surrounding community. The mosque committees have determined the needs of the community and conveyed this to the architect. The community is then presented with a proposal for the mosque design and requested for donations. It is not the intention of this study to suggest a change to this system though this could offer an opportunity for further research into mosque design in which the community surrounding the mosque gets to play a larger role in the design of the structure.

A further research possibility, which I have identified, is the benefit an interior designer could have on the architectural and interior design identity of the mosque. It is common practice to employ the services of an interior designer in high-end residential, retail and corporate projects to ensure that the spaces are well designed. However, this is not the case when it comes to the designing of mosque interiors. In South Africa, it is mostly the architect that is employed by the committee to develop the interiors as part of the architectural service provided. In other project types, the interior designer/s would often be part of the architectural firm or collaborate with the architects on these projects. This could either be from the start of the project or during the design phase. In most cases the collaboration between the architect and interior designer yields cohesive spaces that are as practical as they are beautiful.

Another research possibility that I have identified is the use of sustainable technologies in mosque design. There is currently a major drive towards including sustainable technologies in buildings across all sectors of the built environment including religious structures. This drive is occurring on a global scale as a response to the growing cost of running and maintaining buildings. Architects and designers are responding to this drive by including sustainable technologies in their designs in a creative manner. As these technologies are being included in mosque design, it will be interesting to research into the types of sustainable technologies that are being included in mosque design and how these technologies are affecting the interior design identity of the structures.

### 5.9. Reflective note

As a young designer and researcher, the seeds for this study were planted many years before I began my undergraduate studies in 2005. It had been planted by my father whom I would accompany around South Africa to various mosques as part of his religious duties as an Islamic scholar. He would often attempt to describe to me the unique features of each mosque. My interest in the topic was formalised in 2013 when I was commissioned to design an extension to *Masjid-ut-Taqwa* in

Homestead Park. During this process I brought up the topic with a fellow researcher who found the topic was quite interesting and challenging at the time.

My role as a researcher though during the course of this study has been mostly one of discovery. I am a devout Muslim and hail from a fairly traditional Muslim family, I am also a professional interior designer and academic. My training and experience in the design industry provided me with insights into the mosque design that differs from the rest of the communities surrounding the selected mosques whether they are Muslim or non-Muslim. My sense of design has been trained over many years to understand how spaces flow and interact with their surroundings as well as noticing architectural and interior design identities. I was able to easily relate my understanding of the mosques to the participants of the interviews and understand the context of their opinions. The design process and on site experiences are familiar to my frame of reference. However, I found that I was constantly discovering new information in regards to mosque design and the concept of what a mosque can be.

I approached this study with the excitement and enthusiasm of young design students as they begin their studies. My experience as an academic has given me the confidence to easily approach and interview community members in an attempt to gain valuable insights into the various mosques. As part of the interview process, I was able to meet physically or through E-mail correspondence with the architects and designers of the mosques, which are well recognized by the public. This opportunity provided me with the honour of gaining first-hand knowledge on the mosques in regards to my research topic.

This study has provided me with an opportunity to study various mosque designs in detail from the perspective of an interior design researcher. The experience has been inspiring and refreshing as new concepts were discovered in the process of this study. I have attempted to communicate this experience to the reader in an attempt to inspire other designers and interested readers to further explore these concepts when addressing the issues faced by future mosque designs.

The journey of this study ends at a time where I visit the mosques as an adult and no longer a young boy. I perceive the identity of the mosques in a more profound manner and experience the beauty of the interiors with a greater sense of understanding. Through my understanding I have attempted to draw attention to the various issues faced during the design of community-built mosques in multicultural spaces and document potential techniques that have been used by the architects and designers of these case studies.

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### **Appendix A: Letter of Introduction**

Aslam Mahomed 7 Komatie Road Emmarentia 2195 June 2016

(Name)

(Address)

RE: Introduction to Research in the field of interior design

Dear (insert name here)

My research focuses on the challenges faced when developing a community built mosque in an established multi-cultural suburb of Johannesburg that did not previously have a Muslim presence. My research includes interviews with the architects or principle designers of community-built mosques that have been developed since 1994 and I have identified the following projects as case studies for my research:

## **South African Case Studies**

Masjid-ur-Rahmah (2010) SAB Architects

Masjid-ul-Furqaan (2011) SAB Architects

Auckland Park Mosque (2011) Anwar Deedat Architects

# **International Case Studies**

Al-Irsyad Masjid (2010) Urbane Indonesia Cologne Central Mosque (2017) Böhm and Partners Architecture Office Cambridge Mosque (under construction) Marks Barfield Architects

The purpose of this letter is to enquire whether I could contact you as an expert in your field, with regards to setting up an appointment to discuss (insert name of project here) with you. The interview would take the form of an open-ended interview and I would be able to send you the themes of the questions beforehand. I anticipate that the interview would take about 60 minutes to complete. Data gathered during the interviews will not be published anonymously, since it is important to verify information through the linking of data to the buildings listed above. You would therefore have the opportunity to read the transcript of your interview prior to publishing of the data.

The envisaged output of this research is a dissertation focussed on South African mosque architecture and interiors. This study could be of interest to architecture and design students,

professional architects and designers as well as mosque committees involved this sector, furthering awareness of the issues faced by architects and designers when designing community-built mosques in multi-cultural suburbs.

Please let me know if you would be willing to take part at a convenient time during 2016.

Kind Regards

Aslam Mahomed blackchillidesign@gmail.com

Cell: 0718815192

Appendix B: Informed consent form for community members

RE: Research Project for Aslam Mahomed.

Dear community member

Thank you for agreeing to participate in this interview. This consent form is to ensure that you understand the purpose of your participation in the study and that your rights are protected during the interview. Please read through the following conditions and should you agree to the terms, kindly

sign this form in acknowledgment of your consent to participate in the interview.

The aim of this study is to identify the effect that local communities have on the identity and interior

design of the community built mosques in South Africa.

• Your participation in this study is voluntary and you may terminate the interview at

any stage.

• The interview will take approximately 30 minutes to complete.

Your participation is as the user/non-user of the mosque/s identified in this study.

You will not be able to remain anonymous.

The interview will be conducted by Aslam Mahomed and recorded using written

notes, which will be formalised as an interview script.

• The interview script will be kept should you require a copy of the script in the future.

• Should you wish to receive a copy of the dissertation at the end of the study, this can

be made available to you in a digital/electronic format.

 Researcher: Aslam Mahomed

 \_\_\_\_\_Signed on this \_\_\_day of \_\_\_\_\_\_\_201\_, at \_\_\_\_\_\_\_\_.

**Participant:** Name of Participant

Signed on this day of 201, at .

Aslam Mahomed 071-881-5192

blackchillidesign@gmail.com

156

## Appendix C: Interview questionnaire outline for community members

#### Introduction

- Are you a member of the local community around the chosen mosque?
- Are you a user of the mosque's facilities?

#### Location

- In what way do you think the location of the mosque has an impact on the local community?
- In your opinion, would a different location have had a different impact on the local community?

# Identity

- Does the mosque stand out from the surrounding buildings as something foreign?
- What is your opinion of the mosque in your community?
- Does the presence of the minaret and dome in the mosque design affect your impression of the structure?

#### **Muslim Community**

- What is your opinion of the Muslim community in your area?
- In what way does your opinion of the Muslim community affect your opinion of the mosque?

### **Public Space**

• Do you believe the mosque is giving back to the community or just simply taking up space in the community?

#### **Future Consideration**

• What recommendations would you give to the local mosque management to better the mosque?

Appendix D: Informed consent form for architects and designers

RE: Research Project for Aslam Mahomed.

Dear (Insert name here)

Thank you for agreeing to participate in this interview. This consent form is to ensure that you understand the purpose of your participation in the study and that your rights are protected during the interview. Please read the following conditions and should you agree to the terms, kindly sign this form in acknowledgment of your consent to participate in the interview.

The aim of this study is to identify the effect that local communities have on the identity and interior design of the community built mosques in South Africa.

 Your participation in this study is voluntary and you may terminate the interview at any stage.

• The interview will take approximately 60 minutes to complete.

• Your participation is as the architect/designer of the mosque/s identified in this study, thus as an expert in your field, you will not be able to remain anonymous.

• The interview will be conducted by Aslam Mahomed and recorded using written notes, which will be formalised as an interview script.

• The interview script will be kept should you require a copy of the script in the future.

• Should you wish to receive a copy of the dissertation at the end of the study, this can be made available to you in a digital/electronic format.

Researcher: Aslam Mahomed		
Signed on thisday of	201, at	
Participant: Name of Participant		
Signed on thisday of	201, at	

Aslam Mahomed 071-881-5192 blackchillidesign@gmail.com

158

#### Appendix E: Interview questionnaire form for architects and designers

#### Introduction

- Which of the three case study mosques have you been involved in?
- Are you a member of the local community around the chosen mosque?
- Are you a user of the mosques facilities?
- What specific requirements from municipality did you have to take into account when designing the mosque?

#### Location

- In what way do you think the location of the mosque has an impact on the local community?
- In your opinion, would a different location have had a different impact on the local community?
- In what way did the location of the mosque influence the design of the mosque?

## Visual identity

- Does the mosque have a specific architectural style and if so, what style was referenced?
- Is the style-referenced part of Islamic architecture or is it borrowed from other cultures?
- Was the design of the mosque influenced by the design of another mosque?
- Would the design of the mosque still be effective without the presence of the minaret and dome of the mosque?
- In what way did the surrounding community influence the visual identity of the mosque?
- Was the mosque designed to reflect the visual identity of the surrounding urban fabric?
- What issues were there when incorporating the visual identity of the surrounding urban fabric into the mosque design?

#### **Interiors**

- How influential was the exterior aesthetic on the interior design of the mosque?
- Does the interior design of the mosque cater for male and female users?
- In your opinion, does the interior design of the mosque represent the community?

## **Community Involvement**

- Did you consider the involvement of the community in the design process of the mosque?
- If yes, in what way did the community get involved in the design process?
- How effective was the involvement of the community to the design process?

## **Public Space**

- Do you believe the mosque is giving back to the community or just simply taking up space in the community?
- Was the mosque designed to be a public space for the community or simply as a prayer space for the Muslim community?
- If the mosque is designed as a public space, what aspects of the mosque promote the idea of a public space?
- Are these public spaces within the mosque from Islamic architecture or are they borrowed from other architectural styles?

# **Future Recommendations**

 Based on your experience during the design and construction of the mosque, what future recommendations would you give to communities when designing and constructing a new mosque?