

J. Basic. Appl. Sci. Res., 3(6)87-91, 2013 © 2013, TextRoad Publication

# An Analysis to Role of Gardens as Urban Space in Historic Structure of Tabriz

## Mahsa Golzarian<sup>1\*</sup>, Safieh Zarei<sup>2</sup>

<sup>1,2</sup>Department of Architecture, East Azarbaijan Science and Research Branch, Islamic Azad University, Tabriz, Iran

## ABSTRACT

With high rapid of urbanization and industrialization and increasing population in urban centers all over the world along with increased attention to environmental aspects of life, the need to reconsider the role of urban green space has become a central issue to most urban planning, design or renewal programs in the late 20th century. Like other countries, Iran is also considered a victim of unexpected and unplanned increase in urban population contributing to environmental challenges especially in metropolitan areas. Although in most scientific disciplines human settlements have traditionally been perceived and discussed as an aggression against the nature and environment having a profound impact on adjacent ecosystems, much can be learned from traditional patterns of gardening and landscaping in historic cities.

In this paper, the intention is to introduce and analyze diverse aspects of urban gardens in historic structure of cities in Iran focusing on Tabriz, a city in northwest Iran.

**KEYWORDS:** Architecture, Garden, Historic, Urbanization

## INTRODUCTION

Urban parks can be considered as inevitable purification resource and essential lungs for urban areas. Today, with the expansion of many new styles of buildings, parks can be noticed as places which could enhance vividness and liveliness of residential areas. Furthermore, since stress in life may be cited as one of the most common affection to the urban dwellers, parks can prepare opportunity to the abatement of stress by providing areas to escape from noisy atmospheres of cities (Hartig, Mang, and Evans, 1991; Hami et al, 2011). As a direct consequence of such accelerated urban growth, there is increasing pressure on urban areas leading to the urban greens in cities being diminished even though they are the lungs of cities. There is a need for getting quantifiable information regarding green structures and their amount and distribution for sustainable planning (Lang et al., 2008; Gupta et al, 2012).

Urban green spaces provide various social, economic, and ecological purposes which include therapeutic benefits, desirable surroundings for child rearing, social integration, conservation easements, and community development potential (Hague and Siegel, 2002; Miller, 1997; Milton, 2002; Khosravaninezhad et al, 2011). In addition, urban designers also started to consider urban parks as places that may renew natural environment and biodiversity. Oguz (2000) reminded that urban parks can be a conduit to connect people with natural environments, and to enhance mental and physical health to the urban dwellers (Hansmann, Hug, and Seeland, 2007; Oguz, 2000; Hami et al, 2011). Although concept of per capita for public green spaces, public parks and resorts is the most important factor in making a city livable, pleasant and engaging citizens (Chiusura, 2004; Lotfi et al, 2011).

In developing countries like Iran, urban environments in most cities are currently facing similar issues regarding green space. On one hand, they are experiencing a rapid population growth along with intense development pressure, and on the other hand, they do not pay enough attention to the importance of historic gardens as urban green space as the most significant factor to resolve problems of urban environments in metropolitan areas.

Although in most scientific disciplines human settlements have traditionally been perceived and discussed as an aggression against the nature and environment having a profound impact on adjacent ecosystems, much can be learned from traditional patterns of gardening and landscaping in historic cities, especially in historic civilizations of Middle East. The concepts and patterns applied in landscaping of historic cities can be remedied and applied in contemporary urban planning and design projects to maintain urban biodiversity and ecosystems of metropolitan areas as well as well being of citizens. Therefore, the changing conditions within cities necessitate the need to speculate on how historic gardens can be revitalized in order to provide feature positively affecting public health and behavior.

\*Corresponding Author: Mahsa Golzarian, Department of Architecture, East Azarbaijan Science and Research Branch, Islamic Azad University, Tabriz, Iran. Tel: +989144174257; E-mail address: mahsagolzarian@ymail.com

## **RESEARCH METHODOLOGY**

The aim of the study is to analysis physical characteristics of two examples of historic gardens of Tabriz. The objectives are to investigate the historic evolution and transformation of one of major prototypes of urban green space and recreation center in urban structure of Tabriz. This study is mainly composed of documentary data obtained from historic and architectural texts. The key aim is to identify some of the realities regarding the evolution of one popular examples of historic gardens in Tabriz, Golestan garden with attention to social, cultural and urban contexts.

### The Historic Role of Gardens as Urban Spaces in Cities of Iran

Urban parks and green spaces play an essential role in improving the quality of life of urban living. They can modify adverse urban climate, preserve ecological diversity, and promote human health (e.g. Ferrini, 2003; Jensen et al., 2000; Tyrvainen et al., 2005; Van Veenhuizen et al., 2004; Huang, 2010). These areas function as a visual screen and act as noise barriers and avoid too much spatial uniformity (Dole, 1989; Gupta et al., 2012).

The history of public space in Iran can be traced back from the Persian Empire period around 500 years B.C. Majnonian (1996) has stated that public spaces were used for different purposes such as a place for national ceremonies, announcing important news, crowning ceremony, and etc. During 14th century A.D., public spaces such as 'Chahar Bagh' emerged as the most important part of the cities. During this time, public spaces were used as a venue for social communication, national and religious ceremonies (Hami et al, 2011).

Among different types of urban spaces in historic cities of Iran, gardens have been considered very important because of their role in provision of urban green space as well as their social and environmental role. Considering modern definitions of urban green space, it becomes obvious that urban role of gardens in historic cities of Iran can be discussed according to contemporary definition and role of urban green space. The traditional pattern of garden in Iran might at first appear to contradict this concept as a kind of isolated biotope that is maintained by the human force or labor, a stark delimitation between the harsh desert outside, and the lush, cool and pleasant environment inside the garden.

In addition, Iranian gardens were also introduced as a place to experience nature. In the early of 20th century A.D., Persian gardens became public urban parks for people's recreation and socialization in most of big cities in Iran including Tabriz (Romianfar, 2008; Hami et al, 2011).

According to historic documents, Persian garden was a place surrounded with mystery and restricted by codes and secrets, a place and position of memory and fantasy which does not remain within its boundaries, its scope expands beyond its walls and limitations, including the natural and cultural basis and the potentials of the environment that is around it. It means more than its tangible and objective characteristics and also associates and recalls its relations with universal order. Garden, this tame nature, enjoys the aesthetic, high, transcendent and utility values all at the same time (Behbahani and Khosravi, 2006).

The research has shown Iranian garden has been very famous even it has been mentioned in Bible. Agronomy and constructing garden was holy in ancient period of Iran. After entering Islam constructing garden has been developed around Islamic world. Geometry of Iranian gardens is very important. Normally a garden is divided into little sections. The original of this geometry is based on land divisions. Every parts of the garden are squared or rectangle shaped and inside each of these parts there are other smaller rectangles that are normally planted with flowers and trees. The separation of these parts is normally trees or streams (Golbon, 2012).

#### Historic Background of Gardens in Tabriz

The city has proven extremely influential in the country's contemporary history and with a rich history contains many historical monuments and gardens with unique characteristics. Most of these gardens were influential in urban scale and were conceived as important contributors to quality of urban space. Most of these gardens have been destroyed due to repeated devastating earthquakes and several invasions during frequent wars. The high number of neighborhood and urban gardens in historic structure of Tabriz was significant during history and the city has been named as the city of gardens. Historic documents indicate that there existed several well-designed urban gardens in each neighborhood of the city. Most of these gardens have been abandoned due to physical transformations of the city.

The geographical position of Tabriz in the middle of industrial zone of the western province (West Azerbaijan) with brick kilns, and business –traffic center of the region created a polluted weather which getting worse. The park per capita is 1.14 which is very low compared to the global and national standards. The per capita of parks is 1.14 and the other types of green space is 0.47 m which together sum 1.16m. Such situation is not comparable with the national and internal standards (Lotfi et al, 2011). Transition of Tabriz from traditional city to modern one transformed the role of urban gardens in historic center of city.

Study and analysis of characteristics of urban gardens in historic cities of Iran show that all forms of gardens were constructed and used with regard to important human needs such as refreshment, fun, growth, efflorescence as well as satisfying aesthetic and mental needs. During 150 past years, parks have replaced the urban gardens as an effective approach with wide ecological and environmental affects. The researches in history of urban design in Iran show that the urban design paradigm has had effective function in historical change of parks and green spaces but still lack the cultural vitality necessary for historic continuation of urban

green spaces.

In Tabriz, like other historic centers of cities in Iran, development of new urban structures and spaces according to contemporary or so-called modern life standards and lack of attention and maintenance to older spaces and buildings, their characteristics and values, as well as their incompatibility with new trends, expectations and needs led to their deterioration. The contemporary or so-called modern city in Iran with its streets, squares and large-scale and inhumane open spaces and also new methods of construction of new buildings has all led to severe damages to historic center of city. The whole structure of historic cities in Iran changed due to introduction of modern urbanism during Pahlavi era. This change also led to creation of new urban spaces with new dimensions, characteristics, forms and functions. Besides, the historic center of ancient cities with a diverse set of precious and cultural heritage became influenced by the mentioned changes. This influence became much more obvious due to deep differences between old and new urban spaces and its consequences led to new obstacles in revitalization of old and historic district and texture of the city (Moosavi, 2012). This development and urbanization led to the gradual replacement of urban gardens with parks and recreation centers. But in some cases, the historic garden has survived and was converted to modern urban park.

Nowadays, urban parks and gardens in Tabriz are facing wide ranges of issues which can affect people coming to parks (Ghorbani, 2006; Hami et al, 2011). Among the historic gardens in Tabriz, Golestan Garden is considered to be one of the most influential gardens in historic core of the city. Historic evolution of this garden can be discussed from different points of view.

#### **Golestan Garden**

Golestan Park is a historical park in Tabriz. The park is located near to Qonqa Square in city center. The place, which was originally used as a public cemetery, has changed to a city park during the second Pahlavi era (Wikipedia, 2012). Golestan is also one of the most popular traditional neighborhoods in Tabriz. Located in the core of the most westerly part of the historical district of the city, Golestan District contains many historical buildings and spaces that are considered as important elements of the city's architectural and cultural heritage. The neighborhood is comprised of a complex network of narrow passageways which are cut by winding streets which occasionally open out onto squares and creating unique views to Golestan Garden. Built during the Islamic period and redeveloped during introduction of modernity into Iran, Golestan Garden contains several characteristics of Iranian garden but lacks a structured urban plan for maintenance and re-organization.

The Golestan Garden Historic District is considered to be very significant in the historical, archeological, and architectural heritage of the Tabriz. This neighborhood completely reflects the city's growth from the traditional pattern of urban life to a modern society influenced by western culture, yet is able to demonstrate the importance of the an urban garden in city's history.

Architecturally, the Golestan Garden Historic District reflects the major stylistic trends of early twentieth century residential design in Iran and the adaptation of these styles to the central zone of Tabriz. Especially prevalent are early examples of masonry buildings with vernacular patterns of architecture. But, at the time being, the general character of the Golestan district and the quality of its architecture are partly due to the deed restrictions imposed by recent developers.

The district also possesses archeological significance due to existence of some historic documents about early formation of the city and has a high probability of containing precious prehistoric and historic archeological sites, features, and artifacts. The neighborhood has received increased attention in the last several years as interest in historic neighborhoods of Tabriz has grown. Many individuals who care about older buildings have recently moved to this area and rehabilitation activities have increased, but a significant result has naot been achieved.



Fig. 1,2, Existing condition of Golestan garden in urban area.

The style of garden making in Golestan garden shows an organized geometry and existence of only one axis and quadripartite form which also surround the garden continue the spatial organization of the water, plants and architecture. This means everything follows the geometric order and organization. The garden has been planned based on the length axle and symmetry in two sides of middle axle and among the various rectangle and square formed various garden networks, there was a big kiosk with a beautiful pool which approximately

occupied two third of the length of the garden. It is seemed that water rotation in the garden was not existed based on the principles of Iranian garden and the extend of main and sub streets of the Garden was designed without water motion path. In this Garden, the shading trees have been used numerously in the extend of the main and sub axle.

Historic documents indicate that Golestan garden, as an integral and complete combination of geometric and natural structure, implies and demonstrates the close relationship between its cultural and natural aspects of traditional urban life in Iran and also is a sign of consistent, compatibility and adaptation of nature and human needs. Golestan garden could be considered as a true actualization of latent potentials of environmental and cognition of its complexity in the past times able to provide such a space that leads to dynamization and survival of natural environment. This historical garden which is amongst important historical gardens in Iran should be recognized, identified and listed as a natural heritage and an important, valuable document of historical and cultural identity of the area and must be protected and maintained continuously and dynamically due to the multiple values and environmental and aesthetic characteristics which resemble the historic pattern of Iranian Garden in all senses. Major characteristics of Golestan garden from architectural and environmental points of view can summarized under following categories:

- Existence of a central visual corridor along the main entrance
- Construction of edifice as the focal point of garden in central point
- Combination of water with vegetation and geometric elements
- Cultivation of vernacular species of trees and flowers
- Geometric division of garden into defined sections
- Intersection of four circulation axis in center of garden
- Application of vernacular materials for hard landscape sections

## DISCUSSION

Throughout history, urban green spaces have been an integral part of city in Iran and their importance is very well known for maintaining the environmental quality and sustainability of urban areas. In most of historic cities of Iran, urban green spaces constituted gardens and recreation venues, informal green spaces such as river banks or sea fronts, green spaces surrounding archeoalogical and religious sites, road corridors and indigenous vegetation types.

However, unlike studies regarding urban parks in the western countries, no research has been done concerning people preferences for urban parks in Iran or is not available. Hence, the basic and systematic information about user motives and preference for activity in park is not available (Hami et al, 2011).

Like other examples of urban gardens in historic core of cities, Golestan garden has been known as a place for recreation, activity, and enjoyment and has provided numerous benefits to urban residents by acting as urban lung absorbing pollutants and releasing oxygen, especially after industrialization of urban areas by means of providing clean air, water and soil, and balancing city's natural urban environment.

Researchers hold a variety of opinions and views on the benefits that people have obtained from the utilization of Golestan garden in urban neighborhoods. Historic documents reveal that Golestan garden has possessed natural, social and recreational benefits for the area and has been able to provide people with emotional, intellectual, social, and physical benefits. Generally speaking, the benefits of Golestan garden as a neighborhood park can be discussed under seven categories including health, sociality, scenery, psychology, physiology, belonging, and safety.

#### CONCLUSION

In Iran, urban structures have always consisted of several urban environmental elements and settings like gardens during history. These elements pushed ecosystem of each urban setting towards the improvements of climatic, hydrological and biodiversity functions and often described the human-environment interaction of several generations. Besides, in historic cities of Iran, there was a wide range of opportunities in which contact with nature contributed to improved quality of human life and well being. This included existence of several types of urban or neighborhood gardens providing the opportunity to relax from the daily activities of life and to contemplate and spend the time in a naturally designed environment. This natural feature also contributed to physical and cultural structure of urban neighborhoods and districts emphasizing the role of garden as a focal point of each area. Therefore, the character of residential areas with green space or urban nature was the most important community feature contributing to inhabitants' appreciation of attributes of their neighborhood and scenic beauty, cleanliness, and pleasant sounds all existed as fixed categories of aesthetic preference in urban gardens of historic cities in Iran.

Based on the above discussion, it can be concluded that Golestan garden basically has provided its users with socio-cultural, psychological, physical, and scenic benefits during history of Tabriz and has acted as the most valued urban open space which was significant and memorable for the local people because of being familiar and accessible. But, despite its value and significance, lack of attention from urban management system has decreased its vitality in recent years and turned it into an urban park which is getting further abandoned due to lack of significance and attention.

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