

The Naghsh-e Jahan Square Open Space; Values and Issues*

Ali Shahabinejad**
Reza Abuei***
Mahmoud Ghalenoei****

Abstract

Naghsh-e Jahan square is one of the most important historical squares of Iran and the world that has changed a lot in its long history. Most of these changes include the open space of the square and its surrounding monuments are nearly the same as the past. In this paper, in addition of representation of open space characteristics in the square of Safavid period and analyzing its spatial values, the process of historical changes through time emphasizing present time was evaluated. Research approach is historical-analytical based on documents, transcripts, oral tradition and historical images related to the Naghsh-e Jahan square. For current situation, most of the data has been gathered through field work.

The aim of this research is representing the original condition of the square and documenting its historical changes particularly the current situation. This work provides a kind of comparative studies about the spatial values of the square in the current and past situations. The article has also analyzed the existing issues of the square open space and has offered a number of suggestions for improving the current condition. The results indicate that the previous situation of the square open space in Safavid period had caused the desirable condition and qualities such as climatic comfort, vitality and pleasant landscape that some of these qualities have been weakened because of changes during the past centuries. However, it is possible to increase spatial qualities to make the square more similar to its original situation by revitalizing the square open space.

Keywords

Naghsh-e Jahan Square, Safavid period, Current Condition, Values, Issues.

.....
*. This paper is extracted from Ali shahabinejad's Ph. D. thesis entitled "Urban Space Values of Naghshe Jahan Square" which is prepared under supervision of Dr. Reza Abouei and Dr. Mahmoud Ghalenoei. at Art University of Isfahan.

** . Ph. D. in Conseravarion of Historical fabrics, Department of Conservation, Art University of Isfahan, Isfahan, Iran. Corresponding author. a.shahabinejad@au.ac.ir.

***. Ph. D. in Conseravarion of Historical fabrics. Art University of Isfahan, Isfahan, Iran. r.abouei@au.ac.ir

****. Ph. D. in Urbanism. Department of Architecture and Urban Planning, Art University of Isfahan, Isfahan, Iran. m.ghalehnoee@au.ac.ir

Introduction

Urban spaces are the most important field for the formation of social relations and urban activities in cities¹. If urban spaces include more qualities and space values, could attract more people and become a place for social life and establishing Pleasant memories and mental images in the minds of people. Naghshe Jahan square is one of the successful examples of urban spaces of Iran in Safavid period, which through its high level of space values could become a thriving and glorious place so that many people who visited it, praised and admired it and spoke about its beautiful landscape, its lively and thriving areas and environmental welfare in different parts of it. However, the historical developments during the past few centuries have changed the square a lot, so that the current situation of the square is completely different from the past. This article describes the issue that has been addressed. In this paper, the outdoor situation of the square of the Safavid period would be described and its spatial values would be analyzed. Then history and alteration process of the open space of the square in the later periods would be described and finally the current situation of the open space of the square and some of the issues relating to its environmental values and qualities would be analyzed and propose some suggestion for solving the problems. At last the conclusion will be presented.

Research background

Although numerous studies have been done related to the Naghshe Jahan Square, but these studies are generally more associated with four main buildings of the square and its total history. Some of these studies that can be pointed out are; Pope (2009), Godard (1989), Tavassoli (1997), Galdieri (1983), McChesney (2006), Pournaderi (2006), Abuei (2008). Generally fewer studies have been done about the open space of the square and its values. However, a few studies related to this issue can be pointed out that have been done in recent years. Shahabinejad and Aminzadeh (2012), have analyzed the quality of

the entrance landscape of Naghshe Jahan square from the view of Gheisarie in the Safavid and current time and have studied the qualities and aesthetic values of this landscape in these periods. Shahabinejad and others (2014) in an article entitled “human scale in Naghshe Jahan square”, have analyzed the square from the perspective of the quality of human scale and answered this main question that how this square by its vast areas and its superhuman scale present such qualities that regularly are expected from the spaces with human scale. Dahhar has analyzed the total proportion of the Naghshe Jahahn square in relation to the location of Sheikh Lotfollah mosque and finded out some golden proportion and hidden geometry in this connection. Naghshe Jahan Square based on user-space perspective. Zand Vosoughi (2014) in his doctoral dissertation examined the role of social interactions in the Naghshe Jahan square and has analyzed the valuable features of the square in this communication in different historical periods. The major difference of this study from previous studies is that the study doesn't focus on a particular environmental quality, but it focuses on the most significant environmental qualities and spatial values of the square in the Safavid period and analyzes the quality changes in later periods especially in the current time.

Open space of the square in Safavid period

The open space in Safavid period had a useful composition and the historical documents and tourist descriptions confirm this well. The analysis of historical documents shows a few favorable properties related with open space of the square at that age, which can be generally described in three subjects of climatic comfort, landscape, and finally Liveliness and Variety of functions. Each one of these properties will be described as follows:

- Climatic comfort

Based on left historical photo evidences and tourist descriptions such as Sharden (1983: 62), Della Valle (1991: 36-37), Olearious (2000: 606), and Kaempfer (1971: 194), there was a stream around the square

in Safavid period, and around the river, there were high and thick trees which had made the shadows (Fig. 1) like an umbrella on the open space of the square, so Sharden says that always there was a place in the square that the shadow can be found². Besides, there were not any green areas around these trees except the tree trunks which penetrated into the soil. On the other hand, the minimum of the square open space had made as a green area, in spite of the trees efficiency of shadows and the quality of climatic comfort and also improving the landscape of the square. In images 2 the plan of the square which shows the trees and square positions and it's based on historical evidences studies, can be seen.

• Favorable View

In Safaviyeh age, except the stony river around the square which had running water and the beside trees, the other parts of the square open space was in sandy and pressed soil, and except some efficient elements such as polo gates and Ghopogh beam or the fences in front of the Alighapou which had cleared the palace's borders, and also some symbolic elements like the military canons which are plundered in Hormoz war and had been placed in front of Alighapou Palace, there were not any other stable environmental elements. This composition of the square open space elements had caused the area had been a simple and integrated region, which in combination with the body of the square had caused

being more recognized the fancy architecture and its environment such as Abbasi Mosque, Sheikh Lotfollah Mosque, Alighapou palace, Ghesariyeh Entrance and body of the square.

Related to the trees around the square, Shardin also says because of the thoughtful arrangement in finding the position for planting trees and avoidance of planting on some parts, these trees had not caused to conceal the body of the square (Shardin, 1983: 62). Besides, these trees had had broad leaves and crumbled when there had been no needs of their shadows in winters so the all views around the square could have been seen and there had been an attractive variety of the landscape in spring and summer.

The night view had been also noticed and especially on anniversaries and special feasts that would have been performed in the square, it had been decorated with lights in a way that Shardin has mentioned fifty thousand lights (Shardin, 1983: 61).

• Liveliness and variety of functions

In spite of being a government square³, and it has been built for showing the power of the government and Safaviyeh spread power and interchange with other countries, the open area of Naghshe Jahan Square in Safavid period, because of its vastness and harmony, had provided a useful space for all kinds of civil activities such as fancy ceremonies of kingdom rituals, common people gatherings, and purchase and sales. In general, the square activities fields in

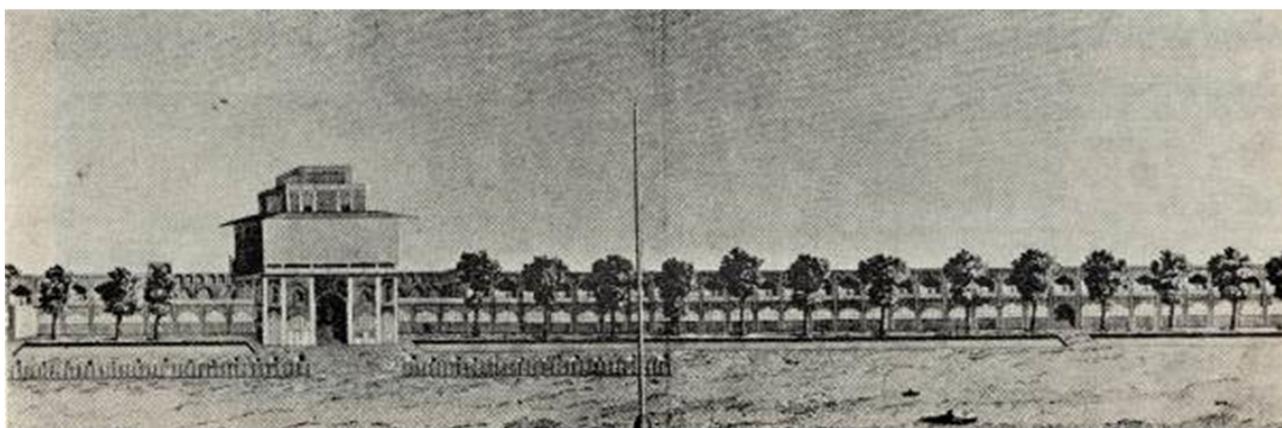


Fig. 1. The position of the river and the trees which were around of the Naghshe Jahan Square in western line.

Source: authors, based on illustrated album of Sharden.

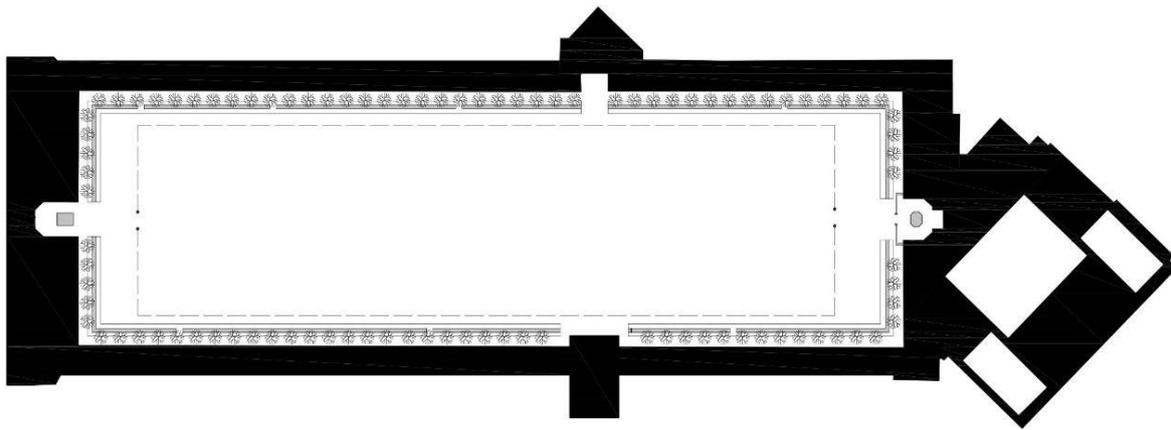


Fig. 2. The trees positions and the river around the square in Safavid period – writers. Source: authors.

Safavid Period can be described in following:

The main and middle open space of square: in this part of the square which had been in a big rectangle among the around trees of the square and had considered as the widest and the biggest part of the area, the majority of activities would have been performed there such as playing polo, Throwing Ghopogh⁴, vending, gathering the common people, execution of criminals and military parading (Fig. 4). The area between the river and trees and the square facade: this part of the open space of the square which Kaempfer (Kaempfer, 1984; 94) says that it had been a kind of common promenade, because of the shadows of the square body and around trees, had been always under shadows so that had been a suitable space for a casual walk around the square and watching the goods and shops around the square. Some people had also sat beside of the river and under trees shadows and had been watching the different competitions and activities which had been performed in the square⁵ (Fig. 4).

In addition of the areas around the river, the patios on the second floor had been also places for gathering the common people and watching the activities and special ceremonies which had been performing in the square. The king and lords of the government also would have been watching the activities such as polo, military parading, and also the illumination ceremonies and they had made communication with people from the column saloon of Alighapou which had been overlooked of all the square areas.

In table 1 there is a complete description of different activities which had been performed in the square and had mentioned in historical texts. The table information is based on Safavid travelogues text for the square include Tomas Herbert travelogue (Homayoun, 1976), Sherly brothers travelogue (Avans, 1978), Don garcias de silva figueroa travelogue (Figuerova, 1984), Petro Della valle (Della valle, 1991), Jan Shardin travelogue (Shardin, 1983), Sanson travelogue (Sanson, 1967), Jemelli Kareri travelogue (Kareri, 1968), Adam Olearious travelogue (Olearious, 2000), Ian Smith travelogue (Flour, 1977), Jan Paptist Tavernnier travelogue (Tavernnier, 1977), Englbert Kaempfer (Kaempfer, 1971), and also the historical text⁶ include Naghavat Alasar Fi Zekr Alkhyar (Natanzi, 1971), the history of Abbasi World's Opinions (Torkaman Monshi, 1971, second book), Abbasi history or Mollah Jalal Newspaper (Monajjem Yazdi, 1987), and Rozat Alssafavie (Jonabadi, 1999). These travelogues and historical texts include an age from the first Abbas King till the end of Safavid period in Soltan Hossein King Period. The description of these events shows the Naghshe Jahan Square in Safavid period had been a field for a lot of activities such as social, economic, political, governmental, cultural, fun, sport and etc. activities. This variety of activities had caused the square had been a place where all people had gathered, from the king and the lords to the lowest level of people in society which had included vendors or even criminals and sinners.

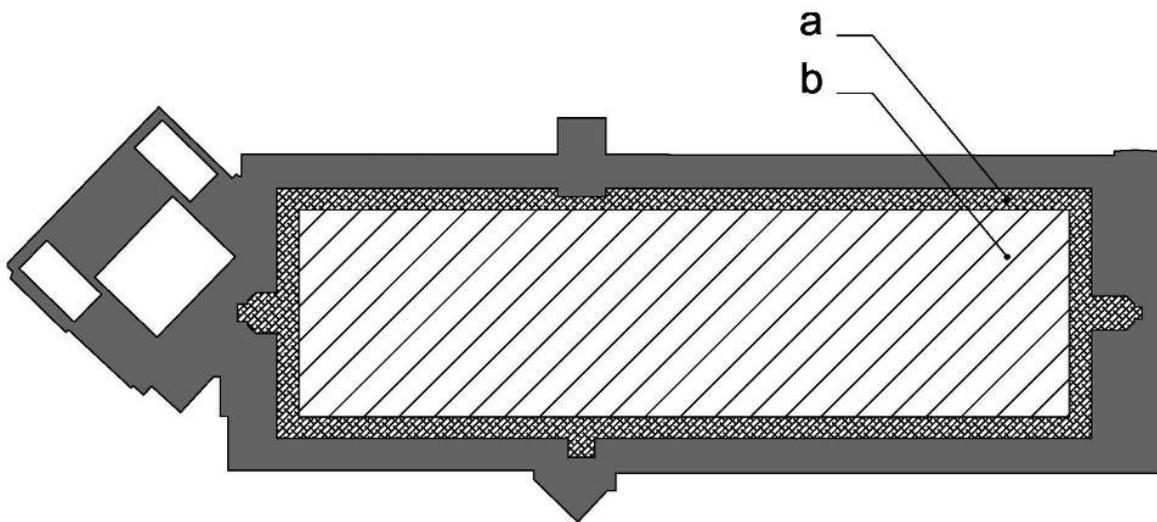


Fig. 3. Different zones of activity in Naghshe Jahan square of Safavid period; a: beside of the square body and trees and river, b: the open space in the middle of the square- writer. Source: authors.

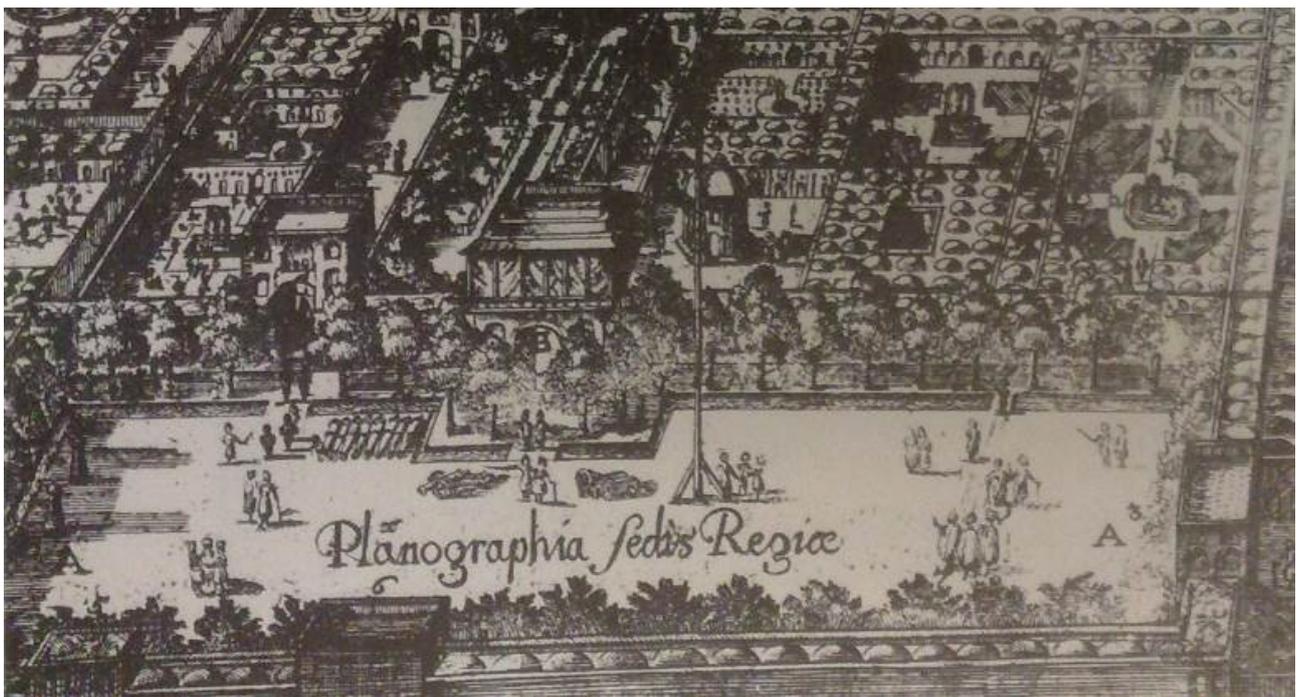


Fig. 4. An image of Naghshe Jahan and Ghoghagh beam and polo gates in the open space of the square. Source: Homayoun, 1976.

This point must be considered that moreover of the capability of the square for performing a lot of civil activities, the Safavid kings and rulers also had encouraged the square vitality and abundance. In a way that majority of activities like sport competitions or illuminations had been performed by direct orders of Safavid Kings (Fig. 5).

The Process of Historical Changes in Open Space of the Square

The situation of the square open space, after Safavid period, has changed a lot. The historical documents shows that in Ghajar age and in Mohammad King Ghajar, the stream around the square dried and the all trees has cut and destroyed and entire of the open

Table 1. Classifying of the activities in Isfahan Naghshe Jahan Square in Savafid period. Source: authors.

General Performance	Details Description
Sport Competitions	Generally includes Polo, Throwing Ghogh, Shater races ⁷ , Horse Races (they had made the horses to run a few rounds around the square), Javelin (Olearious, 1997: 609).
Feast and Symbolic Ceremonies	In some special events like the king entrance or other lords and commanders or important foreign guests (to meet ceremony) like Torkestan ruler in 1020 Arabia Calendar, and also in important feast and festivals like Norouz or king coronation, fancy feasts had performed in Naghshe Jahan square. These feasts had been decorated, illuminated, and had been performed by giving the valuable gifts, playing polo and throwing Ghogh, fireworks, and acrobats, and the ceremony of the parade of people and soldiers, the shooting of many guns at once, some wonderful performances like rocketing, magic tricks, and flowering ceremonies that would have caused happiness for people.
Political and Governmental Activities	The execution of criminals that sometimes done by a high Ghogh beam. Ian Smith in his travelogue mentioned the execution of Gilanian criminals in front of Alighapou (Flour, 1986: 86). Olearious, in his travelogue, mentioned the execution of a German watchmaker who named Schtadler by the Safi king order in Naghshe Jahan Square (Olearious, 2000; 565). Also, Kaempfer says about the execution of one lord from Isfahan who had been recognized as a criminal in Naghshe Jahan Square (Kaempfer, 1971: 105, 132). Compulsory or optional gathering of people like the demonstration in Soltan Hossein King for protesting about the economical disorders (Abouee, 1998). Debates for economic and social and military situation in the country in the open area of the square like the debate of the Abbas, King with foreign ambassadors such as Spain, Don Garsia Desilva Figuerova in Shaaban 1028 Arabic Calendar (Honarfar 1971: 9). Formal and governmental announcements like tax free, entrance of the king or going for a trip, victory in a war announcement and entrance of majesty guests and so on which sometime had played horns to announce these events.
Military Activations and parade	In addition to the parade which had performed in, this square and the commanders had watched it from top of Alighapou Savafi kings had used the canons ⁸ and other weapons that had taken as booties to make the military and war atmosphere that was symbolic. These canons generally had been placed in front of Alighapou building.
Goods purchase and vendors	Vendors, sellers and sales people had been gathered in the square, especially on Fridays, from the villages and cities near of the Isfahan to sell their goods and products (Tavernier, 1977: 385). Generally, the vendor activities had included business and selling goods and services such as haberdashery, selling trips, selling coal and firewood, selling iron, selling chickens, pigeons and other farm animals. The days on which these activities had been doing, each job and castes had took its place in the square but generally these activities had not been done in front of Alighapou. The majority of vendors, because of protecting their selves from climatic factors such as sunshine, had been doing their activities under tents or canopies (De Bruyn, 1732: 119). When the vendors had had the possibility to stay for a few days, because of the high level of security in the square, they just had spread a tent on their goods and had left them in the square without any anxiety (Sanson, 1971: 452). On feasts days or on days which kingdom salute ceremony had performed or hospitality of foreign ambassadors or polo and Ghogh game had occurred, or had been a parade, there had not been the possibility of vendors taking place in the open area of the square and vendors taking place wouldn't had occurred (Kaempfer, 1971: 452).
Entertainments	These activities had been performed in the afternoon, while the weather had started to be cool. The different artist groups for entertaining people and also incomes, had come to the square and had done all kinds of acrobats and after finishing their performances, had been paid. These groups had included handy crafts, clowns, magicians, puppeteers, handy trickers, rope players, wrestlers, puppet players, narrators, people who make prophecies, astrologers, preachers, dancer girls, artists (who had been painters and had made a portrait), showmen (who had shown some events like war) and etc. (Sharden, 1992: 282, 283). One of the other entertainments which had occurred in the square was rooster fighting (which in, two roosters had been fighting with each other), the other one was egg play (hiting of two bird's eggs to consider which one is stronger), watching the fight between some animals like lions, bears, cows, bucks, and other animals (two tribes of Isfahan, Nemati and Heidari, had been making lottery by being winner or loser), bullfight and fight against wildish animals and etc.
Walk, Rest and fun	Between the body of the market and river, and beside the river which had been throughout of the square, had been using for as common walkway which was the main people communication path in the open area. In this path, people could see the goods that had arranged in shops' showcase and had been buying goods from the market around the square and walk in the square. Shardin says: "between the stream and balcony opposite of them, is a place of workers who make or repair their things and sell them in front of the shops, in the middle of the square." (Shardin, 1966: 116). Also, in this area, people could protect themselves from sunshine under the trees shadows and rest next to the current river or watch the sport competitions and other different activities in the open space of the square.
Hospitable Activities	One the important fun activities which had been considering as social communication and had been around the square, and a lot of people had been gone there, was coffee shops. In these areas had been performing a lot, from poem and poetry and narrations and stories and games and funs to Ali eulogy. People had been going to these coffee shops to drink coffee and smoke. These places, moreover being rest place, had had a good view and narrators had been saying their stories and sometimes chess games had been played (Monajemyazdi 1987: 236, 237). In different parts of the square, especially in part of north, these activities had been performing. Olearious has mentioned a few stands (Darafarin or Darabzin ⁹) and tents in north of the square that each one had been satisfying their customers. Some of them had included a place for consumption of drugs, a place for drinking tea and for drinking coffee (Olearious, 2000: 610). These stands had been considering as sort of hospitality in open space.
Religion Ceremony and Mourning	The mourning ceremonies and lament customs include Moharam and Safar Mourning, the Mourning of 21st night of Ramadan and the Ninth and Tenth of Moharam and other mourning ceremonies, especially the mourning for death of the Kings and the grandees of science and religion, had been performing that the groups of people had been coming into the square. Also in the religious celebrations like 13th Rajab (the birth of Ali (greetings to him)) and also 18th Zihajah or Alghadir Khom Eve, there had been celebrations in the square (Della valle, 1991: 124-126).



Fig. 5. Establishing the vendors' areas and general market in Naghshe Jahan Square in Soltan Hossein age (the end of Safaviyeh) Ghopogh beam and vendors' tents can be seen in this image. Source: De Bruyn, 1732: 119.

space of the square has become an area covered by sand and soil (Flandin, 2014: 125). In Naser Aldin King age, the trees planted again and the stream ran but differently in comparison of Safavid period and in a specified area of the square margins, the trees planted again (Fig. 7 and 9). in Pahlavi age, in order to revival of the square and making it alive to attract people, it was decided to make a wide pool and green areas like a park, and beside, build asphalt roads to make the possibility of fast move and cars can reach to any areas of the square. This plan which was designed by Andre Godard in 1936, has finished in Second Pahlavi age and caused that the environment of the square took new identity in comparison of before Pahlavi age. So, the majority of the square areas has become green areas and asphalt roads for the movements of cars (Fig. 9).

After the Islamic revolution, in 1993, in order to make limitations for cars' movements, wide asphalt paths in the middle and south of the square have become pedestrian paths that were a combination of cobblestones and new green areas. In 80s, again in order to make limitation for cars' movements in the square, the beside Gheisariyeh Parking has

eliminated and its area has become green area and the green surfaces of the square have increased more than ever. In this time, the Gheisariyeh gate pool also revived. In 2014, also, by decision of completely elimination of cars' present in the square, the field for elimination of the latest asphalt roads has emerged and in the end of 1394 and 2016 these asphalt paths have become cobblestones and green surface again (Fig. 8 and 9 c).

The Present Situation of Open Space of the Square; the problems and solutions

The changes which are performed at Pahlavi age and up to 2016 in the square caused a lot of alteration in the open space of the square that the most important of these changes is considerably increasing green areas in comparison of the end of Ghajar age. Moreover, in many places in the square, civil facilities such as benches, light poles and illuminations, public telephones, water coolers, and etc. can be seen. The present situation of open space of the square is faced with a lot of problems and difficulties which some of them are mentioned in following:

- The lack of coordination between present open space structure and present pedestrian situation:

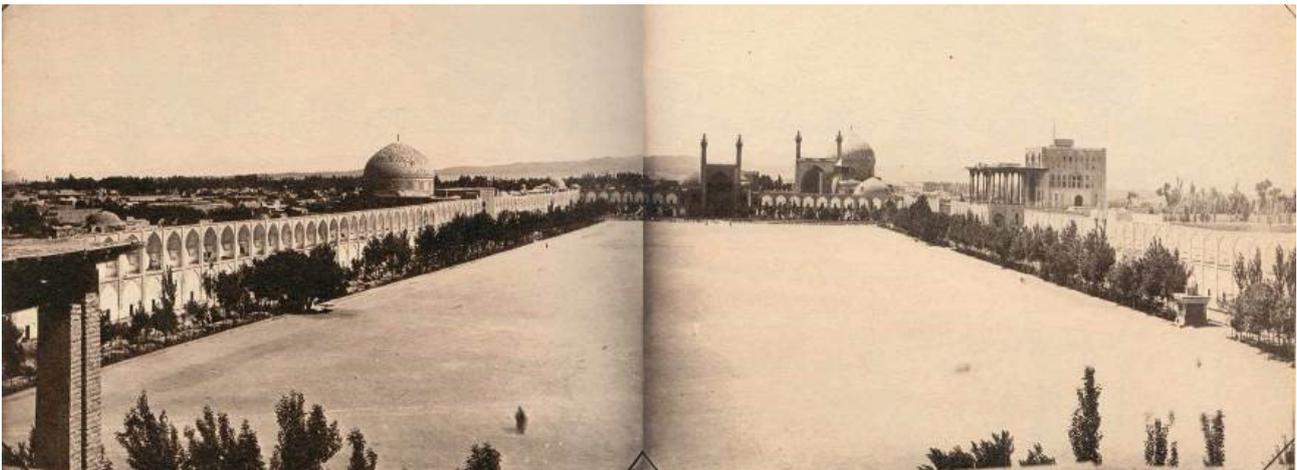


Fig. 6. the situation of the open space of the square in the end of Ghajar age. Source: Hoeltzer, 2013.



Fig. 7. The present situation of open space of the square. Photo: Mr. Ali Kaveh, 2012.

the composition that exists now in the open space of the square is generally based on Andre Godard in 1936 that changed the ignored square area into national garden and the area for car movements. The green area which is made by Godard design, was built without any historical study and without considering the main and initial situation and that was just a complement combination for drivers and the green areas functions can be considered as the green areas in margins of streets and in the middle of common rounded squares in the other places in a city

which are just for decoration and they don't have any social and civil identity roles. This design, by some changes, has formed the main character of open area of the square yet and the changes after revolution also were in order for this function. Now, 80 years after that design, the car's movements are gradually removed and in 2014 the vehicle entrance into the square was completely prohibited and the whole of the square space became a pedestrian area so that matching with pedestrians' needs in the square are felt extremely.

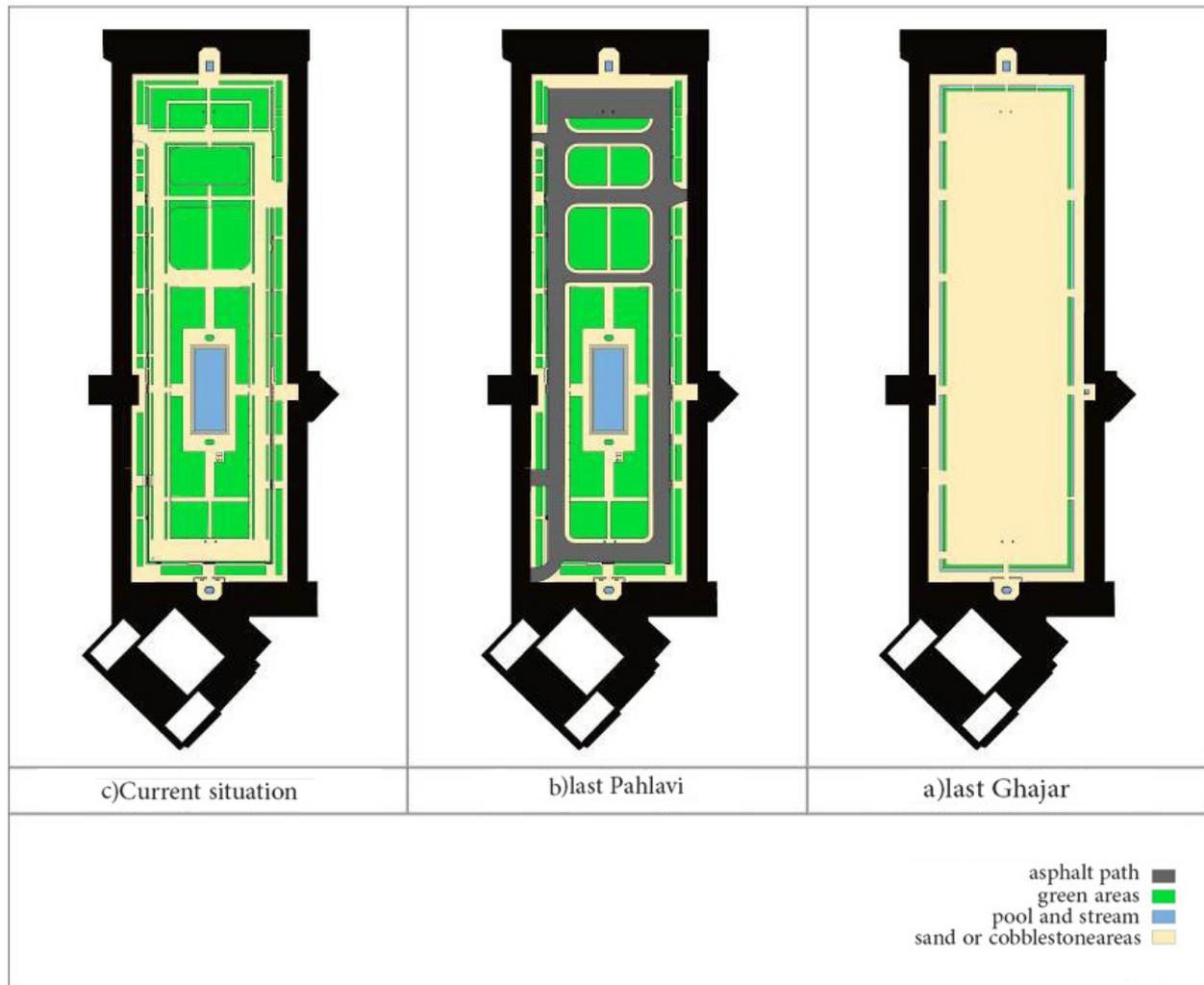


Fig. 8. The process of changes in open space of the square from the end of Ghajar age up to now (the end of Ghajar, the end of Pahlavi, the present situation. Source: authors.



Fig. 9. Some of the non-matched behaviors with the expected function of open area of the square which current green areas encourage that. Source: authors.



Fig. 10. the view of the square from Gheisariyeh Gate; the disruption in the historical elements, landscape like the historical buildings around the square and the north gates of polo with new elements (civil facilities). Source: authors.

The weakness of functional system in the open area of the square: with the current situation, the majority of the square area is occupied by green areas. These green areas which are commonly covered by grass are combined with flowers, bushes and decorative four season trees. The composition of cobblestone surfaces is also like linear in most of them. Consequently, in the whole of the square area, there is not any specified areas with adequate width for gathering which is necessary for an urban space¹⁰. This causes that the square open area doesn't have the capacity of gathering people in small scale. As a result, the square capacity for the social activities and also the historical and original activities which can be common in the square in modern ways is at low level. Besides, the present situation of the square open area which is like a big and wide green park, similarly is encouraging the activities that are supposed to be done in such a park and green areas and is not acceptable for the square role as an urban

space area which must be for cultural, social and civil activities (Fig. 9).

In this order, making a balance between hard surfaces and green areas, and also increasing the gathering areas and some areas for staying (not movement) by cobblestones or grass in soft or hard area form, increase the capacity of the square for matching events which is expected in an urban space. Also, some changes in the square open area can be done to make the capacity for some ancient games such as cricket, throwing Ghopogh, Shater race, horse race and javelin in the modern form. Moreover, in order to strengthen cultural, artistic and entertainment activities which had been common in the Safavid period in the square, today, some activities such as skate, vendor stands (for selling artistic goods and handmade goods) in specifying the time, portrait paintings, live Islamic Iranian music in the open area of the park, acrobatic games like what had been performing in Safavid period can be occurring. Also,

catering services in the north body of the square and spreading these activities in the open area in front of the stands which have a good landscape to the whole square can revive the historical functions of the north of the square in Safavid period that had included hospitality services.

The reduction of regional calmness quality in the open area of the square: in the present situation, the stream has dried and the present stream is just for transferring surface water and there is not any current stream. Besides, there are no any trees around the square to make shadows; instead there are some decorative trees which are evergreen like cypress which never make shadows. So, reviving the current stream around the square and making some limitations for evergreen trees and making them into the trees which have shadows and change their leaves in a way that the arrangement would be like Safavid period, can be helpful to remove some climatic comfort problems and revive the original situation of Safavid period of the square.

The quality reduction of the landscape: nowadays, because of ignorance of the design pattern and also environmental elements places include natural elements such as trees and bushes, and also civil facilities include illumination's equipment, benches, bins, some organizational kiosks like tourist police, the view and the perspective of the square have disorganized and there is a kind of disorder in the view of the square in a way that some historical elements like the facades of the square, around historical buildings and Cricket Gates are not in a specified view (Fig. 10). Besides, because of the lack of a management framework in relation to the control and protection of the landscape arrangement and the perspective in the Naghsh Jahan Square, in different anniversaries, there would be some activities in exhibition form in the square which cause disorders in the square view by inappropriate actions like assembling ugly metal scaffolds.

In this way, the reduction of spare civil facilities in the open area of the square and improving the arrangement of these facilities in a way that minimize the obstacles and disorders for the historical view of the square, can be helpful for increasing the quality of the square landscape. Also, creating recognition and readability for historical elements in the open area of the square like polo gates, and placing some historical and cultural objects which are adequate for the identity of the open area like Ghopogh beam and military cannons which are matched to the square Safavid period situation, can help to strengthen the historical square landscape.

In relation to the night view of the square, in spite of the several illumination facilities in the open area of the square, these facilities are not matched with the highest level of the position of the square and never fulfil the necessary and enough illumination for the open area of the square. Also, they are not matched by aesthetic characters and do not show the most attractive qualities of the square at night that especial plan must would be revised for night view of the square.

Discussion

This paper, by historical, analytical approach was a try, to consider some environmental qualities of Naghshe Jahan square in Safavid period and by reviewing of the change process concisely, it is trying to consider the problems of the open area of the square. Since the concentration of this study was on such a subject like climatic comfort Quality, View and landscape, Liveliness and Function Variety which are the most characteristic environmental quality and the area's values in the Safavid period in writers' views, this paper has considerable differences against other studies on Naghshe Jahan Square. Because considering the background of the study shows that there is not any similar work in the mentioned qualities which are in this paper.

Summary and Conclusion

This study shows that Naghshe Jahan square of Safavid period had had an arrangements of environmental elements which in combination of the square body, by creating a favorable view and perspective, had provided an adequate area for climatic comfort, while it had a complete harmony with the activities system in the square in a way that moreover protection of the government role of the square, there had been the capacity for a variety of activities and this had caused the liveliness and abundance of the square. There were a lot of changes in the open area of the square after Safavid period and consequently the present situation in the open area of the square is completely different from the former and initial situation. These changes are generally related to the high level of occupation by green surfaces and landscape elements. In spite of the widened green areas, the regional calmness quality is not satisfied and also causes weakening the activation arrangement of the square. Also, because of the lack of aesthetic consideration of the view for placing the environmental elements like trees, and other civil facilities in the square, the view arrangement has undergone some weaknesses which have undermined the beauty and historical elements attractiveness in the square. These factors have caused, in spite of the high level position of the square as an applied historical global work and one of the most important tourist attractions of Iran, that a lot of the square's capacity wouldn't be used in aspects such as climatic comfort, Liveliness, Activities Arrangement and landscape. Yet, by some changes like making the balance between hard and soft surfaces and revising decoration of environmental elements, the field for increasing the area quality and creating a maximum liveliness would be provided in the open area of the square.

Endnote

1. Urban spaces
2. I forgot to notice that there is a stream water around the square, and there are houses [the shops around the square] which are decorated by cottonwood trees. Cottonwood is a high tree, so they overshadow around houses like an umbrella without hiding them. This figure makes the square stage decorated, especially in summer when there is no temporary markets and it is wet by watering, water is up to the edge of the stream way. So, I believe that Shah square is one of the most beautiful squares in the world and sightseeing it is favorable because always there is a shadow for people to rest under it (Shardin, 1983: 62).
3. There had been always a governmental square in capitals and big cities which had been using for military parades, formal ceremonies, and probably for criminals' execution... in the around of this square, there had been military, governmental and royal buildings, but in some cases, the ruler or governmental organizations had would made such a square in a way that can be used for social affairs. Naghshe Jahan square in Isfahan is one of good samples of such a square. There had been usually built some buildings shuch as military, governmental and royal, mosque and markets and other spaces and some civil buildings (Soltanzadeh, 1991: 85-87).
4. Ghopogh was a long stick which had been placed in the square of the city and there had been a sphere, gold glob, melon or apple and in some cases, a container filled by coins and gold on the top of it. Then, skillful snipers had been trying to target it and anybody who had hit the target and had made it to fall down, had would been given a valuable reward. This had been one of the variety recreational games for Safavi kings. For extra explanation about Ghopogh, look it up in Dr. Mohammad Moein Dictionary in Persian and also The First Abbas King Biography, written by Nasr Allah Falsafi, second book, Pages 306 & 307.
5. This role of AliGhapou is similar to Hasht Behesht (eight heavens) next to the Hassan King Square in Tabriz city that Soltan Ozoun Hassan and the commanders of that age had been using this square for watching different ceremonies. Refer to the texts of unknown Venice tourist, AnjolleLo, in his travelogue named "Venices' travelogues in Iran" (Amiri 1349, 391). The role of AliGhapou building had been so great that even the tourists in Ghajar age such as Flandin and Hoeltser mentioned this event clearly (Felanden 2015: 125); (Houlster, 2013).
6. For valid historical texts in Safavi age, refer to M.C.Chesni, 2006.
7. In Shater races, the volunteers who had wanted to be one of the king's Shaters (postmen), must run the distance between Naghshe Jahan Square and a beam which had been one Farsang (about 6 Kilometres) distance from the square, for twelve times, from sunrise to sundown. This distance is about 72 kilometers that is about 1.7 times greater than the distance in marathon races, with a difference that the racer had had more time to finish this race. Some ones who had won the race, immediately had would been one of the king's Shater.
8. For the identity of these canons, refer to (RadAhmadi and et al, 1390, 12) and (Jackson & Lockhart, 1986: 311-312).
9. Sometimes, some covered markets (by shelters) had been built next to the square in surround which, in contrary of other markets, have been wooden stands named DarAfarin or Darabazin. DarAfarin had been exactly as same as nowadays stands. Its appearance and trunk sometimes had been so beautiful that had considered as an art work. Shardin has mentioned such a market in north of Naghsh Jahan Square (Pirnia, 2011: 114).
10. The only considerable surface is a rectangle in the north of the square which in the end of 1394, by elimination of the cobblestones, has become a useful area for group activities such as symbolic polo in the Norouz 2016.

Reference list

- Abouee, R. (1998). *Considering the possibility of reviving Naghshe Jahan Square according to present situation and historical past*. M. A. thesis in restoration and reviving the historical buildings and areas. Isfahan: Pardis Academy of Isfahan, Art University.
- Abouee, R. (2008). *Isfahan Naghshe Jahan Square in three historical texts, the series of architectural and civil engineering papers of Isfahan Method Conference*. Tehran: Art Academy of Islamic Republic of Iran.
- Afoushteh Natanzi, M. H. (1971). *Naghavatosalar Fi Zekr Alkheyar* [Safavid History]. By the effort of Eshraghi, E. Tehran; The book translation and publication establishment.
- Barbaro, J. (1967). *Sanson travelogue* (accurate research and study about ceremonies, behavior and government of Iran), by effort and translation of Tafazoli, T. Tehran: Ebn Sina.
- Careri, G. (1969). *Careri travelogue*. Translated to Persian by Abbas Nakhjavani, A. & Karang, A. A. Tabriz: East Azarbayegan General Department of Culture and Art cooperated by Frankline Publication Institute.
- Dahar, A. & Alipour, R. (2013). Isfahan Sheikh Lotf Allah Mosque Architectural Geometric Analysis for determination of the relationship between Pray House and the entrance of the building. *Bagh- e Nazar*, 10 (26): 33-40.
- De Bruyn, C. (1732). *Voyages de Corneille Le Bruyn par la Moscovie, en Perse, et aux Indes Orientales*.
- Della valle, P. (1991). *Petro Della valle travelogue*. Translated to Persian edited by Shafa, Sh. Tehran: The Ministry of Culture and High Education, the Scientific and Cultural Publication Company.
- Falsafi, N. (1974). *First Abbas King Biography*, Vol. 1. Tehran: Tehran University Publication.
- Figuerova, D. G. D. (1984). *Figuerova travelogue*. Translated to Persian by Samiee, Gh. the first print. Tehran: Noor Publication.
- Flandin, E. (2014). *The journey to Iran, an image of Ghajar period in Iran*. Translated to Persian by Agahi, A. Edit and explanation by Entekhabi, H. Isfahan: Naghshe Mana Publication.
- Flore, V. (1977). *The first ambassadors of Netherlands and Iran*. Effort by Majlesi, D. & Aboutorabian, H. Tehran: Tahouri library.
- Galdieri, E. (1983). *AliGhapou*. Translated to Persian by Jabal Ameli, A. Tehran: Ancient Works Protection National Institute.
- Godard, A., et al. (1989). *Iran Works*. Translated to Persian by Sarvghad Moghadam, A. Mashahad: Astan Ghods Razavi Publication.
- Habibi, S. M. (1999). Civil Society and Civil Life. *Honar- Ha- Ye- Ziba*, (7): 21-33.
- Hoeltzer, E. (2013). *Thousand Reflection of Life: Ernst Hoeltzer images of Naseri Age*. Tehran: Cultural Heritage Country Institute (center of research). Tehran: The center of cultural heritage documents and evidences.
- Homayoun, Gh. (1976). *The illustrated European documents from Iran*. Tehran University of Tehran.
- Honarfar, L. A. (1971). Isfahan Naghshe jahan Square. *Art and People Journal*, (105): 2-28.
- Jackson P. & Lockhart, L. (1986). *The Timurid and Safavid Periods. The Cambridge History of Iran*. Cambridge: Cambridge University Press.
- Jonabedi, M. (1999). *Rozatosafaviyeh*. By effort of Mojed Tabatabaie, Gh. Tehran: Afshar Affairs.
- Kaempfer, E. (1971). *In Iran Kingdom Court*. Translated to Persian by Jahandari, K. Tehran: National Works Association Publication Series.
- Kashanijoo, Kh. (2012). *Pedestrian pathways from the principles of design to efficiency properties*. Tehran: Azarakhsh Publication.
- Mc. Chesni, R. (2006). *Four sources about Abbas King's buildings in Isfahan*. Translated to Persian by Ghayyuomi Bid Hendi, Tehran: Farhangestan- e Honar.
- Monajem Yazdi, M. J. M. (1987). *Abbasi History or Molla Jalal Magazine*. Effort by Vahidian, S. A. Tehran: Vahid Publication.
- Olearious, A. (2000). *Olearious travelogue, Bloody Isfahan of Safi King*. Translated to Persian by Hossein Kordbache, H. Vol. 2. Tehran: Hirmand.
- Pakzad, J. (2013). *Theoretical principles and the process of urban design*. Tehran: The Ministry of Home and urban planning.

- Pirnia, K. (2011). *Iranian Architecture*. By effort of Memarian, Gh. Tehran: Soroush Danesh Publication.
- Pope, A. (2009). *Iran Architecture*. Translated to Persian by Sadri Afshar, Gh. Tehran: Akhtaran Publication.
- Pournaderi, H. (2010). the changes and complement of Naghsh Jahan Governmental House, AliGhapou, a review of Ismeo Institute studies in AliGhapou History. *Soffeh* (51): 24-30.
- RadAhmadi, M, et al. (2011). Introducing and considering some Image-historical documents that have just found about Naghshe Jahan Square. *Bagh- e Nazar Journal*, 8 (17): 3-18.
- Rogers, W. (2003). *The Excellent City Park system*. Washington, DC: Public Land Pub.
- Shahabi Nejad, A. & Aminzadeh, B. (2012). The Entrance View of Naghsh Jahan Square of Isfahan, the values and issues. *Honar- Ha- Ye- Ziba*, 17 (1): 27-37.
- Shahabi Nejad, A., et al. (2014). The human scale in Naghsh jahan Square of Isfahan. *The Scientific and Research Journal of Restoration and Architecture*. Art University of Isfahan, 4 (7): 29-40.
- Shardin, J. (1983). *Shardin travelogue, Isfahan Chapter*. Translated to Persian by Arizi, H. Tehran: Negah Publication.
- Sherly, A. & Sherly, R. (1978). *Brothers travelogue*, By introduction and explanation of Moheb Aien, Second Edition. Tehran: Manouchehri library.
- Soltanzadeh, H. (1991). *The urban spaces in Historical fabrics of Iran*. Tehran: Rasam Publication.
- Tavasoli, M. & Bonyadi, N. (2007). The Center of Architecture and Urban Planning Studies of Iran.
- Tavasoli, M. (2009). *Urban Design, the art of renewing city structure*. Tehran: Markaz motaleat- e memari va shahrsazi- ye Iran.
- Tavernier, J. B. (1977). *Tavarnie travelogue*. Translated to Persian by Nouri, A. Correction of Shirani, H. Isfahan: Taeid Bookstore.
- Tibbalds, F. (2015). *Making people friendly town*. Translated to Persian by Mohammad Ahmadinejad. Isfahan: Khak Publication.
- Torkaman Monshi, E. (1971). *The History of Abbasi Opinions World*. By effort of Afshar, I. Tehran: AmirKabir, by cooperation of Taeid Library.
- Zand Vosoughi, N. (2014). *Social sustainability and public life in Iranian Squares: the case of Naghsh- e Jahan Square*. Ph. D. thesis. Sheffield: University of Sheffield.