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## Exploring Concept of Collective Memory and its Retrieval in Urban Areas with Semiotic Approach (Case study: Hasan-Abad square)\*

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### Abstract

Urban areas are significant elements in the structure of cities which can increase social interactions, identity and meaningfulness, formation of mental pictures and formation of the sense of collective memory. Urban areas show integrated structure of spatial organization of a city in which not only the connection of form and practice are to be considered, but also the meaning will find its place in whole complicated system of a city. Since forming the sense of collective memory has always been among the most basic qualitative principles and concepts in urban areas, finding a new approach to which can carefully explore the formative layers of urban areas is a priority. These layers are helpful in finding useful solutions for memorability of spaces and qualitative promotion of them.

Rollan Burt believes before any comment about the city, the technique of symbols should be utilized. With this new approach it seems it is possible to explore urban spaces and also to reach new solutions in the direction of the meaningfulness of a space and increasing the sense of collective memory. In this regard the objective of this research is to explore the concept of collective memory and its retrieval in urban areas with semiotic approach. Therefore the present research wants to discover the effective components on formation of the sense of collective memory on one hand and represent the conceptual template of semiotic on the other hand which is concealed in urban areas regarding the retrieval of memorability of urban spaces. Research is exploratory-explanatory and in the process of its decision making, an analytic comparison is used. Analysis of content and deductive reasoning is the main method to create the mental grounds of the research. Results express that the amount of memorability of Hasan-Abad square as an urban space based on the conceptual template presented in recent years and because of recent decisions of urban management has faded out. To retrieve the memorability, operational indexes of suggested semiotic templates in the frame of perceptual and social codes can revive the memorability of this square.

### Keywords

Collective memory, Semiotic, perceptual codes and social cod

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\*. The present article is based on the doctoral dissertation of Nasim HasaniMianroudi entitled «Exploring concept of collective memory and its retrieval in urban areas with semiotic approach (Case study: Hasan-Abad square)» under supervision of Dr. Hamid Majedi and Dr. Zahrasadat Saeidehzarabadi, and with the consultancy of Dr. Yousef Ali Ziyari at the Islamic Azad University, Tehran North Branch, Is presented.

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## Introduction

The public spaces in cities refer to living spaces which lie somewhere between the residential and workplaces. Give that such spaces contribute to the outdoor urban life of citizens; they should be interesting and attractive enough to increase the social interactions among citizens and promote a code of social behavior which a city might expect from its citizens.

Collective memories refer to common memories of individuals from events and incidents in a social and spatial framework experienced by each member of the group. Events in the city make memories and memories create life, Aldo Rossi believes that cities are collective memories of citizens that are formed in conjunction with objects and places. The memories of urban spaces are one of the qualitative characteristics of the environment that have not received enough attention, though many studies have so far been carried out on urban spaces.

Those city spaces that used to evoke memories have long been forgotten or degraded in quality. By reducing the appropriate platforms for the urban events and social interactions, the sense of citizens' belonging to the environment have been diminished and cities have been downgraded to places for frequent coming to going. This issue has taken to the memories away from city spaces and has negatively influenced the significance of urban spaces. In particular, the texture structure of today's city of Tehran brings with it a very small number of historical identities. Hence, meaningfulness is – evoking urban memories, an act that is not associated with to interference in the appearance of the environment. It also brings some changes in the structural and planning aspects of the city, and its effects can be observed in urban spaces.

Unfortunately, the lack of sufficient theoretical foundations in this regard, has resulted in designing methods that often focus on single spaces and selects the apparent ornamentation as a communication object. In our country, such an emphasis has negatively influenced proper functions of the spaces

and resulted in spatial discontinuity, isolation, and discrete designs. In fact, the spaces have been treated as exhibitions. Moreover, the study of texts suggests that research carried out in this field–has used the available methods to measure the quality of the environment and rarely have drawn upon a semiotic method to recover the sense of collective memory.

The main hypothesis of the research is “By identifying the cognitive-semiotic patterns in urban spaces, one will discover a set of rules based on which memorable urban spaces are built”. We hypothesize that “social, semantic, and perceptual signs play a key role in forming a sense of collective memory.” According to this hypothesis, social signs, through the formation of social events, semantic signs through the formation of identity and sense of belonging and perceptual codes through the formation of the mental images of citizens create- a sense of collective memory in urban spaces. In this hypothesis, a close association has been already established between the concept of memorable urban spaces based on cognitive signs and restoring them through semiotics.

Therefore, in this paper is an attempt to analyze the concept of collective memory and restore it in urban spaces using a semiotic method. To this end, first we carried out the content analysis on the available urban planning texts providing the information on collective memories and semiotics. Then we extracted the criteria for evaluating the sense of collective memory and semiotics and integrated them proposed a model through a logical process. In the next phase of the study, we selected Hassan Abad Square in Tehran, as a case study and used the structural equation modeling and path analysis to restore the sense of collective memory in this area.

## Theoretical framework

### ● Collective memories

The word “memory” in Dehkhoda's dictionary is defined as follows:

“Things that have happened to someone and its effects have been left on his mind. It is someone's past or the past events that a person has seen or

heard; things seen in the past or heard in the past (Dehkhoda, 1976: 64).

This term in Longman's Dictionary is defined as "Someone's ability to remember things, places, and experiences"(Longman, 2010: 1093).

In the Webster Dictionary, "the power or process of reproducing or recalling what has been learned and retained especially through associative mechanism" (Merriam-Webster, 2003: 725).

Based on the lexical definitions presented above, "memory or remembering past events and incidences by someone occurs through recalling people, objects, places, and experiences." Examining different definitions show that a key aspect emphasized in all definition is "event".

The events in these definitions are not just limited to written events in history books but include events that someone himself has experienced. Therefore, memory can be precisely conceptualized as remembering events experienced by someone who gets involved in recalling people, objects, places, and experiences through the associative mechanism.

Memory can be individual or collective. Collective memories are events that are remembered by a group of people, who have been involved in building and shaping that memory. Common memories which are remembered by a larger group of people are more likely to have semantic and collective associations (Mir Moghattaday, 2009: 7). Maurice Halbwachs was the first person who introduced the social frameworks of memory as a collective memory.

### **Collective memories reflected in the city**

Aldo Rossi, the Italian new rationalist architect was the first person who introduced the concept of Maurice Halbwachs' collective memories into the literature of urban planning and architecture. It process is the city's architecture in Rossi's term. By describing the city's history as "the spirit of the city", he recognizes the city's history as a signature at the foot of the walls of the city reflecting the city's distinct identity or its memory (Sa'ad Panah & Assasi, 2016: 6). It can be said that the city itself is the collective

memory of its people, and like memory is associated with objects and places. The city is a manifestation of collective memory. Therefore, the relationship between this manifestation and citizenship is the dominant impression of the city and when certain artifacts become a part of memory; a new image will emerge in the mind.

### **Memorability of Urban Places and Spaces:**

The social nature of memory reflects its connection with the public spaces of the city. Given that memories shaped in the collective residential buildings are of a social nature, the context in which they are shaped must also be a platform for social interactions (i.e. city).

Perceiving urban environments is a mental process. The human being receives sensory messages from the environment then creates an image in his mind and that is what we call the memories of the environment. Although memories are an abstract and subjective concept, they are associated with a physical reality that perceiving that requires going beyond a position or a place. However, the place is a medium helping the human mind recalling memories. A memory can encourage us to attend a specific place. By attending the place in which others are present, people sometimes gain some experiences which bind them to all the people who would have the same experience in the past or future. According to Madani Pour, these linking sections make the public spaces more stable and sustainable. It is in these spaces which people would gain shared experiences. In fact, these experiences are the collective memories (Asgari & Naghibi, 2016: 8).

Effective factors and components contributing to the collective memory:

#### **• Temporal components**

Forming memories requires a time reference. The passage of time and historical evolution are major factors playing a key role in remembering events and incidents. Since collective memories, such as the historical memories of a nation, are passed from generation to generation, the history and time of

residence in a city, is a factor consolidating collective memories. Lewicki, 2008: 10)

● **Spatial components**

Forming memories requires a spatial reference. Urban spaces and places and their physical and functional structures and spatial relationships are considered the spatial reference of the memories in urban spaces.

According to Rossi, buildings and elements form a reference point in the minds of the inhabitants. ..., argues that any change in the physical forms of urban spaces can bring a significant change in the mental image of the city’s inhabitants and affects their collective memory. As long as places, the buildings, rocks, and trees in a city are not changed, the mental image of the inhabitants of that space would not change and there would be a sense of belonging to the place of residence and the collective memory of its inhabitants (Abd Elrahman, Mahmoud, 2016: 1100).

● **Socio-cultural components**

Social interactions and collective memories occur in the context where social interactions take place. For forming memories, in addition to the physical context of the city, a socio-cultural context is needed. In such a context individuals with different connections form collective interactions and all this forms the basis for collective memories. However, a social relationship between a group of people does not necessarily result in shaping a collective memory, but it is impossible to have a collective memory if no social relationship has established. The manifestations of these communities make public arenas more lively and strengthen relationships and the passage of time promote a sense of collective memories (Habibi, 2000: 22).

● **Perceptual-mental components**

Individual and mental experiences such as occupation, education, and the extent to which the person is interacting with the environment and his perception of the environment are effective components contributing to developing collective memories. These two factors play an important

role in shaping the individual’s mental image of the environment. In other words, the quality of view and landscape and the way in which the mind of audience interacts with an urban space play a key role in perceiving and forming a sense of collective memory, are undeniable (Diagram 1 & 2).

**Semiotics**

One hundred years ago, the American pragmatist philosopher Charles Sanders Peirce used the term semiosis as a process involving the establishment of a relationship between a sign and its object and interpretation. , Pierce used his term semiotics or semantics in his last year of his life. In the same decade, Ferdinand de Saussure used semiology for semiotics. Semiotics refers to understanding phenomena in the world, through reading their signs. In other words, the semiotics is a systematic and organized study of all the set of effective factors contributing to the interpretation of signs. Semantics is the study of phenomena based on the relationship between the signifier and its signified to create and produce meaning. Semiotics seeks to discover the deeper layers of the meaning, and includes all the readings derived from the decoding of phenomena (Khanlari, Qasemi, 2016: 21), the use of sign is important because the truth and true meaning often are often not correctly transmitted in a form other than the signs and codes, and their interpretation will not be possible except in its context .

In the art, architecture, and urbanization of Iran, we often encounter signs and cryptic objects and shapes. They not only play their own role in decorations, geometry, form but familiarize their audiences with different layers of meanings and truths in their designers’ minds. Signs “are things that have meanings to humans (Sujudi, 2015: 72).

Signs usually appear in the form of words, images, smells, flavors, motions, and objects. But, these things are not inherently meaningful, and only when the meaning is assigned to them becomes a sign. Nothing is a sign unless it is referred to as a signifier, referral, or pointer to something other than

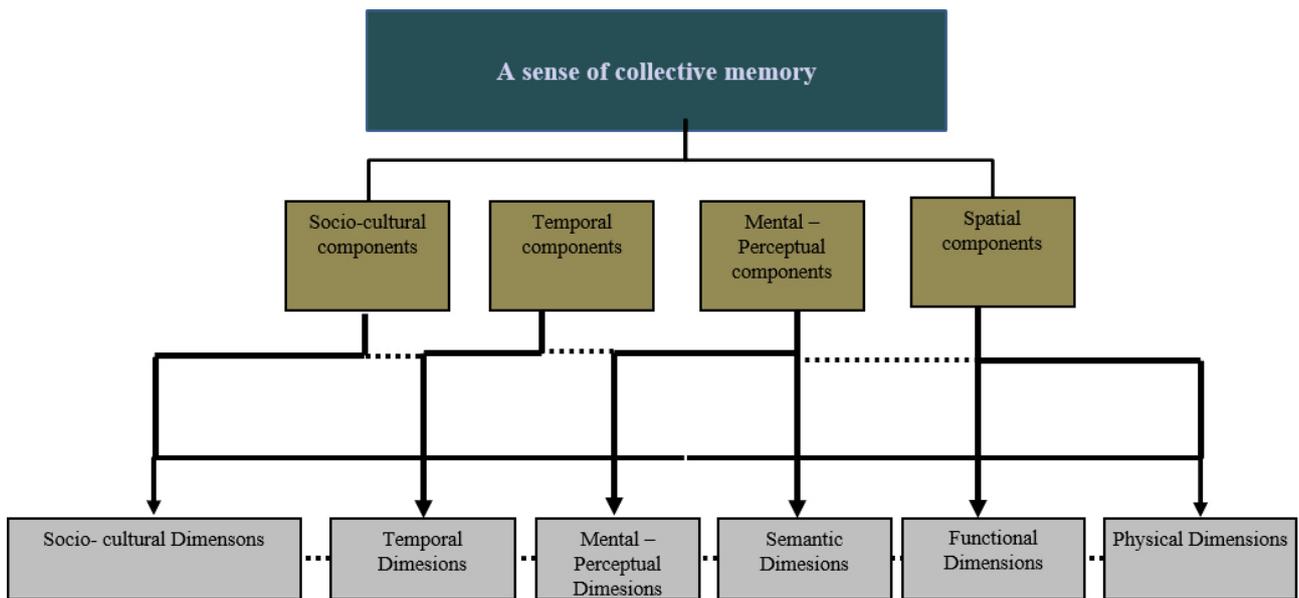


Diagram1. Effective factors and components contributing to the collective memory. Source: authors.

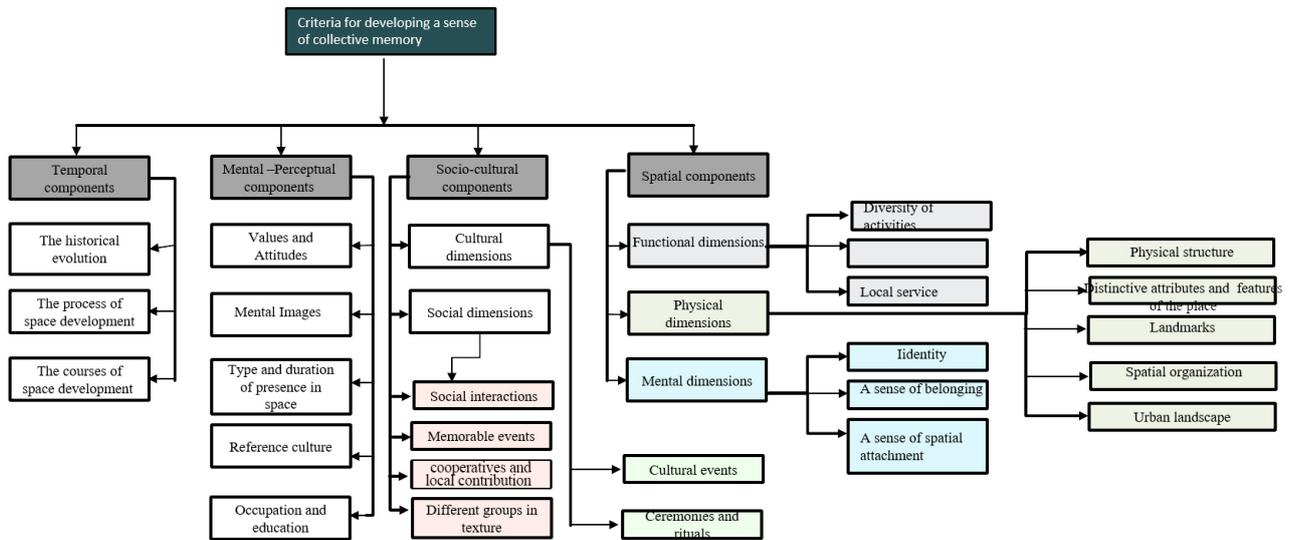


Diagram2. Criteria for developing a sense of collective memory. Source: authors.

itself. In this case, it can be a sign. Understanding the signs is completely unconscious when they are connected to familiar systems of social norms and conventions. This is the significant use of the signs that is emphasized by semiotics (Chandler, 2008: 45). Primary patterns that examine the structure of the

signs proposed by the Swiss linguist Ferdinand de Saussure and the American philosopher Charles Sanders Peirce (Majedi, Zarabadi, 2010: 50). To understand semiotic science in the city, understanding the rules of the semiotics is mandatory. The city is a structure that uses signifiers and the particular

attention to the way the signifiers are applied builds the semiotic science of the city.

### Codes

The concept of the code is very important in semiotics. The code creates a framework in which the signs become meaningful. In fact, you cannot name something a sign if it cannot be codified. In addition, if we assume an arbitrary relationship between the signified and the signifier, then it is clear that the interpretation of the conventional meanings of the signs requires familiarization with appropriate sets of conventions and norms. Codes transform signs to meaningful systems, thus creating a relationship between the signifier and signified. The production and interpretation of texts depend on the existence of codes or conventions of communications. Therefore, the meaning of the sign depends on the code by which it is expressed.

The code or conventions represent a social aspect of semiotics. When Semioticians study cultural processes, they deal with objects or actions that are meaningful to members of those cultural groups and do not look for identical codes; “conventions of communication “ understand the roles or the processes of the production of meaning in Culture. Codes are not just conventions of communication but are procedural systems of appropriate conventions which operate in certain domains. Semioticians seek to identify the codes and implicit rules and constraints that exist in the process of generating and interpretation of the meaning within each code (Chandler, 56: 2008).

### Types of signs

- Social Codes: These codes can be identified when they converge with socio-cultural norms.
- Perceptual Codes: These codes can be identified through subjective interactions with the environment and depends on one’s perception of the environment which is based on the mental and individual characteristics.

- Semantic Codes: These codes can be identified through the signs of semantic communication with the environment.

- Logical Codes: These codes can be identified when they converge with natural factors such as position (Zarabadi, 2010: 70).

Semiotic Functions is presented in Table 1, Diagram 3, Diagram 4 & Diagram 5.

### Literature review

In a paper entitled Criteria for measuring the possibility of forming, recording and transferring collective memories, Moghattadi has attempted to present an overview of the concepts of memory and collective memories using the theoretical framework of Maurice Halbwachs. This paper has been published in the Fine Arts journal. In another study entitled “An investigation into urban semiotics”, Majeedi and Zarabadi, have explained the basic concepts of semiotics and the theoretical foundations. Principles for recognizing and decoding sign systems in the city are presented and the paradigms of this approach are briefly explained. Also, in another article by the two researchers, entitled “A semiotics-based city as a context-oriented city”, published in the Cultural Research Quarterly, semiotic systems have been used for creating a contextual city.

Based on what has been discussed so far, this paper is the first attempt to use semiotics method to revive the sense of collective memory in urban spaces.

### Research setting

Hassanabad Square lies in the middle part of Tehran’s central zone. The square is located in a historical area called Hesar Nasserri and geographically speaking, it is in the district of Tehran. According to the division made by the municipality, Hassanabad square is on the border of the 12th and 11th district. However, in the proposal submitted for restoring the district 12, this area would be a part of Hesar Nasserri. The purpose

Table 1. Semiotic Functions.Source:authors.

<b>Functions</b>	<b>Types of semiotic functions</b>
Establishing the relationship between the message and the subject to which the message refers	<b>Referral functions</b>
Expressing the attitude towards the issues by the recipient	<b>Judgmental and allegorical functions</b>
Stimulating a reaction in the recipient by influencing his mind or his feelings	<b>Emotional functions</b>
The expression of the message of art and literature mediated by the signs,	Artistic or aesthetic functions
Establishing, maintaining or stopping communication	Communication functions

of this proposal is preserving the historicity of Tehran. According to this proposal, the eastern part of the 11th district up to Karger Street will be added to the district 12 and based on this division, Hassanabad Square would be a part of the district 12. Hassan abad Square (Qajar and Pahlavi) is a unique design. Although nowadays there is no square in its middle, four buildings constructed around the square of the square are the important indicators of the square. The buildings designed by Mirza Ali Khan in 1935 reflecting Neoplatonism and the French Baroque architecture (Bani Massoud, 2012: 232). The buildings have been restored in recent years and the historical identity of the square has been largely preserved (Fig. 1).

### Methodology

The nature of the research is theoretical-practical. Given that the sample of this study is a city with urban functions, this research falls into the category of urban scale. Data for this descriptive research were gathered through a survey included items measuring the attitude and behavior of the target samples. The participants for the study were recruited through random sampling. They were asked to complete the survey questions. The placemaking questionnaire

evaluates four following concepts:

**Society associated features:** This category includes features such as diversity, monitoring, co-operation, neighborhood, dignity, friendship, relationship, and pleasure.

**Activity associated features:** This category includes features such as entertainment, vitality, efficiency, efficiency, differentiation, compatibility, sustainability, event promoter, and authenticity.

**Comfort associated features:** This category includes features like safety, cleanliness, greenery, walking and sitting ability, liveliness, delectability, attractiveness, and historicity.

**Communication associated features:** This category includes features such as continuity, proximity, communication, legibility, fitness, transferability, and accessibility (Strategic management plan for improving the quality of urban spaces of Tehran, 2013: 14).

### Participants and method of sampling

The participants in this study were audiences and experts who varied in the degree of familiarity with the square. Given the multifunctional role of the area which is promoted by its wide scope, the audiences were from different walks of life mainly composed of businessmen, customers, and pedestrians. In the urban area, the other group of the participants included experts in urban planning.

This group comprised of all individuals and groups that were directly involved in decision-making, policy-making, design and carrying out urban and architectural projects (Pakzad, 2010: 178).

Due to the lack of accessibility to the participants, to recruit the samples, the streets, and squares of the case study were identified using the map, and then the questionnaires were distributed at the identified sites and data were collected through random sampling. In the present study, we used one-stage cluster sampling method. As the population was unknown, we determine the size of the sample using the Cochran formula. The sample size of the present study was 195 with 0.07.margin of error

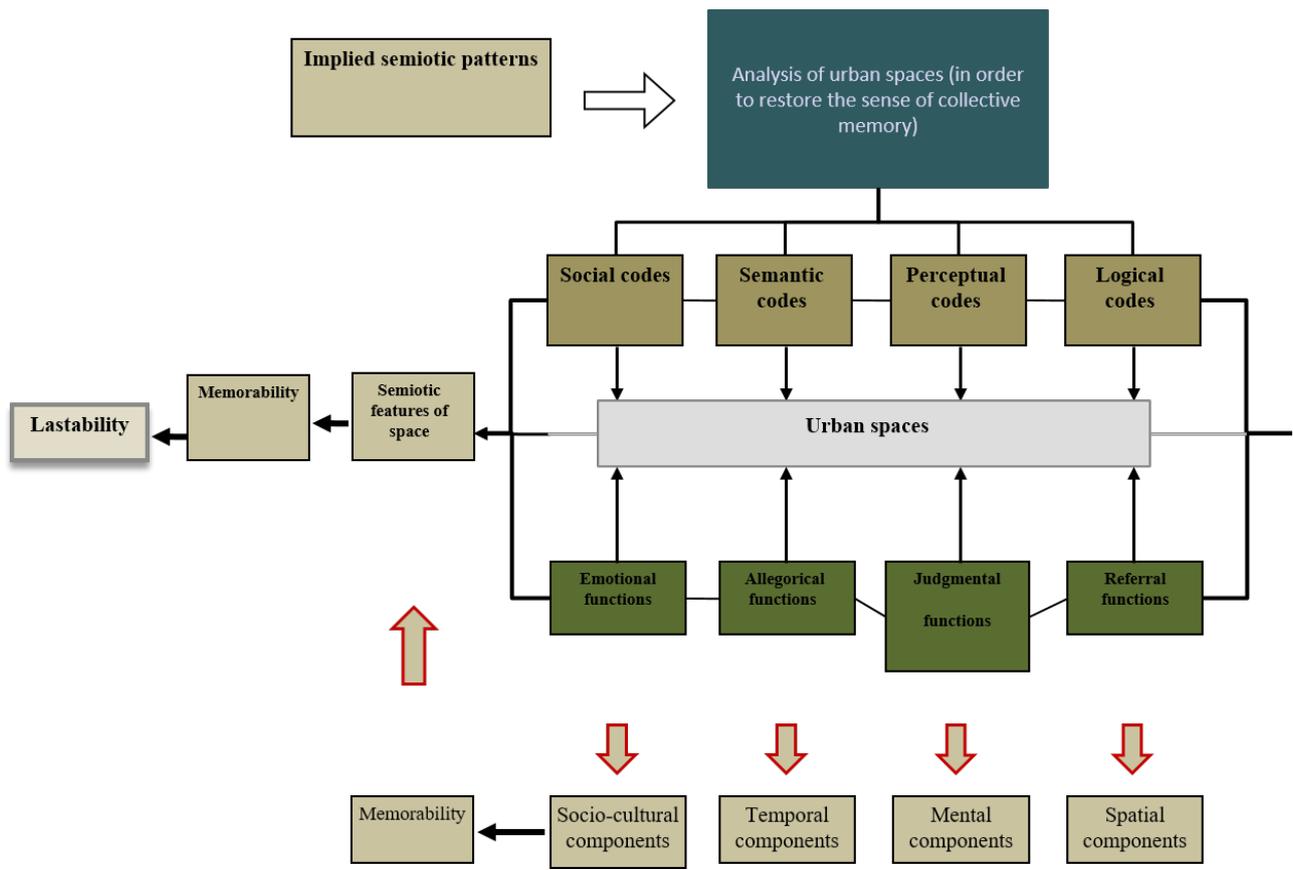


Diagram3. Pattern of urban space analyzed based on semiotic approach for retrieving a sense of collective memory. Source: The authors.

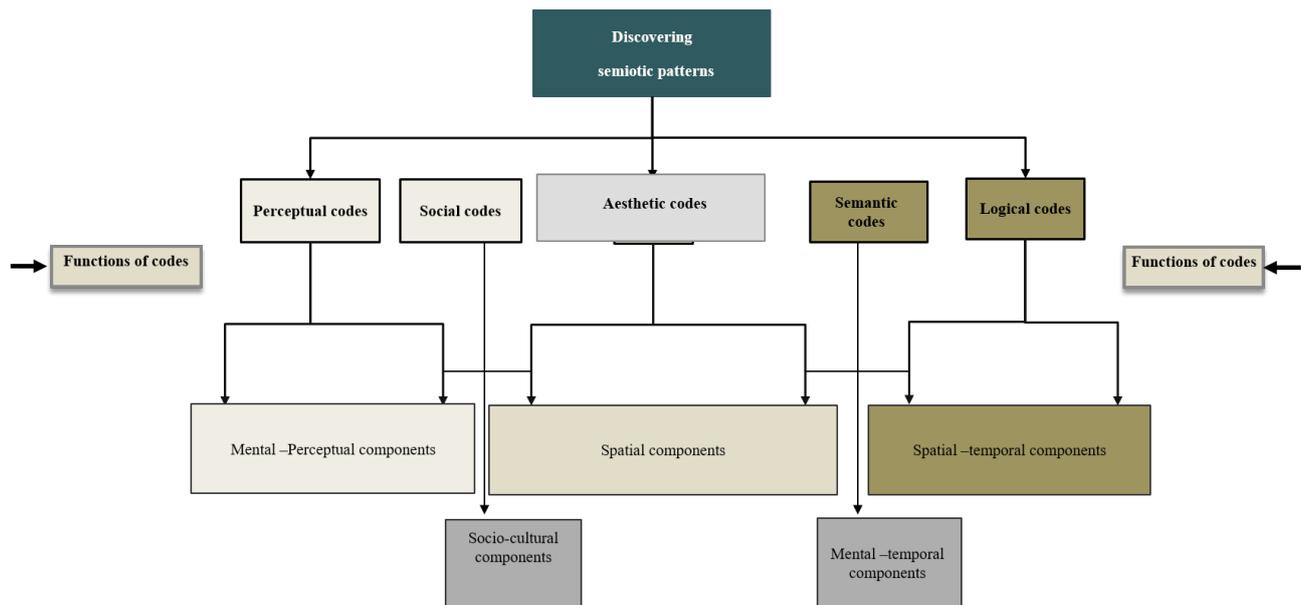


Diagram4. Integration of the components of collective memory and semiotic codes. Source:authors. Source: The authors' perceptions, 2017.

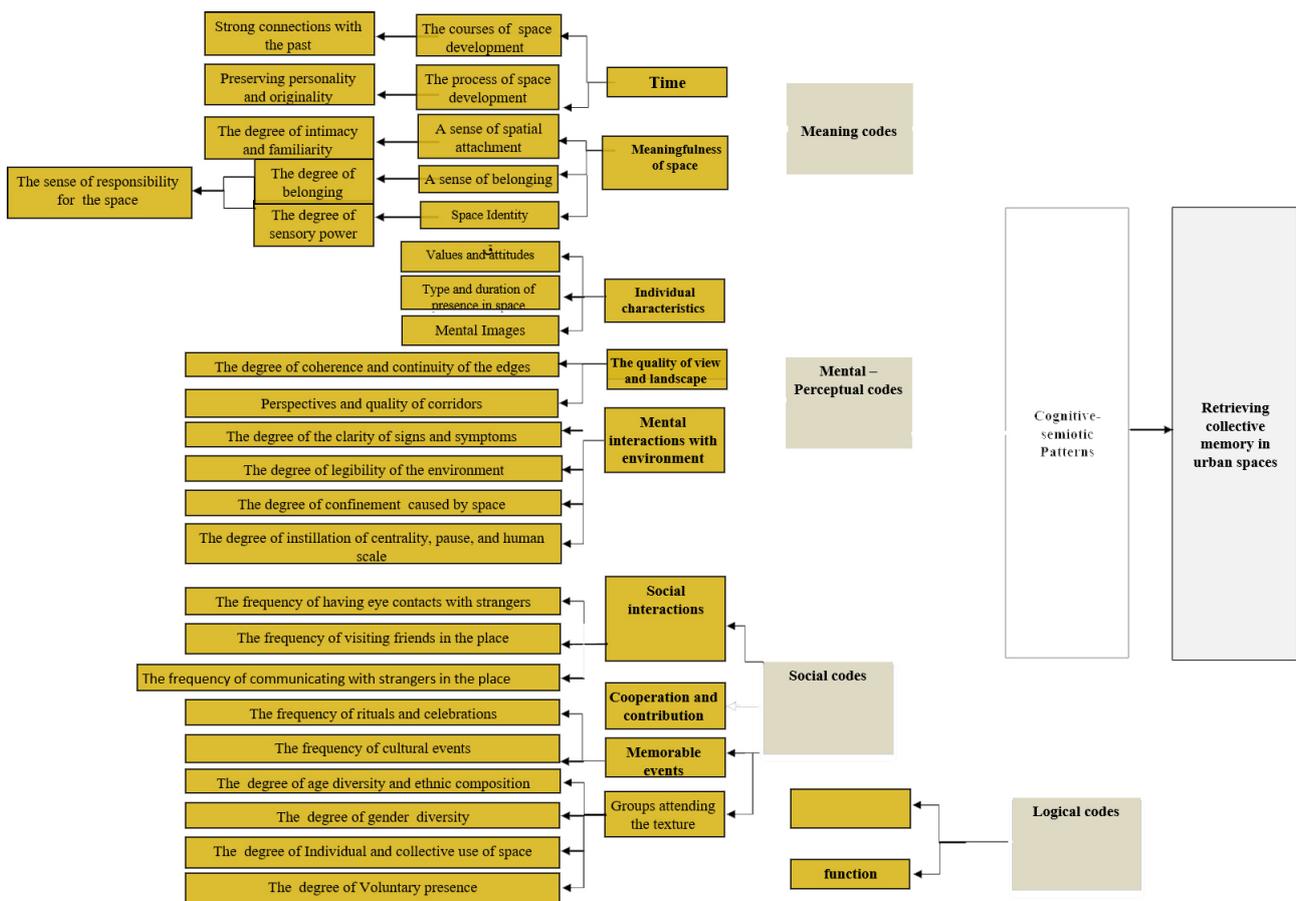


Diagram5. The conceptual model of the study. Source: authors.

Where:  $z$  is 1.96;  $p = q = 0.5$ ;  $d$ : the error for estimating the proportion (the error is usually considered between 0.01 and 0.1.)

### Developing the questionnaire

Questionnaires are instruments commonly used for

$$n = \frac{Z^2 pq}{d^2}$$

gathering data directly. It includes a ; and items that elicit answers from the respondents. As there was no standard questionnaire for measuring the variables of the study, the researcher developed and used the questionnaire based on the conceptual framework of the study. The operational indices of social, semantic, and perceptual codes were identified through reading available library sources, articles and

books were and integrating them with the components of memorable urban spaces including spatial, perceptual, temporal and social-cultural dimensions. Features related to cognitive and semantic and social dimensions were introduced under the title of effective codes contributing to a sense of collective memory. Then the measures developed based on quality criteria were placed on the Likert scale. Interviews with experts were conducted in order to identify their attitudes. After analyzing interviews the relationships among the component and codes were envisaged to provide a better understanding of the framework for developing the questionnaire (Diagram 7,8).

### Validation of the questionnaire

#### • Pilot study

Dylan believes that before administrating the



Fig. 1. Hasanabad square in tehran .Source: Strategic management plan for improving the quality of urban spaces in Tehran.

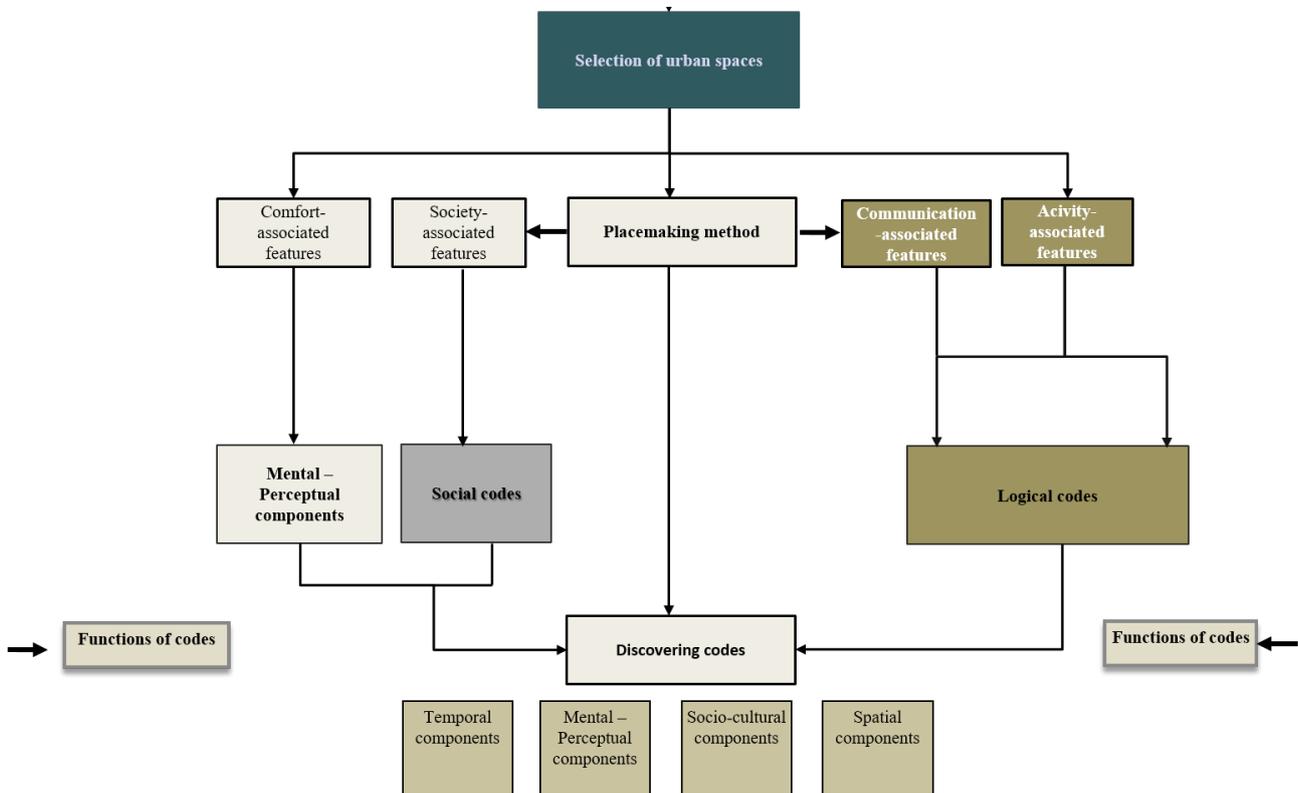


Diagram6. Pattern of urban space analyzed based on the placemaking for retrieving a sense of collective memory. Source : authors.

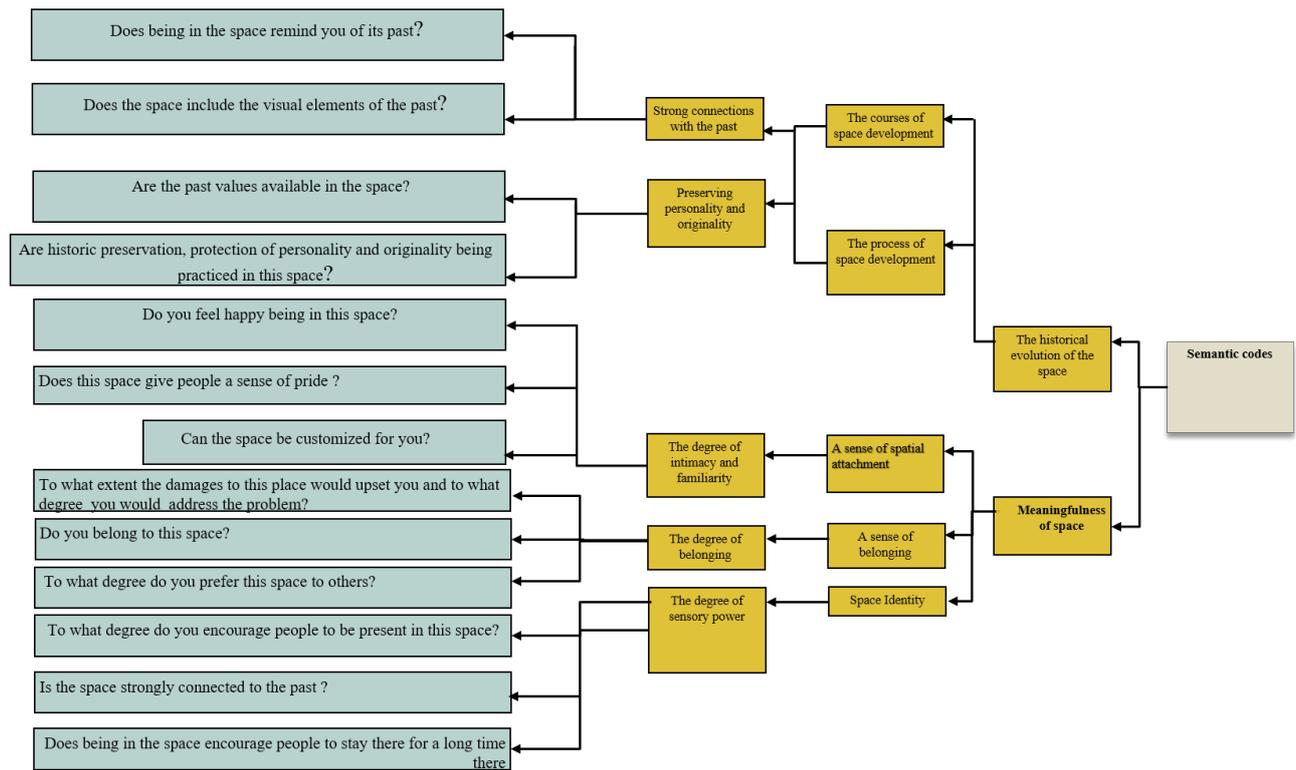


Diagram7. The questions related to semantic codes. Sources: authors.

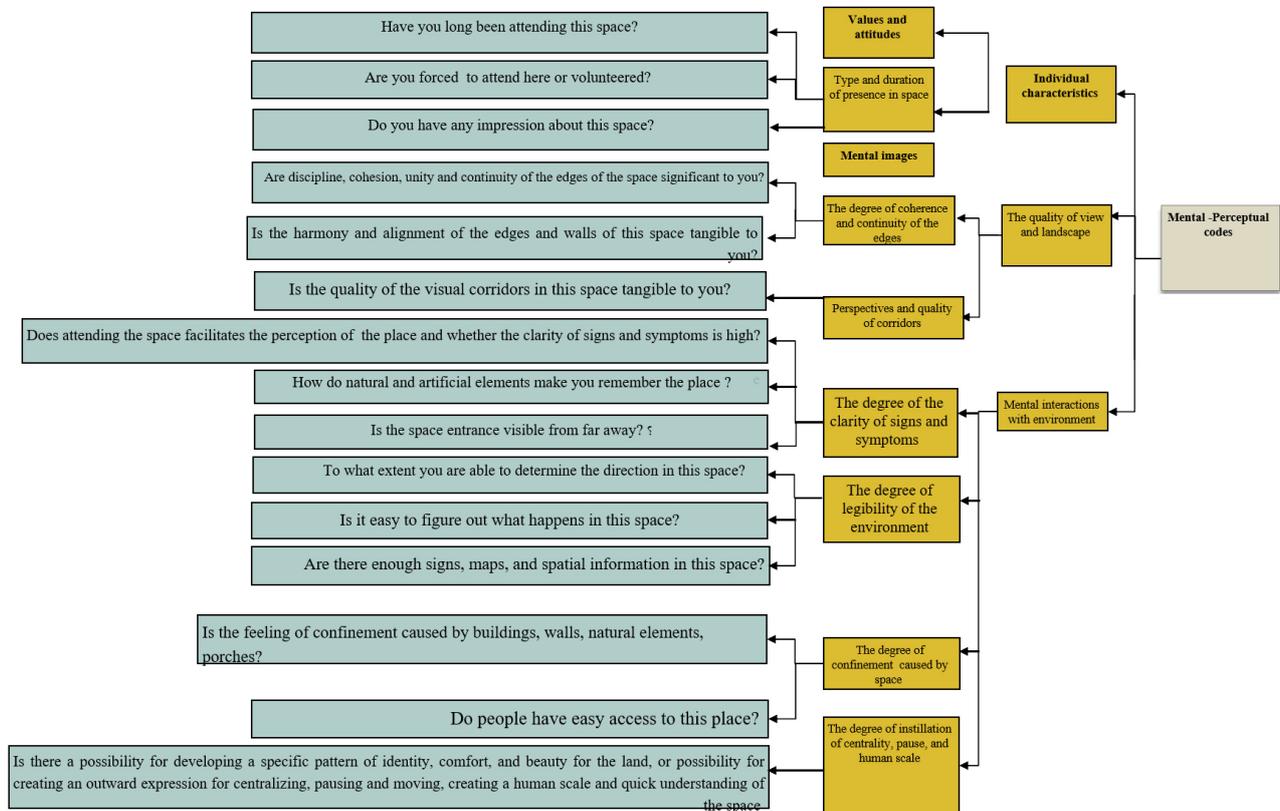


Diagram8. The questions related to social codes. Sources: authors.

questionnaire, it should be piloted with three groups of people.

Group1. The people you attempt to generalize the research findings to them or the people describe and interpret them. In other words, those who are the statistical population of the research. 2. Experts involved in developing and administrating the questionnaire. 3. People who use the results of the research, such as organizations, ministries and executive agencies and planners (AZKIA, 86: 2015).

- Informal piloting: The purpose of piloting at this stage was consulting experts than gathering the data from the audience. Most of the people we referred to at this stage were professors, experts, researchers, and those who have a specialty in research, and some of them were part of the statistical population.

- Official piloting: At this stage, information was gathered from the small number of subjects, but the procedure of data collection was same as the main stage of data collection and the subjects of the study were representative of the actual sampling. The main purpose of the piloting was looking at the pattern of responses. That is why our sample size was large enough. The results of this phase helped us to decide on questions that were answered by the small number of the subjects or answered by the majority of the subjects or repeated. Also, it is used to estimate how the main samples respond the questionnaires. Total 80 subjects were recruited for a formal piloting.

### Validity and reliability of the questionnaire

The researcher's questionnaire is validated when validity and reliability are established. We assessed the face and content validity of the questionnaire. To determine the formal validity of the questionnaire, 6 professors and experts in the field of urban planning who were familiar with the subject of the study were asked to determine if the questions were suitable for determining the purpose of the research. Based on the results of statistical analysis, after the initial administration of original questionnaire, some questions were deleted and the final version included 40 questions.

To address the content validity of the questions, we developed the questions based on a conceptual model of research which was informed by theoretical studies. It is worth mentioning that Cronbach's alpha method was used to measure reliability. In this research, the reliability of the questionnaire was higher than 0.7, which indicates the validity of the questions.

### Data analysis and data collection procedure

Data analysis was carried out through studying available library sources on the research topic in general and examining the data gathered from the field and questionnaire on the case in particular. To develop a questionnaire, the social, semantic, and perceptual indices were identified by reading library sources, books and articles. These data were coded and integrated with the memorable components of urban spaces, then organized into spatial, perceptual, temporal and social-cultural dimensions. The components associated with perceptual, semantic, and social dimensions (scales) were presented as effective codes contributing to a sense of collective memory.

The subscales were organized based on the framework of the quality criteria on the Likert scales. After preparing the questionnaire, we recruited two groups of participants namely citizens and specialists through random sampling method. Total 195, participants evaluated the memorability of the research setting and recalled their mental perceptions of Hassanabad square. Data were analyzed using Lisrel software in through path analysis, the correlation coefficient and between the relations between variables were defined (Diagram 10).

Diagram10. LIESREL outputs. Sources: authors.

### Discussion

This research is an attempt to evaluate the memorable urban spaces and components involved in shaping the sense of collective memory of urban spaces using a semiotic approach. To this end, we developed a questionnaire to evaluate the above-motioed issues.

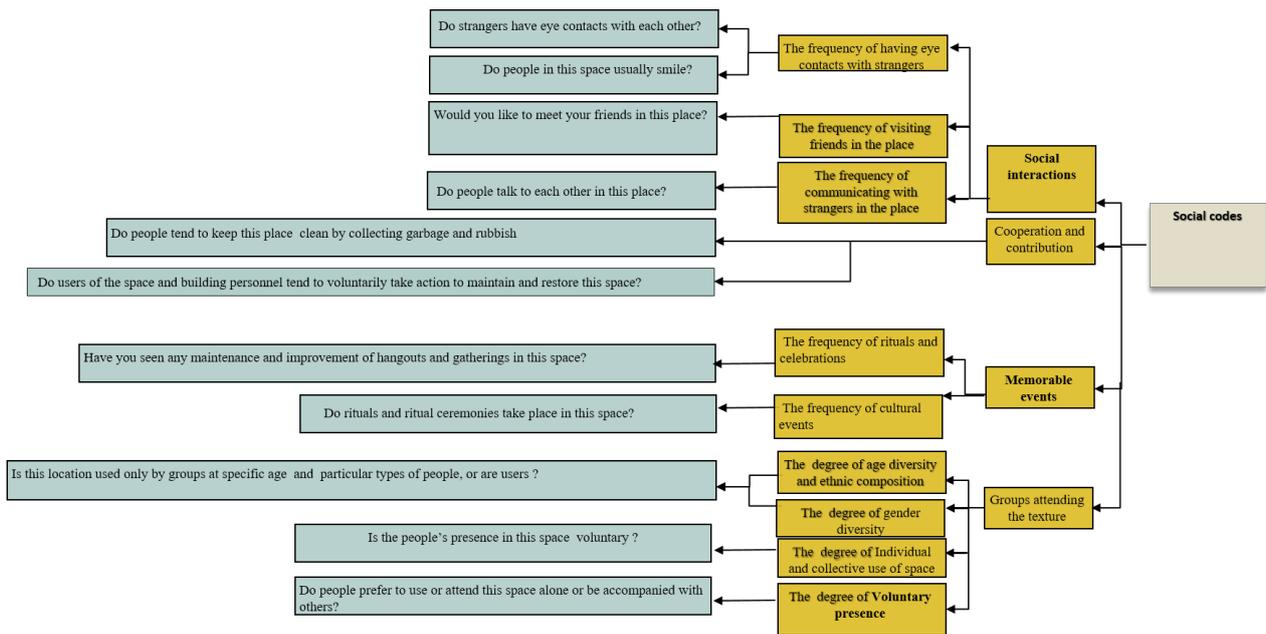


Diagram9. the questions related to mental-perceptual codes. Diagram8. The questions related to social codes. Sources: authors.

The measures were introduced through a chart designed for the operational features of codes, under the four categories: logical, cognitive, social and semantic codes. Based on the place-making method, the features associated with four aspects, comfort, activity, communication and society, were analyzed in Hassanabad Square.

We analyzed the urban space of Hassanabad Square based on the quality criteria measuring perceptual, semantic and social aspects then we searched for semiotic patterns hidden in social, perceptual, semantic and logical codes. To this purpose, we asked the citizens and experts in the space to complete the questionnaire. It should be noted that for developing the quality criteria of urban space, we categorized the set of components gathered from theorists and urban operators into four dimensions of collective memory sense, namely spatial, temporal, social and mental-perceptual. The results of the questionnaire summarized and presented in the tables and charts. The results of the surveys indicate that according to the respondents' point of views, the urban space of Hassan abad Square is still memorable, but based on

the model of path analysis and structural equations, Hassan abad Square is not as memorable as it was in the past.

In this study, in order to measure the operational features of perceptual codes, the criteria of individual characteristics, visibility and landscape quality, and mental interactions with the environment under the category of comfort were analyzed. The results of the confirmatory factor analysis method indicate that the perceptual codes, as indicated in the diagram of the “integration of the components of collective memory and semiotic codes”, include the conceptual-mental component of a sense of collective memory in Hassanabad Square and it has the greatest impact on the memorability of this place.

Meanwhile, according to the results of the analyzes, three criteria of the quality of view and landscape, mental interactions with the environment and individual characteristics as indicators of the perception code, respectively, have been the most effective factors in shaping the mental images of individuals and forming a sense of collective memory in Hassanabad Square. On the other hand,

the operational features of social codes, which have been introduced through the headlines of social interactions, memorable events, cooperation and contribution, and groups attending the context of Hassanabad Square, were also analyzed. The results obtained in the confirmatory factor analysis method indicate that the social codes that include the socio-cultural component of the sense of collective memory in Hassanabad Square have a second priority in retrieving a collective memory. Based on the results of the analysis, it can be said that, the social codes through the formation of events in the space of Hassanabad create a sense of collective memory in

this place. At the last stage, the operational features of semantic codes that were introduced by time and meaningfulness criteria under the title of comfort were analyzed. The results obtained through the confirmatory factor analysis method show that the time component of the sense of collective memory in Hassanabad has the least effect on developing the collective sense. According to the results of the analysis, the space identity and the historical evolution of the space, as the operational indicators of semantic codes create a sense of collective memory in Hassanabad. The effect is mediated through the time (Table 2).

Table 2. Results. Sources: authors.

<b>Results</b>	<b>codes</b>	<b>Placemaking method</b>
<b>0.80</b>	Mental-perceptual codes	Comfort associated features
<b>0.75</b>	Semantic codes	
<b>0.69</b>	Social codes	Society associated features
<b>0.57</b>	Alogical codes	Activity & communication associated features

### Conclusion

The impetus behind the research was turning urban spaces to memorable places for the citizens. To this purpose, we critically reviewed the studies on the concept of collective memory and theoretical approaches and the semiotics concept, the evaluation of environmental quality from the perspective of audiences and builders. Then we developed a conceptual model for the collective sense of memory.

We integrated the operational features of the codes and the components of the memorable urban spaces, into the operating system and proposed the coherent conceptual framework. This framework allows urban designers and urban planner to evaluate any urban design plans based on the urban space benchmark provided here to

keep them within the scope of the integrated system during the decision-making process. The originality of this paper lies in introducing the semiotic approach as an effective way of restoring the memorable urban spaces. The results of the study show that the perceptual, mental, and social components of the sense of collective memory in the urban space of Hassanabad Square are at the satisfactory level. However, spatial and temporal components are at a disadvantage. This is because of the changes that have taken place in recent years. Ignoring this situation can cause a widespread damage to the square.

Moreover, the data showed that in measuring the quality of space, the focus of the audience has been on space activity while experts are more focused on physical indicators. Comparing the citizens' perceptions of environment quality with the quality norms used by urban planners for promoting urban space can indicate the extent to which the place has succeeded to meet the expectation of a wide range of audience and space designers. Based on the results of the study, it is evident that the space has been unable to meet the expectations of its audience in space. Therefore adopting an approach in which the idea of experts and end users get closer to each other should be placed on the agenda of those who are in the charge of urban spatial planning. It is naïve to assume that this situation will improve if public awareness about the memorable urban spaces is not promoted. Moreover, if this issue is not addressed, it can lead to people's dissatisfaction with urban spaces. Undoubtedly, people's conscious interaction with urban spaces and the general knowledge about these spaces can increase the quality of space; result in better understanding of the space, and promote the awareness of people about the space. In addition, the common understanding of the environment by people can create, sustain and deepen the collective memories through which the sense of belonging to the environment, society and identity development will be reinforced.

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