Original Research Article

A Review of Hezar Jarib Garden' Form Based on the Descriptive, Illustrative, and Field Documents

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Received: 08/02/2021 Accepted: 16/06/2021 Available online: 22/12/2021 Abstract | According to the available evidence and documents, during the Safavid period, many gardens were built in Isfahan, of which only their names have remained today. The Hezar Jarib garden is one of the most famous of these gardens. This garden is located in the south of Zayandehrood river and at the foot of the Sofeh mountain. Today, the University of Isfahan and parts of one of the urban neighborhoods (Mardavij) are built on its remnants. To introduce its characteristics, the study of this garden helps better understand some of the values of ancient Iranian garden building. In this regard, descriptive and illustrative documents can be a solution to analyze the physical characteristics of the Hezar Jarib garden at the time of its prosperity. Many tourists in different periods have described this garden in terms of architecture and its events during its prosperity and deterioration. For the first time, this research tries to comprehensively represent the framework of the Hezar Jarib garden and its elements. On the other hand, the irrigation method of this garden will be revealed in the process of its visual representation. Descriptive and illustrative documents perform this modeling. Field studies also revealed some of the unknowns of the garden over time. The purpose of this article is to represent the transformation of this garden over time. The findings are based on the four primary systems of the Persian garden; Roads, plants, buildings, and water. With the analysis of the spatial relationship of different parts of the Hezar Jarib garden, the ratio of void and solid spaces, the number of surfaces, and the shape of the buildings were obtained. On the other hand, the changes that occurred over time were also revealed.

Keywords | Safavid Garden, Chahar Bagh of Isfahan, Hezar Jarib Garden, Representation, Descriptive and Illustrative Documents, historical landscape.

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Introduction Hezar Jarib's garden was constructed based on the quadripartite plan of the Iranian Chahar Bagh during the reign of Shah Abbas the Great in the south of Isfahan. Similar to other buildings related to the Safavid period, this garden underwent serious destruction as a result of the Afghan attack and the events that took place during the Qajar period. The garden was completely destroyed when street constructions were carried out and new applications were made in this area, somehow that just two dovecotes remain from its form. The existing descriptive and illustrative documents help investigate the form of this garden in the past. The visual investigation of this garden can also disclose a forgotten part of this monumental architecture. Also, this representation can have unique values because it is one of the only public and royal gardens in the south of Isfahan, which was built during the Safavid period. To attain the objectives of the study, the following question is raised:

What characterized the form of Hezar Jarib garden at the time of its construction?

Literature review

The construction of gardens had a long history in Iran and was an inseparable part of urban components in many periods. Iranian farmers constructed and designed gardens in a way that made little problem when it came to sunlight exposure and irrigation system (Tahvildar Isfahani, 1963). One of the earliest patterns of the garden is the four-part pattern used in many Iranian gardens (Pirnia & Memarian, 2014). Later, in Safavid Isfahan, this four-part model was used again, and changes were made to complete it (Pirnia, 2008). Isfahan Chahar Bagh can be considered as one of the examples used in the process. These gardens are various in design. An examination of various sources reveals that Chahar Bagh is a general word that is equivalent to the Persian garden in many documents. However, not all of them are necessarily divided into four sections. Chahar Baghs have single or multi-axis which can be divided into two parts, four parts, six parts, etc. In this regard, many researchers have analyzed the Persian garden and studied its geometry. Others have criticized Chahar Bagh and the four-part model (HeydarNattaj, 2011; HeydarNattaj & Mansouri, 2009). In the meantime, some researchers have emphasized geometry, different meanings, and axes in Chahar Bagh design (Alemi, 2011; Shahcheraghi, 2014), (Barati, Al Hashemi & Minatursajadi, 2017). On the other hand, some researchers do not consider the Chahar Bagh model as a complete model for the division of Iranian gardens and have done this division based on other models (HeydarNattaj & Rezazadeh, 2015). In the existing studies, the components of gardens have been studied, and especially the central building of the garden has been analyzed (Motedayen & Motedayen, 2015; Shekari Nayeri, 2019).

There are many descriptions regarding Hezar Jarib garden. Several explorers who came to Iran in the Safavid period have provided details about its form and function(Chardin, 2010; Della Valle, 1991; Kaempfer, 1984; Sanson, 1967; Tavernier, 1957). In descriptions of the devastation of the Afghan attack, many gardens, including the Hezar Jarib garden, were on the verge of extinction (Sargis Gilanents & Minasian, 1992). after the Afghan attack, some travelers came to Isfahan and described what have left (Afzal Al- Molk, 2000; d'Allemagne, 1956; Flandin, 1947; Momtahen Al-Doleh, 1974; Olivier, 1992). Moreover, many researchers and historians have so far examined Isfahan and its gardens including Hezar Jarib garden and its transformations (Al-Isfahani, 1989; Honarfar, 1971; Huma'i, 2011; Jaberi Ansari, 1999; Javaher Kalam, 1969; Naima, 2006; Shafaghi, 2002; Tahvildar Isfahani, 1963; Jenab, 2007). Other researchers have also examined the physical structure of Hezar Jarib garden in the past and its status in the present map of Isfahan (Mahmoudian & Chitsaz, 2000; Mousavi Khorasani, 2017). It should also be noted that some sources have considered Hezar Jarib as being related to Faridan¹ in Isfahan (Der Hovhanian, 2000). Other documents have also referred to the new Hezar Jarib; none of these should be mistaken for Hezar Jarib garden, which is the focus of the present study.

Methodology

The data of the present study was collected based on descriptive documents including travelogues and historical books. Moreover, illustrative documents, such as drawings, aerial images, and maps helped reveal part of that ruined structure of the garden and its irrigation system. In another part of the study, local studies were used to describe some of the surviving towers and canals. These local studies were performed by descriptive and visual documents. Initially, all descriptive documents, including travelogues and historical sources, were carefully studied, and sections that helped to recover the framework of the Hezar Jarib garden were extracted. At this stage, computer modeling was performed based on the combination of all descriptive documents.

In the second step, the drawing documents were modeled separately. These drawings and graphic schemes were placed next to the reconstructions based on descriptive documents. Then, through a comparative study of the documents of the above two sections and their threedimensional modeling, the ultimate model of the garden with its components was developed. Drawing software programs (i.e. AutoCAD v.2013, 3Dmax v.2016) were used to represent the documents. Due to the lack of documentation in different periods, an attempt was made

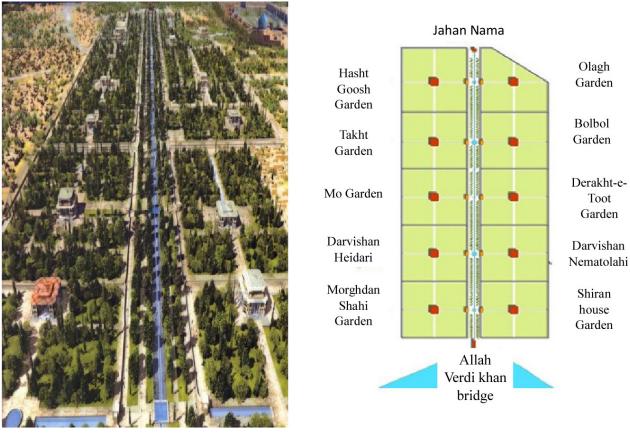


Fig. 1. Chaharbagh in Safavid period based on descriptions of Jean Chardin. Source: Rezaian & Kaboli, 2010.

to show the changes over time in different drawings. Since a small part of the components of this garden is now available in the city, unique modeling based on them was not possible. Therefore, field studies mainly increased the precision of former drawings and helped to reveal some of the unknown secrets of this garden.

Gardens in the South of the Zayandehrood River in Isfahan

During the Safavid period, a number of gardens, such as Hezar Jarib, Farah Abad, and Sa'adat Abad gardens were constructed along with Isfahan development toward the south. In most cases, what has remained from the gardens is their names, which are used to name the streets they were once located in (Fig. 2). The remaining documents indicate that the southern part of Isfahan during the Safavid period onward was chiefly allocated to private gardens. Only the names of the two gardens of Hezar Jarib and Farah Abad are mentioned in the documents as public gardens the location of the Julfa neighborhood in the southwestern part of Isfahan and Takht-e Foulad cemetery in the southeastern part of Isfahan had conditioned the advancement of this part. On the other hand, due to the Armenian residence, Julfa had many private gardens used only by Armenians. Therefore, the opportunity of creating public gardens for all citizens was ruled out in this region. Although Takht-e Foulad cemetery had little green space, it did not have public gardens due to the particular use of this place. it should be noted that during the reign of Shah Abbas II, Saadat Abad Garden appeared on the southern edge of the Zayandehrood River, which was the public and royal garden of the Shah and his entourage. On the other hand, we can especially mention several private gardens near Chahar Bagh Bala Street (south of the city) in the Safavid period. Regrettably, most of these public and private gardens were destroyed later.

Hezar Jarib

In the past, the numbers 40 and 1000 were symbolically taken to mean abundance and were used in the names of other historical monuments. Therefore, it is assumed that Hezar Jarib garden was indeed not so large in terms of square footage, yet it was named so due to its greatness (Chardin, 2010; Shafaghi, 2002).In some sources, Hezar Jarib is used to mean one-thousand-arpent and its area has been estimated to be more than six-thousand-arpent² (Sanson, 1967). Other sources have considered the word 'thousand' in the name of the garden to refer to its amount of cultivation. The garden had the capacity to cultivate a thousand pails of seed (Burton, 2005). This garden



Fig. 2. Southern gardens of Isfahan in Safavid period. Source: google earth, 2018 & Authors.

was also called Abbas Abad garden since Hezar Jarib mansion was constructed under the orders of Shah Abbas (Honarfar, 1976).

Hezar Jarib garden was located at the end of Chahar Bagh Street, at the foot of Suffa Mountain, to the south of Isfahan, Iran. A large part of the garden is now replaced by the University of Isfahan, Toopkhaneh training center, and such residential areas as Mardavij, Bahar Azadi, and Kavian (Fig. 3).

• The condition of the Hezar Jarib garden in the Safavid period based on descriptive documents

Some documents are obtained in the notes left from different eras in the form of books or travelogues. No information is available from the periods before the Safavid about the transformation of the lands in this part of the city to gardens according to the urban development of Isfahan in the Safavid period. Before this period there had probably been brownfields in this part of the city. According to historians, after nominating Isfahan as his government office, Shah Abbas arranged many constructions in the city. Several gardens were constructed as a result (Torkaman, 1938). Hezar Jarib garden is one of them, which was constructed along Chahar Bagh Street, on the south of Allahverdi Khan Bridge and included a luxurious palace, a harem, and several pools (Allemagne, 1956). The garden was similar to European national gardens. Although they belonged to Shah, ordinary people could use them as places for recreation and use

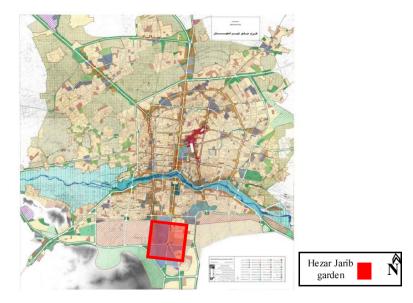


Fig. 3. location of Hazar Jarib. Source: Isfahan cultural heritage organization.

the fruits. There were fruits and vegetables with medical uses Some of the trees were shade trees that provided shade but no fruits (Della Valle, Havers, & Grey, 1991). A number of hunting fields also surrounded the garden (Javaher Kalam, 1969) where, according to some travelers who visited the garden in company with Shah Suleiman of Persia, a zoo had been constructed (Burton, 2005). Shah Suleiman together with the great men of his court rode on horses to have fun on their way, they would go to Hezar Jarib garden to breathe fresher air(Sanson, 1967). Based on the information available in different sources, it can be conceived that the garden included a series of terraces on a smooth slope, one over the other(Della Valle, 1991). The available descriptions from the Safavid period indicate that the length and width of Hezar Jarib garden were approximately 1610 meters and the difference between its highest and lowest terrace was about 3. 3 meters. These terraces were connected to each other through slopes (Chardin, 2010; Isfahani, 1989)(Fig. 4). Besides, the garden was divided into different parts (i.e. terraces), which were crossed by a number of passages and creeks. Every four terraces comprised one part. In the middle of this part, there were two ways of intersecting at a right angle. Each part, moreover, was surrounded by water canals. The garden, as a whole, had 15 streets, including 12 transverse (west-to-east) streets and 3 longitudinal (north-to-south)

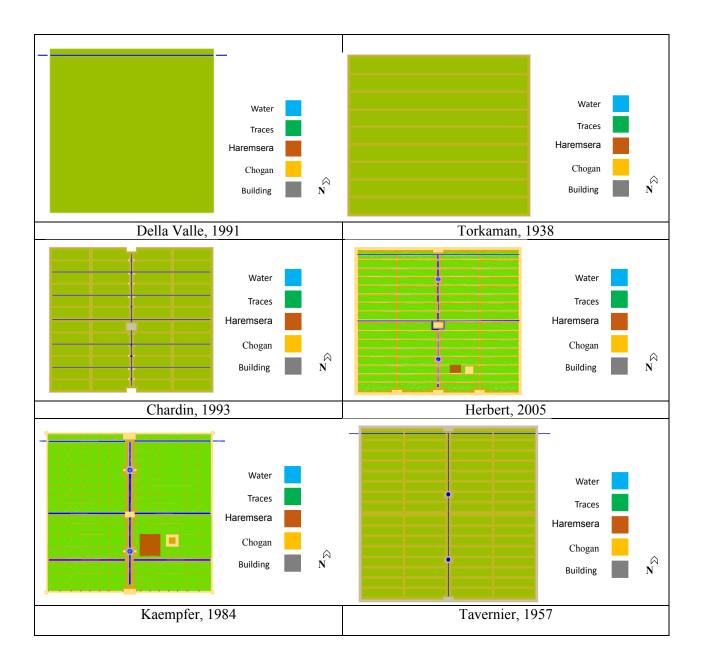


Fig. 4. Plan's Representation of Hazar Jarib garden in different periods based on description documents. Source: Authors.

ones. Over the latter, a number of arcades were placed at a certain distance (Chardin, 2010) (Fig. 5). A stony creek passed the middle street (north-to-south) (Careri, 1727; Tavernier, 1957; Herbert, 1928), which was surrounded by two rows of tall plane trees on both sides (Kaempfer, 1984). The garden had several ponds with different forms (Chardin, 2010). The middle pond was octagonal, with fountains around it (Herbert, 1928)(Fig. 7). The other one is a regular dodecahedron. The third one was a large octagonal pond on the fourth level. Around this pond, there were several small fountains at equal distances Another pond was on the tenth level, with the same size and shape as the fourth pond (Tavernier, 1957) (Fig. 7). An elevated pavilion has been seen near and on both sides of each pond of the mansion (Chardin, 2010; careri, 1727; Kaempfer, 1957). Also, all ponds were supplied with the middle stream (Herbert, 1928). According to descriptive documents, Hezar Jarib garden had three mansions on the middle axis, all of which were rectangular and relatively elevated (Kaempfer, 1336). The first and the last mansion were similar to each other, and in the middle, there was a pavilion mansion. This mansion was a type of mansion spring and was located on the water. These mansions have had multiple utilities, such as beauty, noise avoidance, sports, etc (Shekari Nayeri, 2009). The mansion had three

floors and was large enough to accommodate 200 people (Chardin, 2010). The entrance mansion was located in the south of Chaharbagh Bala Street, and the third mansion was in the south of the garden. The middle mansion consists of two parts, a mansion with a brick facade based on a quadrangular design and a hall with wooden columns surrounding a large pond (Herbert, 1928) (Fig. 6). In the northern part of the garden, there was a mansion for the royal harem with a design comparable to the caravanserais in the middle of the roads (Fig. 8). There was a pond in the previous part of the royal harem (Kaempfer, 1957). The harem building was designed so that in addition to representing the form of the caravanserai, it looked like a dormitory building from the perspective of tourists (Careri, 1727). Based only on the descriptions of a historical source (Kaempfer), one researcher has presented a particular hypothesis that a nationwide transverse wall separates the garden into two parts (Alemi, 2011). The authors' analysis reveals that the presence of this wall in Hezar Jarib garden is not correct for various reasons. By carefully studying the Kaempfer design, a wall can be seen, but it is not located in the middle transverse axis of the garden. This wall, as mentioned by Kaempfer, was to separate the building of the harem and its surroundings from other places (Fig. 10, Kaempfer plan). Even in other

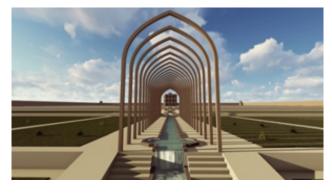
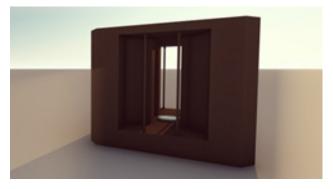


Fig. 5. representation of a part of Hazar Jarib, middle street based on Chardin's description (1993) by Authors.





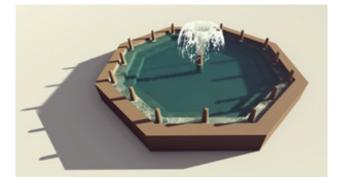


Fig. 7. representation of the octagonal pool, based on Tavernier's description (1957) by Authors.

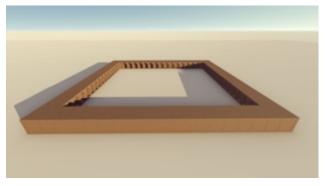


Fig. 8. representation of the harem, based on Kaempfer's description (1984) by Authors.

designs where Kaempfer draws from elements such as ponds and fountains, although many details can be seen in them, the wall corresponding to the transverse midaxis is not apparent at all in those drawings. Also, many tourists who have visited the garden have described the transverse middle axis of the garden as a passageway. It can be said that what has led to this false hypothesis is the analysis of a document without accuracy and comparative studies with other documents. This wall is not visible in any of the remaining various pictorial documents, which were mainly drawn during the development of this garden. Also, in the aerial photos of 1944 and 1956, the transverse middle axis of the garden is comparable to other axes that have been used as a street in this garden. On the other hand, there are still people who remember the garden in the 20s and 30s of the present century, when the whole garden was still standing. In the study of oral history, the above axis was recognized as the pedestrian axis, or in other words, one of the transverse streets. Therefore, the above two hypotheses that this axis is a wall or a stream are not correct. On the other hand, on the west side of the street, there was a polo field next to the harem (Herbert, 1928) (Fig. 3). The plane tree was used more in the north-south axis and the pine tree in the east-west axis (Kaempfer, 1957). In addition to the promenade, Hezar Jarib was the place of other events, such as the camel sacrifice ceremony. Field studies and reviews of remaining documents from the Safavid period show four dovecotes in the four corners of the garden (Shafaqi, 2002). The tower that was in the southeast corner of the garden is called Iqbal Tower, the northwest tower is called Khoni Tower, and the southwest tower is called Kaka Siah (Homayi, 2011) (Fig. 11). The name of the other tower is not mentioned in the documents. Some researchers divide Iranian gardens into Yard gardens, flat gardens, and central island gardens (HeydarNattaj & Rezazadeh, 2015). The analysis of this garden's physical and functional characteristics revealed that this garden

could have a set of characteristics of all three categories of the above gardens. A comparison of these descriptions indicates that the garden had also undergone some transformations during the Safavid period. Some of these transformations are quite clear while others might have been reported inattentively by explorers and authors. By the end of the Safavid period when the government enfeebled, the garden stepped toward destruction.

• The condition of the Hezar Jarib garden during the Afghan attack period until the end of Zand era based on descriptive documents

Little information about Hezar Jarib garden is available regarding this period. On Thursday night, 9th Rabīi al-Awwal, 1145, Nader invited Shah Tahmasp to this garden. in this garden, Shah Tahmasp was de-crowned by Nader. During this period, only a few plane trees had remained from the past eras; all the other monuments had been completely destructed (Javaher Kalam, 1969).

• The condition of the Hezar Jarib garden in the Qajar period based on descriptive documents

The explorers who visited the garden during the Qajar period have described it as having 12 floors with creeks, ponds, and fountains on the verge of destruction. Moreover, from among many mansions, only one had remained, which was itself destroyed (Olivier, 1992) (Fig. 9). However, the garden was reported to have 10 floors according to another source. In 1876, Mohammad Shah came to Isfahan and visited this garden, and he was attracted by the creeks and the amount of water that flowed to the garden from the Zayandeh-Rood River. Therefore, the creeks were reconstructed under his orders, and water was returned to the "Nahr-e-Sefid" from the Zayandeh-Rood. Also, in the middle of the garden, a street was constructed and fruit trees and flowers were planted. For 30 years, the garden was used as a place for public recreation up until the time when water was disconnected, thus it returned to its former state (Al-Isfahani, 1989) (Fig. 9).

During the reign of Naser al-Din Shah, there was a large

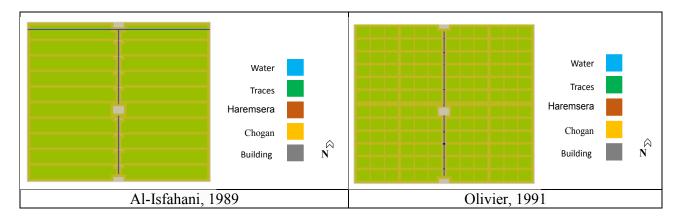


Fig. 9. Plan's representation of Hazar Jarib garden in Qajar period based on the descriptive documents. Source: Authors.

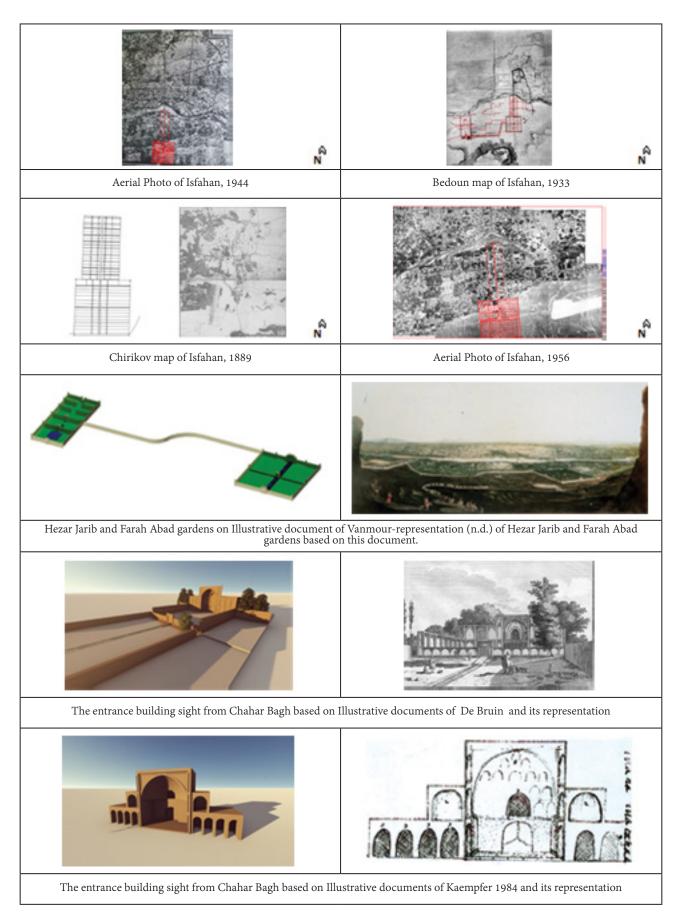
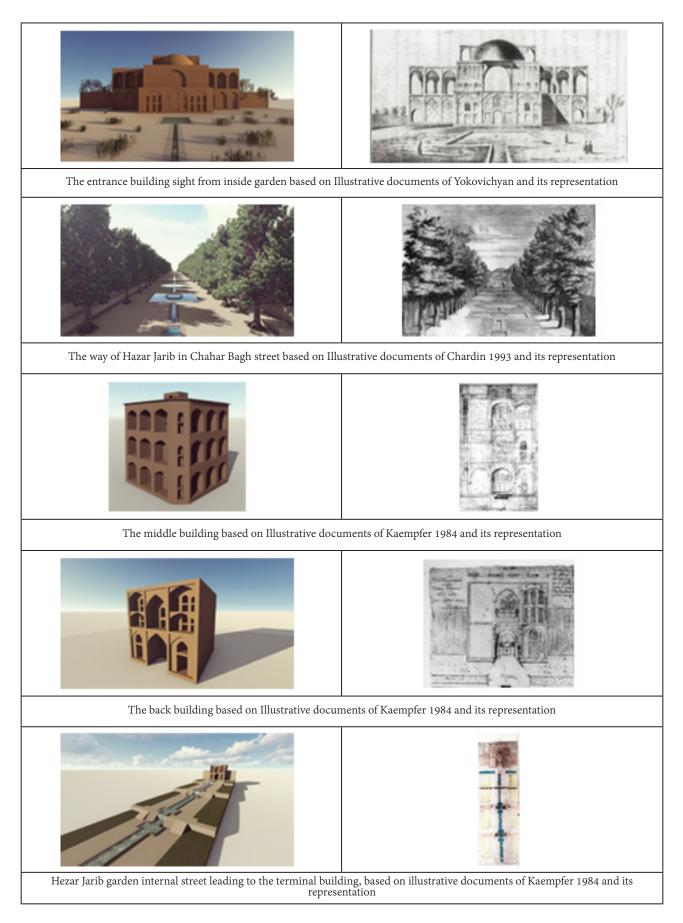
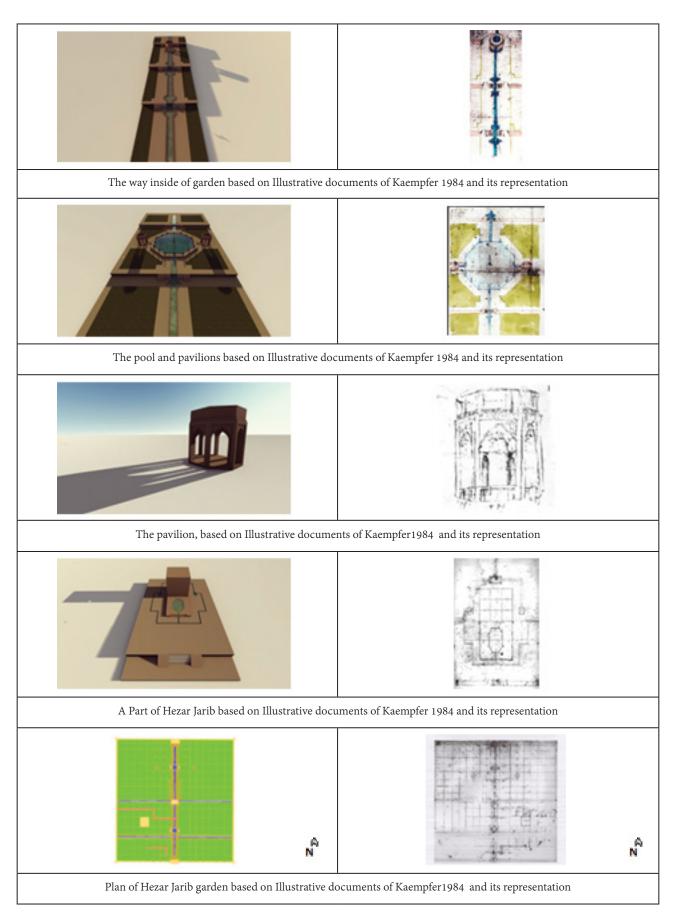


Fig. 9. Plan's representation of Hazar Jarib garden in Qajar period based on the descriptive documents. Source: Authors.

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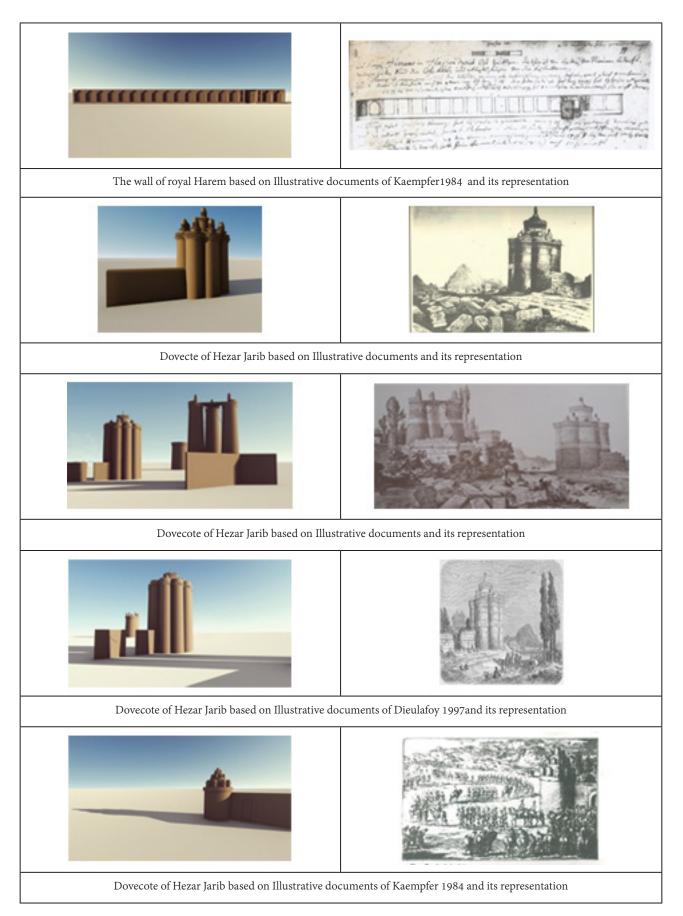


Continues of Fig. 9. Plan's representation of Hazar Jarib garden in Qajar period based on the descriptive documents. Source: Authors.



Continues of Fig. 9. Plan's representation of Hazar Jarib garden in Qajar period based on the descriptive documents. Source: Authors.

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Continues of Fig. 9. Plan's representation of Hazar Jarib garden in Qajar period based on the descriptive documents. Source: Authors.

A Review of Hezar Jarib Garden' Form Based on the Descriptive, Illustrative, and Field Documents



Fig. 11. one of the remnant dovecot of Hezar Jarib located in Mardavij street. Source: authors Archive.

creek in Hezar Jarib garden that came from the river, entered the garden, and remained flowing there. The buildings and trees were all destroyed, but the walls were still standing (Tahvildar Isfahani, 1963). At the same time, Zell-e Soltan was the king of Isfahan; the water creek was cut under his orders. No report is available on the restoration and reconstruction of the garden during his reign(Huma'i, 2011). Troops and soldiers went to Hezar Jarib garden, which had then been turned into a desert. In there, they marched, shot, and built strongholds. During the period of Zell-e Soltan, the entrance building was assigned to Ebrahim Khan Farashbashi for destruction. He built a house for himself using its materials and sent the rest to Abrisham garden to complete Zell-e Soltan's building (Momtahen Al-Doleh, 1974). In the subsequent periods when various buildings attributed to the Safavid period were assigned to special individuals, Mirza Mohammadali Najafi, son of Sheikh Mohammadbagher, bought the garden from the government. After his death, his brother, Nour-allah, together with Mohammadhossein Kazerouni bought it. At first, they reconstructed some parts of the garden and built some buildings there. The garden was still green and flourishing at the end of the Qajar period; in fact, the welcoming ceremony of Ahmad Shah and Reza Shah was held in this garden. In the subsequent periods, Isfahan to Shiraz road crossed from the middle of the garden (by its owners, i.e., Kazerouni and Nour-allah Najafi) upon the government's confirmation (Jaberi Ansari, 1999).



Fig. 12. one of the remnant dovecot of Hezar Jarib located in the University of Isfahan. Source: Authors Archive.

• The condition of the Hezar Jarib garden after the Qajar period based on descriptive documents

During the Pahlavi period, Kouy-e Karmandan, Traffic Police agency, and the University of Isfahan were established in this location. Hezar Jarib Street was established in the middle of the garden and divided the garden in two (Alami, 2011). From this large garden, its western wall had remained, which was called Shah Abbas Wall(Shafaghi, 2002). Other remaining elements were two dovecotes (Mousavi Khorasani, 2017) (Fig. 10). One of the remaining towers is the southwest tower located in the University of Isfahan, and the other is the southeast tower situated at the end of Sheikh Sadough Street (Mahmoudian & Chitsaz, 2000) (Fig. 12). These towers are cylindrical, and in the southwest tower, only the outer body is wavy, and the inner body is cylindrical. But in the southeast tower, the outer and inner walls are both wavy (Tabatabai Zavareh, 2017).

• The condition of the Hezar Jarib garden based on Illustrative documents

Visual documents related to this garden can be divided into several categories. The first category is the drawing documents, which mainly include two-dimensional and three-dimensional maps of the Hezar Jarib garden and its surroundings. Some of these documents, which are depicted mainly by tourists, are not very precise. The second category is the images captured by the camera. These images chiefly show a part of the city's south where some parts of the Hezar Jarib garden are apparent. Unfortunately, due to the short lifespan of the photography industry, there are not many historical photographs. On the other hand, as mentioned before, another problem is that none of these images were taken to depict the Hezar Jarib garden(Fig. 10).

Irrigation system in Hezar Jarib garden

Existing documents mentioned different types of the irrigation system of Hezar Jarib Garden. According to some sources, water flowed from the mountain(Careri, 1727); others have referred to water from the Zayandeh-Rood River (Al-Isfahani, 1989) (Tavernier, 1957). Different documents mention two irrigation methods. In the first category, the source of water is Sofeh Mountain (Careri, 1727). But other authors have mentioned the Zayandehrood river as the primary source of water (Tahvildar Esfahani, 1963) (Al-Isfahani, 1989). Field studies and the study of pictorial documents such as former maps make this hypothesis plausible. Based on these sources, the water of the Zayandehrud River was first divided into three branches by the Shayej canal; the Siyah stream, Sefid stream, and Sorkh stream entered the Bagh Daryache. Then the Sefid stream extended and reached the Hezar Jarib garden and irrigated it (Jenab, 2007). The other Maadi, i.e., the White Maadi"Nahr-e-Sefid", was a branch of Shayej Maadi and Zayandeh-Rood River and irrigated Hazar Jarib garden (Jenab, 2007). Later, when Zell-e Soltan became the owner of the upper lands of Lenjan³, he cut the Black Maadi and white Maadi. As a result, the garden and Takhteh Foulad⁴ lands turned into vacant lands (Huma'i, 2011) (Fig. 13). Later, Zell-e-Sultan, who became the owner of the lands in Lenjan, cut off the Siyah and Sefid stram, so that water could no longer reach the suburbs of the city. As a result, Hezar Jarib and Takhte-foolad lands became barren (Homayi, 2011). Different sources indicate the irrigation of the Hezar Jarib garden from three other streams (Kaempfer, 1984). According to field evidence, the Sefid stream was located on the top floor of the Hezar Jarib garden and was also called the Hezar Jarib creek. Another document states that this stream is a branch of the Shayej canal. While field studies and analysis on documents decline this point of view (Fig. 14).

Discussion and Conclusions

The Hezar Jarib garden, which was a royal garden on the



Fig. 14. the remnant of Nahre- Sefid in Isfahan University. Source: Authors Archive.



Chahar Bagh Saadat Abad garden Takht Foolad garden Haft Dast garden Farah Abad garden Hezar Jarib garden Hezar Jarib Maadi

Fig. 13. Irrigation system in Hezar Jarib garden (Nahr-e-Sefid). Source: google earth & Authors.

one hand and a public garden on the other hand over time, has wholly vanished over time. Historical sources and travelogues have described this garden to some extent. In addition, some visual documents of this garden have remained. Today, however, little evidence of this garden is apparent in field studies. The representation of this garden is based on descriptive documents along with visual documents. The author's field studies and the above documents were used to expose some of the lost features of this garden. The findings of this study can be placed in the form of four fundamental garden systems, including roads, plants, buildings, and water. In the road section, we can refer to the main roads and side roads. The main garden path was north-south and was located in its middle axis. In the middle of this road was the main waterway of the garden. Other side roads were designed for accessing the buildings, but over time, the routes changed. In the plant's section of the Hezar Jarib garden, there were all types of trees and plants, including fruit trees, medicinal trees, etc. The trees were arranged so that the north-south axis was decorated with plane trees and the east-west axis with pine trees. In the building system of this garden, there are differences in various descriptive and visual documents. However, by thoughtful analysis and comparison between all documents, it can be seen that the garden had diverse types of buildings. The main pavilion, which is located in the center of the garden and can be considered the tallest building in the garden, had three floors. On the other hand, there are four small pavilions on the east and west sides of the two central

pools. The two tall buildings that afforded access to the garden were located on the north-south middle axis. The south building was a side entrance for the gardeners and crew, and the north building, which was the main entrance to the garden, was built like a high Iwan with an entry to the three floors. This building can be considered the most majestic garden building, also known as the emblem of the Hezar Jarib garden. The building also had many rooms and side spaces. Another building is the harem building, located in the northwestern part of the garden among the plots. This building was designed in a form comparable to Iranian caravanserais. Finally, the dovecotes, which are the only surviving building features of this large garden, used to be four in the four corners of the garden. In some drawing sources, the number of these dovecotes is six, and the other two towers are located between the two north-south walls. The garden space is separated from the surrounding area by a wall. This unadorned wall was connected to the towers at the four corners and the entrances in the middle of the north and south. In the water system of this garden, two categories of water resources can be considered: flowing water and stable water sources. There were two streams, one at the top and one in the center of the garden, which provided water. The upper stream is known as the White stream. The stream flows east-west through the garden and then into the end building and out of the garden. The middle stream flows north-south along with the garden and then goes up from the garden to Chaharbagh. This stream was called Hezar Jarib (Figs. 15 & 16).

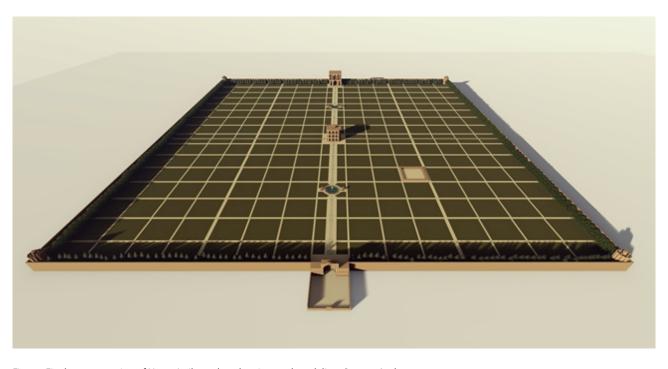


Fig. 15. Final representation of Hezar Jarib garden, drawing, and modeling. Source: Authors.

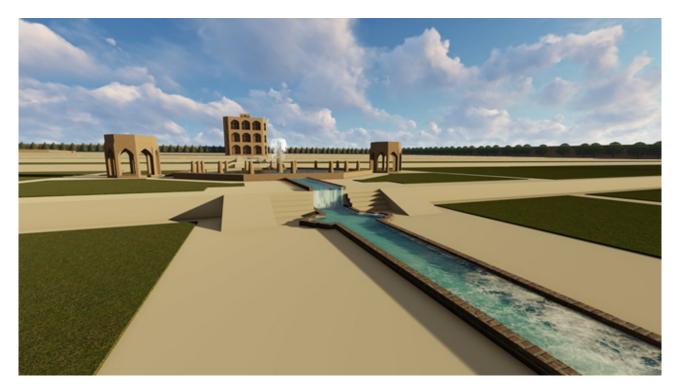


Fig. 16. final representation of Hezar Jarib garden, drawing, and modeling. Source: Authors.

Endnote

1. District in the Isfahan.

2. it's an old unit of era

3. A district in the south-west of Isfahan.

4. An old cemetery in Isfahan.

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