Abstract

"Carpet" and "garden", thoroughly, reflect the culture of Iran's pre-Islamic and post-Islamic periods. The aspects of these crafty and traditional arts that their essence, more than other aspects, represent the creativity and ideology of the artists, are the design, Composition and structural principles of carpet and garden design which have become valuable cultural relics and source of thoughts throughout the history.

The present study aimed to investigate the relationship between arts of gardening and carpet weaving in Iran and to compare the principles of their form and structure and to obtain the identical inherent principles of these arts, “garden carpets” were found to be the closest point in this area. The present study focuses on the garden carpets as the link between garden design and carpet design and illustrates how to design the motifs and how to replace and arrange the elements and principles in order to display identical concepts. This study is conducted using a descriptive method and with the approach of visual comparative structure study of these two arts, and aimed to achieve replacing the architectural elements of the garden, with motifs and designs used in garden carpets.

The conformity of garden design of Persian carpet with Iranian religious beliefs (Heaven Symbolism) and harmony of overall design of garden carpets with overall structure of Persian gardens are of results of this study. The other outcome is that, in addition to the individual concept implying the homogenous fact, these two arts have harmony in visual basics and design principles resulting in structure and diversity, as well.

Key Words: Garden, Carpet, Comparative Study, Design Principles

1. Introduction

Complex issues of representation and a form of art and self-expression of arts and tools takes place to suit different levels of expression. One of the most striking examples of these categories should be searched in the traditional arts of Iran Islamic beliefs, all of which are derived from various forms of semantics. This sense of unity in the face of pluralism can be seen as the most important value lies in Iranian art, While creating beautiful patterns, understand the meanings of symbols by creating a relationship between them makes it possible successor (Ayatollah, 9,2010). The relationship between form and content is valid for all visual arts. An abstract art is also intended to express a spiritual content creation. Forms and colors that conveys the concept. What do the numbers and letters in a chemical formula, in the form of a visual perception system to do so? Mentally visualize any kind of a spiritual content - including architecture - Chart inherent traits that content that uses specific forms - which are organized according to a given instance - are expressed as means to express the image the intellectual content must be appropriate and perceptual visual form and finds that such a need is felt to language forms (Grvtr, 277).

As each language is composed of words, language and forms the basic forms of the basic patterns have emerged. Each form has been chosen for some reason and thus has its own specific function. The success and sustainability of a culture based upon having a valid form of language as well. Forms as visual cues to convey a sense of meaning are signs of change. Implications of these signs indicate a form of language and a culture of intellectual content (Grvtr, 278).
each form has identified relationship between the individual components. (Abid Dost, K. M., 2010) The process of perception can be more important than all the constituent lines. Structure rarely matches the lines forming the shape and is not the most immediately recognizable because it has no points and lines (Grvtr 276).

"Carpet" and "garden" view mirrors all of Iran's pre-Islamic culture and after it. Those aspects of the craft and traditional arts of all existence relics and Site thought to be ages, this issue consist with the genius of its artists, representing the ruling ideology of the substrate upon them, designs and structural principles of composition and design, paving and garden which has become a valuable cultural. Interconnected garden and paving design principles in Iran, would create questions in mind as a symbol of the realistic aspects of the semantic relationship between the two art has been repeated in this article, has been the subject of forms and principles of organization and forms of this view on the implementation of the principles of garden design and new carpet to be reflective.

A batch of Iranian historical Carpets clearly map the garden map, Another batch implicitly. Iranian name for this role, in Golestan. Professor Pope In this context, More than anything, focuses on gardens map and Ferdos garden Iranian imagine which is Minoo Golestan (Abddvst, 135:1388). The present research focuses on the garden carpets as the link between making garden and designing carpet and presentation of how to design carpet and mode of alternatives and elements Sequence to demonstrate same concepts.

2. Materials and Methods

Procedures based on the method, described in this article, is historically and Gathering information from historical documents at once to compare and discover the extent of conformity with the general structure of the carpet garden design of Persian gardens and landscape design principles and....

3. The theoretical origins of the "garden" and "Pavement" in art and Iran and Islam

The carpet: Carpet Arabic words in Pahlavi language refers to the: setup thrown or spread (Dehkhoda, 1999, 17077) is spread on the ground to as "ground" that his inborn "Collapse" and ", it does offer peace of mind to ensure the carpet.

4. Pavement design structure: the structure of Iranian carpets, several important and noteworthy:
1. Symbolism and its main distinguishing feature is the integration code.
2. Usually based on the layout geometry and geometric regularity.
3. Mainly determined by the frame, square or rectangular Persian rugs with the four directions and the four ancient climate and the square base of the Kaaba and the mosque correspondence will be conducted.
4. The principle of "symmetry" or "balance" that has cast a shadow over the project.
5. Each rug design has two main sections: Boom margin. Usually canvas or text, the "marginal" or margin frequent and sometimes seven consecutive number looks to be framed.
6. Avoid the deep space view perspective and taking advantage of the linear logic exponential depth (mode two-dimensional) models for its design.
7. The design-oriented aesthetic centrifugal vacuum and particles are dominant. (Chitsazian, 2010,101)
5. Persian Garden:

Garden of the word "garden" is a Persian origin, place certain types of trees and plant flowers in it there can be and usually is a fence. "Garden" in the Avestan language, Persian, Paliz (garden) and the European paradise in Arabic "paradise" is. (Minorsky, 1985,75). Architectural concept of the garden, reflecting a sense of place because the garden space is determined that the overall picture of the universe itself is framed (Ardalan and Bakhtiar, 2001,68)

6. Designing the Garden

Structure Design "garden" and combined art and garden decoration in different parts of the local culture inspired and influenced by climatic conditions and the intended use and purpose of life is different. Garden of the structure and the composition of the three species.
1. Garden of geometry: combining divisions and the overall form and function within the rules and regulations of mathematical geometry: straight lines, regular forms, precise angles, given appropriate dimensions, regular routes, see the subtle and deliberate, guides, verse network, water features for the garden. (Pirnia, 1987, 28) plans say that the carpet is composed of straight lines (Iran Carpet Company). Since the Iranian architect designed a geometric garden makes the garden look like it's going anywhere investigation and talk to consider this type of garden is the garden.

2. Garden view: overseeing free and eye-catching combination. Amenity lines, a variety of surfaces, rotating shapes, wavy lines, no pivot or pivots irregular shift too, is characteristic of this type of garden. (Pirnia, 1987, 28) The plan includes designs of carpets and carpet design consists of curved lines called Battalion (Iran Carpet Company).

3. Garden hybrid: a combination of geometric and perspective. Architects and painters are willing to geometric garden design, garden planning fascinated by the landscape (Abolqasemi, 1992, 7). First used in most of the species, so the "Persian Garden is a collection of beautiful, harmonious and rational blend of fun and eye-catching water plants, paths, lighting and architecture based on a calm and relaxed geometry is formed." (Abolqasemi, 1992, 27) Model as a reference to build the garden so the study compared with the reference model should be such that it can be compared gardens attributed to the Persian gardens, this model can be constructed as the garden of Iran reproductive. There are two types of garden design of Persian gardens: 1 - four-part 2 - organized along the steep slope length and conform to the shape of the irrigation system (Masoudi, 75, 2010) What about the reference of the observer pattern, is important in the unity of the deep parts of the garden in its entirety can be isolated from the surrounding environment. The intensity of this distinction, the limit is defined by the wall, in connection with homogeneous geometry as it is a place where the light is strongly influenced by observer distinctions (Masoudi, 2010, 161).

7. Reflection "garden" in "Persian Carpets", doctrinal and historical roots

In the Garden "geometric" Persian Garden is a master plan, Divisions within the rules and regulations and general forms of mathematical and geometrical system function: Garden design on the basis of the above characteristics of the carpet with a mixture of religious beliefs and ideas of his time, has had. (Chitsazian, 2010, 106)

Organizing principles in the design of gardens and carpets, and in order to be useful to combine and create visual perception are based on the following: Geometry - harmony - unity - Symmetry - Hierarchy - Rhythm - Stress - Conflict and .....
Geometric interpretation of crystallization lines that make up a garden layout. The first point on the geometric layout of the reference pattern Persian garden pond and streams are then split. Then, along the Street that they are caused by shady trees and the gardens and its associated layout. Other elements in the layout geometry plays an important role in different levels of the garden elevation difference is that in some non-flat garden can be seen. An important point to be noted that the flat garden, pond indeed a pivotal role as the main point is that all lines and geometric elements forming layout so that it was originated. (Masoudi, 157,2010). The survey carried out some ¬ geometry is considered as the main aspect of the Persian Garden. ¬ In this study, the starting point classification scheme ¬ Persian Garden as a four-part pattern of the two cross-stream of water and a pond in its center. This four-part model of the Chahar Bagh is called, has always been regarded as a Persian garden. In various surveys of Western and indigenous, this feature can be seen as the most significant aspect of the Persian Garden. Relegated to the garden to spend and abstract geometry of the design, although other factors may be inevitable as part of a more quantitative approach, But the whole issue of reliance on it, is a form of reductionism.

The Golestan carpet (18-19 centuries) as a basic layout of a Persian garden known pattern (geometry, four-part, four gardens) in the stream of water at the junction of the picture that matches the symmetry axis, the pool is located. On the other hand, within the frame of strict attention to the carpet. This process has an important role in the garden and the walls are crystallized (Massoudi, 2010). Iranians view large square surrounded by mythology, the world was divided into four parts ordered geometric accuracy and the center of its own universe tombs like mountains above the four rivers of the world (i.e. four river) was the head of the mast. (Massoudi, 66,2010) and it has a unique geometry that has been shown in art make garden and carpets.

8.co-ordination and balance

The aesthetic to the organization or "harmony" between the components of the disorder, there is a phenomenon. Coordination, the relationship between the two things are contradictory. The fact that the East is one of the foundations of knowledge Lao Tzu says it, and it has been a symbol of the Yin Yang symbol. (Grvtr, 2005,355) Coordination is a key element of the aesthetic architecture and its scope is by no means limited to the spatial dimensions. Material, color, gender, appearance and design ... all must be consistent with the requirements that higher order functions and inclusivity. Coordination, visual perception, apart from visual balance is not. Physical and psychological perception systems all tend to reach a state where stress levels are minimized, or in other words, are more balanced. (Grvtr, 2005, 356) In fact, art and its various manifestations in the traditional civilization, and the place of real epistemological perspective to the art, to achieve truth. Thus, all forms of art can be art interpretation of the concepts outlined and these reasons, the most important features of a traditional Iranian art as unity in diversity and harmony. A characteristic of the carpet (especially the cheeks) there is increased coordination between the models and the size of a large organization it is created. The coordination of the continuation of Iran's artistic tradition by repeating geometric patterns are similar. coordination design is art
Although repeating geometric patterns that were woven in Iranian art loses its dynamism, but geometric designs into heavy weights in Iranian art. (Blair, 1994,49) It is evident that the use of the same geometric structures (including certain ratios used and how to expand it) in order to achieve harmony, but it can create a harmony resulting from the union, it could be interconnections to organize the elements of art. the garden, or reflects a sense of place, the garden space is determined that the frame is a snapshot of the universe itself. This means that discipline and coordination, which can number, geometry, color and material comes within the senses and at the same time, consider the wisdom of nature, the sphere of hidden esoteric focus on the positive space (Ardalan, 2002). Garden design is also a peak at what makes the coordination structures of similar geometry and geometric designs alike.

9. Unity

"Persian Garden as Architecture, Poetry, Music, carpets and other works of art in the tradition and principles of delicacy and perfection Bday considerably and the peak of unity in diversity and diversity in unity." (Enlightened)

Unifying theme is that all components are ideal in Persian art from the four corners (four symbols of the material world) will accumulate and eventually achieve unity in the midst of the religious beliefs that originated in the Middle two axes perpendicular to the four garden, pavilion and pool before we see it on the carpet in the middle of the medallion we see that due to the shape and position of the components in place to deliver the unity of. And this is what we understand Persian architecture and in particular the dome. center are all original and are of their existence. All of these components, and sanctified it, because they worship her life for him to be there in the garden pond Yard geometric center of the current and perception of the world there is a connection. " (carbon, 2001,8) All the various parts of the garden at this point to reach unity. The center represents the unity of all originate in the middle of the carpet, the sign of life, getting to show his face around complete the incomplete portion of the intermediate (bergamot), and the taking the life of living beings is unmatched and unique. While there is this unity is realized. "Confluence textures, forms and colors to create variety. Diversity least make uniform and a great variety makes confusion. That need to create an atmosphere of diversity is moderation." (clerical, 1986) and temperate diversity in unity in all the arts, and particularly Persian carpets and see art.

10. Axis

This created by two points in space, linear forms and spaces that can be arranged around it. Fact -driven, control -line model for the project. Designed for intuitive motion control and physical control lines makes use of. This means that the designer can lead the observer to object to a particular place. Axis of the chart and ask moves. (Rouhani, 1986).the two main roles close. axis in both the arts center, but instead the transverse axis is changed, sometimes at 3/1 to be long, sometimes at 2/1 and sometimes be deleted. (Soltanzadeh, 2000)

11. Bilateral symmetry and repetitive symmetry

Symetry words in European languages the word symmetry is equivalent to the Greek word "symetria" is derived from the original meaning of the melodic, harmonic and well formed respectively. When it comes to the proportion of all building components as well as the whole structure is based on a calculation unit (Moduls) scheme is common in all of them. Symetry order of relevance to the whole components based on a common unit (module), respectively. Symetry synonymous with the concept of fitness or simply word beautiful. (Grvtr, 2005:371). There are two types of symmetry: Bilateral symmetry and repetitive symmetry. In the first type, which is also called axial symmetry In one form or part of a 180 degree rotation around a vertical axis or horizontal axis are thus two sides will points equal intervals are centered. These types of symmetry of the legality of the order it makes a clear hierarchy and proportion may be biased. Repeat to repeat a form of symmetry in a row. Where is the prevailing balance will also be expected asymmetry in the perception of state legitimacy and lacks tension. (Grvtr: 2005:375) believes the "three elements form processing" to achieve smooth and elegant forms that include: symmetry, proportion and movement. (Rykwert, 1983,220). " Are
usually the product of the width and length of the text, the full symmetry and map 4/1 is the original map. course, this fraction to 8/1 and 16/1 to be changed "(Iran carpet company). This composition is comparable with that of four Persian Garden there was a water view “(clerical, 1986) the design and style of the text is divided into four equal Psychology has roots in both art and represents one of the undeniable influence of Persian art and Iranian artists mindset has on each other. This four- part revolving around two perpendicular symmetry were perfect. Symmetry in carpets and gardens, at least in one direction, and in most cases there are two directions. Persian Art Since the desire is to show the evolution of the most important visual effects of symmetry, balance traditional arts is especially sublime. When the set this is art. Open plan carpeted based on symmetry and proportion and harmony based on the size, shape and relative position of the elements in the entire firm. The Persian Garden Nir symmetry of its features. (Ayatollah, 14, 2009) what at first glance appeared to layout patterns of a Persian garden viewer, the perfect symmetry of its geometry. Each of the stream of water to act as an axis of symmetry, center of symmetry added to the pool and the garden, the overall layout is divided into the four corners that are different from each other. (Massoud, 2010, 157) writes in this sphere: the Persian Garden symmetry with mystical visions - read. Water table, blue sky and Garden repeats itself..... heaven way through the cornea into unity - alone (Danshdvst, 1985). Garden plots were organized around the symmetry were exact size, because the design was already rattling the development in time of the, Sassanid, lush gardens, a plan that was the plan of the palace like Mendel had four blocks (Ardalan, 2002)

The symmetry of this design is one such visual tools: The main part of the building in the middle of the axis of symmetry are located and other spaces are located on the side in order in terms of importance.

12. Hierarchy

Whenever several elements come together: an order comes in between them. Might have been worth all of the elements or functions are a type hierarchy. Principle of hierarchy suggests that the most and perhaps the real differences between all combinations of architectural forms and spaces there. These differences partly reflect the importance of form and space and functional, formal and symbolic of the organization are. For an application form or space or space as important to be a separate organization should be single openly. This can be achieved so that the shape or form, or a form of exceptional size of the single important place we value. in all cases, or in the form of a hierarchy is an important space to be exceptional by comparison much as possible, as opposed to a regular pattern and practice have significance destined to be. general visual hierarchy can be spiritual hierarchy tell apart. intuitive factors include: size, shape and position (Pakzad : 2005: 382)

A. Size: one form or space because of the obvious difference in size compared to the other parts can be a combination supremacy

B. Forms: The forms and spaces differentiated from the rest by a combination can be visually supremacy. Contrary to the form, and that this distinction is based on the change in the geometry or in order to be sensitive.

C. Location: forms and spaces that may appear as components of a compound can be a valuable place.

In hierarchical order, important places for a form or space capita are:

− The end of a line or a central organizing
− The symmetrical central organizing
− A central organizing center or radial
− Protrusion above, below or in front of a compound (DK Ching, 350, 1989)

How to prepare, arrange and deploy elements of the hierarchy are often all or some areas of the building such as the map view is reflected in the volume and composition. (Soltanzadeh: 17: 2009) that the transition out of space to an intermediate space that is neither inside nor outside the Iranian porch and then inside the final order is to show your Hierarchy and interior spaces with private, semi-public and private, and vice versa own show. they represent the visual primacy of the spiritual hierarchy.

The carpet in the hierarchy has to be either. Kind of "status" in the eyes of the transition between the edges of the carpet (the carpet design depending on the fringes of the 5-3 variety) to the center of the carpet Torange its central role in the show notes to mind preparation times to reach the main characters and are responsible for the final design., and the Persian Garden design is the hierarchy of public, private. Hierarchy "form and size" in transition levels of the central circular geometry tetrahedral geometry of the design, symbolic architectural
principles rugs and other Iranian art and evolution of the tetrahedral geometry of the circle. This principle lies deep in much the same behavior that occurs in the dome mosques in Iran.

Orderly or harmonious repetition of lines, shapes, forms, or colors are said to include the fundamental theory is echoed as a strategy for organizing forms and spaces is considered. Simplest form it is a linear iteration consists of many components be., in this case it is not necessary that the components are quite similar physical properties based on their architectural forms and spaces can be organized. How to repeat: 1 - size 2 - Figure 3 - Detail (DK Ching, 368, 1985).

"The sequence of the various elements give meaning. Repeating plants and design elements of the potential complexity arising from the diverse landscape provides much less and orderliness" (clerical, 1986) Making garden art and carpet kits (repeat Henry repeating event, if certain conditions must be in perfect harmony and create a feeling of beauty. Making garden and carpet design in the form of a recurring phenomenon aforesaid by artist, designer, designs, makes pleasant and beautiful. Arabesque is essentially due to the nature of processes to reproduce the cosmic creator, like nature rhythm is based on the concept is rhythmic arabesques. But as forms in space that are prominently placed in the passive. (Ardalan, Bakhtiar, 2001)
13. Stress

The shape of a building or a building’s overall visual rarely consist only of a geometric form. A general form of geometry can form a building but usually several side forms have been used in a building. A combination of architectural forms multiple forms can also be formed with the values that are in conflict with each other and to create tension. This is meant to reduce tension. (Lang, 1964, 100). than a human hand, which tries every perceptual disorder to diagnose structural and find other words to reduce the level of tensions. Meanwhile the essence of all beings who want to experience stress creating stress in different ways possible. The general rule in this case is that more and more complexity and contradiction of the order is less than the amount of tension. Tension is only the form and the proportion of but also through the stress of conflict antithetical. The two elements are brought unusual. (Grvtr: 2005:357)

Pavilion and pond in garden pond, building and forms the shape of a rectangle is the product sequence is located on the axis of symmetry. man’s desire to move. ” or in other words is what Danny does, and what a positive impact that is greater than the negative effects, thus tension is achieved through the extraordinary importance of the main building or in Indeed, the importance of its function - is emphasized. ” (Grvtr: 2005:359)

14. Conflict

The main features of the Iranian plateau, where the gardens were refreshing, water shortages, poor vegetation, dry climate and low levels of relative humidity was considered. Utility within the Persian garden was provided to observers, such basic features and distinctive environment where there was a garden in the Persian garden in
sharp contrast with the surrounding environment (Massoud, 2010), and this contradicts the symbolic, if the carpet has been optimistic garden is symbolic life of the desert dwellers.

15. around the border

Privacy is the boundary between the two areas and are distinct concepts. Privacy or garden borders the proverbial wall and it means an early start and knew the garden. The proverbial garden wall and the wall
defining an integral part of the Garden of Eden by the concept of precedence. ( Masoudi, 113, 2010) walls required by this place (garden) to his determination. (Chitsazan, 2010) because they have different inputs and in heaven narratives and concrete walls and fences. (Zaki Zadeh, Renan, 2008, 53)

Islamic architecture and urban space in exactly the same way towards the inner surfaces in the form intended to be defined, rather than positive, tangible results. Negative space itself is directly linked with the symbol of spiritual space. Garden is a Persian garden interior walls defining an inner space, not any object, building or be located in the middle of a pond. (Burkhard, 2000) evil can not find the way. Carpet edges of the walls of the resort is paradise. (Abddvst, K. M., 2010:135).

It is delimited by the Iranian proverbial wall in the garden, gathering the hardware environment surrounding space, and all components and concepts, which puts them in the interaction - such as geometry imposed on the Garden - Self-way function. People are gathering space. One of the main features of the way of Islamic garden gathering in the warm, dry, and can be seen on the water. Establishment of green areas in the garden, in contrast to the dry environment around the Persian Garden is one of the fundamental principles. All these concepts have shown that the design of the carpet in your garden if you have repeated undeniable.

16. Result

"carpet" continuing effects "garden" of Iranian life is hard and dry desert climate and the effigy of "Heaven" home and garden freshness brings to them. than the designers tried Carpets are designed to take advantage of the fundamental principles in the eye of the beholder familiar desert and is closely associated with the memory of his ideal garden, thus the same hand that the design principles such as symmetry, balance, hierarchy, proportion, etc. Makes the garden seem to help creative designer rug is hand made and the memories will be signs in the presence of the garden to garden.

All content and images examining the role of geometric and non-geometric carpet, garden and orchard map of Iran hypothesis of this paper is to evaluate the final result is thus stated:

1. Sketch of Persian gardens and garden with the overall structure of the coordination.
2. In terms of composition and structure, both geometric and garden landscape garden are reflected in the carpet.
3. The design of these two art forms construct two general principles (balance, symmetry and ..............) are a reflection of each other.
4. Symbolism and its main distinguishing feature is mysterious.
5. usually based on the layout geometry and geometric regularity.
6. Determine the square or rectangular frame of Iranian carpets with the four directions and the four ancient climate and the square base of the Kaaba and the mosque correspondence will be conducted.
7. The principle of "symmetry" or "balance" that has cast a shadow over the project.
8. Each carpet design has two main sections: Boom margin. Usually canvas or text, the "marginal" or margin frequent and sometimes seven consecutive number looks to be framed.
9. Avoid spatial perspective and enjoying linear logic (method two-dimensional) models for its design.
10. Oriented design aesthetic centrifugal vacuum and particles are dominant.

References

1. Ayat Ullah, Habib Ullah, Afhami, R., Farshid Nik, F., Mehrabi product semiotics, Gljam 14, 2010
7. Enlightened, Scheherazade, the Persian Garden Conference Proceedings, Persian Garden characteristics
11. Persian Garden is a reflection of heaven.
15. Esoteric, MR, language, Proceedings Publications aware (p. 88 Masoudi)
16. Wilbur, Donald Newton (2006) and the palace of the Persian garden, health insurance translations daughter Saba, ch
17. Tehran: Scientific and Cultural
23. Zaki M. Renan, Alireza (2008) eternal peace in heaven and its blessings, C-6, the Court issued
31. Abdvdst, H., K. Poor, beautiful, diverse place on the Tree of Life Persian rugs, Gljam, 2010
34. Blair, 1994,49.