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A Theoretical Approach to Restoration of Zoroastrian’s Tower of Silence (Dakhma) in Iran (A Case study of Zoroastrian’s tower of silence of Kerman)

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Abstract

The Zoroastrian’s tower of silence (Dakhma) in Kerman, is one of the most valuable religious monuments of Kerman and its history dates back to 1233-1261 S.H.

Alongside, there is the main and older Dakhma that probably belongs to Sassanians. Since about 1320 S.H. that Zoroastrians burial tradition was changed because of the social and hygienic reasons, it was disused and now, is in undesirable condition.

On the base of contemporary theory of conservation, one of the best ways to conservation of architectural heritage is regeneration and rehabilitation and put them into consideration if possible.

There is three basic method to conserve an architectural monument based on contemporary and classical theories: the first one is protective preservation with focus on maintenance of physical conditions of monument in present situation and prevents it from changes; the second is restoration in old usage for continuity, and the third one is revitalization and rehabilitation with new usage that is relevance to the authenticity and identity.

Each of above methods will follow different problems that are depended on the type of monument and various values and conditions of physical and nonphysical status of the building.

At first, in this paper, the information of Dakhma gathered for the field study and then analyzed in qualitative research and deductive reasoning to find the best intervention in the monument.

In the end, according to the result of subject value essay and at the other hand, the needs of stakeholders, the third method as giving a new usage with emphasize the authenticity and identity of the subject regeneration it, is resulted.

Keywords: *Restoration, Tower of silence, Conservation, Zoroastrian.*

Introduction and statement of the problem

After the arrival of Islam in Iran, the Zoroastrian

religion, one of Iran’s ancient religions, continued its existence as a religious minorities alongside Islam. Meanwhile, followers of the Zoroastrianism



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kept many of their rituals and practiced them as far as possible over the centuries (Zarrinkoub, 2016: 35-34). But the funeral or, in other words, “to lay in Dakhma” or “burial” due to various social, cultural and health issues, has changed during this period, since about 1941 onwards, the method of burying the dead was replaced with a manner similar to dead’s burial in the religion of Islam. (Alipour, 59: 2007). This change made the Zoroastrian Dakhmas lose their use and they were abandoned in the form of ruined and abandoned buildings. Following this event, many of these Dakhmas have been destroyed and the remainder suffered from very serious physical and structural damage. While this kind of architecture is a cultural and native wealth, which is a complex of ideologies and intellectual structures related to one of the most important divine religions in ancient Iran, nowadays, the remaining samples are subject to destruction. Examples that are not recognized as a “whole” but as an “entity” are the acceptors of retrospective research (Falamaki, 2017: 95). The main reason for this lack of attention, either in general in the Iranian society or in the Zoroastrian community, is cultural and ritual changes in the form of the burial ritual and as a result of the loss of the main use of the building.

Theoretical framework and research background

Modi, Boyce, Hintze and Zaehner outside Iran and Oshidari, Chaychi, Mazdapour, Soroushian and Alipour in Persian are among the most important ones who have studied the Zoroastrianism and its traditions. On the other hand, the protection of monuments and ancient sites has been addressed this issue by some experts such as Boito, Giovannoni, Feilden and Brandi since the middle of the eighteenth century, which started its formation as an academic knowledge (Falamaki, 2002: 11), until today. But what separates the subject of this article and other Dakhmas inside Iran from other Zoroastrian Dakhmas outside Iran, is the limited attitude due to the change in the ritual of burial in Zoroastrianism

which has been led to their useless. A subject that also requires a different look in restoration techniques and theoretical framework. A look that has not had any results to date, except for the protection and repair of the body of this category of buildings with a sectional and positional continuity approach, such as students’ restoration and protective projects that have been written about this Dakhma and other Dakhmas or have been developed and implemented by the cultural heritage of Iran’s cities.

- Research question: This paper is an attempt to answer – the following question : How can religious - ritual buildings of Zoroastrian Dakhmas in Iran be protected and which method is best suited to protect them in order to restore them to contemporary life?
- Research hypotheses: Iranian Zoroastrians’ Dakhmas (And in particular Kerman’s Dakhma), as a valuable cultural heritage of Iran, have special values for conservation and regeneration. Restoring historical buildings and monuments to contemporary life and paying attention to them can be effective in preserving their identity, originality, physical and non-physical values.

Research method

In this research, which is a case study of a practical nature, basic information, to prove what Dakhmas are and their values, as well as the needs of the stakeholders has been collected through field and library studies, documentary studies and research. Then the results were analyzed using qualitative analysis method to achieve a proper way to deal with Dakhma and based on rational reasoning is concluded.

Findings

• Zoroaster

According to one of the most well-known narratives in Noss’s view, the time of Zoroaster life dates back to 660 BC. According to another anecdote, he was born in the west of Iran in 1000 BC and has been started to invite people in its eastern part (Noss, 1999: 453). According to other documents, that the oldest of them is Xanthus of Lydia Zoroaster has

been living about 600 years before Khashayar Shah's crusade to Greece. (Nyberg, 27: 2005).

To lay in Dakhma (burial)

Some scholars believe that dealing with the corpse among ancients in ancient Iranian and Zoroastrian religions cannot be considered as burial. Because, in teachings of Zoroaster, burial of the dead is considered a great sin (Alipour, 2007: 51). Because they knew the body and whatever it is in contact with as infected and unclean things. And they believed that if the corpse was in contact with the soil, it would infect it (Azargoshasb, 1970: 42). The four elements in Zoroastrianism are soil, water, fire and wind and in this religion it is not permissible to infect them. For this reason, the corpse should be available to carcasses or it have to put on top of the silent towers (Chaychi amirkhiz & Saidi Harsini, 2003: 3).

For this reason The Zoroastrians used places known as Dakhma (tower of silence) to bury (destroying) the bodies of their dead; The bodies of the dead were placed inside the Dakhmas, in order to be destroyed by meat-eating birds and animals, and then bones were poured into the middle section of the Dakhmas under the name of the Estoodan (place of bones). There are also some hints of dead's burial in Iranian literature. Leaving out the lifeless body was very common in the ritual world. When Alexander arrived in the west, he saw that Villagers and townspeople put dead body in a passage and it remains there. Justin Asara says that "the bodies of the dead" are usually open in the air to be the bait of the birds and the dogs then bury meat-free bones. (Ghadyani, 2014: 318); (Fig. 3, 4).

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Kerman Zoroastrian's Dakhma

After the arrival of Islam, despite the restrictions, Zoroastrians kept many parts of their rituals. Although the elements of their ritual traditions probably changed, their foundations always remained constant. (Mazdapour, 2005: 147). Gradually, the Zoroastrians of Fars and Khorasan went to Sistan and Makrān, and some immigrated to India. (Same,

pp. 372 - 376). Indian Zoroastrians (known as the Persians of India) who were able to gain a strong social status, after being aware of Zoroastrians' situation in Iran during the Qajar era formed an association titled "Association for the Improvement of Zoroastrians in Iran" and a delegation called "Maneckji Limji Hataria" was sent to Iran to take steps to improve the Zoroastrians status in Iran (Naebian & Alipour, 2011, 160-129). Maneckji came to Iran in 1854 at the time of Nasir al-Din Shah Qajar. And for nearly 28 years he has been reforming Zoroastrian affairs in Iran, including his efforts to rebuild Yazd and Kerman Dakhmas. (Boyce, 1977: 427 and 427). Kerman city Dakhma, known as Maneckji Dakhma is located in the suburb of city, near the village of Seyedi on the way of Kerman – Zarand, 15 km north of Kerman city, on a low altitude hill, and next to the old Kerman Dakhma (Fig. 1, 2 and 5). In the lower part of these Dakhmas, their related buildings are seen. The buildings in which religious rituals were carried out (fireplace) and the building where Dakhmeban (Dakhma's sexton) lived. (Fig. 4) Sassanid Dakhma has been damaged (Fig. 5) while the building of Maneckji's Dakhma, it remains almost healthy. (Fig. 4) In general, Dakhmas architecture is physically five parts: "The wall of tower of the Dakhma, Estoodan, Pavi, the staircase, the entrance door,



Fig. 1. The position of maneckji Dakhme toward to Kerman.
Source:www.google earth.com.

and Dakhmeban's room. Since Dakhma must last for many years, in its construction, stone and thatch mortars were used. On the floor of the building, to prevent contamination of the sacred element of the soil, stone is used to put the corpses on the stone. From the location point of view, by choosing a place far from town and village, with the emphasis on not being exposed to the prevailing winds of the city, Dakhmas were built on a high in order to

prevent smell of carrion, contamination and germs transmitting to the city" (Sheyni Gholampour, 2014).

From facts identifying to monument conservation.

• Recognition of external meanings and facts about the historical site of Zoroastrian Dakhma

Because of the monument totality negation due to lots of changes in the cultural basis of its surrounded



Fig. 2. Maneckji Dakhma (on the right), sassanian Dakhma (on the left) and ritual building (center). Source: authors.

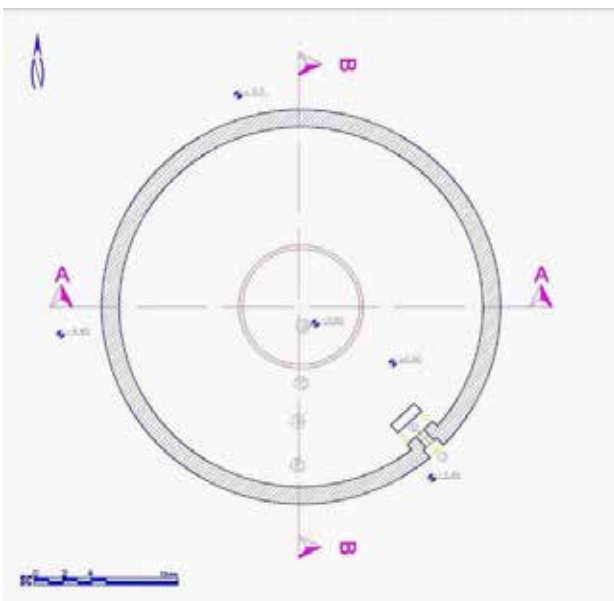


Fig. 3. The plan of Maneckji Dakhma. Source: Taran, 2014.



Fig. 4. Maneckji Dakhma. The room of sexton is situated on down-right corner of picture. Source: authors.



Fig. 5. Ruins of old Dakhma from Maneckji Dakhma. Kerman is situated in background. Source: aouthers.

environment, it is very complex and difficult to raise and address the issue of protection. Legislation, in each country, on how to deal with monuments, which are part of great cultural heritages, is organized in a different way regarding how the cultural heritage is classified and also, how much support and legal obligations are available by different decision makers (Orbasli, 2007: 74). Experiences in the field of architectural protection state that, considering the environmental and legal contexts of the monument (social, cultural, economic, etc.), whenever there are sufficient justifiable reasons to protect a monument; coordination between goals is more logical and sustainable and protective operations will be more successful.

• **Recognition of internal meanings and facts about historical site of Zoroastrian Dakhma**

Survey and study of these facts is essential to determine the protection strategy and method:

A. Monument life facts from the beginning to the end

- Playing an active role; during different times and between a human group with the same ideological identity in response to one of important, essential, and inevitable needs of their lives (having a place to bury the dead people)

- Improving and organizing the area via the construction of new buildings (Dakhma & Khileh) during Qajar era.

B. Facts of era after complex life

- The monument abandoning and deterioration that has occurred due to changes in the burial rituals of Zoroastrianism in contemporary era “When a historic monument is abandoned, its deterioration begins” (Ashurst, 2007: xxxi).

- Feeling no need for a proper attention to a historical site -as a source of inheritance- by people and authorities and even the owners (the Zoroastrian community) ,to bring it back to life ,in a way that leads to its protection and efficient use , can accelerate the process of deterioration of the monument.

Discussion

• **How to protect the complex?**

Understanding this national asset and knowing its history and meaning is an essential step in the way of how to protect this monument. Many factors affect determining the importance of protecting the building; include of cultural, social, economic image of the place after protection in the environment in which it was born and spent its life. “Contrary to the relatively absolutist views of classical theories, to recognize the importance of the building status , which are more focused on the monument itself and protecting the body and its structure against further deterioration, contemporary conservation theories have a more relativistic and also more broadly and deeper look (Vinas, 2005: 213) into the subject. And, far from any bias, the measurement of all tangible, intangible and conceptual conditions of the environment is considered necessary for work. Therefore, conservation is known as a subjective and abstract concept and to explain the protection of the monument , seeks out all the positive outcomes that are beneficial to the host society as a result of its protection. The purpose of these outcomes is to sustain national, regional, indigenous (local), cultural, economic and other interests. This is precisely the realistic part of conservation that should be balanced against its artistic part . Only in this case, conservation can lead to the sustainability of the monument (preserving the true meaning of the

work) as well as self- sustainability with legitimate support from managers and authorities (Fig. 6)

Value-based protection (cultural heritage attributed values)

If we consider the process of preserving a monument, when the work takes particular interest by cultural heritage sponsors, as a time-consuming, difficult and complex activity and accept that protection is a kind of sensitive behavior and treatment with a historical monument that has heritage value; Determining the valuation degree of a monument existence, is a subject in which based on this subject the path of protection is achieved with greater accuracy, more realism, highest possible quality and less error. Protection of cultural heritage in all forms and all historical periods is rooted in the values attributed to the heritage (ICOMOS, 1994). Each historical monument, which is a source of heritage, has a human-artistic message that should be reviewed by a historical study. It means that scientific, historical and emotional values of the building which are respectively associated with existence, age, and human messages, should be discovered, categorized and evaluated as a whole,

using scientific and intuitive methods.

Recognizing these values as the foundation of all decisions and actions in preserving any cultural and historical heritage, is an important step in its recognition and with all its complexity and difficulty, provides a professional, scientific and high impact protection. According to Munoz Vinas: “Modern ethics are not seeking high-tech protection, but they seek high impact protection.” Mehdi Hojjat, in the book on cultural heritage in Iran, quotes Feilden: “Selection of specific objectives, how to deal with property, and the amount of interference in property, whether movable or immovable, directly depends on all the values adopted by society for various cultural property” (Hojjat, 2001: 95). Our ability to understand the values attributed to heritage, in one part, depends on the extent of the information resources that may be perceived in an authentic and correct manner about these value (ICOMOS, 1994). In determining and classifying these values regarding the historical complex of Kerman tower of silence, using qualitative analysis method, the classifications in the typology of values in the documents, the texts and resources written by the classical and

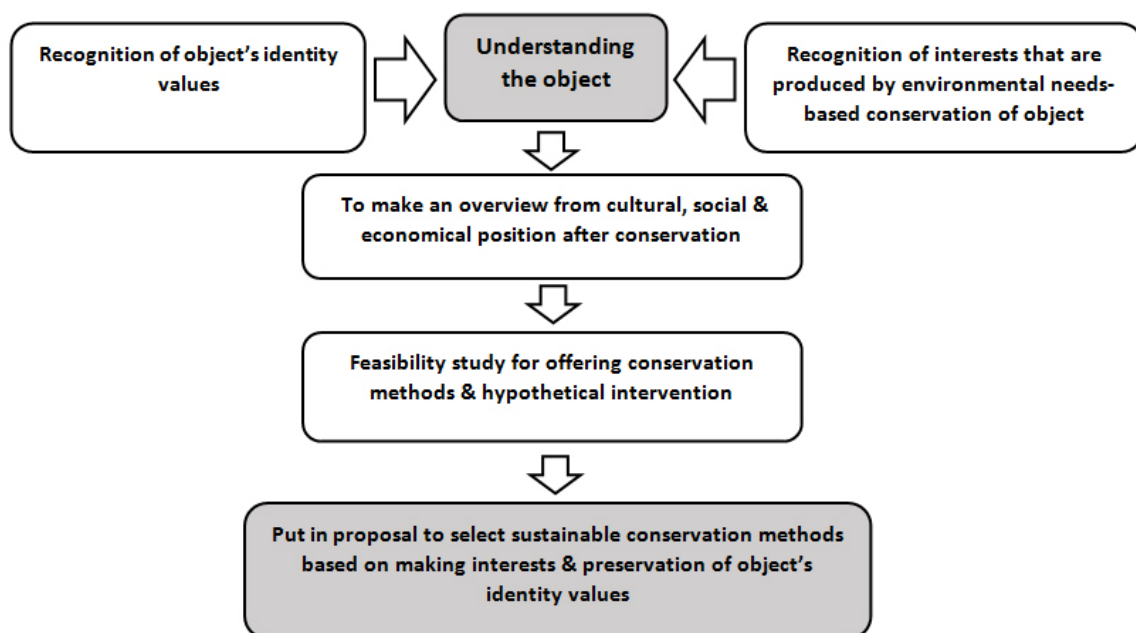


Fig. 6. The process of choosing a sustainable preservation method for Zoroastrian Dakhma. Source: authors.

contemporary scholars and theorists of conservation and restoration, including Feilden, Vinas, Brandy, Falamaki and Orbazli are used in table 1 as follows and then these values are classified as the values identified on the historical site of the Dakhmas in table 2. Then their validity and accuracy have been interpreted qualitatively. Although, at all stages of these qualitative interpretations, there is a belief that judgments about values attributed to cultural property, as well as information sources related to it, may possibly vary from culture to culture (Table 1, 2).

• **Archaeological values, authenticity and historical** archaism of the place (possibility of studying historical, cultural and social changes of Zoroastrian Iran). Remain of complex architecture is a visual representation and a real image of history which is created a cultural- ritual landscape; This complex by incorporating the three concepts of old age, existence and human message is a narrator of part of ancient Iran olden rituals. Archaeological findings are inherently unique in talking about history and its events in a plain language and without any prejudices or judgments in real or close to reality, and also bring benefits to various sciences researchers. As an example, for archaeologists or historians, it plays the role of a document for completing or ordering the pages of history - especially the social, cultural and ideological history of Zoroastrians in Iran. Considering the unique historical, cultural, and social characteristics, this complex, as a material and spiritual heritage which has cultural, ritualistic, indigenous concepts of past traditions in Iran, has the capability to be protected, as an “old documentary” of “cultural and archaeological values, after scientific and archaeological exploration” (Falamki, 2016: 101).

• **Emotional (being wonderful and spiritual),** architectural and symbolic values of the place

This historical complex is a kind of symbolic ritual-burial architecture whose main remnants of its simple unaffected architecture (the old and new Dakhmas), like any other historical architectural monument, has its own wonderful architectural values. These values, according to the complex function, shape

and surrounding environment include the following: In general, tower of silence is an open and symbolic architecture space, a place or a “public memorial” for used for embedding dead bodies. Via existence beside its main usage, it has been caused live people to experience a better feel, in the mental relationship between himself and dead person, by being beside it. Meanwhile, by placing the dead body in this enclosed place, both a form of reverence for the body and a kind of learning lesson about end of life is received in the audience mind, whether in the past or present time for the live person who is present at the place. This means that the place, with all its simplicity, which is its prominent feature, also has an “emotional-spiritual” value. “In fact, legally, a rock on another rock can be a memorial, if it is worthy.” (Hojjat, 2001: 86)

• **Socio-cultural value, ideological and group identity of the place**

The old Dakhma (Sassanid), which seems to have intended to respond to the needs of people living in a collective settlement, with a functional look and also with the reverence for the human species in a native-local way. While in the new Dakhma (Maneckji) which was founded with the aim of maintaining and organizing the spiritual concepts existing in Zoroastrianism and the Zoroastrian community of Iran, of architecture are also important in order to display “Cultural Integrity and Group Identity” in different lands with this monument. A concept that as a value is ponderable today.

• **Rarity, continuity and originality values of the monument**

This historic site has a genuine physical and conceptual structure which is formed in different historical eras (Sassanid and Qajar) and remains in its original form and it is an evident that the basic concepts of Dakhma in Zoroastrian religion have kept their originality and validity in the form of “continuity” throughout generations. “The components of any tradition or ritual may vary in different time and place, but the base and foundation of the ritual will always remain constant.” (Mazdapur, 2004: 147)

Table 1. Classification of values and means associated with a historical monument, in accordance with views of conservation science classical and contemporary scholars. Source: authors.

scholars	Classification of Values and Means in the Historical Monument	Explaining the Values Identified in the Historical Complex of the Kerman Zoroastrian Dakhma
Bernard M. Fielden	Emotional (identity, continuity, being spiritual, wonderful and symbolic) Cultural (Documentation, History, Archaeological, Aesthetic, Symbolic, Architectural, Urban view, Landscape, Ecological, Technological, and Scientific) Applied (functional, economic, educational, political, ethnic and racial)	Wonderfully because of the burial special way in the past, Cultural identity and continuity because of material originality, the end of physical life symbol, being spiritual via learning lessons Documentation, Historical, Archaeological, Architecture Economic, educational, ethnic and racial
Salvador Miunoz Vinas	group identity meaning Ideology-related meanings Emotional meanings	Intra-cultural customs and ceremonies, belonging and collective memory Space made in a two-way relationship with group ideology Learning lessons(thinking about death), commemorative
Aylin Orbasli	Architectural value (using materials, structural techniques or displaying professional skills) Historical value and relationship with a particular historical period The monument role in an important historical event or relationship with an important historical person Monument participation in the construction of a set of buildings Rarity value	Special Materials Selection affected by Religious Thoughts, appearance, plan and volume influenced by the burial method Historical architecture (Sassanid and Qajar eras) Creating cultural stability and integrity by Zoroastrians in India in Qajar period One of the two examples containing Sassanid Dakhma in Iran (Sheyni Gholampour, 2014)
Mohammad Mansour Falamaki	Current intra-mental values between two or more characters Social and cultural values within a specific geographical range Human values (current among members of different groups) Native or local cultural values Religious values (both in territorial and in time span) Local, regional and national ethical values Environmental and geographical values Environmental dominant and distance from the city	Evidence of cultural behaviors belonging to the Zoroastrian community in Iran Revealing native and local burial rituals Zoroastrian culture and customs related to Zoroastrians in Kerman Religious uses (land and time) Ritual ethics and social behavior of Zoroastrians Monument location and position
Cesare Brandi	Aesthetic Values Historical Values	Appearance , shape and architectural performance Historical archaism and authenticity

Table 2. Identified Values in the Zoroastrian Dakhma. Source: authors.

Category No.	Identified Values
Category one	Archaeological, authenticity, archaism (historical)
Category Two	Emotional (being wonderful, spiritual), architectural and symbolic
Category three	Social, cultural, group identity and ideology
category Four	Authenticity, continuity and rarity

Two Dakhmas have retained their original shapes, both in matter and in content, until the end of life and this caused the complex to have a physical “originality” feature as a base quality indicator centered on values.

More ever, this complex is one of the rare Iranian Dakhmas that have survived from ancient times .It consists of buildings of various historical periods and, in addition to the concept of authenticity, its architecture has the valuable concept of “rarity” in its architecture.

Considering the neighborhood of two Dakhmas which are belonging to different historical eras, this complex, as a rare example, has the potential to provide redefinition and understanding of the physical and conceptual components of architecture with religious-ideological content for a specific type of “burial architecture” in Iran.

Place protection based on needs and benefits

Of course, taking into account the subject’s performance, interventions should be done with a lot of considerations. The complex completely lost its function and many of its internal associated concepts many years ago. The main question in choosing the method of hypothetical interventions on this historical complex and its architectural remnants is that considering all the mentioned values as a historical-cultural complex, which kind of needs can this historical complex, which has lost its usage and in no way can restore previous activity to it (Part of the monument existence facts), respond to and whether providing these needs is helpful? If the answer is yes;

what are these interests as interventional components in the complex protection? The interests that reflect and even enhance the historical age, context and cultural messages of the complex in a proper way, and with attention and emphasis on the values and facts of the monument. These interests in Table 3 are as follows: Based on the above framework, the main interests of “Zoroastrian Dakhma protection” can be explained in three main categories:

• Local interests

Protecting the Dakhmas at the local level will increase the ecotourism potential, and, consequently, economic and cultural flourishing will be achieved through rising land prices, rising local life quality, promoting services quality and quantity in the region, increasing managers and officials’ attention toward region (village of Seyedi). (Preservation of cultural documents and historical signs).

• Regional interests

Kerman city is one of the most important centers of Zoroastrian concentration and residence in Iran. Strengthening Zoroastrian tourism attractions will not only strengthen the connection between Zoroastrians and Muslims (Which ultimately leads to strengthening the level of culture and cultural interactions in the region) but also by attracting tourists and developing tourism promotes economic growth in Kerman and helps to create a tourism brand (index) for Kerman, and as a result, increases and the strengthens the role of Kerman in the regional tourism map. Obviously, a wide range of stakeholders including researchers, locals, public and private managers, and ... will benefit from the findings of the project.

Table 3. Classification of stakeholders' interests based on the Maslow's hierarchy of needs. Source: authors.

Needs	Interests	stakeholders
Physiological	Financial and economic strengthening	Local residents, public and private managers
Safety	Increasing mental and psychological safety, avoid turning into a criminal area, increasing financial and economic security	Local residents and tourists
Sense of Belonging	The need for attachment and the feeling of Zoroastrian belonging to Iran, local residents' belonging to a heritage loving community, heritage lovers belonging to heritage supporting and protecting bands	Zoroastrians, tourists, local residents
Sense of Esteem	Respect for the cultural values of the Zoroastrians, visit facilitating, respecting the needs of visitors and creating a sense of respect in them	Zoroastrians in Kerman, local residents, tourists, researchers and cultural enthusiasts
Sense of Self-transcendence	The pleasure of solving the ancient heritage problem ,the ability to solve the problem of broken buildings, the ability of intercultural fusion, the ability to revive forgetting cultures	Zoroastrians in Kerman, restoration researchers and specialists, public and private managers

• **National and international interests**

The most important national interest is increasing tourist arrivals and the prosperity of tourism as the world largest financial and commercial industry and joining powerful countries in this field. In addition, the cultural significance of such actions in a country, that has been culturally diverse throughout history, can help to promote a sense of cultural security both nationally and internationally. The results of the recognition and evaluation of “values” and “benefits of conservation” of this cultural monument ,as the two main components of conservation, are considered by the sponsors, stakeholders and guardians of cultural wealth and also along with the groundwork for achieving the results, prevent the decline of the historical monument.

Examining the possible options for the complex protective interventions

In the book of historical monument preservation, Fielden has provided a comprehensive definition of conservation: “conservation is an action to prevent the decline of a monument and it involves all acts that lead to a longer life in the cultural and

natural heritage. Its purpose is to communicate art understanding and philanthropic messages of these buildings to those who have look and use them with amazement. Always, the minimum effective action is the best practice and, as much as possible, every taken action should be reversible and prevent any possible interference in the future ... “(Jukilehto, 2008: 264)

“Conservation must keep the messages and values of cultural property and, if possible, promote them. These values systematically help to organize priorities in decision-making during hypothetical interventions; In addition, they create a treatment with certain amount and nature”(Fielden, 2003: 3). In the present study, four criteria of “preserving the values attributable to the monument”, “the benefits of monument conservation”, “improving the actual status of the monument” and “meeting the needs of stakeholders” are the indicators that define the theoretical and practical frameworks of protective actions for investigating monument and the attention paid to them is taken into consideration in each of the following hypothetical interventions to select the final option.

Table 4. Evaluation of interventions based on four assumed qualitative criteria in defining the theoretical and practical frameworks of protective actions of the monument. Source: authors.

Type of intervention on the monument	Improving the true status of the effect	Maintaining the monument values	The benefits of monument conservation	Meeting stakeholders' needs
Preventing conservation	<input checked="" type="radio"/> Preventing complex deterioration, <input type="radio"/> Restoring the complex life, <input type="radio"/> Paying attention as a heritage resource	<input checked="" type="radio"/> Documentation, dating (historical), archaeological <input type="radio"/> Emotional, architectural and symbolic <input type="radio"/> Social, cultural, identical, ideological Authenticity, rarity and continuity	<input type="radio"/> Local interests <input type="radio"/> Regional interests <input type="radio"/> National and international interests	<input type="radio"/> Tourists <input type="radio"/> Local residents <input type="radio"/> Zoroastrians in Kerman <input type="radio"/> Zoroastrians <input checked="" type="radio"/> Researchers and Specialists <input type="radio"/> Public and private managers
conservation in the form of restoration and providing previous usage	<input checked="" type="radio"/> Preventing complex deterioration, <input checked="" type="radio"/> Restoring complex life, <input checked="" type="radio"/> Paying attention as a heritage resource	<input checked="" type="radio"/> Documentation, dating (historical), archaeological <input checked="" type="radio"/> Emotional, architectural and symbolic <input checked="" type="radio"/> Social, cultural, identical, ideological <input checked="" type="radio"/> Authenticity, rarity and continuity	<input type="radio"/> Local interests <input type="radio"/> Regional interests <input checked="" type="radio"/> National and international interests	<input type="radio"/> Tourists <input type="radio"/> Local residents <input type="radio"/> Zoroastrians in Kerman <input type="radio"/> Zoroastrians <input checked="" type="radio"/> Researchers and Specialists <input type="radio"/> Public and private managers
Conservation in the form of restoration and providing a new usage related to the nature and identity of the monument	<input checked="" type="radio"/> Preventing complex deterioration, <input checked="" type="radio"/> Restoring complex life, <input checked="" type="radio"/> Paying attention as a heritage resource	<input checked="" type="radio"/> Documentation, dating (historical), archaeological <input checked="" type="radio"/> Emotional, architectural and symbolic <input checked="" type="radio"/> Social, cultural, identical, ideological <input type="radio"/> Authenticity, rarity and continuity	<input checked="" type="radio"/> Local interests <input checked="" type="radio"/> Regional interests <input checked="" type="radio"/> National and international interests	<input checked="" type="radio"/> Tourists <input checked="" type="radio"/> Local residents <input checked="" type="radio"/> Zoroastrians in Kerman <input checked="" type="radio"/> Zoroastrians <input checked="" type="radio"/> Researchers and Specialists <input checked="" type="radio"/> Public and private managers

Option 1: Protecting the monument in the form of preventive conservation to prevent an increase in the process of physical damage, and this historic complex should be protected just in a symbolic manner and without any interference in natural landscape and building.

Option 2: Protecting the monument by restoring the previous functions of the building in a completely classic way and emphasizing the preservation of its existential integrity.

Option 3: Protecting and supporting the monument in the form of complex restoration through

providing a new usage in accordance with its nature and identity and bound to respect the building and of course, using modern standards to convey meanings that have lost their validity, with the aim of monument and its surroundings revival.

Conclusion

According to the above table, it can be concluded that, as it is expected in accordance with the results of classical conservation theories, preventive conservation is not able to meet all the protection demands. Except for the protection of certain

physical values, in almost all cases involving the needs of stakeholders at all levels of regional, national and international, it is not possible to provide effective solutions.

On the other hand, although it is expected that the building past usage be able to response protective needs, considering the facts of the present time, including the burial ritual abandonment and also social and health issues, makes it virtually impossible to meet the audiences' needs. Moreover, the presentation of this method with respect to ritual changes will never lead to its full implementation. But when dealing with the third type, if there is a new usage that meets the monument authenticity and identity and at the same time, be able to cope with religious and ritual restrictions (for example, the Zoroastrian religious museum), so it can be a constructive solution to meet all the conservation needs. Even in the area of protecting the monument values, and about the values of authenticity, rarity, and continuity, although ideally, these values cannot be kept unaltered, they will not be harmed. Because, according to article 5 of the Venice International Charter, one of the best ways of protecting architectural works is to put them in the spotlight on appropriate actions, or even to create user-friendly applications in accordance with the needs of the day and bring them into contemporary life. This can be used in the form of a museum presentation for monuments such as the historic site of the Zoroastrian Dakhmas that are not able to rebuild or deliver their previous functions, due to the loss of their use in current days as well as limitations for presenting new applications.

Endnote

1. See also Kamranzadeh, 2012: 275-257.
2. Dakhma is the place where the dead are burned. The root of this word is "Dagh" that means burning in Persian. According to Avesta, in the old days, Iranians used to burn the corpse of dead. (Dehkhoda, 1961: 288-290; Moein, 1996: 1499) also see Akbarian, 2004, to understand the root of Dakhma.
3. About death philosophy in Zoroastrianism, refer to: Razi: Death in

Zoroastrianism Pages: 683-687 and Notes

4. Hafiz the poet:

As seen by Afrasiab, the mighty, the great Whence his mobilizing army generals Whence cunning heroes' war cries and calls Not only his palace has gone to the dust Even his tomb (wrong translation for Dakhma) is destroyed and long lost.

5. In the context of Vendidad; Nasu kasha, someone who bring the dead person is called "Nasasalar" (Sheyni Gholampour, 2014).

6. For the values attributed to this researcher's view, see: Fielden, 2003: 6).

7. Vinas, 2005: 51

8. Orbasli, 2007: 76

9. Falamaki, 2017: 115

10. Brandy, 2010: 39

11. The cultural perspective , a concept with cultural and natural values, reflects the interaction between man and nature throughout history. Cultural landscapes are valuable sites that contain, preserve, and represent the identity and history of a region and its inhabitants (Mokhles, 2013).

12. Shashe: the name of a seed that Zoroastrians plant it in the rosin vases or on pottery jars (Tareh Tizak) for the last five days of the year, thirty days, and other dead's related rituals. In the old days when people used to place dead in Dakhma, on the first day of Farvardin, they took pots of Sheshe into the Dakhma and placed them on the stone, in front of Dakhma. (Boyce, 1977: 228) A ritual which is performed in tombs nowadays and it is still common between other Iranians in Zafarabad Fars and Khor (Mazdaopur, 147: 2004); (ICOMOS, 1994).

13. Due to the fact that no burial practices are carried out in Dakhma, it is necessary to consider the term "burial" with more attention.

14. Maslow's hierarchy of needs; this hierarchy is based on the classification by Abraham Maslow that includes the following requirements: biological, security, belonging and love, credibility and respect, self-esteem and self-actualization. For further reading, see: Maslow, 1943.

15. "... The integrity of the monument is based on four factors: 1. The monument construction material 2. Visible characteristics of the monument 3. The goal of the monument constructor 4. The main role of monument "(Vinas, 2005: 66)

16. Choosing such a use for a monument requires a detailed study related to this article.

17. "Using memorial monuments for socially beneficial purposes makes it easy to protect them" (ICOMOS, 1964)

Reference list

- Ahmadi, B. A. (2013). *Tarh- e Maremat va Ehya- e Dakhme-ye Cham* [Cham Dakhma repair and restoration plan. M. A. thesis]. Department of Restoration, Faculty of Art & architecture, Shahid Bahonar University of Kerman, Iran.
- Akbarzadeh, D. (2005). Dakhma [Crypt]. *Iranian studies Journal*, 3 (5):1-6.
- Alipour, N. (2007). *Dadghah - e - cham* [The Cham court, corners of architecture and burial practices of the followers of Ashe Zoroaster, the great Iranian Prophet]. Tehran: Samira Publishing.
- Ashurst, J. (2007). *Conservation of ruins*. Oxford: Butterworth-Heinemann.
- Azargoshab, A. (1970). *Aein-e Kafn va Dafn- e Zartoshtiyān [Zoroastrian burial rituals]*. Tehran: Rasti publication.
- Brandy, C. (2010). *Theory of restoration*. Translated by Hanachi, P. Tehran: University of Tehran.
- Boyce, M. (1977). *A Persian Stronghold Zoroastrianism*. Oxford: University Press.
- Boyce, M. (2010). *Zoroastrians, their religious beliefs and practices*. Translated by Bahrami, A. Tehran: Ghoghnoos publication.
- Chaychi amirkhiz, A. & Saidi Harsini, M. (2002). *A glance at Iranian coffins*. Tehran: Samira Publishing.
- Dehkhoda, A. A. (1962). *Dehkhoda dictionary*. Tehran: University of Tehran.
- Falamaki, M .M. (2002). *Baz zendeḥ Sazi- ye Banaha v Shahrha- ye Tarikhi [Restoration of historic monuments and cities]*. Fourth Edition. Tehran: University of Tehran.
- Falamaki, M .M. (2017). *Manshor- e Maremat- e Memari [Architectural restoration charter]*. Tehran: Faza Publication.
- Fielden, B. (2003). *Conservation of historic buildings*. Third edition. Oxford; Burlington, MA: Architectural Press.
- Fielden, M. & Jukilehto, Y. (2010). *Management guidelines for World Cultural Heritage Sites*. Translated by Hanachi, P. Second Edition. Tehran: University of Tehran.
- Framji, K. D. (1884). *History of the Parsis. Vol. I. Including their manners, customs, religion and present position*. London: Maccmillian & Co.
- Ghadyani, A. (2014). *Mazhab va Bavarha- ye Dini az Iran- e Bastan ta Payan-e Selsele-ye Zandi-ye* [Religion and religious beliefs “from ancient Iran to the end of the Zandieh era”]. Tehran: Arvan Publication.
- Hojjat, M. (2002). *Miras- e Farhangi dar Iran* [Cultural heritage in Iran]. Tehran: Iran Cultural Heritage Organization.
- ICOMOS. (1964). *International charter for the conservation and restoration of monuments and sites (The Venice charter)*.
- ICOMOS. (1994). The Nara document on authenticity.
- Jukilehto, Y. (2009). *History of Architecture Conservation*. Translated by Talebian M. H.. Tehran: Rozaneh publication.
- Kamranzadeh, M. & Zarreparvar, M. (2012). The Study of Zoroastrians’ Burial Ceremonies in Kerman. *Pajuheshgaran- e farhang*, 11 (30): 257-275.
- Maslow, A. (1943). *A theory of human motivation*. Originally Published in *Psychological Review*, (50): 370-396.
- Mazdapur, K. (2004). *Zartoshtiyān [Zoroastrians]*. Tehran: Office of Cultural Studies.
- Moein, M. (1997). *Farhang- e Farsi- e Moein* [Moein Farsi dictionary]. Tehran: Amir Kabir Publication.
- Mokhles, F. & Farzin, A. A. & Jawadi, Sh. (2014). Pir-e Morad Shrine, the Cultural-Religious Perspective of Baneh City. *Bagh- e Nazar*, 12 (34):27-38.
- Naebian, J & Alipour, J. (2011). Maneckji Limji va Jame-ye Zartoshtiyān- e Iran-e Asr-e Qajar [Maneckji Limji and Zoroastrian Society of Iran in Qajar era]. *Quarterly Journal of Iranian History after Islam*, 1(1): 129-160.
- Noss, J. B. (1976). *Tarikh- e Jame- e Adyan* [A history of the world’s religions]. Translated by Hekmat, A. A. Third Edition. Tehran: Scientific and Cultural Publication.
- Nyberg, H. S. (2005). *La religion de l Iran ancient*. Translated by Najmoddini, S. Hamedan: Bahonar University Publication.
- Orbasli, A. (2007). *Architectural conservation*. NewYork: Wiley.
- Oshidiri, J. (2001). *Noor, Atash, Atashkade dar Aein-e Zartosht* [Light of fireplace fire in Zoroastrianism]. Tehran: Sadi.
- Razi, H. (1991). Marg dar dianat- e zartoshti [Death in the Zoroastrian religion]. *Ayandeh*, 17 (9-12): 683-696.
- Sheini, Gh. R., Heidari, B. D. & Karimnezhad, M. M. (2015). research on the ritual architecture of Zoroastrians tower of silence, A case study of Maneckji Limji Hushang Hataria and Golestan Banoo towers of silence in Yazd. *Motaleat- e Irani Islami*, 5(18): 67-79.
- Soroshian, J. (1978). *Farhang- e behdinan* [Behdinan Culture]. In an effort by Sotoudeh, M. Second Edition. Tehran: University of Tehran.
- Taran, Y. (2014). *Tarh- e maremat va ehya- ye dakhme- ye zartoshtian- e Kerman* [The plan for repair and restoration of Kerman Zoroastrian Dakhma]. M. A. thesis. Department of Restoration, Faculty of Art, Shahid Bahonar University of

Kerman, Iran.

- Viñas, S. M. (2005). *Contemporary Theory of Conservation*.

London: Routledge.

- Zarrinkoub. A. H, et al. (2016). *The Cambridge history of*

Iran. Collector Faray, R. N. Translated by Anousheh, H. 11th Edition. Tehran: Amir Kabir.

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