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Original Research Article

Application of Persian garden Design Pattern in Gardens of Northern Iran*

Seyed Abdollah Mirsafa^{1**}, Mostafa Pourali²

1. M.A. in Architecture, Faculty of Architecture and Urban Planning, Lahijan Islamic Azad University, Iran.

2. Assistant Professor, Faculty of Architecture and Urban Planning, Lahijan Islamic Azad University, Iran.

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Abstract

Problem statement: Persian gardens which are registered on UNESCO heritage list share similar patterns and design characteristics. Enjoying a geometrical design, enclosure, order, visual symmetry, axial order and centrality are among the main characteristics of every Persian garden. The Persian gardens are always divided into four sectors, with water playing an important role for both irrigation and ornamentation. The Persian garden, as a metaphor of paradise, is usually known as the tradition of arid zones and hot and dry climates; while due to the greenery and rich natural environment of mild and humid climate, this kind of design is not considered a necessity in such areas.

Research objective: This paper, however, rejects such inclusivity and discusses that the Persian garden design principles have also been employed in other climatic regions of Iran as well. Accordingly, the current paper introduces a number of historical gardens in mild and humid climatic zone of Iran, which have applied the same design principles as Persian gardens.

Research method: The paper seeks to clarify if Persian gardens can be exclusively found in hot and arid parts of Iran; and if not, what are the ways in which one can design a Persian garden in the mild and humid parts of Iran. The paper uses a qualitative method to explore the understanding and interpretation of users about the notion of garden in the studied area, and to identify the mutual characteristics of designing garden in central and northern parts of Iran.

Conclusion: The paper further discusses if application of Persian garden design principles is responsive in northern Iran. “Dar Al-Hokoumah of Guilan”, “Safa Garden” and “Nasseriye Gardens” in Rasht, “Abbasabad Garden” in Behshar as well as several historical houses in Amlash are among the cases to approve the adaptability of Persian garden design principles in a different climate than hot arid central part of Iran.

Keywords: *Persian Gardens, Hot Arid Climate, Mild and Humid Climate, Historical Gardens and Houses of Guilan.*

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** Corresponding author: +989113410259, abdolah.mirsafa@gmail.com

Introduction

Persian gardens have been built based on certain needs, climate and conditions over time and each garden's structure is based on regional condition in which the garden is built in (Soltanzadeh, 2003, 22). In spite of superficial varieties and differences, Persian gardens have common principles and these principles have been continuously and uniformly applied regardless of climate, geographic and time limitations in different architectural and urban scales, and it can be stated that in these gardens are created and continuously applied in different physical, functional and semantic¹ dimensions based on Iran's culture (Beheshti, 2008, 9). Although the cultural treasures of Iran are mostly placed in central Iran, original patterns of architecture and urban planning in different regions of Iran are in proportion to regional and climate differences and one of them is Persian garden. Although the first and original Persian gardens are placed in central Iran, some of them are placed in different climates other than hot and dry climate, for example in mild and humid climate in southern margin of Caspian Sea. There are lots of gardens and garden houses in Guilan, Mazandaran and Golestan which are based on Persian garden design pattern. "Dar Al-Hokoumah of Guilan", "Safa Garden" and "Nasseriye Garden" in Rasht and "Soufi Garden House" in Amlash are some examples.

The study questions are:

1. What is the meaning of garden and what are the characteristics of Garden in Guilan?
 2. What are the common characteristics of historical gardens in Guilan and are these characteristics the same as Persian garden characteristics in desert areas?
- Here is the study hypothesis based on theoretical foundations:

Persian garden has been considered as a metaphor of paradise (Shahcheraghi, 2015, 91). Occasionally considering Persian gardens as a metaphor of paradise is because of climatic condition, since the Persian gardens are a metaphor of oases in hot and dry deserts.

This study rejects the necessity of the presence of these Gardens in hot and dry regions and introduces examples of Persian garden design in mild and humid regions in northern Iran especially in Guilan.

The background of the study

Persian gardens have generally the same characteristics across different cultures and geographic regions and times but there are some differences in microclimate and micro culture levels among the gardens in different times and places (Beheshti, 2008, 9). Central plateau of Iran which is surrounded by Alborz Mountains on the north and Zagros Mountains on the west and south has a high altitude and very dry climate, regardless of the rivers meeting the Caspian Sea and Persian Gulf (Khansari, Moghtader & Yavari, 2004, 19).

Because of the hot and dry climate of the central plateau, there has been much effort to make parts of it milder, for example by building special gardens. Therefore some researchers do not think it is necessary to build gardens similar to central plateau gardens in the regions which do not have a hot and dry climate.

Although two-thirds of Iran regions have a hot and dry climate, there are many historical gardens in mild and humid areas and their structure and design have common characteristics with Persian gardens. Examples of these gardens are Mazandaran Historical Gardens in the east side of southern coasts of Caspian Sea and various literatures have studied them as Persian gardens. In his book, Wilber (1969) has depicted and described palaces and royal gardens in the area: "in this region (Mazandaran) in addition to the palaces and gardens which belonged to Safavid King, "Shah Abbas II", Qajar kings have built some palaces but all of them have been destroyed. Researching the palace reveals their design, structure and special characteristics, since they are built in an area which has a very different climate from the plateau's climate. It will soon be revealed that approximately all the characteristics of these palaces are similar to palaces and gardens in

Isfahan” (*ibid.*, 133). “Historical documents and the remains of the gardens show that there were special gardens in three areas of Mazandaran: Farahabad, Babol and Behshahr (Ashraf al-Belad)” (*Heidar Nattaj, 2010, 89*). Unfortunately less attention has been paid to southern side of Caspian Sea, especially Guilan which is located in western coast because very little remains of these gardens after the structural changes especially in recent decades.

Gardens in Guilan are significant among the gardens in non-desert areas of Iran and there is some information about them just in some sources like maps, photos, travelogues and historical texts from Qajar era which have been mentioned briefly in this study.

Since Guilan had shared borders with the former Soviet Union and had “lots of cultural transactions with western nation through the former Soviet Union” (*Vahanian, 2016*), they were considered as (an outer yard) for Iran as a big home, in other words a place for Iranians to meet and transact with other nations. On the other hand the central plateau and especially desert area was considered as a seraglio since it was harder to reach and had more potential natural resources. “It seems that although a seraglio had to interact with outer yard, it was a place to keep experiences and cultural values and did not let them change through interactions with other cultures” (*Beheshti, Najar Najafi & Abutorabian, 2017, 60*). Meanwhile the outeryard of Iran’s culture is influenced by the experiences and cultural values in Iran’s seraglio. The studies have revealed that Persian garden design can also be traced in the areas which are not hot and dry like Guilan and Mazandaran and even beyond Iran’s macro-cultural level in gardens like “Shalimar Garden” in Lahore, Pakistan and “Taj Mahal Tomb Garden” in India which have a mild and humid climate.

Research method

This paper uses a descriptive and analytical method based on historical documents and field study and also grounded research method² has been used for data analysis³. Field study data⁴ have been collected

by semi-structured interview⁵ with 21 experts to reach a theoretical saturation⁶.

Theoretical framework

• Persian garden

Garden is a combination of objects and plants; therefore it is a live phenomenon and reveals the culture of each nation and its climatic conditions (The Florence Charter⁷, 1982). In other words, the main structure of all the historical gardens in the world is based on natural building architecture and the combination of plants, water and buildings to create an appropriate place for living. The concepts which make a garden as a cultural and natural heritage different from gardens in other places are its conceptual layers, semantics and structural and functional characteristics of each region (*Shahcheraghi, 2015, 41*). Persian garden has such a position.

• The characteristics of Persian garden

In Persian garden literature geometrical design, enclosure, order, visual symmetry, axial, central and quartet order and unique water, agriculture and buildings systems are the main characteristics and principles of Persian garden.

Table 1 presents a number of common principles in Persian garden design. The mentioned characteristics in this table are the most general characteristics of Persian gardens. This paper will discuss these characteristics in Guilan Gardens.

Guilan gardens

Based on literature and available sources, Guilan had small and independent kingdoms and some tribes adjacent to the Caspian shore around 700 B.C. and 150 years before the formation of Achaemenid Empire (*Rabino, 1972, 479*). Guilan’s residents had founded very advanced governments and civilizations before the Aryan invasion (*Memarian, 2008, 157*) and the culture and civilization of northern catchments and central Alborz in ancient world culture were relatively pure and introverted and less affected by foreign nations and factors

Table 1. Common characteristics of the main principles of Persian garden design based on the available sources. Source: authors.

Garden characteristics	Sources
geometrical design	(Falamaki, 2010, 4) (Soltanzadeh, 2003, 104) (Mansouri, 2005, 62) (Bani Masoud, 2011, 25)
enclosure	(Masoudi, 2004, 90) (soltanzadeh, 2003, 104) (Mansouri, 2005, 63) (Soltanzadeh, 2003, 96)
water as an important element	(Pirnia, 1994, 4) (Daneshdust, 1990, 266) (Shahcheraghi, 2015, 74) (Soltanzadeh, 2003, 100) (Mansouri, 2005, 60) (Mirfendereski, 2001, 7)
order and visual symmetry	(Wilber, 1969, 183) (Soltanzadeh, 2003, 102) (Heidar Nattaj, 2010, 89) (Naghizadeh, 2013, 8)
axial, central and quartet order	(Javadi & Javaherian, 2004, 57) (Soltanzadeh, 2003, 101) (Mansouri, 2005, 59) (Mirfendereski, 2001, 8)
order	(Heidar Nattaj, 2017, 209) (Mansouri, 2005, 62) (Mirfendereski, 2001, 8) (Shahcheraghi, 2012, 157)
water, agriculture and buildings engineered systems	(Shahcheraghi, 2012, 156) (Mirfendereski, 2001, 8) (Soltanzadeh, 2003, 99) (Heidar Nattaj, 2010, 7)
garden as a metaphor of heaven	(Shahcheraghi, 2015, 117) (Wilber, 1969, 19) (Petruccioli, 2013, 351) (Naghizadeh & Dorudian, 2008, 73) (Memarian, 2008, 70)

(Khakpour, 2011, 18). Iran has a wide variety of cultures and micro-cultures and it is not limited to any regional governments. This type of culture and civilization has been expanded in all the indigenous micro-cultures and geographic regions by means of agents such as language, religion, literature and

architectural heritage. Guilan has had rich historical and cultural background and local independent governments through different historical periods and from a cultural point of view it is a part of Iran’s culture and civilization as a whole and today we are witnessing unique and precious architectural artworks in this region. Gardens and house-gardens of Guilan have been influenced by Iran’s culture and civilization. This paper aims to analyze the samples of this kind of architecture which were mentioned in the previous section.

From a geographic and historical point of view, Guilan has a variety of organized gardens in addition to natural green space and gardens with different functions, and those organized gardens have been built based on special plans and are considered as Iran’s non-desert gardens. The famous historical gardens in the region are “Nasseriye Garden”, “Safa Garden”, “Mohtasham Garden” in Guilan, “Salar Meshkat Garden” in Rasht, “Chukam Historical Garden” in Khomam, “Mir-Safa Garden”, “Keshavarzi Garden” and “Mohamad Sadeghi House-garden” in Lahijan and several House-gardens in Amlash. These Gardens can be analyzed in another study from a semantic, functional and structural point of view. Today Persian garden is imagined as a rectangle with two intersecting axes and a summerhouse at their intersection, the main entrance is located on one of the two ends of the main axis and the service sections are along the outer walls and there are square segmentations full of trees and streams and these are the characteristics of Persian garden (Beheshti, 2008, 10). Because of the vast number and varieties of Gardens in Guilan, this study will focus on a limited number of the historical gardens of Guilan to find some spatial and geometric designs similar to Persian garden to support the research hypothesis.

Research findings

The main questions of the research have been presented to the participants based on background research method, without any conditions and

prejudice from the researcher and these questions have been asked from the interviewees in a semi-structured interview. Based on field studies and interviews about Persian garden design pattern in Guilan, common comments and information have been investigated.

Applying Persian garden design pattern in any aspect including micro-scale (architecture) and macro-scale (city) depends on various factors which affect the structure of the garden. In some situations, applying this pattern in different times and places makes some similarities and differences. This paper will analyze this aspect after performing the interviews and gathering information. After the categorization of data, forty-two concepts were selected and placed under twenty-two categories and finally six categories were selected as the core categories. [Table 2](#) illustrates the primary concepts, categories and core categories based on field study

method. We will then analyze six characteristics of Persian gardening and the differences and similarities of Persian garden design patterns in the studied region.

• Garden definition and imagination

Human factors and interest in beauty are the major reasons to create a green area on Iran’s dry and waterless plateau and make it like a heaven ([Memarian, 2008, 70](#)). Thinking of garden in Guilan as a heaven and inaccessible place is nonsense. Guilan gardens seem to be different from gardens in the central plateau of Iran in terms of function, possession and concept. If we consider “the priority of recreation over financial and economic productivity” in Persian gardens in desert areas ([Beheshti, 2008, 7](#)), the priority, needs and position of garden in Guilan’s culture is more than that.

Here is a poem by “Ghazi Mohammad Varamini”

Table 2. Concepts, categories, the main categories in background research method. Source: authors.

The main categories	Types	Categories	Concepts
Architectural patterns of the region	conditional	climate	Green nature, organic geometry in gardens, the interaction of garden’s structure and site, native material, native plant species, the difference between the platform and the design context, the difference of architectural design patterns in Guilan and other areas in Iran’s plateau, climatic differences, extrovert patterns.
		culture	
		geography	
Meaning and mental imagery	conditional	cultural difference	The effect of cultural and social situations, the kind of plants and the size of garden in Guilan, everyone in Guilan has access to garden, people’s tendency toward unlimited spaces, garden in desert is a picture of heaven, differences in imaginations and concepts of garden in various eras and areas.
		heaven	
		sanctification	
Having geometry	interactive	centrality	Geometric order of Persian gardens, symmetry, water system, agriculture system, buildings system, creating geometry by water and plants, garden’s rectangular shape, water and plants, centrality, natural elements in the nature influence the geometrical structure.
		ordered layouts	
		axial order	
Contradiction	interactive	interaction	Creating order in the disordered environment of the jungle and creating a green area in desert is a kind of contradiction of Persian garden with its environment.
		creating order planting	
The presence of water	interactive	beauty	The amount of water sources and their accessibility, pleasant audiovisual effects, thermal equilibrium, reflection and virtual space.
		watering system	
		temperature	
Enclosure	interactive	safety	Safety, privacy, legibility, need for peace, silence and getting rid of sound pollutions, making separate spaces, providing safety for the plants and green area.
		privacy	
		wall	

(943 AH/ 1536) for “Khan Ahmad Khan”, Guilan’s governor (942-1005 AH /1535-1596) (cited in Eshraghi, 1977, 68):

*I swear to God, the creator of this word
That Guilan is like paradise
You call it the paradise which is far away
It is always spring and no fall*

Since Guilan is in a different geographic area from the central plateau of Iran and enjoys a vast green space, possession of gardens in Guilan is not just limited to rich families and princes, and every day activities including economic activities and trading, social activities and transactions are performed in gardens.

• Geometrical design of the garden

One of the characteristics of Persian garden is the geometrical design. The structural order of gardens is based on geometrical order and the significant element of this order is the water stream. Trees and their

placement are also based on the order and geometrics of the garden (Bani Masoud, 2004, 132).

Persian gardens have rectangular plans anywhere possible and have their own beauty regardless of the area (Mansouri, 2005, 62). Gardens in rainy and green area in northern Iran mostly do not have any special geometrical design in their general structure but inside the gardens in smaller dimensions, geometry and geometrical patterns like squares and rectangles are more evident. In Guilan, a kind of ordered geometry and rectangular shaped scheme is evident in the structure of house-gardens and historical gardens with pre-organized plans. For example in Guilan’s map from Nasser era (Fig. 1), you can see the geometrical structure of some of these gardens and their names. The prevailing geometric shapes in Guilan’s local architecture are simple squares and rectangles and their combination as a whole creates a rectangle. Polygon shapes and curves are not used in this region’s architecture and all the elements of the building, plan and facades are

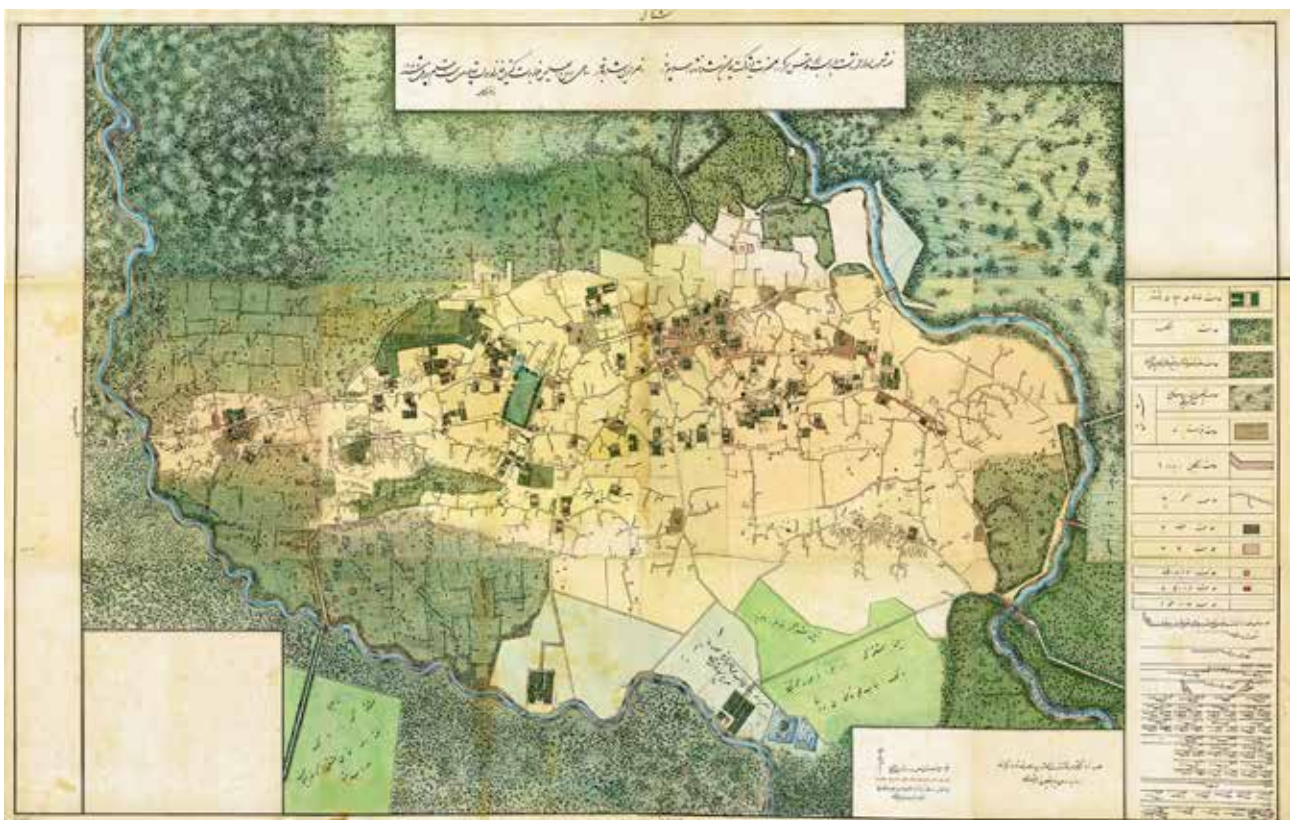


Fig. 1. The first map of Rasht drawn in 1870. Source: Cultural Heritage Organization of Guilan’ archive.

simple. Symmetry-based order is more emphasized in civil building (Khakpour, 2011, 52).

• **Contradiction and interaction of garden with the natural environment**

Contradiction is one of the common characteristics of architecture in Iran. "In contradiction or concordance with the surrounding environment, architecture is always influenced by the surrounding nature" (Kasraeian & Afshar Naderi, 2002, 22). Persian gardens are (usually) in contradiction with their surrounding environment (Mirfendereski, 2001, 5). This contradiction is made by creating a green area in dry deserts of central plateau of Iran. The design and structure of historical gardens in northern Iran which has a rainy and humid climate are similar to Persian garden, although unlike desert gardens it is not in contradiction with its surrounding environment. Therefore the methods of creating contradiction in the green area of northern Iran are different. In other words, unlike the gardens in central plateau of Iran which are surrounded by desert and dry environment, the contradiction in the gardens of northern Iran is made by human intervention. This human intervention turns the green nature with a completely natural order into a man-made space.

• **Garden enclosure**

Persian garden is an outdoor space but it is completely enclosed by walls (Arianpour, 1987). It seems that garden's enclosure is gradually turning to an important element of Persian gardens and makes it more beautiful (Mansouri, 2005, 63). Enclosure in Guilan's Persian gardens in southern coasts of Caspian Sea is in different shapes based on climatic differences, conditions and needs. Using plants as fences or making boundaries by garden elements or using temporary wooden fences are examples of enclosure in gardens. Sometimes the garden is enclosed by natural elements; "Eskandar Beyg", the special secretary of "Shah Abbas" court, remarked that "Shah Abbas" built three "talars" in Miankaleh, near Caspian Sea and invited emirs and guests for hunting ceremony (Eskandar Beyg, 1955, 297). "Molla Jallal" presented more details

and declared that the king ordered the servants to build houses with porches and special shelter for ducks and other animals with short walls made of tiles covered with hay, the lake was formed as a rectangle and a drawbridge was built on it. Various kinds of flowers including lilies, calendula and Matthiola were planted along the lake bank and alfalfas were planted all around the lake in a one-acre area to create an ever green area and plantain trees were planted all around it. A ditch was made around the area and straws were planted to prevent the entrance of the animals and this place was called the promenade of the king (Gushe-ye Eysh-e Shah) (Alemi, 2011, 9). Now we can see how a place turns into a garden through reformations and enclosure is always a permanent element of the garden and here the enclosure was a ditch filled with straws all around the garden to make it possible to enjoy the view. The essence of the garden does not depend on a special plan, what matters is its connection with the nature (*ibid.*, 92).

• **Buildings in the garden**

Local architecture all over the world is mostly influenced by four elements: geographical and natural conditions of the land, climatic conditions, economic conditions and resident's livelihood, and the cultural characteristics of the local residents (Khakpour, 2011, 22). The architectural characteristics in Guilan based on local knowledge have an influence on the buildings' construction in gardens and Guilan gardens in different scales have their own unique characteristics. Gardens in Guilan, unlike most of the gardens in desert areas of Iran with introverted architecture, central yard and an enclosed area, have an extroverted architecture, open landscape and a symbolic building in the middle of the garden because of Guilan's special climate. In addition to climatic conditions, one of the reasons for extroverted environment is enjoying the nature and creating an appropriate landscape and overlooking the yard (*ibid.*, 34).

The introverted or extroverted architecture of the garden makes the gardens different in various areas,

although these characteristics are not exclusive to certain climates and we can find some examples of extroverted architecture in central Iran gardens.

• **Water element in garden**

The presence and movement of water is one of the most original and pleasant common characteristics of Persian gardens (Heidar Nattaj, 2010, 60). Applying the principles of Persian garden design in different climates causes some differences and similarities. In the hot and dry climate of central plateau of Iran, building the garden and its survival depended on the amount of water coming from far mountains toward the garden and in the mild and humid climate of northern Iran in spite of natural green area and abundant water resources, natural elements especially water have a fundamental role in gardens and the amount of water determines the extent and the shape of garden. Therefore, water is not just an important factor in a hot and dry climate. In the mild climate of northern Iran, if water resources are more abundant, water has a more important role in the garden (cited in Mansouri, 2005, 60). “Abbasabad garden” in Behshahr, “Khosroabad” in Sanandaj and “El Goli” in Tabriz are examples of the important role of water element (ibid.).

Analyzing the mentioned design patterns in some cases

Qualitative analyses and interpretation reveal that the principles of Persian garden design are evident in gardens and house-gardens of Guilan. Studies show that the principles of historical gardens in Guilan map from Qajar era and also the house-gardens from that era have influenced on landscape architecture and garden design in Guilan.

This paper will analyze “Dar Al-Hokoumah of Guilan”, “Safa Garden” and “Nasseriye Garden” in Rasht and a house-garden in Amlash in Guilan.

• **Historical gardens in rasht**

In all the travelogues of Rasht, there are some resting places in the middle of landscapes and garden and they have been illustrated in the map from Nasseri era (See Fig. 1). Jungles are all around the city and

the buildings inside the city have a kind of connection with these jungles landscapes (Kazemzadeh & Fadaei Ghotbi, 2017). In princess Bibusco’s travelogue⁸ (19th century), the gardens in Rasht are described as: every day and all day long, Rasht residents are walking in the gardens and gardens in Rasht are connected together and there is no fence between them, there is one garden after another garden and there are no walls (Mosaffi, 1994, 13). Princess Bibusco’s visited “Azad al-soltan”, the king’s third son who governed Rasht and the areas around it and Guilan Province, then described that to walk in the gardens owned by nobles, he had to pass through a small and old bridge at the advent of Rasht. The prince invited him and his companions to his palace for evening meal (ibid., 15). He wrote that, at first they entered a garden which had four buildings around it and he described a dome ceiling and a garden enclosed by tall walls. A glorious pool with blue porcelain tiles filled by clear water was shining in the middle of the garden. In Iran, the kings’ houses have these kinds of pools with water channels and blue tiles (ibid.). In the oldest map of Rasht⁹ which has been drawn after “Nasser Al-Din Shah Qajar” order, we can see some of the historical gardens in and around the city.

• **“Dar Al-Hokoumah of Guilan” in Rasht**

“Dar Al-Hokoumah of Guilan” was the living and governing place of the governors in old Guilan in Rasht. “Dar Al-Hokoumah of Guilan” has been built in the command of “Amir Hedayatollah Khan Foumani”, the last governor of Guilan before “Agha Mohammad Khan Qajar” seized Guilan in 1200 AH/ 1786 (Etemad Al-Saltanah, 1977, 43). This building has been located in the current Shahdari square area.

“Louis Rabino” in his book, “Les provinces caspiennes de la Perse: le Guilan”¹⁰, states: “Dar Al-Hokoumah of Guilan” is significant among other houses for its exterior and interior beauty. This house consists of a number of big pavilions in the shape of foursquare, in the middle of this glamorous building there is a big garden with a pool and fountains” (Rabino, 1972, 74). “Parts of this building burnt in the seventh of February, 1909 during the invasion of “Modiriye Garden” in

Rasht and the constitutional movement in Guilan” (Navaei, 1947, 48). In his book, Louis Rabino writes: “the government palace in Guilan was burnt in 1909 but the Andarun was not damaged and this part is being used as government departments such as post and telegraph departments” (Rabino, 1972, 76). “Dar Al-Hokoumah of Guilan” as illustrated in the map of Rasht from Nasserri era, was near the buildings such as “Tekye-ye Dowlat”, “Nagharkhane”, “Darb-khane-ye Divani Square”, “Hamam Divani”, “Hamam Varase-ye Yahya Mirza”, “Seyed Abu-Jafar Graveyard” and Monument, “Tekye-ye mostowfi” and “Hamam Varase Nasrolah Khan” (Ferasati, 2002, 353) and also “Modiriye Garden” belong to “Modir al-molk”, “Ghazzagh-khane Mansion” and some government departments and the houses belonging to Rasht nobles (Figs. 2 to 4), but later this part of the city was replaced by the new government mansions and buildings including the municipal building, the post and telegraph building, the national library and Iran hotel and together with the new square and street created a completely modern administrative organization system.

Today the registered and preserved remains of those buildings around this square are a sign of transformation during the first Pahlavi era. Texts and pictures analysis of that era reveals that the “Dar Al-Hokoumah of Guilan” consisted of several parts and in the middle of the building there was a glamorous garden.

“Gmelin” in his travel to Rasht in 1184 AH /1770 Writes: “Rasht has been the capital of Guilan’s government and Khan’s residence for about fifty years” (cited in Rabino, 1972, 74). “The Khan Mansion consists of some big pavilions in the shape of foursquare and they are connected through beautiful corridors. In the middle of this glamorous building there is a big garden with fountains. At the back (Andarun) there is the Haram mansion and it has a separate garden” (ibid.).

Based on the oldest map of Rasht (See Fig. 4), most of “Dar Al-Hokoumah of Guilan” spaces have a rectangular geometric design with longitudinal axis



Fig. 2. Dar Al-Hokoumah of Guilan. Source: Cultural Heritage Organization of Guilan’ archive.



Fig. 3. A watercolor painting of Dar Al-Hokoumah in Rasht, draw by Pavel Yakovlevich in 1895. Source: <https://www.hermitagemuseum.org>



Fig. 4. Dar Al-Hokoumah of Guilan in Rasht map from Qajar era. Source: Cultural Heritage Organization of Guilan’ archive.

along the Garden’s main mansion and there is a symmetry in two sides of this axis. Therefore, these gardens are based on Persian garden design patterns and methods. Based on the political and social conditions of the time, this garden is considered as a governmental- residential garden.

• “Abd al-Ali Khan Soufi House-Garden” in Amlash

“Abd al-Ali Khan Soufi House-Garden” in the historical part of Amlash is one of the significant buildings from Qajar era in Guilan. This building is about 200 years old and has been registered in the List of National Monuments of Iran. Its area is five thousand square meters. The main mansion of the garden is a two-floor building at the back of the house one floor for summer and one for winter. The mansion has a beautiful brick façade and there is decorative plaster, decorative mirrors and wall drawings inside the mansion. The back yard consists of service providing rooms like storerooms, stables, bathrooms and kitchen. The entrance of the garden is on the axis of the house and the building has a symmetrical plan on a rectangle east-west land. On the two sides of the entrance alley, there are some partitioned gardens. The garden has fruit trees and it is enclosed with walls and streams and a pool on the southern side. The main summerhouse has a great view of the nature (Figs. 5 & 6).

• “Safa Garden” in Rasht

“Safa Garden” is one of the oldest gardens of Rasht which is evident in Rasht map from Nasser era. Its construction dates back to “Nasser Al-Din Shah” Kingdom in Qajar era. According to historical sources, this garden belonged to “Mirza Abd al-vahhab Khan” family. According to some sources, “Safa Garden” has been the promenade of “Naser Al-Din shah” and “Reza Shah Pahlavi”. In his travelogue to Guilan, “Nasser Al-Din shah” writes about “Safa Garden”: “I went to “Mirza Abd al-vahhab Khan”’s “Safa Garden”. It is similar to Nasseriyeh Mansion, but it has one floor and Nasseriyeh Garden is a little better. Gowhar-roud River passes near this garden” (Sotude, 1988, 40). According to the findings of this paper about this garden, we believe that this garden has been built in a certain era and based on a plan and it has been one of the private residential gardens in the city. The garden’s geometry in some parts is based on longitudinal axis and the symmetry of the



Fig. 5. Abd al-Ali Khan Soufi House-Garden in Amlash. Source: Cultural Heritage Organization of Guilan’s archive.

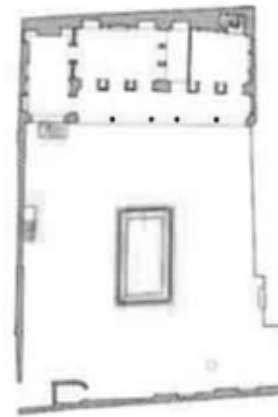


Fig. 6. The Plan of Abd al-Ali Khan Soufi House in Amlash. Source: Cultural Heritage Organization of Guilan’s archive.

two sides of the middle axis and the old trees are evidences of this design. Tall trees, the brick façade of the mansion from 1244 AH/ 1828, a pool with blue tiles, old snow fields and pure and beautiful nature near the Gowhar-roud River are some of the characteristics of “Safa Garden” in Rasht (Fig. 7). Various travelogues especially in Qajar era have described “Safa Garden”. Ezz al-dowle” Travelogue (1290 AH/ 1873), “Mozaffar al-Din Shah” Travelogue (1317 AH/ 1899), “Zahir al-dowle” Travelogue (1317 AH/ 1899) are some examples.

The area of this garden is now about eight thousand square meters. The primary area of this garden was much more than the current area, but gradually through the development of the city, this garden’s area was reduced. Unfortunately, the geometric

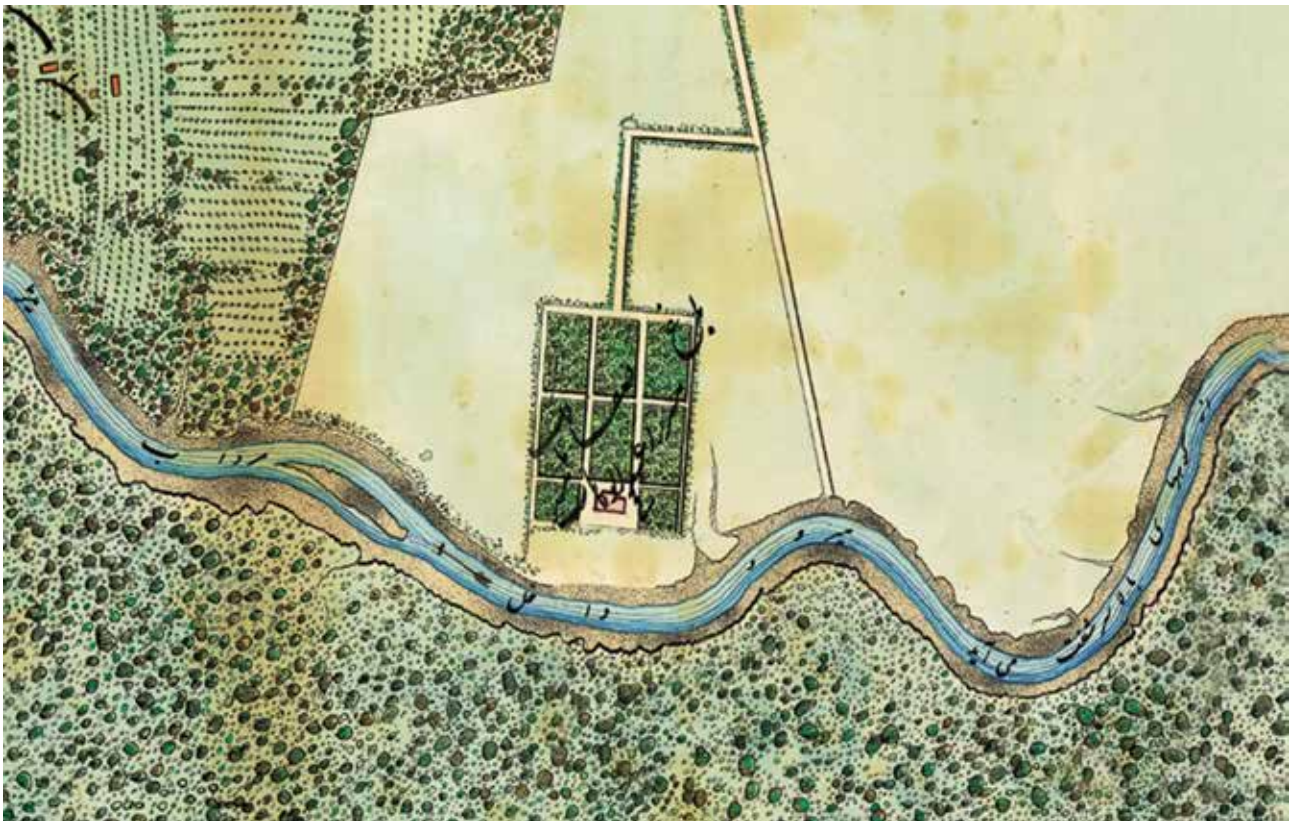


Fig. 7. Safa Garden near Gowhar-roud River in the map from Nasser era. Source: archive.

structure and architectural pattern of the garden have been destroyed because of lack of consideration over long periods of time, although there are some signs of Persian garden design pattern in various ways including structure, view, order, planting and buildings (Figs. 8 to 10).

• “Nasseriye Garden” in Rasht

In the oldest map of Rasht which was ordered by “Nasser Al-Din shah” in Qajar era and drawn by “Zolfaghar Khan” the architect in 1870, we can see remains of historical garden including “Nasseriye Garden”. “At the bottom of the map, near two big pools called “Nasseriye Pool”, there is a text explaining the “Nasseriye Garden” and its geographical location: “Nasseriye is one of the buildings of Mohamad Ghasem Khan the governor and is a promenade of Rasht residents. There are no signs of Mohtasham Garden in this map, but on the left side of Mohtasham Garden, there is a garden described on the map and that is Safa Garden which belonged to Mirza Abd al-vahhab”

(Vahanian, 1997, 312). In his travelogue about his first visit to Guilan in 1887, “Nasser Al-Din shah” has also written about “Safa Gardens” and “Nasseriye Garden” which are historical gardens: “Near the city, we reached the road to Nasseriye, it was a narrow path. There were rice farms and mud and water. We could see Nasseriye from afar, it was a fine building. The other Mansion was farer; it was belonged to the governor. There was also another mansion named Safa Garden which belonged to Mirza Abd al-vahhab. We could see all of them from afar” (Sotoude, 1988, 40). “We entered the road to Nasseriye. There is a mansion similar to pavilion which is made of wood. Gowhar-roud River passes near Nasseriye Mansion. Nasseriye mansion is not as good as they said. It is an average mansion” (ibid.). According to “Safarname-ye Tavalesh” (Written 1297 AH / 1880) “Nasseriye Garden was built by Ghasem-e Val. Nasseriye Garden is so pleasant. We stayed at Nasseriye Garden” (Hessam al-Saltanah, 1969, 37).



Fig. 8. Nasseriyeh Garden (on the right) and Safa Garden (on the left) near Gowhar-roud River in the map from Qajar era. Source: Cultural Heritage Organization of Guilan’s archive.



Fig. 9. A long view of Nasseriyeh Garden, Mohtasham Garden and Safa Garden taken by Anton Sevryugin in Qajar era. Source: <https://asia.si.edu/research/iran-in-photographs>



Fig. 10. The main mansion of Safa Garden which was ruined later in fire. Source: Cultural Heritage Organization of Guilan’s archive.

Unfortunately, “Nasseriyeh Garden” in Rasht has currently been completely changed. According to the map from Qajar era and the texts and picture, we can find that the design of the garden is based on Persian garden’s geometric style. The old pictures and

above drawings of the garden illustrate the geometric cohesion, symmetry and the emphasis on the main axis and the position of summerhouse at the back and on the main axis (Figs. 11 & 12; Table 3).

Research findings analysis

• The characteristics of historical gardens in the region (Guilan)

- The overall plot of gardens in Gilan is mostly based on topography and characteristics of the area and the structure and shape of garden in a combination of different parts. There is a tendency toward geometry, symmetry and order in the structure of gardens in Guilan but landscaping bed, topography and vegetation make it impossible to have a monolithic space. The residents of Guilan enjoy the nature in their gardens simply and unpretentiously but there are also schemes of rectangular and ordered geometry in gardens of Guilan.













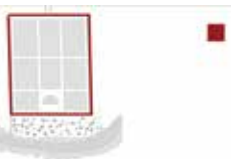













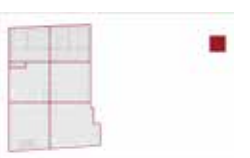

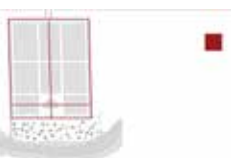





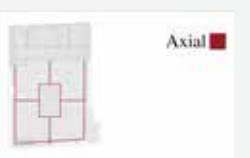

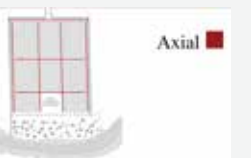






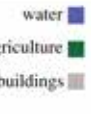
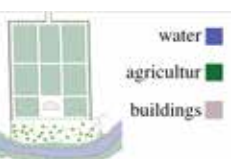




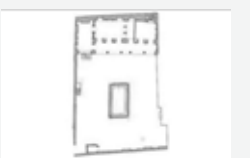




Fig. 11. Nasseriyeh Garden and Pool near Gowhar-roud in the map of Rasht in Qajar era. Source: Cultural Heritage Organization of Guilan’s archive.



Fig. 12. The Mansion of Nasseriyeh Garden. Source: Cultural Heritage Organization of Guilan’s archive.

Table 3. The comparison of Persian garden characteristics and the mentioned cases in Guilan. Source: authors.

Characteristics of Persian garden	Dar Al-Hokoumah of Guilan”	Soufi House-Garden	Safa Garden	Nasseriye Garden
1 Geometry	  The basic geometry with square and rectangle classifications	  The shape of the garden with a rectangular plan	  The basic geometry with square and rectangle classifications	  The basic geometry with square and rectangle classifications
2 Enclosure	  Enclosure by wall or natural element	  Enclosure by wall or natural element	  Enclosure by wall or natural element	  Enclosure by wall or natural element
3 Water	  The presence of water has been mentioned in written sources	  Pool (Houz) along the main axis of the garden	  Natural water in the river (Gowhar-roud)	  Natural water in the river (Gowhar-roud)
4 Proportions and visual symmetry	  Regular shapes and the straight line geometry	  Regular shapes and the straight line geometry	  Regular shapes and the straight line geometry	  Regular shapes and the straight line geometry
5 Axial, central and quartet order	  Axial A network of perpendicular alleys	  Axial A network of perpendicular alleys	  Axial A network of perpendicular alleys	  Axial A network of perpendicular alleys
6 The structural order of the garden	 	 	 	 
7 water, agriculture and building systems	 an accurate placement is not possible	 an accurate placement is not possible	 an accurate placement is not possible	 an accurate placement is not possible

- Most of the Persian gardens in desert areas belonged to masters, Emirs and kings and hierarchical system is evident in these gardens and it is a symbol of power. Petruccioli (2013) believes that “one of the politicians and governors’ purposes to build gardens was to use them as a symbol of their power”. But in the green area of Guilan with rainy climate, the gardens belonged to everyone and were available for everyone and because of the important role of gardens in the life and culture of the residents in Guilan, everyone enjoyed gardens in meeting their needs.

- The reason for differences in concepts and mental imaginations of residents of Guilan is that unlike desert area in which garden was called Pardis or Paradise, everywhere in Guilan is like garden. The residents of Guilan were not satisfied with a small and enclosed area and even it was nonsense to make them satisfied with a garden similar to Heaven because they were living in an actual heaven and a green nature. Garden is an inseparable part of people’s life in Guilan, regardless of their social classes.

- Persian gardens in desert area have a wall which separates the interior and exterior areas, in other words, walls are the boundaries between the green and pleasant area inside the garden and hot and dry desert outside the garden (by means of shadow, breeze and pleasant weather as the results of the combination of water, plants and buildings) and gardens in desert areas create microclimates in an enclosed area. But the situation is different in Guilan with vast green areas and humidity as a result of Caspian Sea and rainy weather which has turned the Alborz hillside into a green environment.

• Common characteristics of Persian gardens

- The presence and movement of water is the main characteristic of Persian garden (Heidar Nattaj, 2010, 60). Water is one of the main elements of Persian garden and has at least three aspects: conceptual, functional and aesthetical. “The beauty of Persian garden depends on the presence of water. Using various forms of water in the pools, streams, waterfalls, fountains, colorful fountain as brilliant spots and dark fountains as reflective surfaces in

Persian garden indicates the importance of water element and its spiritual role” (Mansouri, 2005, 61).

- Every garden is enclosed regardless of the climate. Shahzade and Fin Gardens are enclosed in desert like Safiabbad Garden in jungle and Jahannama Garden in the city and also gardens in protected areas such as Abbasabad which was a safe area, were enclosed. It seems that garden’s enclosure is one of the functional necessities (ibid., 63).

- Contradiction with nature is a common characteristic of Persian gardens, which is acquired by brilliant and precise designing and creating order in a disordered environment and sometimes by creating a green and pleasant area in a dry desert. For example “on 17th June, 1618 Della Valle describes Janat Garden in Ghazvin as a designed and ordered jungle with Plantain and fruit trees” (Alami, 2011, 6).

- Man-made elements like buildings and natural elements like water and plants are applied in the geometry of Persian garden. These elements constitute the Persian garden structure in different times and spaces. The buildings are placed in an area to enjoy the water and plants view. “Plants as main elements in different types are among the common characteristics of Persian gardens and they are not called gardens without plants” (Heidar Nattaj, 2017, 7).

Summary and conclusion

Although Persian garden design has been continuously applied regardless of climatic, geographic and time limitations in different architectural scales through centuries, applying Persian garden design in different times and places causes some commonalities and differences in various structural, functional and semantic dimensions. Therefore, applying Persian garden design patterns in mild and humid climates depends on various factors which have many effects on the building and geometric structure of the garden. Place and time are always the most important factors in design of Persian gardens, their structure and the combination of garden elements, and make Persian gardens different from other gardens in other areas. The findings of this study reveal that the Persian

garden design pattern in spite of its originality and identity can be accommodated with time and place conditions. The analyzed cases in this study provides evidence of the accommodation of Persian garden design pattern with climates different from the hot and dry climate of central plateau in Iran.

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Endnotes

1. Grounded Theory is based on facts and data from the studied environment (Strauss & Corbin, 2011).
2. For more information please read Shahcheraghi, A. (2015).
3. It is line-by-line interpretation of data to create categories by determining the characteristics and their dimensions (Lak, 2014, 52).
4. Data here refer to interviews and notes from field observations, pictures, videos and etc..
5. In the ground theory method, it is recommended to have deep, open and semi-open interviews in a semi-structured form and with eye contact (Lak, 2014, 50).
6. Theoretical Saturation: when we are determining the categories there is a point in which analysis will not result in finding new properties, dimensions or relations (Lak, 2014, 48).
7. Florence Charter, on September 15, 1982 (Icomos, 1982).
8. Princes Bibusco, a Romanian writer and poet in 19th century who visited Iran for several times and mentioned the beauty of Rasht, Qazvin, Tehran and specially Esfahan in her works.
9. The map of Rasht from Qajar era has been drawn by Zolfaghar Khan-e Mohandes, and includes the districts, mosques, baths, caravansaries, gardens, etc. in 1870 (Ferasati, 2003, 351).
10. This is one of the oldest sources about Guilan (Ferasati, 2003, 351).

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