

Urban-Historical Landscape Analysis on the Basis of Mental Perceptions Case Study: *Tajrish* Neighborhood

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Abstract

Despite the close affinity between collective memory and urban structures as the relationship between what is hidden and what is visible; rapid changes throughout the city have caused a disconnection between integrated memories and landscape cohesion. As a context for memories, the historical urban landscape proves to be valuable. The present research seeks to identify elements and signs in urban landscape design that is associated with collective memories and to determine the extent of their impact on maintainability and consolidation of the cultural integrity and attachment to residential areas and urban spaces. Now, a question is raised: Which kinds of elements help us to reach landscape perception in relation to collective memory? Accordingly, major categories, which have influences on mental perceptions, based on the studies, are elements that affect landscape, mental attachment, rootedness, and social relations. Identification and utilization of these categories in urban landscape design would enable the perception of the landscape as a mental reality that is tied with memories of the users of the space and is possible with elements such as signs in the landscape. To address research inquiries, the researcher has surveyed components of collective memory via landscape analysis method. The use of qualitative techniques is dominant in the paper along with some quantitative methods, and the under-investigation location is Shemiran. The research method was comprised of field survey and obtaining information regarding history of the site. In order to answer research questions, landscape analysis method based on subjective perceptions was selected. The statistical population of the study included 30 residents of the district that were 30 years old or older. The respondents were presented with the obtained elements, as well as 6 pictures in order to score them based on their subjective perception. Questionnaire data was analyzed and elements that impact subjective perceptions in urban landscape were identified. What matters is to identify the factors that create collective memories and its durability in environmental aspects and the facet that whether adopting them in landscape design can prove to be effective in maintaining and enhancing cultural coherence, attachment to residence, and urban spaces, thus improving urban landscape quality.

Keywords: Urban Planning, Urban landscape, Historical Landscape

1.Introduction

Urban landscape is directly linked to the citizens perception and memories, as well as city context. Various theorists in the course of time have subjected this link in their discussions; most notably, Gordon Cullen and Kevin Lynch are the two theoretical pioneers in this field who have addressed urban landscape in their books “The Concise Townscape” and “The Image of the City.” In his book, Cullen considered landscape to be useful since it makes us recall our memories and experiences, i.e. the same internal emotional reactions that can disrupt our thoughts when they emerge (Cullen, 1998). Keramati considered collective memories and culture to have a direct relationship with sustainability. In this point of view, the identity of sustainability is a combination of social, cultural, and economic aspects, very well indicating the strong dependence between the environment and people. That is why environmental preservation investigates a sustainable city with a non-

material/social approach, with collective memory as a tool to access it, and in fact concentrates on the social identity of memory and keeping it (Keramati, 2011). On the other hand, Chokor emphasized landscape assessment quality as well as the participation of the users of the space. In fact, he held that pleasant, beautiful urban landscapes with high environmental quality may be achieved only in case efforts are made to create them as a sign of people's taste and demand in new environmental initiatives and reconstruction and enhancement plans of the residential community (Chokor, 1990). Belanger also emphasized the existence of special signs in urban landscapes. There are indeed elements in urban landscape, including natural and artificial elements, urban spaces, people's perception and mentality of the spaces, events that occur, time, identity, culture, history, holy matters, and signs that call memories to the mind. Physical, environmental elements are directly perceivable by human senses. Physical contact can

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certainly have a positive effect on the health and well being of the users of that space (Philip, 2014).

A great number of experts have analyzed the factors affecting urban landscape and the memories that formed therein. The landscapes may be perceived through human's activities, perceptions, and actions (Norman, 2011). Landscape may generally be considered as the study of anything in connection with the appearance of a space or environmental context or even visualizing and experiencing it (Francis, 2012). In this respect, urban landscapes offer this experience to their users. The regions of a city that have seen the face of history constitute the memory of a city. As a matter of fact, those landscapes represent a specific historical period and thus, it is of great value and importance to preserve these regions and the elements forming them (Jinghui, 2012). City is deemed by Rossi to be an archive of personal and collective memories where human occurrences are registered on different layers (Rossi, 1984). This points out to the palimpsest approach to urban landscape. As Robert Baron stated, palimpsest is a combined forms that have co-existed in different times. In fact, it is an image of accord and diversity properly displaying the depth of a culture, which should be visible through the morphology of each city and building (Baron, 2004). In the past, materials such as papyrus and hide, on which texts and images were recorded, were scarce and expensive; therefore, they were not discarded. Rather, the ink on them was cleaned off using alkaline substances and their surfaces were scraped using hard stones so that they would be usable again. This scraping failed oftentimes and the main text remained to some extent. Hence, palimpsest suggests something that has changed, but there is still a trace of its original form (Shirazi, 2004). Thus, the multi-layer characteristic of urban development in the course of centuries and the omissions and additions allow the researcher to study city as a combination of innumerable stories (Soltani, 2013) and can be effectively helping us upon studying and repeating culture. This comprises added layers and cleaned off spots that are used and alter meanings, such as cities that have identity and hold memories within (Baron, 2004). In this regard, the most important issue from Rachel's viewpoint is that the historical signs existing in urban landscape be perceived (Rachel et al., 2012).

Rachel Gold established a very close relationship between urban landscape and memories. In her opinion, personal and collective memory forms the city where we live and visit. In other words, memorials for the local people are the definition of the characteristics of culture and their

heritage (Rachel M. et al., 2012). On the other hand, Kincaid considered urban developments to be a reflection of memories, whether retained or lost. He addressed the relationship between memory, city history and reconstruction and considered urban memories to originate from the story of people's age (Kincaid, 2005). Huyssen also believed that it is necessary to investigate urban interaction in relation to the history of the city for establishing urban identity and it may be said that memory is the result of manipulating the past through the process of selection (Huyssen, 1997). In the discussion about memories and historical spaces, Paul Stangl held that the historical memories of a land in public spaces offer a special form for the everyday life, what he called as "native memory" (Stangl, 2008).

Habibi also put forward a definition for memory that depends on our mind and the space in which memory takes shape. He stated that mind is where memories are accumulated, what remains in mind is the space where the event or incident has occurred, a space devoid of matter, but replete with form (Habibi, 1997). Halbwachs, the renowned French sociologist, introduced the concept of collective memory. From his viewpoint, collective memory is the reason why a society may feel united throughout history. The same factor causes different generations to feel attached to a society (Khosro Khavar, 2003). Quoting Jorge Luis Borges, Habibi commented elsewhere that the occurrence and incident happening in a space impacts the environment of that space and transforms into collective memory for the people (Habibi, 2004). At the time of the incident and especially after that, the space where the incident has taken place becomes a familiar space and the stage is set depending on the intensity and importance of the incident, the objects become animated, and humans find roles therein (Habibi, 1999).

In this respect, collective rituals may be mentioned that leave a deep effect on the residents of city and lead to the reinforcement of a sense of solidarity and attachment to place (Aminzadeh, 2007). In spite of this, one of the other fundamental elements in urban landscape pertains to historical regions through which past memories are narrated (Jinghui, 2012). However, it should be taken into consideration that rapid developments of cities eliminate the needed context for the formation of memories. The young generation living in such cities cannot perceive collective memories by means of their environment (Siewp-Wai, 2000).

When the relationship between urban landscape and mental perceptions is addressed, certain factors, including

natural construct, incidents, events, and symbols need to be identified that cause something to be called to the minds of the users of the space. On the whole, in the course of the formation of cities throughout history, landscapes are born, which are linked to people's memories and remain in the minds of city residents (Lynch, 1995).

2. Case Study

Zone 1 of Tehran has an altitude of 1800 meters on the north, is met by Modarres, Sadr, Chamran and Babayi Highways on the south, is met by Lashgarak Road and Ghoochak Forest Park on the east, and is met by Darakeh's river on the west. The area is located at the foothills of Central Alborz Mountains, which has a number of unique natural potentials and capacities. An analysis of *Tajrish* neighborhood's landscape was carried out in a micro scale. The existence of gardens, wells, rivers, and proximity to the foothills has made Shemiran a favorable countryside when the weather is hot. Considering such qualities and history, the above-mentioned area was chosen for this study (Figure 1).

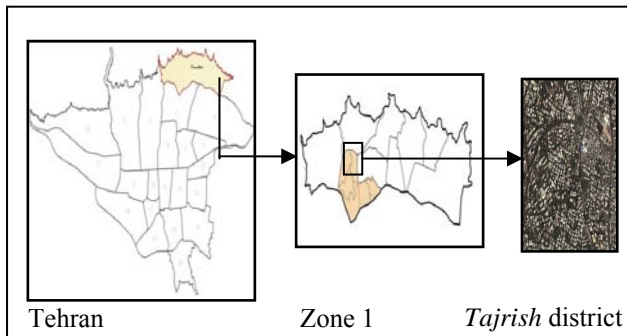


Fig. 1. The location of *Tajrish* in Zone 1 of Tehran – Reference: author.

3. Materials and Methods

Given the historical events and spaces formed in different historical periods in Shemiran, memories have been formed or events have taken place constantly in the course of time from which there may still be a trace or they may have fully disappeared. In this regard, the palimpsest method (historical investigation in order to find signs and the traces remaining from the past and reading memories through historical layers) in addition to the analysis of aerial images (the trace of the gardens) and landscape analysis method (identifying people's mental perceptions of urban landscape) using interviews and questionnaires as tools were adopted.

Given the information obtained from previous research and the identification of study's scope, certain methods were chosen in order to achieve the research objectives. Landscape is analyzed and perceived using all human senses. There are two approaches for landscape analysis, namely descriptive and perceptive. In this study, the emphasis is placed on landscape analysis with the basis of people's mental structures; therefore, this article is based on descriptive research method. A number of Interviews were conducted in order to find out about the mentalities of users of the space. In this regard, the landscape analysis method (using interviews and questionnaires as the tools for identifying people's mental perceptions of the urban landscape as well as finding out about the factors creating collective memory) was adopted. To conduct the interviews, local residents were taken into consideration that lived in the area under study (*Tajrish* neighborhood) and were familiar with the history of the neighborhood. Snowball sampling method was used for identifying them. Considering that landscape analysis method is perceptive and mental, six images (Figures 2 to 7) from memorable spaces of Shemiran were prepared at first to begin working with the questionnaires. Given the studies carried out, certain components (Table 1) were then considered for each image in order for the viewers to score them given the impression they receive from each image (1=strongly disagree, 2=disagree, 3=no comment, 4=agree, 5=strongly agree). By doing so, the images were black and white so that visual beauty would not influence the viewers, and they would answer the questions while bearing in mind what the images associate in their minds and merely through their impression of the space. The questionnaires were distributed among 30 persons who were at least 30 years old. According to the results, the factors affecting the mentalities were extracted.



Fig. 2.



Fig. 3.



Fig. 6.



Fig. 4.



Fig. 7.



Fig. 5.

Table.1
Factors to connect collective memory and mental perception:

Factors	Components
Constructed Landscape Elements	Yards and gardens.
	Old production buildings.
	Old streets and specific vegetation.
	Old houses and the ways between gardens.
	River(s).

	Topography
Attachment to place	I prefer these landscapes to any other.
	I'm happy when I'm looking at this landscape.
	This landscape evokes many memories within me.
	I miss this landscape when I'm away.
	I feel that I can be myself in this region.
Rootedness	My roots are here.
	This region is important, because my family originates from here.
	My livelihood is dependent on the region.
Social relations	I care about the future of this landscape.
	I feel a part of the local community.
	I'm not moving away from this region in the near future.

(Source: Soinia.K, et al. 2012)

4. Discussion of Results

The investigations indicated that the social relations between landscape, city, and culture are of great importance. The methods employed in this research help attain a mentality of people that relate past memories and it may be used for achieving a social relationship between culture, environment, and landscape at the present time. The people's personal and collective perception of their environment demonstrates that landscape is the living environment before anything else. When people perceive their environment, they establish a close relationship with landscape.

These perceptions may be examined in terms of living conditions, demands, and mentalities each of which have resemblances and differences with the other one. On this basis, given the studies and the information obtained through interviews with the sample population, a mental map was obtained for the residents of *Tajrish* neighborhood (Figure 8).

The map shows indeed that natural, artificial, and mental elements leave durable effects on people's minds each in its own specific way. Depending on the conditions of the time and place in which a person lives, certain components are of importance the existence of which can cause memories to be durable and attachment to place, formation of new memories, and cultural coherence will ensue.

Even if there is no objective trace of those elements in the mental map created from people's perception of the environment and landscape through the years, the mental memories are valuable. Wherever there are traces of memories, it will be selected as an outstanding point. The relationship between these points creates a communicative grid through which the transition and contexts for memories are formed and the outlines of mentalities may be known.

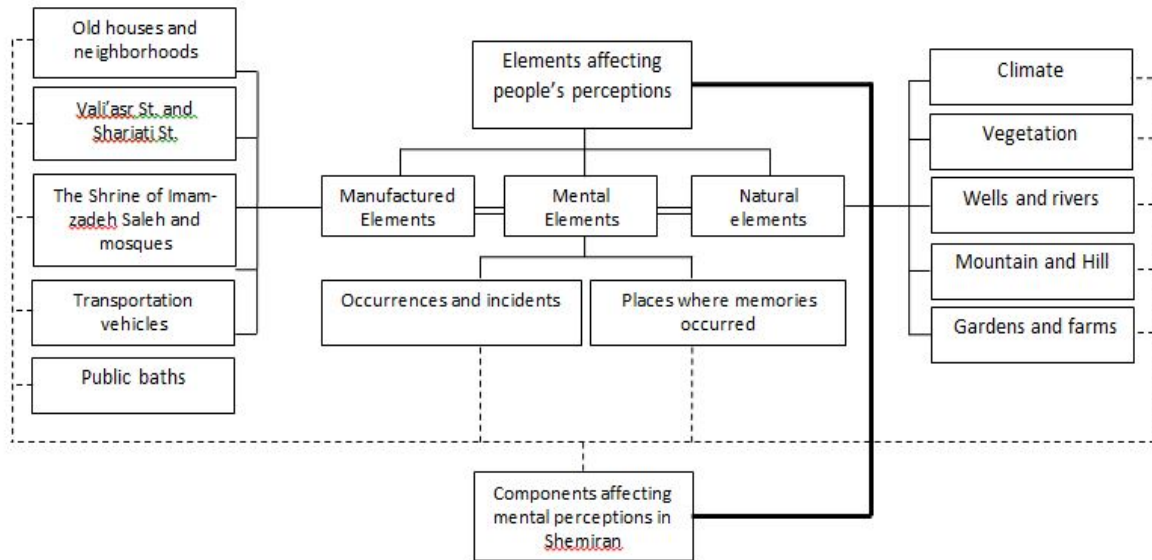


Fig. 8. Mental map of the components affecting mental perception in Shemiran. Reference: authors

Given the mental map obtained, two main criteria (time and natural construct) play an important role in the formation of mental perception of urban landscape. Regarding the criteria of time, which plays a key role in perceiving landscape, includes the following cases:

- 1- Identification of old layers, added layers in the course of time, and cleaned off spots for reading memories.
- 2- Reading what is remaining from the history of memories as well as reading the mysteries of the past city-image from the remaining works.
- 3- Determination of temporal and spatial reference points with social aspects, such as the days of a year, and the relevant ceremonies or traditions.
- 4- Identification of signs that call to the mind and develop collective memories for creating spaces with the collaboration of people.
- 5- Identification of complexes that function as public forms (such as commemorations and memorial buildings).

In addition to time and memories, natural construct is another effective factor, which is important for

determining the area of design, distance to the mountains, existence of rivers, and even lands within mountains, at the foothills, and around the hills (only a part of gardens previously constructed by humans remains today). In this regard, historical investigations and interviews with old residents were conducted to access different layers.

Furthermore, analysis of aerial images indicates that, in light of the recreational history of the region, gardens can be known as witnesses of the past. Therefore, the trace of the gardens from the past up until the present time shows that what we call human-nature interaction can be observed through human intervention in creating gardens and recreational spaces. The patterns established in these spaces are made by humans whom - in the course of time - have played a direct role in the formation of memories. When comparing the borders of the site since 1956 up to now, the disintegration of the gardens may be seen. Hence, the traces and signs remaining from the past gain an importance, whether those with a pale trace, or those that lack a physical trace and reside only in the minds of the residents as memories. The trend of the developments may be seen in Figures 10-14.

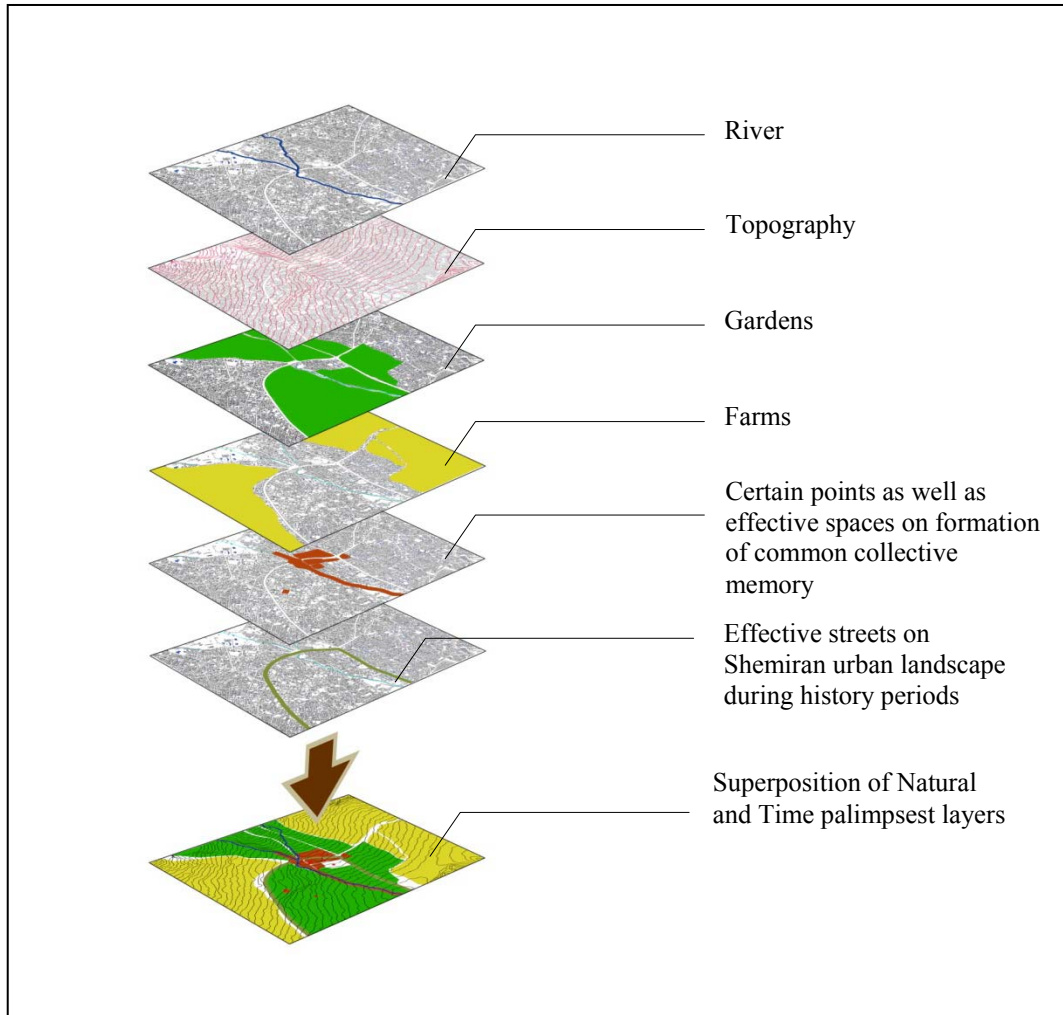


Fig. 9. Shows the superposition of palimpsest layers.

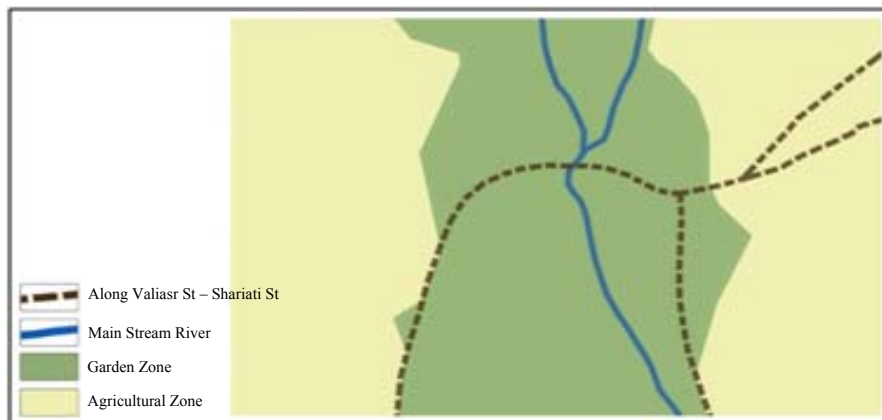


Fig. 10. Year 1956

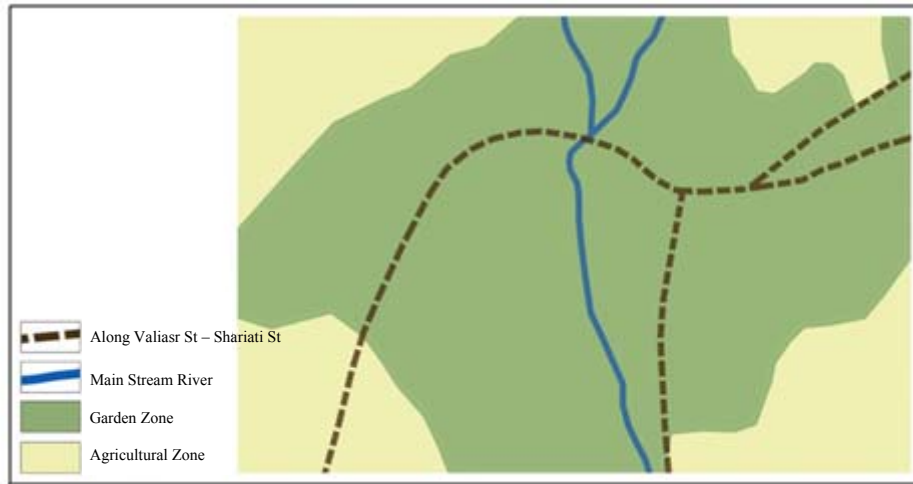


Fig. 11. Year 1966

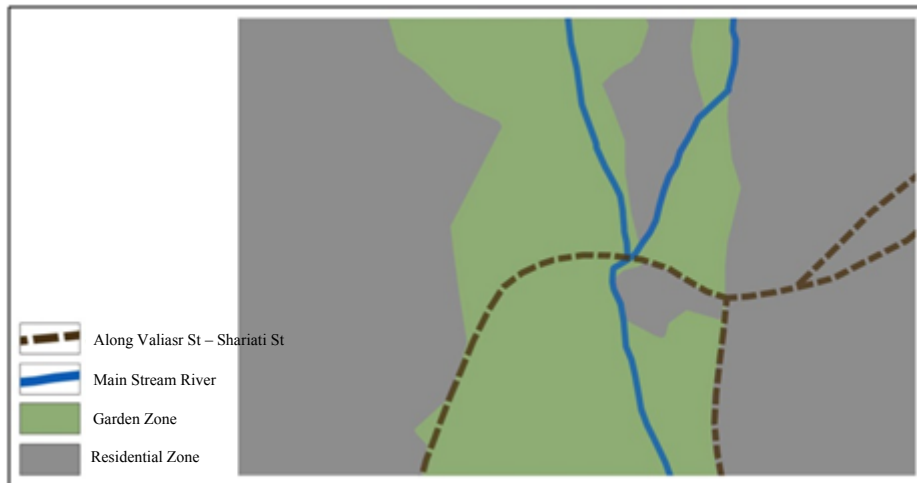


Fig. 12. Year 1979

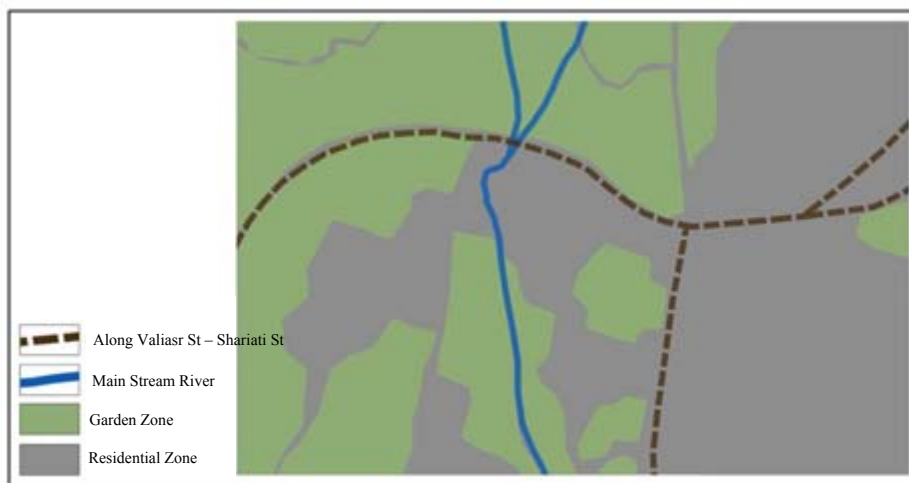


Fig. 13. Year 1991

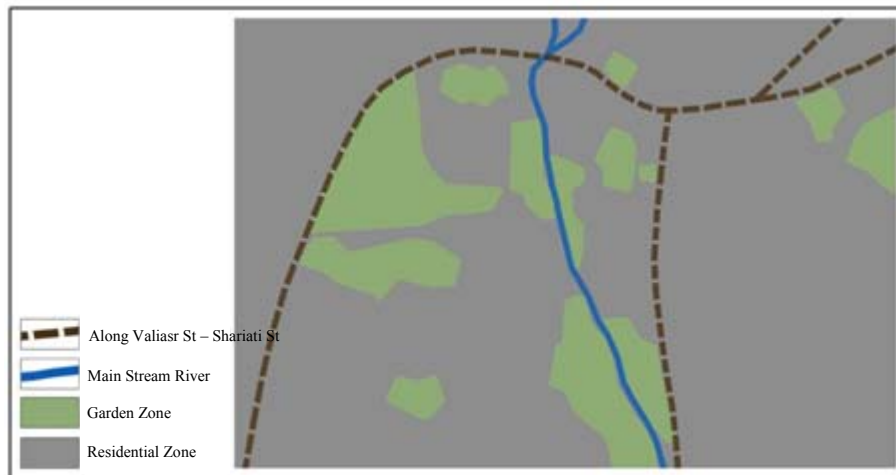


Fig. 14. Year 2002

On the other hand, given the analysis of the results of landscape scores, the effectiveness of each of the components on mental perception in the urban landscape of *Tajrish* neighborhood was obtained. On this basis, the elements and symbols existing in the landscape leave the greatest positive effect on mental perceptions compared with other factors, the most important components being gardens, buildings, and old streets with their specific vegetation with 100%, alleys within gardens with 96%, and rivers with 93% effectiveness.

In this respect, Rachel Gould and Chokor consider historical symbols respectively and pay attention to the people's demands as well as the symbols they have in their minds to be among the most important issues for perceiving urban landscapes. In Belanger's view, places as historical neighborhoods can be replete with symbols. This leads to the creation of collective memories the result of which is the development of common values (Rachel et al., 2012); (Chokor, 1990); (Belanger, 2002).

The next factor whose components play an important role in landscape perception is attachment where preferring a certain landscape over another with 88%, a feeling of happiness therein with 74%, recalling memories by visiting the place with 67%, a feeling of nostalgia with 54%, and convenience with 53% effectiveness left the greatest effect on people's mental perception and demonstrated an attachment to that landscape given the collective memories shaped in urban landscapes. In line with this, Keramati also emphasized the positive relationship between landscape and people as a result of collective memories, which causes the landscape to be preserved (Keramati, 2011).

In the discussion about collective memories, the last factor affecting mental perception of the space is social relations. This made the upcoming events happens to the landscape in future to be of great importance to all residents with 92% effectiveness. Social relations take shape in spaces where there are interactions and relationships among people. In this regard, Schwartz considers as very important the role of open spaces in improving the life of citizens and increased probability of memories being formed (Schwartz et al., 1982).

5. Conclusions

According to research findings, gardens, old buildings, and streets of Shemiran that have embraced lots of memories over time had the greatest effect on people's mentality about urban landscape evocativeness. Such signs cause people to care more about what happens to urban landscapes. Shared memories in a specific place make people prefer that landscape to other ones when they recall those memories. In contrast, when collective memories fade over time, people feel less attached to the specific place, which makes them relocate their residence area since the memorable elements have gradually disappeared. Therefore, including elements in a landscape that brings most positive influences on mentalities over time would help protection, as well as emergence of spaces that are originating from people and their collective memories.

According to what palimpsest and landscape analysis methods offer, when people's perception and memories as well as the users of the space are considered to be one of the most important factors in urban landscape, temporal

and locational layers are of particular importance. Generally, these two layers may not be separated because people's memories and mentalities take shape by similar components and symbols in relation to a special location in the course of time.

Given what was investigated, identifying the elements and symbols that call to mind collective memories and using them in the design of urban landscapes is effective to a great extent on preserving and enhancing cultural cohesion, attachment to the place of residence, and urban spaces. Such an approach makes possible the mental perception of urban landscape. On this basis, the perception of urban landscape, which is tied to the memories of the users of the space as a mental reality, will be possible by a number of factors, including the existence of effective symbols that attract the minds of people to a certain collective memory, identification of those signs that call to mind and create collective memories, determination of temporal and locational reference points with social aspects, such as ceremonies and traditions, creation of new memories to bond the future generations with today, creation of familiar spaces with the aid of learning about the history of neighborhoods and the events that have taken place therein in the course of time, and taking into consideration the natural construct of land that substantially contributes to the durability of memories in the mental perception.

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