CONCEPT OF THE "ISLAMIC HOUSE"; A CASE STUDY OF THE EARLY MUSLIMS HOUSE

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Abstract- Islam is a way of life, and this has been reaffirmed through Al-Qur'an (the Word of God) and Al-Sunnah (the behavior & speech of Prophet Mohammad –peace upon him); so the early traditional Muslims house follows certain Islamic principles as guidelines in architectural design. As a way of life, then the house should provide a complete living web that reflects the lifestyle of Muslims. An "Islamic house" means a house with the values of Islam which is started from good intentions, clear philosophy and then conceptualized until the completion and construction of the building. Referring to the history of Islamic architecture in the Islamic world, different styles could be seen in different regions as each particular region used its own indigenous regional from which was influenced by the interchange of culture traits, ideas of authority figures, administration and intermarriage. Indeed, even the vernacular techniques, climate and local materials, also influenced the form of Islamic house architecture, which will be discussed in this paper through many examples of the traditional Islamic houses. This paper discusses aspects of architectural concepts in the early "Islamic house". Islamic values in traditional Islamic houses are manifested in the design concept of buildings, use of materials, and environmental and social consciousness. There are indeed many lessons to be learned from this concept and design. On the other hand, aspects of the Islamic concept of architecture is absent from almost all modern houses in the Islamic world for many reasons: rapid development, use of foreign materials, design methods, and construction systems all contribute to the absence of sustainability and spirituality in modern buildings. The aim of this paper is to illustrate the concept of the Islamic house and amplify awareness and implementation of Islamic measures in the design, construction, and education of architecture.

Keywords- Islamic; Early; House; concept,

I. INTRODUCTION

An understanding of Islam as a religion is necessary in order to comprehend its effect on the built environment. The teaching of Islam covers the whole range of human activities and needs including the spiritual, socio-cultural, economic, political, and environmental. Islam is not simply a religion; it represents a whole sense of community and way of life. It defines both a worldview and a guidance framework for action in all spheres of life.

Islam ensures in its teachings that everything that we do in this world is considered as religious if it is undertaken with Allah's consciousness and accords with the values and principles revealed by Him.

Islam has given a responsibility to man towards the natural environment. It evolves from the role of man as vicegerent (khalifah) on earth. As khalifah, Allah has grounded us in a position of power and trust, which we must hold with responsibility and harmony. We cannot violate the trust. In this regard, Al-Qur'an says:

"He is that made you vicegerents in the earth 'if then' any do reject (Allah)' their rejection (works) against themselves." (Qur'an 35-39)

The attention paid by the Shari'ah (Islamic Law) to the natural and urban environments of Muslims is reflected in certain principles, which intimately aim to enhance the social framework of Islam.

Those principles are clearly found in the sources of Al-Shari'ah as the basics and guidelines of Islamic built environment, which are stated in Imam As-Shafi's legal theory presented in his book Al-Risala which he wrote during the five years before his death in 204 AH/81AD.

According to As-Sha'fi, there are four major sources or roots (usul) of Islamic law, which are taken into consideration for the Islamic built environment.

1. Qur'an (word of God "Allah")
2. Al-Sunnah; the divinely inspired speech and behavior of the prophet Mohammed (peace upon him).
3. Ijm'a; the consensus of the entire Muslim community.
4. Qiyas or Ijtihad; the use of human reason in the elaboration of the law.

II. ISLAMIC QUARTER AND URBAN FORM

According to Guzler Haider, an ideal Islamic city is where the residents live based on the following criteria; - faith (iman), law (shari'ah), vicegerancy (khilafah), environment (biah or khilqat), hard work (meshaqqat), unity (ummah), alms (sadaqah-economy), justice (adl), struggle (jihad), loyal (ibadah),piety (taqwa), knowledge (ilm), thinking (fikr) and beauty (jamal).

The urban form of the traditional Islamic city shows that the mosque and other public facilities such as the suq (market), hammam (public bath), governor's palace, madrasa (school), caravanserai (hotel) and other public facilities, all represent the "Social Foundation" in the heart of the city. The "Social Foundation" occupies not more than 10% of the land of the traditional Islamic city. The residential sectors almost occupy 60-65% of the city land.

The mosque or "masjid" became the focal point surrounded by public facilities in the core of the traditional Islamic city. It was not only used for jemaah (congregational) prayer, but was also planned as a centre for social development, a knowledge centre, for education and other activities. Normally, the maximum walking distance to the mosque in a residential area does not accede 250 meters.

The original Islamic Arab city was a pedestrian city. The pedestrian routes were built separately from the road for vehicles. The purpose of this was to create a safe environment for the residents. The pedestrian nature of the Islamic city enables one to enjoy and feel the external spaces. Pedestrian activity is encouraged by walkways, enriched by shadows from walls, mashrabia (projected balconies with grilled screen windows) or the landscape. The pedestrian also has easy access to all services, like schools, mosques etc.

The design of the modern city is affected by measurements relating to the flow of traffic. To give the city a sense of humanity, it is necessary to find a way to relate human movement and the movement of the car, and both should be considered in the urban vision scheme.
In the case of the pedestrian, one could suggest a system which would connect the whole community by using corridors of semi-covered pathways, separated from the cars, and using bridges at the crossing points.
The previous statement conveys great meaning to town planners as vicegerents. The planner is not only involved in the physical aspects, but also must be competent to produce a good environment to enhance the quality of social life. This means, the major role of the town planner is to be available to produce a good environment, which considers both physical and other values aspects (social life) in producing a layout design. Meaning to say, town planners and architects are also closely related to the Shariah (Islamic Law) in managing human life according to the Islamic concept for a comfort built environment.

III. ISLAMIC RESIDENCE CONCEPT

"Islamic" means "to reflect Islam", and the term "house" means "the habitable and comfortable place to live in harmony without any problems". The term "Islamic house" means "a house with the values of Islam which is started from good intentions, a clear philosophy and a conception that reaches the completion of the construction of the building according to Islamic teachings. The nature and behaviors of the Islamic family and its social role has created the typical Islamic attitudes regarding the function of the house. The right and responsibility of the family to live in an enclosed space has led to a clear separation between public and private life, which may be the most significant social characteristic of Islamic culture. As we know, there are a lot of activities we can be found in a house, such as sleeping, eating, family gatherings and much more, but if we want to create a real Islamic house, it should include the concept of Islamic life and anything that relates to Islamic teaching and morality, such as cleanliness and modesty.

Houses, especially in the "Muslims residential sector", are one of the important elements in the built environment. In Arabic, house is called ' sakan' which is derived from 'al-sakinah', which means 'tranquility', as God mentions in Al-Qur'an.
The Sharia'h scholar, Dr. Yousuf Al-Qaradawi, defines the house as "the place in which an individual protects himself from the climatic impacts and in which he finds freedom from the restrictions and pressures of society. It is place of rest for the body and relaxation for mind'".
 This Definition of the function of the house is based on many Qur'an verses, one of which is:

It is Allah who made your homes for rest and quiet for you, out of animals, (tents for) dwellings, which you find so light (and handy) when you travel and when you stop (in your travel): and out of their soft fibers (between wool and hair) and their hair, rich stuff and articles of convenience (to save you for a time). (Qur'an 16-80)

Islam also regards the house as a place for expression and strengthening family relationships. This indeed explains why the Prophet Mohammad (peace upon him) says that the house is the best place on earth. The Prophet (peace upon him) considered owning a house as a contribution to happiness. He says:
For happiness, a good thing to ride, and a good house (Ibn Hibban).

There are some basic principles or guidelines for Islamic housing related to the verses of Al-Qur'an and Al-Sunnah of the Prophet (peace upon him) such as: privacy, comfort, peace, safety, natural light and ventilation, cleanliness, modesty and many others.

IV. MAIN FEATURES OF AN "ISLAMIC HOUSE"

The characteristics of a house are that it should serve all the utilitarian needs, be suitable to the lifestyle and culture of the owner, and protect the residents from the climate and harm.
Islam does not forbid or restrict any kind of house, design concepts and custom as long as they do not contradict the teachings of Islam.
The "Islamic house" should follow certain Islamic principles as guidelines of architectural design and provide a complete living web that reflects the lifestyle of Muslims.

A typical Islamic house is designed based on the function and nature of the family and its social role. As well as responding to needs, lifestyle, culture and comfort criteria, a house must also positively respond to the economics and geographical conditions, building material and techniques available.

The formation of an Islamic house is perfectly determined by the factors of Quranic prohibitions. These then make an Islamic house is a perfect living place that reflects the way of life suggested in Islam:-
'There was indeed a sign for Sheba in the dwelling place: two gardens on the right hand and the left. Eat of the provision of your God and never render thanks to him. A fair land and an indulgent Lord" (Qura'n 43:15)

4.1 Privacy
Public and private life are strictly demarcated in Islamic society, and even within the house, degrees of privacy are expressed architecturally, the most fundamental division being between male reception areas and the harem (women) area, and the family sanctum. In a sense, it is a development of the Bedouins tent, though the latter is far more open. In use, visitors are required to maintain a code of behaviour which was developed over centuries and of which the Arabs are rightly proud. Traditions of hospitality, generosity and kindness to strangers abound in Arab history and folklore and are typified by men such as Hatim Tai, a contemporary of the Prophet. The simplest form of separation of male and female areas is found in the tent of the nomad, where there is no permanent structural division. A screen or cloth is hung across the center of the tent and along one half of the front when unrelated male visitors are present   .

From an urban design point of view, the household is private and should not display itself to the street outside. Only one or some of its external walls will face the street, and is maintained in as unassuming manner as possible. If there are openings other than a door, then they must be screened and it should be impossible to see into the area occupied or used by the household. This is also true for door or gate openings which usually have screen walls behind them, guarding the privacy of the household.

In the example at fig.1, you can see windows at ground floor level guarded by vertical iron bars and internal wooden shutters. These are the windows to the majlis (guests room), the area of the house which is open to male visitors. Other openings which are visible are screened by mashrabiya, perforated plaster panels, or by a badgir (air scoop) – recessed planes which help channel and direct air movements into the building and onto the roof where, in the old days, many used to sleep at night.

Privacy is paramount in Islamic households. The key point to understand about the manner in which Muslims houses are used, is that there is a significant separation of the male and female areas of the house.

Certainly a difference in scale of the house can make the layout less or more complicated, but all houses should fulfill the previous illustrative privacy. –The interior courtyard house is the ideal expression of these concepts. Although an austere façade is presented to the outside world, the interior courtyard is a place where the family is free to work and relax.

Generally, the living unit of a Muslim should have two types of space:- private and public. The most fundamental division occurs between male reception areas and the family living area where the family work and relax. The plan of the living unit should be such that guests can be entertained without interfering with family life. In the living unit most spaces are not functionally specific; the rooms can be interchanged for sleeping and eating. Such flexibility reflects the concept of unity within the living unit.

In the men's area of the house, there will be accommodations where guests can live when visiting. Sometimes a guest will sleep overnight on the floor of the guest room, but at least one room with associated bathroom facilities would be a preferred solution.

The men's reception (or guest) room tends to be located adjacent to, or directly accessible from, the entrance lobby of the house so that visitors do not meet or converse with the female household or violate the harem.

A room where guests can be entertained and major family occasions celebrated is included in the Islamic house wherever economically possible. It is usually the most decorated room in the house.

Flat roofs of the early Islamic house in the Middle East serve a variety of purposes in the hot regions of Islam: storing and drying food- stuff and, as a sleeping area. The roof's status as a normal living and working area is clearly indicated by the permanent staircase leading to it.

4.2 Courtyard Concept
The Islamic city is filled with cellular courtyard houses of every size and shape, tied together by a tangle of winding lanes, alleys, and cul-de-sacs. Housing is grouped into quarters, or neighborhoods that are defined according to occupation, religious sect, or ethnic group (see Fig.1A).
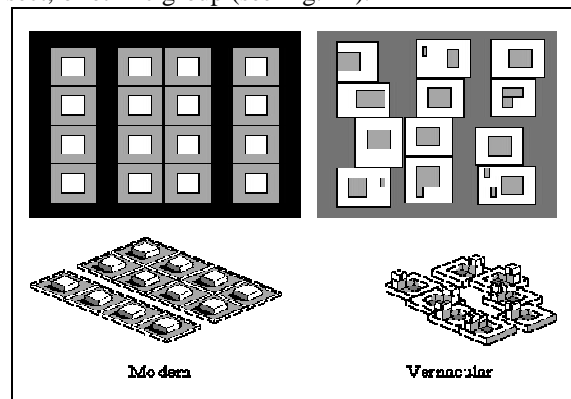

Figure (1A) Modern and Traditional Islamic "cluster of houses" planning, Source: Mahgob, 1997

The main feature of Islamic architecture is the focus on interior space as opposed to the outside or facade. The typical expression of this focus on inner space is in the house. Muslims dwelling units typically are organized around an inner courtyard. The facade of this house offers high windowless walls interrupted only by a single low door.

Fig.1 The courtyard represents the core of the traditional Islamic house; it includes a water element and trees. This picture is a traditional house-courtyard of Andalusia Source: Author, 1999

The sahan, fina or Courtyard consists of an open space surrounded by semi-open spaces (veranda) or enclosed spaces (rooms). For social and religious purposes it helps to achieve privacy. It is a place where trees and flowers are planted and fountains are located.

Muslims courtyard houses are clustered together into a walled complex to serve the needs of extended families. The entrance to the complex (which has many courtyards sometimes) is through a single door that leads to a passageway from which the individual dwellings can be reached. The introverted courtyard house expresses the need to exclude the outside environment while protecting that which is inside -- the family and the inner life.

The open courtyard is still considered to be the most convenient of all designs to serve these purposes. The open courtyard presents the first concept of unity in space. It has been used in different sizes of houses, palaces and other types of residential buildings.
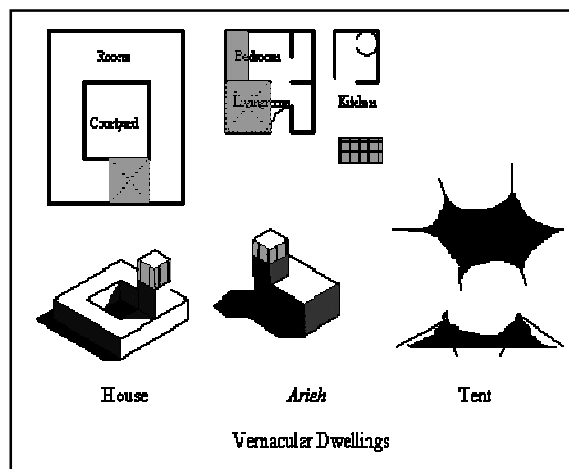
4.3 Relationships & Classification of the Spaces
Essentially there are four kinds of space found in the traditional "Islamic house", both internal and external:

- private,
- semi-private,
- semi-public, and
- public.
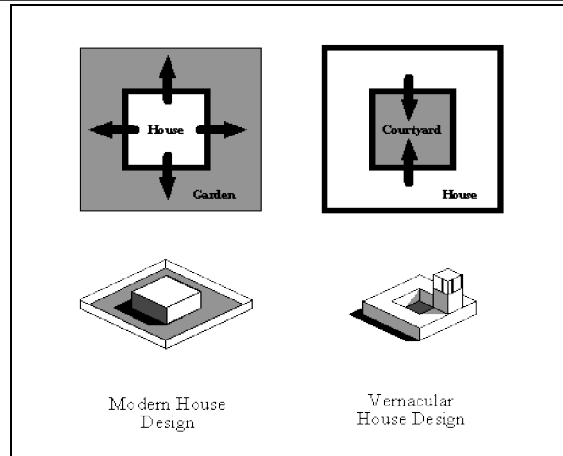
Figure (2A) Modern and traditional Islamic house design concept, Source: Mahgob, 1997

Figure (2B) Types of early Islamic vernacular dwellings, source: Mahgob, 1997

The hierarchy of spaces and the sequence of private, semi-private, semi-public, and public, is one of the main features of the house concept. In different parts of the Islamic world the architecture and planning of the sequence was handled differently, perhaps as a reflection of the degree of importance the different societies held this hierarchy, but also as a consequence of the amount of land available, and the degree of safety against attack; to this might be added the degree of comfort in terms of noise and nuisance. In some parts of the Islamic world, for instance in the city of Fez, Morocco, there is a sequence of four steps to access the public street;   first, there is a bent exit from the courtyard,

- this leads to a private corridor, which, in turn
- gives out onto a blind alley that
- leads you to the public street.

In Tunis and other cities, at the entrance to the house there would be a small room off the main thoroughfare or blind alley which served both as a semi-public space as well a guest room; privacy to the rest of the house being maintained by further turns or screens (see Fig.8).
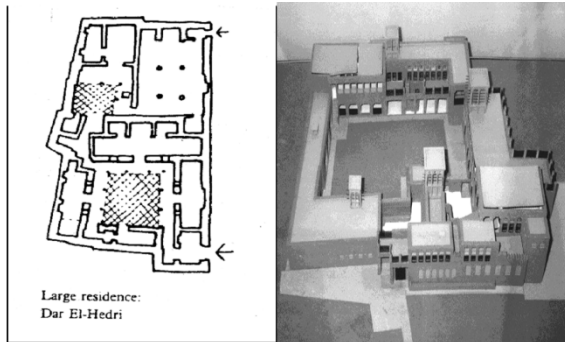
Fig. 2 (left) Plan of typical traditional Islamic courtyard house in Tunisia Source: Hakim; 1979 And the model of sheikh saeed house, UAE (right) Source: Mahgob, 1997.

In Arabic gulf countries and Iraq, there were both blind alleys and public thoroughfares onto which houses opened. In each case there was usually a space incorporating either a dog-leg or right-angled turn in order to provide privacy.

It was noticed that there should be no opening of one door directly across from another, even on large streets, as there was an argument that harm would result. By this they appear to have been thinking primarily of privacy, but there were also arguments relating to the uses that might develop adjacent to the opposite entrance. Sometimes a complicating issue was provided by the rights or duties incumbent upon the owners of properties, as these varied with the owners' position with respect to the entrance of an alley.
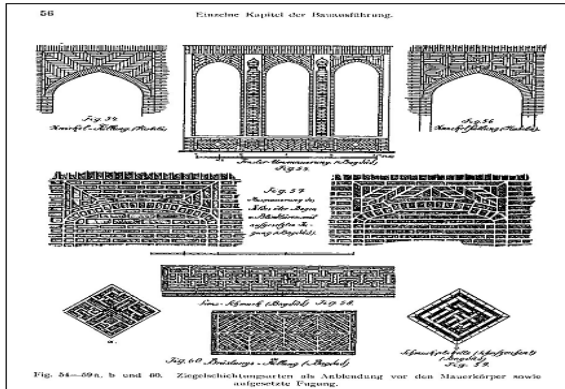

Fig. 2A constructional bricks pattern for external and internal openings of the traditional Islamic house in Baghdad-Iraq,Source: www. Irak
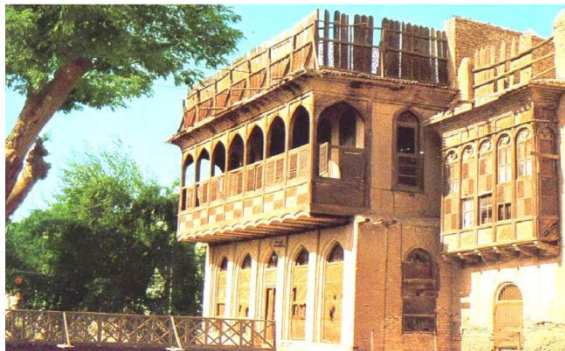

Fig. 3 (left) Grilled external windows mashrabia is one of the distinguished elements used for privacy and penetration of solar radiation, picture for traditional house in Basra-Iraq

5.4 Identity and Desire

The most important factor to be considered in designing living units are the people themselves. The traditional "Islamic house" satisfied the desires of the individuals and society. As in other traditional examples, there was a shared image of what the house should be and how it should be built.

A modern Muslims house does not satisfy the continuously changing desires of individuals and society. Social pressures, media, and other means of commercial advertisement shape those desires. There is always more to pursue, which adds pressure to the already hectic life of the individual (Mahgob, 1997).

There was no need to implement any measures to ensure relevance of identity in the community. Identity was a natural by-product of actions taken by the community during the evolution of traditional Islamic settlements. There was no need to impose an architectural style, character, or use certain architectural features or elements to produce a desired identity.

Many measures are enforced to ensure the presence of a desired identity in modern houses. These measures include committees enforcing building codes and character to ensure achieving a desired identity in new buildings. The result is a collection of unrelated buildings and a mix of styles and characters depending on the designers and committees' approvals. Many features that are enforced by these committees are not related to the traditional architecture, or even to the culture of the people, and are borrowed from other places. Identity and desire is what we are missing in contemporary Muslims houses and what early Muslims generation had.

V. ENVIRONMENTAL CONSIDERATIONS

In hot climates, courtyards with trees and water fountains provide shade, but they also provide an interior and private focus for life sheltered from the public gaze. But within the courtyard and the house itself, the appearance of plainness often gives way to lavish displays of wealth and decoration. The vividness inside parallels the emphasis in the Qura'n on the richness of the inner self compared to a more modest outward appearance.

This design concept gives the house sufficient illumination, the requisite ventilation, and acts as a sieve to purify the air from all dust particles. It also cuts noise down from adjoining roads. It traps warmth in winter and lowers the temperature of the intense heat in the summer.

Architectural and constructional treatments for the early traditional Islamic house of the Middle East shows a good understanding and responds accordingly to the climate and environment; massive structures which providing high thermal mass benefits protecting inner environments form the harsh long summers. Massive walls and roofs of the

construction work as a "thermo flask" to protect inner spaces from climatic fluctuations, as shown in figs.4&5
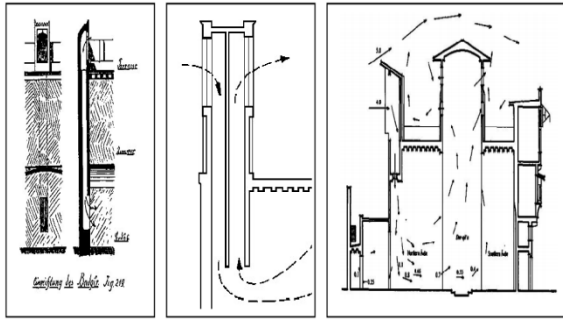
Fig. 4 Scoop or "Air-Tunnel" which orients towards prevailing wind is used in traditional Muslims house for getting ventilation for all internal spaces of the house. This is a sketch for badgir used in traditional house in Cairo-Egypt, source: www. Hassan Fethi, www. Irak and Mahjob; 1997.

The concept of the badgir-sirdab system, as shown in figs.4&5 (which is the extended air scoop or tunnel from the roof to the basement of the house) was a cheap, environmentally friendly and energy saving solution to create a comfortable environment inside traditional Muslims houses of the early examples in the Middle East. This was not an easy endeavor with outside temperatures of over 50°C during summer. The badgir caught the wind and led it through the cool cellar into the house, as shown in fig.4.
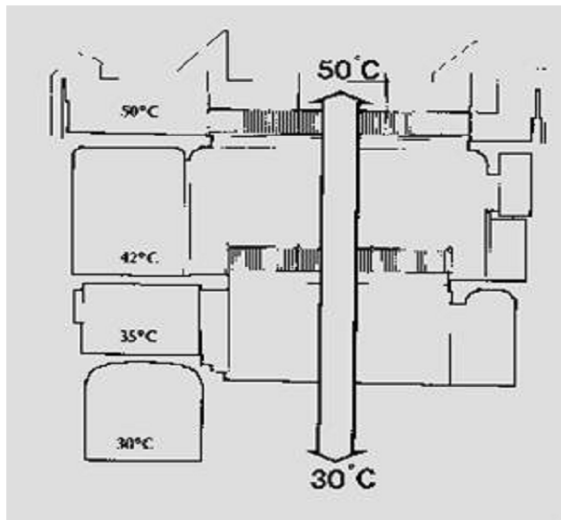
Fig. 5 Analysis diagram showing the high difference in temperature between the roof and the basement in summer, and how the high thermal capacity of the heavy construction of the traditional Islamic house works as a "thermo flask" to maintain the inner environment for energy conservation aim,source:www.Irak

Fig. 5 shows the large differences in temperature that may be produced using the naturally given conditions of the traditional Muslims house. More than 20° are even nowadays, in the times of air-conditioning, considered as unhealthy. Those conditions turn the house dwellers into Bedouins, using different places during day and night as during winter (South side, mainly closed rooms) and summer (North side, cellar and roof)

VI. RESULTS & DISCUSSIONS; CHARACTERISTICS OF "ISLAMIC HOUSE"CONCEPT

1.   A dwelling is one of the most important necessities of life. The fact that it is essential does not mean that a Muslim should spend large sums of money on building beautiful houses, concerning himself with matters of secondary importance, such as ornamentation and unnecessary rooms. The sole purpose of the dwelling should be to protect the occupant from the extremes of weather and to guarantee needed privacy.

2.   It is essential that bedrooms should be of two kinds, and separated from one another; one for the parents, the others for the children. Girls and boys should sleep apart from the age of ten.

3.   Natural ventilation and lighting should be provided for all spaces of the house.

4.   Attention should be paid to the cleanliness of the courtyard, its entrance and guests. Refuse and garbage should be kept outside the house, so that bad smells will not disturb the residents and visitors as Prophet Mohammad (peace upon him) said;

                'Keep yourselves clean as Islam is clean'   (Ibn Hibban)

5.   Following and implementing the general principles of Islamic conduct, especially the principle of beauty, cleanliness and moderation in expense, the characteristics of simplicity, a pleasant odor and modesty in the design of the dwelling.

6.   Using the internal courtyard as a core offers complete privacy to the family, as well as other architectural elements such as the mashrabia (see figs.2, 3, 6 and 7)

7.   Dwelling units, which are single or double-storied, can still preserve privacy using special treatments, which the traditional Islamic house had (see figs.6&7).

8.   Islamic housing should be practical in order to fulfill human needs based on the nature of their lifestyle, cultural, environmental, social and physical requirements.

9.   The Islamic house must relate to the family needs and sensitivity towards the environment, existing resources and building technology. It should function to reflect the lifestyle of Muslims.

10.   Applying Islamic art and decoration; geometry, floral design and calligraphy as shown in fig.2A, but does not exhibit the beauty of the house with arrogance.

11.   Height of building; must not be different from normal to prevent people from showing off (arrogance) and invading the privacy of others;.
'What does not lead you to waste fullness and does not take you away from purposeful moderation' (attributed to Caliph Umar bin Al-Khattab advising the governor of Al-Kufa).
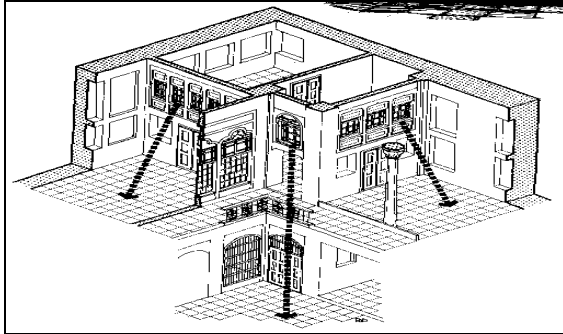
Fig. 6 Axonometric-section for the traditional Islamic house in Baghdad-Iraq showing the specific privacy which the house offered for family and the grilled windows for that as well as the massive construction which offered high thermal mass. Source:Almulla Hwaish;1989
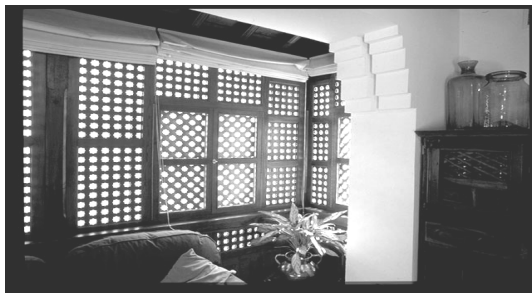

Fig. 7 Internal details of one room n the first floor facing the alleyway through the mashrabia Source: Author;1994

12.Family Protection (An-nur, 30&31)

-Segregation of each space according to activity.

-Appropriate entrance to link the alleyway to the courtyard, as shown in fig.8.

-House design and materials used should be in response to the climate.

-Natural ventilation and lighting should be provided for all spaces (see fig.4).

-It is preferable to have the lavatory separate from the bathroom.

13.Waste or extravagance: only for appropriate family needs without excessive use of either money or energy:

'O children of Adam! Wear your beautiful apparel at every time and place of prayer; eat and drink; but waste not by excess, for God I love not wasters' (Al-Isra' 26-27)

-Respecting guests;

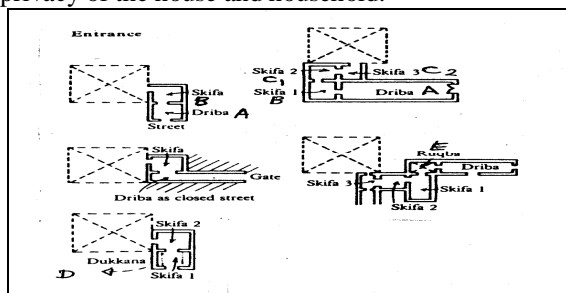-Special space for guests; no chance to invade the privacy of the house and household.

Fig. 8 Details for many types of house entrances in traditional Muslims house in Tunisia showing different design approaches for getting enough visual protection for the family during the use of the courtyard Source:Hakim;1979

 14. Neighborhood property 'the rights of Neighbors'

-No disturbance of the neighbors or the public; noise, dirt, unpleasant smells, blocking the wind and lighting (due to the height of the building).

-No usurpation of any kind and or of size, as the Prophet (peace upon him) mentioned in the following:

'Do you know the rights of the neighbors…. you must not build to exclude breeze from him, unless you have his permission…'   (Ibn Adi & Al-Kharati).

15. Fulfill human needs;

   -Size of the house must suit the activities in it:

   'Of happiness; a good wife, a spacious house, good neighbors and a good mount' (Narrated by Ibn Hibban).

CONCLUSION

Islam is a monotheistic religion, which arose in the deserts of Arabia in 600 A.D. Its founder was the Prophet Muhammad (peace upon him). The message of God revealed to him is contained in the holy book, the Quran.

Islam is the second largest of the world's religions numbering in excess of 800 million Muslims and 45 Muslim countries that extend from North Africa to South East Asia. One of the main characteristics of Islamic houses is that their function should be practical in order to fulfill the needs of a particular family based on the nature of their lifestyle and needs.

In addition to that, the design of an Islamic house should give some consideration to the existing culture and sensitivity towards geographical and domestic conditions, labor skill and available materials and the building technology of its locality. In reference to the history of Islamic architecture, we have observed that architectural styles or identities of different regions are, in fact, different from each other. The influence of vernacular, a form of art, which concerns the climate, geographical land conditions and local materials, has become the main influence in shaping the Islamic house architecture of the region. Local customs, therefore, which do not contradict any Islamic principle, can be incorporated with ease in the cultures of Muslim people. Houses designed based on Islamic principles should function and provide all that is needed to reflect the lifestyle encouraged of a Muslim.

The right and responsibility of the family to live enclosed in its house has led to a clear separation between the public and private life inside the house, and may be the most significant social characteristic of Islamic culture.

        The Islamic house should suit the nature of the family and its social role as well as responding to needs and comfort criteria. The Islamic house must also positively respond to the family needs, economics, climate and geographical conditions.

Islam does not forbid or restrict any kind of house, design concepts and custom as long as they do not contradict the teachings of Islam.

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