

Cultural Aspects to the Design of Street Environment

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1.0 Introduction

Streets form parts of all cities that determine the identity and characteristics of city dwellers. People never forget the elements of city which can be experienced in the streets and they will accept it as memory. It has been accepted as a sign of civilization. Street life and culture are important ingredients in the imageability of a city due to the fact that people of different backgrounds focused on the street life and culture (William, 1990). Street is considered as a social and public area where people with their own cultures, identify their own environment. So, it is important to know the characteristic of street of different cultures, so as to compare them with other factors.

There is a complex inherent relationship between culture, design and life-style, which generates thinking and creative process, and in turn visual images of environment. The findings of relationship between culture and environment may provide the beginning of important scientific basis to legitimize, which is to establish different cultural aspects of visual environment, life-style for different countries and communities (William, 1990). Islamic countries such as Iran have different cultural backgrounds and environment, thus creating different spaces. Street spaces in an Islamic environment grew out of direct response to the needs, means and aspirations of their inhabitants with Islamic planning system a moderating. Their needs are basics to their cultural aspects underpin motivate of changing the environment.

It is assumed that the main purpose of urban design is to provide an urban environment that facilitates and maintains a functional balance between human needs, cultural background, and environmental characteristics (Esser, 1976). Cultural characteristic is the extent to which a person recognize or recall a place as being

distinct from other places as having a vivid, or unique, and almost a particular character of its own (Lynch, 1982). The study of cultural aspects, which response to the urban environment especially comparative analysis and evaluation between the different cultures a topical issue that interest researchers. In addition the current focus on the cultural causes of environmental demands suitable approaches to managing change such settings. Therefore, research examines the cultural aspects that influence street design.

This paper presents the overall structure of the research framework in which the results of cultural aspects manifesting in street spaces. It also to identify records and investigates the cultural norms relating to Islamic value systems that governed the development of spatial form in Islamic cities as a precept to formulating a new Islamic urban street principle. This is with a view to determine its significance in a dynamic society. The research problem is presented in the first part. The second section outlines the research agenda including the research questions, aim, and objectives. The third section presents the research methodology and techniques. The fourth section features the case studies while the fifth section establishes the scope, limitations and significance of this research. The final section presents the overall structure of the thesis.

2.0 Research problems

Culture is a patterned way of life shared by a group of people; it is also a kind of socially transmitted knowledge which can be shared by people; (Peoples and Bailey 1988). Culture is the manner in which human groups learn to organize their behavior and thought in relation to their environment. Culture has something to do with the relationship between human beings and their environment (Milton, 1996). The world is a small village in which exchanging sciences, architecture and urban designing into a comprehensive knowledge; these changes are due to different cultural attributes of every society. Rapoport (1977) pointed out that cultural variables play a major role in urban environments. They relate to the form of the city and how it might better be organized. Although designing the streets and its building is based on an international standards and criteria, they are totally different from each other. This

differentiation is due to different and interchangeable features in the street based on adaptation to people's culture and custom and their living style. The different lifestyles will lead to different behavior, different uses, different evaluations and effects (Rapoport, 1977). Different cultures cause different behaviors which create a variety of environment where particular activities occur. The activities have boundaries which inform users their spatial limits. That is to say, may the same people with same cultural behave very differently in place (Barker, 1968). Different group of users with different cultural backgrounds (e.g.), can cause different urban environments. Therefore approaches to the understanding the environment and the criteria used for its design must be different (Rapoport, 1977), so that there is a link between environmental design and cultural attributes.

Cultural values are important and these are expressed through symbols which give people an easy way of identifying with the group and asserting group cultural (Siegel, 1970). It is necessary to understand the cultures of the various groups involved and the influences of their values, lifestyles, activity systems, symbols and all the other variables. Lynch (1960) suggested that if cities are be used by different groups, studies must be done to discover the similarities and cultural differences between different groups. The impression that culture mediates between human beings and their environment is equally strong whether culture itself is perceived as consisting primarily of characteristics assumed to be observable, such as actions, techniques (Milton. K, 1996), or whether, as in more recent anthropological thought, it is restricted to what people know, think and feel. The distinction between what people do and what they think, feel and know was that it opened up the possibility of studying the relationship between them and their environment. Milton.K, (1996) argued, whatever people hold in their minds forms a basis for their actions that is related to their cultural background which, through being observed and interpreted, feed back into their consciousness, reinforcing and modifying their understanding of the environment. Knowing how to interfere in the street spaces in different cultures, quantifying it, and identifying the situations where the changes happen, may help researchers to find some patterns and models, which will to be able to guide architects and urban designers. It means where and when the architects and urban designers should have more flexibility in their work to be able to prepare a proper opportunity

for the people, so that they can paint this area as they like and then to become more familiar with it.

Cities currently are under going rapid changes due to rapid industrialization, economic growth and urbanization. This has changed the city characteristic by increasing of population, migration, economic wealth and change of life style with the development of modern cities. However some of these changes are due to cultural motives significant to those places, and others, just overgrew to imitate of Western's culture. Fee (1998) for example argued that since the building boom of the 1970s, many of Malaysia's historic buildings have been demolished. Recent large-scale urban redevelopment continues to threaten historical buildings, also the cultural background of these areas. He asserted that to lose these areas, however, is effectively to obliterate culture, historical memories, and there is now an increasing pressure from various segments of the community to conserve the nation's cultural heritage. Lawton (1970) explained, city's spaces are not where the meetings take place but its relationship to other place which is important, so that a change in any one part changes all the other parts within the city, and if not related to culture of these spaces it may look dull, and not intimate.

Street is an outdoor living area and the public life of people in the community. It seems, there is a lack of response of the urban environment to cultural aspects associated with the street spaces in the most Islamic cities. Pakzad (2004) mentioned most of the city streets in Iran seem to be under construction. As a result, a lot of historical buildings are being demolished and replaced by new modern buildings. These new buildings are getting higher and the environment become denser with population, even larger imagination, while physical elements are being replaced with new development. These developments are not related to cultural background of Iranian Islamic society and hence it needs much more sympathetic design based on the cultural items. According to Mogherry (2002) the policy of Master Plan for Iranian city is to improve the cities for the future to continue the following modern decade to cater the increasing population in the modern city. These changes in the attitude of decision-makers and the educated upper class may be viewed as a response to the many dramatic political, economic and social changes experienced over the last century.

Design is a problem solving activity which must be based on an understanding of cultural aspects of different groups. Design is even a responsible attempt to help provide settings appropriate for specific groups of people (Rapoport, 1983). This research is relevant as it seeks to identify why, what and how the cultural attributes cause change the street physical characteristics. This is to build a conceptual bridge between environment and other ways of knowing the places characteristics. Richards (1992) pointed out that urban cultural research is in the hope of understanding both urban environment and cultural aspects more clearly.

3.0 Research Aim

The aim of the research is to characterize cultural attributes of street and outline how they can affect the shaping physical characteristics of the street in an Islamic city.

4.0 Research Questions

- 1-Why cultural attributes are important in design of street environment?
- 2-Why cultural attributes can affect the shaping physical characteristics on the street environment?

Research Question follows by Subsidiary questions:

- 1- What are the cultural attributes that influence street character in Islamic cities?
- 2- How cultural factors create characteristics in the street space?
- 3- Why cultural attributes are important in generating suitable characters of a street?
- 4-How and which the cultural attributes shape streets environment, which characteristics of cultural attributes of different cultures are relevant to the shaping of street spaces?
- 5- How, when and by whom a particular street is used and how it relates to other streets?

5.0 Research Objectives

To investigate the cultural attributes relevant to street environment.

To establish cultural attributes that influence the design of streets, in Islamic cities.

To identify and classify the effective factors shaping the physical characteristics of street space generated by cultural attributes.

6.0 Research Methodology

6.1 Data Collection

This research adopts a qualitative approach, with quantitative data as supporting evidence. The techniques selected for the research which is, primary qualitative approaches that are include, in/depth interview, field observation, and photo selection.

This research investigates aspects of the street environment which are influenced by cultural attributes. Shaping of the urban environment is related to images, values, and symbols. If the environment acts on people partly through communication then it must be intimately linked with culture. If the argument in the preceding sections is correct, a major characteristic of environment is that it provides a better fit between spatial organization and culture, communication, behavior, and human activities (Amos Rapoport, 1976). An evaluation of the cultural aspects of the street and their qualities are investigated by examining the reason for them being recalled by the users.

For appreciate research methodology the selection of several important aspects need to be considered. These are physical characteristics of the street, the cultural aspects which influence the physical elements of street and people's behavior of the street characteristics. This research investigates the physical attributes of the street environment that are recognized and recalled by the people as contributing towards its characteristics. The techniques use for data collection consisted of a combination of physical measurements, observation of physical traces, observations of behavior and

cultural aspects, and interviews. The outdoor behavior is recorder and analyze through behavioral mapping procedure. According to Lynch (1959) to understand the role of environmental image in our own urban lives, it is necessary to look carefully at city areas and to talk with their inhabitants especially the physical characteristics noticed in describing the street, such as buildings, location, street furniture, and landscaping. Lang (1994) suggested that people need physical elements to be able to orient themselves and to find their way around city and other places. In this study, a visual survey is conducted by the researcher to record the physical characteristics and activities that occurred in the street. According to Salkind (2000), visual survey attempts to study directly the physical characteristics of the environment through the use of survey. To achieve the research objectives, this study involves a review of the previous literature pertaining to the street environment of Islamic cities in general and to the street of Iran in particular. The establishment of the cultural attributes is based on findings during the research, by using of case study. The case studies are chosen to be made on how the users who are from the different cultural reacted to them and how these aspects and facilities influence their design, behavioral and use of the streets.

The study is limited to analyze the aspects of culture in improving the physical characteristics of street design in Islamic city. The discussion is mainly in the context of physical elements of Iranian cultural attributes, which influence the physical characteristics of street. The field observation will be use to identifying the physical elements that dominated the characteristics and the quality of cultural aspects within the research areas. The study is limited to the user's opinion of the streets. Users of the street include local, pilgrims as well as people living in the study area. Understanding or interpretation of the differences and similarities in cultural attributes can be made to aid the thinking and design process of streets.

The aim can be use of the existing theories and develop concepts with existing areas in urban design, cultural aspects, and environmental research. The approach is directly influenced by the availability and type of data. Data for this research utilizes sources from two language groups; English language which using the universal sources, and Persian language, to match research site (Iran), the majority of the researcher, also the using of case study in Iran, afterwards, the transcripts are in English. The research begins with literature review in order to understand the

meaning and components of Islamic cultural in street design. The study of the street in cultural context implies two things. First, networks of practices and ideas exist that are drawn from the shared experiences and histories of social groups. After that, these practices and ideas can be invoked to account for specific patterns of urban growth and urban form (John, 1984). This research tries to identify physical characteristics associated with the Iranian street which have influence by cultural aspects.

6.2 Expected Result

Descriptive statistics of physical characteristics includes:

- Primary: more than 60% of the respondents.
- Secondary: more than 40% and less than 60% of the respondents.
- Tertiary: less than 40% of the respondents.

7.0 The Case Study (City of Mashhad)

Mashhad is the second largest metropolis in Iran. The aim is to select a case study that could be considered typical of a major city in the west of Iran. According to A. Mahvan (2004), the location of the mausoleum of the Imam in the city of Mashhad has provided fuel for Khorasan's development and growth. Every month of the year a large number of people would make pilgrimage to the Holy Shrine which ensures prosperity and wealth of the people of Mashhad. Mashhad is the center of the vast province of Khorasan. Taherids and the Samanids, governments were formed and dedicated themselves to the freedom and independence of Iran. The Persians laid the foundations here for a West Asian civilization (Rezvani 2005).



Figure 1-1, Map of Iran

Generally, we can divide the eras of formation and development of Mashhad into the following:

1-First and Second Era: In the second century Noghand, had two residential areas and garden of Hamirebne Ghohtabe. In 188 A.D, 192, Haron Alrashid died when he was traveling to Khorasan and was buried in the garden of Hamirebne Habte. Later the Caliph Maemoon made a tomb for him (A.Mahvan 2004).

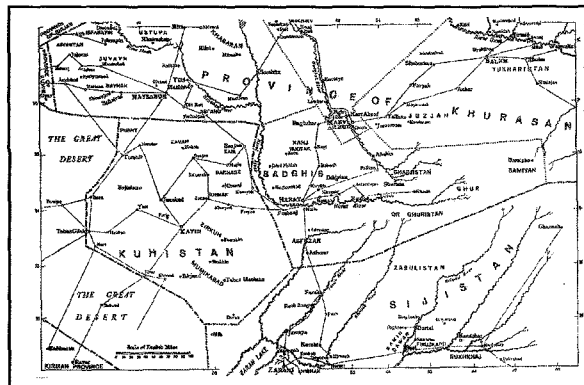


Figure 1-2, Khurasan, 331, Reference: (Aebeneh, Hoghal)

2-Third Era: (formation of Shar Alreza): In 769A.D an invasion by Amir Tamour, the city of Toos was destroyed and the citizens had to migrate to Shar Alreza and settled down around the Shrine of Imam Reza (A.Mahvan 2004).

3- Fourth Era: frame formation of the city and establishment of Bala Kheyaban and Payen Kheyaban: In 830 A.D 885, Amir Alishir Navayee established the Atigh Safavie court. Due to over population from the 3rd to 9th centuries, Amir alishir Navayee diverted the river of Cheshme Gelasb(Gilas). Scandar Beyge Monshi

designed a road from the west to east gate that led to the Holy Shrine in each part. Because of water shortage in Mashhad, they enlarged the River of Cheshme Gilas River (M.Rezvani 1998).

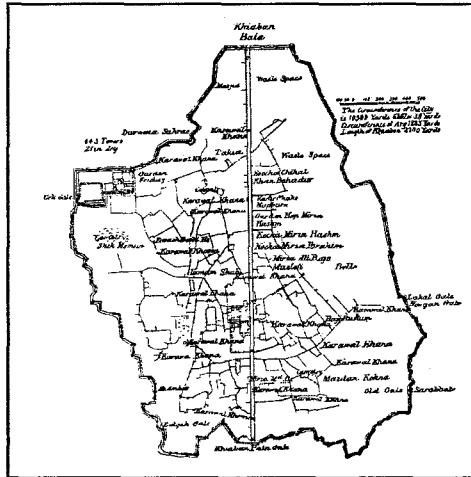


Figure 1-3, Plan of Mashhad city - Reference: Mc Gregor - 1875A.D

Shah Smail Safavi defeted the Ozbaks and the city of Mashhad became part of the kingdom of the Safavis. Mohamad Hashem Khodasani destroyed caravansary of Sanabad and established trade caravansaries and bazaar called Vazir Nezam. He also made a fence around the river which passed through the city and widened the only street that was made during shah Abbas (M. Monjem 1986).

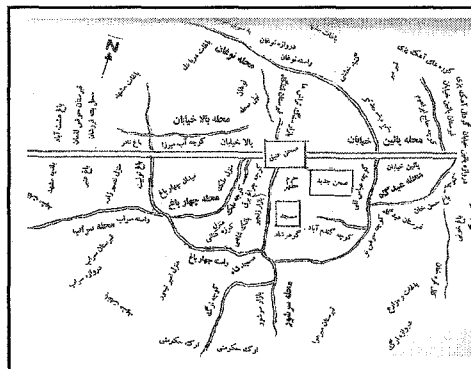


Figure 1-4, Residential area of Mashhad, 1920

4-Fifth Era: and the Present: In early Pahlavis period (1919) Mashhad only had two streets; Bala Kheyaban and Payen Kheyaban. This was because of their location to holy shrine. The rest of city at that time according to travelers and writers of diaries consisted of small narrow and covered alleys called Sabat. The most famous roads at

that time were Noghan, Sarshoor, Chahar Bagh, Sarab, Eyd Gah and Hoz-e- Nou (M.Mahvan 2004).

Early in 1911, Mashhad had only one main street with four gardens. Improvement of Mashhad included the construction of modern roads. The walls of the city and the Bala Kheyaban gate were built after the Razavi Street. In the Shirazi Street, buildings owners and shopkeepers invaded the frontage of Bala Kheyaban and Payen Kheyaban, which was 28 meters at the begin of construction during Shah Abbas period. In addition, they covered the River in the middle of street with wood and established coffee shop, barber shops, and grocery stores (Sayyedi 2001). Until 1966, the river was uncovered and walls were built around it to prevent it from being polluted by shopkeepers. But unfortunately, trees were cut down which ruined the beauty and character of the city (Sayyedi 2001).

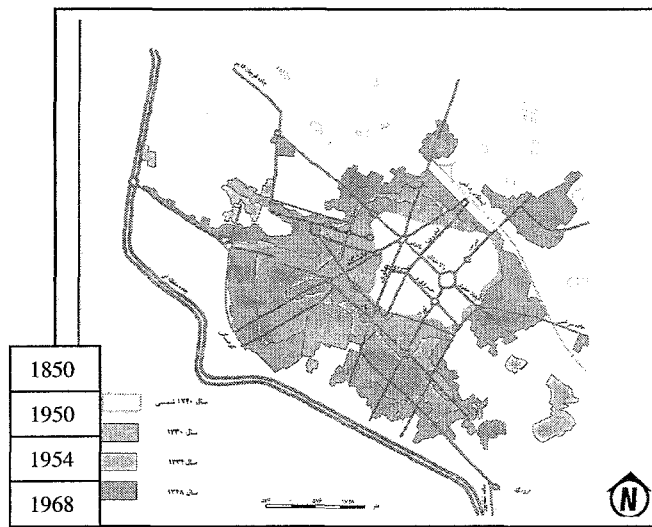


Figure 1-5, Development of Mashhad (1850-1968). M.Mahvan 2004

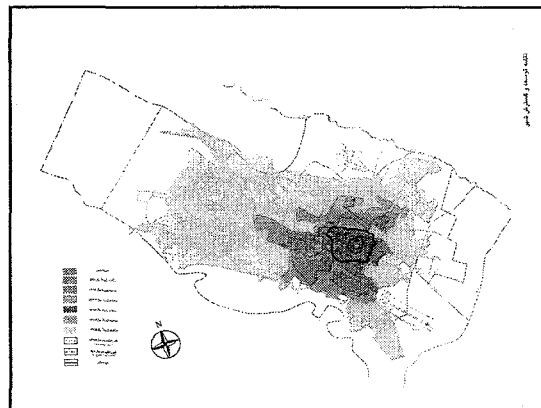


Figure 1-6, Development of Mashhad since (1850). M.Mahvan 2004

i. Geographical Background

Mashad, or Khorasan-e Razavi province, with approximately 20000 hectare of area, is the second largest city of Iran. The average altitude of Mashad from the sea level is 985 meters and it is located at 59° and 36' of east longitude and 36° and 17' of north longitude. Mashad's climate is marked by warm and dry summers and cold and humid winters. The maximum average temperature in summer is up to 26.4°C and the minimum average in winter is 4°. The average amount of rainfall in a year is 260 mm and the rain season continues from the end of Aban, (second half of November) to the half of Khordad (beginning of June). The main water resources of Mashad are from Golestan, Torogh and Kardeh rivers (Rezvani 2005).

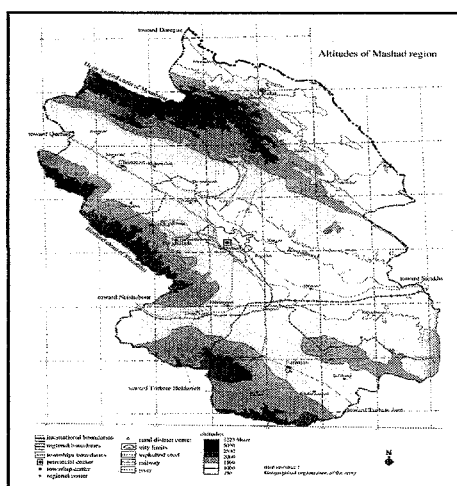


Figure 1-7, Natural characteristics and position of Mashad. Rezvani 2005

ii. The Economic and Cultural background

From the very beginning, Mashad's economy was influenced by different factors like natural conditions of the region, suitable soil for cultivation, mines, wars and the presence of Imam Reza's shrine. Today, with a population of about 2150000 of Mashad's economic activities include agriculture, animal husbandry, poultry farming, food industries, weaving industry, carpet weaving, machinery and equipments in addition to activities in exploitation of mines like stone, iron, lead, coal, marble, lime and gypsum (Rezvani 2005).

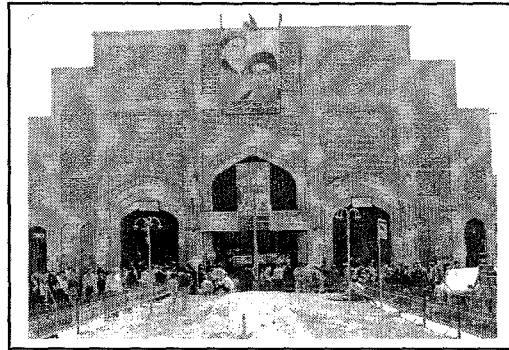


Figure 1-8, Bazaar Reza. (Field work, 2007)

8.0 Scope and limitation of the Research

Since the Modernist period, the role of the urban street has been reduced to that of a road: a conduit through which vehicles and people move (Lozano, 1990; Moughtin, 2003). This simplified mono-functional view of the street is changing very slowly among planners and designers compared to the efforts done to illustrate its multi-functional role by some researchers: the street as teacher (Clay, 1991), the street is a public environment, (Seifoddini,2000), the street is related to the physical needs of people, (Pakzad,2004), the street as playground for children (Moore,1991), the street as a place for social interaction, recreation and public life (Jacobs,1981). To reach the purpose of this study, define a street as a continuous space between two rows of adjacent buildings, through which pedestrian as well as vehicular movement occurs, and in which other social activities take place. For the scope of this research, the street is defined as a cultural zone. The dimensions considered will include the physical characteristics of street. Rapoport (1977) illustrates how these street spaces in different cultures imply different meanings. The research is confined to cultural aspect of Islamic street, which are considered to be most significant, focusing mainly on urban environment. The scope is also limited to the physical characteristics of Islamic streets because the physical characters of streets are considered to be the essence of the character of the most cities characters which focus of civic aspects. This research is focused on the cultural attributes and effectiveness that create design changes and transformation in the street spaces.

9.0 Significance

Current urban design strategies in many Muslim societies are largely irrelevant and inadaptable to the needs and values of the culture of the Muslim society. Culture finds expression in social structure and religion, which in turn are reflected in the urban environment. A thorough knowledge of Islamic value systems is primary to understanding how the inhabitant's culture of an Islamic city has influenced the design of the street. Street is a part of Persian characteristics. Aspects of Islamic culture have been thoroughly investigated by scholars in many parts of the Iranian cities. According to Mokhtari, (2006) to highlight the historical context of the Iranian street, some essential research should be undertaken in the areas. The study can also highlight the significance or influence of notable physical characteristics in the street which can emphasize the cultural attributes of Iranian cities. According to Iran Cultural Heritage organization, (2006), to best understand Iranian environment and her people, one must first attempt to acquire an understanding of its Persian cultural aspect.

The significance of this study can be summarized in the following three points:

- 1- The research will present a way to describe the cultural attributes and physical characteristics which would be meaningful to designing of street environment.
- 2- The research findings will enhance the understanding of the consequences of design aspects of different cultural attributes, as they relate to the use of the street of different cultural background in the Islamic city.
- 3- The identified approaches that provide designers with a set of research-based design criteria that are prescriptive in the sense of cultural effectiveness attributes to the street design.

10 Structure of the Research

This research consists of 6 chapters. The first chapter presents the overall structure of the study which can be provided by review of the scope, aim, objectives and the methodology adopted. It also highlights the significance of the research.

Chapter 2 present the literature review, which explores some theories and the concept of street spaces, it develops the arguments for the design of street spaces, the following chapters continue by exploring some concepts of cultural aspects and their influence in design of street. It develops the argument for the relationship of cultural attributes with human spatial behaviors, which influences deign of street.

Chapter 3 will explain the research methodology and the establishment of the choice and rationale of the methodology adopted in the study. This is to substantiate the validity and reliability of findings.

Chapter 4 and 5 presents the findings of the research and make analysis on the Islamic city.

Chapter 6 is the general conclusion which can be made from the study. This also consists of some recommendations concerning the design process and guidelines for the organization of street in the Islamic cities.

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