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ANALYSING PERSISTENCE AND FORMATION OF SOCIAL INTERACTIONS IN RELIGIOUS SPACE OF MOSQUES

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ABSTRACT

Nowadays, intricate conditions of modern life have resulted in the crucial role of social spaces in interaction occurrence fade away. The lack of social interaction possibilities has triggered urban designers to investigate on the effect of physical environment factors in public areas. It seems to be requisite to study and analyse sociopetial spaces to achieve physical attributes which can guarantee engendering of social interaction among people. Hence, occurrence of any kind of social behaviours require apt environmental-physical basis. The mosque as a collective space for Muslims and appropriate behavioural setting can be able to encircle some social interactions. It has been about centuries that mosques have performed the role of behavioural settings, and also a religious space to forge religious activities. The influence of environmental and physical factors of mosques on social interaction chances are considered in this research. The results signify the impacts of physical parameters; including locating, flexibility, diversity, visual permeability and vitality, on occurrence and endurance of social interaction among users.

Keywords: Mosque, Social Interaction, Behavior Setting, Activity Space

INTRODUCTION

In every society, according to its customs, culture and its prevalent specific memes, there can be found some special social values towards which the acts of the persons in the society are lined and coordinated. Hence every society seeks special social spaces as social interaction spaces. A very good example of this can be seen in the societies where specific rituals or festivals and carnivals are held. Each of these ethics needs a specific space to be expressed in. Obviously each of the spaces coordinated with social values in each of these societies have their own characteristics. Any case of lack or weakness of these characteristics, could lead to adulteration of the society. One of the special spaces of this kind in Islamic society is called mosque. With the Muslim population growth and their increasing conquests, the need for a place to gather in order to discuss and overcome the religious, social, political and economic problems, became an important issue. Therefore mosque being a place to promote monotheism possessed other different roles and became a place for people to gather. So it seems that this holy place possesses a concept of social interactions in itself and always has had a critical role in organizing Islamic social systems.

In relation with the importance of social interactions in recent decades, many architects and urban planner shave tried to picture their concerns and define their normative thoughts using the principles of behavioral sciences. Among the researches done in this field, the studies of John Lang, Irwin Altman, Fleming and John Zeisel could present a proper frame for understanding the importance of social interactions on deigning social spaces. Now this question can be asked that how do the physical layout components of mosque influence the social interactions. Some of the characteristics and environmental and physical components of mosques that have made this holy place as a space for social interactions to be formed will be perused and studied here. The domain of study in Iran for this research is up to the beginning of Pahlavi era. Following, the assumption of the study will be formed on the basis of influence of parameters such as placing, accessibility specifications, hierarchy, human scale and etc. on facilitation of social interactions. The goal of this research is reaching some environmental and physical factors of mosques which will lead to formation of social interactions and strengthening them.

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Social Interactions

Whenever an act of someone is responded by someone else, this relationship between two or more individuals is called social interaction or social relation. This interaction leads to a social relationship between the individuals. It should be noted that in the field of formation of social interactions, the presence and existence of other individuals is necessary. An individual should always consider the presence and existence of other individuals in social interactions. This social interaction and relationship leads to the formation of another concept called social group.

In fact when social interaction is formed between individuals, they will try to find common goals and reinforce them. Little by little, the individuals will form a unified group. If the common goals found by the individuals in the group are not strong enough, the interactions will vanish soon but if the common goals are strong and big enough to strengthen the group and the interactions of the individuals, these interactions will lead to formation of a social group. In other words, a social group is a gathering of individuals that have relatively continuous and stable interactions and relations with each other and possess a feeling of interacting with other individuals of the group. The main reason of these feelings and interactions is having strong common goals (Naghizadeh, 2007).

According to Fleming *et al.*, (1985), social interaction is strengthened by three factors: the opportunity passive contact, proximity to others and appropriate space for interact. The more physically close individuals can get to each other, the more they have the chance of interacting and forming social relations (Sattayakorn, 2012). According to John Lang, the social interactions and interests are dependent on the built social spaces. By using environment design normative theories, lots of assessments are presented about the influence of design on social interactions and are used in architectural designs. The assumption of these assessments is that factors such as forming of moving paths, spatial hierarchy and the placing of common services can mainly influence the social interaction of people (Lang, 2002).

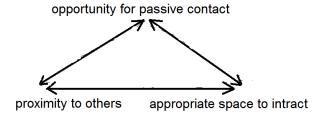


Diagram 1: Three parameters influencing social interactions [Fleming et al]

Mosque

The word mosque is derived from the act of prostrating. Its initial meaning has an emotional application and refers to the act of bending and lying with the front of your body and your head toward the ground (Zargar, 2007). According to Hillenbrand what gives mosque identity is the wall precisely coordinated towards the Kaaba in Masjid al-Haram in Mecca (Saudi Arabia). Mosque is surely the main religious monument in Islam which among its various roles, acts as a place where Muslims gather and pray God together. The simplest form of mosque has a central yard surrounded with porticos and porches and connected to an indoor hall. However, aside from the universality of such definition, it can never present the picture of the enormous forms and uses of mosques. The characteristics which best identify the most ethereal Islamic monument (Hillenbrand, 2004). For studying the form of mosques, two characteristics can be briefly studied. First the main components of mosque physical layout and second the spatial structure of mosques.

Having in mind the evolution course of mosques, the components of mosques are as follow: Porch, Shabestan, Sahn, Mihrab, Dome and Minaret and pulpit. All of these components are not necessarily constructed in every mosque but in most of the important mosques, most of these components can be found.

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Table 1: Mosque architecture main elements [Authors]

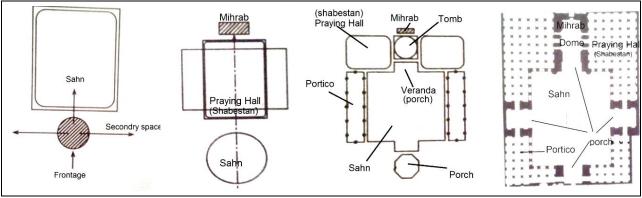
Component Name	Description Description	Picture
	This part is covered with a ceiling and Muslims say their prayers in this part. It is one of the main parts of all mosques and is divided into two separate parts for men and women.	
Mihrab	The niche in front of the pulpit. The main application of Mihrab is indicating the direction of praying lines.	
Sahn or Yard	Sahn is somehow the most important part of mosques for visitors. The influence of mosques is related directly to the size of Sahn. The vast empty space stops the visitor and puts in front of them a holy district.	D. Lames
Porch (Ivan)	This pure Iranian space acts as an interface between inner and outer parts of the mosque, the chill and the heat, light and darkness. This space is a place for people to discuss and talk after the prayer and to watch the Sahn.	
Minaret	A tall tower built besides the mosque with a covered space on its top for the Muezzin to stand	
Dome	The Dome is one of the most important components of mosques representing the sky for the inner part of the mosque. Construction of domes in Iran is estimated to be as old as the Ashkani era.	
Pulpit (Mimbar)	Pulpit is a high place designed for the preacher to climb and preach people. Pulpit acts as a medium for dace to face interaction of the preacher with people.	

Spatial Hierarchy of Mosques

One of the most stable characteristics of mosques is its spatial hierarchy. In order to achieve continuity of social interactions in mosques and bonding of people and mosques, a combination of architectural components and elements is needed the same way as the ancient Iranian mosques and monuments possessed a spatial hierarchy from the entrance through the Shabestan (Pirnia 2004). These components could be designed in a way that the spatial and temporal conditions for establishing social interactions are provided.

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Table 2: Spatial hierarchy of mosques [Mosque Architecture Guide]



Different Types of Mosques

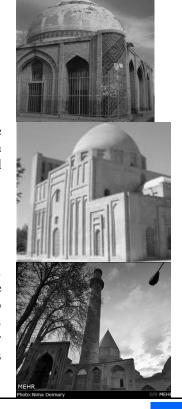
According to different social, religious and urban activities, different types of mosques are formed that are different from each other form application point of view.

Table 3: Different types of mosques [Authors]

- 1 Grand Mosque is the most important mosque in cities Mosque because the Friday Prayers, which is one of the most important congregated prayers of Islam, must be held in the Grand mosque of the city. Usually these mosques are located in line with bazaar or around the main square of cities. Previously most of the social activities were held in
 - Grand mosques instead of main squares.
- 2 Regional Usually there are many regional big mosques in cities that are dedicated to different regions of the city.
- 3 District In order to provide a space for daily prayers, mosques are built in regions. The size of these mosques is dependent on the population of the district. These mosques are directed by local people.
- It is a kind of mosque which is usually built near tombs.

 Mosque

 These mosques can be categorized into two categories. One type is mosques built by a benefactor person with a tomb located in it for them and the second type are the mosques built near holy toms, such as the toms of Imams and their children or the toms of famous and important religious figures.



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5 School Mosque	Education was the second main role of mosques in the first four decades of the Islamic era. In Iran and during Ghajar era a new type of educational space was designed which was both a mosque with great Shabestan and Dome and a school for students.	
6 Minster mosque	Besides the bazaar region of some cities or in some main passages, small simple mosques are constructed as minsters.	

The Influence of Mosque Physical Layout on Social Interactions

About the co-relation of mosques and people's daily life there can be found many historical records about the accommodation of the passengers that had gotten stuck on the way in mosques. One of these historical records from the twelfth century (Solar Hijri) is as follows:

"Every night I can see people arriving there. Some talk to friends and some start reading. This passing by continues till the end of the day and the rise of the night and then stops (Halimi and Eslamboulchi, 2004). This record partially shows the influence of mosques on Muslim interactions. Following the influence of mosque physical and environmental layout on social interactions will be discussed.

Mosque Environmental and Physical Layout characteristics and Social Interactions Placing

One of the most important elements in Islamic cities which define the form of city patterns is the mosque.

Table 4: The parameters influencing the placing of mosques [Authors]

No.	Parameters influencing the	Considerations
	placing of mosques	
1	Neighborhood	Compatible applications must be surrounding the mosque. Such as: cultural, educational, housing, welfare and service applications Incompatible applications must not be surrounding the mosque. Such
		as: industrial, therapeutic and sporting applications
2	Strategic placing in the region	Considering the accessibility radius of the mosque
3	Accessibility Potentials	Accessibility can be a major parameter in social interest
4	Noise Pollution	The mosques in which rituals and preaches are held must not be placed deep in residential areas. They can be placed in places where they can act as joint joining noisy streets to residential areas so that they can keep the residual areas away from the noise and their noise won't bother the residential areas.
5	Psychological Characteristics	Such as the feeling that the district and its people are emotionally attached to the mosque. The mosque should be placed so that: It shouldn't lead to separation of people of a district It shouldn't be placed so far from the district that people don't feel attached to it.

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Since according to their application, mosques are used by lots of people during the day, the proper placing of mosques becomes a very important issue. Some of the important parameters in placing mosques are the influence range of the mosque and its accessibility. Mosques are usually placed in the main paths of cities where they can be easily accessible for strangers. Also the application of the buildings surrounding the mosque should be compatible with the mosque especially the building that are placed in the view of the mosque (Zargar, 2007).

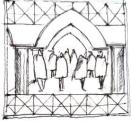
Space Form

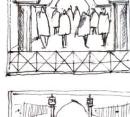
In the inner parts of mosques, visual continuity is achieved by creating vast empty spaces and well-spaced Shabestan regions so that people can easily interact with each other. Hence mosques are inner places designed for gathering of people but are never closed places themselves separated from the outer space by specific borders (Halimi and Eslamboulchi, 2004). Creation of multiple regions between the inner and outer spaces strengthens the relation and connection of the spaces. Although the outer space is a space for mobility, diversity and change, the inner space must be a space for reflection, attention and faith. If a space is created between the inner and outer spaces to be a place for temporary presence of people, the relation between the inner and outer space will be strengthened (Talebi, 2001). On this basis the ancient architects created the vestibule to provide a space for temporary presence of people.

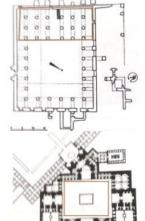
In spaces where the chance of face to face meetings and interactions are higher, the relations and interactions of people with their environment and with others could be seen clearly. There are some other environmental qualities to be considered here such as the height difference which can be a major factor in decreasing the social interactions in case of significant height difference decreasing the visual continuity or blocking spaces out of sight (Salehi, 2008). In the past, the spatial surfaces were formed in a way that besides surrounding and protecting the space, they should not be reducing the visual continuity between the inner and outer parts of the mosque.

Table 5: The influence of space form on interactions [Authors]

Creating social interaction opportunities using Shabestan space form







Creating social interaction opportunities using Sahn space form

Visual Permeability

The visual permeability leads to enrichment of the public domain. This visual permeability can be achieved by ease and clarity of access. Otherwise only the people who were previously aware of the region can benefit from it (Bentley et al., 1985). The possibility of visual contact with an activity can be a motivation of doing the activity. Therefore visual permeability of mosques can lead to more interactions between people. There are lots of methods to provide this visual permeability such as using transparent surfaces and using openings in the architectural design specially by using Islamic architecture elements such as doors, Shabestan, Porches and etc.

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Variety of Functionality

Although the main function of mosques has been to be a place to worship God, they have had different other functions and roles according to the necessities during history. In the time of Prophet Mohammad, mosques were also places for judicial affairs where people would go to in case of disagreements. Mosques have also had the function of a place to gather and spread the news from the old times until now. Another function of mosques that could be mentioned here is the educational role they have played during history (Maleki, 2011). The variety of functionalities of mosques will result in more relations between individuals and mosque inner spaces and consequently more opportunities for social interactions.

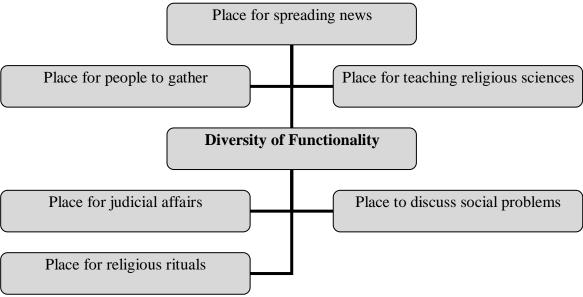


Diagram 2: Diversity of Functionality [Authors]

Vitality

The spatial diversity prepares an environment where proper behaviors are encouraged. This environment supports the proper behavior systems within itself.

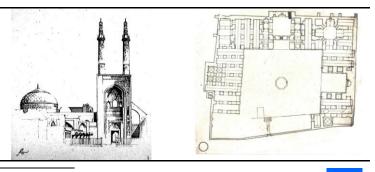
The variety of form and space indicates the different spiritual experiences an individual can experience. Such variety embedded in mosques' architecture can draw different individuals of different sex and age in different periods of time towards mosques (Bentley et al, 1985).

Existence of various behavior systems with different structures leads to an active atmosphere and to experiencing vitality.

This feeling of vitality in the atmosphere of mosques can lead to formation of social interactions and relationships.

Table 6: Vitality [Authors]

Diversity of form and space leads to vitality



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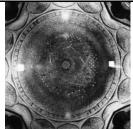
Flexibility

Places designed for a series of applications and functions and showing flexibility in use offer more choices for users in comparison with the places designed for one specific function (Bentley *et al.*, 1985). Mosques are places with flexible design that apart from their religious functions can also possess political and social functionalities as well. One good example can be the Sahn where different layers of inner and outer spaces of mosques are interacting and can offer different usages such as a place for people to gather during rituals, preaches or mourning.

Atmospheric Influence

Every environment results a little bit of stimulation in different senses which unconsciously lead to excitation of nerve system. Environments with high levels of atmospheric influence are spaces that offer a huge amount of emotional data and on the other hand environments with low levels of atmospheric influence are spaces that offer a little amount of emotional data. "In equal conditions, environments with higher levels of atmospheric influences excite higher levels of activity in individuals" (McAndrew, 1992). In mosques the visual and touch senses are excited by decorations, materials and forms of the mosque. Mosque architecture and its decorations are based on geometry and materials. Artists and architecture blow the spiritual soul into forms using colors and geometry. Using decorations and the art of tiling and with the help of color as a defining element, which can also represent taste and smell, balance is brought to the mosque architecture. A balance between the spiritual data such as solitude and interaction (Eftekhari, 2000). Light is considered to be another element used for excitation of visual sense. Light helps people better use the public places and leads to social integrity and control. Sufficient amount of light can encourage people towards using a place. Proper lighting and providing enough light to understand and feel the psychological security prepares the space for formation of social interactions. Light is a very important element in Iranian architecture that converts the space to a proper framework for human spirit. In mosques where a combination of dark and light places are provided, the light regions spread the feeling of energy and satisfaction and since human being is naturally drawn towards light, the dark regions make people more eager for the light (Razavi, 2001). Sound can be a medium for identifying the mosque or even the city. The sound of muezzin and the meaning of what he says can also act as a major parameter in defining and identifying the mosque (Naghizadeh, 2001). Excitation of the sense of hearing is done by the architecture of minarets.

Table 7: Parameters influencing atmospheric influence [Authors]



Light in Dome inner space



Water fountain in yard (Sahn)



Minaret, sound in mosque space



Muqarnas art in the porch, using geometry

CONCLUSION

The position of social interactions in spiritual spaces is very clear and inescapable. General acceptance of mosque as a place can lead to the promotion of social life. Creating the opportunities for social interactions can be achieved using architectural, cultural and social concepts and providing the needed spiritual necessities. Studying framework space characteristics of mosques can lead to valuable results; placing of mosques in the cities was effected by parameters such as neighborhood, strategic position, position according to accessibilities and etc. The placing of mosques was in a way that people could easily understand the placing. Since mosque space is a result of a proper combination of its main

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elements, it can become a place for different proper behavioral systems according to its flexible space. The main reasons of enrichment of this religious space can be named as follows: flexibility in mosque permeability region, forming of moving paths, ease of access and visual access to indoor and outdoor activities. Spatial and functional diversity of mosques results in vitality and more presence of people in mosques. Atmospheric influence, visual, hearing and touch sense excitation using decorations, sound of Azan, light and etc. will lead to emotional enrichment in mosque space. Generally according to functional and spatial characteristics of mosques and with a look at the history behind mosque architecture, it can be said that mosque spaces have succeeded in presenting a fertile space for forming of proper behavioral systems and social interactions.

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