

IS THE MOSQUE A MALE-DEDICATED BUILDING?! **A Critical View on Women Praying Space in Contemporary Mosque Design**

Yasser Megahed

PhD, MSc, Dip. Arch, BArch (Eng.),
Senior Lecturer in Architecture
Cardiff University

ABSTRACT

Contemporary approaches to mosque design display a myriad of richness in expressing the sacred in the Islamic culture and religion. Still, some foundational questions about the process of mosque design, particularly those regarding its dynamic functionality and the complex needs of its multiple users, have not yet been convincingly tackled—a case in point is the design of the space dedicated to women in the mosque.

Other than a general rule that men and women should not pray in the same rows, evidenced by the Prophet Mohamed's mosque in Medina, there is no specific guidance on how to design the women praying space. In turn, different cultural conventions and interpretations of Islam in the diversified Muslim societies have produced some norms regarding the spatial organizations for women-space in the mosque. These norms may include separating the ladies' prayer space with a barrier or allocating it to a top or bottom floor that is often accessed by a dedicated entrance away from those to the men's prayer hall. While not directly derived from Islamic texts, these norms were absorbed in the expected and accepted approaches adopted by architects and building regulators regarding how to design women praying halls in contemporary mosques.

The prevalence of those norms has sparked various jurisprudential and socio-political debates about the role of women in Islam. Besides, many architectural questions can also be posed about the inefficiency of those rarely challenged norms to fulfil the needs of the female users of the mosque and to engage them in its broader spatial and participatory experience. In turn, the commonness of those norms in mosque design may have emphasised a certain perception that the mosque is a male-dedicated building. Setting this out, this paper aspires to interrogate the architecture of women praying space in contemporary mosque design. With shades from the debates about equality, inclusion and fair opportunities, the paper will operate an architectural forensic analysis of examples of women praying spaces in conjunction with a review of some of the increasing – though still limited – literature tackling the issue of women space in mosques.

The paper will end with speculations on new possibilities to incorporate the functional complexities associated with the women praying space to become an integrated part of the spatial and participatory experience of the mosque.

Introduction

Mosque design has become a rich pool for architects to express the sacred in the Islamic culture and religion, and their associated symbolism. The architectural program of the mosque simply revolves around a large space for praying (a generic multipurpose hall, often dedicated to male users) with smaller adjunct spaces connected to it. This straightforward brief has encouraged many architects to put their energy onto the formal expression of the spiritual and symbolic meanings affiliated with the building, specifically the visually intriguing architectural elements of this typology such as: the main hall, the courtyard, the minaret(s), the dome(s), etc. In this popular architectural recipe, though, not much seems to be done in regards to tackling key questions related to how the mosque performs and how it fulfils its particular spatial and functional targets, particularly those regarding the underlying complexities of its dynamic functionality and the intertwined needs of its multiple users (Megahed, 2019). It can be argued that one key element that has not seen much development is the design of the women praying hall in the mosque.

In contemporary mosques, women praying halls are often regulated to a screened space in the back of the main praying hall, a small room upstairs, downstairs, or allocated to an adjacent structure. It is hard to confirm the exact origin of this architectural tradition, but it can be observed that this tradition has become an accepted practice from early 20th century in many Muslim regions. This common practice has become a taken for granted solution in the contemporary architectural approaches to the design of the mosque, defining the expected and accepted norms about the women space in this architectural typology. The prevalence of those norms has sparked various jurisprudential questions about the place of women in the mosque and broader socio-political debates about the role of women in Islam. Aside from those broader debates, there are key questions that architectural designers need to ask themselves regarding their role in those debates and their responsibility towards one of the key user-groups of this building typology. These may include questions about the quality of the spatial and participatory experience associated with common practice in designing the women praying spaces (in comparison with those designed for other user-groups); let alone: the ability of these spaces to engage their users in the broader objective of the mosque to act as a place for the Muslim community to share knowledge, interact, and exchange of goodwill face to face under the wider umbrella of Islamic social inclusion (Nadwi, 2015).

Setting this out, this essay aspires to interrogate the women praying space in contemporary mosque design from an architectural point of view. The paper will come across the story of the women praying space, its history, the evolution of its design, the religious debate about it, and finally its common practice as defined in the building regulations of different Muslim regions. The paper will then operate an architectural forensic analysis on examples of women praying spaces in contemporary mosques, reading through them the commonplace functional and spatial experiences of the women users in the mosque, and show how the accepted contemporary mosque design formula may have failed them in different ways. With shades from the debates about equality and inclusion, the paper will end with speculations on new possibilities to incorporate the functional complexities associated with the women praying space to become an integrated part of the spatial and participatory experience of the mosque.

The Story of the Women Praying space in the Mosque

Women Praying Space—A Fragmented Chronology

The issue of the design of the women praying space is freighted with many complex questions that carry historical, cultural, and jurisprudential facets, in addition to its architectural functional and spatial aspects. The literature tackling this issue is divided between scattered jurisprudential and Muslim Feminism literature. The first has a long chronology of debates about the religious rules regarding women visits to mosques (Ouda, 2016; Rasdi, 1999, p. 19; Sadlan, 1999, p. 17). On the other hand, the

latter, which has seen more increase in the last 10 years or so, has concerned itself with issues around gender equality and rights in relation to the role and position of women in mosques and in Islam in general (Batuman, 2018; Eskandari, 2011, Sherwood, 2018). While those two different perspectives bring important insights to the debates around women praying space in the mosque, still, not much has been done specifically to look onto this issue from the architectural point of view (Kahera et. al, 2009, p. 7).

The benchmark for looking at the design of women space in the mosque is the Prophet Mohamed's mosque in Medina. Hadith reports do not describe an architecturally distinct prayer space for women in the Medina Mosque. They implied that in the era of the Prophet the mosque followed an open design approach in which men lined up in rows starting behind the imam where women simply prayed in rows behind the men, starting from the back of the mosque without a barrier (Tarim, 1999). It was also reported that women tended to come and listen to sermons and attend the prayers even at dawn or dusk (Ouda, 2016, p. 42, 43). After the prophet's time, there are very limited texts to support the evolution of the women praying space from the prophet's mosque to our contemporary mosque. The evidence available suggests that women were attending the mosque in Medina and other places under the Muslims rule, and also gave sermons sometimes too, where both men and women listened to them (Katz, 2014, p. 76; Tarim, 1999, p. 166). Though, there has been some sparse and anecdotal evidence suggesting the opposition of women attending mosques by some of the Prophet's companions and mainly attributed to authoritative figures such as Ibn Masud (Katz, 2014, p. 136).

Outside Medina, mosques in Damascus in the 7th - 8th Centuries under the Umayyad Caliphate seem to follow the same arrangement as the prophet's mosque (Tarim, 1999, p. 166). Besides, other resources suggest that Iraqi women frequented mosques for various purposes, including regular prayers, pious retreats and in Ramadan well after the first generation of Muslims had died out and new cohorts of native-born Iraqi Muslims had arisen to take their place (Katz, 2014; Tarem, 1999, p. 167). As the scholar J. Tarim (1999) states, the same arrangement was followed in the early Abbasid time in Iraq as seen in the Samara Grand Mosque, built by the Caliphate Al-Mu'tasim as well as in mosques of North Africa such as the Great Mosque of Kairouan under the Aghlabids rule (Tarim, 1999, p. 167). On the other hand, women presence in mosques in Egypt was also evident in the first mosque of Fustat and under the early Abbasid caliphate, in the mosque of Ibn Tulun and later under the Fatimid as seen in the famous mosques of those eras: Al Azhar Mosque, Al Hakim Mosque and Al-Aqmar (Bosworth, 1996; Katz, 1999, p. 168).ⁱ This was still the case afterwards in the mosques and Madrasas of the Ayyubids and the Mamluks (13th – 16th century) (Gabr, 1992; Katz, 2014, p. 155). The researcher M. H. Katz (2014) supports those views in his book: *Women in the mosque: A history of legal thought and social practice*, where he mentioned cases where women appeared in Cairene mosques as audience and also as religious instructors and preachers (Katz,2014, p. 155). These claims are supported by Egyptian Moroccan Maliki *fiqh* scholar and theologian writer Ibn al-Hajj Al-Abdari (737/1336), who strongly emphasized women's mass attendance at mosques on the occasion of major religious festivals (Katz,2014, p. 147).

The pieces of references above imply that women have attended mosques and were part of the main mosque space without separation for a long time after the era of the prophet, though, the literature is often vague about exact venues and activities of women are rarely detailed. However, the change to a dedicated space for women in mosques can be seen in the following reports.

The first mention of a dedicated space for women in the mosque is found in the 8th century in a report transmitted from the early Medinian historian Ibn Zabala (a student of Malik ibn Anas). The report

ⁱ Katz states that at that time in Egypt, it is reported that the sister of the prominent scholar al-Muzani is said to have attended the study circle of al-Shafi, which was held in the main mosque of Fustat. There was no suggestion of a clear separation of the women space then. Also, the prominent preacher Umm al-Khayr al- Hijāzīya, for instance, appears to have been active in the Friday mosque (Katz, 2014).

described the expansion of the Prophet's mosque ordered by the Abbasid Caliph Al-Mahdi in 777–78 AD, and referred to a 'women's arcades' (سقيفة النساء) at the back of the enclosed courtyard of the mosque.ⁱⁱ Moreover, in the 9th century in the Spanish Umayyad Caliphate, it is reported that a roofed arcade was built at the back of the Great Mosque of Cordoba specifically as a space for women's prayer called the 'Maqsura'ⁱⁱⁱ. The mosque also had doors specially designated for women, although fewer than those allocated to men. However, as Katz suggests, the use of 'maqsuras' to separate women from men in congregational prayer was still neither uniform nor completely uncontroversial (Katz, 2014, p. 137).

Under the Seljukian Kingdom in the early 11th century, the Great Mosque of Isfahan (Jame Mosque of Isfahan) has seen the construction of a dome behind the north-west wall. Anecdotes mention that this was the praying hall dedicated to the wife of the Sultan Malak Shah 'Turkan Khaton'. It is not clear if the dedication of this space was for gender separation or it was for security reasons (Tarim, 1999, p. 170). By the 14th century, some North African mosques offered women's space that appears to have been architecturally more separate from the main prayer space. Women were allocated some designated spaces in the mosques of Fez and the Kairouan's mosques.

The Great Mosque of Kairouan had a women's prayer room (called bayt al-nisa' - بيت النساء) at the back of the courtyard with its own exterior door; the mosque had two small doors reserved exclusively for the use of women, as compared to fifteen larger ones for men (Katz, 2014, p. 142). Similarly, in the 15th century India, an enclosed platform known as 'zenana' or ladies' gallery started to be included in the early Indian mosque architecture at Gujrat's mosques such as: the Jami Mosque, the Rajapur Mosque, Ahmad Shah Mosque, and the Kapadwanj Jami Mosque (Imam, 2000, p. 23, 36).

In the 16th Century's Ottoman Egypt, clearly separating or removing the women praying space seems to be a common practice in Cairo's Mosques. As Tarim (1999) argues, this Ottoman new architectural tradition may have been inherited from their ancestors: the Seljuk (Tarim, 1999, p. 171). This coincides with what some European visitors to Egypt in the Ottoman period stated that women did not go to mosques in contrast to the evidence from preceding period of the Mamluk sultanate. It is unclear whether this view reflects an overall change in Egyptian women's habits, the distinctive practices of the women of the predominantly Ottoman elite, or simply the misconceptions of ill-informed outsiders (Katz, 1999, p. 157).

A clear ban of women attending mosques (or certain parts of the mosques) was seen in the 19th Century in India, Pakistan and Bangladesh with the decline of the Mughals and the coming of the British. The researcher Ziya Us Salam (2019) suggests that this may be attributed to increasing conservative, orthodox influence that generally called for avoiding areas of doubt and suspicions in religious matters to ward any possibilities for sin (fear of immorality between sexes in the case of women praying in mosques). Till the moment, many mosques in those regions are still out of bounds for women users (Salam, 2019).

Women Praying Space—Other Influences

In parallel, the women right of entry and use of the mosque has seen a number of meta-literary disputes and theological, legal claims among Muslim scholars after the time of the Prophet (Katz, 2014; Salam, 2019; Rasadi, 1999; Ouda, 2016; Kahera, 2009). The interpretation of some hadiths concerning women's use of the mosque has dominated those debates (Ouda, 2016, p. 46). These often revolve around the Prophet's Muhammed's suggestion of assigning a special door for women in the Medina

ⁱⁱ Katz implies that the 'women's arcades' (سقيفة النساء) predated the Caliphate Al-Mahdi's enlargement of the mosque. It is unclear when these arcades began to be used specifically to accommodate women or how long this use remained customary; later descriptions of the mosque do not mention special spaces for women (Katz, 2014).

ⁱⁱⁱ The space called 'maqsura' in general was understood as an innovation of the early Islamic period, introduced by Umayyad rulers to protect themselves from hostile subjects. (Katz, 2014).

Mosque; others are taking clues from sayings by Aisha (the wife of the Prophet) and Umar Ibn Al-Khattab (the Prophet's companion and second Caliph in Islam) in certain situations related to women attendance to the mosque and preference of them praying at home (Al-Khalifa, 2017; Al-Qasemy, 1979, p. 224; Ouda, 2016, p. 43; Sadlan, 1999, p. 17; Wanely, 1994). Key respects of these different opinions are based on assuming a difficulty that some women can face to go regularly to the mosque especially at Friday congregation (Al-Jadid, 1999; p.120). Some are concerned with the safety of women on their way to the mosque, while others were related to the idea of avoiding public mixing between the sexes as best for the general Muslim population (Al-Jadid, 1999; Katz, 2014, p. 89; Ouda, 2016, p. 37; Sadlan, 1999).

Briefly speaking from those fragmented references above, the evolution of the women praying space seems to revolve around three main attitudes: the continuation of the adoption of the model of the early version of the Prophet's mosque, the dedication of enclosed distinct spaces for women and finally, in some cases, the elimination of the women space. This evolution is noticeably nonlinear and has shown many variations in different geographic regions under Muslim rule. It is not fully clear whether the evolution of women praying practices, and accordingly their spaces, reflects an overall change in Muslim women's habits in those regions, changes brought by the successive ruling kingdoms, changes in the cultural hegemony of those different societies, or is it due to changes in religious legal views about women praying in mosques. The answers for these inquiries are far from conclusive, but it can be observed that from the early 1900s in many Muslim regions, it became a commonplace practice to have a clearly (often enclosed) dedicated place for women in the mosque fully separated from the men's praying hall. This habit has become central in approaching mosque design in the modern world and have become a key condition in contemporary mosque design and building regulations.^{iv}

The Contemporary Building Guidelines for Mosques

The practices that were developed since the Prophet's mosque in Medina for the women praying space and the jurisprudential debates around it have amalgamated to make some kind of consensus about the contemporary standards of the design of the women praying space in the mosque, which in turn have become evident in many of the building regulations and codes of various Islamic regions (Ibrahim, 1979; Al-Jadid, 1999, 2006; Qatar National master Plan, 2017; Saudi Mosque Building Code, 2020; UPC, 2013). The section below presents a synthesis of various contemporary guidance to the design of women praying space in the mosque. It builds upon different planning guidelines for mosques in some Muslim regions including Abu Dhabi, Al Doha, and the Saudi mosque building codes as well as the works of the researchers: Mohamed Hassan Nofel (1999) and Ahmed Mokhtar (2010, 2019), which have been extensively used in informing those codes. The key points that those codes often iterate are: the segregated prayer hall, segregated access and facilities, as well as some guidance on the size of the space in relation to the main praying hall.

a) The Segregated Prayer Hall:

Mosques building guidelines vary in different forms but often advise that males and females should pray in separate spaces or in separate zones within the same space (when praying in the same place, these guidelines often refer to this point as 'per Sunnah'). This advice is always followed by a guideline that women should be separated by a kind of barrier (a curtain/screen/mashrabeya) from the rest of the prayer room to ensure privacy (Mokhtar, 2019; Sadlan, 1999; Al-Jadid, 1999, 2006). There is also often a mention that in all cases, women praying area shall not be visional from the outside whether from

^{iv} Some few Mosques are currently tending to fully prohibiting women from attending mosques, especially in India, Pakistan, and Bangladesh for certain socio-religious view as Ziya Us Salam (2019) mentions in her book *Women in Masjid: A Quest for Justice*, however this is out of the scope of this paper.

outside the mosque or from men's praying area (Qatar National Master Plan, 2017; Saudi Mosque Building Code; 2020).

b) The Segregated Access and Facilities:

The different guidelines almost agree on the guidance that entrance of women praying area shall be independent and away from the men's entrance (Mokhtar, 2010, p. 255). They advocate the principle that the worshippers' (men and women) movements to and from the mosque should be totally separated without any connection between them in order to provide gender privacy. In addition to segregated access, design guidelines often suggest clear separate facilities for each gender: ablution spaces restrooms, shoe racks, etc. (Mokhtar, 2010, p. 254).

c) Size of Space:

On the other hand, those code mention some guidance regarding the size of the space of women praying hall. Building codes tend to advise that female prayer and ablution spaces may be relatively smaller than the main (male) praying space. The exact percentage varies from one guide to another, generally between 10%^v to a rare 40% of the total number of users of the mosque (often includes in it the number of children attending the mosque) (Mokhtar, 2019). This guidance builds on the idea that females are assumed to come less to the mosque, based on the fact that attending Friday congregational prayer is not compulsory to female, that female users do not pray during menstruation, and a generally-accepted view that praying at home is more preferable to women (based on an understanding of a certain hadith with a similar meaning).

The guidelines above seem to make the main recipe for contemporary mosque design. The repetition of the same guidelines in many building codes in various Muslim regions has helped in making a uniform formula for designing mosques and consequently the women praying spaces in it: a multipurpose hall, often dedicated to male users, where the women praying halls are usually regulated to a mezzanine, a basement, or to a screened space in the back of this praying hall. The next section will look at the application of this pan-accepted design formula in some contemporary mosques, reading through them the commonplace functional and spatial experiences of the women users in the mosque.

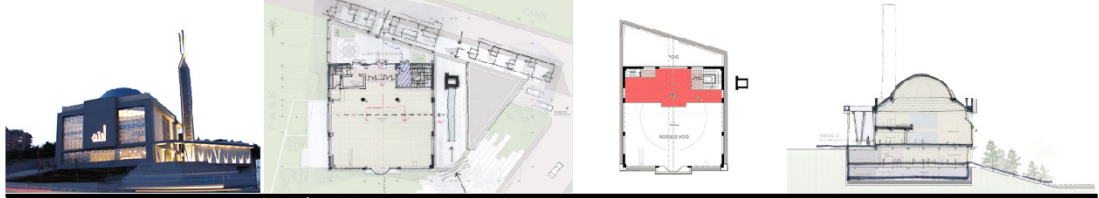
Analysis of Examples of the Women Praying space in Contemporary Mosques

The chosen examples for this analysis combine a sample of contemporary mosques from different regions and scales as well as varied approaches to mosque design: some are more conventional while others are more radical (mainly in terms of form and aesthetics). The reason for this relatively broad range is to see a variety of approaches to the design of the women spaces and also to allocate any recurring patterns in these variant examples. The analysis looks at the different functional and spatial experiences of both men and women in the mosque: the approach and access experience, the entry experience, the transition and threshold^{vi} experience, the spatial build-up till the centre of events in the building, the size of the women hall, and the general functional efficiency of the space.



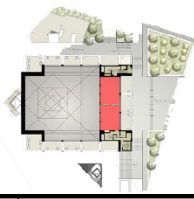
^v In the report معايير بناء المساجد, (2017), the recommended ration is 5% of the total space to be allocated for women.

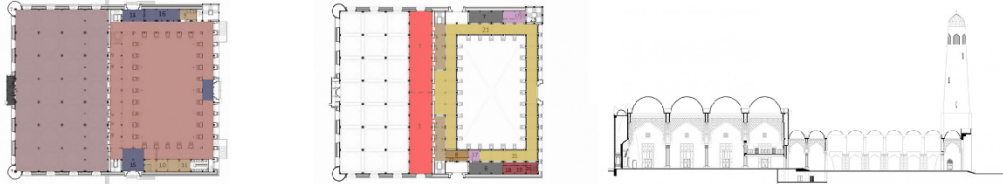
^{vi} Threshold: the architectural elements that is associated with transition and sense of arrival that comes (Porter, 2004). This threshold has been represented in mosques historically in many different ways through its entry experience. Mosques entrances were usually located in a position to lead the people inside the mosque through a shaded entrance followed by the open court (sahn) and finally to the 'riwaq'. Later, the 'majaz' defined this relationship with its high cave-like ceiling and its bent orientation that morphs the city's grid into the qibla direction. Afterward, in the Ottoman era, this threshold has been expressed by moving the courtyard (the sahn) from its traditional central position to become an external transition leading to a domed praying hall (Fathy, 1960s; Gabr, 1992).

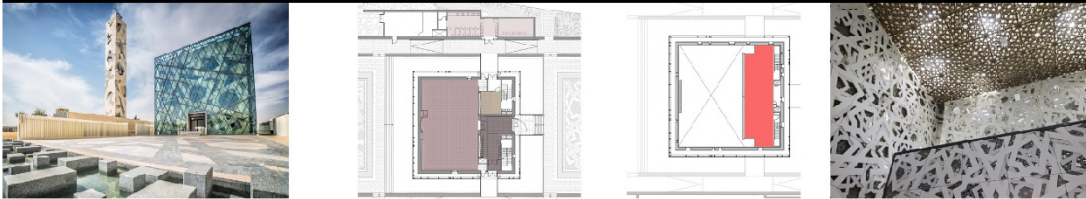
Alacaatli Uluyol Camii Mosque, Turkey, Architect: Esra Aydogan Moza, Built: 2016
 Women space: Mezzanine (Ref. <https://www.alfozanaward.org/>)



	MALE EXPERIENCE	FEMALE EXPERIENCE
APPROACH AND ACCESS	Direct access from the outside to the main mosque structure through an arcaded semi-shaded porch Entering the mosque through one of 2 doors (one is central) direct from an arcaded porch leading to the main entrance lobby	Same approach through the semi-shaded porch Entering the mosque through one door on the side of the main entrance facade (accessed as well from the porch)
ENTRANCE LOBBY	a large entrance lobby accessed by 2 doors direct from the arcaded porch with shoes storage facilities	A small entrance lobby separated from the men's one by partitions and a door that works also as a stair lobby and also a lift waiting lobby
ABLUTION AND WET AREAS	Not clear in the available drawings but assumed to be in the basement	Not clear in the available drawings but assumed to be in the basement (in this case: women are expected to go down first for the wet area, then go up for two floors to the designated praying room)
THE THRESHOLD EXPERIENCE	Stepping from the outside to a semi-covered double height porch Taking off shoes and storing them Entering the mosque through one of the 2 doors to a relatively wide entrance lobby that is around 3m high. Stepping inside the main praying space through two other doors to a low height part of the main prayer hall with two central structural columns framing the view Moving then into a clearly geometrically defined space, a grand double height volume of the main praying space	Stepping from the outside to the same semi-covered double height porch Taking off shoes Entering the mosque through a side door in the main entrance facade leading to a small entrance lobby that also acts as a stair lobby and a lift waiting lobby The stair leads to another lobby with shoes storage The lobby leads to the women praying space through a side door to semi-geometrically defined mezzanine floor (a 1/3 of the main space) but still with a grand spatial experience looking to the main space (through a screen) but is part of the main spatial experience with a generous height above to the central dome.
EXIT, ENTRANCE LOGISTICS	Through the same 2 entry doors (which are few in relation to the number of people entering and exiting – a common issue in many contemporary mosque (ref: my other paper))	Based on the size of the stair, lift and waiting lobby, it can be argued that the entry and exit experience will see a lot of crowding especially if adding to it shoes storage/recollection as well as the extra circulation up and down from the wet areas in the basement.
VERTICAL CIRCULATION	The main praying space is on the ground floor. There is a side stair leading to the social facilities in the basement men extra praying area	A medium size stair with a central lift in the stairwell
SIZE & HEIGHT	Full Ground floor and part of the basement Generous (triple height)	Around a third of the main praying hall size, Generous - double height
RELATION TO THE MAIN HALL	Central to the main spatial and volumetric experience	Part of the main spatial and volumetric experience but not centred to it
EXPERIENCE OF A DISABLED USERS	No clear data is available but it can be implied that disabled users can use either the main floor through direct access or the basement space through courtyard access.	It is expected that female disabled users will use the lift in the women entrance lobby. The placement of the lift, its size and the size of the stair/lift lobby raise a lot of questions about the practicality of this solution for disabled users

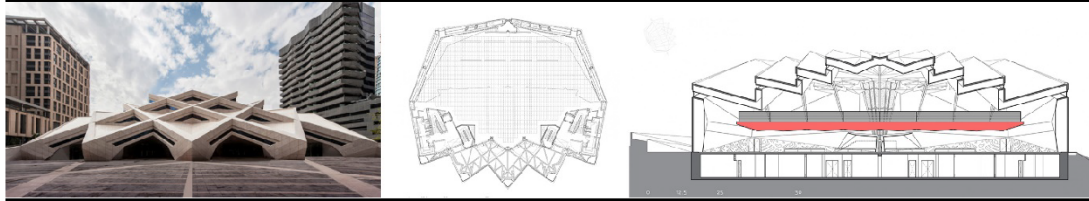
Al Aziz Mosque, United Arab Emirates, Architect: APG Architecture & Planning Group, Built: 2016 Women space (upper floor)(Ref. https://www.alfozanaward.org/)		
		
	MALE EXPERIENCE	WOMEN EXPERIENCE
APPROACH AND ACCESS	<p>Direct access from the outside to the main mosque structure through stair steps, entering through a heavy arcaded and wide porch</p> <p>Entering the mosque through one of 3 doors (one is central) direct from an arcaded porch leading to the main entrance lobby</p>	<p>Direct entry from the outside to a small external entrance to a vertical core that has a stair and lift.</p> <p>The whole approach experience misses the arcade as the vertical core is at the corner of this arcade and accessed from the outside.</p>
ENTRANCE LOBBY	<p>a large external entrance lobby accessed through the arcade pillars and the main praying hall outer wall. The lobby is the same width as the main praying hall</p>	<p>There is no proper entry experience. A very small entrance lobby that also acts as a stair lobby and also a lift waiting lobby</p>
ABLUTION AND WET AREAS	<p>In the basement and accessed through wide outdoor single flight stairs</p>	<p>In the basement and accessed through the same designated three-flights narrow stair (in this case: women are expected to go down first to the wet area, then go up for two floors to the designated praying room)</p>
THE THRESHOLD EXPERIENCE	<p>Stepping up from the outside on different steps into a heavily built arcaded entry lobby, then through the doors to a double height space to the centre of gravity of the main space under the geometric dome (triple the height of the women praying area at the centre of the main praying area)</p> <p>Moving then into a clearly geometrically defined space, a grand double height volume of the main praying space</p>	<p>The threshold experience is very limited with the marginalised external entrance leading to the narrow and expectedly crowded vertical core leading directly to a low in height praying space without a transitional lobby. The praying space itself is on the edge of the main volume of the mosque (the main praying space) and away from its centre of gravity under the geometric dome.</p>
EXIT, ENTRANCE LOGISTICS	<p>Through the same 3 entry doors</p>	<p>Based on the size of the stair, lift and waiting lobby, it can be argued that the entry and exit experience will see a lot of crowding especially if adding to it shoes storage/recollection as well as the extra circulation up and down from the wet areas in the basement.</p>
VERTICAL CIRCULATION	<p>The main praying space is on the ground floor.</p> <p>There are outdoor stairs leading to the basement men extra praying area</p>	<p>A medium size stair with a central lift in the stairwell</p>
SIZE & HEIGHT	<p>Ground and basement floors, height is generous in the main space: double height near the entrance and triple height in the main squarely shaped space under the dome</p>	<p>Around a fifth of the main praying hall size, (single height)</p>
RELATION TO THE MAIN HALL	<p>Central to the main spatial and volumetric experience</p>	<p>outside the main spatial and volumetric experience. (at the edge of the main space under the entry arcaded area)</p>
EXPERIENCE OF A DISABLED USERS	<p>No clear data is available but it can be implied that disabled users can use either the main floor through direct access (though, they will struggle with the approach steps and the ones under the arcade)</p>	<p>It is expected that female disabled users will use the lift in the women entrance lobby. (They will struggle as well with the approach steps) The placement of the lift, its size and the size of the stair/lift lobby raise a lot of questions about the practicality of this solution for disabled users</p>

Imam Muhammad ibn AbdulWahhab Mosque , Qatar, Architect: Arab Engineering Bureau, Built: 2011 (Women space: Mezzanine)		
		
	MALE EXPERIENCE	WOMEN EXPERIENCE
APPROACH AND ACCESS	From the street to an outside courtyard enclosed by an arcade, leading to an outside entrance lobby under the arcade into a hypostyle praying hall.	Sharing the same outside arcade but then leading to a side vertical core to the top floor
ENTRANCE LOBBY	It can be argued that male and female users are sharing the same outside entrance lobby. Though, the female stairs can be accessed directly from the outside while avoiding the courtyard experience	
ABLUTION AND WET AREAS	In the ground floor in one side of the courtyard arcade	
THE THRESHOLD EXPERIENCE	Outside to a courtyard surrounded by an arcade, a covered outdoor entry lobby, leading to the main space through a series of doors, walking under the mezzanine, then ending with the generous volume of the hypostyle hall	A non-central transition experience mainly from the side of the courtyard, leading to the stairs. The upper lobbies are not central to the space. The main praying space is central with a generous height and direct relation to the main volume.
EXIT, ENTRANCE LOGISTICS	A series of doors (11 doors, which is suitable for the expected number of worshippers)	Using the two side stairs to the outside
SIZE & HEIGHT	Triple height, full ground floor	Double height, a ¼ of the ground floor size
RELATION TO THE MAIN HALL	Central to the main spatial and volumetric experience	At one side of the main spatial and volumetric experience. (looking over the main space towards the qibla wall)
EXPERIENCE OF A DISABLED USERS	No clear data is available but it can be implied that disabled users can use either the main floor through direct access	It is expected that female disabled users will use the lift enclosed in the centre of one of the women dedicated staircases. The placement of the lift, its size and the size of the stair/lift lobby raise a lot of questions about the practicality of this solution for disabled users

KAPSARC Mosque, King Khalid International Airport, Saudi Arabia, Architect HOK , Built: 2014 Women space: Mezzanine (Ref. https://www.alfozanaward.org/)		
		
	MALE EXPERIENCE	WOMEN EXPERIENCE
APPROACH AND ACCESS	From an outside geometric plaza to a central entrance by crossing a bridge on an artificial ditch to a central lobby that leads to the main double height praying space	A side approach crossing over the artificial ditch to an entrance lobby that leads to a stair to the top floor
ENTRANCE LOBBY	A small lobby but could be considered of good size in comparison to the size of the mosque and centred to the main and side entry points	A different lobby separated from the main lobby, half in size and centred with the other side entry access
ABLUTION AND WET AREAS	Outside and separated from the main building	Outside and separated from the main building
THE THRESHOLD EXPERIENCE AND PRAYING SPACE	The transition from the worldly experience to the spiritual through the plaza to the bridge, the lobby then the grand volume of the main space.	The transition is more lateral with a side access and entrance lobby to a small stair that leads to the women praying hall that floats like an object in the bigger volume of the mosque (though the visual continuity is cut by a high latticed screen)

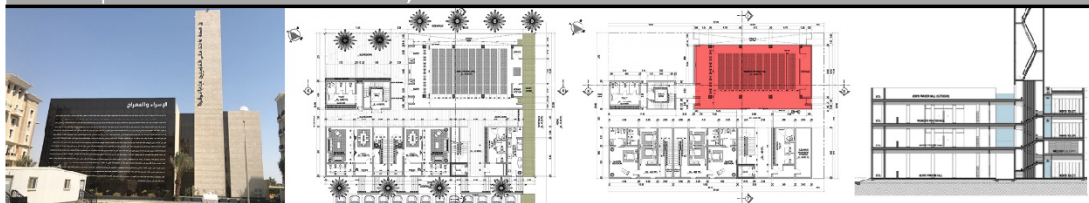
EXIT, ENTRANCE LOGISTICS	Through the same 2 entry doors	Based on the small size of the mosque, the stair – while narrow – can be suitable for the task of entry and exit specially that the wet area is separated outside the main structure.
VERTICAL CIRCULATION	No	A small stair that seems fitting the small number of users expected
SIZE & HEIGHT	Full ground floor space, the height is around three times the height of the entrance lobby	A third of the size of the main hall. And half the height but still generous above (around 2 times the entrance lobby)
RELATION TO THE MAIN HALL	central	Part of the main hall experience
EXPERIENCE OF A DISABLED USERS	Access to the main praying area through side ramps leading to the side entrance	No lift seems to be available for disabled users

KAFD Grand Mosque, Saudi Arabia, Architect: Omrania Office, Built: 2017
 Women space: Mezzanine (Ref. <https://www.alfozanaward.org/>)



	MALE EXPERIENCE	WOMEN EXPERIENCE
APPROACH AND ACCESS	Same experience for men and women users: From the outside plaza to a cave-like outdoor covered arcade that makes the entry lobby leading to a series of double doors to the main praying space	
ENTRANCE LOBBY	Each is at one sides of the mosque in the ground floor accessed from the inside	
ABLUTION AND WET AREAS	The initial transition from the outside to the inside starts from the plaza to a cave-like outside covered arcade leading to the main praying hall with a lower height that leads to a generous double-height space.	
THE THRESHOLD EXPERIENCE	The initial transition/threshold experience is similar. It changes inside where women users are directed to use the side two stairs. The dramatic threshold experience is a bit lost when exiting the main praying hall to the stair/lift lobby spaces leading to the mezzanine floor.	
EXIT, ENTRANCE LOGISTICS	Direct from a vast amount of entrance as well as two extra exit doors in the qibla wall	Through the two main stairs in addition to two extra exit stairs as well as two lifts
SIZE & HEIGHT	Full ground floor, generous height	Half the size of the ground floor, half the height
RELATION TO THE MAIN HALL	central	A mezzanine overlooking the main space, sharing the same geometrical experience of the ceiling
EXPERIENCE OF A DISABLED USERS	Direct access and use of the ground floor	Two lifts with generous lobbies are available

Esra & Me'raj Mosque, Saudi Arabia, Architect: Saleh Alluhaidan, Built: 2018
 Women space: a full floor in the second floor)



	MALE EXPERIENCE	WOMEN EXPERIENCE
APPROACH AND ACCESS	Direct entry from the outside to the male praying room in the ground floor, other floor is accessed from a covered walk through a side access from the outside	The women praying zone is in the second floor, accessed from a covered walkway in the ground floor through a side access from the outside
ENTRANCE LOBBY	An entry lobby that is part of the praying space, accessed directly from the outside and separated visually and in materiality from the main praying space	An entry lobby that is part of the praying space, accessed directly from an outer generous lobby from the stair, and separated visually and in materiality from the main praying space
ABLUTION AND WET AREAS	A wet area designated for each floor and accessed through a wide lobby and adjacent to the stair	

ABLUTION AND WET AREAS	A wet area designated for each floor and accessed through a wide lobby and adjacent to the stair	
THE THRESHOLD EXPERIENCE	The threshold experience is relatively limited as the access to the ground floor is direct from the outside. The transition feel happens through the deep entry walls and the entry lobby that shares the same space of the praying hall.	The same threshold experience, only differs in its location on the second floor that is accessed through the stair and a wide corridor
EXIT, ENTRANCE LOGISTICS	two shared stairs (relatively narrow), shared with users of other floors and services	
SIZE & HEIGHT	The ground and first full floors	The second full floor
RELATION TO THE MAIN HALL		Exactly above, same size
EXPERIENCE OF A DISABLED USERS	Direct in the ground floor	Through a lift
SIZE & HEIGHT	Generous and amplified more by the skylights	Relatively shorter height as it shares the same roof but higher floor slab. The size of the space is around 1/6 of the male praying zone
RELATION TO THE MAIN HALL	Central to the main spatial and volumetric experience	Ancillary to and separated from the main hall but does not share its spatial experience
EXPERIENCE OF A DISABLED USERS	The available data does not show clear design interventions towards disabled users	



	MALE EXPERIENCE	WOMEN EXPERIENCE
APPROACH AND ACCESS	Access from the outside through a small enclosed outside plaza, leading to a bent entrance direct to the centre of gravity of the main praying room under the dome	Outside access to a side door in an enclosure, leading to a stair lobby
ENTRANCE LOBBY	Bent entrance lobby leading to the main praying space	An outside enclave leading to a narrow stair lobby
ABLUTION AND WET AREAS	In the ground floor, accessed from the outside	In the first floor, accessed from the stair lobby
THE THRESHOLD EXPERIENCE	A gradual experience, magnified by the bent entrance, leading to the central praying space under the dome	A marginal transition experience from the outside to the small entrance and the stair. The transition experience improves slightly on the top floor with a bent entrance lobby leading to the praying zone.
EXIT, ENTRANCE LOGISTICS	The entrance door and an exit side door	Through the stairs to the ground floor
VERTICAL CIRCULATION	The male praying area is only in the ground floor	Through a stair
SIZE & HEIGHT	Full ground floor with a generous height (triple the height of the women space) in addition to the height of the dome in the centre	A third of the main space, and a third of the main space height
RELATION TO THE MAIN HALL	central	Side and marginal, given that the women praying space is on one side of the qibla wall. The women praying hall is overlooking the volume of the main hall from the side
EXPERIENCE OF A DISABLED USERS	Direct in the ground floor	Not available, given that the space is in the first floor with no lift available

Sancaklar Mosque, Karaagaç Mahallesi Mosque, Turkey, Architect: Emre Arolat, Built: 2014

Women space: Ground floor (side) – (Ref. <https://www.alfozanaward.org/>)



	MALE EXPERIENCE	FEMALE EXPERIENCE
APPROACH AND ACCESS	stepping gradually from the ground level through a lower level path where the main praying space is allocated. The main praying space is accessed by two distinct doors	Same experience – though there is a direct access from the beginning of the path to the ladies praying space through a designated door.
ENTRANCE LOBBY	A stepping down (theatre like steps) inside the mosque taking the visitor from the entry level to the lower level of the main praying zone	Very small transition space from the designated door to the ladies praying space.

Observations

Looking at common practices of mosque design in the examples above, we will find that the majority of the designers tended to follow what can be called the pan-culturally accepted recipe of the women-space in the mosque. The ingredients of this recipe are: separating the ladies' prayer space in an enclosed space allocated to a mezzanine or separate floor. It also assumes the need for segregated access by a dedicated entrance and facilities away from those to the men's prayer hall with a clear aim for the protection of privacy of the female users. More specifically, in terms of approach and access: the men's experience can be described as direct and central to the main event in the building: the praying hall, using architectural elements that create a gradual approach: stair steps, courtyard, porch, arcades, etc. In turn, the common practice in most of the examples was that the women do not have a grand approach and entry experience. They tended to access the building from the side or on an opposite end, that is often further away from the main entrance, and sometimes through a circuitous route to avoid interaction with the men's space and approach. Still, some mosques have deployed the same approach experience and access routes for both men and women and then divided them inside the entrance lobby. In some cases, the women's entrance was external, away from the main entrance and approach, and leads directly to a vertical core that ends at the women zone. In those examples, the entrance lobby when separate from the men's lobby (which seemed more common) tended to be small in size and sharing its function with a stair landing and the lift waiting area.

In terms of the threshold and main space experience, the men's experience was grand and dramatic. Their experience often involved walking the worshipers through a series of space that brings many sensory changes to prepare the soul for the spiritual act of praying: coming from the worldly outside, stepping up through external steps to a courtyard or an arcade that changes the feel of light and shadow, then stepping up to an entrance lobby to the beginning of the main praying zone. This is curated by employing all the needed architectural elements that can allow such spatial, sensory and spiritual experience to happen such as: change in height, elevation, volumes, light and shadow, and materiality. Then the grand finale occurs when reaching the main praying hall: the symbolic centre of gravity and the climax of the architectural experience. In comparison, unless the women praying space was in the same main space or approached from inside the main space, the female users of the mosque often missed the whole transition and threshold experience. Their experience was more direct and sometimes associated with circulation complications: narrow stairs, where those who are entering and exiting may clash, crowds at the stair and lift lobby, many steps to and from the wet areas, etc. Additionally, the transition from the outside to the inside in many cases ended with a disappointing climax: a narrow lobby leading to a less geometric space, away from the symbolic centre of gravity in the main volume, low in height, and shielded by screens from looking directly over the main space.

In terms of size, the women spaces in those mosques were often smaller in their capacity, based on the idea that fewer ladies come to the mosque as they are not obliged by Islamic ruling to pray at mosques and especially Friday congregation prayer. This, however, can be considered a kind of biased statistics as it also may imply that the design of the mosque is less inviting which in turns discourages this specific user-group from attendance. In the small sample analysed, the women praying hall varied in terms of area from a sixth of the main space size to a rare 50% of the space in one of the examples. Accordingly, the women praying spaces in many of the examples appeared secondary or ancillary in the architectural composition in relation to the main praying hall that is dedicated to men, and marginal to the experience the dominant spatial quality that the architect created for the main hall.

In terms of wet areas, many of the mosques allocated the women wet area outside the mosque, the ground floor, or in the same floor where the women praying area is located. Still, another common practice was to put the wet areas in the basement. In this case: women are expected to go down first for the wet area, then go up for two floors to the designated praying room. This experience becomes more complex if putting into consideration the needs of a disabled user.

In brief, while it is hard to give a generalised claim against the majority of contemporary mosque approaches, still, the analysis above brings some important insights about norms regarding the design of women spaces in contemporary mosques and the implications of some of those norms on the experience of this key user-group. The clear observation that can be inferred from this analysis is that the whole experience of women in many of the common practices of mosque design can be described roughly as more inferior in quality and efficiency than the male experience. In many places, this experience was associated with functional complications, impracticality, as well as a lack of a grand spatial and sensory journey that can be found for the male users.

Other Factors

The issues above are magnified more when adding the everyday element to these spaces (Eskandari, 2011). In practice, the women praying space should fulfil the function of hosting the five daily prayers as well as Friday congregation prayer. They also should provide space for other prayers such as ‘taraweeh’, ‘tahajod’, funeral prayers, in addition to study lessons, Ramadan breakfast ‘iftar’, marriage ceremonies, and celebrations, to name a few. These different functions have their certain particularities as well; from the logistics of organizing the entry movement, exit of large number of people in close time intervals; specific requirements such as avoiding the crossing on front of other praying people, the logistic of shoes storage, the proper evacuation of the mosque after congregation prayers, as well as the management of certain praying requirements such as for those who may need special assistance (e.g. praying on a chair) or those who have children with them. These may also include the logistics of second ‘jama’ah’ for those who came late to the formal praying time without interfering with other praying people or those who want to leave immediately after the prayer.

However, incidents of big crowds and cramped women praying spaces are often evident in Ramadan night prayers, Eid prayers (when done inside the mosque), and in many Friday congregations in places that women are used to witness (Suratkon, et al., 2017, p. 5, 6). These everyday instances are commonly tackled by improvised solutions done by those who are praying or by the mosque’s management—which obviously lack the qualities of specialized architectural intervention to deal with these issues. In many cases, this leads to women praying in limited leftover spaces: hallways, balconies, anterooms, etc. that cannot either be extended if the privacy condition to be fulfilled (Salam, 2019). Additionally, as it is a social convention in many Muslim societies that the responsibility of dealing with children in the mosque is often delegated to ladies, these spaces exceeds their capacity and become unsuitable for the functionality and the well-being of its users (Utaberta, et al., 2018, p. 6). Looking at the women praying space from this perspective, we can see how the daily experience of this user-group is very different from the neat architectural design schemes and the sterilized photos of the built outcome of contemporary mosques. These spaces are not designed to accept a big number of users in the case that many women decide to attend the mosque and the complexities associated with the everyday use (Eskandari, 2011).

Conclusions

All the previous raise clear questions about the suitability of the common practices of the design of women praying spaces to achieve the main ambitions of the mosque as a building for those dedicated users, in terms of functionality, spirituality and spatial equity. The observations above imply a clear issue of ‘design equality’ in regards to the common practices of the design of women praying spaces in contemporary mosques. While the whole issue started with an easy straightforward architectural solution as seen in the Prophet’s mosque in Medina, which lacked the element of spatial segregation; segregation has become now the norm and a central criterion in mosques building codes and guidelines in Muslim regions. Spatial segregation seems as the key issue that has led to the whole design complications. The word segregation is multifaceted and can be understood from different points of

view which can carry both positive and negative connotations: privacy and protection on one side, and discrimination and male-power on the other. But, the women's views about segregation also vary: some women are more accustomed to segregated arrangements or have a clear preference for them (as more private and secure); whereas some women activists voice sees this as a kind of discrimination and not the following Sunnah, regarding spatial segregation as a form of discomfort, repression, and bias because it does not allow for fuller participation in the congregation and social inclusion, and because it violates the Quranic injunction that men and women are equal; a third group favours partial segregation by a screen that has built-in flexibility (Kahera, 2009; Snijders, 2019, p. 37, 63).

In those debates, mosque architects have become in the middle of two main paths; one path advocates the following of Sunnah based on the configuration of the Prophet's mosque in Medina at his time, which assumes women to be part of the main space of the mosque, praying at the back in rows behind men and children without a barrier. The other path is based on the prevailing meta-literary views by Muslim scholars and preferred social attitudes regarding 'protecting' the women praying space from mixing with the men's space. The latter is more prominent in many of the building codes regarding mosques and therefore has manifested more in contemporary mosques. The repetition of the same guidelines in various building codes has given an impression that these are decisive directions for the design and are based on conclusive religious rules; which is not exactly the case. By following this recipe, a great deal of functional, spatial, and socio-political problems has arisen, bringing with them dark shades of claims of inequality in terms of spatial quality, functional inefficiency and a broader challenge to the idea of Islamic social inclusion. Those problems may have also emphasised a perception that mosques are designed as male-dedicated spaces, and hence may have helped in creating a space for claims such as that Islam "marginalizes" and "isolates" women.

All of these disputes have put the architect in a dilemma between following the norms: the commonplace guidelines and socio-cultural practices on one side, or to take their responsibilities towards a certain user group of the building by clashing with those norms, breaking spatial stereotypes and the issues of spatial discrimination they may have brought. The straight forward 'architectural' answer for this dilemma seems to be in a new critical reading of the original Prophets mosque in Medina in the seventh century as the fundamental historical precedent which in essence transcends through all mosque design, but this time with an eye looking for clues for social inclusion and spatial equality. This new focus should be based on making (all) the users of the mosque central to the mosque's spatial and functional experiences. Building on this new reading of the original model, mosque architects should review the actual contemporary needs of women's space and deal with it as of high priority when approaching any new mosque. In addition, it is also key to complement this critical reading by an understanding of actual contemporary requirements of female users of the mosque through consulting representative of this user-group when a community decides to construct a new mosque, and involve them in the design and planning process. And finally, it is central to this new reading to incorporate the functional complexities associated with everyday routines in the women praying space to become an integral part not just for the functional approach but also for the whole formal and spatial concept of the mosque.

Bibliography

Abu Dhabi Mosque Development Regulations: Mosque development Committee, Abu Dhabi Urban Planning Council UPC 2013 available at:

<http://asfaar.org/file/files/bHarFtGNniPAjvbntLjsZrft80Eesg4ZmCjG2qTk>

Al-Khalifa, H., 2017. *The Friday mosque of the Arabian Gulf: defining its spatial and formal languages-1975-2010* (Doctoral dissertation, Cardiff University).

Batuman, B., 2018. Appropriating the masculine sacred Islamism, gender, and mosque architecture in contemporary Turkey. In *The Routledge companion to modernity, space and gender* (pp. 270-287). Routledge.

Bosworth, C.E., 1996. *The New Islamic Dynasties*, New York: Columbia University Press

Eskandari, M., 2011. *Women places and spaces in contemporary American mosque* (Doctoral dissertation, Massachusetts Institute of Technology).

Fathy, H, 1960s, *Mosque Architecture*, Available at:

https://books.google.co.uk/books?id=9djwPQAACAAJ&source=gbp_navlinks_s

Gabr, A.H., 1992. *The Influence of Traditional Muslim Beliefs on Medieval religious Architecture: of the Bahri Mamluk Period* (Doctoral dissertation, University of Edinburgh).

Imam, N. M. S., 2000. *Mosque Architecture: Formulation of design criteria and standards in the context of Bangladesh*. Dhaka: Bangladesh University of Engineering & Technology.

IUMS. 2019. What does the Sunnah say about women and mosques? (IUMS: International Union of Muslim Scholars). available at: <https://iumsonline.org/en/ContentDetails.aspx?ID=9202>

Kahera, A.I., Abdulmalik, L. and Anz, C., 2009. *Design Criteria for Mosques and Islamic Centres: Art, Architecture and Worship*. London: Routledge.

Katz, M., 2014. *Women in the mosque: A history of legal thought and social practice*. New York: Columbia University Press.

Megahed, Y., 2019. 'Has Mosque Design Really Developed? Notes on the Hidden Complexities of Mosques' Architectural Brief' in Al Naim, et al. (ed.) *Mosque Architecture: Present issues and future ideas*. Al Khobar: Abdullatif Al Fozan Award For Mosque Architecture & Institut Terjemahan & Buku Malaysia Berhad.

Mokhtar, A.H., 2019. 'Design guidelines for female Muslim prayer facilities in public buildings' *Facilities*, 38,3/4.

Mokhtar, A., 2010. 'Architectural design standards for Muslims prayer facilities in airports'. *International Journal of Sustainable Development and Planning*, V5(2).

Nadwi, M. A., 2015. *Ibn Hazm on the Lawfulness of Women Attending Mosque*. Oxford: Interface Publications.

Nofel, M., 1999. Design criteria for mosque architecture. *Proceedings of Research on Mosque Architecture*, College of Architecture and Planning, King Saud University, Saudi Arabia, vol. 5, pp. 75–94, 1999 (in Arabic).

Porter, T., 2004. *Archispeak: An Illustrated Guide to Architectural Terms*. London: Routledge.

Rasdi, M. and Tajuddin, N. 1998. *The mosque as a community development centre: Programme and architectural design guidelines for contemporary Muslim societies*, Skudai: Penerbit Universiti Teknologi Publishing.

Rasdi, M.T., 1999. 'The implication of a new mosque curriculum on the design of mosques as a community development center' In *Proceeding of the symposium on Mosque Architecture* (pp. 1-23).

Qatar National master Plan, 2017, General Design Regulations for mosques, Community Facilities Standards and Provision Guidelines. available at: <https://issuu.com/muhyuddin/docs/mosque-general-design-regulations>

Salam, Z. U. 2019. *Women in Masjid: A Quest for Justice*. London: Bloomsbury.

Saudi Mosque Building Code 2020, Available at: <https://alfozanaward.org/the-mosque-buildings-code-at-the-kingdom-of-saudi-arabia-2/>

Sherwood, H., 2018. 'Muslim women call for more equality in running UK mosques', *The Guardian*, 15 August. 2018. Available at: <https://www.theguardian.com/uk-news/2018/aug/18/uk-muslim-women-call-for-more-equality-mosques> (accessed Feb. 2021)

Snijders, A., 2019. *No key to the women's area: Gender participation in mosques in Antwerp*. Master Thesis, Leuven: Katholieke Universiteit Leuven.

Suratkon, A., Abd Salam, N.N., Rahmat, M.H., Arhan, A.M., Abd Wahab, I. and Ghaffar, S.A., 2017. 'Woman Friendly Mosque, Features and Facilities: A Case Study on Masjid Sultan Ibrahim,

Tavernise, S., 2009. 'In Quest for Equal Rights, Muslim Women's Meeting Turns to Islam's Tenets'. *The New York Times*, 15 February 2009. Available at: <https://www.nytimes.com/2009/02/16/world/asia/16women.html> (accessed Feb. 2021)

Universiti Tun Hussein Onn Malaysia'. In *IOP Conference Series: Materials Science and Engineering* (Vol. 291, No. 1, Dec.). IOP Publishing.

Utaberta, N., Omi, F.S., Roslan, S.B. and Ariffin, N.F.M., 2018. 'An analysis of women's access and participation in the mosques in the contemporary world' In *IOP Conference Series: Materials Science and Engineering* (Vol. 401, No. 1, Sept.). IOP Publishing.

Arabic References:

- (Al-Jadid, 1999) الجديد ، منصور بن عبدالعزيز. ١٩٩٩. المسجد في الإسلام ، حدوده و تاريخه ، أبرز الضوابط الشرعية المتعلقة ب عمارته ، أبحاث ندوة عمارة المساجد ، مجلد ٨ أ ، ص ص ٨٩ - ١٣٢ ، كلية العمارة والتخطيط جامعة الملك سعود.
- (Al-Jadid, 2006) منصور بن عبدالعزيز. ٢٠٠٦ . الضوابط الشرعية لبناء المساجد وصيانتها ، الجديد ، مجلة جامعة الملك سعود ، مجلد ١٨ م ، العمارة و التخطيط (١) ص ص ١٤٣ - ٢٠١ . Available at : <https://mosque-design.com/Allbook.pdf>

- (Al-Qasemy, 1979) القاسمي، محمد جمال الدين. ١٩٧٩ إصلاح المساجد من البدع والعوائد، عمان : المكتب الإسلامي.
- (Ibrahim, 1979) إبراهيم، حازم محمد. ١٩٧٩. المعايير التخطيطية للمساجد. الرياض: وزارة الشؤون البلدية والقروية.
- (Ouda, 2016) عودة، جاسر. ٢٠١٦. المرأة في المسجد. الدوحة: الناشر: الإتحاد العالمي لعلماء المسلمين.
- (Sadlan, 1999) السدلان، صالح بن غانم، ١٩٩٩. الضوابط الشرعية لعمارة المساجد. أبحاث ندوة عمارة المساجد ، مجلد ٨ ، ص ص - ١ - ٣٢، كلية العمارة والتخطيط جامعة الملك سعود.
- (Tarim, 1999) تارم، جاهد بن مقصود. ١٩٩٩. مصليات النساء والمخالفات الشرعية في استحداث عزلها عن المساجد، أبحاث ندوة عمارات المساجد ، مجلد ٨ ، ص ص ١٦١ - ١٧٤، كلية العمارة والتخطيط جامعة الملك سعود.
- (Wanely, 1994) وانلي، خير الدين. ١٩٩٤. المسجد في الإسلام ، أحكامه ، آدابه، بدعه ، عمان ، المكتب الإسلامي.
- معايير بناء المساجد . ٢٠١٧ وقف سعد وعبدالعزیز . الرياض: الموسى للنشر [/Available at: https://mosque-design.com](https://mosque-design.com)