Designing Residential – leisure Complex Around Holly Shrine of Imam Reza By Context Approach

H.R Ameri Siahou (Ph.D)
Assistant Professor of Architecture & Urban Development Engineering Group Of Payam Nour University Of Bandar Abbas
Maryam Heidari
Student of M.A in Architecture of Payam Nour international University of Asalouyeh
hdr.arch@yahoo.com

Abstract:

Holy shrine of Imam Reza in Mashhad city of Iran, as a religious center, always has been important for muslims all over the world that welcomes from more than 20 million annual domestic and foreign tourists. But physical changes have occurred in the recent years, often is irrelevant with character and identity of Mashhad city and merely regarded for attracting people capitals and huge commercial profit, without any attention to context and site potentials. Today, around holy shrine of Imam Reza, neglecting of context, leads to make low-quality buildings without human scale, therefore a residential – leisure complex by the purpose of linking new buildings with their context is vital and it will help to attracting more pilgrims & tourists. The result of this kind of designing is improving the cultural, social and economic situation of Mashhad city. In this research, the purpose is evaluation of the environmental conditions of the holy shrine and the site selection for residential and leisure center by contextual architecture approach.

Key words: architecture in context, culture, residential–leisure complex, tourism, holy shrine of Imam Reza

1-Introduction

Architecture and urban design are humanistic acts by the purpose of replying to needs set of human in interaction with the environment. For the successful conduct of this process and the birth of the architectural effect, identification of environmental factors & contacting with the substrate and context is so important. In context as an event, urban elements will be known & contextualism is a view that in it, addition to the physical aspects, human dimensions & cultural, social and historical aspects are regarded. In this way, the architect and urban designer, at first, must find out the features of a place-context and he/she should be committed to the effect of the environment on his/her design and considers these factors have crucial effect in his/her design process. This major feature in traditional & indigenous architecture of Iran, that today it's mentioned as Irani-Islamic ma and urban design, is visible clearly and we can say Irani-Islamic architecture and urban design, is the dynamic epitome of physical, historical, social & cultural context. The manifestation of contextualism is seen in the religious & pilgrimage cities and this spaces because of their formation based on beliefs of different communities, have particular respect and sanctity. On the other hand, because of the importance of these cities in the physical system of land, the continuation of the physical and non-physical values in them have had special attention and the way of looking and dealing with them, have major effects in architecture & urban design approaches of the country. Despite the importance of religious & pilgrimage cities and the architecture & urban design model they can make for the other cities of this land, what in recent years is going in Mashhad, the heart of Shi’ism cities, hasn't prepared a good outlook for Irani-Islamic urban design totally, and specially pilgrimage cities. The Irani-Islamic city’s body should has the experience of city residents during its history, substrate & context. Around the holy shrine because of different reasons such as modernism designs, high buildings, destruction of context and historical buildings, failure to observe the sky line, the lack of coordination between the walls, neglecting the architecture & urban design model of context, has separated Mashhad city from its rich identity and has made lots of physical & social problem.

2- Contextualism
Contextualism in architecture originates of ancient era thoughts about order and harmony and to put buildings in line with the adjacent forms. But contextualism expression, the first time used by steven hart & Stewart Cohen in the published thesis by the title Le Corbusier : Architecture, Urban design. These discussions has started the Late 1950’s and by Colin Rowe and Bob Slatzki continued in 1955, through a paper by title : Presenting Real Transparency. In 1970, Cornell University students got attention to discussion of the placement of building in city context (Bahreini, 2009). Some villages like Kandovan in Iran and underground villages in China are samples of this approach. Also In the contemporary era some architects like Hassan Fathi, Egyptian architect are interested in contextualism. Contextualism in the 20th century in europe specially in Belgium started with the advent of urban gardens, and in U.S.A, with publication the book Life and Death of Great America's Cities by Jane Jacobs and using of Collage idea by Colin Rowe & Cooter and until today it is continued. Attention to context, formed in postmodern era. The architects of that era after seeing modern style, started to criticism of this style and tried to fix the existing shortcomings. According to Robert Stern, architect and writer, post modernism have some common principles:
1- Contextualism, the possibility of developing a building in future and the desire to make the relationship between the building and its environment.
2- Idiom to the history of architecture so that passes the election limitation & is said communication, form, shape & the meanings formed over the time.
3- To note to arrays & simple pleasure of arrays in buildings (Brolin, 2004).

2-1- The existing elements in context

Context is including topography of the location, status of vegetation, urban context including density of buildings, streets & sidewalks and compared them with each other, gender & composition of materials, proximity of buildings with each other, geography of the area, the amount of urban traffic, the presence of animals & other biological Creatures and human population rate. Existing all the elements in the context isn't essential, but related to each site and context, a number of elements may be available. The most comprehensive theory about the existing status in western culture based on the zoning policy, was formed in 1794, and was known "Exquisite" that its principles are as follows:
The principle that has helped site planning, should be applied for house designing and also should belong to the era and place that it has been made in. Good sex and color of material should be used so that deserve the style and the site (preferably native materials). "Exquisite" theory provides a regional base for connecting architecture to the terms of the site and its environment and for this act, uses from factors such as climate, landscape, age, culture, color, sex, material & style. (Terner, 2005, 225).

Contextualism is one of the common views in urban design that considers the context as a historical event. Contextualism at first merely noted to physical dimensions, but gradually noted to human dimensions and focused on social, cultural aspects of society. Contextuals believe that physical components of the city aren't under the cover of their forces or internal features, they are related with their surrounding environment. Hence, we cannot just search the properties and dimensions of the phenomenons and look at the essence of the phenomenons without regarding the time dimension & the context they are in. The analysis unit of this approach, is studying buildings or spaces in relation to its environmental factors and any change and intervene in them is related to these factors. Contextualism is compatibility with physical, historical, social & cultural context which roles in making contemporary cities (Tolaie, 2001, 35).

As a result, the new components will be able to penetrate in the context if they have the possibility to communicate with it, otherwise they will be rejected by it. In the other word, if a strange element has ability to adjust with the context, it can compose with it (Mir Moqtadaeei, 2004, 17).

3- Methodology

This research in terms of methodology is «Qualitative» research, in terms of purpose is «Fundamental - Applicable» and finally in terms of research way is «Field & library-Document» and through four tools «Interview, View, Questionnaire and Documents», defines the subject.

4- Analysis of the collected information
Mashhad city because of blessing of Imam Reza compared to the other ancient cities in Khorasan province, has been preserved from deconstruction of invading tribes such as Mongol, Timurid, Uzbek and Turkmen. A valuable collection of Imam Reza shrine which includes the buildings of the second Ah century until the present, is the witness of this historical safety certificate. From the beginning of the ninth century, (Timurid period), Mashhad came into the centralization of western Khorasan (including Mashhad and Nishapur and khabushan and Bihaq) and on the side of Herat and Samarkand and Bukhara became one of the most important cities in Khorasan and the owner of a historic and important buildings such as the Goharshad mosque and numerous schools & tombs that some of them have been destroyed in the past century and the other part has remained and deserves protection. The original people of this city have been Sadats and Shiites which among the sixth-ninth Ah centuries, Sadat Mousavi and in the ninth-fourteenth centuries, Sadat Razavi, have been the most determined and effective ethnic and social groups in the city for managing shrine of Imam Reza. The school-building movement in the early Timurid period (nineth century) and the second half of the eleventh century (Safavid period) has caused the cultural promotion of this city and has brought great endowments that along with the other endowments of Imam Reza, have formed the most original cultural-religious identity of Mashhad (Seyedi, 25-34).

4-1- Climate

Most parts of the city has the mountainous climate and a smaller portion of the east, includes the semi desert climate, most days in a year there's air inversion that is dangerous for air pollution. The temperature difference between summer and winter is relatively high and in spring and autumn rains much.

Effective factors on climate of Mashhad are: latitude, the dry and hot air of «Qare Qom Desert» located in north of the region and existence of two high mountains «Hezar Masjed» and «Binaloud» in North and South of Mashhad plain.

According to the climate classification of Coupon, Mashhad is located in semi dry and cool climate. Based on the Demarten classification, the climate of Mashhad is semi-dry type and based on the Amberje classification, is located in cold and dry climate.

![Image 1: The map of climate classification of Iran](image)

4-2- Rippling
Mashhad located in a plain between two mountain ranges, «Hezar Masjed» in north eastern and «Binalood» in south western. Anyway Mashhad plain, with 20 km length and 140 km width, is one of the broadest plains in the province. The most important peaks around Mashhad are as follows: «Shirbad» 3140 m, «Zanburgah» 3030m, «Daq zar» 2900 m, «Kamar Yakhdan» 2630 and «Qar Kohne» 2150 (Qadirpour, 2009, 15).

«Hezar Masjed» mountain range that from its peak 1000 yards that located at 120 km of Mashhad, can see «Mashhad» and «Chenaran» cities in south and «Ashgabat» of Turkmenistan in north, is extended along north western – south-eastern and its mountains have great similarity to Zagros mountain ranges. This mountain range is the major center of nomadic of Khorasan province and people of near villages, look at it as a sacred place and there, they vow every year. In the past 8 years, Mashhad plain has had 60 cm dimples because of much utilization of water and reduction of underground water. Mashhad plain with 12% of the water resources in Khorasan province, includes about 60% of the province's population (Qadirpour, 2009, 17).

4-3- The direction of the Sun's radiation

The average of annual sunny hours in Mashhad, is 2500 hours, which is a significant amount and showed the importance of investment in this area for getting more energy. The lowest sunny hours, is in February and the most of it is in July.

Angle of sun radiation at latitude 37°, at the local noon in the 1st of February, is 90° and at the local noon in the 1st day of month, is 45°. Solar energy radiated on vertical surfaces throughout the year on the south and south western and south eastern sides, is the highest percentage. After that, eastern & western sides receive the most energy and the lowest energy is on the north side. In the warm months, the western side receives higher energy than the south side.

4-4- The direction of building establishment in relation with climate factors
The direction of building establishment in Mashhad, always should be determined according to the direction of Sun's radiation and cold winds of winter. In relation with sun's radiation, the most suitable direction of building, is that one receives the most solar energy in warm months. In relation with cold winds of winter, the wind direction to the building, maybe locate in one of the effective, semi-effective or ineffective ranges. It's clear the building direction should be proposed such that winter winds locate in ineffective range. Whatever the angle between the wind direction and the regarded frontage be less, the impact of wind on it, will be less. In 30°, solar energy radiated on vertical surface, gets to the most amount in the cold months. Also the maximum of this energy, in hot months, locates in west side. For determining the most suitable side in relation with cold winds, by regarding winter winds blow from south-eastern & north-western, and fall winds blow from south, if the building turns to west side, winter winds will blow in ineffective range and fall winds will blow from south.

5-Conclusion

According to the collected information and study of climate & population conditions of Mashhad and the other effective factors noted in previous part, the regarded site for designing this complex, is located in Sharestan
street, one of the related streets to holy shrine of Imam Reza in Mashhad city. This street encircles the holy shrine and disconnects the four main streets are perpendicular to holy shrine. A part of Sharstan street located between Tabarsi and Navab Safavi streets, is desired here.

The main reason for selecting this street, is less attention to Tabarsi street (the first access for Sharastan street) compared to three other streets around holy shrine, responding to part of requirements of inhabitants & satisfying them and finally cultural, social & economic promotion in this area.

Image 5: Aerial map of the site
This site includes Sharastan Residential – Commercial Complex, a new built & elevated complex. This street accesses to Tabarsi, Navab Safavi & Vahdat streets. Following images show views of the site from different sides.

Image 6: Regarded site at the right side & Sharastan Residential–Commercial Complex in the left side

Image 7: View from inside to outside
References

1- Bahreini . Hossein , 2009 . Analysis of the theoretical foundations of contemporary urban design , vol 1 , The late 19th century till 20th century . The University of Tehran
3- Bonyanian, Hassan , 2007 , Culture of development in Iran , Policy to promote the culture of development in Iran . Amir Kabir Publications
4- Terner , Tom , 2005 . City as landscape , Processing and urban planning company
5- Tring , Pitter , 1999 . Evaluation of tourism and leisure industry, Tehran , Iranian Community
6- Tavallaei , Novin , Winter 2001 , Contextualism in urban design , Fine Arts Magazine , no 10
7- Derakhsheh , Jalal , 2004 , Searching in native-oriented ideas , Political Sciences College of Imam Sadiq University , Political Knowledge Magazine , no 1
8- Rapoport , Amos , 2009, Anthropology of dwelling , Mashhad , Kasra Publications
10- Rezvani , Alireza , 2005 , In search of urban identity of Mashhad , Tehran , Department of Dwelling and Urban Development
11- Ranjbarian , Bahram & Zahedi , Mohammad , 2005 , Tourism services , Isfahan , Kankash Publications
12- Management and Planning Organization of Khorasan Province , 2002 , Tourism Master Plan of Torqabeh & Shandiz
13- Cultural Heritage Organization , 2010 , is available in www.chto-khr.ir
14- Soroush , Abdolkarim , 2005 , Fatter than ideology , Towrat Cultural Institute
16- Seyedi , Mehdi , Selection of history and historical geography of Mashhad (from beginning to Islamic revolution) , Tehran , Beh Nashr Publications
18- Shirazi , Mohammadreza , Khordad 2009 , Contextualism & Regionalism in architecture , Infrastructure engineering, no 8
19- Falamaki , Mohammad Mansour , 2005 , Native architecture , An unknown space , Tehran , Faza Publications
20- Qobadian , Vahid , 2006 , Basics and concepts in contemporary architecture of the west , Tehran , The office of cultural researches
21- Qadami , Mostafa , 2011 , Target strategies edition , In the context of sustainable development of tourism , Case study : The metropolis
22- Golkar , Kourosh , 2011 , Creation of Sustainable Place : Reflections on Urban Design Theory , Tehran , v of Shahid Beheshti University
23- Mahmoudi , Mahnaz , 2005 , Sustainable design principles in order to sustainable development goals
24- Urban & Regional Researches Magazine , Mashhad , no 9
26- Norberg –Schulz , c , 2001 , The Spirit of place toward the phenomenology of architecture , Tehran , Rokhdad No Publications
27- Alexander , Phil ,2002 , Managing festival and tourism events , Michigan State University
28- American Wordpower Dictionary
29- Colman , M ,Michel ,1989 ,Tourism marketing , Routledge Press
30- Global Environmental Contextualism Adrian Smith FAIA RIBA , Gordon Gill AIA and Robert Forest AIA RIBA OAA LEED AP
31- Norberg – Schulz , c ,1980, Genius Loci ; Toward the phenomenology of architecture , New York :Rizzoli

172