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Survey of Forming Elements in the Persian Garden Design

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ABSTRACT: Among different natural elements, water and plants are the most important ones. They usually influence the other natural elements. If they are carefully taken into consideration at the time of environmental design, a more qualified sustainable living space could be developed which could result in an economic saving as well. Meanwhile, it is important to be familiar with the different conceptual, functional and esthetic aspects of the mentioned elements to be able to organize them in a better way. Herein, the wise combination of water and plants in the Persian gardens is a remarkable example of its kind which crystallizes a sustainable design with respect to the above aspects. This paper investigates the importance of water, trees and flowers -as the leading environmental factors- in Islamic documents in addition to some Gnostics viewpoints. The position of these elements in the Persian gardens is discussed afterwards. The results show that the Persian garden has a wise, philosophical design concept in which the environmental factors such as water and plants are arranged, not only to provide people with their physical needs (Functional and Esthetic aspects), but also to prepare them with a metaphysical and intellectual space (Conceptual aspect). These qualities have made the Persian gardens survive over the centuries, while harnessing a great cooperative relationship with nature.

Keywords: Persian Garden, Ethical principles, Conceptual Aspect, Functional Aspect, Esthetic.

INTRODUCTION

According to its worldview, any nation specially values the nature and also formed its relation with nature and natural elements based on the principles and values originated from its worldview. Thus, it is very important to recognize the situation of natural elements in the beliefs and culture of any society and the more the conceptual recognition of a society to nature and natural elements, the more valuable is this situation. Following the old worldview and Iranian- Islamic culture, the relation between this nation with nature and its natural elements is a relation based on respect to nature and coexistence with it. According to this thought, earth is the God's property [Eliade, 1987]. By this culture, natural elements like water and plants are considered as a divine verse and sign and are such important that frequently repeated in Islamic documents. The most beautiful material combination of water and plants can be seen in the art of the Iranian Gardens. Art of the garden is one of the oldest Iranian arts with valuable traditions and spiritual power [Hobhouse, 2004], where, elements such as water and plant are used with three facets- conceptual, functional and aesthetic; the conceptual aspect can be studied by two categories including interpretation of Holy Koran and view of Gnostics and poets. In addition, any element considered in Iranian garden, whether water, trees and flowers, had special function embedded for a specific objective and also designing was conducted such that its elements being as beautiful as possible and its elements were being such changed that observing the aesthetic principles in it.

For this reason, this paper aims to investigate the conceptual and spiritual aspect of water and plant by reviewing the Koran verses, Islamic narrations and comments of mystics and poets for both elements; after obtaining the spiritual dimension of water, tree and plants in Iranian gardens, the situation of each will be studied of two dimensions, functional and aesthetic.

METHODOLOGY

To recognize three aspects- conceptual, functional and aesthetic- of elements such as water, tree and flower, it is initially studied the Koran and related comments for three elements by using descriptive- analytic method as well as using field studies to provide case examples; then other mystic sources including comments of Gnostics and poets for these three elements will be analyzed. More, citing the library evidences about Iranian gardening and organizing it by using water and plants, the functional and aesthetic dimension of both elements will be studied by which one

can determine the importance of both elements of Koran's, Gnostics' and Poets' point of view as well as reviewing its effect on functional and aesthetic aspects of Iranian gardens.

Water: the Main Element in Persian Gardens

Water is the main and vital element forming a garden; water has been used in Persian Garden very smartly and artistic such that it not only used for irrigation and feeding the plants, but also it has been used conceptually by poetic and artistic view decorating the garden space bringing freshness vitality and beauty [Johnson, 1929: 71-3]. The presence of water in the garden is used based on specific concepts and distributed according regularly considering the physical and technical specifications of water and irrigation on one side and also considering the conceptual, aesthetic and landscaping and architectural aspects on the other side [Bell, 2007-1: 41]. Persian garden is in fact the architecture of garden and water and combination of water and plants will make an unbeatable epic of poem, glory and music in the trees. By a thoughtful and intelligent manner, water is flowing in the streams and remains stagnant in the pools and waterfronts resulting in fountains manifesting by its movement, sound, view and vigor. The appearance and movement form of water in the garden follows a special system coordinated with geometry and structure of garden with different forms in different varieties of Persian Gardens [Khansari, 1998: 103] [Figs. 2&3].

1. Water in the Islamic Basics and its Epistemic Concepts

Persian Gardens make an oasis in a dry region by combination of "Current Water" and "Trees" and according to the contrast between desert and garden, is an exemplum of fresh scenery of paradise [Wilber, 1940: 31]. In Islamic and mystic basics, there have been repeated different faces of water could be investigated by two aspects of Holy Koran and Islamic-mystic principles where indicate various spiritual importance of water [Heydari, 2008: 73].

Analysis of Spiritual Concept of Water in Koran

Arabic word "Maa" (means water) has been frequently repeated in Koran as the symbol of good, blessing and cleaning; in addition to this word, there have been also mentioned other various types of water including streams, springs, heaven falls all are exquisite images of spiritual effects of water [Gheissari, 1975, 24]. The climax of an image of heaven as indicated in Koran is this verse "Gardens under which rivers flow (in Paradise)" means gardens with streams flowing under its trees and castles. Such verbal combination as mentioned in 35 verses of Koran, in verse 15 of Mohammad Surah, there have been mentioned four types of streams: "like heaven water promised to virtuous people where there are rivers of fresh and current water-"Therein are rivers of water unpolluted" and rivers of milk with no change in its flavor and taste- "rivers of milk whereof the flavor changeth not" and rivers from Tahoor wine enjoyable for drinkers- "rivers of wine delicious to the drinkers" and also rivers from pure honey-"rivers of clear-run honey" and they will enjoy from all fruits in the heaven with God blessing (Holy Koran, Mohammad Surah, verse 15). Flowing water and its movement in four directions and streams is an example of four heaven rivers applied in Persian garden; although in most Persian Gardens it can be seen that water is coming from a side and while pouring in a pool it is divided and flowed into three other sides; but it indicates the water circulation in four directions [Ruggles, 2008: 144] (Fig. 1). According to some commentators, word "Kothar" in the verse- "To thee have we granted the Fount (of Abundance)" (Kothar, verse 1) means a river in the heaven, the poor specified for Prophet Mohammad in the heaven or doom desert [Bistooni, 2007: 121]. Kothar river or pool as indicated in the narrations, is flowing under the ground with unlimited ends and anybody may perceive it and enjoy it by its clear and illuminated mind; generally the descriptions of Koran from Malakoot garden is coordinated and even and indicates a clear image of green, boiling springs, rivers and stable presence of water.

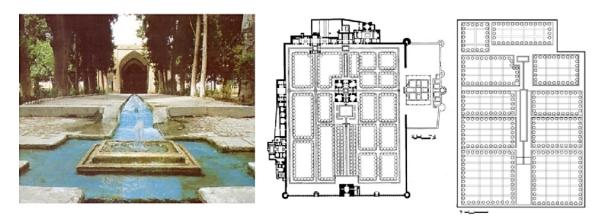


Fig. 1. Fine Kashan Garden. Dividing pool of water indicating water movement in four directions (courtesy: the same)
Fig. 2. Fine Kashan Garden Plan. Different types of presence of water in the garden. (Courtesy: the same)
Fig. 3. Eram Garden plan, Shiraz. Long route of water flowing along the garden longitudinally (courtesy: Khansari: 1998).

It is only in verse 46 of Alrahman surah that indicating a new image of boiling springs in the heaven garden such that it mentions two gardens with two boiling springs and two types of fruits and also says: "besides them, there are two other heavens...so lush tends to be dark...... there are two kinds of fruits as well as date and pomegranate... there are women with good character and beautiful....Houris hidden in the tents..." (Alrahman, verse 66). Such description of heaven by Koran resulted in many attempts to design the heaven shape such that there are two gardens in it and with four sides' form of Persian Gardens or the same Iranian Chaharbagh in a form and meaning related to four gardens in the heaven as indicated in Koran. These four classifications were particularly used in the gardens surrounding a tomb [Wilber, 1979: 67] because there could be flowed four streams like rivers of heaven garden in front of the tomb and deceased person might taste the flavor of heaven gifts in its tomb (Fig. 6). Table 1 indicates different effects of water in Koran focusing on its structural sample in Persian Garden.

Table 1: Spiritual effect of water in Holy Koran and its appearance in Persian Garden, courtesy by: authors.

| Elements of Persian Garden | Surah and Verse | Koranic Description | Types of water in Persian Garden and Koran |
|--|---|---|--|
| Heaven rivers | Main rivers, side rivers, streams, canals, partridge chest, Abgardan | It has been named totally 41 times in Koran, in 37 cases, the lexical combination of heaven used with current rivers | Gardens under which rivers flow (in Paradise) |
| | Geometric basics of Persian Garden as Chaharbagh and water movement in 4 sides | Mohammad/ 15 | Description of four rivers in the heaven |
| Heaven Springs | Aaraf 160 | Moses Miracle for flowing 12 springs | Springing water from aqueduct using clay water pipes usually located in the upper side of garden, using Jooshgah, Gavareh, ShotorGhelo |
| | Alrahman 46 | Boiling springs | Partridge chest exfoliations, stepped waterfronts for making small falls |
| | Ensan 18 | Salsabil spring containing tasty drink out of ginger | Pool in front of Kooshak using types of pools |
| Heaven Falls | MaaMaskoob | Vagheat/ 30 | Life of garden depends on water |
| Heaven Pools | Kothar pool | Kothar/ 1 | |
| Rain water for flourishing the deserts | And he caused rain to descend on you from the sky | Anfal/11, Kahf/45, Fergan/48, Ankabout/63, Logman/10, Sajdeh/27, Fater/27, Zomor/21, Fosselat/39 Gaf/9, Gamar/11 | |

Mystical- Islamic Basics of water and Appearance of its Spiritual Concepts

Gnostics, generally benefited from a poetic mind and an artistic perception, discovered the similarities between different aspects of wise creation. Therefore, they dealt with searching the relation between man and nature and most of them discovered fundamental similarities between human behavior and different aspects of nature.

Table 2: Spiritual aspect of water by the viewpoint of Gnostics and its appearance in Persian garden.

| Gnostics mentioning the spiritual effects of water | Usage by exemplification | Elements of Persian Garden |
|--|---|---|
| YounosAmreh, great medieval Gnostics of Anatoly | Mentioning the praise of God by heaven rivers | Rivers flowing through the garden |
| GalebDehlavi | Mentioning the heaven rivers and Kothar pool indicating the acceptance of God | The geometry of Iranian Chaharbag and presence of types of pools in different parts of garden |
| Abd Al-RaoufHeravi | Exemplification of friend's lip to Salsabil spring in the heaven | Presence of elements appearance of aqueduct, Jooshgah, Shotorgeloo in the garden |
| RoozbehaBagliShirazi | Mentioning the water as a tool for spirit rest | Presence of water as main element of garden, for rest and freshness |
| Gazali | Mentioning the water as a verse of God | Water with different forms is the integral element of Persian garden |
| ZolnoonMesri | Listening to flowing water and finding the unity of God | Rivers, streams and canals, Abgardan, partridge chests |
| Shebli, unknown Bagdad Gnostics | Exemplifying the lover Gnostics to crying (raining) cloud | Rain water stored in the aqueduct for irrigation of garden |

For example, Shabli (deceased on 910/297 AH), unknown Gnostics of Bagdad, analogizes the lover Gnostics to the spring with its similarity to faces of nature and says: "as thunder is rumbling, cloud is raining, light is shining, wind is blowing, bud is blossoming and birds are singing, Gnostics also is crying in his eyes, laughing by his libs, shaking his heart, loses his head, praying God" [Hosseini, 2008: 71]. Table 2 names some poets considering the mystical and spiritual aspect of water with dome descriptions they discussed as well as discovering its structural example in Persian Gardens.

Aesthetic and Functional Approach of Water in Persian Garden

While designing the garden, besides considering the aesthetics and place identity of garden, it has been mainly focused on irrigation such that space dimensions has been designed based on accessing to the water; using coolness, reflection, sound of water as pools, basin, pond, stream, fall (stepped, inclined, fountain), shallow pool in the interface of main pathways (for close view), deep pool as dam or reservoir (for far view) [Thacker, 1979].

Water is indeed the most interesting subject of landscapes and sweetest happening in different parts of the garden [ASLA 1977:23]; and because it glares the eyes from the far distance and is pleasant closely, where it was being seen, it could come with freshness and living and moved the shades turning the sadness and worry to freshness and vivacity and enriched crowded scenes by its light and extended form; occasionally it was equal with the greatest combinations and occasionally adapted with the most trivial ones (Figs. 4&5). It might be put in a calm realm to provide the man with calm in a peaceful landscape and or making glory and happiness in a tortuous and surging route. Table 3 indicates different types of water in Persian gardens by two approaches, functional and aesthetic.





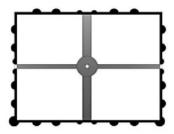


Fig. 4. Water movement in the side rivers of Fine Kashan garden: presence of water in small scale, Khansari: 1998.
 Fig. 5. Pool in front of Kooshak in Eram Garden, Shiraz: Presence of water in great scale.
 Fig. 6. Mazar Soltan Garden, Sanjar and water movement in 4 directions, courtesy by: Soltanzadeh, 1999.

Plants in Persian Garden

Plants in the past Persian garden are very considerable based on their genus and species, location, planting, elegance and efficiency and even play important role for protecting the garden against natural destructive factors. In Persian garden, plants are used by different goals such as shading, yields and decoration and because efficiency is one of the main properties of Iranian gardens, fruit trees comprise most parts of the garden followed by shady trees and then decorative plants with least size in the garden [Bahram, 2005: 81]. The situation of plants in the garden is different during various seasons such that they show buds, flowers, fragrant, freshness in the spring, shade, flower, fruit, current water, pure and pleasant air and relaxing place in the summer; piles of colorful fruits, dynamic colors and dance of leaves in the autumn and explicit geometry and pride of evergreen trees in the embraced with bare and deciduous branches in the winter [Klasten, 2008: 67]. Plants are generally divided into two classes including trees and flowers and this study aims to investigate three aspects- conceptual, functional and aesthetic- of plants in two separate groups of trees and flowers.

Table 3: Aesthetic and Functional Approach of water in Persian Garden.

| Water display in Persian Garden | Application | Aesthetic Function | Diagrams |
|------------------------------------|---|--|----------------|
| Main rivers | Water conduction from reservoir to different levels of garden | Making a central core in the garden | [, <u>L</u> |
| Side rivers | Watering to gardens and Cretes, dag in the soil | By continuous flow of side rivers, one can perceive the garden as a complete set | 1- 7 |
| Canals | Physical connectors and separators of water conduction | Indicating the inviting state, binding and or separating | |
| Partridge chest | For making waves in the water and increasing its size view | Showing the water movement more beautiful and making a pleasant voice of water | |
| Abgardan | For frequently circulating the water | Water movement in a limited surface for attracting the attentions and concentration | |
| Clay water pipes | Clay pipes for water conduction from aqueduct origin upwards | | |
| Jooshgah | Fountain-like in the water for turning and moving water | Focusing on the movement and water fills, making a watery sound | |
| Fountain and geysers | Water boiling upward | A symbol of springs | |
| Shotorgeloo | By making a pressure difference, it can pushes water | | <i>•••</i> 0.1 |
| Stepped waterfront | It is used in slopped lands of garden | Making small falls in a limited area, making water sound | |
| Pool | A place for pause and reserving water where main rivers flow in | Heart of the garden, making a mirror surface and beauty of landscape against summerhouse | |
| Basin | For water storage and pause in the milestones of garden | Making a milestone, flexibility of water in different designs of pools can be seen easily | |

1. Epistemic Concept of tree in Islamic Basics

Nature is the first terrestrial tool manifesting the divine realm for man; among them there are fewer things reminding the thoughts of perfection far earlier than tree, because tree has temporal and spatial possibility for achieving the perfection, this is because its branches are upwards and outward with no close perfection. Therefore, in Islamic basics always spiritual aspect of tree were considered and besides Koranic verses, most knowledge sources have respected to this creature.

Spiritual Concept of Tree in Koran

In most cases, word "Shajar" has been used in Koran. The word 'Tree" indeed means "any vegetable trunk". In addition, Koran has used the word "Shajar and Taajo". As we can see in Verse 65 of Nesa: "But no! by your Lord! they do not believe (in reality) until they make you a judge of that which has become a matter of disagreement among them, and then do not find any straitness in their hearts as to what you have decided and submit with entire submission."-means not it isn't so, I swear to your God they indeed aren't believers, unless you be the judge for their hostility and then they have no objection to your award and be surrendered by your order. In this case, word "shajar" is in conformity with tree because the struggle is called Moshajerat because the words of two enemies will be mixed to each other like the leaves and branches of a tree. But generally, the word "Shaajr" with different shapes has been frequently used in Koran each expressing its various traits and specifications. For example in Yas surah, when discussing about creation and ultimate life, according to God, creation of fire from green tree is a wonderful and instructive event. Imam FakhrRazi says: "fire in the tree is like the flame of life in the human body and creation of fire and mentioning the fire in the tree as stated by God is an introduction to its great creation" [Bistooni, 2007: 91]. As indicated in verse 30 of Al-Gesas Surah: "then when he approached to the fire, in the right side of valley in that holy place, it was a call from that tree that: Oh Moses, it's me, the creator of the world" (Gesas, verse 30). In Verse 20 of Momenoon Surah, we have: "there will be created a tree from TooreSina that is some oil and stew bread for eaters" (Momenoon, verse 20). There are different usages for tree in different surahs of Koran. Table 4 indicates different roles of tree in Koran together with descriptions used for it and comparing it with structural example in Persian Garden.

Table 4: The spiritual aspect of tree in Koran and its appearance in Persian Garden. Courtesy by: authors.

| Types of samples of tree in Koran | Koranic description | Surah name and verse | Element of Persian Garden |
|--|---|--|--|
| | Forbidden tree | Bagareh/35, Earaf/ 19-22, Taha/120 | Fruit tree (according to some commentators it is apple and or quince tree) |
| Role of tree in | Tree of life for Jonah | Saffat/ 145 | Fruitful or shady tree |
| Prophets' living | Mission tree for Moses | Gesas/ 30 | A type of tropical tree |
| | Date tree for delivery of Mary | Mary/ 22-25 | Date tree |
| | Muslim allegiance to the messenger of Allah | Fath/ 18 | Shading tree |
| Role of tree for indicating the power of God | Mentioning the trees of gardens, olive and date trees, mountain trees as a sign for perceiving the power of God | Naml/60, Nahl/10, Vageah/72, Nahl/68 | Olive, date trees and tropical and non-tropical trees |
| God praising tree | Real praise of trees for God and prostrating him | Alrahman/6, Haj/ 18 | Including all types of trees |
| Tree and exemplification in Koran | Exemplification of word clean and blasphemy to fruitful and barren trees | Ebraham/24-26, Asra/60 | Fruitful and barren trees |
| Heaven trees | Exemplification of divine light to a shiny star from olive | Noor/35 | Olive tree |
| Hell trees | Tooba tree | Raad/290 | Foliage and shady tree |
| | Sedrat Al-Montaha Tree | Najm/14-16 | Shady lotus |
| | SedreMakhzood and TalheManzood tree | Vageah/28-29 | Fruitful tree and leaved and shady banana tree |
| | Zogoom tree | Vageah/52, Saffat/62, Dokhan/43 | Tree's shade |
| | Date tree | Repeated totally 20 times in different verses | Date tree |
| Special trees mentioned in Koran | Grapes tree | Repeated totally 11 times with its Arabic meaning "Enab" | Scaffold tree |
| | Pomegranate tree | Anam/99, Anam/141, Alrahman/68 | Fruit tree |
| | Olive tree | Anam/99, Anam/141, Nahl/11, Tin/1, Noor/35, Ebath/39 | Fruit tree |
| | Pig tree | Tin/1 | Fruit tree |
| | Fruitful and thornless lotus | Vageah/28 | Fruit tree |
| | Barren lotus | Saba/16 | Barren tree |

Spiritual Concept of Tree of Mystic-Islamic Point of View

By viewpoint of Gnostics, in the garden, all plants devoted their time to praise the God like angles who always praise the God. Jalal Al-Din Romi says: "Trees are praying the God and birds are signing litany and violet bent its head down to prostrate [Bistooni, 2007: 71]. According to Gnostics, trees reach their hands out towards heaven and because plane leaf has been exemplified to human hand, this usually is the praying leader of prayers of the garden [AbdallahDefa, 2007: 121] and in the autumn when trees lose their leaves, they are like an ideal Gnostics who is praying the God with absolute poorness while is out of material belongings with no anger and worry [same: 128]. According to Gnostics, tree is an exemplification of evolution and renovation. Continuous development of trees means their periodical revival and reminding the immortal return to the origin. In Gnostics principles, each tree has its special symbol. Therefore, Persian Garden is always a green space full of symbols reminding the man with a set of believes. Table 5 indicates trees planted in a Persian Garden together with their symbolic and mystic concept and their functions in the garden.

Table 5: Symbolic concept of trees and their functional evaluation in Persian Garden.

| Trees planted in a Persian garden | Symbolic and mystic concept | Functional evaluation of trees |
|--------------------------------------|---|--|
| Plane | Symbol of glory and training | Shady tree, preventing the fever and disease |
| Pine | Straightness, vertical, fertility, longevity and faith | Evergreen tree and protection of garden against winter winds |
| Cypress | Sign of death and corpus, symbol of softness and freshness | Shading and green along its life |
| Italian poplar | Symbol of all pairs, Yin and Yang, Lunar and Solar year | Fast development and usage of its wood |
| Ash tree | Adaptation, production and humility, the holy cosmic tree | Shading |
| Pig | Fertility, life, peace and success | Edible |
| Grapes tree | Symbol of life and immortality | Fruit and leave edible |
| Apple | Love, peace and agreement, divinity and wisdom | Edible |
| Pear | Hope and health, justice, good state and fairly judgment | Edible |
| Cherry | Symbol of naked birth of man | Edible |
| Peach | Defending evil and fruit of fairy | Edible |
| Plum | Symbol of liberty and loyalty, longevity, purity, hermitage, childhood | Edible |
| Berry | A symbol of three stages of man life | Edible from fruit, leave, for feeding the silk worm, usage of its wood |
| Wild plum | Fairy plant, Greece Roman wedding flowers | Edible |
| Date | Symbol of joy and passion, consecration, tree of life | Edible, leaves and stem |
| Almond | Symbol of virginity, autogenic, happiness in marriage, charm and elegance | Edible |
| Walnut | Hidden wisdom, fertility, longevity, symbol of stability | Edible, usage of leave and its wood |

Anesthetic and Functional Approach of Trees in Persian Garden

In Persian Garden, planting whole trees were conducted for a specific objective and wasn't accidental and senseless [Geographical, 1957,11] (Table 5). Shady trees are put in both sides of gardens routes stressing on axial directions due to their importance relying on type of shady trees [Lanchinski, 2008: 71]. Occasionally such trees are only a tree, like plane tree and occasionally two types like plane tree and cypress tree. Around the garden next to the wall, there is a walkway where there planted shady fruitless trees and or shady fruitful trees such as walnut in rows along the river. In side routes crossing the main route perpendicularly and forming the routes between Cretes, there are also planted shady trees in rows. Among the Crete, there are planted fruitful trees differing based on developing types in different climates. In Delgosha Garden, Shiraz, for example; the sour orange trees with pleasing odor in the springhave been planted, besides shading trees along the routes in its Cretes [Bell, 2007: 124-2]. In both streets in both sides between Crete or waterfront, helping more to make shades, the walkways of gardens made more narrower by which the shade of trees can cover both sides of the walkway, and vestibules are such made. When the level of Cretes can are put lower than the level of axial walkways, the fruits of trees can be easily accessible from the walkways. In Iranian Gardens, the around of pools were planted with elm tree, maple, myrtle and Judas tree. Willows also were planted in the places with abundant water, but they hadn't been planted next to the pool, because they resulted in breakage of the edge of the pool. Deciduous and evergreen trees also planted together along the stream (Fig. 7), because green ones were always a symbol of immortality, young life force, virility and fertility [Heydari, 2008: 48]. The deformation of plane trees during four seasons based on their leaves and falling leaves, planted next to the cypress tree and pine with evergreen leaves, makes great variety of colors, design and size of Persian Gardens (Fig. 8).

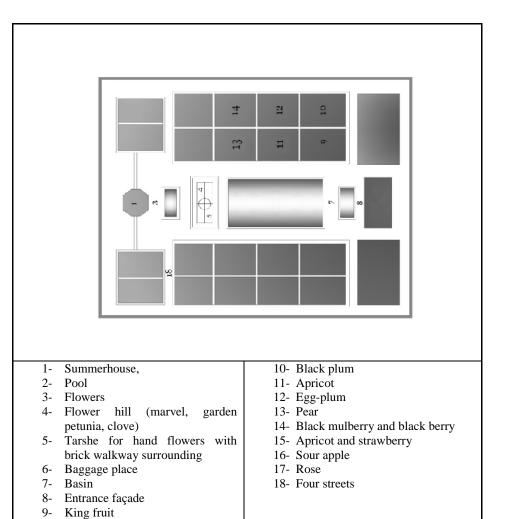


Fig. 7. General model of planting the trees in Iranian Garden, by authors, courtesy by: Iranian Garden paper by late Pirnia.



Fig. 8. Planting deciduous and evergreen trees together. Courtesy by: Khansari, 1998.

It is for about one millennium that Persian speaking Gnostics and poets saw the manifestation of divine perfection in the flower. However, such divine flower could never be described accurately and poet can only compose the description of distance between nightingale and flower; it is only the nightingale that is far from the flower that can say some praising words indicating its delight, like a straw that after being cut from canebrake begins singing. Mohammad Egbal made its philosophy based on the same concept and believes that separation and parting may force the ma to movement and enables him to do plaintive song and create the beauty like nightingale that is eager to the flower [AbdallahDefa, 2007: 44]. Molavi has also founded out this concept: "Their nightingale, which throws thee into ecstasy, hath the rose-garden in its heart", means the nightingale that make you cheerful, it has Gulshan in its heart. [Same: 46]. Gnostics can find the love to his beloved in the flowers and trees under the shade of slim cypress and in the humility prostrate of small violet. Most Gnostics stated how they could be attained to the vision when listening the sound of praising and prostrating the plants and such prostrate of God by nature has been elegantly drawn in the frame of narrations and poets; one of the most beautiful narrations about Sonbol Effendi is by Sheykh Tarigeh Khalvati in Istanbul on 10th century; Sonbol Effendi wanted assign his successor. For this reason, he sent his henchmen to collect flowers for decorating the convent. All of them returned back with a bunch of flower in their hand, except a person called Markaz Effendi who came back with a small withered flower in his hand. They asked him why you didn't bring a thing in the dignity of the master, he answered: "I found all flowers praising the God; how I could cut their praising? Then I saw a flower that just finished its praising, and then I brought it". Thus Markaz Effendi could be selected as his successor [same: 72]. Table 6 indicates the name of some Gnostics and poets particularly emphasize the spiritual aspect of flowers in the garden together with some exemplifications used by them and comparing them with existing examples in the Persian Gardens. Flowers planted in Persian Garden also like trees each have special symbol with a mystic concept. This indicates how Gnostics and poets emphasize on the spiritual and conceptual dimension of flowers in the garden (Table 6).

Table 6: Symbolic concept of flowers and their functional usage in Persian Garden; source: authors.

| Flowers planted in Persian Garden | Symbolic and Mystic Concept | Functional Usage of Flowers |
|--------------------------------------|--|---|
| Rose | With domination and supremacy in the garden, both the symbol of time and eternity, both heaven perfection and terrestrial pain | Rose extraction and aromatherapy |
| Violet | Symbol of hidden virtue and beauty | Herbal usage |
| Lilly of the valley | Symbol of purity, peace, resurrection and symbol of fertility of mother of nature | Food and drug usage from its leaves |
| Hyacinth | Symbol of foresight, peace of mind | Used by honey bee |
| Common primrose | Symbol of purity, youth and impudence | Medicinal, tonic, antipyretic, anti- seizure, wormicide |
| Amaranth | Symbol of immortality, faith, loyalty, stability in love | Usage as separator of garden routes |
| Marguerite | Purity and innocence | Used by honey bee and good smell |
| Saffron | Apathy, humility, self-denial, sun plant | Edible usage |
| White lily | Stylized lily or iris, light and life flower, sky lady king | Besides brick walkway for privacy of gardens planted, usage of its fragrant |
| Narcissus primrose | Symbol of self-conceit, narcissism, pride, introspection | Usage of their fragrant and used for honey bee |
| Jasmine | Symbol of femininity, grace, seduction, charisma | Usage for fragrant and used by honey bee |

Anesthetic and Functional Approach of Flowers in the Garden

Founders of Persian Gardens prevent idleness and used flowers logically and didn't plant without reason. Composition and planting of flowers in Persian Gardens was conducted practically and scientifically following from relations and standards and based on the efficiency, dynamism and combating with environmental conflicts as well as their elegance and eye-catching in different seasons [Alexander, 2007: 121]. Flowers were planted at the base on trees in Persian Gardens. There were specially planted some flowers with some properties such that both their fragrant and leaves were used for making halva and jam,... and some of those had medicinal usages. Among the Crete, facing the main building, there was a Golestan if not a pool. In Persian Garden, there was always tried to be full of flowers [Macdonald, 2008:37]. Decorative flowers were mostly planted in the gardens facing the building and in the entrance axis and main axis fronting the summerhouse; in some gardens among the Crete, they planted Aspstatype of alfalfa, and can be harvested for seven times and is suitable, fragrant, beauty and economic- to prevent water loss and other issues. This plant can be easily maintained and absorbs the nitrogen of air and gives it back to the soil; it can repel the fly and mosquito; honey bee also can feed its flowers; this plant can be harvested at winter and is used as winter foliage. Early in its growth, it come with a grass view and by growing up, it waves with wind and when it blossom, its flowers are violet with a green background (Lathchinski, 2008: 124].

CONCLUSION

This study aimed to investigate the Religious- Ritual concepts and basics entered in current heritage of Persian Gardens influenced by pre-Islamic and post-Islamic eras as well as different ritualistic thoughts; by considering different religious, ritual and mystic thoughts, this study in fact tried to focus on this concept that the main concept and heritage of Persian Gardens roots in ritual and religious thoughts of people of this territory. For this reason, it can be expressed that elements such as water and plant are among the most important elements forming the environment, and in recent years the importance of its functional and anesthetic issues has been considered, but its conceptual dimension needs more investigations; Persian garden is a combination of three dimensions- conceptualspiritual, functional and aesthetic of mentioned elements by the best shape and formed a unique system called "Persian Garden" [Kalen, 2004: 28]. Therefore, for determining such concepts, this set has been selected and elements such as water, tree and flower were investigated based on three aspects including conceptual, functional and aesthetic ones; such discussions indicate the wise and perfectionism presence of elements such as water and plant in the structure of garden, but indicates how Iranian garden makers can organize both elements such that meeting the physical and spiritual needs of man. Persian garden indeed is a heaven collection embedded the creatures such that not only meeting the physical needs of men (functional and aesthetic dimension), but also attending to its metaphysical and spiritual dimension (conceptual dimension). This resulted in its survival during the times and has been considered such as a unique collection that although its components (including water and plant) haven't been changed apparently and structurally, but is the same conceptually with no considerable changes. On the other side, because Persian garden has been formed based on the thought basics shaped in the Middle East and Mesopotamia during thousands years with many thought and mind effects on residents of such territories, it is likely that scriptures also used the same language and model formed in the minds to communicate with its contacts; as indicated in Holy Koran, God communicated with any tribe with its specific language (rom, verse 22). Therefore, the models used in Persian garden have significantly close relation with the expressions and contents of scriptures such as Koran such that the conceptual and spiritual model of Persian garden to be recognized must be sought in Koran and other scriptures. It must be stated that environmental design must generally meet the material needs of man and a ground for its spiritual development. Turning the plants and trees to decorative things and bodies in the green spaces of our country and hidden in the pollutions, and turning the ways to a main subject in the urban spaces and dominated on the spaces with domination of buildings on green spaces and generally, distortion of the man among anxious and fearful, and passive objects, all resulted from the penetration of culture and believes that forced their theoretical views on human societies. According to the importance of water and plants in holy Koran and other Islamic principles, environmental engineers and landscape designers must consider the spiritual fundamentals of such elements to provide a condition by which they can use sustainable elements in landscape architecture considering the concepts as mentioned in Persian garden and for establishing the complexes more coordinated to spiritual and physical needs of man, three aspects including conceptual, functional and aesthetic ones must be considered in the design. Another important point is that God promised all virtuous people to live with these valuable elements, water and plant in the heaven and this indicates high importance of such heaven elements. On the other side, better recognition of such divine gifts will provide the man with better conception of the knowledge of God; as stated:

"According to wise men, each leave of green trees is like a booklet indicating the knowledge of God" (composed by Saadi).

This subject has been frequently repeated in holy Koran as well (Alrahman 12, Anam 59, Nahl 10, Naml 60).

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