

# Cemetery as a Sociocultural Space in the Persian Cities

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Received 06.17.2014; Accepted 03.11.2015

**ABSTRACT:** Examining the planning of cemeteries in the urbanism system of Iran does not show a good condition. In fact, cemeteries in the most Persian cities have become large-scale open spaces outside the city. This could cause irreparable damage to the cities because of the partial and/or improper use of the capacity of urban lands. Along with this, historical cemeteries within the cities have been abandoned. However, it seems that urban space with function of the cemetery has a specific sociocultural potential. Cemeteries can be very effective elements in the symbolic network of the city. As a result, it is also an essential element which must be associated with the structure and organisation of the city and the neighbourhoods, not as a waste and marginal element. In addition, examining this symbolic space achieve a symbolic dialogue which will result in exploring the beliefs, emotions, dreams, and imaginations of ancestors which means these urban areas need a specific attention. This paper, by using descriptive-analytical research method, attempts to explain sociocultural functions of cemeteries as an urban space, and to scrutinise its pathology through reviewing its position in the urban plans in Iran. In the following, via an emphasis on the sociocultural role of the cemetery, a series of strategies will be expressed for promoting its position within cities.

**Keywords:** Cemetery, Urban Space, Sociocultural Space, Persian Cities

## INTRODUCTION

A cemetery is a lasting and enduring space – place, and with respect to its social nature, it is a historical and symbolic phenomenon. In almost all historical cities, cemeteries are considered amongst the oldest urban spaces. According to Mumford, the very first thing which a person would be confronted in the old Greek and Roman cities is a series of tombs and tombstones (Mumford, 1968). In Islamic societies which respecting a deceased Muslim is equal to respect for his living being (HorrAmoli, 1989), revering the dead within the Islamic community has always been important. In the past, religious people when passing a cemetery, read some verses of Quran which based on their faith would bring joy to the soul of

their deceased. They have, for a long period of time, considered their behaviour as an Islamic tradition, and this tradition would have always been amongst the Persian people. Furthermore, in the Islamic tradition passing a cemetery has been regarded as the most important advice on and warning about the end of human's life. Taking this piece of advice might be possible when the cemetery is considered as a part of the religious society (Edalatnejad, 2009).

The study of the status of cemeteries in the master plan of some of the Persian cities, however, demonstrates poor conditions of cemeteries and lack of adequate attention to this issue in urban planning as well as urban management. In many cities of the country, despite the shortage of the cemetery space and strict need for it, land-use planning is not clear or even without considering the new space and proposes to change the

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existing cemetery. Generally, the Persian urban plans rarely see the approach to cemetery as a public service (Farhadipoor, 2009). Thus, it seems that in the most development plans of the Persian cities, the approach to cemetery has been as a place with merely functional role (not public service) such as a landfill or water treatment plant, and it has been transferred to the farthest point of the city, as a centralised place (Haghir & Shohanizad, 2011). But it should be born in mind that centralised cemeteries in the Persian cities besides the abovementioned problems, has ignored the scale and distance in urbanism. And in this process, the quality of human relationships has been reduced and the cost of attendance in cemeteries has been also dramatically increased.

## MATERIALS AND METHODS

Descriptive research includes surveys and fact-finding enquiries of different kinds. The major purpose of it is description of the state of affairs as it exists at present. In social sciences and business research, the term "ex-post facto research" is often used instead of descriptive research studies. The main characteristic of this method is that the researchers have no control over the variables; they can only report what has happened or what is happening. Most ex-post facto research projects are used for descriptive studies in which the researchers seek to measure such items as, for example, frequency of shopping, preferences of people, or similar data. Ex-post facto studies also include attempts by researchers to discover causes even when they cannot control the variables. The methods of research utilised in a descriptive research are survey methods of all kinds, including comparative and correlational methods. In analytical research, on the other hand, the researcher has to use facts or information and analyze them to make a critical evaluation of the material (Gauch, 2003; Kumar, 2005; Trochim, 2001).

The description is used for frequencies, averages and other statistical calculations. Often the best approach, prior to writing descriptive research, is to conduct a survey investigation. Qualitative research often has the aim of description and researchers may follow-up with examinations of why the observations exist and what the implications of the findings are (Dawson, 2002; Kothari, 2008). Descriptive research, also known as statistical research, describes data and characteristics about the population or phenomenon being studied (Akhgar et al., 2013). However, it does not answer questions about e.g.: how/when/why the characteristics occurred, which is done under analytic research. Although the data description is factual, accurate and systematic, the research cannot describe what caused a situation and it needs analytical approach to identify the causes.

This article is based on using analytical - descriptive method, attempts to understand the cemetery as an urban space and a sociocultural place and landscape. It also criticises the attitude towards it as a mere functional space, its transfer to far away from the city, and forgetting historical cemeteries, which are today within the city. In this regard, the role of the cemetery

in social and cultural aspects will be studied, and a series of suggestions are proposed in promoting this role based on four approaches: renovation of cemeteries within the city, expansion of existing cemeteries, using cemeteries as urban green spaces, and locating new cemeteries within the neighbourhoods. Finally, recommendations and strategies for designing and planning local cemeteries will be presented.

## The Status and Importance of Cemeteries in the Persian Cities and Urbanism

Many believe that architecture has begun with construction of cemeteries and tombs, as Durant once said architecture started through decorating the graves (Durant & Durant, 1993). Cemetery space is very important in the history of human civilisation. The cemetery has a special place in the culture of Iranians, especially amongst Muslims, so this space is not comparable with other land-uses and space. Shrines and mausoleum cemeteries have always played a decisive role in the formation and evolution of the Persian ancient cities. The structure of the Persian cities in the past was usually based on the fact that the main gates were located at the end of a main roads leading to the city. Just outside the gate, vast square and main cemetery were constructed and bazaar was formed through the gates of the city (Vazirizadeh, 2009). However, with the expansion of cities and an increase in their population, the new cemeteries were created at relatively far distance from urban textures in the form of large areas, like what can be seen today in Tehran's cemetery (Haghir & Shohanizad, 2011).

In today's Persian cities, nevertheless, the structural importance of cemeteries and tombs largely has faded, but these spaces still have a special as well as spatial significance. The importance of cemetery and necessity of attention to it in contemporary Persian urbanism can be outlined as follows:

**Cemetery as a Ritual Space:** like all societies, in Iran also burial has a special ceremony. Visiting the graves and performing religious rituals at the grave of the deceased has been a long-lasting tradition. Cemeteries for many people who have buried their deceased in there, are full of memories and loads of religious, spiritual and cultural values. On the other hand, cemeteries represent the ideology of the society about the world after death. Cemetery is an architectural manifestation of public attitudes towards death. It seems this would be the reason for the importance of cemeteries in the Persian culture.

**Cemetery as an Educational Space:** in the Persian culture, cemetery is a place where one must walk through, learn, and contemplate. Cemeteries have always been considered by Sharia (Islamic laws based on the Quran), as places of warning. Overall, cemeteries, wherever they may be, create the spiritual atmosphere which is based on the beliefs of the people towards death.

**Cemetery as a Historical – Cultural sign:** tombs, tombstones and in total the atmosphere of the cemetery contains abundant rituals, religious and cultural signs, concepts, and values. On the one hand, these signs and symbols, and on the other, patterns

and engravings contain the main concepts behind the place. The beautifully engraved tombstone (sculpture) and the poem engraved on it (literature) [which is about the life and death (ideology)], and tombs (architecture), are all cultural signs seen in cemeteries. Therefore, every one of the cemeteries can be regarded as a historical object.

Cemetery as a historic memory of the society: cemeteries can be listed as identity – historical spaces of the city. Every one of them has signs of the background and history of the settlement of its nearby neighbourhood. However, many cemeteries, especially the Tehran's cemeteries, are burial place of famous people. Preserving their tombs is considered an effort to keep their names and memories alive which creates a place for the historical memory of citizens.

### Social Function of Cemeteries in the Persian Cities

Human relationship with the environment depends on the person's communication with the place and social relationships which taking place within that place. This means the quality of an urban space, on the one hand, is measurable in terms of how it relates with people and, on the other, with relationships that are formed within that space. This relationship, from the one side, occurs between people and place and, from the other, amongst people (Fig. 1). Since this relation always occurs in the context of a place, the place itself, its spatial arrangement, and its associated meanings is effective to this relationship, and place becomes the third head of this relationship (Esmaeili, 2009a).

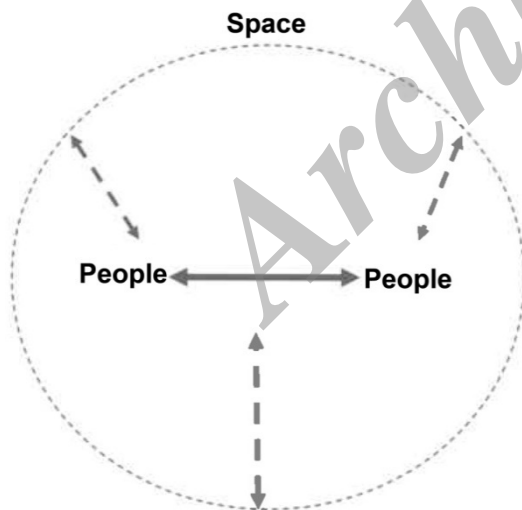


Fig. 1: The space affects people and the relationships between people and it is affected by them.

Urban spaces and public areas, however, are the main places of social life of citizens, and, therefore, are very effective to a dynamic environment and social life. In fact, urban spaces

are part of the open and public spaces of cities, which are the manifestation of the collective life essence (Pakzad, 2005; Herbert et al., 2008). In urban public areas, most contacts, relations and interactions occur amongst people. These areas contain all parts of the urban texture to which people have a physical and visual access, such as streets and parks (Tibbalds, 2000).

Therefore, it becomes clear that urban public spaces are defined by the presence of people and their activities. They are important because of making social interactions between people rather than their physical role. In any case, being public, being open, and making social interaction are the three main indicators of urban spaces (Kashanijoo, 2010; Tavassoli, 1997). In some cases, semi-closed and even closed spaces can also be regarded as urban spaces, like traditional bazaars in the Persian cities. Basically urban space refers to a public place and in the context of social interaction. Important point about these spaces is that it does not need permission to enter and at any time of the day a person would be able to enter. Nevertheless, what in Iran is considered as urban space includes streets, sidewalks, parks, and shopping centres.

However, according to the definitions of urban spaces and their recognition criteria, one of the spaces in Iran which is somewhat neglected is cemetery. Unlike today's urbanism of Iran, in the past special attention has been paid to this space. In addition to Iran, in other civilisations, the importance of this space can be seen. The most striking example can be found in the pyramids of Egypt. In this civilisation the most important concern of humans was life after death and their most fundamental activity was construction of tombs and mausoleum. But on the other hand, in the study of this space in the viewpoint of society, it can be seen that grave as a place where a human being is buried is the physical sign of the dead person. This means cemetery gets different spatial qualities depending on the people who have buried in there (Esmaeili, 2009b).

Apparently, respecting the sanctity of the dead people in Iran has not precluded the recreational use of the cemetery, and this space has always been in dynamic interaction with human life. In the Persian villages, cemeteries could be seen in the most beautiful natural spaces (Kashigar, 2003).

Cemetery is a place – space that has common experiences for the survivors. In general, a person's goal who enters this space is either to visit one of the buried celebrities or his/her missing relatives and acquaintances. In both ways, meeting people with a common attitude or sense would be possible for him/her, and perhaps the positive and even soothing features of the cemetery increase the possibility of establishing social interactions amongst individuals, and decrease the unpleasant experience (Haghir & Shohanizad, 2011). In cemetery as an urban space, social interaction is the most important element. Perhaps a cemetery in which social interactions amongst people and citizens are more dynamic and deeper would be titled a better urban space. In other words, in cemetery public interactions, the dialogue amongst citizens, children's fuss, and such trivial



Fig. 2: Scenes from social interaction of citizens in cemetery (Cemetery of Ardakan, Yazd, Iran)

events strengthen its dynamics.

The important point in the dynamics of cemetery in Iran is religion. In other words, because of Shism's emphasis on visiting the dead<sup>1</sup>, cemetery is a very dynamic space in the Persian Shiite cities. In most cases, the Persian citizens whilst visiting their dead and religious practice, get special and unique opportunity to think about life and death (Shaker Ardakani & Saadatjoo, 2011). People do not come to the cemetery only for visiting the dead and giving alms for them, men come to talk about business, politics, or to make an appointment with a friend. Women go to this urban space to talk about fashion, cooking, and housework. Meanwhile, children in front of their parents' eyes find a safe space to play, make friends, and deplete their energy (Fig. 2).

### Cultural Function of Cemeteries in the Persian Cities

The importance of cemetery spaces in the cities is so that authors such as Mumford state that burying the dead and formation of cemeteries in particular places is the start of settlement. Communities that had a special regard for the dead, bury their dead in a special place and believed that place was a sacred place. Consequently, they either settled in that place or occasionally returned to it, and subsequently other land-uses were formed and the core of settlements emerged from there (Mumford, 1968). On the other hand, the cemetery has the role of identity making for the city. Burial of the dead inspires the citizens with a sense of belonging, having root and historicity which cause a common identity amongst the community. This is augmented with the burial of those who have a special social dignity and are symbols of national or urban identity.

Cemeteries are considered valuable resources of historical, cultural, architectural and archaeological terms. They are

valuable resources about the history of cities, and culture and customs of different people throughout the ages (Esmaili, 2009b). These spaces are considered as important heritages which are not only related to the dead but also to the living. The dead are only as their subjects. They are longstanding spaces of the city through which citizens can understand a part of the history of their city and experience historical time in them.

If culture can be defined as a concept which has root in the past, effective in constructing the present, and feeding the future, the cemetery as an identity and historical place will find its meaning and concept. Cemetery in many countries and nations is a cultural and identifying space which belongs to the city's unconscious (Hajipoor, 2009; Majedi & Pourjohari, 2012). Cleaning up and removal of local cemetery from the cities is as removing the identity and the historical memory of neighbourhoods and in long-term, links between conscious part (the city of the living) and the subconscious part of the city (the city of the dead) will be ruptured and the city will suffer from a cultural Alzheimer.

Cemetery can be a very effective element in the symbolic network of the city; therefore, from this perspective, it is also an essential element which must be associated with the structure and organisation of the city and the neighbourhood, not as a waste and marginal element. Humans, by moving in and watching this symbolic space achieve a symbolic dialogue which will result in exploring the beliefs, emotions, dreams, and imaginations of ancestors. Symbols of any kind are stories of ancestors' beliefs about self, life, and the relationship amongst them; and when a human of this time manages to find and gets to know them, in fact, he discovers a sacred and secret chain which links him/her to the past in the collective subconscious (Jung, 1960; Jung, 1968; Moreno, 1971).

Cemetery can also be distinguished as an ethnographical place

– space. Entering the cemetery is coming into in the realm of the ancestors, some further and some nearer (Mouhebbati, 2012). The roots could possibly be traced there: who were our ancestors and what professions did they have? This allows detecting human displacement patterns from this ethnographical feature. When, from where and why our ancestors moved to their present home? What this migration means in the context of history and how it relates to historical events of that special period? Sometimes reasons for mass deaths could be sought as an outbreak of specific diseases, natural disasters, and tragedies such as an explosion in a mine.

In the corners of the integrated texture of the cemetery, the dead are not simply placed under the earth. A small monument is also built to demonstrate the importance and value of their lives. Tombs and monuments of cemeteries in addition to their ethnographical value for a particular family, declare other signs: symbols, creative achievements of society, and the skills of artisans. They can also be admitted as a context to study construction methods which are forgotten today (Firoozeh, 2009). Monuments can even represent society's wealth or at least a particular group's wealth in a historical period.

Overall, the cemeteries can be considered as cultural landscapes. Going to these places, people can become familiar with the identity of a nation, like the museums which show the age, history and culture of a society (Khodadadi, 2002; Kil et al., 2012). These place as memorable landscapes play the main role in preserving the memory and name of the ancestors and the dead. These landscapes besides the aesthetical, environmental, ecological, historical, and educational roles and features, play a social role in the today's lives, promote social interactions in a strong memory atmosphere, declare national and family identity, and reveal important aspects of the cultural and ethnical roots of a society and a country (Houshangpoor, 1963). In small scale, each of the remaining tombstones, especially those that simultaneously include epigraph, form, and pattern

mostly have unique characteristics the study of which can deliver unique information of human's attitude towards life, the afterlife, and how to use visual signs to convey this message and finally declare his/her aesthetic approach to life and death. The tomb of a human being, before telling about their death, is a sign of their life, because death is the fruit of life.

### Cemetery and Experiences of the World and Iran

Most people around the Globe believe that the cemetery is a dark, bleak, horrific and malevolent place in which life dies. For them cemetery is a space for mourning and no one expects recreation and attract from this space. The root of this issue can be sought in the constructing and locating of cemeteries. But cemeteries in the world have lost their mere function of burial and in many parts of the globe they have become a museum, gallery, or a vast amusement park. In many cities around the planet, cemetery is one of the liveliest urban textures which is not as an waste, marginal, and undesirable element, but it has brought credibility and importance for cities. Père Lachaise Cemetery in Paris, Highgate Cemetery in London, and Merry Cemetery in Romania are the most prominent notable examples. People from different nationalities visit the tombs of scientific and artistic personalities buried in the Père Lachaise and Highgate cemeteries in the recent years; and have granted a great cultural prestige to these places. These cultural interests are so much that Père Lachaise and Highgate cemeteries have become the centres of a special kind of social and cultural activities as cultural tourism.

Père Lachaise cemetery is the largest green space in Paris and it is remembered as an open museum that two million tourists from all over the world come to visit it every year and in terms of attracting tourists is similar to other tourist sites such as Notre Dame Cathedral, the Louvre, the Eiffel Tower, and Triumph Arch (Fig.3).



Fig. 3: Scenes from Père Lachaise Cemetery in Paris

Highgate cemetery is one of the most attractive and beautiful cemeteries in the world which dates back to 1839. Being a forested area and the burial site of a lot of influential figures such as Karl Marx and George Eliot, this cemetery has become one of the London's special tourism areas. Merry Cemetery in Romania is famous for its colourful tombstones. This cemetery is one of the specific rural tourism areas listed in the UNESCO Heritage (Hajipour, 2009).

There are also many famous cemeteries in Iran which Takht-e-Foulad Cemetery in Isfahan, Zahirodolle Cemetery in Tehran,

and Ebn-e-babuyeh in Rey can be listed. But the important point about these cemeteries in contrast to Père Lachaise, Highgate and Merry cemeteries is that despite their enriched physical, social and cultural values, they have unfortunately been severely destroyed. Although these cemeteries, at different scales, have the potential ability to attract people as tourism and pilgrimage centres, but in some cases large parts of them have intentionally been destroyed (the reasons for this will be stated in the following). Fig.4 and Fig.5 show the extent of the destructive interference in Takht-e-Foulad.



#### Interventions in Takht-e-Foulad Cemetery in Isfahan

Fig. 4: Interventions made in Takht-e-Foulad Cemetery in Isfahan (Source: Mirshahzadeh, 2009)



Takht-e-Foulad Cemetery in Isfahan – before destruction (1977)



Takht-e-Foulad Cemetery in Isfahan – after destruction (1977)

Fig. 5: Interventions made in Takht-e-Foulad Cemetery in Isfahan (Source: Mirshahzadeh, 2009)

## Pathology of Cemetery in the Persian Modern Cities

Following the industrialisation of countries and consequently, the formation of large cities with large populations in Western countries and in fact, with modernism, cemeteries were one of the issues that were considered for the planning. Coincided with this era, urban management system in these communities suddenly faced an unexpected population that had not anticipated its needs previously. Before that, cemeteries in these cities were under the supervision of religion and in the sacred spaces of churches, as a reminder of virtue, separating the past from the future and at the same time combining them. But in the modernism age, with development of the metropolis, this old harmony was disturbed, and all issues related to death like other modern elements were rationalised. Cemetery as an independent and secularised urban element got free from any obligation of religion (Parsapazhooh, 2009). Thus, from 60s to 70s of the 19th century, a kind of de-sanctification of cemetery happened and in the following, formation of centralised cemeteries occurred under the perfect supervision of the urban administration (municipality) in most Western countries. With this thought, a movement was formed that the city of the living and the dead were separated with the creation of large and centralised cemeteries. This was based on this idea that the dead man is a superfluous object in the modern city and must be taken away from the city. At this stage, each of the urban functions was within its own specific area, separated, and fully rational and mundane. With the formation of centralised cemeteries, small cemeteries within the city gradually lost their importance. But in about the middle of the 20th century, due to attacks from individuals and experts like Jane Jacobs (Jacobs, 1992; Jacobs, 2005) to stiff, rigid, rational, and modern urbanisation, urban management in the metropolis turned face towards decentralisation of cemeteries; because it is faced with this immutable fact that although the dead people are physically removed from the city, but naturally, their memory for two or three generations remains in their family, friends, and fans. This issue in physical terms manifested itself in urban convenient access to cemetery and related planning.

In the past, in the Persian cities, cemeteries were built within or adjacent to the urban textures. Furthermore, each of the villages around the city had a cemetery near itself. The growth of the Persian cities and their population in the last hundred years, caused, on the one hand, many cemeteries around the city to be placed within new textures, and on the other hand, new cemeteries be built for the city. In the early of 70s of the 20th century, and based on modern thoughts, new cemetery was built in the maximum possible distance from the city and other cemeteries were gradually abandoned. In fact, in Iran, due to the acceptance of faulty and/or defective modernism that pervades all aspects of life, the cemetery is as a waste and superfluous place that does not belong to the city and should be discarded as garbage, and even the regulations of cemetery locating in urban development plans in the country do not

differ from the regulations of landfill locating.

Examining the planning of cemeteries in the urbanism system of Iran does not show good condition. In fact centralising of the cemetery outside and with a relative distance from the city is a phenomenon that Mumford calls it "space eating" (Mumford, 1970) and Lynch refers to it as "wasted land" (Lynch, 1991); and with considering the importance and the particular aspects of the cemetery mentioned above, it could bring irreparable damage to the cities. Due to the partial use of the capacity of urban lands, or improper use of them, the following problems might be inevitable:

Over time and with constructing new cemeteries outside the city, the continuity amongst generations who used to meet each other in family tombs fades and family visits gradually reduces, and finally is forgotten. Thus, the privacy protections reduce and family graves' complex slowly deteriorates and becomes obsolete (Mirshahzadeh, 2009).

One of the problems of these large-scale spaces, due to the lack of adequate controls, is presence of crime and addicts and while reducing the security of the complex, causes abuse of spaces and buildings that will lead to further damage.

It seems that Tehran is a pattern of urban planning for many of the Persian cities, and evaluating the situation of cemeteries in Tehran's urban plans will largely clear the situation of cemeteries throughout the country. In Tehran's first master plan (1968), the cemetery was located in the urban services category. Studies and approval of this plan coincided with the thought of a single cemetery and approval of Tehran Municipality Act (1970) that focused on burying the dead in the main cemetery of Tehran (Behesht-e-Zahra). Also in Tehran's Preserving and Organising Plan (1992), cemetery was located in the category of urban services land-use such as slaughterhouses, landfills, and fruit and vegetables sale centres. In "Examining the Issues of Urban Development of Tehran's Regions Plan" (2002) and in the study of Tehran's urban land-uses, the cemetery has also been located in urban services category. In other words, the cemetery has been considered as a contaminant and inconsistent land-use while enough researches have not been done to prove the contamination and inconsistency of the cemetery (Aqa Jan Biglu, 2009). Cemetery unlike slaughterhouses and landfills can involve a variety of functions and generally it, independent of the common categories of land-use, can be materialised in a range of scales and mix-use.

In terms of traffic, the centralised and single functional cemeteries in metropolises have created new challenges for urban managers. Metropolises due to their large population have high mortality rate and subsequently, have high transportation demand in relation to the death (including burial, funerals, etc.), in a way that centralised graves in one place (for example Behesht-e-Zahra) can create problems in traffic. Currently, with constricting numerous highways and developing public transport networks, there is not unsolvable problems in terms of the traffic related to Behesht-e-Zahra, however, if the burial capacity of this cemetery gets full and the Behesht-e-Zahra

Table 1: Current and suggested status of 12 cities' cemeteries (according to their master plans)

City	Current Status	Suggested Status
Isfahan	Takht-e-Foulad Cemetery: Historical cemetery belonging to the Safavid era, 594,240 square meters. Bagh-e-Rezvan Cemetery: Founded in 1984, 750 hectares, a third of the cemetery area is green space.	Takht-e-Foulad Cemetery: allocating to green space, due to the growth population of Isfahan and placing in the center of the city. Bagh-e-Rezvan Cemetery: It is possible to extend in the northern and eastern parts. Constructing a new cemetery has not been proposed.
Tabriz	8.16-hectare cemetery holds 0.18% of the city's area. 0.51 square meter per capita.	About new and existing cemeteries has not been commented.
Rasht	This city has 5 active cemeteries within the urban texture. Total area is approximately 14.88 hectares. 4 of 5 cemeteries lack of expansion possibility. Lack of cover the citizens' needs.	Changing the land-use of the existing cemeteries. Proposed cemetery is moved to out of the city.
Hamadan	Until 1966, 10 cemeteries with a total area of 16.5 hectares were used in various city neighbourhoods. In 1966, a new cemetery was established as the only cemetery of the city, with an area of 55 hectares.	About new cemetery has not been commented.
Bandar Abbas	The current cemetery is far from the city. Abandoned cemeteries have not been mentioned.	Transferring the existing cemetery outside the city. Two areas, outside the city, have been identified and suggested.
Saari	A cemetery with an area of 5100 square meters for 25 years was the burial place of the dead. Saari municipality has possessed 22 hectares of land for new cemetery.	The current cemetery is used as shrines and green space. New cemetery outside the city is located.
Gorgan	The cemetery is located near a Shrine and within the city. It has 7 hectares area. Kazakh immigrants settled in Gorgan have an exclusive cemetery.	Located within the city and filling the capacity of existing cemetery, new cemetery was proposed out of the urban texture.
Shahrekord	The current cemetery is located at a distance of 2kms from the city. Its problems are the lack of green space and electricity. Three neighbourhoods (villages) connected with the city have a shared cemetery.	A new location outside of the city for the next cemetery has been suggested. Three neighbourhoods (villages) connected with the city will use the next cemetery.
Bam	Until 1350, this city has 10 active cemeteries, which are abandoned now. The current cemetery which covers an area of 15 hectares is in the centre of the city. Due to earthquake, 13 hectares of it is filled.	The cemetery is moved outside of the city. Changing the land-use of the existing cemetery.
Minab	Minab has 6 active cemeteries which its main cemetery in downtown works actively and regularly. Other cemeteries work as local cemeteries, and in an irregular form are dispersed throughout the city.	Need to build two cemeteries in the East and West of the city. Existing cemeteries gradually become green and public spaces.
Meshkinshahr	The cemetery is located in the north of the city and its capacity has been saturated.	Construction of two cemeteries in north-east and south-west of the city has been suggested.
Ramsar	Ramsar has 6 active cemeteries with an area from 1,000 to 20,000 square meters. 4 cemeteries are also Shrines.	Expansion of existing cemeteries has been proposed.

experience is repeated at another part of Tehran, urban planners will most likely face the new traffic problems. In addition, the cost of constructing and developing traffic infrastructure which is imposed on urban management cannot be ignored. Therefore, it seems that establishing the cemetery close to the trip source could be a good solution to reduce the trip volume and duration. Table 1 with 12 case-studies expresses urban plans approach to the cemetery which indicates inattention to this urban space – place.

### Guidelines for Enhancing the Function of Cemetery

One way to answer the problems of abandoned spaces is strengthening the presence of people in them. This means that with proper infrastructure, facilities, and ideas in accordance with the spirit of the place, a new power can be given to space to attract more people, and to increase the possibility of their presence. The collection of the above mentioned operations which in urban restoration is known as improvement,



depending on each case, could also get help from rehabilitation. This means that in order to attract people, taking benefit from new land-uses in accordance with the place in needed; because what is important in the improvement of such spaces is attention to the specific characteristics of these space-places.

### Principles of Urban Economics

Land-uses in terms of land prices can be deployed in any area of the city, on condition that the quality of land-use is in proportion to the land price in order to achieve optimal efficiency. A diverse range of facilities and services can be mixed with cemetery so that the urban management can sell the graves several times the cost of the ordinary cemeteries. In this case, the efficiency of cemetery increases and it can be deployed in expensive city lands. Therefore, the city can be classified as cemeteries in which urban management should attend to the price elasticity of grave demand in different regions of the city or the grave price difference that each resident of neighbourhood has to pay in proportion to other neighbourhoods. The result of these two factors, the price elasticity of grave demand and change in the quality of cemetery, will determine the feasibility of establishing a cemetery in terms of economic factors. Through this, there can be three types of cemetery in the city:

Local cemetery, which is located within the neighbourhoods and it supports the neighbourhood;

Regional cemetery, is more large-scale than the local cemetery, and is defined in the metropolises which their urban divisions are more large-scale than neighbourhood scale;

Urban cemetery which serves on an urban scale.

### Approaches to Deal with the Cemetery

Jon Lang, urban design theorist, believes that the cemetery design is a kind of design which organises the spatial form of the graves and buildings in an open field (Lang, 2012). Accordingly, interpretations and views about the place and space of cemetery have relatively universal change.

In Iran, like many countries, studies and extensive research have been done in this field and the outcome of these studies is: cemetery is an urban space. Consequently, Cemetery must belong to the city completely and comprehensively. In order to support this vision, local government develop a variety of goals and strategies in physical, social, and natural terms. However, four action plans are seen in the international experience as the axes of cemetery planning, each of which will be described in the following:

#### Recovery, Restoration and Improving the Quality of Existing Historical Cemeteries

In accepting the cemetery as a cultural landscape in the city, different approaches such as conservation, preservation, restoration, reconstruction, adaptation, and extensibility in its management is taken into account effectively (Feizi & RazaghiAsl, 2009). In this regard the following strategies are suggested for revitalisation of these cemeteries:

Promoting and handling the architecture of the graves and

the space of the cemetery: in this case, it seems that with improving the quality of current situation of cemeteries within the city, which are mainly historical, these spaces will gain their dynamism and social status again.

Establishing cultural land-uses in accordance with this space (in the form of parks – museums, gardens of celebrities, death museums, memorial gardens, etc.): in this case, it seems that with establishing cultural land-uses in the space of cemetery or adjacent to it, the identity of the cemetery will be strengthened and with attraction of visitors, its dynamism will be increased. Cemetery will be capable to allocate higher number of deaths in accordance with its new land-uses. Also with strengthening the cultural position of this space in the city the cultural aspects of urban development will be improve.

Strengthening the aspects of tourism in cemeteries with appropriate potential (like recreational and tourist spaces using traditional concepts as well as archetypes): this case like previous cases can promote the identity of the cemetery. It can also attract more visitors to use the recreational facilities of this space.

#### Expansion of Cemeteries within the City according to their Positions and Surrounding Texture Land-Use

It is said that changing and transforming the historical cemeteries to urban open spaces is an idea that formed in Europe and has come to Iran after decades (Mirshahzadeh, 2009). Like any other design experience that was imported to Iran, this idea got the urban managers; and the public's interests (Edalatnejad, 2009). In action, if the emphasis is put on spatial structure of these places with respect to local – cultural requirements, the achieved results can discover latent potential of such places, and increase their social identity with an emphasis on their distinguishing features while strengthening the sense of belonging and environmental dependence. As an example of the above strategy the following points can be mentioned:

Creating new land-uses in the form of public buildings with cultural – recreational use such as libraries in new or historical cemeteries.

Enabling the potential of creating personal spaces for heirs of the dead.

#### Using Cemeteries as Urban Green Space

It can be said that today with high density in cities and lack of urban open spaces, cemetery as an urban landscape has the capability to be used as a green space and to improve the situation of the city in the field of urban ecology. Planting plants according to the engineering and irrigation criteria (which with regard to health issues do not need too much watering), deciduous and conifers trees, seasonal flowers and so on, If properly be designed, in addition to the aesthetic effects also helps to improve the urban environment. By taking advantage of the cemetery as an urban green space in Iran gardens – cemetery concept can be used. Hafezieh and Sadieh in Shiraz are examples of garden – cemetery in Iran (Abolghasemi, 1992; Koch, 2006; Pirnia, 1995; Soltanzadeh, 1999; Wilber, 2004)

#### Creating New Cemeteries within the City (Local Cemeteries)

If the recovery of the existing cemeteries or their expansion is

not possible, constructing new cemeteries is necessary to meet the needs of burials. In these conditions the locating of a new cemetery is particularly important. Planners have considered that the existence of suitable land in city and near the city's population centres is one of the main criteria in finding the right place to build new cemetery. Allocating urban barrenlands or changing consistent and appropriate land-uses to the cemetery is a priority for planners and decision-takers because of the advantages of proximity and belonging to the urban structure.

### **Suitable Location for the Construction of a Local Cemetery**

Christopher Alexander writes in his book, *A Pattern Language: Towns, Buildings, Construction*, never build vast cemeteries, allocate pieces of land throughout the local community to them instead (Alexander et al., 1977). Faced with this strategy, the first step in locating local cemetery is estimating the acceptance rate of the dead in a specified period of time. After calculating the required capacity, the following actions have to be taken:

**Determining the soil suitability:** what is clear is that the suitable soil for cemetery in terms of texture is the soil which is not so porous which simply passes running water to the underground aquifers and not so non-porous to cause water to flow on earth.

**The level of the underground water:** the lower the underground water level is, the more appropriate that land is to build cemetery. In this respect, levels of less than five meters are not recommended.

**Ups and downs:** flat land is more suitable for construction of cemetery. Although this statement is not denying constructing a cemetery in the ups and downs land, but at the same conditions the smooth land is in priority.

**General and hydrodynamic slope:** gentle slopes are suitable for constructing a cemetery. Constructing a cemetery is not recommended in steep slopes. Additionally, the construction of a cemetery should be on the opposite of hydrodynamic slope.

**The wind direction:** this parameter does not affect local, regional, and even urban cemetery. What is said that the air of a cemetery is contaminated is completely inaccurate. Results of frequent experiments at several air quality parameters measuring stations in the largest country's case study, Tehran's cemetery (Behesht-e-Zahra), confirm that the air of this cemetery is free from any contamination (Andaroudi, 2009).

**Geology and seismology:** construction of cemetery in high-risk areas in terms of seismology is considered one of the best land-uses since having the least engineering structure.

**Vegetation:** within the urban spaces, valuable vegetation with unique features is rarely seen. However, to construct a local cemetery within the urban spaces, it is necessary to take measures for vegetation.

**Surface water:** it is recommended that the location of a

new cemetery have appropriate distance from surface water sources such as rivers and streams.

## **RESULTS AND DISCUSSION**

### **Engineering Measures to Build Local Cemetery**

In order to build a new cemetery at any scale, it is necessary to take appropriate engineering measures in proportion to the cemetery capacity and the key parameters (above mentioned parameters). These activities generally include the following: **Planning a system for wastewater treatment:** this system, depending on the scale of the cemetery and environmental key components, can be different from a simple tank for fixing the suspended solids and aerating the wastewater to use advanced wastewater systems. Under any conditions, the use of the wastewater treatment system for the cemetery at any scale is essential.

**Engineering the graves:** this engineering action is directly related to the type of soil and groundwater levels and vary from simple measures such as the use of a clay layer to the advanced engineering actions for constructing the graves.

**Using appropriate vegetation:** making green space in the local cemetery is an important action to make the multi-functional cemetery. What is certain is that making green space on the basis of soil type and water limitations (in Iran) inclines engineering approach to use deciduous and conifers trees. In designing cemeteries, it is recommended that landscape designer avoid from English, French, and Japanese green space patterns as much as possible, and consider the background, cultural location, and social structure of the community. Furthermore, because of water limitations in Iran, allocating green space as grass should be seriously avoided.

In addition to the above discussed cases, some of the recommendations and strategies for designing, planning and management

are proposed in order to strengthen the sociocultural roles of the cemeteries in the Persian contemporary urbanism as follows:

- Injecting educational – cultural activities to the cemeteries;
- Injecting supportive tourism – commercial spaces and functions around the cemeteries;
- Attending to being green and the presence of nature (native and fruitful trees and plants) in the landscape design of the cemeteries;
- Preventing of environmental pollution in the cemetery;
- From the perspective of the cemetery, presence of tall buildings in its vicinity will increase the security and social control. Therefore it will be a good place for kids to play and a hangout for the local youth;
- Necessary measures and equipment to use as a local passing space;
- Attending to the architecture of the tombstones and other artificial elements of the cemetery;
- Redefining the position and role of cemeteries in urban landscape, according to current needs;
- Defining the position of people's participation in making and

designing cemeteries;

Defining symbols and memorial elements based on the cultural – identity system of the city;

Attending to role and cultural - economic structure of the city in relation to the landscape design of the cemetery.

## CONCLUSION

In this paper, the cemetery has been viewed as a public and urban space. This approach takes its validity from history of cemetery presence in the Persian cities and its connection to the urbanisation. It is deduced that the cemetery was a respectable space for the Persian urban residents. In such conditions, cemetery was a space to pass and the outcome this passing was reviewing the philosophy of existence and self-purification. Cemetery was a desirable space with a mixture of trees, water, and light, and because of this, it was considered a good place to spend leisure time, holding public rituals, and solitude. In legacy left by the Persian literary men, it is frequently referred to spirituality dominating the cemetery space. However, it can be concluded that the lack of such quality in cemeteries built in recent years is a cause of the approach that considers cemetery just a place to bury the dead, and, of course, quantitative dimension, i.e. the burial capacity, is central axis in planning. In this study, the cemetery has been considered as a space for life and human interaction. With such approach, the location of the cemetery is as important and valid as other public services and land-uses.

Another point is that according to the historical, social, cultural, and environmental study, and thanks to health preventive considerations, today, it must be admitted that cemetery within the city is one of the most appropriate choices to meet the cemetery need: an approach in which like other public service land-uses, the location of the cemetery is valid and important. Finally, it is necessary to emphasise that to implement the urban plans by the new approach, thought and organisational structure of factors involved in the urban management should

be modified. Table 2 shows the locating and functional criteria of cemetery in the past and present and briefly describes the above expressed strategies.

## ENDNOTE

<sup>10</sup> Imam Ali said: visit your dead because they will become happy (Sheikh Sadough, 1983).

Imam Sadiq said: as someone gives you a gift, the dead will be happy when you visit them (Majlesi, 2006).

Imam Ali said: be the neighbour of the cemetery to take lessons (Ansari Qomi, 2011; Mohammadi Reyshahri, 2006)

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Table 2: Locating and functional criteria

Time	Locating	Locating criteria	Functional criteria
Past	Within every neighborhood	Decentralisation Serving the neighborhood residents	Burial of the dead Mourning Meeting Giving warnings and advice
Present	Relatively far from urban texture and in the form of extensive and centralised space	Centralisation In locating the cemetery	Burial of the dead
Suggestions	Renovation, rehabilitation and improvement the quality of existing historical cemeteries Expansion of existing cemeteries Using of cemeteries as urban green space Locating new local cemeteries	Decentralisation Serving the neighborhood residents soil suitability The wind direction Geology and seismology Vegetation Ups and downs Surface water General and hydrodynamic slope	Burial of the dead Mourning Meeting Giving warnings and advice Ritual space Educational space Historical – cultural sign Historical memory of society