

The War Memorial Garden Design

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Abstract

The purpose of present research is memorial garden design of war. In this design we used concepts, elements, symbols and signs which are related to art after the war between Iran and Iraq. The war between Iran and Iraq is aimed to many culture results. It had many influences on literature, painting, photography and movie making arts that these were created for representing and preserving Islamic and idealistic values relevant to the war in Iran. In the proposed design plan, aside from the implication of symbols, the composition, texture, color and form of the elements and plants in particular, have been used to imply the abstract concept in the creation of spaces. The results of this research introduce a process for using mental and sensorial perceptions of elements. This process can be applied for implying of special concepts in the environmental.

Keywords: Memorial Garden, Symbol, War, Landscape, Conceptual Design

1. Introduction

Wars have specified role in history (Botol 1997). And they have many excellence influences on a nation culture - the eight-year-old war between Iran & Iraq in 1978 that called as "Sacred Defense" includes concepts such as stability, fraternity and sacrificing (Amani 2000).

Arts after the war were for expressing and celebrating of these values. Constructing memorial garden of war can be a purpose for this meaning (Taghi Zadeh 2008). Paintings have been inspired from the war more than the other arts (Ghazi, 2010). In this research it is tried to reach the symbols and signs of the war by pictorial analysis of a symbolic portrait so that they can be used in design procedure of Memorial Garden.

2. Method and Materials

2.1 The war art

So many portraits were created during and after war (Aghdashlu 2008). One of the symbolic and outstanding portraits from war is a portrait by the name of "KAVIR" created by Mr. Kazem Chalipa (Sepidar 2010), (Figure 1).



Figure 1. “desert” printed by Kazem Chalipa (Chalip 1988).

Most of the paintings after the war are symbolic. Because there is no direct tool to express the meaning, a symbol of that is made and is replaced by that meaning (Ahmadi 1992). For example circle, red color, spiral movement and cedar have special meaning in Islamic culture. In this portrait the woman embraces a circular basket of Tulips. Circle form is the symbol of reality universe and the red color of Tulips is symbol of blood, life and motion. Tulips are moving toward center in spiral movement are making a snail picture. Islamic philosophers believe that spiral movement will reach finally to origin point which is the pure essence of the sublime God and also employs unification concept (Avini 2010). Cedars in the left side of portrait are the symbol of eternity. Square forms induct calmness and stability to viewer and diagonal lines have many roles in inducting humbleness and courtesy (Sepidar 2010).

As color in the portraits are symbol of spiritual manners related to its own existence, form and shape and even texture and tissue of elements have all induction character. Therefore they all can be used to induct concepts (Pouya 2011)

2.2 Knowing of the site

In this research, the area dedicated for designing Memorial Garden is an eastern-western hill. This site is in the entrance of Tabriz city (in IRAN). The hill with the height of 1600 meter (above sea level) has a visual relation with urban texture that is located in south and south-east, north mountains and east gardens (Halali 2006).

After knowing and doing physical studies of the site for analyzing landscapes subjective¹ (psychological) method was used (Lothian 1999). Since the memorial garden deals with some special concepts, therefore for evaluating the hill landscape, we should follow perception of the same concepts from the landscape in spectator mind.

Aesthetics evaluation of landscape is formed in four stages: Expressive², Perceptual³, Symbolic⁴, Symptomatic⁵ (Nohl 2001). For analyzing the hill landscape, some abstractive parameters are considered in Perceptual,

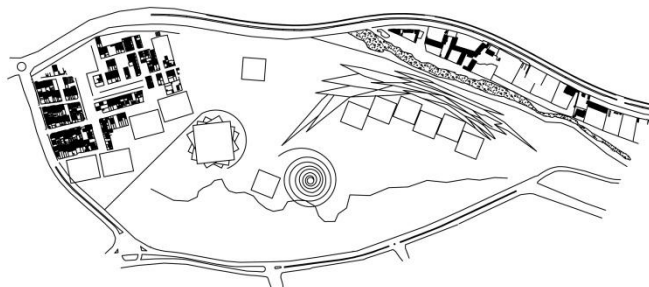
1. In subjective or psychological method, landscape quality derives from the eyes of the beholder and objective evaluation of subjectivity.
2. Expressive level: In the level of aesthetic cognition all perceived elements and structure are associated by the beholder with feeling and emotion.
3. Perceptual level: On this level, the beholder of the landscape gains immediately relevant information through the senses, such as by viewing, hearing or smelling.
4. Symbolic level: On this of aesthetic cognition, visible things in landscape indicate something else, too. However, the contents, attached to the indicating or symbolizing things, are not landscape realities, as they are at the symptomatic level. Here they are become ideas, imagination, utopian pictures, which are generated in the head of viewer.
5. Symptomatic level: Here physical things of the landscape refer to something beyond themselves. Objects are understood as signs or symptoms indicating something else.

semiology and symbology levels, concerning the meanings that had resulted from the war (Table 1).

Table 1. Introduction subjective parameters in Stages of landscape aesthetics perception (Pouya 2011).

Stages of landscape aesthetics perception	chosen subjective parameters
Expressive level	Fear, pride, composure
Symbolic level	stability, dedication, unity
Symptomatic level	destruction, reclamation

In this way many pictures are prepared from different part of the hill landscape, and then they are analyzed and marked based on introduced parameters in table 1. At last considering physical studies and landscape studies the hill is fielded. In each field physical conditions and mental perceptions from each field are assigned to have suitable locations for inserting each one of conceptual spaces (Figure 2).



Limaceous and helical lines: symbol of reaching god .
Broken and impacted lines: symbol of invasion and ravage.
Squares: symbol of defiance and resistance.

Figure 2: conceptual analogy of the site (Pouya 2011).

3. Results

3.1 Design idea

After analyzing the portrait is tried to use its concepts in sketch and garden design. In this the sketch, the movement spiral use and its eight times rotation is a symbol of eight-year-old war between Iran and Iraq. This form is situated in the highest point of the hill. The squares are symbol of constancy and the broken lines are used for implying invasion (Figure 3).

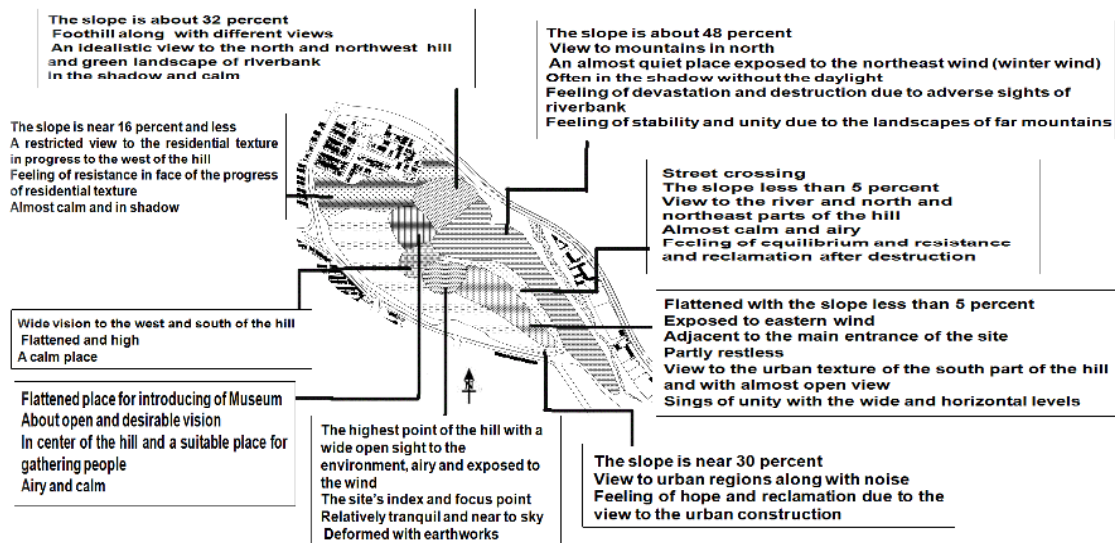


Figure 3: primary idea of plan

3.2 Design

Practical program assigned for designing Memorial Garden is including eight gardens pointing out eight years of defense. These eight gardens imply concepts such as invasion, defense, identity, eternity, unification, pacification, and sacrificing and are situated on base of each site properties of the hill (Figure 4). Meanings and concepts in addition to usage of symbols can be also inducted to visitors by using visual characteristics of elements.

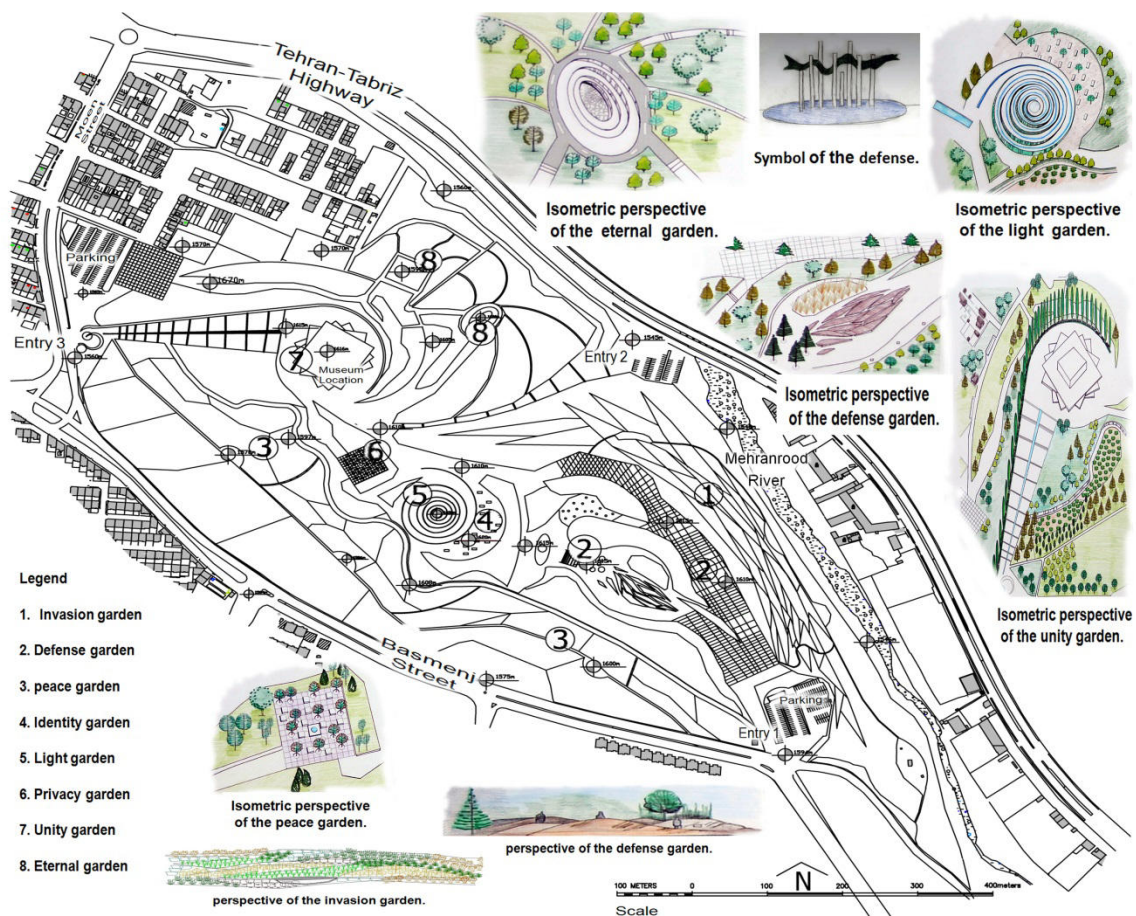


Figure4: Master Plan with eight definite gardens

In this research the plants role is highly concerned. Form, color, height and texture of plants in arousing the visitors' sensations and his/her mental reactions are effective.

Table 2: The implant properties of each proposed spaces of the design and their considered species. (Sabeti 2004); (Pouya 2011).

The name of garden	The planting definitions	The proposed species
Privacy garden	Using spherical crown or willow trees as a single implant.	Ulmus glabra var. pendula, Morus alba var. pendula, Salix babylonica, Robinia pseudoacasia. Var umbraculifera, Eleagnus pungens.
Eternal garden	Varied implant of deciduous and evergreen trees with colorful flowers and fruits as a symbol of eternal heaven.	Acer pseudoptamus, Eleagnus pungens, Catalpa bignoniodes, Celtis australis, Cotinus coggyria, Crataegus monogyna, Fraxinus excelsior, Hibiscus syriacus, Malus floribuda, Sambucus nigra, Syringe vulgaris, Quercus pendunculifor a.Viburnum opulus.
Light garden	Using evergreen conical form with limited and ordered planting and using ascending forms for showing ascent.	Chamaecyparis lawsoniana, Clematis orientalis, Cupressus arizonica, Lonicera periclymum, Parthenocissus quenquifolia.
Defense garden	Emphasized and solo implant with conical form with the symbol of individual resistance of people, having tiny and medium texture for giving unification to the elements.	Agav americana, Chagmiles australis, Cedrus deodora, Picea abies, Pinus nigra.
Identity garden	Usage of evergreen species, symbolic, having conical and willow forms.	Anemone sp, Cupressus arizonica, Ligustrum ovalifolium, Morus alba var. pendula, Papaver sp, Platanus orientalis, Salix babylonica, Thuja orientalis.
Invasion garden	Use of erratic and diverse forms of plants, implant of pastured and compact bushes with coarse intertwined textures in steep domain of the hill.	Agropyron desertorum, Berberis thunbergii Bormus Tomentellus, Forsythia Intermedia, Juniperus Horizontalis, Pyracantha coccinera, Rosa canina , Rosmarinus lamiaceae ,Stipa Barbata.
Hope garden	Using bush flowers and plants to create a wide and open view to the surrounding. (Red Tulpia, in Iran, is the symbol of blood of the martyrs. Planting the rings of this flower in an area can be a symbol of countless victims of the war)	Tulipa sp, Iris sp , Chrysanthemum sp, Tagetes sp.
Unity garden	Creation of a proper stratum in implant, usage of perpendicular forms for directing to the gathering place and widespread crown forms of plants for provoking to gathering and unity, having tiny and medium texture, using of flowering species and vine with warm colors.	Campsis radicans, Cercis siliguastrum, Forsythia intermedia, Fraxinus excelsior, Lonicera periclymum, Populus nigraPopulus , alba, Robinia hispida.
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Light garden	Using evergreen conical form with limited and ordered planting and using ascending forms for showing ascent.	<i>Chamaecyparis lawsoniana</i> , <i>Clematis orientalis</i> , <i>Cupressus arizonica</i> , <i>Lonicera periclymum</i> , <i>Parthenocissus quinquifolia</i> .
Defense garden	Emphasized and solo implant with conical form with the symbol of individual resistance of people, having tiny and medium texture for giving unification to the elements.	<i>Agav americana</i> , <i>Chagmiles australis</i> , <i>Cedrus deodora</i> , <i>Picea abies</i> , <i>Pinus nigra</i> .
Identity garden	Usage of evergreen species, symbolic, having conical and willow forms.	<i>Anemone sp</i> , <i>Cupressus arizonica</i> , <i>Ligustrum ovalifolium</i> , <i>Morus alba var. pendula</i> , <i>Papaver sp</i> , <i>Platanus orientalis</i> , <i>Salix babylonica</i> , <i>Thuja orientalis</i> .
Invasion garden	Use of erratic and diverse forms of plants, implant of pastured and compact bushes with coarse intertwined textures in steep domain of the hill.	<i>Agropyron desertorum</i> , <i>Berberis thunbergii</i> , <i>Bormus Tomentellus</i> , <i>Forsythia Intermedia</i> , <i>Juniperus Horizontalis</i> , <i>Pyracantha coccinera</i> , <i>Rosa canina</i> , <i>Rosmarinus lamiaceae</i> , <i>Stipa Barbata</i> .
Hope garden	Using bush flowers and plants to create a wide and open view to the surrounding. (Red Tulpia, in Iran, is the symbol of blood of the martyrs. Planting the rings of this flower in an area can be a symbol of countless victims of the war)	<i>Tulipa sp</i> , <i>Iris sp</i> , <i>Chrysanthemum sp</i> , <i>Tagetes sp</i> .
Unity garden	Creation of a proper stratum in implant, usage of perpendicular forms for directing to the gathering place and widespread crown forms of plants for provoking to gathering and unity, having tiny and medium texture, using of flowering species and vine with warm colors.	<i>Campsis radicans</i> , <i>Cercis siliguastrum</i> , <i>Forsythia intermedia</i> , <i>Fraxinus excelsior</i> , <i>Lonicera periclymum</i> , <i>Populus nigra</i> , <i>Populus alba</i> , <i>Robinia hispida</i> .

Warm colors of plants bring happy and excite the environment; and dark and cold colors of plants are used to enlarging the garden and to give calmness (Rogers 2002).

Plants forms give mental-imaginary effect too (Sabeti 2004). In this research special forms of the plants were used for inducing concepts. For inducing constancy and stability concept were used pyramid cal and conical forms. For inducing eminence concept were used Pillar-shaped and oval forms. For implying tranquility concept were used spherule forms. For inducing stagnation concept were used procumbent forms. For inducing the meaning of freedom and motion concept were used hanging forms. For implying the meaning of disorganization and ravage were used irregular and forms and shrubs.

Texture of trees also has important role in recognition and induction the meaning in space (Mchoy 1997). Grand textures of plants are firm, rough and predominant on other elements. Medium textures of plants from sense point of view are neutral give unity to space and link the elements. Tiny textures of plants seem delicate and wisely.

High height of plants inducts a sense of pride and greatness and in case that they are wide crown ones they induct a sense of security. Pruning the plants induct a sense of control on environment. The implant properties of each proposed spaces of the design and their considered species are summarized in Table 2.



Figure5: Plan Design defined bases on the traits of plants and concepts of spaces; in each place, specific plants are considered which are unique and coordinated with other conceptual elements of design.

4. Conclusion

Portraits are clear express of thoughts and can be referred to recognize believes of a nation. Searching in how to express the meanings of a portrait can be a method to induct the same meanings in the space. This research shows how to make a relation between painting and environment design.

Difference in shape, color and texture of elements in each one of the suggested space, is suitable for the same space that has particular implant characteristics. Therefore the visitor will recognize the different visual and sensory characteristics of each space and will be curious to find out the hidden meanings of each space. In this way visitor perhaps engages unconsciously with desired meanings and concepts of the design. This matter that how much such a form or such other characteristic of plants are inducting the desire meanings of designer in people minds is relative and depends on people awareness from consulted meanings and concepts.

By using plants instead of artificial and inflexible elements in inducting the meanings of design, in addition to creating a green and variant landscape in different seasons, local species of region also are kept and it is more economic.

Since in the modern period human has a figurative look about views and landscapes, making statues in memorials Gardens- which have laudatory characteristics- will be exhausting with no meaning to him (Benjamin 1988); in this research it was tried to use plants as flexible forms instead of artificial elements. This design has tried to open a new way of newer expression of cultural and high-valued concepts in the space so that such a

space can always keep its memorial role.

References

- Aghdashlu, I., Moslemian, N., khosrojedri, H. (2008), "Impact of war on contemporary Iranian painting", *Tavoos Journal* **2**, 20-24.
- Ahmadi, B. (1992), "Visual cues to the text of the semiotics of visual communication", third ed. Tehran, Iran.
- Akbari, A.B. (1999), "The holly defense. The undergraduate degree thesis in Paintin", Faculty of fine arts, university of Tehran, Iran.
- Amani, M.D. (2000), "The holly defens, The undergraduate degree thesis in Painting", Faculty of fine art, University of Tehran, Iran.
- Amid Z., A. (1989), *The roots of war Phenomenon*, Recognition the aspects of aggression and defense: Papers presented to the international conference of aggression and defense", first ed., Tehran.
- Avini, S. M. (2010), *Pleasant mirror of committed art*", *Visual arts magazine* **6**, 2 – 17.
- Benjamin, W. (1988), *Illumination*", ed.by Hannah Arendt, Schocken Books, New York.
- Bigli, B. (2005), "Collection of anonymous martyr memorial cemetery", Thesis for a master's degree in Architecture, faculty of fine arts, university of Tehran, Iran.
- Botol, G. (1997), "Sociology of war, *Scientific and cultural publications*", third ed.Tehran.
- Bruce M.F., M. (2010), "Symbols and Signs in the World", Kalhor publication, Tehran, Iran.
- Chalipa, K. (1988), "Ten years of Islamic Revolution painters", Hozeh Honari publications, Tehran, Iran.
- Ghazizadeh, Kh. (2010), "Art of the Islamic Revolution in transition". *Honarhayeh Tajasomi magazine* **7**, 16 – 20.
- Halali, F., Tahooni, R. (2006), "Technical; social and cultural feasibility studies of the Cultural Center of Sacred Defense construction", Tabriz: Department of Preservation and Publication of Sacred Defense Works and Values (department of engineering), Iran.
- Hohenegger, A. (1987), *Signs and Symbols, Ministry of Culture and Islamic Guidance*", Tehran.
- Jafari, T. (2004), "Memorial of sacred defense in Dokouheh". Thesis for a master's degree in Architecture, Faculty of Fine Arts, Tehran, Iran.
- Joolideh, N. (2010), "Erasure of Love". *Honarhayeh Tajasommi magazine* **8**, 28-33.
- Kakaie, A. (2001), "Comparative study of sustainability issues in poetry of Iran and the world", Palizban publication, Tehran, 31-37.
- Karimi, K. (1994), "A memorial – cultural complex of Shiraz Koran gate". Thesis for a master's degree in architecture, University of Tehran.
- Khalighi, A. (2001), *Floriculture (Breeding Ornamental Plants)*,"Roozbahan publicashing, seventh ed., Tehran.
- Khosro T., Kh. Darvishzadeh, A., (1984), *Geology of Iran*, University of Tehran publication". Iran.
- Lothian, A. (1999), "Landscape and the philosophy of aesthetics: is landscape quality inherent in the landscape or in the eye of the beholder?". *Landscape and urban planning* **44**, 177-198.
- Mahmoudian E., R. (2002), "Reorganization of the Holy Martyrs privacy, sample: Memorial design of elements and physical spaces in the cemetery of martyrs in Isfahan". Thesis for a master's degree in architecture, faculty of fine arts, University of Tehran.
- Mchoy, P. (1997), "Successful gardening", Anness publishing limited. London.
- Mirshakkak, Y. (2006), "Silver morning: A sermon about Kazem Chalipa's paintings", Honarhayeh Hajasomi

magazine **3**, 28-34.

Naghizadeh, M., Aminzadeh, B. (2000), "the meaning and the visage in explaining the basics of art", *Fine art Magazine* **8**,16-32.

Nohl, W. (2001), "Sustainable landscape use and aesthetic perception – preliminary reflections on future landscape aesthetics", *Landscape and urban planning* **54**, 223-237.

Noordhuis T., K. (1995), *The complete book of gardening*", Metro Books, London.

Noshadi, A. (2001), "Engraving of love and devotion: pleasing mirror of sacred defense painting", Thesis for a bachelor's degree in painting, faculty of fine arts, University of Tehran.

Palangi, N. (2008), *Memories of Khoramshahr*", *Tavoos magazine* **2**, 40.

Pishbin, E. (2009), "Dos and Don'ts in 100 landscape of garden park villa", *Ayaz publishing*, second ed., Tehran, Iran.

Pourmand, H. (2005), *Park Museum and Cultural Center of holly defense (designing the museum of sacred defense)*."thesis for a master's degree in Architecture, Faculty of Fine Arts, university of Tehran, Iran.

Pouya, S. (2011), *The sacred defense Memorial garden-museum Design*". Thesis for a master's degree in environmental design, University of Tehran, Iran.

Rogers B., E. (2002), *Landscape design*,"Harry. N. Abrams. Inc, Publishers.

Sabeti, H. S. (2004), *Forests; trees and shrubs of Iran*", third ed., Yazd University, Iran.

Sepidar, F. (2010), *Desert*", *Honarhaye Tajamosomi magazine* **8**, 32-35.

Sepidar, F. (2010), "The role of the contemporary poet". *Honarhaye Tajamosomi magazine* **9**, 4-7.

Shirgir, E. (2005), "Environmental designing of memorial garden of Bam earthquake with the aim of qualifying surrounding of Bam organ". Thesis for a master's degree in environmental design, University of Tehran, Iran.

Shirzadi, Sh., Sondoso, M. (1994), *Memorial cultural complex of Gheytarieh hill*", Thesis for a master's degree in Architecture, Faculty of Fine Arts, university of Tehran.

Shirzad Kh. Y. (2008), *Proposed layout of sacred defense museum of eastern Azerbaijan*", Thesis for a bachelor's degree in museum, High Center of Cultural Heritage (department of museum), Bahar publishing, Iran.

Taheri, Gh. Khameyar, A., Yarnasb, A. (2007), "An aperture to the heaven garden (Irancontemporary paintings)Communication Research and Cultural Foundation's effort to martyr and Veterans Affairs", Shahed publications, Tehran.

Taghizade A., A., Sangari, M., Abdolahi, M. (2008), "Spiritual and cultural factors in the sacred defense (Islamic Research Institute),"Zamzam H.publication, Qom, Iran.

Terry C., D. (2001), "Whither scenic beauty? Visual landscape quality assessment in the 21st century", *Landscape and urban planning* **54**, 267-281.

Yung, C. G. (1980), *Man and his symbols*", paya publishing, Tehran.