

The Comparison of Water Representations in Iranian and Indian Gardens

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Abstract

Iranian gardens are known for their unique style and identity in the world, which remained intact against political attacks and turned into traditions. Although Indian garden design differs from Iranian design and took on Indian identity through Mughal history, Indian basis, and climate, it has been largely influenced by Iranian scheme. It is inevitable to recognize the role of water as the most pleasant common hallmark of Iranian gardens to understand Indian garden design.

The present paper aims to prove that the concept of water in Iranian garden changed when used in India and affected by various factors. Water is used for scene and landscape design and a symbol of cleanliness, dynamism, and motion in Iran (symbolic); in contrast, it is used to decorate gardens in India (decorative). Research indicates that in Indian gardens, water is running in very delicately designed streams which over-emphasize the streams more than water itself.

Keywords

Water representation, Indian gardens, Iranian gardens, Symbolic element, Decorative element.

Introduction

In contrast to architecture, gardens do not stem from human beings basic needs. Human beings searched for their utopic and imaginary world in gardens due to their inclinations and interest in the nature; therefore, gardens fully reflect the culture of every country. Ideological and cultural differences lead to stylistic differences in design, so it can be claimed that gardens appropriately represent cultural characteristics of any nation.

Water with various potentials such as life, brightness, cleanliness, light, inertia, and motion brings about various feelings in human spirits. Also, its various running structures such as brooks, streams, rivers, and fountains provide mental comfort and technical functions. Thus, it is seen in various representations in human-made structures especially in relation with gardens. Iranian gardens, as the oldest scene and landscape design and architecture in the world recognizes water as a symbol so much that without it, gardens would be meaningless. By studying the role of water in Iranian gardens and comparing it with the Indian gardens, one can find out the garden design in Indian culture and the subsequent developments.

The present paper only aims to investigate the differences in water representations in Iranian and Indian gardens. By studying the role of water in Iranian gardens and Indian gardens with selected samples, various stylistic and conceptual differences in water representation are shown.

Research Questions

- How did the concept of water in Iranian garden change after it was introduced to India?
- In what aspects of gardens do these potential changes happen?
- How and to what extent did the background affect water representation in Indian gardens?

Hypotheses

The concept of water changed when introduced to India and it was affected by various factors. Although water was used symbolically in scene and landscape design and was known as a symbol of cleanliness, dynamism, and motion, it was often used to decorate landscape.

The Role and Concept of Water in Iranian Gardens

Iranian gardens as a whole cannot be visualized without water. The more the water, the more the role of water in the garden landscape design. When water resources are abundant, the main building of

the garden is moved to those resources (Mansouri, 2005). Water representation in gardens is based on certain concepts and its distribution is also based on certain rules which on the one hand relate to physical characteristics of water and irrigation, and on the other hand to landscape and aesthetics. In Iran, garden design is water design. Iranians enthusiasm in water led to used it in various forms in the garden adding to its beauty. It is running through the quadrilateral scheme, brooks, low-slope and winding streams to make the air cool, pleasant, and fresh. Thus, water in Iranian garden can be investigated in two groups of "form-embodiment" and "conceptual-symbolic" characteristics:

1. Form-Embodiment Characteristics: One of the prominent characteristics of Iranian garden is inclination to water representation; therefore, Iranian garden designer presents weird structure attempting to make water and its pleasant babbling and view more ostentatious (Heidar Nattaj, 2011: 61). It is displayed fully in Dolat Abad Garden. The designer made an undescribable masterpiece by running the water in and out of the ground so that one can see water in all parts of the garden. Not only did the designer run it in subterranean layers to feed the root of trees, but also he presented it over the ground to display it (Javaherian & Shahcheraghi, 2004).

In Iranian garden, irrigation system, like plating system, suited garden geometrical properties. It was designed in a way that it water entered the garden and after irrigating the garden and all the sections it left the garden and irrigated other gardens and farms. There are often ditches in the main streets and other lanes which are usually wider to look like water view, where water is running to gardens. These ditches meet each other perpendicularly in certain junctions to form ponds. For instance, in Kashan's Fin Garden, there are pleasant walkways in the middle of which streams of water is running and it throws out of turquoise fountains (Fig.1).

Pools and ponds are of utmost importance in Iran and are deigned in different sizes and shapes. They are usually constructed in the main axis of the garden. Iranian skilled architects stressed water as a life-bringing, cooling, and clear element in water views, ditches and ponds (Heidar Nattaj, 2011:62). Water has been represented as a running element in Iranian gardens and used to beautify the garden-scape in fountains, pools, ponds, and water views. The sound of fountains filling the atmosphere of the Iranian gardens is very pleasant. Specifically, the babbling of water in the ditches, streams and

falls is very comforting. A good example of this is the Fin Garden where you can hear this pleasant sound in every part of it. These sounds have different tranquilizing effect on the mind (Ibid). In addition, short waterfalls are constructed in gardens on steep slopes. Iranian architecture tried to create short waterfalls using steep slopes and level split on the course of ditches. Creation of Sineh kabki in steep slopes is due to water shortage which is made by water run showing it voluminous and roaring (Ibid: 65). Shahzadeh Mahan Garden is one of the most beautiful examples of using steep slopes to make waterfalls (Fig.2).

2. Conceptual-Symbolic Characteristics: Water plays a crucial role in cooling, light reflections, and pleasant sounds. It is rare and hence dear in the dry regions of Iran. It is of good omen to look at it in the dawn or in the beginning of the month. Iranians find water with a great deal of difficulty, use it with thrift and show it off in the gardens with great skill which add to the beauty, pleasantness, freshness, and elegance of the gardens (Ibid: 60). Although water causes humidity in the dry land of Iran, what drove Iranians to include it in the garden architecture was more than that. It has always

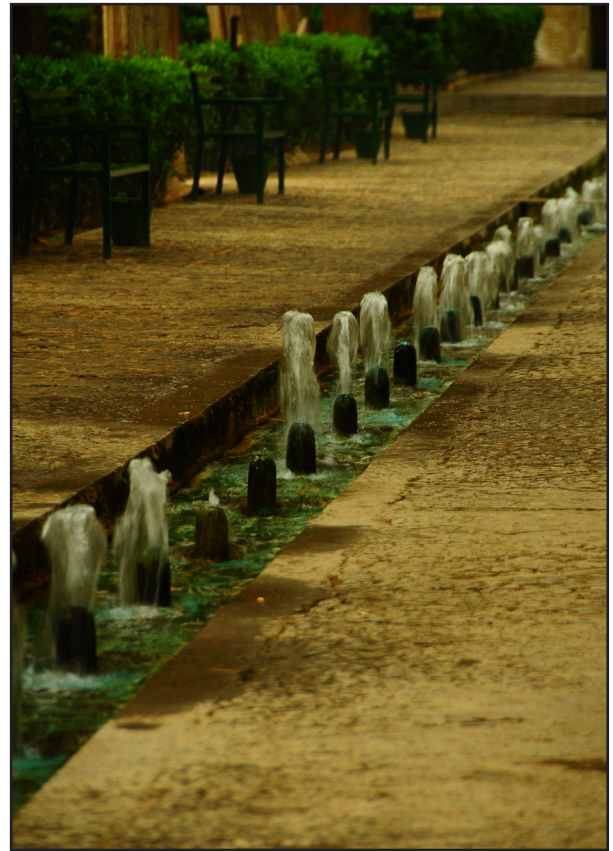


Fig.1. Auditory enrichment, Fountains in Fin Garden, Kashan. Photo: Mohammad Hossein Askarzade, 2010.

Fig.2. Waterfalls repeated in the natural slope and the overemphasized role of water in the main axis of Shahzadeh Mahan Garden, Kerman. Photo: Seyed Amir Mansouri, 1392.





Fig.3. The overemphasized role of water in the main axis of Dolat Abad Garden, Yazd. Source: www.makanbin.com

been deemed valuable in Iran, since it was known as the omen of light and purity in the ancient Persia. Water running in the four corners of Iranian gardens assimilates the four streams of water in the Paradise (Ansari & Mahmoudinejad, 2007). In fact, water is the most original and most pleasant common characteristics of Iranian garden (Heidar Nattaj, 2011: 60). Therefore, one can see the emphasized role of water in the main axis of Iranian gardens. For example, in Dolat Abad Garden, there is a heightened walkway, dominant on other walkways, in the main axis of the garden, which has a ditch in the middle leading to the main building and pool. This ditch provides a new looks by running through the main building and the garden (Omrani & Jeyhani, 2004), (Fig.3). The reflective property of water also influenced the design of large garden pools. It doubles the grandeur of the building by reflecting its picture. For instance, the water view of Dolat Abad Garden is exactly along the main axis and its dimensions match the octagonal building to completely reflect its picture (fig.4).

The Role and Concept of Water in Indian Gardens

"Babur!" was the first to build Mughal gardens to create beauty. Afterwards, gardens and palaces of the early Mughal government were transformed or restored by "Shah Jahan" (Koch, 1994:136). Although Indian gardens initially followed Iranian

Charbagh, this style integrated with the local traditions and environment to take on an indigenous form. Mughal gardens had main waterways similar to idealistic style of quadrilateral scheme. For example, in Humayun Garden, the tomb is located in the center of the garden, which is completely similar to Iranian Charbagh. The architectural concept of the tomb which is located in the intersection of

Fig.4. The proportion of water view dimensions with the wind-catcher height in Dolat Abad Garden, Yazd. Source: www.geolocation.ws



the main two walkways is simultaneously conforming to old and traditional and innovative and non-traditional principles (Ibid: 72). This splendor in design is used for grand royal palaces and Taj Mahal, too (Ibid: 136). In this garden, a high platform on which the main building is constructed is integrated with a Charbagh in a lower level. In fact, we can also call Taj Mahal a monument of Iranian art and culture (Sultanzadeh, 1999: 11). Taj Mahal's garden is a distinct 300 x 300 square which follows Iranian quadrilateral scheme. The garden is divided by four walkways in the middle of each a stream of water is running. These sections are further divided by primary and secondary roads into smaller square areas in four stages, 4x4 system. On the crossroads a platform is raised above the road level, on which a square pond with five fountains are constructed. The fountains are placed alongside only in the north-south canal, because if they were placed in the east-west canal, they would hide Taj Mahal's view. In addition, the north-south canal is wider to better reflect the picture of the building. It should be noted that walkways and strips of gardens straddling along both sides of the canal made it a passage axis towards the main building. Indian gardens are characterized by a source whose water is pooled in a stream which comprised the

main axis of the garden. One may often observe stagnant water in Indian gardens (Fig.5). In this design, elements such as steep slopes for stratification, ponds, canals, ditches, buildings, and platforms are seen along the water canals. Furthermore, brooks are running all over the secondary walkways. Where these streams of water meet a square pond with clear water with one or several fountains are constructed to refresh the environment (Fig.6). In Iranian gardens, irrigation system used ground level differences, Indian gardens, however, did not use such a system as water was abundant and they did not feel the need to use irrigation system; therefore, there was no need to make high levels in India's low lands.

The Comparison of Water Representation in Iranian and Indian Gardens

Water has always been an omen of cleanliness and brightness and was so much valued in ancient Persia that the area of any garden depended on the available amount of water for irrigation. Shortage of water strengthened the value of this precious element of life. Perhaps this is why most Iranian gardens are located in hot and dry regions which lack vegetation to provide a convenient place for accommodation and pleasure.

Fig.5. Stagnant water in the main axis of Taj Mahal, Agra. Photo: Arezoo Shirdast, 2012.





Fig.6. Narrow and shallow streams of water all over the secondary walkways in Humayun tomb-garden, Delhi. Photo: Arezoo Shirdast, 2012.

In contrast to Iranian dry plateau, Indian hills are covered by thick vegetation making the Indian plain susceptible for agriculture. Due to Indian climatic characteristics and dry farming, Iranian-style garden design was independent on irrigation system. In most Indian gardens, the necessary water especially for decorative purposes was sourced from wells; therefore, Indian gardens were idealistically divided into four sections not out of necessity.

In the last decades, Iranians built gardens on steep slopes on which steps were constructed to make the slow current of water fast and noisy. On the bottom of streams a bed of white rock with particular designs was placed to make the waves of water more beautiful. On the other hand, India had low lands and faced with the shortage of surface water. These geographical properties led to different approaches to landscape design. Thus, by digging wells gardens were allowed to be built in low lands of India which lacked surface water (Masoudi, 2005). In most cases, water is stagnant in the low lands of India (Figs.7&8).

Not only was water used to meet the needs of Iranians, but also it brought about spiritual effects. Running water has been the main factor reviving Iranian gardens which moved in Charbagh, streams, and low-slope and winding ditches to refresh the air. So there was no other solution but a system of stream running all over the garden to cool the air, and create a shadowed and peaceful environment. These streams usually met to make ponds. On the contrary, in the temperate climate of India,



Fig.7. The use of running water in the walkways of Fin Garden, Kashan. Photo: Ayda Ale Hashemi, 2010.



Fig.8. The use of pond with stagnant water in an Indian garden, Bibi-ka tomb-garden, Aurangabad. Photo: Arezoo Shirdast, 2012.

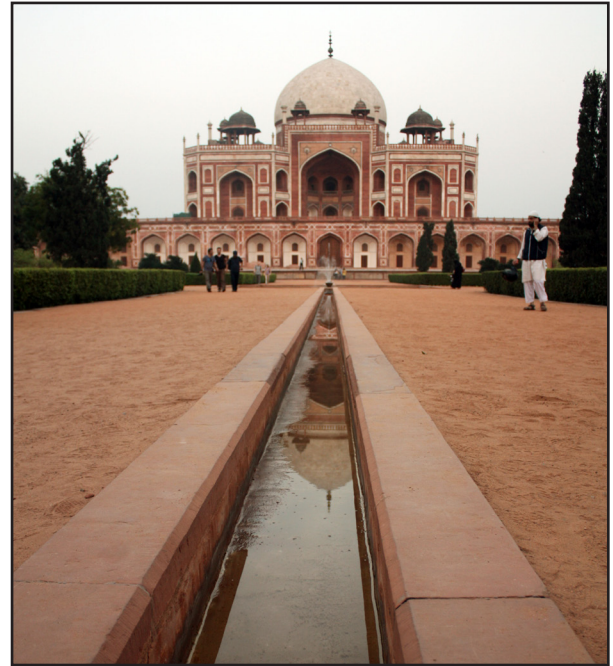


Fig.9. Underemphasized role of water in the narrow stream of an Indian garden, Humayun tomb-garden, Delhi. Photo: Arezoo Shirdast, 2012.

this functional concept of water changed into a symbolic one. Water was represented decoratively in narrow and delicate streams and in geometrical shapes on secondary walkways. However, water is running fast only in the main axis of Iranian gardens, and branching streams are used for irrigation purposes. Therefore, one can observe a small and less noticeable representation of water in brooks which are proportionately narrower to the side-walk, or in ponds with lots of decoration and miniature fountains (Figs.2&9). In fact these brooks are so symbolic and decorative that water changed

into an element of beauty and some elaborately designed ponds are even more emphasized than the water itself (Fig.10).

Another significant point is the interaction between water and people in Indian gardens which distinguishes Iran and India. In Iranian gardens, this interaction is immediate, yet in Indian gardens there is an intermediary element called the green space which point to another decorative aspect of water in Indian gardens. In fact, plants are used as decorations in addition to the ditches design which confirms the decorative role of water in Indian gardens.

Fig.10. Highly decorated beds of ditches in Indian gardens, Bibi-ka tomb-garden, Aurangabad. Photo: Arezoo Shirdast, 2012.



Conclusion

Water, as one of the major elements in Iranian gardens, is at least represented by three aspects: conceptual, functional, and aesthetic. It is not used only for irrigation purposes, but its conceptual, poetic and artistic element has always been beautifying the garden and created freshness, motion and beauty. Moreover, as water is considered sacred in Islam, its religious properties are also considered. In other words, the dominant design of Iranian gardens and its man-made parts are overshadowed by the sacredness and purity of water. However, Iranian gardens took on a new and indigenous identity in India where the aesthetic properties of water are developed. It is used less functionally and more spiritually and sacredly. Indian gardens used water in a decorative and delicate sense which decreased its natural properties and represented so much more as an aesthetic and geometric element that the architecture and decorations of the ditches are more ostentatious than water itself. Water representation in the Iranian gardens of India is symbolic, delicate and aesthetic which emphasize the geometrical and man-made arrangement of the garden more than its naturalistic aspects.

Endnote

1. Zahir-ud-din Muhammad Babur (1483-1530 A.D), the last emperor in the Golden Age of Islam, founded Mughal empire in India. He was a direct descendant of Timur, succeeding five Amirs, through his father, and also a descendant of Genghis Khan through his mother by 15 intermediates. Upon defeating Ibrahim Lodi, he could establish the great Mughal empire, known as "Indian Mughal Empire". His successors ruled Indian subcontinent for more than 350 years. He was the ruler of New Delhi before he died. He contributed a lot to science and literature. He described his life, conquests, and governing principles in a complete collection of his notes, called BaburNama (Jalali Naeeni, 1996 & Dehkhoda, 1998).

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