# The Shalamar Gardens Lahore: A Case Study of Mughal Garden Design and Concept

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#### Abstract

Islamic landscape architecture is one of the most significant domains of Islamic art and design, especially the development of Chaharbagh based on the concept of the paradisiacal garden that created lush green places in Islamic territories. Muslims developed magnificent paradisical gardens during Timurid Kingdom in Persia and Central Asia and then during Mughal Empire in the Indian Subcontinent. The Mughals laid a unique style of gardens which was symbolic in design. The present study examines the relationship between the physical and symbolic features of Mughal gardens. The paper considers the example of Shalamar Gardens Lahore to examine this relationship.

**Keywords:** Mughal Gardens, Shalamar Gardens Lahore, Chaharbagh, Paradisical images.

## Introduction

After the advent of Islam in the seventh century AD, idolatry was discouraged, therefore the Muslim artists and architects turned to ornamental and floral designs instead of representing human figures or animal (Janey, 2007). Thus, the forms of art were transformed and consciously planned "to aid in the contemplation of Allah" (Janey, 2007, p.6). This gave a new avenue of design to the Islamic art and architecture. Consequently, many Islamic arts developed and flourished due to the change in ideology of Muslim artists such as Islamic calligraphy, miniature paintings and landscape architecture. With the passage of time, Islamic landscape architecture became one of the most significant domains of Islamic art and design, especially the development of Chaharbagh based on the concept of the paradisiacal garden that created lush green places in Islamic territories.

The expansion of Islam from the Arab Peninsula to west in Spain and to east in Persia and Indian Subcontinent also brought significant changes in the territorial, political, cultural and religious spheres of the regions (Brend, 1991). These vagaries also brought profound changes in the landscape architecture of the capital cities and influenced the planning of garden design and concept. Muslims developed magnificent paradisical gardens during Timurid Kingdom in Persia and Central Asia and then during Mughal Empire in the

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Indian Subcontinent (Brend, 1991). The Muslim rulers in general and the Mughal Emperors in particular laid a unique style of gardens which was symbolic in design.

James L. Wescoat and Joachim Wolschke-Bulmahn (1996) provided a comprehensive description of the concept and theme of Mughal Gardens in the Mughal Gardens: Sources, Places, Representations, and Prospects. Based on their literature review they present "six major themes in the interpretation of Mughal gardens: two of which are symbolic; two functional; and two aesthetic" (p.24). They describe Symbolic themes as (I) Paradise Symbolism- in which gardens are earthly images of religious archetype and (II) Political Symbolism- that signifies the dynastic claims and territorial claims of the Mughals. However, Asher (1991) opined that Mughal gardens were symbolic of their royal and political power in the region and not associated with paradisical symbolism. The Idea of Asher might be based on the fact that without the political power and supreme command the conception of great magnificent gardens over a period of time was almost impossible. However, the strong attachment of Muslims with religious impressions could not be ignored, especially when it was strictly observed and practiced after the expansion of Islam in different Islamic territories (Brend, 1991). Furthermore, many Mughal architectural monuments such as Taj Mahal and Red Fort hold the inscription that described the architecture as worldly image of Paradise. For instance, a wall of Diwan-i-Khas in Red Fort has a Persian inscription that if there is a Paradise on earth, it is here, it is here (Kausar, 2001). Similarly, the name of a water canal in Red Fort Delhi is Nahr-i-Bihisht, the Stream of Paradise.

Wescoat and Wolschke (1996) further interpreted Functional themes as (III) Courtly Function-to perform social function of gardens, such as sites for celebrations of ceremonial events of royal and noble families; and (IV) Environmental Function- to provide a resting place in the hot season of Indian Subcontinent. Aesthetic themes were described as (V) Subjective Aesthetics-based on personal experience of the garden to appreciate the integral beauty of paradise imagery; and (VI) the Formal Aesthetics-deals purely with elements and principles of designs and make the gardens state of the art object (pp. 24-26).

Literature review shows that the impression of religion was fundamental in the development of Islamic gardens. However, the influence of the Paradise Symbolism on the formation of Chaharbagh has not been extensively studied. Therefore, the present study examines the relationship between tangible (physical) and intangible features (symbolic) of Mughal gardens. The paper considers the example of Shalamar Gardens Lahore to examine this relationship. Based on the notion that the Mughals observed religious impressions and the conceptual categories presented by Wescoat and Wolschke (1996), the paper hypothesized that Quranic description of Paradise highly influenced the layout of Chaharbagh, specially its terraces and water distributing channels. The study also explores the possible influence of two other conceptual categories on the planning of the ChaharBagh and its other structural elements. For this purpose the study addresses following questions:

- What is the influence of and relationship between religious impression particularly on Paradise Symbolism and the development of Chaharbagh design?
- How the other two conceptual categories relate to the Chaharbagh and its tangible features?

The study describes the structural elements of the gardens including the Chaharbagh, water channels, pavilions, cascades, thrones, gushing fountains, fruit plants and trees, as tangible features and religious, political, functional and aesthetical influences as intangible features.

## **Historical Background of Mughal Gardens**

By the time when Islam arose in Arab Peninsula, Arabs had no tradition of gardens. When Islam expanded to its neighboring territories, and Persia was conquered by the Muslims in 651, they found green lush gardens there (Straut, 1913) and created gardens according to their religious Ideology. It was at that time when the concept of Chaharbagh blended into Islamic gardens design and a new Islamic pattern of Persian Gardens evolved and spread to the rest of Muslim world.

## **Concept of Mughal Gardens**

The concept of Mughal gardens was influenced by the pattern of Islamic Persian Garden and the Quranic description of Paradise (Schimmel, 2004; Wescoat&Wolschke, 1996). Muslim Persians who were the pioneers of this Islamic art of landscape, designed gardens in a style specified in Sura -e-Rahman and other Surahs of Quran (Stuart, 1913; Ruggles, 2008). Throughout the history of Islamic art and architecture the efforts of Persian and Mughal Emperors to create paradisical gardens are worth mentioning. Mughals gave a spiritual meaning to gardening by establishing "manmade reflections of the Quranic images of Paradise on earth" (Kausar, 2001, p.103).

The tradition and patterns of Islamic Persian gardens influenced the Muslim world to the east in Central Asia (Wascoat, 1996). The gardens of Samarqand during the period of Emperor Timur presented both physical and spiritual images of worldly paradise (Golombek, 1995). The dry land of Samarqand challenged the Muslim architects and engineers to look for new avenues. They dug canals to bring water from long distances to irrigate their gardens, thus altered dry lands to lush green gardens with shady trees and flower beds (Golombek 1995; Homayoun, 2001; Stuart, 1913).

The Persian garden tradition spread to Central Asia with Timurid Empire and from there it influenced Mughals to introduce this Islamic art of landscape to the Indian Subcontinent (Grabar & Dickie 1985; Schimmel, 2004). They planned Chaharbagh with running water, spurting fountains, shady trees and scented fruit plants with small building structures such as pavilions and throne as mentioned in the Quranic image of paradise (Clark, 2004; Kausar, 2001; Wescoat&Wolschke, 1996). Zahirud-Dīn Muhammad

Babur, a Timurid and the first Emperor of Mughal dynasty built magnificent terraced gardens with running water in Kabul. Among his gardens in the province, the most favorite was Bagh-i-Wafa, where different types of trees, fruit plants and flora were grown in the terraced garden (Asher, 1991).

Babur was the first to introduce Persian gardens to Indian Subcontinent (Kausar, 2001; Stuart, 1913). He was fond of nature and impressed by Timurid gardens of Samarqand (Asher, 1991). Therefore, he gave prodigious attention to the gardens in both regions i.e., Kabul and India (Asher, 1991). When he conquered Agra in India he found gardens without wells. He erected wheels for the natural flux of the water flow and created symmetrical gardens in India (Stuart, 1913). Mughal emperors used Chaharbagh of Persian style and planned geometrical gardens with divisions and sub-divisions (Kausar, 2001; Ruggles, 2008). These formalized and geometrical gardens of Babur's own concept of paradisiacal imagery set a standard for Mughal Gardens in coming years (Asher, 1992).

The Chaharbagh garden at the tomb of Mughal emperor Humayun, exemplifies the grandeur of Persian style landscape in Indo-Islamic architecture (Stierlin, 2002). Another splendid example is the Shalamar Bagh in Kashmir constructed by the Emperor Jahangir. The use of natural steep hill, slopes and running water made this garden a real resting place. Shah Jahan the fifth emperor of Mughal dynasty had great love for the art of landscape and architecture. The garden of Taj Mahal, Shalamar Garden of Lahore and Red Fort at Delhi are his wonderful contributions to the Muslim art and architecture (Schimmel, 2004; Stierlin 2002).

## ChaharBaghs of Shalamar Gardens Lahore

The most distinguishing and prominent features of Shalamar Garderns of Lahore were the two stepped Chaharbaghs and three terraces. The two large stepped Chaharbaghs distinguished as lower terrace and uppermost terrace were separated by a central or middle terrace with a large tank. Each of the terraces was placed four to five meters (13-15 feet) higher than the previous one (Ruggles, 2008). The lower and uppermost terraces were identical and square in shape while the middle terrace was narrow and rectangular. Each terrace had a decorative water tank in the centre intersected by water channels on four directions. One of the hallmarks of the two or Charbagh like other Islamic gardens was the four fold garden with axial paths that intersected at the garden's center. These Chaharbagh of Shalamar Gardens were symbolic of paradisical imagery thus planned in a manner to depict the image of two gardens mentioned in Sura-e-Rahman of Al Quran.

"But for those who fear to stand before their Lord there are two gardens. Which of your Lord's blessing would you deny?" (Chapter 55: Verse 46).

<sup>&</sup>quot;Having many branches" (Chapter 55: Verse 48).

<sup>&</sup>quot;In them two fountains run" (Chapter 55: Verse 50).

<sup>&</sup>quot;In them are two kinds of each fruit" (Chapter 55: Verse 52).

<sup>&</sup>quot;Reclining upon the couches lined with silk brocade, and the fruits of the two Gardens will be near at hand" (Chapter 55: Verse 54).

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"And besides them, there are two other gardens" (Chapter 55: Verse 62).
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The Chaharbagh was further divided and subdivided into smaller gardens represented different gradations of Paradise (Al Quran, Chapter, 55: Verse 62). Kausar (2001) quoted Ibn-Arabi that among two gardens of Paradise one consists of eight gardens and each one comprised of hundred grades where people will reside according to their deeds they made on the earth (p. 103).

Annemarie Schimmel (2004) writes that unlike the Shalamar Bagh in Kashmir, the Shalamar Gardens of Lahore were laid down on flat terrain therefore, "the gardens had to be artificially terraced so that small waterfalls could be created" (p. 295). This could be one reason of establishing terraced gardens. However, compliance to the Quranic description of Paradise as an expression of religion could be the other reason of conscious planning of terraced gardens by Mughals to represent the two other gardens as mentioned in verse 62 of Sura-e-Rahman. Latif *et al.* (2017) defines that the terraces in Chaharbagh symbolize the cosmic mountains, and the throne created at the great water tank represents the position of the divine power. Huge water reservoir represents the cosmic ocean to supply the water to all the gardens levels (p.126).

Nevertheless, any one of the two reasons could be the bases of the development of terraced gardens in Chaharbagh. The first one symbolizes the political power of Mughals and the second is Paradise Symbolism that depicts the impression of religion.

The Paradise symbolism of the two Chaharbagh not only provided personal experiences to enjoy paradisiacal imagery but also provided natural green hubs of shady and ornamented trees to be saved from typical hot weather of Subcontinent. Numerous shady trees, exalted fruits and scented flowers were planted in the gardens that were brought from India, Persia and Turkistan (Clark, 2004; Ruggles, 2008). The brick walkways and water sides were decorated with tall and shady trees. Mostly the cypress trees (all seasons) were planted with regular intervals to provide personal experience of visual excitement (Schimmel, 2004). A horticultural study (2014) on the Mughal gardens indicates that in Shalamar garden the flower parterres were orderly and symmetrically intersected by orange, lemon and cypress trees fenced with bricks and stones. The Mughals were very sensitive about formal aesthetics. Their four-fold gardens always "employ the concept of order and symmetry" (Latif, et al., 2017, p.125). The cypress trees in Chahar Bagh were also added as a symbol of eternity by Mughals and celestial meanings by Persians (Kausar, 2001). The shady and decorated trees planted in Shalamar gardens were included, plane trees or chinar, cypress, cidar, neem, and pipal. Fruit trees included musk-melon, mango, lemon, pomegranate, apple, oranges, apricots, plum, pears and almond (Clark, 2004; Horticulture study 2014, Schimmel, 2004). Similar to fruits, variety of flowers was also planted in Chaharbagh. THE PROMINENT WERE TULIP,

<sup>&</sup>quot;Dark-green in colour (from plentiful watering)" (Chapter 55: Verse 64).

<sup>&</sup>quot;In them there are two springs gushing forth" (Chapter 55: Verse 66).

<sup>&</sup>quot;In them, there are fruits dates and pomegranates" (Chapter 55: Verse 68).

<sup>&</sup>quot;Which of your Lord's blessing would you deny?" (Chapter 55: Verse 69).

MARIGOLD, NARCISSUS, LILY, IRIS, AND JASMINE ETC. INDIGENOUS FLOWERS LIKE CHAMPA, CHAMBELI and Jafari were also planted to fragrant the atmosphere (Horticulture study, 2014). The plantation of variety of sweet-smelling fruits and flora in Shalamar gardens symbolized the Quranic description of two gardens that are planted with shady trees and scented fruit plants (Chapter 55: Verse 52 & 68).

## Flowing Water in Chahar Bagh

The theme of flowing water in the gardens of Paradise (Chapter 55: Verse 50, 66) can easily be traced in Shalamar Gardens. To depict the gushing fountains of the two gardens of Paradise a great water network was developed. The water flowed in the gardens through 20 feet wider water channels, and 5 cascades including a ten feet high main cascade, and 410 fountains (Clark, 2004). The cascades of Shalamar Gardens, Lahore were developed as alternatives of natural waterfall at Shalamarbagh in Kashmir. Shah Jahan was impressed with its lay out. He wanted to bring this garden with its natural flowing water to the flat land of Lahore. But the absence of steep hills and slopes here at Lahore compelled him and his court architects to introduce artificial cascade (Kasaur, 2001; Ruggles, 2008; Schemmile, 2004). The water canals provided beautiful reflections of arcaded pavilions and terraces along with the garden trees and captured different shades of the sky from dawn to dusk. These water channels had beautiful lotus, lily and fully opened flower shaped fountain jets. Initially the water tanks of the garden were embellished with rows of pearl fountains and their floors had agate work but unfortunately during Sikh reign the agates was shifted todecorate Ram Bagh and the Golden Temple at Amritsar (Stuart, 1913, p.143).

In *Shalamar Garden Master plan 2006-2011*, Rogers & Vandal (2006) give a detailed account on the water system of Shalamar Garden.

"Water entered the gardens from the south, under the aramgah, into the central channel of the Upper Terrace. It then flowed through all the channels of the terrace and decorative fountains. It flowed northwards under the aiwan pavilion and then fell dramatically downwards over a carved marble cascade or chadar into the central tank of the Middle Terrace. Here it filled the other tanks. Water flowed over cascades to the east and west down to the channels of the side gardens. To the north, it fell over the chinikhana creating a waterfall in front of its many carved niches. When it reached the Lower Terrace from the chinikhana, the water filled the channels and fountains and left the site flowing under the pavilion in the north wall" (p. 24).

In Shalamar Gardens marble and sand stone pavilions or *baradaries* with domed or pyramidal roof were built to provide cool resting place for the royal and noble families (Petruccioli, 1998). In Islamic landscape architecture, pavilions were formed as free-standing structures open on all sides. They were so designed that offered the pleasure of visual excitement *by viewing the water running through cascades and* scented

atmosphere of the botanical gardens (Ruggles, 2008). The summer pavilions, cascades and fresh running water, fountains and shady trees as described in Quranic image of paradise were vital features of Mughal gardens (Kausar, 2001).

The gardens were also used to perform ceremonial functions, such as the upper and middle terraces were used as a site for celebrations of birthdays, marriages and other royal family get together. The white marble pavilion at middle terrace named as SawanBhadon had enclosed a recessed area called Chinikhana. This Chinikhana was decorated with rows of niches, which were used to display flower arrangements at day time and adorned with oil lamps at night. The water pool in the center of ChiniKhana mirrored the glittering light of the lamps created a magnificent atmosphere at night and provided a splendid illustration of aesthetic theme of the gardens. Moreover, the functional themes employed the garden design as such so that the quadripartite gardens of the two terraces were also used to serve environmental function, such as the summer pavilions and aramgah provided a resting place in the hot season of Lahore and to enjoy the coolness generated by the gushing fountains as well as the rainy season of monsoon. The theme of the aesthetic can also be traced in the layout of the middle terrace named Bagh-e-Faiz Bakhsh, The Garden of the Bestower of Plenty consisted of large water reservoir in the form of a huge tank with 152 fountains and number of small water channels running through all terraces (Schmmile, 2004). Middle terrace also had four white marble pavilions, the central podium called *mahtabi* and the great fabulous cascade named chaddar. It also had a white marble throne chabutra for the emperor and a large white marble pavilion SawanBhadon.

## Conclusion

This paper examines the relationship between the tangible and intangible features of Shalamar Gardens Lahore, the wonderful illustrations of the Mughal garden layout in Subcontinent. The garden features are profoundly related with the six themes i.e., Symbolic themes that are paradisical and political; Functional themes that are ceremonial and environmental; and Aesthetic themes that are personal and formal.

The tangible features of the Shalamar Gardens, such as two stepped Chaharbagh, terraces, fresh running water, gushing fountains, cool pavilions, throne, flora and shady trees were planned in relation to symbolize the image of Paradise described in Sura-e-Rahman. The theme was so designed and the features were so well placed according to the Quranic description that the whole layout created a magnificent earthly image of the Paradise. The study shows strong influence of and relationship between the Paradise Symbolism and the structural elements of the Chaharbagh. The study confirms the hypothesis that *Quranic description of Paradise highly influenced the layout of Chaharbagh with the emphasis on the terraces and water distributing channels*. The study demonstrates, the layout of stepped Chahar Bagh, and flowing water has symbolic relationship with the Paradise Gardens as provided earthly images of Heaven.

As far as, the political symbolism is concerned, the Mughals erected many gardens during their power. The Mughal emperors ruled Indian Subcontinent from the early 16th century to the early 18th century and created magnificent Chaharbaghs in Kabul, Agra, Delhi, Kashmir and Lahore. They adorned the Chaharbagh and its avenues with shady trees and rich flora that were brought from the land of Persia and other neighboring territories. They adorned their pavilions and thrones with white marble and precious gems and stones and provided water canals from the long-distanced areas to irrigate their gardens and to run gushing water in the pearl fountains and marble cascades. These wonderful gardens were symbolic of Mughals' political power in the region and showed their dynastic and territorial extent.

Moreover, the terraced gardens were erected to create artificial waterfalls and to provide a flow of running water throughout the garden channels on the flat terrain of Lahore. It shows that design was also adapted to different topographic and climatic conditions but the basic concept and design of Chaharbagh was retained.

The garden features also show a strong relationship with other thematic categories. The placement and design of axial paths, water canals, cascades, fountain jets, Pavilions and flora, all have significant relationship with aesthetics. The magnificent atmosphere created by the rich flora, summer cool pavilions to enjoy the waterfalls to moisten the air, all served to formal as well as subjective aesthetics and provided personal experience of the garden to appreciate the integral beauty of paradise imagery and to enjoy the elements of art and design. The gardens also performed the ceremonial or courtly function other than the routine visit to the gardens. The environmental functional symbolism can be easily identified in the gardens. The shady trees were especially planted to provide a dense dark shade in the hot season. Gushing fountains made the atmosphere cool and pleasant and moisten the air to provide a calm resting place in the extremely hot summer season of Lahore.

The present study of Mughal gardens revealed a close relationship between symbolic representation and its physical elements. Thus, it can be safely concluded that although all the garden features and themes are interrelated with each other but the inclination towards the Quranic image of Paradise was more prominent during Mughal dynasty and had great influence on the planning and design of Mughal gardens as compared to the other symbolic categories.

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