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PARADISE ON THE EARTH: ROLE OF WATER, TREE AND GEOMETRY IN THE FORMATION OF PERSIAN GARDENS

Statement of the problem. Design of garden in Persia as shown by its historical evolution tries to demonstrate a terrestrial imagination of “Eden” as in the everlasting world. We can see the Pasargadae in the Fars province which was built in 600 B.C. by Cyrus the great. Eastern arts have always tried to implicate on abstract concepts. The issue which has a mysterious influence in configuration of Persian garden can be seen in the employment of tree, water and geometry.

Results and conclusions. In this paper, firstly, we have reviewed on the paradise chronicle and its etymology. Then we employed an analytical-descriptive method for our research. In the next steps, we have studied about fundamentals in Persian gardens. Since the ancient times sanctification of water and planting the trees have always been recommended by Persians. Throughout the research process authors found out that Safavid gardens were very succeed to show off a paradise on the earth.

Keyword: Persian garden, Islamic Beliefs, Safavid garden, Islam.

Introduction

The Eastern arts in general, and especially those in the service of the great religions, customarily communicated ideas by using various types of visual symbols. One reason for doing this is that many profound, abstract ideas can be easier, or at least more forcefully, conveyed through forms and pictures than by words [1].

Ettinghausen believes about Islamic art: 'It is not even necessary to be familiar with a complex theology or elaborate symbolism to enjoy this sumptuously decorative art. Its immediate aesthetic appeal is the main reason why this art has always been readily acceptable to Westerners' [2]. The etymology of Pardess is the ancient Persian word Peridaisos, the same word from which the western name, 'paradise', was derived [3, 4]. The joys and blessings of paradise being the main goal of the ordinary Muslim, fear of hell and aspirations toward paradise remained the leading conceptions of the community with regard to Allah [5].

The first Persian garden on record is Pasargadae, built in approximately 600 B.C. by Achaemenid¹ emperor Cyrus, which is based on the Zoroastrian division of the universe in four parts, four seasons or four elements: water, wind, soil and fire.[6]Based on the archaeological activities and excavations performed at Pasargadae — Capital of Cyrus the Great, the Founder of the Achaemenids Dynasty (530-539 B.C.) — it has become a confirmed verity that the origin of Persian Gardens design has not dated back to 500 years ago but actually to two thousand and five hundred years ago [7]. Iranian culture doesn't separate human and nature. This principle in Persian garden emerges through creating semi-open spaces like terrace and Koushk which are such as an interface and connect garden to built spaces [8].

All Persian gardens, from the ancient to the high classical were developed in opposition to the harsh and arid landscape of the Iranian Plateau. Gardens in hot and dry places are symbols of freshness and delicacy. They are examples of paradise on the earth[9]. Philosophically, there were tried to build Persian gardens on the earth as incarnation mirrors of Eden² for the earthly life.[10]God has said in holy Koran: 'He it is who created for you all that is in the earth'³ [11].

In line with studying the cultural and environmental fundamentals in the Persian gardens, we shall first study the physical and structural elements in the Persian gardens by using a descriptive and analytical approach. The research methodology employed in this research is an analytical-descriptive one. This method has been used before in a similar research by M. Shahidi [12]. To perform this research, the literature review was made by referring to the existing examples and the 'historical evidences in Iran, for the pre and post Islam eras.

¹ The Achaemenid Persian Empire (c. 550–330 BCE), sometimes known as First Persian Empire, was an Iranian empire in Southern and Southwest Asia, founded in the 6th century BCE by Cyrus the Great who overthrew the Median confederation.

² The Garden of Eden is the biblical 'garden of God', described most notably in the Book of Genesis

³ Surah 2, verse 29

Following fundamentals might have been changed in the length of history of Persian garden; however, in terms of context, it always continues and can be used as a sets of indexes by the architects.

Fundamentals in Persian Gardens

Persians like other eastern nations feel strongly about their traditions and socio-cultural beliefs as they believe that these are the essential elements of their identity [7]. Historical gardens, being the combined work of nature and humans, are an integral part of our cultural landscapes; they echo the cultural, nature-oriented and identity values and technical expertise of their founders. Research undertaken to preserve the values and expertise of earlier eras may help to safeguard and protect heritage landscapes for present generations, and their transmission to future generations [13].

Water and Trees

In Iran, both water and trees have been respected by the people before and after Islam. In various parts of Avesta (the holy book of Persians before Islam) and Koran (the holy book of Persians after Islam), water and trees have been deeply expressed as the two important factors of life and beauty. Zoroastrians respect water for many reasons particularly they believe that water is the main source of life [7]. Anahita Temple in Kazeroun is an example for this evidence (Fig. 1).

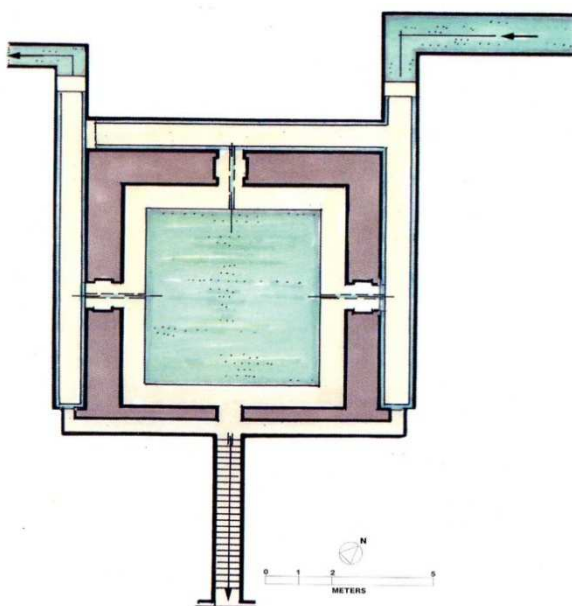


Fig. 1. Plan of Anahita Temple shows the water ways and respecting to water before Islam , Sassanid period, Kazeroun, Fars, Iran

From the ancient times, water has been sacred in Persian religious beliefs. It has mentioned in Mithraism, Zoroastrianism and Islam and has forbidden of extravagance⁴ [7, 14].

After Islam, water has been known as the ‘symbol of cleanness’ [11], neatness and brightness [15]. Water is not just for moving into garden, but either is for irrigation and visionary features. Concepts of elegance and the function here can be seen simultaneously (Fig. 2).



Fig. 2. In Shahzade Garden of Mahan irrigation of trees and beauty features have employed by water courses simultaneously



Fig. 3. In Fin Garden of Kashan water amplifies Emphasis on architectural elements and Mask outdoor noises

Water plays multiple roles in Islamic culture. In landscape architecture, for example, in Mosques, Shrines, and Gardens, the role of water is significant. Water usually presents life and spirituality. In Holy Koran, it has notified: ‘...And we made everything alive from water...’ or ‘...gardens beneath which rivers flow...’ and such similar verses.

⁴ Read more: Rismanchian, O. Heidari, M. ‘*Water, Symbol, Desert*’, Symposium on Desert Architecture, Islamic Azad University, Ardestan Branch.

In addition water has been employed to help other purposes in Persian gardens. For example: Emphasis on architectural elements and Mask outdoor noises (Fig. 3).

Geometry

Wilber believes that the foursquare plan was crystallized at least as early as the Sassanid period⁵ (224–642 AD) [16]. The oldest literary use of Chahar Bagh to mean a garden dates from c. 900 AD [17] (Fig. 4).

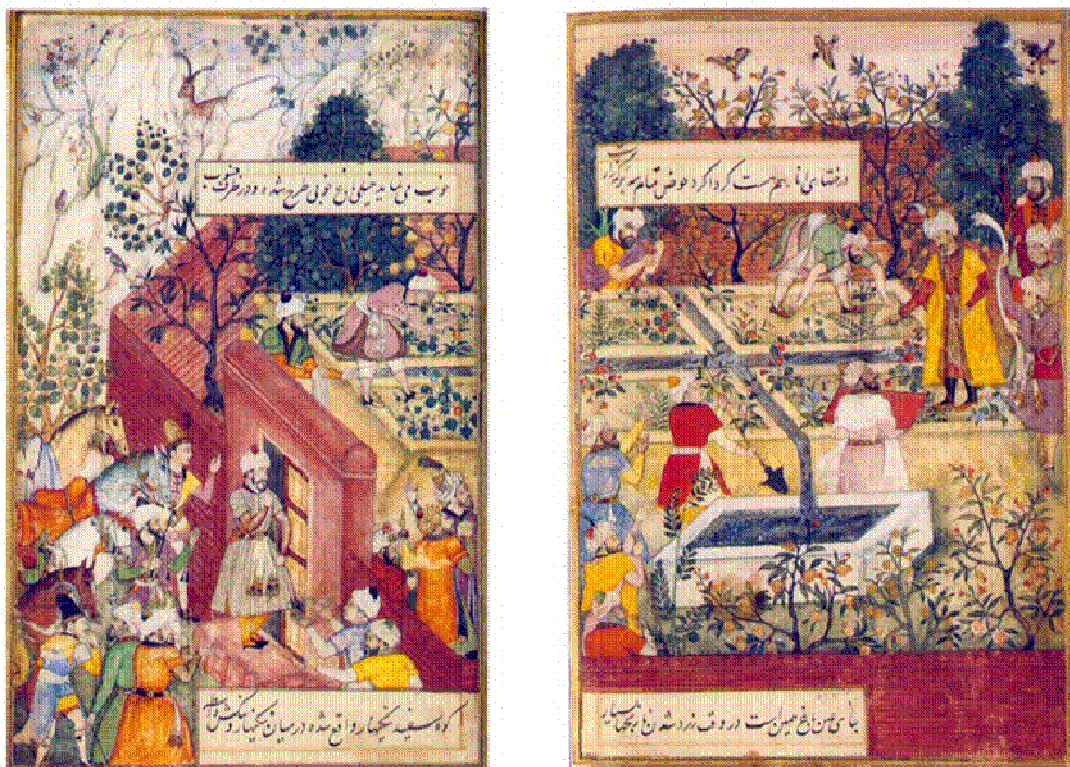


Fig. 2. This Iranian painting shows Chahar Bagh (quadripartite division) in ancient Literature and Miniature, c. 15th A.D.

Regularity was the outstanding characteristic of ancient Persian gardens and of subsequent Islamic gardens. Geometry was fused with a near-mystical love of trees, water and flowers (especially roses, which remain an important crop in Iran to this day) [18]. There is another theory about the garden design. It evokes and recalls the order of the universe by four basic

⁵The Sassanian Empire or Sassanid Persian Empire, known to its inhabitants as Ērānshahr and Ērān in Middle Persian and resulting in the New Persian terms Iranshahr and Iran, was the last pre-Islamic Persian Empire, ruled by the Sasanian Dynasty from 224 CE to 651 CE.

elements as we can see in the Aristotle ontology (water, soil, wind and fire) which have shaped the organized quadripartite geometry of the gardens [19] (Fig. 7).

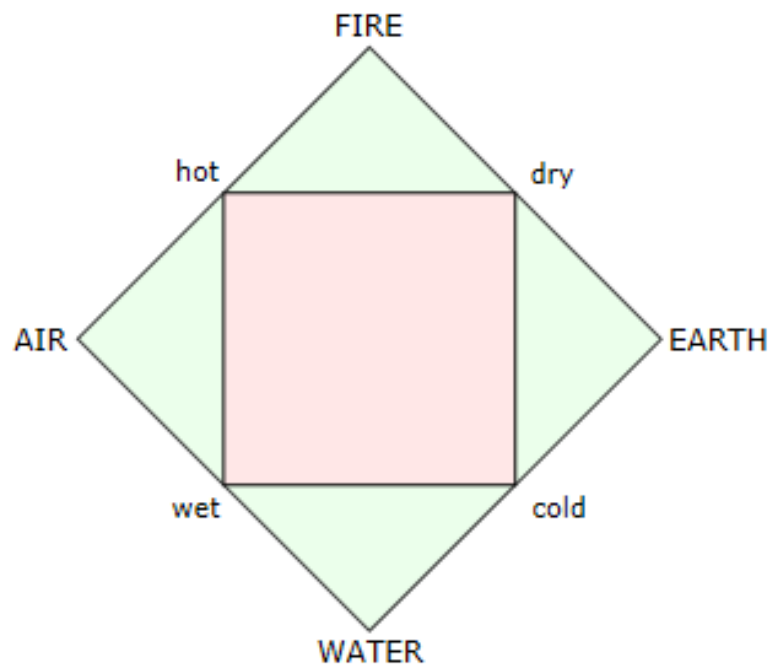


Fig. 5. Hasht Behesht(Eight Heavens) Palace Site plan, Isfahan, Iran

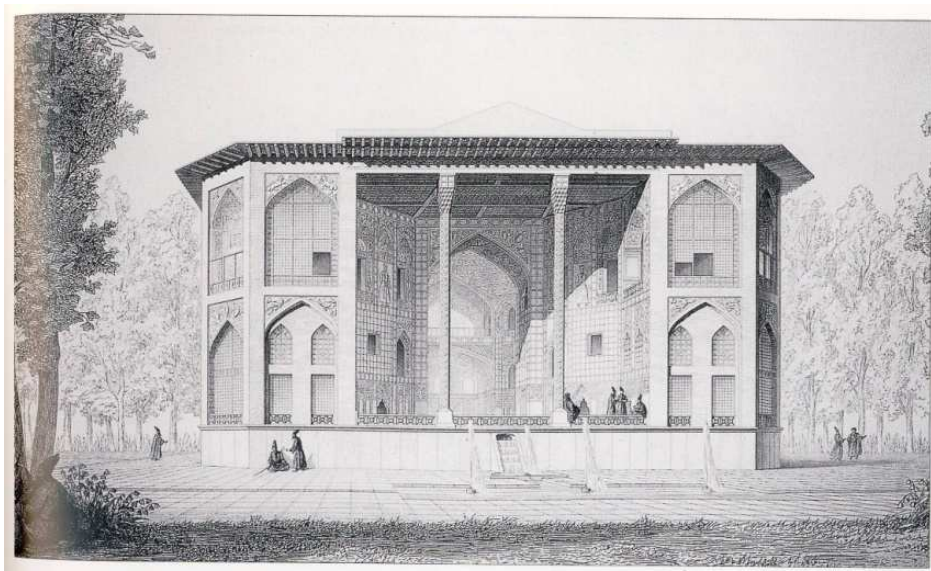


Fig. 3. Hasht Behesht Sketch drafted by Safavid Orientalists

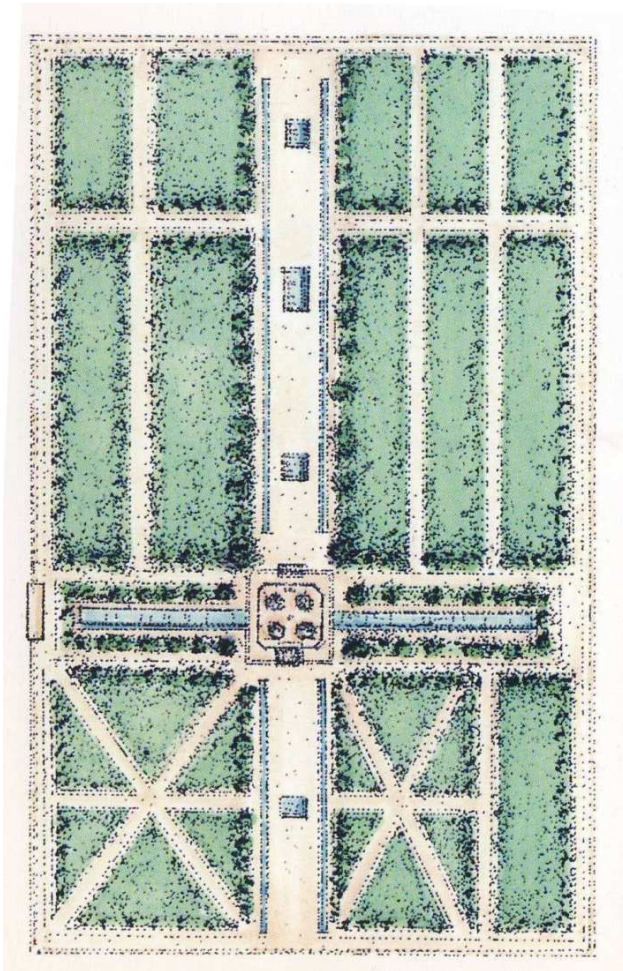


Fig. 7. Four Elements
(Hellenistic Elements)

Conclusions

When we look accurately, find out that some of the Persian gardens have been planned systematically in an erratic ultra-garden. For example, Isfahan city in the past times was a garden-city and had palace gardens (such as Hasht Behesht) into itself. Considerable point about the word “Hasht Behesht” (In Persian language means “Eight Heavens”) is the concept “garden inside garden”, because, Hasht Behesht is inside an ultra garden (located in Isfahan city) and every face of its pavilion (the octagonal building) crossed to a garden zone. (Fig. 5, 6).

In this research, we realized that Safavid Gardens have been contained by the collection of prior periods, from Achaemenids to Timurids⁶.

⁶ The Timurids, were a Central Asian Sunni Muslim dynasty of Turku-Mongol lineage whose Timurid Empire included the whole of Iran, modern Afghanistan, and modern Central Asia, as well as large parts of contemporary Pakistan, Mesopotamia, Anatolia and the Caucasus. It was founded by the militant conqueror Timur (*Tamerlane*) in the 14th century.

The highest level of popularity in arts and also fantastic technologies can be seen in Safavid Gardens. The imagination of garden with paradise was strongly influenced by the prevalent images and terms such as Hasht Behesht (the eighth paradise or the eight paradises), Bagh-i Jannat (the garden of heaven), and Bagh-i Eram (the terrestrial paradise).

Fundamentally, the design of Persian Garden has not only been influenced by climate but also conjugated with cultural beliefs together. Descriptions of Quran about heaven and some symbolic definitions about number “four” are motifs for geometry of Chahar-Bagh. Moderation always places into the mind of Persian designer and he tries to exert the sacred element of the world “water” also to increase aesthetical attractions.

In addition, contemporary Persian architects and designers should be benefited by spiritual traditions of their ancestors as well as using state-of-art technologies, adapted by modern needs of contemporary social conditions. Of course, we can see some of the best examples of Persian modern garden design available by Persian designers of our time. S.H. Mirmiran’s works are remarkable in this issue. For example, Iran’s Consulate Building in Frankfurt planned on Persian Garden and modern architecture principles ⁷.

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⁷ Read more: Memar Magazine, Vol. 30, pp 26-33.

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