

THE ROLE OF DOMESTIC COURTYARD IN ISLAMIC TEACHINGS AND PRACTICES: OMAN AS A CASE STUDY

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ABSTRACT

Islamic domestic courtyard diffuses in many varieties throughout all Islamic countries extending from Arabian Gulf to Atlantic Ocean and towards Pacific Ocean; and has undergone a complex development throughout history. This house typology is a significant phenomenon in the aspect of cultural, environmental, structural and most importantly religion. In Islam, house is not only a place of shelter and rest but also a center where family members can learn, teach, practice and further propagate the teachings of Islam. Through the study of Islamic teachings and architectural knowledge, a house can be designed so that it is capable to play a vital role in enhancing Islamic way of life among its inhabitants. In view of this subject, one of the fundamental functional spaces which should be integrated to the house design is courtyard. Courtyard is an essential entity that was built to moderate complex climatic conditions and to deal with complicated issues in Islamic teachings, for example in subjects of privacy and efficiency. Among the attributes of domestic courtyard are introverted orientation (privacy), space organizer, transitory space, climatic moderator and multi-functional space. These attributes contribute considerably to the house entity in fulfilling its roles and functions as a focal point of Muslims to inculcate divine principles into their lives. This paper intends to elaborate on the attributes of domestic courtyard and analyze important subjects in Islamic teachings pertaining to domestic living. Further, Oman, a country that enters to the fold of Islam at its early advent (2nd year Hijrah), with its unique courtyards houses is used as a case study for this research in order to analyze courtyard typologies and its role in the Islamic teaching and practice.

Key words: Islamic domestic courtyard, Islamic teachings and practices, divine principles, attributes of domestic courtyard, domestic living

Introduction

The concept of courtyard has been invented since thousands of years to Neolithic settlements (Ozkan 2000). Courtyard originally protects dwellers and further responds to cultural, climatic and religion factors. Later, courtyard evolves in its functions and forms in order to adapt to more complex issues such as privacy in religious terms. Thus, courtyard is not only functioning as a climatic moderator and protector but also is capable of enhancing Islamic practice and teaching. This proof of traditional architecture wisdom is prevalent throughout Islamic regions particularly among the Arab Gulf countries.

In the Arab Gulf Countries, local architecture has been changing drastically especially in their domestic built environment. The architectural transition from vernacular to modern foreign-style occurs due to mass modernization and ample oil revenues even though traditional domestic architecture (fig.1) has successfully carried out its role in terms of climatic and religious aspects. The modern houses are designed and built by foreign architects, engineers and laborers who are experienced in their fields but have little knowledge about the significance of traditional architecture which is very much responding or reflecting to local climate, socio-economic conditions, material availability, religion, activities and culture of local communities. Not only local material like stones, baked bricks, mud bricks, palm trees, mangrove poles and lime are substituted by concrete blocks, bricks and glass, but also architectural elements like small exterior windows and courtyard are replaced by big glass windows and fully covered, air-conditioned hall respectively (Fig.2). One negative effect of these changes is rapid increase in electricity consumption (for example, at present in Oman, more than 70% nationally is used for air-conditioning modern, energy-inefficient buildings) (Al-Hinai, et. al, 1993).

Fig. 1: Vernacular House at Bani Habib, Jabal Al Akhdar (source: author)



Fig. 2: Present Bungalow at Muscat (source: author)



Another consequence, in architectural term, courtyard which has been the main element of domestic architecture and foremost aspect of intangible cultural heritage in many Arab Gulf countries is gradually diminishing.

This paper examines the characters and advantages of courtyard house in term of domestic built environment and analyzes Islamic teachings in aspect of domestic living as revealed in the Holy Quran and Ahadith. Specifically, the paper focuses on the uniqueness and variations of courtyard houses of Oman and also elucidates how courtyard houses apart from performing their functions, can be a medium to enhance Islamic domestic way of life as laid down by the Holy Quran and Ahadith.

Courtyard House

Courtyard house is one of the earliest and unique domestic architecture elements which exist in many civilizations since 5000 years ago. Commonly related to the middle east where the climate and culture strongly influence type of courtyard housing, other example exist in Latin America, China and Europe where the form has been reinterpreted to their culture and belief (Edward et.al. 2000). Moreover, courtyard is common in the early time of Islam, stretching as far as Morocco to Turkey and of course, the Arab region which mainly are determined by local tradition, architecture and ecological constraint (URL-1).

Courtyard house, which provide many advantages, prove to be an ideal prototype especially for desert areas (Poster, 1989). According to Amos Rapoport several advantages of courtyard houses are: 1- Distinct privacy mechanism 2- Subsystem setting 3 Access to other spaces 4- Efficiency use of space 5- Climatic efficiency (2007).

These advantages can be further elaborated and interpreted as follows:

- 1- Distinct privacy / introverted orientation
 - i- Provide safe internal outdoor for children and elderly, providing easy and natural privacy (Poster, 1989).
 - ii- Function as family quarters that protect female members of the household from the eyes of male strangers (Memarian, Brown, 2000). According to Al-Azzawi, traditional Baghdad houses have 4 categories courtyard: Hoash al-haram – courtyard of the family quarters, Hoash al-Diwan-Khana - courtyard of business or guests' quarters, hoash al-matbakh – the kitchen courtyard, and Hoash al-Tola – courtyard of the stable (Memarian, Brown, 2000).
- 2- Subsystem setting / Space organizer
 - i- Spaces are organized around courtyard.
 - ii- Provide more habitable spaces through the many openings facing to the courtyard.
- 3- Access to other spaces / transitory element
 - i- Connecting spaces for a better transitional experience between spaces.
 - ii- Transition of the exterior of the inside house to the interior spaces
- 4- Climatic efficiency / Climate moderator
 - i- Provide higher ratio of internal volume to external surfaces in order to reduce heat exchange (fig. 3) (URL-10).
 - ii- Provide an open area protected from sun, wind and sand (fig.4). When they are clustered, surfaces can be reduced significantly to provide further protection from weather (fig.5) (URL-3)
 - iii- Moderate temperature due to the freezing cold in the night and hot in the day (Poster, 1989).

Fig. 3: When volume increases in relation to surface, heat exchange with the outside decreases (URL-3).

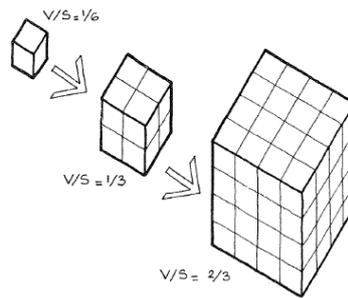


Fig.4: Protected area in a house (A) in Fez; (B) in Istanbul (URL-3).

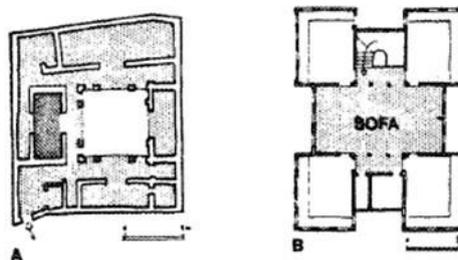
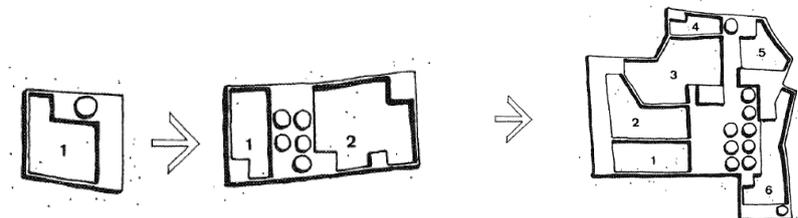


Fig.5: The clustered of buildings limits the exposure of peripheral walls to the sun's rays Telbisseh, Syria (URL-3).



5- Efficiency use of space / Multi-functional space

- i- Offer better desert housing with lower cost. Since materials such as wood or steel are limited in undeveloped desert region construction of a structural span more than 3m is difficult. By making the courtyard the large room of the house, a large space can be achieved without any additional structural span and cost (Poster, 1989)
- ii- Courtyard space become an active and usable living space (Poster 1989) due to its other benefits (moderates current climate, gives privacy and provide extra space)
- iii- Can be used for more than 4 functions: dining, cooking, sleeping, gathering etc.

In short, the above advantages of courtyard which are analyzed from traditional domestic architecture prove that courtyard is an essential entity that was built to moderate complex climatic conditions and to deal with complicated issues in Islamic teachings, for example in subjects of privacy and efficiency.

Islamic Teachings In Aspects Of Domestic Living

In Islam house is regarded as one elements of happiness in life. As stated in a saying of Prophet Muhammad s.a.w.

“There are three elements of happiness and three elements of misery. The elements of happiness are: a righteous wife, who when you see her she pleases you, and when you are absent from her you feel that you can trust her with regard to herself and your wealth; a compliant riding-beast that helps you to keep up with your companions; and a house that is spacious and has plenty of amenities.....

(URL-4).

Islam is a comprehensive religion with its teachings encompasses all aspects of human life which include the subject of domestic living.

Below are some of important aspects in Islamic teaching related to domestic living:

1) Islam discourages showing-off but emphasizes modesty / humbleness and stresses on privacy.

The prophet (s.a.w) said: **“Allah does not look towards your faces, or towards your richness; but He sees (see sincerity of) your hearts, and the nature of your deeds.”** (Muhammad Yahya 2009).

Guarding the privacy of oneself and that of his family is an obligatory and a virtuous act. Further, in Islam it is equally important to respect the privacy of others. As the Holy Quran teaches (interpretation of the meaning):

“O you who believe! Enter not houses other than your own, until you have permission and saluted those in them: that is best for you, in order that you may heed (what is seemly). If you find no one in the house, enter not until permission is given to you: if you are asked to go back, go back: that makes for greater purity for yourselves: and Allah knows well all that you do” (al-Nur 27-28).

2) Islam is full of discipline not anarchy.

In Islam man cannot do whatever he wants but he has to follow the teachings ordained in the Holy Quran and Ahadith. For example, one has to consider his neighbor when building his house. Prophet Muhammad s.a.w. is reported as saying nobody will become a true believer unless his neighbor feels secure and safe at his side: **‘do not block his air by raising your building high without his permission’**. (Abdalati, 1978)

3) Islam ordains a systematic code of living.

Islam is a comprehensive religion which offers its believers guidelines in all aspects of life including domestic way of living. As Allah says in the Holy Quran **“And today we have perfected your religion for you and completed our bounty upon you.”** (Al-Maidah 3)

4) Islam ordains peaceful and constructive coexistence with the environment. The environment must be valued since man relies on it. As Allah bestows it to mankind, so does He make it an obligatory field of the vicegerent activities entrusted to man (Omer, 2013). Allah says in the holy Quran **“But seek, through that which Allah has given you, the home of the Hereafter; and [yet], do not forget your share of the world. And do good as Allah has done good to you. And desire not corruption in the land. Indeed, Allah does not like corrupters.”** (Al-Qasas 77)

5) Islam ordain efficiency without waste

Allah says in the Holy Quran, (interpretation of the meaning):

“Verily wasteful is the brothers of evil” (al-Israa 27)

The practices of the above teachings can be enhanced significantly by the attributes of courtyard as below:

1) Introverted design – in compliance to the importance of humbleness in Islamic teaching and provides better privacy which is imperative in Islam.

2) Space organizer – conforms to character of Islam as a comprehensive religion with complete rules and regulation of the Islamic religion.

3) Transitory – in accordance to Islamic systematic code of living that prescribe guideline for every situation.

4) Climate moderator – same concept in Islam that encourages peaceful and constructive coexistence with the environment.

5) Multi-functional space – Reflects the notion of efficiency in Islam.

Analysis Of The Role Of Domestic Courtyard In Islamic Teaching And Practice: Oman As A Case Study

Oman is often regarded as a country uniquely distinguished from the rest of peninsular Arabia by geology, topography, history, society, culture and even by the specific sect of Islam practiced. Oman evolved into an introverted society and culture practicing its unique form of Islam (Bandyopadhyay, 2005). The indigenous domestic courtyard house is prevalent throughout Oman.

Fig. 6: Oman Map – 4 area of courtyard houses 1. Coastal, mountain, desert and southern (URL-1)



There can be classified into 4 distinct courtyard spatial organizations (Fig. 6) which are: mountainous courtyard house, desert courtyard house, coastal courtyard house and southern courtyard house.

This paper explores the different types of Omani courtyard designs and how these designs enhance the socio-culture and Islamic practice in Oman.

Oman Mountain and Oasis Courtyard house

Oman Mountain stretches from the north-west to the south-east side facing the Gulf of Oman. This mountain area also contains about 2430 oases of different types (Luedeling and Buerkert, 2010).

Oasis dwellings have subtle articulation courtyard due to climate and limited arable soil. Courtyard is given indirect approach and its main function is divided into separate but interrelated spatial fragments. According to Bandyopadhyay (2005) this phenomenon is known as deconstructive courtyard.

Fig. 7: House of Banu Habib Jabal Al Akhdar Plan (source: author)



Houses in mountain and oasis area are always compact with vertical arrangement. In replacing a common square courtyard on the ground floor, courtyard in Oman mountain oasis is on the upper floor which makes it more secluded. Some houses have loggia at upper floor on the sides of family living space. The space under the loggia is used for the coffee sessions in the day and sleeping area in the night.

The house in fig. 7 & 8 is the house of Wadi Bani Habib at mountain Al-Akhdar. The house is double stories made of rock which is found locally.

Fig. 8: Oman topography (source: author)



Courtyard is located on the second floor which interconnects spaces. The above courtyard has a light-well for the working space below. This courtyard is for drying dates and clothes, family gathering at night in summer and other functions. The roofs normally have slightly raised perimeter walls to provide some privacy for dwellers to spend the evening hours, and to sleep at night (Al-Hinai et al., 1993).

Womenfolk used the vestibule to perform household work during the day and to meet other women of the neighborhood for 'coffee sessions' at a specific time (Bandyopadhyay, 2005). For the privacy reason houses at this region have single entrance with small and high-level windows on the ground floor and slightly larger windows on the first. With this simple solid façade it reflects the austerity way of live.

Based on the above analysis, deconstructive courtyard houses of Oman Mountain and oasis region enhance Islamic practices since they provide utmost privacy (main activities on first floor), create internal environment for household activities and function efficiently as space organizer.

Oman Desert Courtyard house

Oman sand and gravel deserts cover approximately 80% of the nation (Mohamedi, 1993). Central desert is the largest which covers from the south al-Hajar Mountains to the Dhofar Mountains. In the west the vast sandy "Empty Quarter" (Rub al-Khali) and to the east is the Ramlat Wahibah region.

Fig. 9: Desert house plan in Sinaw (source: author)



The above courtyard house of Oman desert region has three clustered courtyards (fig.9 (a)) namely guest courtyard, family courtyard and kitchen courtyard. These courtyards are connected by narrow passages which surrounds the family room. The inside house layout protects from the extreme weather cause by solar gain or hot dusty air. Because of this, fewer windows is placed at the outside wall (Fig.9 (b)). At night, the air and surface temperatures drop significantly due to thermal radiation occurring to the clear night sky. As a result surfaces cool drastically i.e. to below the surrounding temperature. Further the cooler air in the courtyard is protected from the warm wind outside by the walls surrounding the courtyard. In the evening, the warm air in the courtyard goes up while the cool air from the surrounding goes into the courtyard causing the convection current cooling the courtyard and the surrounding walls (Al-Hinai et al., 1993).

The above phenomenon illustrates how courtyard acts as a climate moderator; an attribute that facilitates man to coexist constructively with the environment as ordained in Islamic teaching. The family and kitchen courtyards give flexibilities in conducting daily duties while maintaining privacy. The guest courtyard has a bent entrance for the male guest to enter the male living room. The female entrance is totally separated from the male entrance. The small door at the entrance cause the guest to

enter the house with his head bent down so that the inside house will not be viewed at the first glance. Thus, courtyard contributes considerably in guarding privacy and further enhancing Islamic practices.

Oman Coastal Courtyard house

Coastal region of Oman is only 5% of its land (Mohamedi 1993). Oman coast stretch for 1,700km from north to the south which facing to the Persian Gulf, the Strait of Hormuz, and the Arabian Sea (URL-6). The larger part of the central coast is having sandy low hills and wastelands (Mohamedi 1993).

House of Al Wahaibi is in Muscat coastal region situated at Quriyyat (Fig.10), having tunnel-like connecting courtyards to catch sea breeze causing cross ventilation. There are two main courtyards on the ground floor and one courtyard on the upper floor.

Fig. 10: Plan of coastal courtyard house at Quriyyat (source: author)



Two entrances are located on the south side facing to the main street. One entrance leads to the male living room while the other to the courtyard which directs ladies guests to the living room. The east-side entrance leads to the back spaces which are family courtyard. There is a passage connecting between two main courtyards where the family usually sitting down for coffee session.

Fig. 11: Front courtyard and cross corridor (source: author)



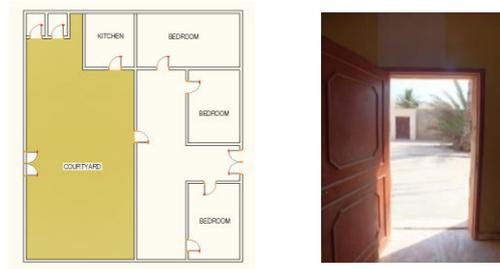
This traditional invert looking house is very much responded to climatic and social-cultural contexts. These courtyards become space organizer that gives environmental advantages and privacy. Male guest room can be access directly from the outside (Fig.11), and the south west entrance, open to courtyard, is exclusively used for female guests. This character reflects Islamic teachings in aspects of keeping privacy inside house and honoring guests to bring blessing into the house and strengthen bonding between the Muslim. The north-east courtyard directly links the side entrance to the family courtyard. This multifunction courtyard is used for activities such as drying clothes and drying dates during day time and the same space becomes the family

hangout place and even sleeping area during summer in the night time. This attribute enhances Islamic practices in applying efficiency and systematic living. Further, the courtyards are connected with passage that also used as a hangout place. The whole courtyards allow the family members to move around in an outdoor setting while still maintaining their privacy which is important in Islam.

Oman Southern Courtyard house

Southern Oman Dhofar region extends from Ras ash Sharbatat to the border of Yemen and north to the border of Saudi Arabia. It is separated from the rest of Oman by several hundred miles of open desert. The coast of Dhofar is fertile due to monsoonal fogs from the Indian Ocean and is part of the Arabian Peninsula coastal fog desert. Dhofar region receives heavier rain from the rest of Oman and has stream running continuously (URL – 2).

Fig. 12: House plan (left) with big courtyard view at rear (right), (source: author)



Traditionally, palm frond is the main house material in this region because palm-frond is air-leaky structures which are advantageous in the humid season therefore to improve the thermal capacity so that internal temperatures are stabilized. The north rooms usually had mud-plastered walls to shield from the northerly winter wind (Al-Hinai et al., 1993).

The above (Fig.12) is a present house in Salalah, Dhofar. With different materials but having the same concept of traditional house, this house has huge courtyard at the back of the house where the windows of the living room are facing. The courtyards are separated to the back lane by one story height wall. Wall facing to the sea have more windows and openings to get more breeze blow through the house and to the courtyards.

Fig. 13: Big open space in front of house in Salalah (Al-Hinai et al., 1993).



Interestingly, houses were separated for some distance from each other so that no neighboring houses will be blocked from the wind, thus permitting the wind to reach all the houses. One story height wall enclosed a courtyard on the south side in order to avoid other houses being constructed closely and then would block the sea breezes (see Fig. 13).

The spacious courtyard of southern house with high perimeter wall provides privacy which is imperative in Islamic teaching. The courtyard also allows maximum flow of wind to penetrate into the house. This character facilitates dwellers to consume nature positively and thus coexist with the environment peacefully as taught in Islamic teachings. Further, the separation of houses with spacious courtyards permits wind to blow into all houses in the neighborhood in order to fulfill and honor right of neighbors. This reflects the uniqueness of Islam as a comprehensive religion that offers guidelines in all aspects of life.

The Importance Of Domestic Courtyard Application In Malaysia

From the previous discussion, domestic courtyard can be integrated in house design in Malaysia due to its beneficial advantages. With the courtyard in house design, privacy, security, internal environment, climatic moderation, multi-functional etc. can be

achieved within the house domain. Most importantly, the domestic courtyard enhances the Islamic practice of Muslim dwellings since it complies with the Islamic teaching in aspect of domestic living. Further research can be made in order to search for appropriate design of domestic courtyard in Malaysia which is a tropical country with its unique people and culture.

Below is an example of courtyard house design in Hulu Langat, Selangor Malaysia (Fig. 14). The courtyard acts as a space organizer, located in the middle surrounded by main functional spaces which are living rooms, dining room and master bedroom. Privacy is achieved from the courtyard front wall and high wall blocking the male living room. The courtyard acts as a transitory space between the outside and inside spaces. Thus, this create the bent entrance which further enhance the privacy of the inside spaces. Since the courtyard surrounded with high walls and roofs, the cool air in the courtyard from the night remains till noon. This cause the cooling effect to the house. The courtyard is used as multifunctional space for family gathering, working area like drying cloth, planting trees and kids playing zone.

Fig. 14: Courtyard surrounded by habitable spaces (source author).



Conclusion

Analysis of traditional courtyard house underlines the foremost role of this typology in respond to climate, economic, social, cultural and most importantly, religious factors. Studies of Islamic teachings regarding domestic living reveal the importance of privacy, modesty, efficiencies, systematic code of life and compatible coexistence with the environment.

In the discussion above, the link between the Islamic practices and the living environment of courtyard houses has been elucidated and further illustrated by variation of Oman domestic courtyards. Also, it is important to integrate courtyard into Malaysia domestic architecture through proper analysis and design.

In conclusion, Islamic teaching is the main generator of architectural form for Muslim domestic built environment in which courtyard is one of the most integral functional spaces in enhancing Islamic practices.

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