



Tracing the Ethereal: Exploring Aesthetic Heritage and Cultural Identity in Historic Gardens -A Case Study of Shalimar Garden

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ABSTRACT

Mughal gardens are a prominent figure in the history of landscape architecture, serving as a symbol of artistic talent and horticultural genius. The Mughal gardens thrived throughout the Mughal Empire's rule in South Asia, and this dissertation investigates the profound philosophy that underpinned its design planting methods. The study explores the sociocultural factors that influenced Mughal gardening practices within the historical framework of that period. This study makes use of both primary and secondary sources to illuminate the main components of Mughal Garden design, including the widespread use of geometric patterns, water features, and the blending of architecture and landscape. A strong link between the gardens and the Mughal worldview is shown when the research additionally looks at the spiritual and metaphorical meanings connected to the fauna and plants selected for these gardens. Additionally, the study focuses on the cultivation practices used by Mughal horticulturists, showcasing their creative approaches to attaining a harmonic fusion of form and function. Mughal gardens are renowned for their overall visual effect, mostly due to the careful selection and placement of their flora. This dissertation tries to uncover the underlying plantation philosophy of Mughal gardens through a thorough investigation of historical records and garden ruins, highlighting the complex interactions between art, culture, and environment throughout this era. Modern landscape designers and hobbyists may take inspiration from the Mughal approach to horticulture and apply its timeless wisdom to contemporary gardening techniques by comprehending the fundamental ideas that guided the building of these gardens.



Introduction

As is clearly described by Taib and Rasdi about Islamic Garden is the reflection of the paradise that is the foremost utmost desire of all Muslim generations to get a life hereafter. whereas the Islamic Garden is the key coin of the heaven gardens due to which Mughals practiced more in their reigns. Islamic gardens serve as a haven of peace, contemplation, and a reminder of heaven. (Taib and Rasdi 2012). Traditional Islamic gardens were designed with a focus on water and providing shady areas. The Islamic Garden needs to be planned with a specific purpose, following some beliefs and goals from the Islamic faith and Muslim culture. It should include special features (Farhadi 2020). However, the images of paradise in the Quran help us grasp

the idea of Islamic gardens. You can find these gardens in Persia, Moorish Spain, and Mughal India. Yeoman's research says that many Islamic gardens have been inspired by older gardens from Islamic history. These older gardens were mainly influenced by Iran, Spain, and Mughal, India. The typical elements of an Islamic garden, such as courtyards, water features, trees, flowers, and writing on walls, were employed in traditional Islamic gardens. (Yeomans 2006). Mughal gardens were created by the Mughal emperor Babur. The first Mughal gardens were created in Afghanistan by Babur, the Mughal Emperor who lived in Uzbekistan. Babur felt a strong connection to the scenery in their home country and was sad that it was missing in the subcontinent. This made them build gardens in the subcontinent. Before Babur arrived in the mainland subcontinent, he used natural water flow to make gardens. However, when he reached the plains of India, he used a different method. So, he decided to use a Persian wheel system to bring water to the Charbagh. He wrote a lot about it in his autobiography. The gardens are not just beautiful buildings, but they also do things that make the culture of old towns better over a long period. After Babur died, his son Humayun became the ruler of Hindustan. After Humayun, his grandson Akbar became the ruler, followed by his great-grandson Jahangir. When Shah Jahan was in power from 1628 to 1658, the Mughal Gardens buildings in cities along the Great Trunk Road reached their highest point of development. Shah Jahan loved buildings and gardens. He paid for many of them to be built all over his kingdom. The Shalamar Garden in Lahore, built by Shah Jahan, is a great example of architecture, design, landscape, and hydraulic systems. It is located east of the Grand Trunk Road. The Taj Mahal is a famous building that people consider one of the best in architecture. The Mughals chose the gardens at the Taj Mahal because they are naturally beautiful and they use them for different things. These activities can be anything from personal events to official family functions. Some events and gatherings, like big celebrations and poetry readings, happen for various reasons. These can include festivals, meetings, honoring spiritual leaders, birthday parties, and competitive games. The gardens are also used as official stopping places, for meetings and gatherings. There is a separate park reserved exclusively for women, which has extra amenities like a hammam. In Mughal gardens, the gardens and buildings blend and there is no clear separation between them. However, the gardens surrounding the palace were created for isolation and some areas were specifically designed for court ceremonies, which were separate from where people lived (Rehman and Akhtar 2012). The history of the Mughal Garden is quoted from Abdul Rahman and Munazzah Akhtar from "The Mughal Gardens".

Review Of Literature

The plains of India and Kashmir are sites of the majority of the Mughal gardens. The region has a tropical climate with warm, dry breezes (Lehrman 1980). The most significant feature of Mughal gardens is how tightly the constructed environment stays attached to the natural elements, including plants, the light from the sun and moon, bird sounds, and air movements that penetrate the garden setting (Petruccioli 1997). The layout of man-made buildings gave the impression that they were in a perfect natural setting. The harmony seen in nature was captured in the constructed world. In the same vein, man-made features including pathways, fountains, streams, aiwans, and lighting coexisted with natural features. The parts came together to make a whole, yet nature was always in charge of the entire.

Consequently, gardens were utilized as centers of revelation, meditation, and enlightenment (Miraei Ashtiani 2015). Originating in Central Asia, the Mughals were Persianized Turks who introduced Persian culture to India (Dickie and Zaki 1985). The first Mughal Emperor, Babur (1526–1530) was derived directly from Tamerlane and Genghis Khan. (Koch 1997). Through his amazing triumphs more than a century before, his great-grandfather had brought together Central Asia, North India, Persia, Mesopotamia, Syria, and Asia Minor into a single empire with its capital at Samarkand, and eventually Herat, Afghanistan. (Dickie and Zaki 1985). This is demonstrated by the striking similarities in garden design and layout throughout a large geographic area and historical period, even in the face of significant differences in regional culture and technical environments. (Blair and Bloom 2003). Since the Mongols lacked a distinct culture or religion of their own, they easily assimilated the customs of the nation they subjugated. Babur's plan to create a garden included importing garden designers from Central Asia to adorn his capital city of Samarkand. (Jaffar 1936).

The earliest Indian rulers were Babur (1526–1530), followed by Humayun (1530–1556), Akbar (1556–1605), Jahangir (1605–1627), and Shah Jahan (1627–1657). Out of the five emperors, Jahangir was the most environmentally conscious and the most well-known landscape architect, along with his great-grandson Babur (Moynihan 1979). At that period, gardens emerged as the new hubs of royal authority. The Mughals' entrance is thus credited with initiating the formal garden tradition in the Indian subcontinent. (Petruccioli 1997). By keeping in mind throughout all of these gardens a diligent design and usual practice of Mughal emperor Shahjahan that takes into consideration landscape design as a resting place for the guests of that Mughal era. A multiple-terraced garden accommodating all features of paradise is sophisticatedly spread

in a linear layout and the water channels that came out through the canal and fountains are running with the layout of Shalimar Garden. The most significant influence on Lahore's cultural past is thought to have come from the gardens that existed under the Mughal Empire. Though many ancient gardens were built in several places, such as Agra, only Lahore was given the moniker "The City of Gardens." Shalimar Garden serves as one illustration of our cultural past. It is situated around five kilometers to the east of Lahore. Shahjahan, the Mughal Emperor, oversaw the construction of this park. He ordered this garden to be built with the same layout and style as the Kashmir Garden that Shahjahan's father had designed and built. An engineer named "Ali Mardan Khan" was hired to build this exquisite work of art. Among the many achievements attributed to Ali Mardan Khan was the creation and introduction of an eastern plant tree into Kashmir. At one point, Ali Mardan Khan was also named the governor of Kashmir. The Muslim Mughal Emperors ruled during the period when the Shalimar Bagh was built. (Kausar, Brand et al. 1990). The Shalimar Garden was primarily constructed so that members of the Mughal Emperor's household could be the only ones to utilize it. This garden was made public after the fall of the Mughal Empire and is still a public monument today. The Shalimar Garden's hundreds of water cascades demonstrate the amount of attention to detail that was put into its design. Shalimar Garden is divided into three sections, each measuring 230 yards in length and 525 yards in width. It is clear from looking at the Shalimar Garden now that its design is a composite of two Charbagh, each with a veranda attached.

The research aims to shed light on the historical significance of Shalimar Garden within the broader context of Mughal gardens, particularly focusing on its present state in Lahore. By delving into the historical significance of Shalimar Garden, the study contributes to a deeper understanding of Mughal Garden design, philosophy, and sociocultural influences prevalent during the Mughal Empire's reign in South Asia. Furthermore, this research offers valuable insights into the preservation and restoration challenges encountered by Shalimar Garden, emphasizing its cultural and architectural importance in Mughal history. By analyzing these challenges, the study not only highlights the unique features and structural elements of Shalimar Garden but also addresses broader issues related to heritage conservation and management. The significance of this research provides a comprehensive examination of Shalimar Garden's historical significance, offering insights into its past glory and present condition. Additionally, by identifying preservation and restoration challenges, the study aims to inform strategies and interventions for safeguarding Shalimar Garden's cultural and architectural heritage for future generations. Overall, the research adds novelty by combining historical analysis with contemporary preservation concerns, offering a holistic perspective on the importance of Shalimar Garden within the realm of Mughal gardens and its relevance in today's cultural landscape.

The objectives to conduct this study are as follows:

1. To examine the historical significance of Shalimar Garden in the context of Mughal and Persian gardens and assess the garden's present state in Lahore.
2. To provide insights into the preservation and restoration challenges faced by Shalimar Garden, highlighting its cultural and architectural importance in Mughal history.

Methodology

The present study employs a technique that mostly consists of text analysis and library search (Rehman 1997) with a focus on the ideas and principles of old historic gardens that have their roots in the Persian gardens. The research methodology involves the following steps:

- *A thorough literature review of Mughal and Persian gardens.*
- *Text analysis of primary sources to identify themes and techniques.*
- *Library searches for additional context.*
- *Comparative analysis to highlight similarities and differences.*
- *Interdisciplinary insights from fields like art history and botany.*
- *Synthesis of findings to inform contemporary landscape design and conservation efforts.*

The research methodology involves a comprehensive approach to understanding historic garden design and philosophy. It begins with an extensive literature review covering scholarly works, historical texts, and archival materials related to Mughal and Persian gardens, establishing a foundational understanding of their theoretical frameworks and historical contexts. Following this, meticulous text analysis of primary sources delves into recurring themes and practical techniques, while a thorough library search uncovers additional literature on design principles and socio-cultural significance. A comparative analysis is then undertaken to explore similarities and differences among these gardens, focusing on layout, symbolism, and water features, enriching the understanding of their design with Shalimar Garden. An

interdisciplinary perspective, drawing from fields like art history and botany, further deepens insights into the complex interactions between cultural heritage and environmental contexts. Finally, findings are synthesized to offer interpretive insights for contemporary landscape architecture and garden design, aiming to contribute to the conservation and revitalization of cultural landscapes and ensure the enduring legacy of Mughal and Persian gardens.

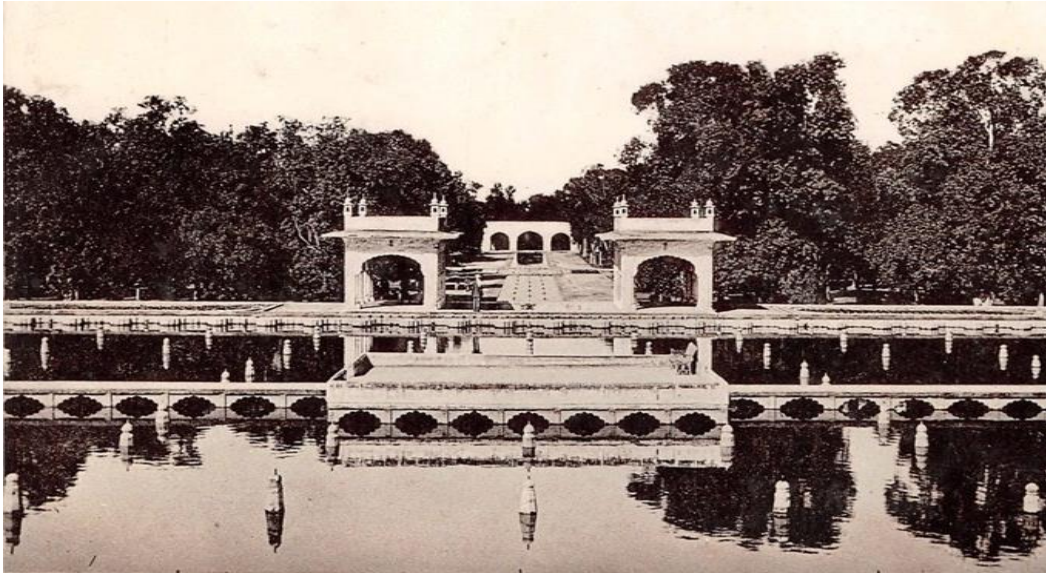


Figure 1. *Vintage Silver Print of Shalimar Garden Lahore, Pakistan, ca.1910*

Discussions

The connection of Mughal gardens to creation is intricately intertwined with the religious words of Muslims (Roth 2020). Moreover, through a case study analysis of Shalimar Garden, once a flourishing oasis where visitors reveled in the beauty of blooming plants and indulged in the fruits of nature, the study examines the gradual decline of its glory amidst contemporary challenges. In the past, Lahore was adorned with gardens, and their allure captivated the hearts of its inhabitants. However, today, the charm of these gardens is threatened by man-made issues, notably industrialization, with the modern transit system exerting significant pressure on the area's green spaces. Consequently, the research meticulously examines earlier library articles discussing plantation practices, their societal significance, and associated social concerns about Shalimar Garden, aiming to shed light on the complexities of its preservation amidst evolving urban landscapes.

Plantation Philosophy

It is reasonable to say that the Mughals were among the greatest garden patrons in history. The majority of informal amusement and pleasure areas were found in residential settlement suburbs or next to bodies of water before the Mughal era. Shrine, temple, and water features were surrounded by planned landscape elements. These formal and informal settings aimed to increase human intellect and the soul's closeness to nature. The regions they inhabited were given a new perspective on the terrain by the Mughals. Gardens were constructed beside major roads, in suburbs, and within towns. (Mubin 2013). In the Shalimar Garden, there are several parterres. A parterre is a section of a garden where plants are arranged symmetrically on a level surface as shown in figure 3. There is a clear similarity between the gardens of the Taj Mahal and Shalimar which includes symmetrical sections with eight angles and eight straight sides. Numerous varieties of flowers covered all eight of these straight sides and eight of these angles. In addition, rectangular-shaped arrangements were added to the garden, where a cypress tree and two little trees were planted. Every plant bed in the garden was planted using the same design. There are instances where the tree planting pattern is reversed, with two cypress trees planted side by side and a different tree planted in the center. Two other parterre styles that were employed in the Shalimar Garden were nearly comparable to those found in the Udaipur city gardens. In one of those layouts, there is a little lake that runs directly across short paths that were constructed for this very reason. Additionally, there is a designated area where visitors may sit and take in the beauty of the garden. (Azmeea, Yunosa et al. 2016) A stage in the middle of the veranda was used for various artists to play. Because the veranda shares many characteristics with a typical little zenana garden (female garden), it might be connected. A support fence runs the length of all the blooms (Mubin 2013). In 1922, the decision was made to create a rose garden on the terrace's second story. Among

all the roses, a large number were imported from England and planted instead of the previously established mango trees. In 2006, all the roses and plants were replaced with grass in all of the flower beds and garden areas under the directives of the Punjab Archaeology Department. It was not until 1761 that the Shalimar Garden's original layout and features managed to hold steady (Azmeea, Yunosa et al. 2016). All of these connections illustrated how the Shalimar garden embodied the idea of the circle of life. The equilibrium that can be seen in the Shalimar Garden is mentioned in the Quran.

“The sun and the moon follow their calculated courses; the plants and the trees submit to His designs; He has raised the sky. He has set the balance so that you may not exceed in the balance: weigh with justice and do not fall short in”.

The balance (Surah 55: 5-9)

Table 1. Comparative Analysis of Ornamental Plant Species Cultivated by the Mughals Across Different Periods in Shalimar and Other Gardens

Sr. No.	Plant Species		Categories	Characteristics
	Common Names	Botanical Names		
1.	Hibiscus (Ali, Wabel et al. 2005)	<i>Hibiscus rosa-sinensis</i>	Perennial shrub	Year-round blossoming of large red flowers
2.	Hibiscus(Ali, Wabel et al. 2005)	<i>Hibiscus Syriacs</i>	Perennial shrub	Large, alluring flowers blooming year-round
3.	Olender / <i>Kaner</i> (Khan, Kant et al. 2010)	<i>Nerium odorum</i>	Perennial shrub	Year-round blossoming of funnel-shaped flowers in white, yellow, and pink
4.	Caraunda(Devmurari, Shivanand et al. 2009)	<i>Carissa carandus</i>	Perennial shrub	The colorful berries are visually appealing
5.	Screwpine (Selvan, Binoj et al. 2022)	<i>Pandanus odoratissimus</i>	Palm like tree	At the apex of the branches, sword-shaped, stiff (leather-like), spiky, bluish-green, aromatic leaves develop in rosettes. In summer, the tree bears very fragrant flowers, used as perfume
6.	Willow (Rosenqvist, Roos et al. 2000)	<i>Salix alba</i>	Tree	Usually elongated, the leaves can also be circular or oval, and they often have serrated edges
7.	Jasmine(Aravind, Ahmad et al. 2021)	<i>Jasminum grandiflorum</i>	Perennial shrub	White fragrant flowers blooming in summer
8.	Champa (Osorio, Alarcon et al. 2006)	<i>Michelia champaca</i>	Tree	Large, fragrant flowers in a golden-yellow hue
9.	Chinar / Oriental Plane(Raj, Sailo et al. 2021)	<i>Platanus orientalis</i>	Tree	Leaves resembling palmate or maple leaves, alternately arranged on the stem, deeply lobed and visually appealing
10.	Mulseri(Kamkaen, Mulsri et al. 2007)	<i>Mimusops elengi</i>	Tree	Elegant leaves with fragrant, small star-shaped flowers
11.	Jasmine(Aravind, Ahmad et al. 2021)	<i>Jasminum smback</i>	Perennial shrub	Fragrant white flowers blooming in summer
12.	Cypress(Mattoon 1915)	<i>Cupressus sampervirens</i>	Tree	The crown exhibits level branches with variably loosely hanging branchlets, creating attractive foliage.
13.	StarApple/ chalta(Das and Prakash 2009)	<i>Dillenia indica</i>	Tree	A perennial tree bearing large, cup-shaped white flowers.
14.	Juhi (Jasmine)(Aravind, Ahmad et al. 2021)	<i>Jasminum auriculatum</i>	Perennial shrub	Summer blooms of small, fragrant, compact white flowers
15.	Narcissus(Bastida, Lavilla et al. 2006)	<i>Daffodil sp.</i>	Bulbous plant	Flowers of Various Colors and Forms and Cup in shaped
16.	Fragrant Padri Tree(Gupta and Dubey 2019)	<i>Sterospermum suaveolens</i>	Tree	Fragrant flowers are borne in large, loose clusters, pinkish in color, with bell-shaped sepal cups
17.	Harsinger / Parijat(Mishra, Tiwari et al.)	<i>Nyctanthus arbortristis</i>	Perennial shrub	Small, star-shaped white flowers with a yellow tube
18.	Rangoon Creeper(Dutta, Biswas et al. 2019)	<i>Quisqualis indica</i>	Perennial Climber	Clusters of pink flowers blooming in summer and the rainy season
19.	Blue Bell Vine(Aprilia, Handayani et al.)	<i>Clitoria turnatea</i>	Perennial Climber	Flowers in deep blue color
20.	Midday Flower(van Doorn and Van Meeteren 2003)	<i>Pentapetas phonicea</i>	Seasonal Shrub	Bright scarlet flowers bloom in small clusters during midday in the rainy season
21.	Dhak / Palas (The Flame of the Forest Tree)(Nikam 2019)	<i>Butea frondose</i>	Tree	Mass flowering occurs in an orange-red hue
22.	Date Palm(Chao and Krueger 2007)	<i>Phoenix dactylifera</i>	Tree	The plant features ornamental foliage and produces attractive fruits.
23.	Saffron(Samarghandian and Borji 2014)	<i>Crocus sativus</i>	Perennial Corm plant	The flowers are ornamental and serve as a source of saffron
24.	Rose(Sjøberg and Schreiner 2010)	<i>Rosa grandiflora</i>	Perennial shrub	The flowers are both ornamental and fragrant

Besides plants, it is interesting to observe how various paintings created by various artists, various old maps of these gardens, and various descriptions made by visitors may all represent the environment of the gardens in different ways. The garden's pathways were portrayed by the trees and plants that were put there. That is to say, the gardens' flowers were arranged along the major channels that the water ran through (Ali 2011). Mughal gardens boasted numerous embellished structures, including adorned partition walls, intricately perforated cement walls, elaborately carved surfaces, and ornate pillars, showcasing a diverse range of masonry artwork. These structures significantly enhanced the garden's aesthetic appeal, complementing other features to create a visually captivating landscape. Marble pavilions with domed structures on the top roof of the pavilions and arches from all four sides gave them a clear view of botanical gardens and the fountain bodies of the water channels in Shalimar Garden (Petruccioli 1998). As discussed by the researcher Ruggles the combination of plantation in the context of water flowing through the channels creates a scented atmosphere which leads to a clear impact of paradise depicted in such a layout for the users (Ruggles 2008).

Symbolic Significance of the Waterway System

When discussing the old Islamic ideals of garden design, water has always been at the center of the conversation. Water has always been important throughout history, regardless matter whether it is being discussed in ancient or contemporary times. The field of water architecture in South Asia and the Middle East has delved deeply into the intricate systems of water, which serve not only as sources of beauty but also productivity and symbolism (Fatma and Fatima , Petruccioli 1997, Ruggles 2008, Ahmed 2019). Inside the Mughal gardens, the water features were designed with 'symbols' in mind. The Mughals were fascinated by symbolism and took great care to include it in their Persia and Central Asian-inspired gardens. The Islamic gardens of Paradise were modeled after the terraces found in Mughal gardens. In their early gardens, the Mughals liked to create octagonal ponds and platforms; however, Shahjahan frequently utilized squares in his designs. As a result, the octagon, derived from the process of squaring the circle, came to symbolize the reconstruction of the material aspect of humanity. This symbolism is depicted by combining the stability of the square with the eternal nature represented by the circle (Crown 1989). The four water channels symbolized both the earthly rivers of life and the celestial rivers of milk, wine, honey, and water (Stuart 1913).



Figure 2. *Front View of Water body of Shalimar Garden*

The fountain represents the "life cycle," which rises, merges, and rises once more. There are two fountains in Paradise itself: Salsabil and Tasneem (Fatma and Fatima). Lahori native Muhammad Salih Kanbu provided an extremely artistic description of the water system and its symbolic meaning in the Shalimar garden in Lahore: "A sacred stream flows through the gardens, irrigating the flower beds, in the center of this earthly paradise with all of its elegance and sweetness, along with its chanting, fascinating, and exhilarating nature." It was lush. The great stream represents the portals of divine compassion, just like clouds do. It is a place of worship with a chevron pattern where people's hearts lay in these emblematic elements of the Mughal gar's main topic and pressing need. Absent even considering the possibility of its existence Since Shalimar terraces are the main feature of the garden, there are indications of irrigation

throughout the place. All of the trees and flowers were at ground level, but the water route that carries water from one area of the garden to another was retained at a little elevation from the ground. On the garden's top and lower verandas, every water walk was wide and elevated. When placing these walkways around the landscape, several different designs were also considered. Due to the extreme difficulty in obtaining stone in Punjab, Delhi, and Agra turned to alternatives like bricks and tiles. The Shalimar Garden used the same brick walls. A remarkable truth is that, except for the Shalimar Garden, no other location where these bricks were used was able to withstand the test of time since they are no longer accessible in their original forms Bricks and plaster were previously used to rebuild all of the verandas that faced the garden. Through this enormous veranda, the water in the tank was distributed to the remainder of the garden. When Moorcroft visited Lahore in 1820, he concluded that the baradari consisted of a square hollow that was also constructed of marble and a white marble floor on the same floor as the basin. Additionally, there are lamps on the sides that serve as a conduit for the water to pass through tiny holes left in the floorboards(Sajjad Kausar 1990). The meticulous design and harmonious arrangement of the garden demonstrate the significant amount of time and energy required to create a significant space that continues to hold significance throughout time as shown in Figure 3.

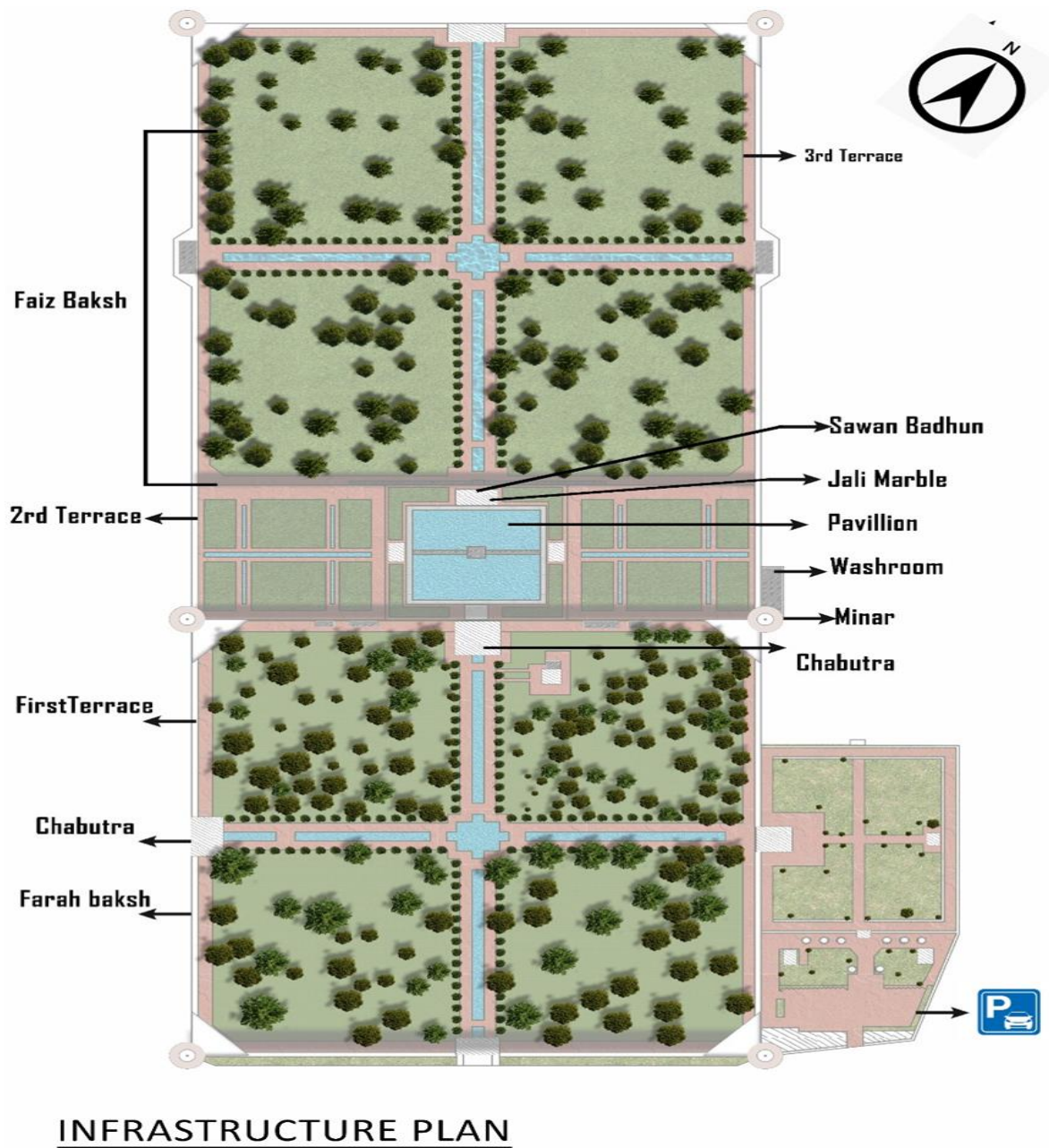


Figure 3. Infrastructure Plan of Shalimar Garden, Lahore

The Speaking Fountain and Dignity Levels

Shalimar, one of the best-known Mughal gardens, was built in 1634 by Emperor Shah Jahan as a retreat for the royal family to relax and have fun. Mulla Ala-ul-Mulk and the talented canal engineer Ali Mardan Khan collaborated on the project. The conventional account is that it was finished in a year, five months, and four days. Conventional accounts also state that the emperor raised his eyes to witness a miraculous exhibition of scientific prowess and artistic magnificence on a day meticulously chosen as auspicious and amazing. When Shalimar was first constructed, it had 80 acres of beautiful gardens, ponds, streams, and absorbs surrounded by a tall wall made of red sandstone with white marble inlay. The Shah Nahar, or royal canal, ran the length of the area, dividing it into three large terraces, each twelve feet higher than the other. The canal was a masterpiece by Ali Mardan. The water for it was carried in from Madhapur by the engineer, and it descended over the three terraces at the top of the garden, a drop of about forty feet. It's amazing how the water was kept at the exact height that was wanted at every level. More astonishingly, the waterworks were so sensitive that all 450 of the gardens' fountains simultaneously ran when more flow was allowed in at the top.

The garden itself was a veritable tapestry of green, with promenades and walkways, agate summer homes, floral plants, fruit trees, and red and white sandstone pavilions, as well as ponds and fountains. Five huge towers and a high wall shielded them all. The contrast between the scorching Punjab plain and the site's cool, verdant loveliness must have been striking after the hot, dusty journey there. The bottom level served as the entryway to these regal leisure gardens. It was designed with avenues of gorgeous fruit trees, which guests are welcome to select and consume as much as they like. The fruit trees include mangoes, peaches, apricots, pears, almonds, pomegranates, quince, mulberries, lemons, and oranges. Proceeding upstairs to the school level, elevated brick pathways known as Khayabans carried an overwhelming scent of roses, which were cultivated in abundance there. Otherwise, the second level focused on shade, with rows of cypress, poplar, and plane trees framing its pathways and Khayabans. The royal canal ran down the middle of this terrace, emptying into a massive marble basin from which over a hundred waterjets sent forth a shimmering, refreshing mist. Despite being far smaller than the other two levels, the impressive main reservoir gave the impression of a vast area.

The first two floors were together referred to as the "bestower of plenty," or Faiz Baksh. The Farah Baksh, or "bestower of pleasure," was the name given to Shalimar's third level above. The royal family could only travel to Shalimar with the most reliable nations, and even then, access to the top terrace was typically restricted. Rather, guests were forced to make do with eunuch guards' cautionary glances and cautious glances up at the carved marble screens that distinguished it from the outside world. On the third floor, only flowers were planted: a fragrant abundance of lotus, jasmine, lilacs, cyclamen, roses, irises, and crown imperials. The emperor would stay in the garden whenever he came to visit. And when he wasn't with his wives, he could host parties in an amazing marble pavilion that was surrounded by windows and kept cool by a cascade of waterfalls. The emperor and his guests could see the fountains, marble pools, and brilliant, splashing water below from behind its white pillars.

One of Shalimar's key themes was the movement of water. A waterfall cascaded into a pond below via a carved screen from a marble reservoir in the middle of the emperor's terrace. It flowed through the central reservoir before overflowing into a pool at the base of the garden via a second fall. The water flowed across chaddars, or sloping plates of white marble, as it moved from one level to the next. These were crafted to provide a soothing sound and to split the running water into a refreshing spray by carving it into beautiful curves, chutes, ripples, and scallops. Thus, their name, which translates to "shawl." The garden designers placed recesses, known as Chini khans, behind the tumbling water to house candles at night and golden vases filled with fresh flowers throughout the day.

Geometry and Unity in Design

Mughal gardens are designed in the layout and style of the Charbagh, which means "four." There are four partitions between each of the two portions that make up the garden. When constructing the gardens, both aesthetic and irrigation principles were taken into account, following the Mughal Garden tradition. The Shalimar Gardens in Lahore showcase the Mughal focus on harmony, order, and the sacred through the use of geometric architecture. It creates a peaceful atmosphere that continues to enchant visitors to this day. In the beginning, the relationship between outdoor spaces (gardens) and indoor spaces (palaces) was weak¹² (Koch 1997) but later a close relationship between palaces and gardens improved the harmony between man and nature. The Persian idea of "Charbagh," which translates to "four gardens," served as the foundation for the geometry of Mughal gardens. The garden is divided into four equal quadrants by two crossing lines, which can be walkways or water bodies. Occasionally, a platform or monument is located in the middle of the garden. Four quadrants are developed for each quarter. Sometimes these pathways are raised and the

garden is at a lower level. Mughal gardens' geometric design is built on symmetrical divisions and subdivisions. It brightened the aesthetics of the gardens and streamlined irrigation.

Conclusion

The great examples of the Mughal Garden design in the Subcontinent, the Shalimar Gardens in Lahore, are examined for their interplay between their tangible and ethereal features in this essay. The six themes, i.e., the garden aspects, are strongly tied to each other. Symbolic, political, and paradisiacal themes; practical, ceremonial themes and environmental; as well as formal and personal aesthetic aspects. Mughal gardens are examples of modern gardening techniques that are now more attainable technique by the users of the modern day. The historical Mughal gardens are a prime example of the range of exquisite aesthetics that defined the Mughal era, with the Shalimar Garden serving as a notable case study. The Mughal rulers created these gardens as paradisiacal settings that went beyond mere earthly beauty via painstaking architecture, inventive engineering, and a profound respect for nature. The long heritage of Mughal Garden architecture is shown by Shalimar Garden, which has a well-balanced combination of geometric perfection, water elements, and lush foliage.

In addition to reflecting the Mughal emperors' exquisite aesthetic sensibilities, the rigorous attention to detail in Shalimar Garden's design also displays their deeply held spiritual and cultural beliefs. The garden represents, in metaphorical form, the Mughals' idea of heaven on earth, where harmony and balance foster a calm and serene atmosphere. The use of water features, such as reflecting pools and cascading fountains, gives the garden experience a sensory depth while conveying a feeling of plenty and cleanliness. The incorporation of a wide variety of plants, from colorful flowers to aromatic fruit trees, adds to these paradisiacal areas' biological complexity and sensory richness. Investigating the old Mughal gardens reveals a deep interaction between symbolism, culture, and aesthetics. Shalimar Garden and its equivalents are prime examples of the Mughal emperors' desire to build utopias on earth that reflected their romanticized views of heaven on earth. This case study sheds light on the significant influence that Mughal Garden design had on later architectural and landscaping practices, both inside and outside of the Indian subcontinent. The Mughal gardens, which center around the Shalimar Garden, essentially beg us to see the lasting beauty and cultural value embedded in these ancient settings. They provide a look into the spectrum of heaven's beauty that attracts and inspires generations, serving as a permanent witness to the Mughal dynasty's dedication to designing locations that transcend the earthly sphere.

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