Isfahan, City of Paradise

A study of Safavid urban pattern and a symbolic interpretation of
The Chahar-Bagh gardens

Masters of Architecture Thesis

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Abstract

The Chahar-Bagh Avenue and the extensive gardens and pavilions surrounding it, represent the most significant contribution to Safavid Isfahan in the 17th century. This thesis aims at a historical review as well as a cultural and theoretical analysis of various forces that led to the Chahar-Bagh thoroughfare, and the Hasht Behisht, the only surviving garden pavilion along this famous Avenue.

Three main positions are offered, corroborated and argued in this study: First the pattern of the ancient Persian gardens as well as the pre-Islamic Iranian ideologies influenced the physical structure of the formal, quartered gardens leading to the Safavid Chahar-Bagh. Secondly the Quranic expressions of Paradise, the image of the celestial gardens, was integral to the design of the gardens lining the Chahar-Bagh. And, finally, Sufism, the accepted spiritual doctrine in the Safavid court, deeply impacted the architectural composition of the Hasht Behisht pavilion. The pervasive influence of Sufism may indeed be traced in the rest of the Safavid architecture in Isfahan.

Through a review of the Islamic art and literature the wide ranging influence of the Persian garden, is also argued.
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INTRODUCTION AND PRIMARY SOURCES
"The real gardens and flowers are within they are in man's heart, not outside"¹

Cities are the result of the correspondence of the cultural aspects and the built environment for man’s collective living; they reflect the image of the inhabitants’ life, their traditions, their ideology, their economics and their systems of governance. The collective personality of a people can be better understood through the study of their cultural productions like music, painting, architecture and cities.

Isfahan, an ancient city in the centre of the Iranian plateau, was shaped over the centuries and experienced many cultural shifts initiated by various rulers, ideologies and religious beliefs. The physical pattern of the town as an art museum embodies the old bazaars, the mosques, the squares and courtyards, belonging to the various epochs of its long history. The application of perfect synthesis of old and new in the urban pattern of Isfahan produced a masterpiece of harmony among diverse historical residences. However, a closer investigation of the history of the town, its differing ruling dynasties and their corresponding—political and religious styles leads us to critically understand its urban pattern and architectural diversity and achieve a sense of continuity, even unity, spanning over many centuries.
Among numerous dynasties that ruled from Isfahan as their capital, the Safavid (1491-1722 A.D) has proved to be the most important one, deeply marking the physical pattern and the architecture of the town. This study seeks to identify and elucidate the “new” Isfahan of the Safavids, focusing on its major shift from the “old” Isfahan of pre-Safavid times.

The establishment of the first settlement in the region goes back to the pre-Islamic period and was sited on the outskirts of the present city. But the shaping of the old Isfahan core dates to the seventh century when Yahudiyyeh, one of the northeastern satellite villages in its development, joined Karan in the west. The city gradually developed around a central area within walls. In the eleventh century, the Seljuqs selected Isfahan as their capital city and built a palace, bazaars and mosques around the old square in the middle of the former town. The city embodied a compact, irregular structure, lacking significant landscape gardening inside the walls except one in the west. The other large gardens were mainly located on the outskirts of the town in the south.

In the early seventeenth century, the Safavid altered the image of the town by implementing magnificent, ordered town planning in the south of the existing city. The new plan followed the principles of the old town, but consisted of an ordered, geometric plan, with application of numerous walled gardens in the south. For the first time the organic, spontaneous pattern of the town received a preconceived overall design, following a geometric, rigid order. The new layout consisted of two foci: the great public square, the Maydan-i-Shah, surrounded by mosques, palaces and shops and a linear promenade, the Chahar Bagh Avenue, sided by gardens and pavilions. According
to some contemporary hypotheses, the “old” Isfahan was an archetype for the “new” Isfahan: “The new was nothing but a logical evolution of the old”.\(^2\) The main point being ignored in such claims, is the establishment of the Chahar-Bagh avenue and its extensive gardens in the Safavid town which deeply marked the pattern of the new Isfahan. This study especially examines this hypothesis, seeking the reasons for the creation of the Chahar Bagh, the well-known Safavid avenue in Isfahan surrounded by extended, quadripartite gardens.

The Safavid Chahar-Bagh Avenue in Isfahan, in fact was a great promenade erected to the west of the Maydan-i-Shah, running for 4 km from the *Darvazeh Dulat* (royal gate) to the Zayandeh-Rud, the river south of the town. The avenue extended though a magnificent bridge, the Allahverdi Khan to the Hezar-Jarib, a royal estate south of the river. More than thirty gardens of the court and government dignitaries lined both sides of the Chahar Bagh. In midway along the Chahar-Bagh, an arched gate gave access to the *Bagh-i-Bulbul* “Garden of the Nightingale” in which stood the tiny *Hasht-Behisht* (Eight Paradise) Pavilion. The Hasht Behisht, Chahar Bagh’s only existing garden pavilion is an important evidence for this thesis. At present, only the general outline of the Chahar Bagh avenue is still in place and all of the gardens along this Safavid thoroughfare except the Hasht Behisht have been completely lost.

The historical archeology reveals that pre-Islamic Persian landscape gardening was a major archetype for the Safavid design. Moreover, the importance of cosmological ideas in Persian thinking and its reflection in its pre-Islamic architecture, undoubtedly
affected the pattern of the Chahar-Bagh. Other strong influences, can be discerned in the Quranic images of Paradise. And more importantly the cosmological doctrines, so basic to Sufism, the dominant philosophy in the Safavid court, had a marked influence on the patterns of the town and the formal and spatial qualities of its architecture.

Consequently, the physical evidence seen in the remnants of the design, along with the documentation from historians and scholars support the claim that the Chahar Bagh Avenue and its attached gardens and pavilions in the Safavid town of Isfahan illustrated both the layout of ancient Persian gardens and the image of Paradise in the Quran. Moreover, the Islamic tradition and in particular, the spiritual concepts of Sufism - the accepted ideology in Safavid court - were the major motives for creating such a magnificent promenade and its surrounding gardens.

In the first chapter, the study will describe a brief history of the town. The Safavids contributions to the physical aspects of urban planning will be analyzed in this chapter as well. The implementation of the Chahar-Bagh Avenue and its gardens will be discussed in chapter two. Chapter three deals with the history of the Persian gardens geographically, located in present day Iran. The influence of the Persian gardens on Timurid Central Asia and Mughal India will be only briefly mentioned in chapter three as well. The symbolic meaning and context of heaven in ancient Iranian motifs and architecture are discussed in chapter four. The description of Paradise in the Quran and Islamic traditions and their reflection on the gardens (earthly paradise), particularly their interpretation in the Chahar-Bagh structure will be explored in the chapter four as well.
Chapter five deals with the description and celestial meaning of the Hasht-Behisht, the only existing Safavid garden and pavilion along the Chahar-Bagh. The spiritual concepts of the Sufism will be interpreted in the architecture of the Hasht Behisht pavilion in the chapter five too. A concluding chapter will summarize the thesis and raise questions for further studies.

Primary Sources:
Since all of the Chahar Bagh’s pavilions, pools and canals have been destroyed for the sake of modernization, at present an accurate archeological study in this part of the town is almost impossible. Consequently, there is no in-depth study devoted to the Chahar Bagh and its garden pavilions. The most available sources about the Chahar Bagh are the writings of the historians and the travelers who visited Isfahan in the 17th century: T. Herbert, J. Fryer, J De Thevenote, E. Kaempfer and J. Chardin attempted to describe the Chahar Bagh’s characteristics as they saw it in its original glory. The well known Tarikh-i Alam Ara-ye Abbasi written by Iskandar Beg Munshi, the Shah Abbass’ chronicler is the main historical Persian text for the Safavid studies. The recent sources include the various Persian texts; The history of Isfahan by Jaber Ansari written in early 20th century is valuable in terms of the names, dimensions and characters of the vanished Safavid gardens. H. Honarfar’s Ganjineh-i Athar-i Tarikhi-yi Isfahan, Isfahan, mostly refers to the former historians and travelers. Some western modern sources like D. Wilber’s Persian Gardens and Garden Pavilions briefly describe a general view of the Chahar Bagh and its gardens. While the writings of H. Gaube, L. Golombeck and B. Shirazi assist in revealing the history of Isfahan. To approach the
context of the study, the main sources include the ancient Persian motifs which are mostly discussed by P. Ackerman and A.U.Pope in *A Survey of Persian Art*. The Quran is an important reference to convey the image of the celestial gardens as believed by Persian-Islamic cultures. Ibn Arabi’s *Futuhat* (11th century) puts forth the cosmology that is important to esoteric traditions in Islam and has natural affinity with Persian view of the universe. And finally, the recent writings of S.H. Nasr and other relevant Islamic sources lead us to understand the concepts of the Sufism and the other Islamic traditions.\(^4\)

**Notes on introduction:**


3- It’s worth mentioning that in spite the lack of any archeological research for the Chahar Bagh, some of the Safavid monuments such as Maydan-i-Shah and Ali- Qapu were studied by IsMEO and especially Galdieri in *Two Building Phases*. Bazzar was studied by Gaube and Wirth in *Der Bazar Von Isfahan*. The Masjidi-Jami in particular was the subject of extensive studies and publications by Galdieri, O. Grabar, Pope and A. Godard.

4- For more information about the mentioned primary and the secondary sources, refer to the bibliography section pp. 135-38.
CHAPTER I: THE HISTORY OF THE TOWN:

ISFAHAN: Brief Review of Pre-Islamic Period (500-740 A.D)

ISFAHAN: Islamic Period - Seljuq (1000-1157 A.D)

ISFAHAN: Islamic Period - Safavid (1491-1722 A.D)
“I have never seen, in any place where Persian is spoken, a
finer, larger and more prosperous city than Isfahan”. ¹

ISFAHAN: Brief Review of Pre-Islamic Period (500-740 A.D)
Located in the center of the vast Sassanian empire, the city of Isfahan bordered a large river, Zayandeh Rud, and acted as the intersection of communication and trade roads in ancient Persia (500 AD). Regarding the strategic situation of the town, it can be concluded that Isfahan was one of the earliest urban sites established on the Iranian Plateau. The location of Gabe or Aspadana, the Achaemenid (500-350 BC) predecessor of the later Isfahan, has not yet been demonstrated by archeology, though the abbreviation ASP for Aspahan appeared on Sassanian coins from the fourth century onward. ²

According to Arab geographers and historians, in early Islamic periods (to 772 AD), Isfahan consisted of two segregated settlements separated by a short distance: Jay, the seat of the Sassanian governors, situated on the north border of the Zayandeh Rud and Yahudiye, the Jewish quarter; the ancestor of the present-day Isfahan lay three miles north of Jay. While Jay served as the administrative and military center, Yahudiye housed the common people, embodying large open spaces, enclosed within walls.
Information about founding and shaping of Jay comes from two sources namely Mafarrukhi in his *Mohasen Isfahan* in 1030 A.D and Abu Nu’aym in *Kitab Dhikr Akhbar Isfahan*. Moreover, Lisa Golombek attributes the round shape of the typical Sassanian city, to Jay. Heinse Gaube, on the other hand, refuses the attribution of the “typically Sassanian round city” to Jay, believing it has not been proved according to the literary sources. Jay had defensive walls with four gates: Khur, Isfis, Tir and Yahudiyeh. The latter was on the northwest, and closest to the village of Yahudiyeh.

These gates were located by the seasonal position of the sun, which rose and set on the two northern ones, Khur and Yahudiyeh, in summer, and on the two southern, Tir and Isfis, in winter. The names of the gates were derived from the days of the week on which they were hung, beginning with Sunday. There were numerous towers at interval of 40 or 50 meters.

The foundation of Jay is undoubtedly credited to Sassanians and Gaube suggests that it was Khusraw I who built some buildings inside the city walls. Abu Nu’aym believes that Firuz constructed an outer defensive wall on an inner fortification. Perhaps the most important point in the structure of Jay was the existence of a square, (*Maydan Al-Suq*), with a market located in front of the Khur gate, and mentioned by both Abu Nu’aym and Mafarrukhi. The pattern of this square is evidently that of open space, flanked by a market, which was originally a Persian urban feature, and an archetype for later Islamic towns. This needs to be emphasized, since it could also be attributed to the foundation of the old square in Yahudiyeh, the core and ancestor of the present Isfahan.
Enclosed, within the walls in the Sassanian era, Jay served to shelter refugees in times of war and in peace. So it was most fitted to serve Arabs as a garrison after they conquered it in 740 A.D. They demolished Jay and soon after it lost its importance as a political center.

Yahudiye, the Jewish colony, was older than Jay and some sources attributed foundation of the city to Susandokht, the Sassanian Queen, who settled the Jewish population in this land. Golombeck refers to the time of Nebuchadezzar, quoting the Ib-Hawqual’s interesting account: “the Jews settled in a place which they called Ashkahan, meaning in their language “we stop here”. In fact, Ashkahan is still referred to as one of the districts in the old Isfahan, and it was one of the satellite villages of Yahudiye.

Prior to the foundation of the old town, the Isfahan region consisted of two village satellites. The first satellite comprised Yahudiye and its perimeter villages: Yaran, Khushiinan, Karan, Televajgun, Khujan, and Sunbulan. Ashkahan, Felfelan, clustered to the north and east of present day Isfahan. The second satellite comprised Juzdan and Lublan located to the southwest, at four kilometers distance from the first satellites.

(fig1)

Segregated because of ethnic and religious conflicts, these settlements had an essential economic and cultural interrelationship. Consequently, the communication roads linked the villages to one another, while their boundaries- the walls- were still preserved. The roads generated convergent, irregular shapes on the out skirts of the satellite villages.
After the decline of Jay, the government’s seat was transferred to Khushinan (767 A.D), a village near Yahudiyyeh, where the Abassid governor constructed a mosque and a bazaar on the out skirts of this village. Some contemporary scholars like L. Honarfar have attributed the site of the present Shiaya mosque to the Abassid mosque location.

Soon the buildings of Khashinan touched those in Yahudiyyeh, and, as the administrative and political center of the region, Khushinan was forced to compete with old Yahudiyyeh, but eventually was absorbed by it. After 773 A.D, Yahudiyyeh was so populated that the third mosque, the Masjid-i-Jami (Friday mosque), was founded in the heart of the town, accompanied by a bustling bazaar. (fig 2) Arab geographers who visited the region in the 10th century confirmed the urban importance of Yahudiyyeh.

Isfahan developed more inside the walls under the Buyids (935-1055 A.D). They constructed a defensive wall with twelve gates around the city (935 A.D). They also built a strong citadel, Tabarak, in the south east of the town which preserved their treasure. The remnant of this citadel can still be traced in the present Ahmad-Abad quarter in Isfahan. The literary sources describe the measurements of the city as between 15000 and 21000 paces around. The boundary of the town touched Toghchi in the north, the site of the present Chahar Bagh in the west, Chehel-Dukhtaran in the east and the Tabarak castle in the south. Near the northern gate (Toghchi), the house of Saheb-Ib-Abad, the Buyid scholar minister, housed his shrine which is still a sacred place for pilgrims. Saheb -Ib-Abad’s great personal library was unique at that time and he built the Jarjir mosque near the grand Bazaar, which, later in the Safavid period, was
replaced by a new mosque called Hakim. It seems two axial Bazaars ran from the heart of the town near the Friday mosque toward the gates of the town.

Lisa Golombeck gives us a portrait of the town in the pre-Safavid period, suggesting that the town inside the walls was divided into the quarters with names like: Jubareh, Karan, Dardasht. She refers to Gavzini and Chardin for a description of the town, but does not mention a date. The main point of her analysis is understanding the fact that the quarters of the walled city were ancient villages, surviving under the jurisdiction and administration of the new town.\textsuperscript{12}

\textbf{ISFAHAN: Islamic Period - Seljuq (1000-1157 A.D)}

Isfahan was chosen as the capital city of the Seljuq in mid eleventh century. Seljuqs ruled a vast Empire from Anatoli to central Asia for 157 years. Isfahan attained its prosperity under the Seljuqs. Tughrul, the first Seljuq Sultan, paid special attention to the development of the town and spent five hundred dinars for construction of the mosques and the other buildings. It was Amid al Mulk Kondori - Tughrul's minister- who was concerned with the development of Isfahan. During the war between Tughrul and Dylamian, the city wall was destroyed, but Malekshah, Tughrul's grand son, rebuilt it. After Tughrul, Alp Arsalan, the second of the Seljuq rulers, who resided in the town for a while, was interested in Isfahan. The period of Alp Arsalan's power (1063-1073) is considered the first step to selecting Isfahan as the capital. The city was the seat of Alp Arsalan's son and successor, Malekshah (1073 – 1093) who transferred the capital
city from Ray to Isfahan. Malekshah, the greatest Seljuq, extended the Persian Empire from China to the eastern Mediterranean.

Isfahan, under Malekshah and with the wisdom of his famous minister, Nezam Al Mulk, became one of the largest and wealthiest towns in the world, and the revenues from the vast Empire were sent to this city. Consequently, Isfahan became an important center of science and arts; many schools were constructed there, including the Nezamiyeh and the Ibni- Sina. The latter is still existing in the Dardasht quarter.

After Malekshah, Isfahan sustained its position as the capital city under Berkiyregh and his brother, but the Ismailies’ activities threatened the security of the town and many people were killed during this time. (fig 3)

**Characteristics of Seljuq Urban Pattern**

Isfahan, under the Seljuqs, took its shape through expansion of the previous town. The residential quarters, being derived from ancient villages, expanded toward each other and the growth of the city was bounded in an organic pattern so that the core of the town and monuments were integrated within its structure.

Each time that Isfahan tried to expand, a new nucleus born through new demands would rise in the vicinity of the old centre and would develop organically. The old skin would be shed and new layers would grow and the town center continued its linear movement in
time, creating a backbone to which all of the main activities were
attracted. 13

‘Backbone’ is indeed the Bazaar structure that in the 11th century attracted some
economic activity from the Old maydan (square).

Reviewing the contemporary sources, most of them, classify the urban pattern of
Seljuqs’ town among the “pre-Safavid” development. A.U. Pope goes further and
claims that the Saljuqs “in spite of their magnificent architecture had no remarkable
town planning”. 14 The reason for such an approach is probably that the Saljuqs mostly
resided in the towns that they conquered and tried to develop and glorify the existing
cities instead of creating new settlements.

Nasir-i-Khusraw in his Safar-Nameh or ‘Travels of Nasir-i-Khusraw’, gives a
comprehensive picture of Isfahan in the Seljuq’s period (1050 A.D):

The city has a strong and high wall, with gates and fortifications,
and all the walls there are battlements. Inside there are streams of
running water and fine and lofty buildings; in the centre of the city
are three and a half farsang (slightly over twelve miles) in length –
the interior of the city is uniformly prosperous in appearance, and I
did not see a single building in ruins. I noticed many bazaars and in
one of these, which was that of the money-changers, there were
200 men in this profession. Each bazaar has its wall and its gate, as
has every quarter and street. There are clean and well-kept
caravanserais. The caravan of which we formed part had brought
1300 kharvars of goods. When we entered the city, no difficulty in obtaining lodging and food....

I have never seen, in any place where Persian is spoken, a finer, larger and more prosperous city than Isfahan.\textsuperscript{15}

Gaube designates Isfahan as an oriental city —consisting of main axes of intra urban communication which connected the city centre with gates and gave access to residential quarters. Secondly there were the twisted dead-end lanes which gave access to individual buildings. Gaube refers to the map that reveals three important periods of the town growth. In this category the second type of street pattern in the 10th century is closest to the Seljuqs’. Apparently Gaube, set the core of the town, the \textit{Old maydan} (square) among the oldest parts of the Islamic Isfahan.

Regarding the importance of the original date of founding the \textit{Old maydan}, I have proposed a new hypothesis during the primary stages of this thesis. This hypothesis reveals that the Seljuqs’ capital glorified on the existing core of the town – the \textit{Old maydan}— which in fact seeks its origin in pre-Islamic time. (300 BC).

Not only did the \textit{Old maydan} enhance the importance of the old town, through its strong urban function, but the amalgamation of other public spaces such as the mosques, the bazaars and the palaces was an archetype for a new square in the Safavid era (16th century).
Considering the crucial urban role of the *Old maydan* and its surrounding monuments on the town’s further development in the Safavid period, the study has a closer look at their situation in the 11th century. (fig.4)

**Old Maydan:**

The *Old maydan* in the heart of the Seljuqs' town was not only the major commercial centre of the city, but it also attained political and religious importance. The combination of diverse activities glorified in a strong and vivid urban nucleus so that the *Old maydan* functioned as an “agora”, performing the role of a powerful socio-economic and political centre. (fig.5)

The *Old maydan* was destroyed in the development of new streets in 1925 but its old boundaries can still be traced. Moreover, the literary sources assist in determining its old structure. The oldest monument that can be dated and still exists around the maydan is the Ali minaret which undoubtedly was part of a Seljuq mosque or *madrasa* (school). Golombek confirms the remarkable situation of the *Old maydan* in Seljuqs’ time:

The Seljuqs, Ilkhanids and Muzaffarids all built up the area around the old Maydan with major madrasah and mosques.... There is no doubt that from Seljuq times the royal families and their associates had their main interests in the area surrounding the centre of the city.
It is likely therefore that although no pre-Seljuq sources mention it, the Old Maydan had been the focus of public life, at least since Seljuq times.16

The Old maydan was in a trapezium shape; the longer base located to the north, flanked the Friday mosque. The small base terminated at the Ali Mosque with its brilliant minaret. On the eastern side was a Seljuq palace, which vanished long ago. A linear bazaar occupied the western side:

The old Maydan was surrounded by mosques, madrasas, palaces, an elaborated bazaar, the Qaysariyyah, and a royal music pavilion, the Naqar-Khaneh. Most of these buildings could still be seen in the seventeenth century, albeit in ruinous conditions.17

Both Gaube and Golombek have attempted to reconstruct the structure of the Old maydan according to both literature and existing evidences. Comparing their drawing with the Persian documents, Gaube's drawing seems to be more accurate in terms of the eastern boundary. On the other hand, Golombek illustrates the location of the Seljuqs' monuments.18 Gaube also attributes the west southern bazaar to the Seljuqs since it was aligned with the southeast wall of the Friday mosque, a Seljuq monument. “Thus we may suppose that it follows the alignment of the bazaar which already existed in the twelfth century”.19
At present a few of the Seljuqs' monuments have survived; the Masjid-i- Jami (Friday mosque), one of the world's greatest architectural works was built on the north east of the old maydan. The tombs of Malekshah and Nezam-Al-Mulk and several beautiful minarets such as Ali, Sareban, Paminar, and Ziyar are all evidence of Seljuq glory. The Friday Mosque, still the finest structure of the town, is indeed an art museum revealing more than 900 years of Persian architecture.

**ISFAHAN: Islamic Period - Safavid (1499-1736 A.D)**

Isfahan was conquered but not damaged during the Mughal invasion of 1244 and maintained its rich economy as the provincial capital. However the city was plundered in Timur's attack in 1387 and many people were slaughtered. The population of the city dramatically decreased and the city lost its glory and importance after Timur's cruel invasion.

The Safavids (1499 – 1736 A.D) are considered to be the founders of the new Persian Empire in the Islamic era. Their two state principles, unifying the kingdom and bringing the majority of Persians to Shia (twelver) Islam, modified the history of the country.

The first ruler of the Safavid dynasty, Ismail I (1499-1525) was strong enough to reunite the kingdom and hold it together. Shah Abbas the Great, was the fifth ruler of this line (1587-1627). He reformed the structure of the military, administrative and economic system of the empire. Roger Savoy in his "the Safavid Administrative System" addresses the changes in the social and administration aspects of Shah Abbas I
that enormously increased the power of central government. Many other writings have also examined the Safavid policy.\textsuperscript{20}

The spectacular physical symbol of Safavid reform was reflected in the implementation of a new urban design in Isfahan. Shah Abbas transferred the capital from Qazvin to Isfahan in 1598. The Persian sources of the 16th century seek the reasons for this shift in the personal preference of Shah Abass for the temperate climate, ample water and fertile lands.\textsuperscript{21} However, the contemporary scholars emphasize "a desire for a centrally situated position within the reconstituted Persian empire" and "the opportunity of developing the city according to his own ideas".\textsuperscript{22}

**Characteristics of Safavid Urban Pattern**

As mentioned the designation of Isfahan as the capital city altered the urban pattern of the old town. Prior to the Safavids, the town growth was concentrated around the old maydan, flanking the Friday mosque. "Unlike the Sultans who had earlier ruled from Isfahan, and who had sometimes lived in the old city, Abbas decided not to live in the old city.\textsuperscript{23}

The city was transferred when the existing focal center was found incompatible with the needs of the new political and cultural establishment.\textsuperscript{24}

In twenty-five years, the new Safavid scheme announced a renaissance in Persian urban design, followed later in the such cities as Shiraz and Kerman. For the first time the
organic, spontaneous pattern of the town received a preconceived overall design, following a geometric, rigid order. The new layout consisted of two foci: the great public square, the *Maydan-i-Shah* (Shah Square), surrounded by mosques, palaces and shops and a linear promenade, the Chahar Bagh, sided by gardens and pavilions. The contrast between the complexities of the bazaars and residential quarters of the old town, with their compression, bustle and noise, and the quiet, clear, symmetries of the Chahar-Bagh gardens was the most magnificent point of Isfahan's urban pattern in the 16th century. Three axes marked the boundaries and the pattern of the new gardens: the *Maydan-i-Shah*, the Chahar-Bagh- main artery, and the Zayandeh Rud, the river. A brief description of these key elements of the Safavid town leads us to a better understanding of the aims, desires and cultural contexts of its designers. (fig 6)

**The Maydan-i-Shah:**

The nucleus of the new Isfahan was the *Maydan-i-Shah* (Shah Square), built in place of a Seljuq garden, *Naqsh-i-Jahan*. This grandiose, rectangle open space lay to the east of Chahar-Bagh and was measured 1674 feet long and 540 feet wide. The long arched walls were broken by four principal monuments, dominating the square. The important *Masjid-i-Shah* opened off the southern side opposite the *Qaysariyyah*, the entrance of the great Bazaar in the north. The Bazaar itself was a connector between the old and new town, tying the activities of the Shah square to the *Old Maydan*. On the west side, the *Ali-Qapu* palace faced the large piazza, leading at back into the royal complex and gardens. Across from *Ali-Qapu*, the tiny delicate *Masjid-i-Shaikh Lutfullah* was located on the east end. Two story arched shops surrounding the *Maydan-i-Shah*, paralleled the
covered bazaar line all around the square. The western wing was devoted to providing for the royal needs, embellished with luxurious goods, jewels and gold. On the south, near the Shah Mosque, the bookstores, stationers, and saddlers had their shops. The handicrafts were located on the eastern side and the coffee houses and hostels on the north. The Naqar-khaneh (music hall), having been transferred from the Old Maydan, flanked the northern side, near the entrance of the bazaar, the Qaysariyyah. (fig.7-8)

Gaube cites the Maydan-i-Shah as the core of the new plan, "since this was the ideal layout to unify the most important functions of a city as administrative, religious, intellectual, economic and entertainment center". While European travelers provide us with an extensive description of the Maydan and its four compartments, only one graphic document of this time illustrates the image of the Safavid core town. Although Engelbert Kaempfer's drawing is not to scale, it depicts the location of the Maydan and the royal complex clearly.

In the middle of the south side, the Masjid-i-Shah (Shah mosque) announces its presence beyond the square wall screen. Its blue dome and slender minarets are representative of thousands of years of mosque building in Persia. The recessed portal, an embraced space, invited the worshipers into the refuge and security that the mosque promises. The massive structure of the mosque dominates the square, since the other surrounding structures seem to be more modest compared with the larger scale of the square.
The *Masjid-i-Shah* is one of the important pieces of evidence for the Safavid town in terms of its spatial structure and its numerous ceramic decoration. The less ambitious *Shaikh Lutfullah* is an elegant, small mosque. Pope attributes the shape of its dome to the pre-Islamic Persian domes, formed upon a square chambré. The most crucial point in this mosque and the *Masjid-i-Shah* is their adjustment to the *Maydan-i-Shah*. The mosques inevitably had to orient the *qibla* wall toward Mecca, therefore a diversion of forty five degrees from the north-south axis of *Maydan* turns its direction toward the prayer chamber. As the result, dome appears above the wall screen of the *Maydan*, while the circulation passage is invisible from outside. The ancient enameled tiles with a flowing, almost florentine pattern cover the dome.

The royal complex, consisting of various palaces, occupied the lands behind *Ali-Qapu* on the west side of the square. It was stretched as far as the Chahar-Bagh where the royal gardens and pavilions began to run toward the Zayandeh Rud for more than one mile. The royal complex, now almost vanished, included the household, the private precincts (haram), the kitchens, storage and stables.

**Chahar-Bagh:**

The Chahar-Bagh avenue, the town’s main artery, ran from the extreme end of the royal complex to the west of the *Maydan*, toward the Allahavardi Khan a spectacular thirty-three-arched bridge over the river. This magnificent bridge spanned the river, connecting the main Chahar Bagh on the city side to the *Chahar Bagh Bala* (upper) where the avenue continued to the suburban palace gardens, terminating to the great,
extensive garden of Hezar Jarib. This grand boulevard was adorned with canals along the center, and sided by walled gardens enclosing the individual royal pavilions. The square shape of the gardens and their cross axes created a rigorous grid which opposed the organic, less regular and cellular pattern of the town to the north. The Chahar Bagh avenue and its surrounding gardens are the major subject of this thesis. The physical description of the Chahar Bagh's gardens and the urban importance of the Chahar Bagh avenue will be discussed in Chapter II.
Conclusion:

Comparing the old and new Isfahan, one can conceive that what had been developed organically at old Maydan in course of centuries, was reflected in the ‘Shah square’ through a planned scheme, whereby the spatial distribution of buildings followed a considered organizational plan. The old Maydan was formed in an irregular shape, flanking by the Friday mosque to the north and the main thoroughfare through the Bazaar was tangential to it. Jean Chardin envisages a large and ancient palace with four corner towers, known as the Takhighah (Palace of the Throne) attributed to the pre-Safavid royal precincts. The old sources witness the centrality of the old Maydan and its administrative and religious functions as well. Reviewing the scheme of the ‘Shah square’, all urban features of the old Maydan have been placed in the Safavid square, although arranged in a different way.

Some modern hypotheses, trying to reconstruct the physical shape of the old Maydan, have concluded that it was an prototype for the Maydan-i-Shah in the new Isfahan. Lisa Golombek goes even further, claiming that the direction of Shah Square is the result of the old pattern:

Consider for example the curious orientation of Shah Abbass imperial centerpiece, the Maydan-i-Shah. The two imperial mosques built to the south and east of Maydan, the Masjid-I-Shah and Lutfullah Mosque, awkwardly twist on their axis in order to face the proper direction for prayer, the qiblah. Had Shah Abbass had a free hand to set out the Maydan as he
wished, why should he have given it this peculiar, apparently baseless orientation? No doubt it was the pre-existing pattern of the city that determined this choice. 30

According to the Persian literature, the orientation of the Maydan-i-Shah returns to the paths and landmarks of the Naqsh-i-Jahan garden that was replaced by the new Safavid Maydan-i-Shah. 31 On the other hand, Gaube aligns the Maydan-i-Shah with the axis of Persepolis, the famous Islamic Persian palace at Fars 32.

Shirazi conceives ‘the new’ as a logical alternation of ‘the old’:

The common language which existed in all fields was the essence of understanding between the old and the new. The new would throw new light on the old, while the old would enhance the quality of the new. The new was nothing but a logical evolution of the old. 33

The entire scheme of the new square, its principles and surrounding compartments; the mosques, the bazaars and the palaces, resembled the pattern of the Old maydan. The contemporary hypotheses which address this analogy, all neglect the creation of the Chahar-Bagh and the over scaled Safavid gardens that marked the urban pattern of Isfahan and even today undoubtedly is the most effective town axis.

The old city was occupied by dense neighborhoods. The irregular and chaotic passages opened their ways with difficulty through the complex compartments of architectural mass. Was the network of these road based on the irrigation system as Bonine claims? 34 Or were they just the boundaries of lots? In fact they were the remains of the houses which faced the regular court houses, the only existing open spaces in the old town.
In contrast, the Safavid embellished the new city with a planned geometric axis, the Chahar-Bagh avenue, which consisted of aligned gardens, embraced by the single standing pavilions. For the first time in its history, Isfahan received two distinct orthogonal axes of development. The planned north–south axis, the Chahar-Bagh, perpendicular to the natural axis of Zayandeh Rud. The expansion of these landscaped gardens altered the image of the town and integrated it with the beauty of the gardens and nature.
Notes on Chapter I:

2- Ptolemy, Geogray’, VI 2&4
   Mafarrukhi, Mahasen Isfahan, translated in Persian by Avi, H. M. Tehran, 1939
4- Golombek Lisa, “Urban Pattern in Pre- Safavid Isfahan”, in Iranian Studies vol.7, 1974, P. 23
5- Gaube Heinse, Iranian cities, New York 1979, P. 68
6- Abu Nu aym, Ibid, P.34
7- Gaube Heinse, Ibid, P. 68
8- Abu Nu aym, Ibid, P. 15-16
9- Golombek ibid, P.21
10- Honarfar, L, Ganjineh-i Athar-i Tarikhi-yi Isfahan, Isfahan, 1966, P. 16
11- Qazvini, 21000 gam (pace), Mafarrukhi 15000 gam, Chardin,20000 gam, see Golombek, Ibid, P. 35
12- Golombek Lisa, , Ibid, P.18
15- Nasir- Khusraw, Ibid, P. 2
16- Golombek , Ibid, P.29
17- Gaube Heinse, Ibid, P.76
18- Comparing two proposed plans, one conceives that the west boundary of the maydan can be traced by
   the line of the existing Bazaar. The crucial point is the east boundary. Considering the location of the
   Ali minaret, a Seljuq monument, flanked the old maydan in the its heyday, the eastern side of the
   maydan can be traced through existing paths.
19- Gaube Heinse, Ibid, P.78
20- Savory, R, “The Safavid Administratrive System”, in Cambridge History of Iran, Vol. 6, P. 365

23-Gaube Heine, Ibid, P. 83

24-Shirazi, Ibid, P 587


26-Gaube Heine, Ibid,

27- For more details of Kaemfer plan see chapter II.


29- Chardin, J, Ibid, P. 21

30-Golombek, Ibid, P. 18

31-Honarfar, Ibid, p.44

32-Gaube Heine, Ibid, P. 95

33-Shirazi, Ibid, P 587

1-Isfahan: Early Islamic Period (to 772 A.C)

2-Isfahan: Abbassid Period (to 995 A.C)
3-Isfahan: Al Buyid and Seljuq Period (935-1166 A.C.)

4-Isfahan: Safavid Period (1597-1722 A.C.)
5-Reconstruction of the *Old Maydan*, Seljuq Period

1. Old maydan
2. Friday musque
3. Bazaar
4. Ali minaret
5. Ali mosque
6-Urban pattern of the Safavid Isfahan

1. Old Maiden
2. Friday Mosque
3. Palace
4. Ali Mosque
5. Bazaar
6. Naghash-Jahan Square
7. Shah Mosque
8. Ali Qapu - Palace Precincts
9. Bazaar Gateway
10. Sheikh Lotsfolah Mosque
11. Gardens of Vavir
12. Chehre Bagh
13. Allah Verdi Khan Bridge
14. Chehre Bagh Khaju
15. Khaju Bridge and Dam
16. Zayandeh Rod River
7-Reconstruction of the *Maydan-i-Shah*.

8-*Maydan-i-Shah*, P. Coste's drawing, 19th century
Chapter II- Description of the Chahar Bagh

1- Isfahan, a garden city

2- Description of the Chahar Bagh avenue and its gardens

3- Urban Importance of the Chahar Bagh
II. 1. Isfahan, a garden city

"la grande Allee... qui est la plus belle que J’ai vue, & dont j’ai jamais eui parler”

The travelers who visited Isfahan in the sixteenth century were astonished by the extent of its greenery and intensive garden complex. Indeed, the city seemed like a huge, smooth, green stain, crossed by a blue line - the river - in contrast to the rocky background of the desert.

Chardin (1666) states that Isfahan with its suburbs was the largest city in the world, resembling a forest from every direction; approaching the town, only the minarets and domes came to the eye. Tavernieh (1633) admits that Isfahan was not smaller than Paris and the entire town structure was enveloped by green foliage. Pierre Loti, Pascal Coste and the other travelers confirm the mentioned accounts. In short Isfahan was a garden city. The reason for such a miracle in the heart of the desert can be attributed to the Zayandeh Rud, the largest interior river in the Iranian plateau. An irrigation system (madis) originating from the river dispersed water to all parts of the town.

In numerous, detailed descriptions of the Persian cities in pre-Safavid accounts by various travelers and historian there is no reference of plants in the streets. In Isfahan, although different sized fountains and wells served the water system of the town, there
are no reports of trees and flowers in the thoroughfares. In contrast every house had its own green space within the courtyards and the palaces were adorned with elaborate and extensive gardens. But these were enclosed and private, shut away from the public by the high, solid walls.

Under the Safavid, in sixteenth century, for the first time a planned, green area joined the compact mass of the old town to the Zayandeh Rud and its natural beauty. Consequently, the old Isfahan opened its arteries to its suburbs and gardens. The reasons for such modification in the town development can be found in both the political and cultural life of the city.

First of all the fruit of national security, prolonged peace, and prosperity impacted the town structure. As a result, the Buyid protective city wall (being constructed in A.D.985) was never rebuilt in the Safavid era and the old town extended beyond the walls to join the suburban open spaces and gardens. Secondly, the town nucleus underwent constant growth toward the river. The Bazaar itself established a similar movement in this direction during the Seljuqs' sovereignty in 12th century. The town had no significant development between the 12th and 16th centuries since it lost its importance as a capital city. Particularly, Tamerlane's savage sack of the city and massacre of its habitants in 1387 reduced it to desperate conditions. Under the Safavids in 16th century, the Chahar Bagh avenue became the principle vector of the town movement. It stretched beyond the river, to the extreme south, on the skirt of the Sofeh mountain.
How can we account for this trend to expand toward the river? Was it a natural tendency toward the water? It was indeed every Persian's desire to set up an ideal environment for his leisure and felicity, in imitation of the gardens of Paradise;

Therein he indulged his love of nature, of shade, singing birds and cool water, flowers and space; but because he was logical and clear minded it must needs be a nature ordered to the rational principle of man, and so he laid out his garden, and his city that had become a great garden, in a plan formulated on the basis of the most lucid and controlled principle, the rectangle. Thus, the river and the abundant lands around it were the major factors to create such desirable gardens. Furthermore, Shah Abbas wished to emphasize his majesty and grandeur by setting up the magnificent Chahar Bagh and gardens as the new center for his imperial power.

II.2. Description of the Chahar Bagh avenue and its gardens

A brief explanation of the general term chahar bagh (four gardens) leads us to distinguish it from the Chahar Bagh Avenue, the famous Safavid thoroughfare in Isfahan. The phrase chahar bagh, is a Persian terminology that was used for the design of a single rectangular walled garden, quartered by the intersection of two right angles streams. A pavilion or summer house rested upon an eminence at the intersection of the canals and walkways, most often in the centre of the garden. (fig.9) Large pools in the shape of circle, rectangle, square or octagon elaborated the long narrow canals. Most often, these pools were introduced inside the pavilion beneath a domed roof. This simple cross plan was elaborated by subdivisions, representing a system of parallels to
both main axes. More often, the longitudinal axis dominated and the subordinate divisions primarily repeated the traverse axis. The origin of such design goes back to pre-Islamic Persian gardens, discussed in chapter III

A. Petruccioli, referring to Oleg Grabar, asserts that Islamic gardens and palaces were places of pleasure. On the other hand, Petruccioli himself has taken the *chahar bagh* as a response to the desire for centrality:

The archetype of chahar bagh of Persian tradition, a square with four sides, four quadrants, four canal and four axes of symmetry, responds adequately to the renewed demand for centrality.6

The term *chahar bagh* in particular was applied to the Chahar Bagh Avenue in Safavid Isfahan later.(1598) The Chahar Bagh of Isfahan, in fact was a long promenade lined with numerous gardens and pavilions (*chahar bagh*). Therefore, it can be assumed that the name of the avenue-Chahar Bagh- was derived from the pattern of each individual garden (*chahar bagh*). On the other hand, according to Chardin, the name of 'Chahar-Bagh' derives from the four vineyards which Shah Abbas had to rent in order to carry out his plan: "Cette Allee s’appelle tchar-bag, c’est-a’-dire quatre Jardins, parce qu’autrefois c’etoit quatre vignobles." 7 Whatever is the derivation, its implication eludes us.

At present, all of the gardens along the Chahar Bagh except one (Hasht Behisht) are completely lost and only the general outline of the Safavid avenue is still in place. Since
all of its pavilions, pools and canals have been destroyed for the sake of modernization, an archeological study is almost impossible. Consequently, there is no in-depth study devoted to the Chahar Bagh and its garden pavilions.8

Iskandar Beg Munshi dates the design of the Chahar Bagh to 1598, as a part of the urban project carried out at the time for official transfer of capital from Qazvin to Isfahan.9 Therefore, the creation of the Chahar Bagh avenue occurred between two building stages of the Maydan-i-Shah and its peripheral walls recorded by Eugnrio Galdieri in Two Building Phases. (1595 &1602)10

In this chapter, the study in particular deals with the physical aspects of the Chahar Bagh avenue and its surrounding gardens. This leads us to a better understanding of the context of the Chahar Bagh and its only existing pavilion, the Hasht Behisht, discussed in chapters IV &V. The most available sources referring to the Chahar Bagh are the writings of the chroniclers and the travelers who visited Isfahan in 16th century: T. Herbert, J. Fryer, J De Thevenote, E. Kaempfer and J. Chardin attempted to describe the Chahar Bagh’s characteristics in its heyday. The study also approaches the brief accounts of the contemporary Persian and Western sources.

The Chahar-Bagh and Maydan-i-Shah were two key features of the new Isfahan, providing a framework within which subsequent building could be fitted. The Chahar-Bagh in its heydays resembled a Persian garden carpet conjured in three dimensions. (figs. 10a-10b) It was this opulent ambience of flowers, streams, trees and pavilions that
surprised and delighted European visitor, “I have never seen such beauty in another city”\textsuperscript{11}

The Chahar Bagh was not directly connected to the Maydan-i-Shah but lay about 580 yards to the west; gardens and the royal complex occupied the space between the avenue and \textit{maydan}. Reconstruction of the Chahar Bagh’s gardens provides us with a better understanding of its function and urban importance. The Kaempfer’s lithograph of the royal complex and the beginning of the Chahar Bagh is the only graphical guide extant. (fig11) The Royal complex consisted of many palaces, the \textit{Chahar Sufa} (Four Porches), the \textit{Imarat-i-Firdous} (the Palace of Paradise), the \textit{Talar-i-Tavila} (the Palace of the Stable), the \textit{Huz-Khaneh} (Pool-House), the \textit{Chehel Sutun} (Forty Columns), the \textit{Khalvat-Khaneh} (the House of Solitude), \textit{Amuristan} (the Vineyard) etc. Only the Shah and his most trusted, aged eunuchs had access to the entire complex. Chardin extensively records the buildings in the \textit{Daulat Khaneh} (royal complex) and store house and work shops.\textsuperscript{12}

the Chahar-Bagh, In fact, was a great avenue erected to the west of the Maydan-i-Shah, running for 4 km on a north-south axis from the extreme end of the royal complex to the river. The avenue was extended to the Hezar Jarib, a royal estate to the south of the river. In the center of the avenue flowed a canal, with water dropping in little cascades from terrace to terrace and now and again arrested in big rectangular or octagonal basins edged with onyx. In the summer months, these tanks were filled to the brim with water. The heads of roses floated on the surface of the water. On either side
of the canal, came a row of *chenars* (plane tree), a promenade of parterres filled with a profusion of rose hedges and jasmine bushes, and, finally, further rows of *chenars*. Eight rows of plane trees and poplars in total, were spaced across the sixty yards width of promenade. Kaempfer mentions that no where in the world did plane trees grow to such a height except in Isfahan. The people could stroll under the shady *chenars*; the so called ‘Tegh Sabz’ (green vault), protecting them from the burning sun. Chardin informs us that Shah Abass would allow no tree be planted without his presence, and under every tree was buried a gold and a silver coin of his reign. (fig. 12)

Gardens spread far and wide on either side of the Chahar-Bagh and grilled rather than solid walls allowed pedestrians to enjoy the view of these gardens from this thoroughfare. An open archway led to these gardens which were named after *Bulbul* (Nightingales), *Tustes* (Mulberries), *Takht* (Throne) and *Behisht* (Paradise). The palaces and pavilions with names like *Jahan Nama*, *Hasht Behisht*, *Abass Abad* and *Nastaran* were erected in the center of these gardens evoking the formal pattern of the Persian garden- the *chahar bagh*. The origin and history of the well-known design of the *chahar bagh*: a walled area with cross paths and water courses, and an eminent pavilion in the intersection of its paths- will be discussed in the next chapter. The combination of palace and garden, became the metaphor *par excellence* for paradise here on earth, exemplified the dwelling of the Safavid monarchs. Chardin describes the beauty and variation of the pavilions:

> ces pavillons sont de differente construction & figure, mais ils sont presque tous d'egale grandeur, & tous peints & dorez fort
materiellement, ce qui offre aux yeux l'aspect le plus éclatant & le plus agréable.  

Some of these pavilions were used as coffeehouses and, in the evening, the Chahar-Bagh was always thronging with life, as Dr. J. Fryer wrote (1693):

Night drawing on all the pride of Spahaun was met in Chaurbaug, and the Grandees were Airing themselves, prancing about with their numerous Trains, striving to outvie each other in Pomp and generosity.  

George N. Curzon, who visited Isfahan in the declining days after the Safavid (1892) tried to describe the Chahar-Bagh in its glorious time:

From the palace [Hasht-Behisht] I now pass to the Great Avenue [Chahar-Bagh], already mentioned, that conducts from the centre of the city for a distance of 1350 yards to the Bridge of Ali Verdi Khan. Its name, the Chehar-Bagh or four gardens, is not derived from gardens that open out of it, but recalls the fact that the site was originally occupied by four vine-yards which Shah Abass rented at 9000 francs a year and converted into a splendid approach to his capital. Of all the sights of Isfahan, this in its present state is the most pathetic in the utter and pitiless decay of its beauty. Let me indicate what it was and what it is. At the upper extremity, a two -storeyed pavilion connected by a corridor with the Seraglio of the palace, so as to enable the ladies of the haram to gaze unobserved upon the merry scene below, looked out upon the centre of the avenue. Water, conducted in stone channels ran down the centre, falling in miniature cascades from terrace to terrace, and was occasionally, collected in great square or octagonal basins,
where cross roads cut the avenue. On either side of the central channel was a row of *chenars* and a paved pathway for pedestrians. Then occurred a succession of open parterres, usually planted or sown. Next on either side was a second row of *chenars*, between which and the flanking walls was a raised causeway for horsemen. The total breadth is now 52 yards. At intervals corresponding with the successive terraces and basins, arched doorways with recessed open chambers overhead conducted through these walls into the various royal or noble gardens that stretched on either side, and were known as the gardens of the throne, Nightingale, Vines, Mulberries, Dervishes, etc. Some of these pavilions were places of public resort and were used as a coffee-house, where, when the business of the day was over, the good burghers of Isfahan assembled to sip that beverage and to inhale their *kaliyan*,......At the bottom, quays lined the banks of the river, and were bordered with the mansions of the nobility.”

A brief description of particular Chahar Bagh gardens, casts light on their actual functions and characters: Each garden consisted of two buildings, one built over the gate, *Imarat-i sardar* (gate building), giving access to the garden behind, and a second larger structure in the middle of the enclosed garden. From the *Bala Khaneh* (upper loggia) of the gateway, one could gaze at a splendid view of the formally planted gardens. An old photograph provided by Honarfar illustrates the last remnants of the *Imarat-i-Sardars* on the south of the river. (fig 13)

At the upper extremity of the Chahar-Bagh, a three story cubic palace was connected to the royal complex through a closed way. The palace flanked the town gate, called
*darvazeh dulat* (The Royal Gate). Honarfar notes that porches and lattice windows embellished the whole facade of this pavilion, while the interior walls were elaborated with many paintings and delicate decorations. The name of this pavilion, ‘Jahan Nama’ (The image of the world) acknowledges its function.

The angle between the royal complex grid and the Chahar Bagh axis generated an unusual composition. Thus, Guldasteh garden found another solution contrary to the formal rectangular pattern of the other gardens. The Guldasteh garden was in the shape of an octagon, consequently the *chahar bagh’s* common lay out- a walled rectangular garden with two cross paths or watercourses- could not be achieved in this palace. The building itself was built with sixteen sides(fig. 14) The geometry of the garden ran from every side of the building, shaping the avenues and four canals. The avenues were embellished with roses and planted with *chenars*. The Bagh Guldasteh was exceptional in the Safavid town, creating a new pattern.

The *Takht* (Throne) and the *Hasht Behisht* (eight Paradise) gardens faced one another, presenting the formal pattern of the Persian gardens-the *chahar bagh*. The Hasht Behisht, the only existing garden pavilion of the Chahar Bagh avenue, stands as the principle evidence for this study. The physical and contextual aspects of the Hash Behisht will be discussed in detail in chapter V.

Kaempfer records thirty gardens along the Chahar Bagh, partially developed for the aristocratic residences and partially for the public use. Wilber recalls the garden of Asad
Abad to the west of the Chahar Bagh, was used for diplomatic reception. 'At the point where the avenue reached the Zayandeh river, quays stretched along the bank. At one angle of the avenue and the quay was the royal aviary, ..and at the other corner the lion house,..'. The 'Lion House' displayed horses and lions and other wild animals. The present Tavos Khaneh (Peacock House) neighborhood in Isfahan, apparently recalls the royal aviary mentioned by Wilber. 

To the south of the river, the Chahar-Bagh was connected to the gardens of Hezar-Jarib, terminating in to an extensive garden with the same name. Chardin shows the image of this main thoroughfare in the 16th century, known as the Chahar Bagh Bala (upper Chahar Bagh) at present. (fig. 15)

A lithography from Hommair shows the vanished Bagh Zereshk (Garden of Barberry), sloped down to the river. The lattice walls along the avenue did not shut out the view and the passer by could see the clusters of flowers in the garden. (fig. 16a-b) Mid-way along the Chahar Bagh Bala, one of the vanished garden was 'Mir Akhor', based on an semi octagonal masonry with a light shelter.

The garden of Hezar-Jarib or Saadat-Abad laid on the slope of a mountain called Sofeh (socle) from which a fountain spurted out. The spot had a splendid view of the city, gardens and the river. The Hezar Jarib garden was characterized by various terraces stepping up from the gateway to the highest terrace on the skirt of the Sofeh mountain. An octagonal palace was exactly located in the center of the garden, overlooking the
magnificent scenery of the town. The Hezar Jarib layout was an exception in the entire Chahar Bagh architectural pattern. From the Safavid town plan, it is apparent that the garden constitutes an extremely important feature in the overall urban conception. Its huge scale and the location at the end of the Chahar Bagh gardens, rather to one side, characterized it as a salient and vigorous termini for the gardens’ assembly. Moreover, erected on the slope of the mountain, it effectively dominated the whole gardens. (fig. 17a-e)

The garden of Hezar-Jarib was built in a series of terraces, held up by stone walls. The number of the terraces are reported differently by observers: Thervenot, in his *Travels into Levant* (1687), first states that there are six, but when he starts climbing them, the result ends up being eleven. Sir Thomas Herbert states that there were ‘nine easy ascents’ but he may be referring to steps, not terraces. From all accounts, however, the Hezar-Jarib, must have been very large and steep.

“Hezar-Jarib” means ‘a thousand arpents’ and as the arpent was about half an acre of land then the area of this celebrated garden must have been extensive. Herbert paced the garden and found that from north to south it was a thousand of his paces, and from east to west seven hundred, surrounded by a wall three miles in circumference. The description then continues, on the normal lines- pools of white marble, summer houses, fruit trees – in fact, Herbert goes so far as to call it a ‘fruit forest’ rather than a garden. Water was lacking, for it was brought by aqueduct from ‘the Coronian mountain’. Water was there, and spouted from lead pipes ‘in a variety of conceits’. The effect of this great garden is clearly conveyed by Herbert’s description (1677):
Gardens here for grandeur and fragour are such as no City in Asia out-vies; which at a little distance from the city you would judge a Forest, it is so large; but withal so sweet and verdant that you may call it another Paradise: and Agreeable to the old report Hortic Persarum erant amoenis-simi. At the west end of Spahawn[ Isfahan]is that which is called Nazer-Jeree[ Hezar-Jerib]; a Garden deservedly famous. From the Mydan[ Maydan-i Shah] if you go to this Garden you pass by Cherbaugh[Charhar-Bagh], through an even Street near two miles long, and as broad as Holborn in London, a great part of the way being Garden-walls on either side the Street; yet here and there bestrew'd with Mohols or summer - houses; all along planted with broad - spreading Chenaer [plane]trees, which besides shade serves for use and ornament. Being come to the Garden (or rather fruit-Forest) of Nazer _ Jeree, you find it circled with a high wall which is about three miles in compass, entered by three Gates that are wide and well built. From North to South it was a thousand of my paces; from east to west seven hundred; and the prospect from one end to the other easily and fully discovered, by reason there is a fair open Ile (like that in Fountaine-bleau) which runs along, and is formed into nine easie ascents, each surmounting or rising above the other about a foot, all being very smooth and even. In the center or middle of the Garden is a spacious Tank, formed into twelve equal sides, each side being five foot, set round with pipes of lead which spout the liquid element in a variety of conceits: and that sort of pastime continues to the North Gate, where is raised a pile for prospect and other sort of pleasure, antickly garnished without, and within divided into six rooms: The lower is adorned with Tanks of white Marble, which fume out a cool
breeze by quaffing so much crystalline water as makes it bubble there by a constrained motion; the Aquaduct being brought by extraordinary charge and toil thither from the Coronian Mountain.19

J. De Thvenot adds more details in 1687:

This garden hath 6 stories of Terrasses, the earth of which is supported by stone walls, and these stories are raised about a fathom in height one above another. There are a great many alleys or walks... The chief walk that begins at the building is very broad, but that which renders it altogether charming, is a stone canal in the middle of it – of the same breadth as that of Tchaharbay.20 [Chahar-Bagh]. The canal of this walk is far more beautiful than that of the street and affords a lovely prospect, in regard that at every 2 fathoms distance there are pipes which spurt up water very high and at each story there is a sheet of water, that falls into a basin underneath that from whence it runs into the canal. On each side of these sheets of water, there is a pair of stairs and a way that leads straight up...

Mounting up to the 4th story, you’ll find a large place where there is a basin of 8 sides, above 20 fathom in diameter, and 3 foot deep of water; it hath water pipes that play all round it, besides one in the middle. On each side of this place you have a large covered divan built of brick, but open on all hands, with basin of water in the middle. These are really charming places, especially for enjoying the cool... Having ascended 3 stories more, you come to a pretty high building; to the front of this building there is a basin of water. Then you enter into a hall open on the 4 sides, at each corner whereof you’ll find little
rooms. Over that there is another story ... much the same. From that hall you enter into the other part of the garden; there you have the canal and sheets of water in the same manner as the other ... Having mounted the 6th story you'll find an octagon basin with a divan or kiosk on each hand. After you have ascended 3 stories more, you pass over a canal 3 fathom broad which runs across ... the garden. 21

Other aspects of the creation of the Chahar-Bagh, mentioned by travelers and contemporary writers, mostly attribute the establishment of the Chahar-Bagh for entertainment, the pleasure of its glimpses and shaded spots on hot, glazing summer days.

II.3. Urban Importance of the Chahar Bagh

The Safavid Chahar-Bagh, was essentially a garden, whose shaded walks made it a promenade on a large scale; moreover, its paths facilitated access to the royal gardens of the Hezar-Jarib to the south of the river, over the Allah-Verdi Khan bridge. In addition, the Chahar-Bagh with its long north-south axis, marked the urban pattern of the town. Two points of view revealed this crucial effect:

First the Chahar Bagh landscape gardening and architectural expression created a new pattern and altered the image of the town. Moreover, the use of a long vista flanked by the rectangular shape of the walled gardens and the use of apparently endless arcades to define an enclosed space, found an analogy in the Maydan-i-Shah, the courts of the
mosques and the courtyards. The Chahar Bagh avenue reflected the regular, ordered elevation of the Shah Square with the symmetrical entrance recessions.

Secondly, the Chahar-Bagh linked the four segregated town quarters together; the Abass-Abad, the aristocratic quarter to the north west of the Chahar-Bagh and the old town in its north east were connected to the Julfa, the new Christian quarter in the south west, and the Zoroastrians' settlement in the south east.

Andre Godard in his *Art of Iran* denies the importance of the urban impact of the Chahar-Bagh; by contrast, S. M. Habibi, consciously addresses the effect of this avenue on the Safavid town scheme, particularly its role for unifying the segregated neighborhoods and giving them a direct access to the centre of the town.22

To reveal the accuracy of the Chahar Bagh layout, the study compares a recent plan proposed by D. Wilber in his *Persian Gardens and Garden Pavilions* with E. Kaempfer's lithograph drawn in 1685. Wilber in his *Persian Gardens and Garden Pavilions* reconstructed the plan of the main thoroughfare of the Chahar Bagh, located between the royal complex and the river. Apparently his sources in this drawing does not match Kaempfer's description of the site. Wilber particularly says 'four charming pavilions' were scattered among the trees:-- the Guest House, the Building of Paradise, the Hall of Mirrors and the Building of the Sea.23 In his drawing, he clusters these four pavilions around a court embracing a pool in the center. Wilber's reconstruction raises the questions of the unusual organization of these pavilions and their improper
locations between the royal gardens and the Chahar Bagh. In fact, Wilber’s proposal does not depict the numerous, integrated palaces in the royal complex and he particularly neglects its angled attachment to the Chahar Bagh. Apparently many other contemporary sources referred to Wilber’s plan and repeated the same inaccuracy.\textsuperscript{24}

Comparing the Wilber’s plan with Kaempfer’s lithograph, (fig 11) the difference in spatial arrangement and complexity is evident. If we transfer Kaempfer’s perspective to a two dimension plan, coordinating existing structures such as the Shah square, Ali Qapu, etc, the location of some vanished Safavid urban elements match their parallels in the existing city map. (fig. 19a)

The contradictions in the Wilber’s plan can be identified as follows:

1-The rah-i basteh (closed way) connected the royal complex to the start of the Chahar Bagh avenue and the ‘Jahan Nama’ pavilion, does not appear in Wilber’s plan at all. While the present Gultasteh Avenue lies exactly on the track of this old road- rah-i basteh.

2-The distinct octagonal Guldasteh garden has been neglected and been replaced by the aggregation of the four pavilions: the Guest house, the Building of Paradise, the Hall of Mirrors and the Building of the Sea. Regarding the formal pattern of a chahar bagh garden- a rectangular lot, intersected by four walkways with a single building in the middle- the composition of these four pavilions around a central pool seems to be odd.
3- The extensive service area is reduced to the kitchen and the Talar-i-Tavila (Palace of Stable) is the only palace of the entire royal complex shown on the Wilber's plan. (fig. 19b)

Wilber’s reconstruction of the Chahar Bagh was apparently based on the Chardin descriptions. Considering that Chardin himself never visited these private royal residences, the incorrectness of the Wilber plan is not surprising.

The entire Chahar Bagh gardens except the Hasht Behisht have vanished today but their layout can still be partially traced from the existing neighborhoods, paths, and such natural tracks as the canals (madis). Some present names such as Bagh-i Zereshk, Tavos Khaneh and Chahar Rah-i Nazar evoke the Safavid gardens as well. Such signs are indeed reliable evidence to identify accurate locations of the gardens.

The present study sets out to reconstruct a full schema of the Safavid gardens of the ‘Chahar Bagh’, relying on Persian literature, the writing of western travelers, and present-day local street and neighborhood names in Isfahan. Accounts given by local residents will also provide supporting evidence. The names and location of the Safavid gardens are depicted in fig( 20). The plan is proposed on the existing map of the town. The reconstruction of the Chahar Bagh avenue and gardens leads us to a better understanding of the context and reasons for their creation discussed in chapters IV and V respectively.
Notes on Chapter II:


2-Chardin. Ibid. P. 49

3-Tavernier, Jean –Baptiste, Voyage en Perse, Paris, 1692


5-Pope. Ibid, P. 1409


7-Chardin, Ibid, P. 58

8-It's worth mentioning that despite the lack of any archeological research for the Chahar Bagh, some Safavid monuments were the subjects of extensive studies. See note 4, P. 7


10-The first phase of the building of the Maydan-i-Shah included the construction of Qaisariyya and an enclosure of a single-story arcade in 1595. In the second phase dating 1602, a second row of shops opening directly onto square was added to the complex.

11-Chardin, Ibid, P.56

12-Chardin, Ibid, P. 380


14-Chardin Ibid, P. 57

15-Fryer, J. A new Account of East India and Persia, 1693, P. 240


18-Wilber, Donald, Persian Gardens & garden Pavilions, Tokyo, P. 107
19-Herbert, T. Some Years Travels into Africa and Asia, London, 1677, P. 165

20-It is worth mentioning the various misspelling and mispronunciations of the Chahar Bagh recorded by various travelers who visited Isfahan:

1-Mendelslo (1639) Tsarbagh
2-J. Chardin (1666) Tcharbagh
3-T. Herbert (1677) Cherbaug
4-J De Thvenot (1687) Tchaharbag
5-Dr. J. Fryer (1693) Chaurbag
6-G. N. Curzon (1892) Chehar-Bagh

21-Je De Thevenote, The Travels of M. DeThevenote into the Levant, London, 1687, PP. 82-83

22-Gudard, Andre, Art of Iran & Habibi, M. Maktab Isfahan, Sofeh Journal, Tehran, 1997, No. 23, P. 1-14

23-Wilber, Ibid, P. 97

24-This map is repeated in the Ardalan, N. and Bakhtiar, L. The Sense of Unity, The Sufi Tradition in Persian Architecture, which has been the reference for many other contemporary writings.

25-Jaber Ansari in his The history of Isfahan describes the numbers and characters of the Safavid gardens, Pp.355-364. Honarfar, also mentions some names and their measurements. The present names like Bagh Takht, Bagh Zereshk, Chahar Raheh Nazar, and Tavos Khaneh. are evidence for the Safavid gardens' locations.

26-comparing the layout of the Safavid Chahar Bagh with European gardens in 17th century, one conceives the differences. A rhythmic urban façade was repeated in Chahar Bagh through the exterior walls of the chahar baghs' aggregation. In the other hand, In such French gardens like Vaux-le-Vicomte and Versailles, the monumental palaces were set on one side and an axial open space cut the mass of woodlands. The 17th century English gardens shows, influenced by French style with its open, undulating landscape, in contrast to the thick forest of France. For more information about European gardens see Crowe, S. Garden Design, Packard Publishing Limited,1981 and Bazin, G. Paradiseos, The Art of Garden, Cassel Plc and Little, Brown and Company,1990.
9- General layout of a *chahar bahg*:

1-stream & walkway  
2-pavilion  
3-wall  
4-orchard  
5-*Imarat-i-Sardar* (gateway's building)
10a-Persian 'Garden' carpet

10b-Part of the Safavid Chahar Bagh avenue
11-Safavid Royal complex & the beginning of the Chahar Bagh Avenue

Kaempfer's lithograph- 17th century
13. Safavid entrance gardens' gateways in decay - early 20th century

14. Gudasteh pavilion - early 20th century
15-Chahar Bagh Hezar Jarib- 17th century

16a-Zereshk garden

16b-Zereshk garden- early 20th century
fig. 17a- Hezar Jarib Garden

Hezar Jarib garden

fig. 17b-Plan of the Main Pavilion & Talar

fig. 17c-Main walkway

fig. 17d-Pavilion flanking the great pool

fig. 17e-Pigeon corner tower
Reconstruction of the Chahar Bagh

Wilber's plan
19a-Wilber's plan

1. Charh Bagh avenue
2. Bagh e Khurgah
3. Haft Behesht
4. Four buildings
5. Chehel Sotun
6. Kitchens
7. Talar e Tavilel
8. Shah mosque
9. Ali Qapa
10. Neydan e Shah

19a & 19b-The royal complex and the beginning of the Safavid Chahar Bagh:

1. Charh Bagh avenue
2. Bagh e Khurgah
3. Haft Behesht
4. Goldasteh garden
5. Rah e Basteh (closed way)
6. Shah residence
7. Khosht garden
8. Chehel Sotun
9. Kitchens
10. Talar e Tavilel
11. Shah mosque
12. Ali Qapa
13. Neydan e Shah
14. Shah Nama Palace

19b-Reconstruction of the Kaempfer's lithograph on plan
1-Khalvat Garden
2-Chahel Sotun Garden
3-Khergah Garden
4-Haft Gooch Garden
5-Takht Garden
6-Haft Bahast Garden (Bolbol)
7-Tootestan Garden
8-Takhtestan Garden
9-Ghaffar Khan Garden
10-Shir Khanesh Garden
11-Gangali Khan Garden
13-Zarenhke Sofia Garden
16-Esmadar-o-doleh Garden
17-Zareshk Olya Garden
18-Hatam Beig Garden
19-Nazhe Garden
20-Mir-Akbor Garden
26-Divan Beigi Garden
27-Osuleh Garden
28-Mehrvar Garden
30-Ocharchi Bashir Garden
32-Darougheh Garden
33-Hazar Garb Garden

20-The proposed reconstruction of the Chahar Bagh on the town existing map
CHAPTER III

Chahar Bagh, Origin and History
Accounts exist tracing the Achaemenid and Sassanian garden plans. We may regard Cyrus (500 BC) as the first Persian gardener to be mentioned in the literature. The Achaemenid garden was already set out in precise alleys and rectangles, with carefully symmetrical plants. The layout of a chahar bagh garden with the application of symmetry, use of defining watercourses, avenues, the closure of vistas, terraces and pavilions existed before Islamic times.

A single standing palace or pavilion (Kushk in Persian) was intimately integrated into the early Persian garden. Such an example goes back as early as the sixth century BC at Pasargade, the palace of Cyrus. This Achaemenid garden consisted of geometric paths and symmetrical arrangements of plants. (fig. 21) Xenophon in his Oeconomicus addresses how Cyrus personally was involved in the planning of his large garden at Sardis, for which the observer was full of admiration remarking the beauty of the tree, the accuracy of their spacing, the straightness of their rows and the regularity of the angles. One of the Achaemenid palaces, called the Garden pavilion, was a rectangular platform with open porches, probably columned, added to each of its shorter sides. The long porticos of the two palaces, extending well beyond the columned halls, and the northeastern porch of the pavilion were designed to serve the royal court as galleries from which to enjoy the prospect of this garden. The pavilion with its exterior element, Ivan (porch), was a companion for the Persian garden from the sixth century BC.
The evidence is that both the ‘Imarat-i Khusraw’ (Palace of Khusraw) and the ‘Hash Kuri’ palace in the Sassanian period, were set symmetrically in parks. The whole layout of the ‘Imarat-i Khusraw’ stood in a walled precinct, the Paradise park, and the west-east axis was marked by a narrow water channel. The cross axis was defined by a large terrace in front of the building, and an approaching ramp on either side. (fig. 22) Such gardens as the Bagh-i-Shirin, (sweet garden), the Bagh-i Shahriyar (royal garden) and the Sarvesitan (cypress garden) all date to the Sassanian period. (591-628 AD) 2

The typical Sassanian garden, in fact, was a quartered garden, a chahar bagh that was elaborated with subdivisions. This scheme was a system of parallel lines to both axes and more often the longitudinal axis dominated with the repetition of a minor path echoing the transverse. The main axes were formed by canals and long avenues, the minor axes by straight paths, and the intersections were often marked by a pool or pavilion. Thus, there was a typical relationship between the pavilion or palace and a formal garden which required an ornamental pool or canal. Moreover, this pattern followed the design of prehistory painted tiles from Bala Jan site, with crossed lines defining four beds. (fig. 24a-b)

Later, the pattern for the Persian garden was incorporated into the Islamic world and traveled to Syria, Egypt and Maghrib. Thus, it can be concluded that some Persian practices influenced the artistic and political life of Islam. The example of the Persian garden in the chahar bagh pattern, can particularly be traced in Samarra, the Bulkanara palace (849-859 A.D.). It was approached through a succession of three courts, all
quartered by intersecting paths and watercourses. And the other end was a quadripartite garden (*chahar bagh*), flanked by pavilions and overlooking a river.

The integration of garden and pavilion was revived in Buyids’ capital, Shiraz in 10th century, and this close relationship redefined the function of the garden. The contemporary sources tell us about their two storey palaces, around which were laid out orchards and groves. Streams were introduced into the palace for coolness, and they flowed through the rooms and arcade courts, implying a close connection between the indoor and the outdoors. These are illustrated later by Persian miniaturists.

The word *Bagh* used to denote an entity comprising both the palace and the garden during the Seljuqs time (11th-12th century). Mafarukhi tells us about the suburban Seljuq gardens in Isfahan. The ‘Bagh-i-Karan’, overlooked the river to the north of the present Khwaju bridge, planted with cypresses and fruit trees- the combination was to be a principal in Persian horticulture. Hafez, the great Persian poet-mystic (14th century) praises the river and the garden in his *ghazals*:

\[
\begin{align*}
\text{گرچه رودخانه‌های سرخ رنگ‌دار\hspace{1cm}}&
\text{گرچه رودخانه‌های سرخ رنگ‌دار}\hspace{1cm} \\
\text{زندگی‌می‌زند و در خیالم\hspace{1cm}}&
\text{زندگی‌می‌زند و در خیالم}
\end{align*}
\]

Though a hundred rivers flow before my eyes,

Zenderud and the Bagh e Karan shall linger in my memory.

In the mid 15th century, we have the description of the palace of Hasht -Behist in Tabriz being built for the ruler, Uzun Hasan. The palace had an octagonal layout in two stories.
A large dome embellished with paintings covered the central area. There were entrances on four of the eight sides which were in the form of a porch. There was an enclosed wall around the vast garden with portals on four sides. The eastern entrance had a building with galleries looking onto the garden and outward onto a great *maydan* (square). It seems that the architectural pattern of this palace was followed in the Hasht Behisht in Isfahan in 17th century.

The Timurid used the setting of the Persian garden in their own tradition for the nomadic encampment, providing numerous gardens in Samarkand. The description of these gardens was reported by the Spanish ambassador, Clavijio. There were orchards with fruit trees and avenues of shade—bearing trees but nowhere does he mention flowers. The Persian names of these gardens *Bagh-i- Delkusha* (garden that delights the heart), *Bagh-i- Gul* (garden of flower) were frequently used for the gardens from the 13th to 19th centuries. The pattern of the *chahar bagh* can also be traced in the Herat, in the ‘*Jahan Nama*’ garden, and the ‘*Bagh-i-Chenar*’ (garden of plane tree). Wilber believes that the ‘*Bagh-i-Gul*’ had palaces built on an artificial eminence raised in the centre of the garden and surrounded by water.

In 1508 Babur attempted to construct a *chahar bagh* with the name of ‘*Bagh-i-Vafa*’ (garden of fidelity). A miniature in the Persian *Babur Nameh* illustrates the lay out of this garden. In this painting, now preserved in the Victoria and Albert Museum, the four plots are shown just within the entrance portal of the garden. They were raised about three feet above the surrounding ground and quartered by two watercourses intersecting
at right angles. (fig. 25-a). Numerous Persian miniatures depicted the pattern of the *chahar bagh* after 15th century. (figs. 24 b-d)

Probably the best document describing the layout of the *chahar bagh* is the *Irshad az Zara* by Qasim ib Yusuf, composed in Herat, in 1515. In his last chapter, Qasim depicted the layout of the *chahar bagh* and its pavilion. There are many details about the plants and trees. Thus, *chahar bagh* was an enclosed rectangular garden, the larger side was parallel to the north, to allow for water flow. Two streams ran through the garden, the main one joined the central pool in the pavilion. There were four plots, each with a single species of fruits tree and planted round with clover. The shade-giving trees were restricted to the outer bank of the first stream, the fruit-bearing trees planted singly or grouped in four plots and the flowers in the same manner.9 Various attempts have been under-taken to reconstruct the *chahar bagh* described in the *Irshad*. All versions agree that the garden had an oblong plan with the main building on a terrace set at the southern end of the main axis formed by a channel flanked by paved walkway.

The *Irshad az Zara* represents primary evidence for how late Timurid traditions could have been handed down to Mughal India. Babur, the first Mughal (1526 – 1530) is credited with having introduced the *chahar bagh* into the India. However no gardens of this description survive which can be attributed with certainty to Babur or one of his followers. Babur and his descendants laid out their first garden at Agra on the banks of the Jamuna River. The design later traveled to Delhi by the time of Akbar (1556–1605)
Agra in the time of Akbar consisted of bands of gardens lining both sides of the river Jamuna.¹⁰ (fig. 26a)

The urban lay out of the waterfront Mughal gardens consisted of both the funerary-the Taj Mahal-and residential plans. The idea of monumentality and the representation of order was achieved with a high, continuos stone plinth along the river. In the latter half of the 16th century, the Mughal gardens were elaborated by the erection of marble and sandstone palaces, which retained hierarchic arrangement of the enclosures and were furnished with pools, canals and fountains.

It seems many details of the ancient and 15th century Persian gardens anticipated those of Shah Abbas I and his successor in Isfahan (1595 – 1722). The term chahar bagh (four gardens) in particular was applied to the famous Chahar-Bagh avenue in Isfahan afterward:

The King's garden, which they call Tsar bagh [Chahar Bagh], is no doubt, one of the noblest in all the world.... which hath spacious walks on both sides of it, divided it into a cross, so that it seems four garden of it.¹¹

Although M. Alami tells us that the combination of khiyaban (street) and the square existed in the pre-Safavid Persian cities, Pope confirms that the Safavid 'Chahar Bagh' was the first urban thoroughfare embellished with planted trees and flowers.¹²
Reviewing the long history of the *chahar bagh* one can conclude that the urban layout of the Safavid gardens was unique in terms of representing a congregation of many gardens in a regular, planned urban axis, perpendicular to the river. In contrast, the Mughal gardens, stretched along the Jamuna river, were bound to the waterfront; they followed the topography of the site and were integrated into the movement of the river. Consequently, the Mughal garden had a less formal setting than the 'Chahar Bagh' avenue in Isfahan. (fig25-26)

There is a trend in contemporary sources to compare the architecture of Safavid Hasht Behisht to that of the Taj Mahal:

Burial under collateral domes explains the ground plan of the Taj, which goes back to a Central Asian prototype, whose linear descendant in Persia is the Hasht Bihisht palace in Isfahan.  

Lisa Golombek clearly states how the Hasht Behisht plan came to India. Babur, a descendant of Timur, was brought up in a Persian milieu in Central Asia. Humayon, Babur's son during his exile took refuge with the Safavid monarch Shah Tahmasp in 1544 before returning to the throne of India. Babur took particular notice of the palatial gardens in Herat. The experiences of Babur and his son in 'Iran and the Timurid Central Asia no doubt had an impact on them which was transmitted to their heirs':

The Taj appears to be the epitome of Persian architecture, this is because it is retrospective... The Taj has paradoxically been considered the chef d'oeuvre of Persian architecture... The process by which Timurid ideas were transformed in India is an
important and complex chapter in the history of culture borrowing to which the Mughul Tombs may add a footnote. ¹⁴

Comparing the architecture of the Taj and the Hasht Behisht in Isfahan, apparently, their contradictions are more than similarities. The monumentally, huge structure of the Taj with its high dome, and the tremendous dimensions and composition of the four tall corner towers have nothing in common with the tiny, delicate Hasht Behisht. The latter with its plain roof, four open talars and slender wooden columns seeks its origin in the pre-Islamic Persian architecture. The soft piano concerto of the Hasht Behisht shares only a soloist - the octagonal plan- with the loud symphony of the Taj. (fig. 27-28)

More sources of the Hasht Behisht can be sought an early example of the Safavid architecture, with the same name, built by Shah Tahmasp in Qazvin in 1543. The first archetype of the Hasht Behisht was erected in Tabriz by Uzon Hassn, offering considerable parallels to the Safavid palace in Isfahan. Many details of Uzan Hassan’s palace and garden seem to anticipate those of Shah Abbas I and his successors.

Moreover, comparing the function of the two buildings, the Taj is a funerary monument, built by Shah Jahan for his beloved wife Momtaz Mahal while all of the Safavid garden pavilions were residential or devoted to leisure and strolling.

The popular Mughal gardens, which have been the subject of several contemporary studies, bestowed no new message for the Safavid designers. These gardens were
indeed the results of Persian architecture, being introduced to India by Timurid and Indian Moslems from as early as the 12th & 13th centuries. Neither the ‘Chahar Bagh’ urban layout nor its gardens’ architecture can be taken as the ‘linear descent of’ the Mughals’. In fact they were purely Persian:

The Safavids look upon the Achaemenid kings, emulating their role as cosmocrators, as well as using certain architectural and decorative motifs.¹⁵
Notes on Chapter III:

1. D. Stronach, "Excavations at Pasargadae, Iran", in Journal of the British Institute of Persian Studies, 3f, 1965, P. 31
3. Bagh in Persian language means "Garden"
7. For more information about Timurid gardens see G. Le Strager, Clavijio: Embassy to Tamerlane, 1403, London 1928 & Lisa Golombek and Donald Wilber, Ibid
8. See Wilber, Persian Gardens and Garden Pavilions, pp. 53-67
11. Munshi, Ibid, P. 545
14. Golombek, L, From Tamerlane to The Taj Mahal, P. 43-49
21-Pasargade Palace & garden

22-Imarat-i-Khusraw (Khusraw Palace)
23a-23b-Pre history painted tiles
24a- The pattern of the chahar bagh in Persian miniatures

24b- Babur & the designer discuss the plan of the Vafa garden
24c&24d. The pattern of the *chahar bagh* in Persian miniatures.
25-The Mugal front gardens in Agra

26- Safavid gardens in Isfahan
27-Taj Mahal- Agra

28-Hasht Behisht- Isfahan
CHAPTER IV

CHAHAR-BAGH - SYMBOLIC MEANING AND INTERPRETATION
As mentioned in chapter III, the physical structure of the Safavid Chahar Bagh gardens in Isfahan originated from the pattern of the pre-Islamic Persian gardens. In this chapter, the study approaches the relevant contexts and underlying influences, in order to interpret the particular architecture of the famous Safavid thoroughfare and its extended gardens. Three major ideologies influenced the pattern of the Chahar Bagh: First the ancient Persian cosmology and mythology. Secondly the Quranic expressions of the celestial gardens. And finally the Islamic traditions, in particular the cosmology of Ibn-Arabi, the famous Islamic mystic. The Jahan Nama pavilion and the Hezar Jarib garden and pavilion are the fundamental architectural expression through which the symbolic meanings of the Chahar Bagh avenue may be defined.

The ancient Persian cosmology and mythology:

The joining of the two Persian words chahar (four) and bagh (garden) as mentioned referred to a 'quadripartite' garden. The number four in early Persian symbology relates to the four cardinal directions, four winds, four seasons, and the four gates to heaven. Phyllis Ackerman addresses the notion of heaven through four cardinal directions:

The notion of four cardinal points is the next step beyond the conception of the dual division of the sky, which already defines roughly east and west; and the advance, where by north and south are added may have been facilitated by visual representation of a bisected heaven.¹
Moreover, the idea of the universe as divided into four quarters usually by four rivers, the title of "King of four world Quarters" and the division of Sassanian subjects into four estates reflect the same idea. Persepolitan iconography relates this "cross motif" to the four divisions of the universe. (fig 29)

Another fourfold geometrical figure, however, may have a different meaning. This motif, which is especially common on early stamp seals, is likewise built on a cross. The arms, however, are not positive features, but rather only the means of dividing the field into units, which are emphasized by contrasted hatchings. This is probably the beginning of the conception of a universe divided into four quarters which is so important in Iranian thinking, for not only does the four-quartered universe continue as a cosmological idea, but it is also reflected in Iranian social organization into four classes, a division still recognizable in the main outline of the Indian caste system.²

The design of a quartered garden, chahar bagh, was probably not conceptualized much before the death of Cyrus in 401 BC. However, the existence of this pattern in early times is confirmed by Herzfeld's discovery of a pottery bowl at Samarra thought to date from 2000 BC and showing "crossed canals defining four beds each with a tree and a bird." This is the orthodox plan of a chahar bagh design of extreme formality, emphasizing the accuracy and the regularity of the rows and angles.

This mentioned pre-Islamic scheme has much in common with one found in the Aryan villages: Two diagonal thorough-fares intersected at a spot marked by a tree, underneath
which elders sat; the quarters served to separate the castes. Therefore it can be concluded that, in fact, the plan of the *chahar bagh* was based on this geometrical principle, until it acquired something of a mystical quality in the conception of the division of the garden into four quarters, the shape of the cross.

The plan of the four parts of the world was also evident in the old Persian towns, originating in Parthian times. There was a gate at the centre of each of the four walls at the end of the axial avenues. The plan was manifested in Jay, one of the twin pre-Islamic cities in Isfahan (to 768 AD). As Lisa Golombek describes, referring to Mafarruki:

> The outer walls had four gates located so that the sun rose and fell in the two northern ones in the summer solstice and in the two southern ones in the winter solstices (fig 30)

The intersection of the north-south line of the Chahar-Bagh Avenue and the east-west axis of the Zayandeh Rud, the river, divided the Safavid town into four sections, recalling the layout of a *chahar bagh* in micro scale and again an allusion to the cosmological idea of the four quarters of the Universe.(fig 31) The division of the town into this pattern, conveys a social segregation as well; each of its four parts was occupied by an ethnic group. The main fabric of the Safavid town was concentrated in the north-east of this cross where the Muslims, the major population of the town, resided. The north-west quarter, the Abbas-Abad, was occupied by the aristocracy of the court—“a most attractive part of the city”. The new Christian colony of Julfa filled
the south–west part while the Zoroastrians lived in the south–east. In this concept, the city of Isfahan was set in the pattern of a *chahar-bagh*, and again was a testimonial to the importance of four divisions in the Persian mind.

In architectural context, the Persian expressions of the *Chahar-Sufa* (four porches) in pavilions and court houses, and the name of the *Chahar-Sue* (four directions)- referring to the intersection of two linear Bazaars or two roads- convey the number four as well. Chardin in his *Travels*, also describes the *Chahar Huz* (the four basins), a square surrounded by trees to the west of the Shah Square in Isfahan in the 16th century.

Trees were symbolic in ancient Persian culture; the cypress tree on the Persepolis stairs was a feature in the ceremonial process of the new year. The bearded lunar divinity of the Luristan bronze makers is associated with the palm. Moreover, the Sassanian palace of the Tahkt-i-Taqdis was set in the centre of a thick grove of trees. And, again, when the virtuous Zoroastrian dies, he finds himself, at the end of the third night, among plants, inhaling fragrant odors. And there seemed to blow towards him from the regions of the south, where Paradise is situated, a wind fragrant, more fragrant than all others.

The motif and legend of the pre-Islamic Iranian culture reveals that the cypress was a sacred plant, having been brought from Paradise and planted by Zoroaster himself in Khurasan.⁴ Being an evergreen tree, the cypress symbolized eternity as well. The cypress relief, covering the entire Grand stairs of Perspolis, symbolized the eternity of the Achaemenids kingdom. The idea later appeared in the Chahar- Bagh gardens.
The Islamic and Quranic declarations concerning the celestial gardens:

Ikhwan Al- Safa, a Persian scholar in the Islamic period, in his Rasa'il has a scientific view of the number four. For him, the number four symbolizes the fourfold polarization of universal nature into the active qualities of heat and cold, and the passive qualities of moistness and dryness, which in their various combination form the elements.  

Verse 16 of Sura 47 of Quran suggests an image of the four rivers as well.

This is the similitude of Paradise which
The god-fearing have been promised.
Therein are rivers of water unstalling,
rivers of milk unchanging in flavor,
and rivers of wine- a delight to the drinkers,
rivers, too of honey purified and therein for them
is every fruit and forgiveness from their Lord.

Thus, the idea of paradise as a reward (the bliss of the otherworld) for the faithful Muslim was the most enticing image of a cool shaded garden. One of the most important features of the Chahar-Bagh gardens, so pleasantly shady, was a “running fountain”- “shades and fountains and such fruits as their hearts desire”. Water was essential for the cross shape of the life giving canals. The climate and altitude of the area should be considered as well. The dry, sunny, shimmering heat, and poor rainfall (4.5 inches a year) were associated with 97 F temperatures in summer. Thus, in such a region as Isfahan, each garden was meant to be a tiny Paradise on earth. Particularly, a formal garden like the chahar-bagh, was a higher form of relief from hot and arid surroundings. And the desire for seclusion, shade and coolness and water was an earthly Paradise for exhausted dwellers on a burning day:
And besides these shall be two gardens
green green pastures
Therein two fountain of gushing water
Therein fruits, and palm trees, and pomegranates
Therein maidens good and comely
houries, cloistered in cool pavilions

The Quranic expressions of the celestial gardens are quite consistent and give us a vivid impression of greenery, gushing fountains, streams and sensual beauty to be found in that place, which later the rulers like Shah Abbas I endeavored to recreate on earth. The water and plants, thus, were direct symbols of God's Mercy. The concepts of Mercy and water- in particular rain- are inseparable in the Quran. The idea of Revelation which literally means 'sending down', is described as Mercy and both are referred to as 'life giving'. The Chahar Bagh basins, symbolizing the fountains in paradise, were in the shape of octagon, square and circle. The octagon, a traditional geometric form, was generated from the combination of the circle and square. The circle recalled heaven while the square was a replica for earth.

"Gardens beneath which rivers flow", seen as rewards for righteous belief are the most powerful and memorable images of heaven:

1-I will remove from you your ills and will admit you to gardens beneath which rivers flow. (A1- Maida) 5:10
2-God has promised the believers, men and women, Gardens beneath which rivers flow, wherein they will abide, and delighted dwelling places in Gardens of Eternity.
The Safavid Chahar-Bagh, particularly evoked the famous expression, "Gardens underneath which rivers flow", which is frequently used in the Quran. In addition to the central canal, three streams crossed underneath the Chahar-Bagh avenue; the Niyasarm, Juy Shah and Farshadi canals, originating from the Zayandeh Rud, passed the suburban farms and gardens and reached the gardens of the Chahar-Bagh. They crossed beneath this avenue and continued their way to the eastern part of the town. (fig 32) Two of these streams still exist and Niyasarm is the largest one in the city. These canals (Madi in the local language), were constructed by Sheikh- Bahaie, the Shah Abbas’ scholar minister, to irrigate the gardens and agricultural lands of the area. The Farshadi canal entering the Madrassah-e-Mader-e-Shah along the Chahar Bagh, plays a vital role in creating the deep silence and tranquil atmosphere within the school courtyard. The Quranic image of the river assisted the Safavid planners to design the canals and basin along the Chahar-Bagh avenue and its surrounding gardens.

The Tuba, the heavenly tree, gives the faithfull eternal bliss:

Those who believe and do good works
Thiers is blessedness [tuba] and a fair resort 10

In addition, Islamic tradition documented that the prophet Mohammed experienced the “Signs of his Lord” in a manifestation of the Lote tree:

The prophet stated truly that which his heart had experienced....He experienced it a second time, near the farthest lote-tree, close to which is the Garden of Eternal Abode, at the time when the lote- tree was enveloped in Divine glory. The Prophet’s eye did not deviate from the greatest Signs of his Lord.11
Chenar, the most common tree in the Chahar Bagh Avenue was a tangible earthy manifestation of the ‘Tuba’, the celestial tree mentioned in the Quran. There was no rest without shade from the harsh, brilliant rays of the sun and relaxation required thick foliage. Chenar was believed by the Persians to be a safeguard against the plague as well. Planes and cypresses were popular trees in Persian miniatures from the fifteenth century on.

Entering the gardens of Chahar-Bagh, one was gradually absorbed their beauty; the sound of the water and cascades drowned out all preoccupations of his soul and a sense of peace led him into a state of contemplation of Divine unity. The endless flowing, splashing and trickling water of the Chahar Bagh gardens was one the most evocative presentations of the Garden of Paradise in the Islamic world. The sound of the water had the miraculous effect of silencing one’s own thoughts and allowing an overwhelming sense of peace to descend.

The Hazar Jarib garden and pavilion stood as the most fundamental architectural emblems in the Chahar Bagh complex. The link between the Hezar Jarib garden and the Jahan-Nama pavilion and their specific architectural compositions alludes to the Ibn Arabi ‘s cosmological plan. Therefore, the study specifically, seeks the symbolic meanings of the mentioned garden and pavilion.

The Jahan-Nama Pavilion:
At the upper extremity of the Chahar-Bagh avenue, the Jahan Nama palace, a three
story cubic palace was connected to the royal complex through a closed way. The cubic
shape of the palace can be defined as one of five "platonic bodies" which Al-Biruni
relates to the four elements; earth, water, air and fire:

These five are related by resemblance to four elements and the
sphere (universe) with regard to the five, they are first the cube
(hexahedron) bounded by six squares called "earthy". 12

It can be assumed that "earthy" was a gate, a passage from the royal precinct to enter
the Chahar-Bagh, the gardens of Paradise. Moreover, the cube or square represents
‘order, nature, and humanity- all things earthly’. The cube also manifests the stability
and solidity, represented par excellence by the Kabah. Not only is the Kabah a
manifestation of the House of God, but is also the center of the world to Muslims.

The name of this pavilion, Jahan Nama (world – portrait) acknowledges its function:
The women of the Haram, gazing unobserved upon the merry below, looked out upon
the center of the avenue. The name of the ground floor, Chahar-Fasi (four seasons), not
only emphasized the season alterations of nature in overlooking the gardens but also
symbolized the division of man’s life. In fact, from the porches and overlooking
windows, one could observe the opening of the flower blossoms as the arrival of spring
celebrated the Persian New Year. The shade of the thick foliage of the trees gave refuge
in the heat of summer and then, the autumn cast its various colours over the gardens.
Winter terminated the activity of nature, suggesting the decline and death which must
follow life in the world. The garden, thus, was a symbol of man’s life, portraying his
birth, youth, old age and death. It is thus, that the name Chahar Fasl captured the alternation of the seasons.

The Garden and Pavilion of the Hazar Jarib

The garden of Saadat-Abad or Hezar-Jarib, mentioned before, was very large and steep, located at the extreme end of the Chahar-Bagh axis. The Hezar Jarib garden was characterized by various terraces stepping up from the gateway to the highest terrace on the skirt of the Sofeh mountain. An octagonal palace was exactly located in the center of the garden, overlooking the magnificent scenery of the town. (fig. 17 chapter II)

The very name Saadat-Abad (abode of happiness) itself conveys the function of this garden and its pavilions, water jets and its carpets of flowers. The Sofeh mountain, at the south end of the Chahar Bagh, was a symbol of the cosmic mountain, 'Mount Qaf', shading the Hezar-Jarib garden and sending water from its “fountain of life” to this earthly Paradise.

In terms of symbolic context, the Hezar Jarib conveyed both the pre-Islamic Persian view and Islamic cosmology. A motif printed on Persepolis pottery represents the pattern and conception of the Hezar Jarib gardens, depicting two stepped lozenges, bisected by a wide straight line and sheltered in a semi circular opening. The triangle or 'lance head' and the half stepped lozenge symbolized heaven. The mountains also make a triangle and resemble the stepped lozenges. Between the mountain and the sky is a great void. This is the water of the cosmological river of the Avesta, flowing down the mountain.13 (fig.33) The stepped terraces of the Hezar Jarib garden was suggestive of these bisected lozenges, symbolizing heaven. The main axis of the garden became the
straight line in the center of the motif. The garden's pools and streams were the analogue of the cosmological river and finally the garden's wall was an archetype for the motif's circumferential square.

Herzfeld addresses the notion that Herodotus' description of the palace of Ecbatana (the Medes capital city- 600 B.C) was only a rationalization of the seven fold heaven myth. But since the Khusraw (Sassanid king- 200 B.C) built his palace as the image of heaven in accordance with the idea that the king was god's surrogate, probably the Median palaces represented an image of heaven on earth. In addition, Herodotus description that Sargon II( the Median King) constructed a royal complex with seven stories, confirms the same symbolic idea.

The concept of heaven was particularly depicted in the architectural setting of the Persian pre-Islamic palaces, called *Takht* (throne). *Takht-i-Jamshid* (Perspolis), the famous Achaemenid palace had extensive terraces, carved on the mountain. The same idea continued in Sassanid time with ‘*Takht-i-Taqdis*’ (throne of praise). There was an early Iranian belief of a triple heaven which was reflected in the symbolic ‘*Takht-i-Taqdis*’ of Khusraw II. The Safavid Hezar Jarib Pavilion followed the same pattern, included several terraces. Moreover, Sulaiman, the Safavid sovereign constructed a three -story platform (Thakh-i-Sulaiman) on the height of the Sofeh mountain, above the Hezar Jarib garden.(fig.35) The name ‘Thakh-i-Sulaiman’ evokes the famous Islamic expression, depicted in a sixteenth century Persian miniature.(fig. 36) Some scholars consider that the ‘throne’ evokes the concept of the sacred ‘mountain’ and
'high places' upon which the sacred fire burned in the Sassanid tradition. Therefore, such Pre-Islamic Persian palaces as Thakh-i-Jamshid and Takht-i-Taqtis were constructed upon a raised platform in order to instill a sense of greatness and the majesty of the monarchs.

It seems that the Persian word 'Takht', later affected the Islamic cosmology and the famous expression the 'Throne of God' was probably derived from this terminology. The word 'Takht' used to refer to one of the Chahar Bagh's garden as well.

Since the octagonal pavilion of Hezar Jarib dominated the entire Chahar Bagh gardens, it can be supposed that the building was intentionally designed as a replica of the heavenly 'Divine Throne', which according to tradition situated above paradise. Such multi-storied octagonal pavilions were represented frequently in Persian miniatures.

Most of the Islamic tradition and mystical writings, dealing with the concept of the 'Divine Throne', agree that it is absolutely vast, encompassing all of the created universe within its boundary. According to Al Moqadasi, the 'Throne' resembles a 'sarir' (a type of Persian royal throne), upon which God will sit at the Day of Judgement.

The 'Throne' rested upon an eminence called 'kursi' (The Divine Pedestal). Kursi conveys two Persian meanings, first a stall with four bases (the Peacock Throne is essentially an elevated square platform) and second the architectural eminence upon which a building is erected.
The celestial gardens of Paradise were exactly situated beneath the Divine Throne, which along with the Divine Pedestal, Mount Qaf and the ‘cosmic Tree’ are important features of Islamic cosmology. The ‘Tree of Life’, the cosmological tree, also appeared on early Persian pottery as an independent motif, growing beside the cosmological river and repeated in opposite directions. (fig.34)

The architecture of the Hezar Jarib garden was a testimony to this celestial assembly: The central octagonal palace was a symbolic replica of the heavenly ‘Divine Throne’, dominating the entire garden, an allusion to Paradise. Ibn Arabi, in his “Futuhat” illustrates the ‘Divine Throne’ as an eight-pointed star inscribed within a circle, situated at the top of the Plain Assembly on the Day of Judgment. The raised square platform upon which the palace was erected also epitomized the symbolic meaning of the ‘Divine Pedestal’. It is interesting to note that Ibn Arabi depicts the form of the pedestal as a square as well. The Sofeh mountain mentioned before, was a tangible manifestation of Mount Qaf and the plane tree, the most abundant shade tree in the garden, alluding metaphorically to the cosmic tree—the ‘Tree of Life’.

On the day of Resurrection, the believers will enter Paradise through the gateway—the arched entrance building, by permission of Rizwan, the gatekeeper and approach the ‘Divine Pedestal’. There they witness the vision of God as light and incredible beauty. “Those who uphold the throne and those who are around it, glorify their Lord with his praise, believing fully in Him”. 16
Ibn Arabi's evidence that the 'Divine Throne' was supported by four pillars, in later treatises is shown as the four angles. Henry Corbin, links the four corners of the 'Throne' to four angels. It is worth mentioning that bears angels or pillars of throne will be increased to eight in the day of the judgment:

and the heaven will cleave a sunder and appear very frail that day the angles will be standing on its sides, and above them eight of them will that day bear the throne of thy Lord.

From a more general view, the entire architectural complex of the Hezar Jarib garden symbolized the Divine Pedestal as well. The four-cornered towers symbolized the four supporting pillars or four angles and the peripheral walls recalled the Ibn Arabi definition of the 'Divine Pedestal' as a square. The walled garden alluded to the symbolic meaning of the Quranic Paradise: "for the righteous there is felicity: walled gardens and grape-vine, and young maiden of equal age and over flowing cups."

Herbert recorded that the Hezar Jarib terraces numbered to sixteen—twice eight, a celestial number. Furthermore, he noted that main the palace was located on the seventh terrace. The number seven has great significance in the writing of the Islamic mystics. Ibn Arabi classified the cosmic existence in seven levels, ranking the Divine Essence as the highest level and the world of nature, man the lowest. The 'Haft Awrang' (seven Throne) also corresponds to the seven stars of Ursa Major. Two large octagonal basins in the fourth and tenth terraces were considered part of the heavenly realms and an allusion to the celestial fountains, 'Kawsar' and 'Tasnim'. The fruit trees were the
sign of God’s mercy and the cypress was an allegory of eternity. The features of the Hezar Jarib garden, thus, form part of a systematic plan of symbolic equations, in which every part of the garden was conceived as a specific replica of its celestial counterpart.

Considering the symbolic interpretation of the Hezar Jarib and the Jahan Nama palaces at the two extremes of the Chahar Bagh avenue, one discerns their opposite contextual implications. This comparison is clearly shown in Ibn Arabi geometry for a heavenly plan; in his cosmology, the whole universe is depicted as a circle or sphere. The pattern of the cosmos consisted of a series of concentric spheres, rising one above another, between the earth and the Divine Throne. These spheres in turn are earth, water, air and ether. Then in the astronomical world, the spheres of the Moon, Mercury, Venus, Sun, Mars, Jupiter, Saturn and that of fixed stars, and further the sphere without stars is called the *primum mobile*, where the astronomical world ends.²²

The cubic shape of the Jahan Nama was the most externalized and fixed aspect of the Chahar Bagh complex, representing solidity and stability. It was, indeed, an allusion to the ‘earth’ in the Ibn Arabi’s cosmological plan. On the other hand, the Hezar Jarib octagonal palace, situated on the highest topography level, metaphorically evoked the ‘Divine Throne’ and dominated the entire earthly structure of the Safavid town. The small gardens, lining the Chahar Bagh avenue like a pearl string, performed the idea of various spheres and stars and the Zayandeh Rud was a parallel to the sphere of water. Incidentally, it should be noted that one of these gardens was called ‘ Setareh’ which means star in the Persian language.²³
Notes on chapter IV:

1- Ackerman, Phyllis, “Some Problem of Early Iconography”, in Pope, Survey in Persian Art, P. 843
2- Ackerman, P, Ibid P. 843
3- Golombok Ibid. P. 23
4- Hedayat Sadegh, Neyranganestan, Tehran, 1964. P. 155-6
5- Ikhwân al-Safa, Rasail I, P.27
6- Quran, 47:16,
7- Quran, 77:41
8- Quran 55:46/75
9- Quran frequently examines the famous expression of “the gardens beneath which rivers flow”:

3- Those, therefore, who have emigrated and have been driven forth from their homes and have been persecuted in My cause, and have fought and have been slain, from them will surely remove their ills and I will admit them to Gardens beneath which rivers flow, a reward from God, and with God is the best reward (Al-Imran) 3:195

4- For those who are constantly mindful of their duty to God, there are gardens with their Lord beneath which rivers flow, wherein they shall abide, and pure spouses. They shall also enjoy the pleasure of God (Al-Imran) 3:15

5- We shall admit those who have believed and have worked righteousness, to Gardens beneath which rivers flow, abiding therein for ever (An-Nisa) 4:123

6- But he who comes to him a believer, having acted righteously, for such are the highest ranks in Gardens of Eternity, beneath which rivers flow... (Ta-Haw) 20:76

10- Quran, 13:29
11- Quran, 53:15
12- Al Biruni, Elements of Astrology, P. 20- Translated by R. Wright
13- Ackerman, Ibid, P. 834 Avesta is the holy book of Zoroastrians in pre-Islamic Persia
14- See fig. 17 in Chapter II
15- Ibn Arabi shows the “Plain of Assembly” in a rectangular in his Futuhat. He sets the Throne of God on the top of the other eschatological notions; the heavenly pool of “Kawsar”, Paradise and Hell etc. P. 422-5
16- Quran, 40:8
15-Ibn Arabi shows the 'Plain of Assembly' in a rectangular in his *Futuhat*. He sets the Throne of God on the top of the other eschatological notions; the heavenly pool of 'Kawsar', Paradise and Hell etc. P. 422-5

16- *Quran*, 40:8

17-"Serapheil, supreme divine spirit, upper most column to the right of the throne,...,yellow light.

   Gabriel, universal divine Intelligence, upper most column to the left of the throne,..., white light.

   Michael, universal divine soul, lesser column at right of the throne,..., red light and Aural, universal divine Nature, lesser column to the left of the throne,...,green light". Corbin, H, *Creative Imagination in Sufism of Ibn Arabi*, P. 373

18-*Quran*, 69:17

19-*Quran*, 78:32


21-Nezami is a famous Persian poet whose poetry book is called 'Haft Awrang' as well.


29- Early Persian cross motif

30- Jay one of the twin cities in Sassanid Isfahan (768).
31-Four social segregated neighborhoods in Safavid Isfahan.

32-The three canals which flow underneath the Chahar Bagh Avenue
33-Motif from painted pottery sherd, Persepolis

34-Cosmic Tree, early Persian motif
35-Takht-i-Sulaiman (Takht-i-Sofeh), Isfahan

Kaempfer's drawing 17th century

36-Persian miniature, 'Sulaiman in his flying Throne' 16th century
CHAPTER V

HASHT BEHISHT PAVILION
In the middle of the Chahar Bagh, an arched gate gave access to the ‘Bagh-i-Bulbul’ (Garden of the Nightingale) in which stood the tiny ‘Hasht-Behisht’ (Eight Paradise) palace. The palace was erected in 1670 by Shah Sulaiman and was much refashioned under the Qajar Fath-Ali-Shah. However, the building still evokes what many of the pleasure pavilions on the Chahar Bagh must have looked like.

The joining of two Persian words Hasht (eight) and Behisht (paradise) is a common designation for gardens in Iran. The name is evocative, though perhaps a more worldly paradise is intended, for the palace embodies eight intimate pavilions.

The word “Paradise”—an English equivalent of “Behisht”—arises from a Persian derivation from Avestha, Pairidaeza, from pairi, ‘around’ and daeza, “wall” meaning an enclosed area. The word came to the west via the Greek writer Xenophon in the fifth century BC, who translated Cyrus’s Pairidaeza, his enclosed park or pleasure ground, into the Greek Paradise. In Latin this translated to Paradisus and finally in the English Bible was shown as Paradise in the 12th century.

The octagonal plan of the Hasht Behisht was not an unusual one, but an addition was the curious treatment of its corners. (figs. 37, 38,) On the principal axes, four huge talars (porches) opened, extending up to roof level, so that from every side of the building the prospects of the garden impinged. The main entrance for both the west and east part
was through these deep porches in the shape of a half octagon. In fact three of the porches were in the form of *talar*, sheltered by a lofty roof supported by two wooden high columns. The porch to the south can be called *Ivan* since it was covered by an arched roof. (figs. 39-40) A large half-octagonal porch rested to the north, clasping a basin in the centre and serving as an audience hall. In central Iran, with a climate of hot summer, much of the day-to-day living takes place out of doors, so the transitional area, the porch, provides a link from the building to the outside, keeping the sun off those under its roof and shading the structure it adjoins.

The porches are heightened by four sturdy polygonal corners, each containing a two-story complex of rooms and stair ways, one on top of another, providing huge piers for the roof over a lofty central hall. Therefore, the private rooms of the palace and access to them occupied the corner piers which held the whole structure. (figs. 37, 39)

A huge and spectacular *muqarnas* vault, resembling the starry sky, and pierced at its apex by a high drum with an inner lantern, covered the central hall. Eight windows lit this oculus brilliantly, each filled with a wooden grill, set on huge "stalactited pendentive" squinches. The vault consisted of distinct cells, the integration of square, triangle and circle on the layers of stucco, embellished with gold and blue colours. (fig. 42)
The number eight was frequently repeated in the Hasht Behisht architectural elements: the sides of the pavilion, the shape of the central pool, the shape of the corner piers, the sides of the lantern, and the number of the upper windows, etc. (fig.42)

The Hasht Behisht stood on a stone-faced platform and was ascended by axial stairways, each different from the next. An echo of ancient Persian palaces such as the Persepolis, raised on platforms and “symbolically elevated beyond the ken of common man”, was captured in this Safavid palace. The layout of the garden- the “four quarters of the universe”- was completed by this platform or “mound”, originally derived from the cosmological mountain. The Hasht Behisht pavilion crowned this miniature eminence, which traversed the whole garden

The enclosed Bagh-i-Bulbul, as a defined space, encompassed within itself a total reflection of the cosmos, and hence, Heaven. The Hasht Behisht pattern fostered order and harmony, revealed to the senses through numbers, geometry, colours and materials. The composition of these elements created a totally tranquil place, avoiding tension and conducive to contemplation.

Not only, does the very name of Hasht Behisht itself encompasses the entire heavenly realm, its overall plan evokes the various Islamic traditions as well. The extensive Quranic expression of the “Garden of Paradise” conveys the idea of a cool, shaded garden. Moreover, the Sufi concepts in particular, can be traced in every architectural aspect of this Safavid palace.
The Quran uses the expression the “Gardens of Paradise”, a hundred and twenty times in such words as Firdus (paradise), Jannah(garden), Jannat-al-Khuld(gardens of immortality), Jannat-al-Mawa (gardens of refuge), Jannat-al Naim(gardens of delight or felicity), Jannat-Adn (gardens of Eden).:

Those who believe and work righteousness will have Garden of Paradise for an abode.\(^5\)

The Quran promised the believer the blessing of eternal gardens, gardens which give the greatest pleasure to the people of hot, arid regions, with the impression of greenery and gushing fountains:

the righteous will be in the midst of gardens and springs, receiving that which their Lord will bestow on them\(^6\)

The Quranic descriptions of a heavenly garden are mainly conceived on physical level and presented in a language of comforts and pleasures of senses. In Sura 57 (Verse21), it even specifies the extent of Paradise: “And a garden the breadth where of is as the breath of heaven and earth”. In spite of the great extension of the Islamic Paradise, it seems to be rather an enclosed garden, probably an archetype of the Persian garden, the chahar-bagh and its analogue the Hasht Behisht. And again the inner aspect of creation seems to convey the shape of paradise, which seems to include gates and doors and the keepers, who greet the God-fearing:

Those who were mindful of their duty to their Lord will be conducted to the Garden in groups. When they approach it and its gates are thrown open, its keepers will greet them with:

peace be upon you, you have attained the state of bliss, so enter it, abiding therein.
They will respond: All praise belongs to God, who has fulfilled his promise to us and has bestowed upon us this vast region as an inheritance to make our abode in the Garden wherever we please. How excellent, then is the reward of righteous workers.7

The traditions and mystics played at least as great a part as the words of the Quran in determining the essential points of the doctrine of the Muslim Paradise. An outstanding point in this relation is the tradition of the ascension of the Prophet, showing clearly that the image of Paradise was almost one of light, colour and music. All versions of Mohammed's ascension tell of a temple in heaven called the "House of Habitation" which is the counterpart of the Holy Shrine at Mecca; as Kabah is supposed to have been built by Abraham, so the latter is represented as residing near the heavenly temple.

The Islamic theologists and Sufis influenced the acceptance of material descriptions on the grounds that they were symbols, the spiritual meaning of which was the patrimony of the enlightened. A declaration was made that heaven, as the supreme aim and ultimate bliss of all man, should be a state in which each would attain his particulars desire. Those who in this life were involved in material things would be received only with sensual delights in heaven. While those whose desire were free from material smear would find the joy of the celestial Vision. In this regard, Ibn Arabi provides us with a belief in two heavens:

There are two heaven – the one sensible, and the other ideal. In the one, both animal spirits and the rational souls enjoy bliss, in
the other, the rational souls alone. The latter paradise is the heaven of knowledge and intuition.8

Ibn Arabi completes his views to explain the psychological motives that led Divine providence to lay greater stress on the sensible than ideal paradise:

...most of the descriptions of Paradise in his book [Quran] are based on the body, in order that they might be understood by the people and serve as an incentive to their minds.9

Consequently in the Islamic world two antithetical idea flourished simultaneously: the sensual Paradise of the Quran, and the spiritual image of philosophers and mystics. In the 12th century, Fakhr-ad-din-Razi attempted to illustrate the architecture of heaven according to the Quranic description and hadiths. His scheme embodied eight main divisions, subdivided into a hundred degrees of stages. Probably none succeeded like Ibn-Arabi in blending all previous ideas into one harmonious pattern. His cosmology, discussed in chapter IV, depicts the whole universe as a circle or sphere and clearly illustrates the geometry of the heavenly plan.

Among the series of concentric spheres, Ibn Arabi refers to the division of heaven into eight stages, referring to them as gardens, gates, mansions etc. The names of these circular strata are derived from the Quran. His paradise is placed between the heaven of fixed stars and that of the primum mobile. And he enumerated them in the following order:

1-The abode of grace
2- The mansion of perseverance
3- The abode of peace
4- the garden of eternity
5- The garden of refuge
6- The garden of delight
7- The garden of paradise
8- The garden of Eden.

Each of these eight spheres are divided into a hundred degrees so that everyone will be recompensed exactly according to his or her actions. *(fig. 42)*

Returning to the *Hasht Behisht* (Eight Paradise), its octagonal shape emphasized the importance of the number eight, representing the Ibn-Arabi’s eight divisions of Paradise, surpassing the number of seven spheres, and larger than hell which has seven stories, proving that God’s mercy is greater than his wrath. The number eight also conveys eight angels, supporting the ‘Throne of God’ at the Day of Judgment.

Ibn-Arabi’s heavenly names, are echoed in Persian gardens: *Bagh-i-Delgosha* (the garden of delight), *Bagh-i-Behisht* (the garden of Paradise) - etc. The very name of Hasht Behisht itself encompasses the entire heavenly realm, so that the eight sides of its pavilion paralleled the numbers of Ibn-Arabi’s Paradises. Moreover, the octagonal pavilion provided the opportunity for perfect appreciation of the garden, since it provided more exterior exposures. Each side portrayed a different view of the garden.
The architecture of the Hasht Behisht, therefore, embodied all aspects of Ibn Arabi’s description of heaven; the garden, the mansion, the gateway. The lofty mansion in heaven was promised by God in the Quran as well:

The true servant of the Gracious one are those who walk upon the earth with humility.... and make us a model for the righteous. These are ones who will be rewarded with lofty mansions in Paradise.  

The Hasht Behisht layout also embodied many concepts central to the Sufi cosmology, in which the universe is composed of a macrocosm and microcosm, each consisting of three divisions: the body, the soul and the spirit:

Two interpretation of this concept arise which, although apparently different, are essentially the same. In the first, God as Manifest (Zahir), is the reality of universal externalization. From within the concentric circles of the macrocosm, there is an outward movement from earth as corporeal manifestation through an all-pervading soul to the enveloping Heavens, viewed as the seat of the Divine Spirit. In the second, complementary view of God as Hidden (Batin), there is an inward movement within the microcosm of man, beginning with his physical presence and moving towards his spiritual centre, the ‘Hidden Treasure’. The two schemes correspond to each other, at the same time that one is the reverse of the other.

Both mentioned interpretation of this idea, relate to the Hasht Behisht pavilion, not only in overall plan, but in the very concept of central palace. Here the central building
(body) provides a primary centrifugal or outward-directed force, highlighted by canals and avenues, flowing out from the building into the gardens or natural paradise. A secondary centripetal or inward-directed force, through its four porches, pulls toward the fountain, the spiritual center, in the middle of the main hall. In turn the water generates ripples of ever-expanding diameter, initiating this cycle of "expansion and contraction". (figs. 43a-43b)

The 'Talars' porches, indeed, were transition spaces between exterior and interior in terms of both physical and spiritual levels. The Talar and Iwan, spiritually are viewed as the Path or transitional space between the temporal and terrestrial worlds, a locus of soul, moving between the Pavilion taken as body and the garden taken as spirit, a Sufi doctrine as Nasr states:

The spiritual path is none other than the process of disentangling the roots of the soul from the psycho-physical world to which they are attached and plunging them in the Divine. It means, therefore, a radical transformation of the soul made possible through the grace of revelation and initiation, until the soul becomes worthy of becoming the bride of the spirit and entering into union with it.15

The bisected octagonal shape of the Talar, thus, leaves it an incomplete form, 'capable of attaining completion only by uniting man to the universal'.16

In the Sufi journey to God, his soul must experience the significance of spiritual stations and states and acquires inner virtues to reach the world of the spirit. The two main states are known as 'maqam' and 'hal':

The sufi distinguishes among the experiences of the soul upon the path between permanent and passing states, calling the first
Maqm (pl. Maqamat) or technically 'Station' and the second 'Hal' (pl. Ahwal) or technically 'State'.

Metaphysically, the bisected form of the Hasht Behist taulars can be viewed as the locus of both 'hal' and 'maqam. figs (43a & 43b)

The four corner pillars of the Hasht Behisht invoked the four elements, the four directions, the four winds, the four seasons and the four elements:

God himself has made it such that the majority of things of Nature are grouped in four such as the four physical natures which are hot, cold, dry and moist; the four humors which are blood, phlegm, yellow bile and black bile; the four seasons.... the four cardinal directions...... the four winds .... the four directions envisaged by their relation to the constellations (awtad); the four products which are the metals, plants, animals and men. 18

The four complexes of the piers thereby alternated with markedly open arches, which were broken by suspended bridges on three sides, emphasizing the centrality of the main hall and concentrating on the Unity of God. The main hall, again an octagon had at its centre an octagonal pool which stressed the importance of “eight”. The pool symbolically brought nature right into the building.

The dome recalled the Prophet's ascent (miraj) to heaven. For in his description, the Prophet was carried on a huge dome made of mother-of-pearl, resting on four corner pillars and the four parts of the Quran; ' In the name, Of God, The compassionate, The
merciful' were written on the four pillars. And from the pillars flowed four rivers: one of water, one of milk, one of honey and one of wine.¹⁹

Mother-of-Pearl or white pearl is the symbol of the spirit, the dome of which encloses the whole creation. The universal spirit, which was created before all other creatures, is also the divine Throne which comprehends all things. The symbol of this Throne is invisible space extending beyond the starry sky.²⁰

The geometry of the dome itself, constructed according to the static and mathematics laws, was a symmetric form regarding its center as a manifestation of 'unity within unity' the first principle of Islam. The ceiling of the main hall, an archetype of the sky, was covered by shining, intricate stars—the stalactites. The vault consisted of distinct cells, the integration of square, triangle and circle on the layers of stucco, embellished with gold and blue colours.(fig. 41) The subdivision of the muqarnas vault into infinite, tiny and interrelated segments, toward the center of the dome, imply the Unity of the Divine principle; the conception links all aspects of the cosmic existence to One, symbolizing 'unity within multiplicity.'

Islam is the religion of Unity (tawhid) and all veritable aspects of Islamic doctrine and practice reflect this central and cardinal principle. The Shari‘ah itself is a vast network of injunctions and regulations which relate the world of multiplicity of the circumference. In the same way Islamic arts seeks always to relate the multiplicity of forms, shapes and colours to One, to the Center and Origin, thereby reflecting tawhid in its own way in the world of form with which it is concerned.²¹
Yasser Tabba, suggests that the **muqarnas** dome is an architectural manifestation of the theory of atoms and accidents, represented by Al-Baqillani and supported by Caliph – al-Qadir (991-1031 A.D.). The theory argues that everything other than God was composed of atoms and accident. This concept, originated from Baghdad caliphate cannot be attributed to the Hasht Behisht pavilion, a Safavid structure, blended with the Sufism doctrine- the accepted Safavid tradition. In contrast, the idea of the ‘multiplicity within unity’ interprets well the intricacy of the Hasht Behisht’s **muqarnas** vault, symbolizing the entire view of Sufism: to free the man from the bondage of many and make him whole, for it is only in being whole that men become holy.

The light falling on the **muqarnas** vault turns these stalactites into bright, lustrous segments, symbolizing the alteration of matter, and transforms the architectural forms into so many crystallizations of light. ‘The first being created by God was light’. Light was the most significant symbol in Pre-Islamic Persia. For Zoroastrians, fire and its sequence, light, was a tangible symbol of God. They highly regarded fire and kept it in the holy temples. In the Persian Islamic world this context was revived by such scholars as Jabir Ibn Hayyan and Suhravardi.

For Suhravardi, light encompass all aspects of the material and spiritual world and the whole universe consists of degrees of light and shadow, the absence of light. All of reality is nothing but light which holds various degrees of intensity. In this concept, the material aspects, are taken as darkness since they are obstructions and do not permit light to penetrate through them. On the other hand, the Divine Essence is pure light or
so called Suhravardi “the Light of Light”. The pure light is the origin of all existence and the entire contents of the universe is nothing but degrees of light and shadow. As Suhravardi recalls:

The Essence of the First Absolute Light, God, gives constant illumination, where by it is manifested and brings all things into existence, giving life to them by its rays. Everything in the world is derived from the Light of his essence and all beauty and perfection are gift, of his bounty, and to attain fully to this illumination is salvation. 23

Therefore, according to Suhravardi, the ontological status of beings is related to their levels through which they approach the ‘Pure Light’ and attain this illumination.

The Suhravardi’s concept is clearly demonstrated in the architecture of the Hasht Behisht dome. The eight full-height brilliant windows concentrate light in the tiny space of the cupola. The shiny mirror cells, covering the entire ceiling of the cupola and the upper cornice, increase the intensity of light. And in turn, the light on the muqarnas vault gains more strength. The mirrors on the apex of the vault, indeed, assist man to approach to the Supreme Light. The bright, shining golden colours and three-dimensional pattern of the stalactites accompany this action to reflect more light in the inner space and to push the whole structure toward the ‘Light of Essence’. The advanced cornice of the vault itself is a manifestation of the Quranic expression of His Light:

God is the light of the Heavens and the Earth:
The likeness of His Light is as a niche wherein is a lamp,
The lamp is a crystal,
The crystal as it were a shining star;
Lighted it is from a blessed tree,
an olive, neither of the East nor of the West,
whose oil would well-nigh flare
though fire touch it not:
Light upon Light:
God guideth to His Light whom He will,
For God coineth parables for men,
And God is All-knowing of all things.  

The importance of light in the Hasht Behisht is revealed not only through the apex of its vault, but also is delineated from the high roofs of the porches and open arches placed at intervals, generously attracting daylight to the building. The diffusion of light in the central hall mostly focused on the brim of the heavenly central pool and mirrors the stalactite of the eternal dome in the fountain. This phenomenon also assists in rendering the whole structure lighter, seeming as if its four piers hold the sky.

If there is a Paradise on earth,
it is here, it is here, it is here.  

Notes on Chapter V:

1- Talar is a Persian architecture element, originating in Achaemenid time (400 B C). Talar consists of a double height vaulted porch with high columns.

2-Such Pre-Islamic Persian palaces as Thakh-i-Jamshid and Takht-i-Taqtis were constructed upon a raised platform in order to instill a sense of greatness and the majesty of the monarchs. See chapter IV.

3-Today the building of the Hasht Behesht is locating in a vast park without wall.

4-Quran, 83:19, 25:15
5-Quran, 18:107
6-Quran, 51:5
7-Quran, 39:73-74
8- Ibn Arabi, Ibid, P.809
9-Ibn Arabi, Ibid P. 194
10-Ibn Arabi, Ibid P. 554
11-Quran, 69:17
12-Quran, 25:77
14-Ardalan & Bakhtiar, Ibid, P.11
15-Nasr, Ibid P.69
17-Nasr, Ibid 71-2
18-Nasr, An Introduction to Islamic Cosmological Doctrine, 1978, P. 50
19-Refering to Quran Sura 47:16
21-Nasr, Sufi Essays, P. 43
22-Tabba, Yasser, “The Muqarnas Dome, its origin and meaning”, in Moqarnas edited by Oleg Grabar, 1985
23-Suhrevardi, “Hikmat al – Ishraq”, in Nasr, Three Muslim Sages, P. 69
24-Quran, Sura Al Nur, Verse 35 (24: 35)
25-Saadi, Sheikh-Musleh- al-Din, Gulestan
37- Hasht Behisht First floor plan
38- Hasht Behisht second floor plan
39-Hasht Behisht, east-west section

40-Hasht Behisht, northern elevation
41- Hasht Behisht, interior, drawing by P. Coste 19th century
Ibn Arabi's divisions of Paradise
43a- Hasht Behisht, the centrifugal movement from the building into the garden

43b- Hasht Behisht, the centripetal movement from four porches toward the centre of the main hall
CONCLUSION
The Chahar Bagh, the famous Safavid Avenue in Isfahan was an illustration of both the ancient Persian garden and the image of Paradise in the Quran and Islamic tradition. A constant interplay between the image of a *chahar bagh* and the symbol of heaven deeply affected the layout of the Safavid Chahar Bagh Avenue.

The general Persian term of *chahar bagh* (four gardens) was characterized by four rectangular lots, generated by the intersection of two right-angled streams with a prominent pavilion in the middle of the garden. The 16th century Safavid Chahar Bagh Avenue, on the other hand, was a long promenade adorned with flowing canals, tiny cascades and rows of *chenars*, the plane trees. The avenue ran for 4 km from the *Darvazeh Dulat* (royal gate) to the river Zayandeh Rud and then extended to the garden royal garden estate of Hezar Jarib. More than thirty *chahar-baghs*, mostly belonging to the aristocratic dwellings, surrounded the magnificent Chahar Bagh avenue.

The pattern of the Persian gardens, physically and contextually, were originated from pre-Islamic Persian beliefs. The integration of garden and pavilion goes back to Achaemenids at Pasargade, the palace of Cyrus The Great (500 BC). Sassanian palaces, the Imarat-i-Khusraw and Hash Kuri were set symmetrically in parks, (600 AD) clearly indicating such an integration. The typical Sassanian garden, in fact was a quartered garden, *chahar-bagh* that was elaborated with subdivisions.
One of the earliest references in the Persian Islamic period to a *chahar bagh* is documented in Bukhara in the Samanid period (943 AD). Buyids revived the architecture of Sassanians gardens, and introduced the streams into the palaces (935-1055 AD). In the Seljuq period, the word *bagh* was used to denote an entity comprising both palace and garden (1000-1157 AD).

The implementation of gardens, in particular the layout of the *chahar bagh*, reached its culmination under the Safavids (1491-1722 AD). This was most evident in the Chahar Bagh Avenue in Isfahan, the Safavid capital city. All of the European travelers who visited Isfahan in 17th century were astonished by extensive garden complex. The city was extended beyond the protective walls, to join the suburban open spaces and gardens. Some contemporary scholars conceive the Safavid (new) Isfahan as a logical modification of the old. "The new was nothing but a logical evolution of the old". But the Chahar Bagh Avenue and its extensive surrounding gardens were evidence that the Safavid Isfahan, indeed represented a renaissance in Persian town planning. Consequently, Isfahan became a model for such cities as Shiraz and Kerman which were developed afterward.

Contextually, the design of early Persian gardens evoked the image of the heaven on the earth. Herodotus’ description of the palace of Ekbatan was only a rationalization of the seven fold heaven myth in700 BC. Khusraw I also built his palace as the image of heaven in accordance with idea that the King was God’s surrogate (600 AD). Moreover the cosmological idea of ancient Persia, the division of universe into four quarters was
implemented in the Safavid Isfahan by the intersection of the Chahar Bagh avenue and the river Zayandeh Rud. The division of the town into four distinct quarters conveys a social segregation as well. The different ethnic groups of the Muslims, the Christians and the Zoroastrians resided in the separate quarter-neighborhoods.

Islam highlighted the idea of Heaven that pervaded Persian thought, promising cool, and shaded gardens. Paradise as a reward for the faithful Muslim, was frequently repeated in the Quran. The pattern of the chahar bagh represented many aspects of Islamic beliefs in celestial gardens. The Chahar Bagh avenue, in particular evoked the famous expression, “Gardens underneath which rivers flow”, repeated more than thirty times in the Quran. The three canals, Farshadi, Sah Juy, and Niyasarm, originating from the Zayandeh Rud, crossed beneath this avenue and continued their way to the eastern part of the town. In addition the Chahar Bagh avenue was reminiscent of the cosmological idea of Ibn-Arabi, the famous Islamic mystic. In his plan, Ibn-Arabi, depicted the universe as a congregation of a series of concentric spheres, rising one above another, between the earth and the Divine Throne. The Jahan Nama and Hezar Jarib pavilions, each set on one extreme end of the Chahar Bagh avenue, in a way illustrate the ideas of earth and the Divine Throne respectively of Ibn-Arabi’s cosmological plan.

The structure of each individual garden pavilions along the Chahar Bagh avenue, evoked many concepts found in the ancient Persian architecture; Quranic expressions of the Paradise; and Sufi doctrine, the accepted Safavid tradition. The Hasht Behisht, the
only preserved structure of the entire Chahar Bagh complex is an evidence of this suggestion: The columned talars (porches), the raised platform and the reliefs on the columns’ bases of the Hasht Behisht pavilion all parallel the pre-Islamic Persepolis palace.

The number eight, evoking the name of the Hasht Behisht (eight Paradise), is frequently repeated in the Hasht Behisht’s architectural elements. Therefore the Ibn- Arabi’s concepts of eight Paradises is effectively captured in the entire structure of the Hash Behisht. Moreover, the Hasht Behisht pavilion conveys many aspects of the Sufism:

1- The notion that the universe is composed of a macrocosm and microcosm, each consisting of three divisions: the Body, the Soul and the Spirit can be interpreted not only in the overall plan, but in the very concept of the central pavilion.

2- Spiritually; Sufism views the talar as the path or transitional space between the temporal and terrestrial worlds, a locus of soul.

3- The symmetric geometry of the dome, at its centre is a manifestation of “Unity with Unity”, the first principle of Islam.

4- The subdivisions of the muqarnas vault into infinite, tiny and interrelated segments, toward the center of the dome, imply the unity of divine principle; the conception links all aspects of the cosmic to the One, symbolizing “Unity within Multiplicity”.

5- The concentration of light in the tiny space of the cupola alludes to Suhravardi’s vision of light, the “Light of Essence”.

Thus, many concepts of Persian Sufism, accepted in the Safavid court as the “School of Isfahan” can be interpreted in the architecture and town planning of the city of Isfahan. This study has set out to cast light on the some of the interpretations of the Sufism on
the layout of the Chahar Bagh Avenue and the Hasht Behisht pavilion. This work can be broadly extended to the other Safavid monuments in Isfahan. The Masjid-i-Shah, like the Chahar Bagh avenue in spite of its world-wide reputation has never been studied in-depth. Besides Sufism, the Masjid-i-Shah, perfectly embodies the Shiite view of the world, the most common sect of Islam in Persia. Other suggestions for studying include the Maydan-i-Shah and the Bazaar. The later, probably is an appropriate subject for the *Al Qabasat* written by Mir Damad, the famous mystic in Safavid time. Considering the urban pattern of the Isfahan, one conceives that architecture was not considered as an individual entity in Safavid town; on contrast the entire town was perceived as one complex phenomenon, manifesting the concept of “Unity within Multiplicity”.

In conclusion, the layout of the Safavid Chahar Bagh, and the architecture of the garden pavilions built along this famous avenue comprised many spiritual aspects of ancient Persian beliefs, Quranic expressions and the mystic doctrine of the “School of Isfahan”.

In addition, the layout of Persian gardens and in particular the *chahar bagh* influenced many aspects of Persian and Islamic art and literature. The Persian carpets, generally depicted the physical aspects of the *chahar bagh*. In fact the rendition of Persian garden on Persian carpets in earliest time preserved the layout of the gardens. The garden carpets brought the colorful flower season indoors, which was short on the Iranian plateau in dry months.
Persian miniatures can be used reliably to study the Persian gardens details. These miniatures reveal that the garden walls were ornamented. As well, according to the 15th century miniatures, the plane and cypress were the most common trees in Persian gardens. The representation of landscape and garden pavilion form an evocative aspect of the Persian miniature. Echoes of the \textit{chahar bagh} also appeared in Persian pottery and tiles.

Persian poetry abounds with images of gardens and a constant interplay between the image and the symbol, the earthly and Divine. Rumi, Firdawsì, Hafez, Saadi, Nezami, are just a few of the poets that introduced many aspects of gardens in their works. Water appears as stream, functioning as a life giving element, a tangible sign of God’s Mercy. The rose is associated with the Divine beloved. The \textit{Tuba}, the celestial tree pervades the Persian poetry. As Hafez says:

\begin{quote}
You think of the Tuba tree, and I of the friend’s stature:
Everyone’s thought is according to his aspiration
\end{quote}

The garden imagery often recurs throughout the earthly manifestation of Divine beauty.

For Maulana Jalal-al-din Rumi, the famous Persian Sufi and poet, the gardens became the tangible symbol of Divine Beauty, manifesting and yet veiling the eternal gardener and his everlasting beauty:

\begin{quote}
The grace is from god, but the worldly people
Do not find grace without the veil “garden”
\end{quote}
Islam, on taking over Persia, was to a considerable extent taken over by the culture it had conquered. Consequently, the Persian layout of the *chahar bagh* traveled to all parts of the Islamic world, into southern Spain, along the coast of North Africa, Ottoman Turkey and India. The implementation of the *chahar bagh* layout in Mughal India and the Moorish Spain gardens is a sign of Persian cultural influence in the Islamic world. Moreover, this impact is conceived in Turkish poetry and the decorations of Mughal manuscripts, albums and miniatures. A review of the Islamic art and literature indicates the impressive range and influence of the Persian garden.

Certainly they [gardens] are among the most important forms of the pre-Islamic traditional art of Persia, possessing a direct initiatory symbolism and serving as models for later Persian and through them Spanish and Mughal gardens.⁴

**Notes on Conclusion:**

1- See chapter I, P. 26


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