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Reviewing the Khorshid Gate in Naqshe Jahan Square Based on the Historical- Descriptive and Image Documents

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Abstract

Statement of problem: Naghsh-e Jahan square has been formed as a prominent urban space in Isfahan with the interaction of economic-residential, religious, and governmental sectors in the Safavid period. This square has entrances to connect with each other. One of this square's routes was toward governmental part is the gate known as Khorshid. The study of this gate helps to identify the uses around the square, spatial relationships, and hierarchy of access during the history. Some researchers study the transformations in square and evaluate Naghsh-e Jahan square. This research reviews the Khorshid gate for the first time based on the historical-descriptive and visual documents of Safavid era until first Pahlavi period.

Methodology: this research has used library and field data. By evaluating the descriptive and visual documents of different historical periods and present condition, the evolution process of gate was determined from Safavid era until the collapse of Pahlavi.

Purpose: This research aims to explain the evolution process and the use of the Khorshid gate from Safavid period until today by evaluating available historical-descriptive and image document.

Conclusion: the evaluations revealed that in Safavid period, the given gate with three other similar gates, have been the entrance of king's seraglio but the Khorshid gate alone connected the seraglio's passage to the western side of Naghsh-e Jahan square. Visual documents also showed that this façade, as some other royal gates of Safavid period, has been two flats building with center doorway and false arches on both sides. In Qajar period, by destroying seraglio, the given gate has been used just as the entry of Khorshid gate. In the first Pahlavi period, this gate was destroyed and it is in the same situation until today.

Keywords: Khorshid gate, Naghsh-e Jahan square, Historical-Descriptive and visual Documents, King's seraglio.

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Introduction

Naghsh-e Jahan square was a major urban space in Isfahan's in Safavid period that had encompassed buildings with different uses. Some uses that formed in the square were religious, commercial, residential and governmental uses. There were entrances in the four sides of square linking this building to square. Among these entrances, except the entrances of mosques, three entrances had prominent gates. Qeisarie gate in the north side was the most prominent square entrance ended to commercial and residential spaces (Aubin, 2012: 296; Forkava, 2005: 239; Afzal Al-Molk, 2000: 28). Governmental buildings are located in the western side and divided into forum and seraglio (Arbab Isfahani, 1979: 37). Each of these groups had a prominent entrance gate to the square.

It was possible to have access to the forum through Ali Qapu doorway, and to seraglio through the Khorshid gate (Tavernier, 2011: 53; Katef, 1978: 62; Flandin, 1978: 161). The gate of Khorshid was the only entraance to king's seraglio from Naghsh-e Jahan square (Kaempfer, 1984: 193; Chardin, 2014). In Qajar period and along with the stagnation of Naghsh-e Jahan square, the buildings surroundings have been destroyed gradually (Loti, 1991: 198; Aubin, 2012: 289). By destroying some parts of seraglio and changing their use, the gate of Khorshid has lost its use in this period and acts just as the route of Khorshid. Finally, in Pahlavi era, this gate was destroyed completely and the Khorshid route was allocated to riding. Due to the destruction of this gate, as one of the important buildings of Naqshejan square, the evaluation of its transformations in the history can be effective to identify the changes and architectural history of Naghsh-e Jahan square. On the other hand, identifying architectural features of this gate helps rebuilding the government house of the Safavid period.

Research question

1. What are the obvious physical elements in the

plan and view of the Khorshid gate?

2. How the Khorshid gate is associated with other areas of Naghsh-e Jahan square from the placement and use viewpoint?

By evaluating the descriptive and visual documents of different historical periods and the historical transformations of Naghsh-e Jahan square, this study shows the Khorshid's gate transformation from Safavid period up to now, and also identifies its architectural features.

Methodology

In order to understand the transformations of the Khorshid gate, the main part of this research was allocated to evaluating the historical-descriptive and visual documents related to the Safavid, Qajar, and Pahlavi periods.

Since Naghsh-e Jahan square and government palace built in Safavid period, and the use of intended gate depended on the palace, Safavid period was the oldest date used to evaluate this issue. However, because the oldest available picture of the gate relates to Pahlavi period, Safavid period to Pahlavi period is considered as the time interval of this research. In Safavid period, this entrance was used as the main entry of king' seraglio. Reviewing and expressing architectural transformations of Naghsh-e Jahan square and Safavid government house can help to identify the spatial relationship and hierarchy of access to the square. However, evaluating the architectural features of this building reveals architectural structure of some royal gates in the Safavid period.

The method of the research is historical-descriptive and visual documents related to Safavid period until Pahlavi period were evaluated. To identify exactly the Khorshid gate characteristics, only those documents were evaluated that referred directly to the entrance of square, especially the given gate. In order to better understand the architectural characteristics of the Khorshid gate, this gate was rebuilt by using modeling software.



This research has been conducted based on the library, analytical and field methods. First, the gate of Naghsh-e Jahan square was evaluated since Safavid period until now. Then, transformations of the Khorshid gate identified according to the historical-descriptive and visual documents. To identify the current condition of gate, some images were taken from its position in Naghsh-e Jahan square. Next to the given gate, king' seraglio was explained briefly, because it was the most related area to the gate of Khorshid. Besides these architectural characteristics, the gate was evaluated by using the visual documents.

Theoretical foundations and review of related literatures

Due to the importance of Naghsh-e Jahan square, many scholars tried to identify and introduce it since its formation period until now. Many parts of these studies consist of travelogues that besides introducing Isfahan, describe Naghsh-e Jahan Square (Tavernier, 2011; Chardin, 2014; Della Valle, 1991; Kaempfer, 1984; Richards, 2011; D'Allemagne, 2015). Besides travelogues, many historical documents have introduced Naghsh-e Jahan square (Tahvildar Isfahani, 1963; Jaberi Ansari, 1999). Only few scholars have evaluated this square from different perspectives as an urban area (Shahabinejad, Abuei, Ghalehnoei & Mozafar, 2014 a; Aqabozorg & Motedayen, 2015).

Some studies have evaluated square changes during the history. (Shahabinejad, et al, 2014 a). Among them, only a limited number of scholars have evaluated visual documents and changes in square according to these documents (Radahmadi, Fakhar Tehrani & Abouei, 2011; Shahabinejad, Abuei, Ghalehnoei & Emami, 2014; Pahlevanzade, 2016). Only few researchers have pointed out to the gate of Khorshid or the seraglio entrance in western side of Naghsh-e Jahan square and its use (Della Valle, 1991; Tahvildar Isfahani, 1963; Arbab Isfahan, 1979; Afzal Al-Molk, 2000). Few

scholars have explained the gate's architectural features and its relation with surrounding areas (Chardin, 2014; Kaempfer, 1984).

Few studies are conducted regarding the representation of architectural works which are ruined now. A clear image of the devastated works is obtained in descriptive documents, especially literary and historical texts (Alehashemi, 2012; Yarahmadi, Ansari & Mohammadjavad, 2017, Jafarpour Nasser, 2018).

Statement of problem

Naghsh-e Jahan square was the main square in Safavid period in Isfahan with different functions. Its main uses were residential-commercial and governmental. Residential-commercial functions were done in three eastern, northern and southern sides and governmental function was just in western side. Among different entrances that connected square to these uses, only three entrances had specific gate. One of them is gate called Khorshid.

According to visual documents, this gate was located at the south of Ali Qapu and historical-descriptive documents showed that given gate was the entrance to Safavid king' seraglio. Since this gate is not available today, evaluating its transformations can help to represent physical transformations and the function of Naghsh-e Jahan square since Safavid period until today.

Findings

Gates of Nagsh-e Jahan square

Naghsh-e Jahan square, has had various entrances as the most distinctive urban space of Isfahan from Safavid period up to now. These entrances connected square to space and its adjacent areas. Adjacent texture of square was divided in two groups in its establishment period, i.e. Safavid period. First group was residential space that surrounded square in northern, southern and eastern sides. Second group was royal space at the western side of square.

In the Safavid period, and according to the European travelers, there were entrances in all sides of square, but based on the importance of adjacent areas of square, just three entrances had the specific gate. Among entrances that connect square to surrounding residential context, entrance to grand bazaar was in northern side by the gate of Qeisarie. Among entrances near to Safavid government house, only the entrance of Ali Qapu to king' seraglio had exclusive gate (Della Valle, 1991: 38). In Qajar period, despite the stagnation of square, the gates always were preserved physically, although they lost their function. In Pahlavi period, after the construction of Sepah and Hafez streets, the gate of seraglio and Ali Qapu lost their roles generally, and the importance of Qeisarie gate diminished partly. In this era, despite the construction of new entrances for square and development of riding's access to the square, new gate was not added. Today, in addition to the gate of mosques, just two gates of Ali Qapu and Qeisarie remain in

square. Gate of Ali Qapu is used as the entrance of Ali Qapu palace but the gate of Qeisarie always played its historical role i.e. connecting square to grand bazar and residential texture in the north of square (Fig. 1).

The transformation of the Khorshid gate

mentioned above, buildings around As Naghsh-e Jahan square were divided into two groups of royal and public buildings in Safavid period. Access to these areas was possible by the entrances near to the square. The only public gate i.e. Qeisarie was located at the north of square and royal gate was in west. The buildings in the royal part was divided into two groups: forum and seraglio (Arbab Isfahani, 1979: 37). Among buildings related to forum, the long palace, the forty columns (Chehelsotone) palace, the house of cloth, the closet, the king's pub and king's factory can be mentioned. The main entrance that provide access of these areas to square was the











B-2

Fig. 1. The Evolution of Naghsh-e Jahan Square's Gates.

B-1

A: Safavid Era. 1. Qaysarieh Gate, designed by Chrdin, 17th century. Source: Chardin, 2014; 2. Khorshid Gate, designed by Kaempfer, 17th century, Source: Kaempfer, 1984.

B: Contemporary Era (2018). 1. Qaysarieh Gate. Photo by: Negar Kourangi, 2017; 2. The current situation of Khorshid Gate's place (absence of the Gate). Photo by: Negar Kourangi, 2017.



Fig. 2. The Seraglio Divided into Two Main Parts. Source: Kaempfer, 1984. Edit by authors.

entrance of Ali Qapu. Besides forum's building, there were areas for seraglio at the western side of square. Among these areas were Ferdos garden and king's mother's hall.

The only access of these areas to Naghsh-e Jahan square was through the gate of Khorshid. This façade and the entrance of Ali Qapu, were the most distinctive western entrance of Naghsh-e Jahan square that the first was connected to seraglio and the second to ministerial palace. This gate was pointed out to in descriptive documents related to Safavid period, and besides, it was illustrated in some visual documents in



Fig. 3. The Four Gates of the King's Seraglio during the Safavid Period. Source: Kaempfer,1984. Edit by authors.

this period; therefore, it definitely belongs to the Safavid period. The existence of this gate in the descriptive and visual documents of Qajar period showed that the gate of Khorshid was used in Qajar period. The images that belong to the early Pahlavi period show that these gates were ruined in those years and then, Khorshid route was called Sa'di and used for riding. Today, there is no trace of this gate and the passage close to it as sidewalk.

King' seraglio in Safavid period

According to different documents of historical period, gate of Khorshid has been connected to Safavid seraglio. Therefore, before paying

attention to gate and its features, the summary of king' seraglio is presented. The only way to connect this area to Naghsh-e Jahan square was gate of Khorshid. Regarding the required privacy for seraglio, there was not much description of these areas. When Kaempfer was in Isfahan, he could see some parts of seraglio. According to Chardin and Kaempfer's description, seraglio used to be divided into several groups and various micro-spaces. According to its importance, the buildings of seraglio divided into two groups, the first group assigned to seraglio's women and had a high degree of privacy. The second group was particular to mother queen and the other old women that had a lower degree of importance and privacy (Fig. 2); (Kaempfer, 1984: 224). King' seraglio had several dominant buildings including public house, Ferdos hall, the house of the mirror and lake building (Chardin, 2014: 158; Rafiee Mehrabadi, 1973: 93). By matching these buildings with Kaempfer's design, it can be said that these buildings may place in the front of mother queen Hall and in southern side of passing close to seraglio (Fig. 3). The most distinctive building of seraglio allocated to king. Some parts of seraglio included sections like kitchen, bathroom, buttery, and different repositories (Chardin, 2014: 161-162). It should be noted that most of these buildings had two stories. As it is clear, king' seraglio is assigned a significant part of royal buildings of the west square to itself that consisted of several rest house, grange, residential houses and walkway (Kaempfer, 1984: 224). Therefore, regarding the extent of these areas, and the privacy of seraglio, protection and entrance to these buildings were very important.

Evaluating the gate of Khorshid in Visual Documentation

Gate of Khorshid is seen both in the remained designs of Safavid and Qajar periods. The documents of Safavid period were Chardin, Kaempfer, Olearios, Haftshad, and Lobron's designs. The oldest document is Chardin's design,

in which the western side of square is in near distant from Ali Qapu has pictured the gate of Khorshid. In this design, in the place of façade, one- story building was shown that is projected out from the square. Of course, in the same part, a building is placed behind the square and is not visible because a tree is located at front of it. Altogether, it can be said that because of the importance of this gate, it is located next to the Ali Qapu but its details are not portrayed accurately. In the next design by Kaempfer, more details of gate are portrayed and due to the presence of gate in the Qajari pictures, Kaempfer's design can be considered as exact design. In this design, two-story cube building has been portrayed as the gate of Khorshid. In Kaempfer's design, besides the given gate, three other gates also are drawn along with the passage close to seraglio that refers to the existence of several other gates in the way of seraglio. All seraglio's passage gate have been drawn same as the main gate. There is another design of Kaempfer that portrays the gate of Khorshid in the same way. In second design, the square has been drawn without any details and just has been referred to its distinctive buildings, and the importance of the given gate can be found in it. In Olearios drawings, squares, high doorway, doorways, and building's front is visible. In Haftshad's design, which shows the general view of building, the gate of Khorshid seems that has been drawn at the little distance of Ali Qapu, but its details is not clear. In Lobern's design, gate's building is not visible, but its withdrawal portrayed the body of square. This issue signifies gate's existence in the late of Safavid period. Qajar period documents have more diversity of document's types. These documents divide into three categories consisted of holographs, plans and pictures. In Chirikof's plan (1851), gate of Khorshid's place has been introduced as cubic-Khorshid (Mehryar, Fatholah Yef, Fakhari Tehrani & Qadiri, 1999: 171). In Seyed Reza Khan's plan (1923), gate of Khorshid is not shown and the



name of gate. In Safavid documents, there is no name of gate of Khorshid but it's the name in Qajar period. Kaempfer reminds us the existence of big Khorshid's image with circular golden part in the body of gate, in the description of second gate that had been placed after gate in the passage of seraglio (Kaempfer, 1984: 221). After Safavid period that seraglio has lost its function, this gate exposed to public's view. Because it indicated the body and the importance of the role of Khorshid as king's sign among people, they called this route and Khorshid gate. Since all gates are close to seraglio, it is possible that by gradual destruction of second gate (that had Khorshid's sign), its name was given to the gate connected to square. The same point in all previous documents is the use of gate. All documents show its relation to king' seraglio (Fig. 4-5-6). In first Pahlavi period, by building Sa'adi school, its name changed to Sa'adi route (Jaberi Ansari, 1999: 340).

Architectural Features of Khorshid Gate

According to available holographs of the Safavid era, and pictures of the Qajar era (Fig. 4-5-6), the gate of Khorshid had been two-story building: first story that the entrance was placed on it, was higher than second story significantly (Fig. 4-5-6).

This gate has been distinguished from the body of square in two different ways. First, it is higher than the body of Western Square obviously and the second is gate's backwardness to the body and surroundings bazaar. The main doorway was high and has pronged clamp. There were concavities in the sides of doorway and bulk heads at the top of them. There is a window in bulk heads. In second floor, exactly over doorway, there are three wooden reticulate windows in shape of rectangular. There are three cavities at the top of windows, too. There were two bulk heads in both sides of windows, exactly over the first floor. At the top of gate, there is a sunshade made of wood (Fig. 4-5-6). There was a porch after the main doorway, and at other side of gate, again there was the other doorway. The reason

place of seraglio has been introduced as the school of horses training. But a hall is visible in the gate of Khorshid's place that may refer to the existence of this gate. Since Qajar period, there is just several images that you can see gate of Khorshid. In these images, the gate of Khorshid has been shown as rather high building that is a little higher than the body of square. This height difference is indicator of gate. In these images, building has a good condition. There are some holographs of Naghsh-e Jahan square from Qajar period but gate of Khorshid is not visible clearly in none of them. In the Pascal Cost's holographs, some projections are seen about the main body (Coste, 2011: 45).

Gate of Khorshid in Historical and Descriptive Docum

Gate of Khorshid was among the gates and great buildings in the western side of Naghsh-e Jahan square. Regarding the formation of this gate in Safavid period, in addition to other buildings around the square, this gate had been also pointed out to, but less detailed description is presented due to its building's simplicity. Among historical and descriptive documents in Safavid period, we can refer to Chardin, Kaempfer, and Della Valle's travelogues who have called this gate, royal seraglio door, porch gate, and the entrance of court women, respectively (Chardin, 2014: 107; Kaempfer, 1984: 193; Della Valle, 1991: 381). The porch gate is the name given by Kaempfer to this entrance because he states that this gate has a porch heavily guarded (Kaempfer, 1984: 200). All these documents indicate that this gate was near to king' seraglio. In Qajar period, in Afzal Al-Molk, Arbab Isfahani and Tahvidar Isfahani's have referred to this gate of Khorshid. In all three documents, the gate has been called gate of Khorshid. Arbab Isfahani and Afzal Al-Molk have known it as entrance gate (Afzal Al-Molk, 2000: 30; Arbab Isfahani, 1979: 37; Tahvildar Isfahani, 1963: 18). The point of Safavid and Qajar's documents' comparison is changing the

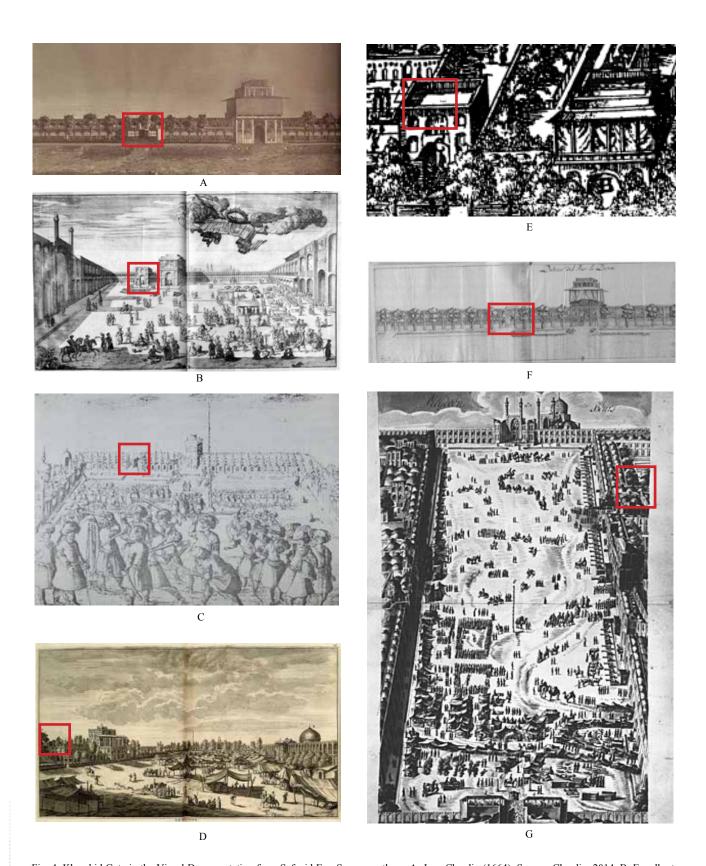
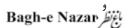


Fig. 4. Khorshid Gate in the Visual Documentation from Safavid Era. Source: authors. A. Jean Chardin (1664). Source: Chardin, 2014. B. Engelbert Kaempfer (1683-1685). Source: Kaempfer, 1984. C. Adam Olearius (1637). Source: Homayoun, 1969. D. Cornelis De Bruijn (Early Eighteenth Century) Source: Golestan Palace photo archive. E. Engelbert Kaempfer (1683-1685). Source: Kaempfer, 1984. F. Sketcher: Bembo. Source: Bembo, 2007. G. Hofsted (1703). Source: Radahmadi et al., 2012.



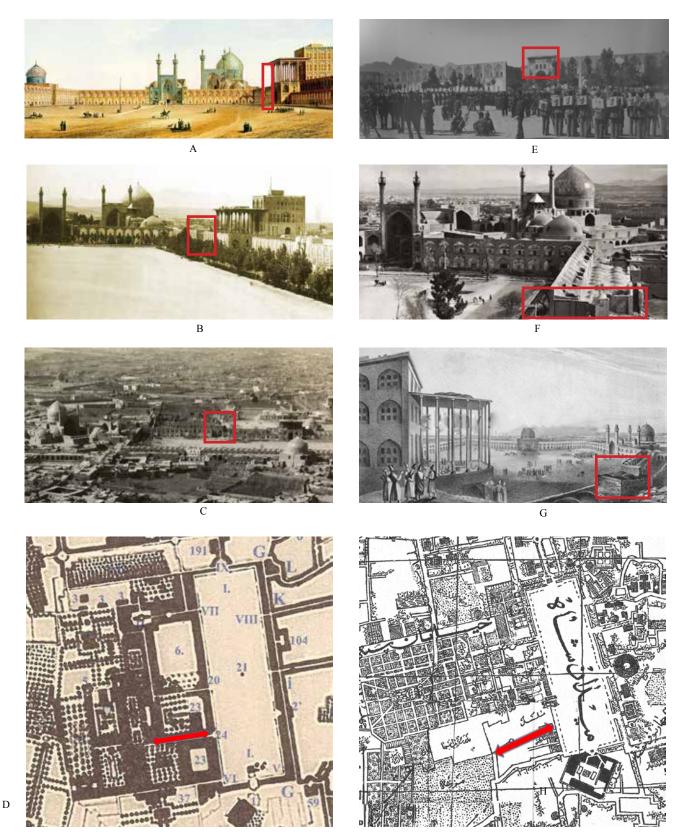
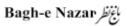
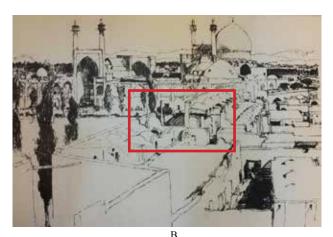
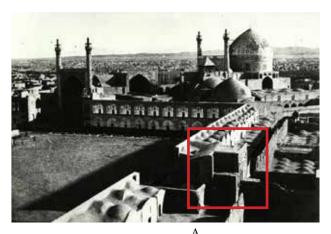


Fig. 5. Khorshid Gate in the Visual Documentation from Qajar Era. Source: Authors. A. Pascal Coste (1843). Source: Coste, 2011. B. Ernst Hoeltzer (1863-1897). Source: Hoeltzer, 1976. C. Photographer: Unknown. Source: Golestan Palace photo archive. D. Colonel Chirikov (1851). Source: Mehryar, et.al., 1999. E. Photographer: Unknown. Source: Golestan Palace photo archive. F. Photographer: Unknown. Source: Golestan Palace photo archive. G. Sketcher: Unknown. Source: Golestan Palace photo archive. H. Soltan Seyed Reza Khan (1923). Source: Cultural Heritage Organization.







B
Fig. 6. Khorshid Gate in the Visual Documentation from Pahlavi Era. A. Photographer: Unknown. Source: Golestan Palace photo archive.
B. Fred Richards (1930).

Table 1. Evaluating the gate of Khorshid in the historical and descriptive documents. Source: authors.

Author	Descriptions	Author	Descriptions
Jean SHarden 17 th century (1664 A. D.)	King's square has 12 major entities and several small entrances. Entrance of kingship's palace has five major gates that the best and first of them is Ali Qapu .The second entrance gate of kingship's palace, is close to royal harem's door. The third door that is in north, named Chahar hoz door. Forth is Bakhtar door that is toward city gate and called king's door. Fifth is in front of small bubble house and called kitchen door.	Pietro Delavale, 17 th century	The entrance door of king's house is in one side of king's square but is not in the middle of it, so that if we divide this side of square into three parts, from one side third and the other side two third space with western side of square. The smaller door is women's entrance. (Delavale, 1991: 38).
Englbert Kampfer 17 th century (1684 A. D.)	In brief distance of Ali Qapu, porch gate goes to seraglio. From north, there is the entity of Qeisarie grand bazaar.	Mirza Qolam Hossein Afzalol Molk, 19 th century	Gate of this Qeisarie in balcony has made well and bazaar's gate is on it (Afzalolmolk; 28: 2000). The door of gate opens to king's hall that one's gate is Ali Qapu and the other had small gate named gate of Khorshid, first was a way to seraglio. Qeisarie gate is toward north of this square and the door of Abbasi mosque is toward south (Azalolmolk; 30: 2000).
Mirza Hossein Khan Tahvildar Isfahani	The Gate named gate of Khorshid, that is in Ali Qapu's side (Tahvildar;18:1963)	Mohammad Mahdi Arbab Isfahani, 19 th century	Two gates in that square open to king's palace that one gate is Ali Qapu and the other has small gate named gate of Khorshid, first was a way to forum and second to seraglio (Arbab Isfahani;37:1979)



for the existence of two doorways is two groups of guards in two sides of gate (Kaempfer, 1984: 220-221). Analyzing remained pictures showed that the doorway of seraglio has lower height than doorway connected to square (Fig. 7). As seen in Qajar period's photos, materials used in this gate were brick, wood and plaster. The major part of the body was brick and some were plaster. By analyzing some adjacent gates of Chahar Baq Street built in Safavid period, and comparing their architectural features with given gate, we can consider specific method of architecture to build royal gates in this period. The given gates had two stories with equal clamp, bulk heads sharing, cavities and sunshades over buildings. Analyzing the gate of Chahar Baq Street gives more certainty to the architectural features of gate of Khorshid.

• Hypothetical rebuilding of Khorshid gate

Due to the available visual documents and for

more accurate detection of architectural features of gate, tridimensional model was used. Since more details of this gate are seen in Qajar pictures, these pictures used as the basis (Fig. 8-9).

Discussion

Some scholars just pointed to the gate of Khorshid, while this research uses the combination of figurative-descriptive documents to analyze and restore this building for the first time. This research can suggest a way for other buildings for modeling and representation.

Conclusion

By evaluating the remained visual documents of Safavid, Qajar and first Pahlavi periods, it was found that a gate has been placed due to its importance in most of these documents in the western side of Naghsh-e Jahan square and in the

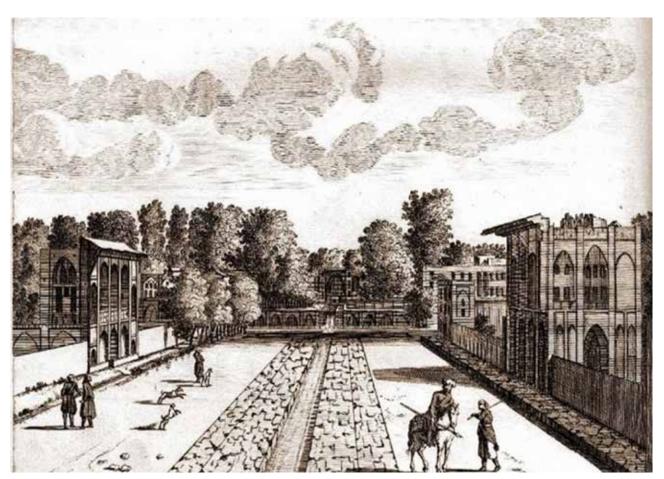


Fig. 7. The common architectural features between Chahar Bagh Street's Gates and Khorshid Gate, Source: Homayoun, 1969.







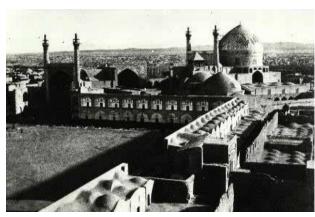


Fig. 8. Rebuilding Khorshid Gate Based on the Photos from Qajar Era. Source: authors.



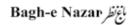




Fig. 9. Rebuilding Khorshid Gate. Source: authors.

south of Ali Qapu palace. From available visual documents, especially pictures of the Qajar and Pahlavi periods, identified that gate of Khorshid was two-story building with a doorway with pronged clamp among them. The first floor was obviously higher than the second floor. The other architectural components of this gate are wooden windows, cavity and bulk heads. Bulk heads were placed at both sides of entrance doorway and wooden window in them. Besides, there are

three wooden windows on the doorway and three cavities at the top of them. In the highest part of gate, there was a Khorshidshade sloping made of wood (Fig. 4-5-6). The Gate of Khorshid has been designed in such a way that in both views, horizontal and vertical, was distinct from its wall clearly and readable. Besides available descriptive documents, there were travelogues that help to identify the use of this gate. By evaluating the documents related to this gate, it became clear that



it was the entrance of king' seraglio in Safavid period (line 2). Three other gates with similar architecture with the main gate were on the way of seraglio passage that shows the importance of the privacy of seraglio building. The evaluation of some similar Safavid gates help the detection of architectural features and also proves the period of constructing this building. Historical-descriptive documents showed that the name of this gate in Safavid period was determined according to its use and with the name of king's seraglio but the name of this gate changed to Khorshid in Qajar period. By gradual destruction of government house of Safavid and king's seraglio in Qajar period, this gate has lost its use until finally, in the beginning of first Pahlavi period and by changing Khorshid passage to Sa'adi Street, it has destroyed completely.

Endnote

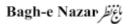
- 1. The modeling done by 3d Max 2015 and Revit architecture software by authors.
- 2. Cavities are the plural form of cavity which means depth, and has decorative aspect in the view of buildings with square or rectangle figure.

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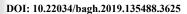
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