

Received 2014/6/22 Accepted 2015/1/28

# Measurement of readings priority landscape of urban spaces from the standpoint of citizens (Case study: urban squares of the city of Hamadan)\*

Mehrdad Karimimoshaver\*\*
Hassan Sajjadzadeh\*\*\*
Salman Vahdat\*\*\*\*

#### Abstract

The urban landscape quality of a city, has an important and effective role in reading and understanding of urban spaces. Visual and conceptual factors promoting urban areas landscape, can only be achieved when priority assessment existing urban issues, be based on the comments of citizens and users of space. Because of the variety of opinions and viewpoints of the city and the surrounding urban landscape issues and its priorities, there are different views and opinions in the city and the surrounding urban land, also decisions must be integrated and comprehensive in line with coverage all aspects of priorities, For this aim, The purpose of this study is priority assessment and reading of city squares landscape of Hamadan, from the standpoint of citizens and professionals. Based on first criteria and indicators of landscape urban squares Hamedan studies using library-mining and then with respect to the goals and research questions ANP model was prepared. In this way, the ANP model - based urban squares landscape of Hamadan, including3cluster (criteria/group) and 20 option (node/sub-groups), using the Super Decisions softwares were produced and the results of the field investigations in the software were analyzed. Models outputs in the text differented ways, and various diagrams and think able for criteria and options, is presentable. Hence, according to the research questions: 1– How are prioritise indicators and effective criterion on urban squares of Hamadan the based on standpoint of citizen and opinions? 2 - What are priority indicators of urban landscape ration criterias based on experts point of view ?, only, same part of the findings in the paper has been brought. The research results show that, from the standpoint of citizens, indicators of vegetation coverage in physical - bodily cluster and memorial and cemetery monuments within the cluster of identity – place, Scale and space proportionin perspective of -Skeletal -aesthetic of cluster, has the highest priority relative to other indicators in each cluster to the item(the BuAli Sina squire). Similarly, in Imam Khomeini Square, clustering building indexes features, in the cluster of physical -body, historical and cultural features of places in local - identity clusters, in Skeletal body aesthetic symmetry of cluster, have the highest priority, Baba taher Square, the green indicator in the cluster periphery of the physical body, memorial and cemetery monuments in the cluster identity-place, lighting and color, in bodily aesthetic, have the highest priority and 'desirable sky line' indicators within the cluster bodily- physical buildings, and memorial and cemetery monuments" within the cluster of local identity, "Scale and proportions of the space "the cluster of a bodily-aesthetic too, from citizen perspective have the highest priority relative to other indicators in each cluster to the item(eshrine of Abdullah Squar), and from experts opinions the "buildings facades" indicators had top priority and symbols and signs had the lowest priority within place-identity cluster: and indicators of scale and appropriateness of space had the highest and lowest priority and body symmetry then any other indicators in haddless are the testing always. lowest priority and body symmetry than any other indicators in bodily a esthetetic cluste.

# Keywords

Urban Landscape, Visual Perception, Urban Square, the city of Hamadan.

<sup>\*.</sup> This article extracted from Master's Thesis "Salman Vahdat" With "Measurement Priorities Reading Landscape of Urban Spaces From the standpoint citizens(Case study: Hamedan urban squares) is title " to Guidance Dr. Hassan Sajadzadeh and Consultation Dr. Mehrdad Karimi moshaver in Bu-Ali Sina University in Hamedan and With financial support in has been done Organization "Iranian Urban Development & Revitalization Organization".

<sup>\*\*\*</sup> Ph. D. in Architecture. Assistant Professor, Faculty of Art and Architecture, Bu-Ali Sina University, Hamedan, Iran. mkmoshaver@yahoo.com

\*\*\* Ph. D. in Urbanism. . Assistant Professor, Faculty of Art and Architecture, Bu-Ali Sina University, Hamedan, Iran. h.sajadzadeh@gmail.com

\*\*\*\* Master of Urban design. Department of Art and Architecture, Bu-Ali Sina University, Hamedan, Iran. Salmanvahdat@yahoo.com



#### Introduction

Cities visual environment through a complex system of "signs" and the social, economic and cultural life of their communities to realize their importance. In the process of interaction between man and the city's visual environment as the "common denominator" of the two, the field of perception, cognition and environmental assessment provides citizens and visitors (Golkar, 2008:95). In their visual environments are able to broaden the aesthetic experience of citizens, improve its image and strengthen the community of civic pride and provide them with advance up the city's image at the international level, the city's competitiveness for attracting the more capital and strengthen the creative classes. (Gospodini, 2002:59-73). One of the most important issues in terms of architects, planners and urban designers have attracted the issue of the need to improve the quality of vision and visual aesthetic components of within the urban landscape (Poorjafar, 2009:66). The importance of the visual aspect of the city is that it is possible to "read" the environment as a "text" provides. Only in the visual environment and urban landscape that mirrors the intangible dimensions civic life, such as poverty and richness, dominance of certain institutions and values, aesthetic tastes in culture, etc. historical depth citizens through a system of "signs" of possible external expression of the and provides a negative or positive evaluation (Golkar, 2008:96). Meanwhile public spaces of the city, as a place to exchange thoughts, ideas and shape social relations (Porta, 1999, 437) Webster behavior and human activities where the formation of of understanding on the urban landscape. The quality of these spaces as a product of process interaction between man (activity) and physical city, to the upper limit depends quality the visual component. Visual component of urban spaces because of the nature of their objective and tangible perception by the human senses and aspects of perception, knowledge and environmental assessment provides citizens. Development and improve the quality of visual and physical of urban spaces in addition to providing human welfare effective to meet readability and perception through a hierarchy of different designs and consider the needs and real possibilities and effective participation in the realization of its forces. Accordingly, this process requires compliance with a comprehensive approach, flexibility and the use of Indicators and the criteria for qualitative and quantitative forecast and priorities of land required

and the distribution and composition between different applications. users comments about landscape of urban spaces (priorities), one of the most important factors in optimum performance landscape urban public spaces, priority assessment criteria, needs assessment and locating these spaces. Because of opinions and opinions in city level Urban around issues and priorities. And decision making should converge in order to cover all aspects of the priorities, therefore, the qualitative and quantitative development priorities landscape (visual) of urban spaces must be based on the views of citizens and users of space.

In this regard this research priorities of urban landscape in Hamadan Considering to the essential factors, including the need to maintain and improve the urban landscape - the historic city, The role of the city as a historic city in the national and global level, the formation early historical periods, improve the quality of the urban landscape as the identity of the city, creating vitality and improve visual quality and promote mental well-being and welfare citizens will be analyzed. Accordingly, using the model of "network analysis process" (ANP) to review and assess the priorities of landscape of urban spaces has been Hamadan. Style based on ANP model in providing models and appropriate strategies and set priorities visual landscape the city of hamedan on expert opinions and views of citizens in setting priorities based. ANP method as a comprehensive and powerful accurate decisions, Thomas L Saaty introduced in 1996 for AHP method. ANP is a mathematical theory to systematically (interdependence effect of criteria) with a variety of attachments Dealt has been successfully applied to various fields (Afsharian, 2007:8-11). Levy et al (2007) mentioned model for planning and decision-making in situations of crisis or emergency environmental hazards in their work (Levy & Kouichi, 2007: 906-917). Hsieh et al (2007) to enhance the level of service received from ANP hotels(Hsieh & Li-Hung LIN, 2008). Tuzkaya et al (2007) ANP model for decision-making in the delivery of services and facilities were the metropolis of Istanbul (Tuzkaya, et al, 2007:14). Cheng et al. (2007) mentioned model was used to determine corporate strategies (Cheng & li, 2007:278-287). Partovi (2006) AHP model to determine the location of facilities and services offered strategies (Partovi, 2006:41-55). These studies and many of the activities carried out in recent years more and more of the functionality of ANP model approach for

decision-making related to urban issues explained. ANP method comprehensive and powerful to make smarter decisions (for solving complex decision) using empirical data or personal judgments taken any decision- making authority and by providing a structure for organizing different criteria and assess the importance and priority of each of the options, process decision easy (Mohammadilord,2009). In this article, the ANP to analyze the priorities of the urban landscape of Hamadan as decision support system has been used.

## **Background research**

About reading the urban landscape extensive research has been done. Including research can of Gordon Cullen (1961) in the book excerpt urban landscape that has been translated into Persian noted that the urban landscape Art up visual integrity and structure of buildings, streets and places knows that makes the urban environment. Kevin Lynch (1960) in book the image of the city with subjective landscape of point and it will factor five routes, nodes, edges, landmarks and areas divided. Spirn (2008) in books (Language Landscape) certain issues including landscape languages, reading and transportation Landscape meanings. . . Discuss and tries to see and mind to unlock the hidden depths and the possibility to create a thinking and reflection than what is happening around us, look and through various signs to the secrets and untold surroundings, either natural or manmade, understand. Simon (2007) in a book entitled (Landscape, pattern, perception, process) urban landscape analyzes and believes that its Landscape is part of the environment in which we resident and by our conception we understand it. Alon- Mozes (2006) in a study under the title (Read Landscape as a text) urban landscape as a valuable tool in the interpretation of natural and man-made environment introduced. Carmona (2003) in a study of the constituent elements of the urban landscape of the city walls, the face of the earth, natural and artificial elements and so introduced. He Of this element priority In Landscape urban spaces are not explicit and all elements of the value is assumed. Pakzad (2008) urban Landscape visual aspects or perception knows the environment which in turn has the form, function and meaning. He his study of indicators and elements of the urban landscape of the city walls, floors, furnishings and urban equipment, vegetation, water and etc knows but clearly does not express a preference for them in Landscape urban spaces. In this article has attempted Criteria and

elements of the urban landscape identify and priority of each element based on the views of citizens in urban areas to be examined.

#### Research method

The method used in this study based on applied research goals and a in terms of data collection and a descriptive and a comparative comparison analysis method using a questionnaire and a viewing. According to the research objectives of the study consists of three main sections as follows:

- 1. Introduction indicators and criteria to assess the urban landscape: This part of the study is to examine the theoretical foundations of the urban landscape, which using library and field studies have been conducted.
- 2. weighting to the criteria and indicators of the ANP model: weighting criteria and indicators of the ANP model is conducted based on the output of information and obtained data from a survey operations in the city Hamadan and is based on a weighted range ANP model is that Included the scope of the number of 1 9 and done based on the results of questionnaire, (citizen's standpoint) experts prioritize in these areas had done.

  3. Indicators analysis and evaluation criteria of the ANP model: the final analysis of the results by the Super Decisions software according to criteria, indicators and options carried out, that the results of the analysis can guide decision makers in prioritise and selecting urban squares landscape strategies of Hamadan (urban squares Hamadan).

# **Components Reading the urban landscape**

For achieving a clear definition as well as criteria and factors evaluation, in first opinions of some experts in the field are examined to determine the components of the urban landscape: "Kevin Lynch" three factors perceptual, physical and functional knows the importance of the urban landscape (Rezazadeh, 2009: 23). Mansouri urban landscape of the city's citizens realize that by understanding its symbols (the physical dimensions of the city) and association associated with (mental aspects and memories) takes place. And three goals of the urban landscape to 1. Aesthetic 2. Cultural-identity 3. Functional introduced (Mansouri, 2010 and Karimi moshaver, 2010). Mahmoudi in his research shows the urban landscape is an objective reality that can be seen in each individual observation, In other words, a description of physical reality of of a city that it describes, See by individual experiences in his mind stamped and most

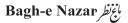


Table 1. Definition framework urban landscape of various researchers. Source: authors.

Dimensions the urban landscape	Scholar
Perceptual - physical - functional	Lynch, (1960)
Aesthetics - Performance - identity	Mansouri, (2010) Karimi Moshaver, et al (2010)
Visual-spatial- physical - activity - identity - Environmental	Abdullah Khan, G, (2008)
Stability - identity - Beauty - unity	Mahmoudi, S, A, (2008)

important key features can be sustained, identity, beauty and unity, he said (Mahmoudi,2008: 60). Abdullah Khan aspects of visual characteristics, physical, spatial, activity, identity and local environmental and urban areas, totaling up the face of the city (Abdullah Khan, 2008). According to the researchers of the urban landscape can be categorized according to the following table (Table 1).

The definitions listed above can be seen that the constituent components of the urban landscape are several dimensions the definitions listed above can be seen that the constituent components of the urban landscape are several dimensions. So to achieve an glimpse and its application in the present study dimensions the urban landscape in three physical components of physical, aesthetic and identity - a place of aggregation, and to achieve the indicators analyzed are:

#### **Indicators of skeletal component – physical**

Although the constituent components of the urban landscape are chained together and not be separated, but due to the approach of this study are analyzed separately.

According to Carmona (2003), physical the urban landscape into three categories glazed, roof and ground is divided into the following:

- -Landscape image of roof: Image of roof of the observer in Image of collection elements that include between Skyline boundary wall separation of the sky and the baseline upper boundary wall upright instead. Image of a city wall: Of between structural elements, walls of the city's most important role in defining the urban landscape. Perceptual quality an classic space city Primarily the discipline space component of the aspect ratio and size of the two important elements wall and floor comes (Carmona, 2003:149-158).
- Image of Land Land represents the landscape, bed the urban space, and the total natural and artificial elements embedded aims (Ibid:159).

In a division that Rossi (Italian architect) has done, the constituent elements of the physical landscape of the city is divided into two parts to form: A synthetic element that is separable into two kinds of fixed and variable elements. And (b) the natural elements, bed physical that occupies the city is defined by natural factors (Rossi, 1984). In another definition that provides Pakzad physical elements and physical urban landscape as Rossi Into two parts Natural and artificial elements classified And components in terms of urban spaces and city walls, floors, furniture and urban equipment, vegetation, water named (Pakzad, 2008: 118);(Diagram 1).

#### **Aesthetic component indicators (physical)**

Beautiful have meanings such as: seemly, decent, good, beautiful, antialiasing and adorned. And Fine quality that the order and harmony that comes greatness

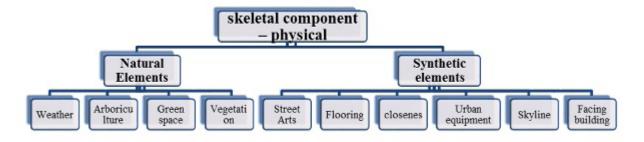


Diagram 1. Indicators to Assessment of factor the physical landscape urban spaces. Source: authors.

and purity, the object is And reason and imagination and great desire of man to admire force and bring joy and expansion (Afhami & Alizadeh, 2011: 57). The beauty of the architecture in relation to the environment and about the meaning of beauty and an important part of understanding the perception of meaning, signs and symbols, in addition to the aesthetic preferences have special significance, defining the characteristics associated with location can also be viewed (Aminzadeh, 2010:5). Pytvrsk with architectural emphasis on the visual aspect - Art for the attention to diversity, human scale, naturalism and organic irregularities in form and color combinations pointed out, and these factors by people like Ziteh, Gybrd, and Halperin spread Partly cloudy(Ibid: 4). Some of the built environment in both the aesthetic and symbolic form pose. And those relating to the environment, such as the role and influence of geometric shapes, proportion, rhythm, scale and complexity, color, and so on are the aesthetic form (Lang, 1987). Aesthetic and symbolic dimension to understand the meanings of the environment by the people. The form includes all tangible aesthetic space, such as eye-catching fabric of space or composition, colors and materials are included (Aminzadeh, 2010:20). Given that both physical and mental aesthetics is separable In order to avoid overlapping in both identity and aesthetic issues related to the symbolic and aesthetic sense of identity is checked (Karimi moshaver, et al, 2010:95); (Diagram 2).

# **Indicators of identity - a place**

The identity of the character of the social and physical environment where people can say anything about you; it's what a place is capable, when the situation is expected to belong and not anywhere else (Dougherty, 2006). And identify the location of the

image, producing experiences, thoughts, memories and feelings immediate and meaningful interpretation of what is and what should be (Relph, 1976:59). Each location is identified, unique content and relationships and patterns that expressed the spirit of the place. Identify it using symbols and signs in the environment will be made (Yuen, 2005: 198). At the same time, some sort of emotional attachment to the place where identity based on place of symbolic importance, as well as emotions within the person's life, purpose and meaning(Williams &Vaske,2003:830). Place identity, personal identity, which is part of the direct experience of the physical environment grows. Thus, a reflection of the cultural and social aspects of the place (Walmesli, 1990:59) And a set of knowledge that man has achieved in his life than the physical environment, including memories, ideas, feelings, opinions, values, meanings and experiences of everyday life in the physical environment is concerned (Proshansky, 1983:59). The process of identity formation similar place overall process knowledge, a person experiences during their physical environment in terms of abstract concepts in mind to build on the experience later to be recognized (Ibid). According to this approach, regardless of place identity and physical identity of the other dimensions more visual perspective on the city argues, physical and visual identity can be generally defined as follows: physical identity, meaning attributes and features the body of the city "or where" the insider reveals non-distinct and parallel with these attributes should be the object of "places" while maintaining continuity when, in the evolution and eventually to the emergence of a whole Leads (Mir moqtdaie, 2006:37). In this regard, one of the things that the identity of the built environment as a means of understanding the place to look to Sarbh if this understanding

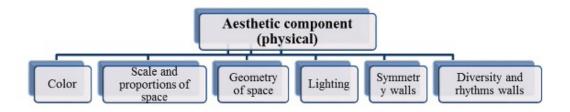


Diagram 2. Indicators to Assessment aesthetic factor (physical) landscape urban spaces. Source: authors.



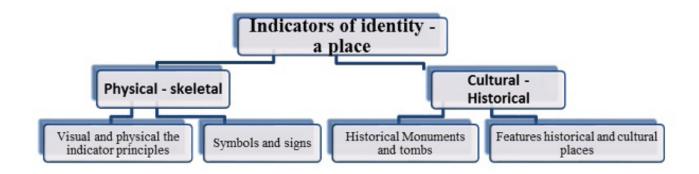


Diagram 3. Indicators to Assessment place\_identity factor landscape urban spaces. Source: authors.

Table 2. Criteria and indicators assessing the urban landscape. Source: authors.

Indicator	Cri	Criterion		
Vegetation				
Green space	Natural Elements			
Arboriculture	Natural Elements			
Weather				
Facing building Skyline Urban equipment Closeness and proportions of the building Flooring Street Arts	Synthetic elements	Skeletal – j		
Diversity and rhythms walls				
Symmetry walls				
Lighting				
Geometry of space				
Scale and proportions of space	Aesthetic	Aesthetic (skeletal)		
Color				landscape
Features historical and cultural place			1	
Historical Monuments and tombs	Cultural - Historical			
Symbols and signs		Identity - a		
Visual and physical the indicator princi	Physical - skeletal	place		

by architect German Karl Frisch The field has been developed and implemented. The second field is the field in which the tomb of Bu Ali Sina, because

there is said to be the tomb of Bu Ali Sina in the center of the field. Pahlavi era tomb architecture and a combination of ancient architecture and Iran after causes and effects of man-made belong to a place (Karimi moshaver, et al, 2010:95). According to the objectives and relevant research based on the above definitions of identity and physical location in urban areas, the components of identity to the urban landscape into two physical-physical and cultural - historical divide. Accordingly, in this study the physical components of the urban landscape identity symbols - signs, elements of visual and physical separation, and historical and cultural elements of the urban landscape, the two memorial monuments and places of historical and cultural characteristics of the index and breakdown have been investigated (Diagram 3). Based on research theory bases and a by analyzing the components of urban spaces of landscape parameters affecting the factors, extracted and a according to table presented below (Table 2).

## Case study

Hamedan, Iran and the oldest city of the oldest cities in the world whose history goes back to the days of standby. Contemporary map is radially settled by Karl Frisch German construction engineer, following the pattern of urbanization Hosmany leather and shell structure was influenced by the neo-baroque style, has been built in the reign of Reza Shah Pahlavi (Sajadzadeh and Pirbabaie, 2012:32). Squares studied in this research are four main square and the city of Hamadan. The first field on the course side of the Imam Khomeini Square is located at the intersection of Shuhada Street and blankets designs and drawings

Islam. The second field is the Baba Taher. Poet and mystic Baba Taher's tomb in the center square and its design is contemporary and the 70<sup>th</sup> field and the last field is Abdullah shrine its name from the tomb and shrine to the shrine in the middle of the field is (Fig. 1).

#### ANP model

Network analysis process ANP, a multi-criteria decision-making techniques known as "AHP" by replacing the "network" instead of "hierarchy", improves. The most important distinction between the hierarchical methods (AHP) in the influence and impact of the measures on each other. (Fig. 2) a better understanding of the differences between the hierarchy and structure of the network provides. As is seen in this image, an object or a node in the hierarchical structure of the fact that at the end of a node or cluster is the end destination. Thus, the linear structure, from top to bottom and there is no return from the lower levels or higher. But in a network, a network and its clusters are not distributed on a regular basis. In addition, in a cluster to a cluster of its influence (national association) or to influence other clusters (external dependence) there and let's go back directly from the second cluster there or pass through the middle ear. In a hierarchical network structure may be a system by increasing connections is formed, so that a pair of related components of arbitrarily linked together and some of its components have an internal attachment ring (Saaty, 2005:352). Network analysis process consists of three basic steps that are outlined in the following are mentioned:

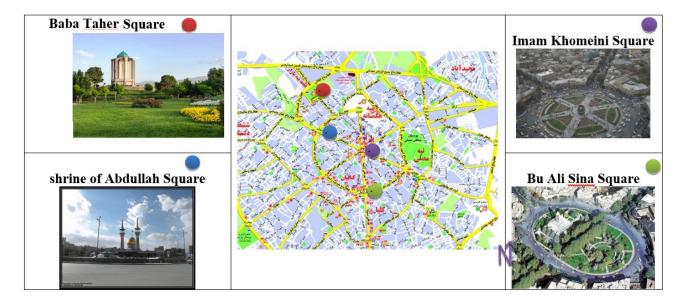


Fig. 1. Range and samples studied. Source: authors.

# • Step 1. Define the structure of the model and network analysis

At this stage, according to (Table 1) of cityscape main clusters that make up the model. Located within each cluster a set of measures that are known as network nodes. Criteria which were within each node has a relationship with other nodes within the cluster are also about relationships and calculations should also stupid and get their feedback considered encouraging the body (Fig. 3).

# Step 2. Comparisons paired, weighting the criteria and indicators ANP model

Control hierarchy ANP, set criteria to compare the interaction that may exist in the network are used.

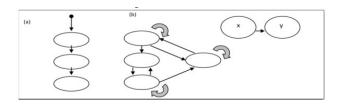


Fig. 2. a: hierarchical structure, b: A network structure. Source: Momeni and Atashsoz, 2007; Qdsiypoor, 2005: 86 and Momeni, 2008: 64.

The relative weight of the ANP like AHP is to say, by comparing the relative amounts of test criteria and sub criteria specified (Jabalamoli, et al, 2008: 340). In this study, weighting the criteria and indicators ANP model is based on two general methods as follows:

- 1. The weighting the network of internal relations and criteria, based on the results of the questionnaire expert in network and multi-criteria decision analysis used, and by experts and specialists in the field of urban landscape has been done, has been done.
- 2. The weighting of the criteria in relation to options, which are based on data from the survey in urban Squares of Hamadan as well as the results of a questionnaire conducted by the citizens was conducted. In the following example, two types of questionnaires that were prepared according to the method mentioned above is shown. The results of this questionnaire were analyzed using SPSS software and the relationship between criteria and weighting to apply options.

Question: "With regard to aesthetic factors of physical urban landscape, in your opinion what is more important indicator of the value and importance What is this?" (Questionnaire 1)

Question: "Given the monumental tomb monuments index So which option is more value and importance of this matter to what extent." (Questionnaire 2)

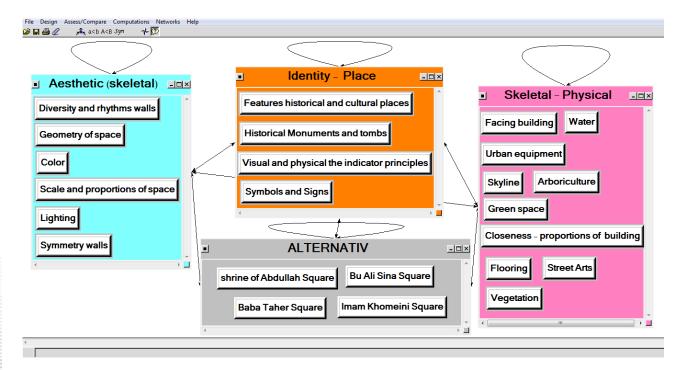


Fig. 3. Structure model ANP based on reading landscape the Hamadan urban squares. (groups including, criteria, indicators, options and relationship them between). Source: authors.



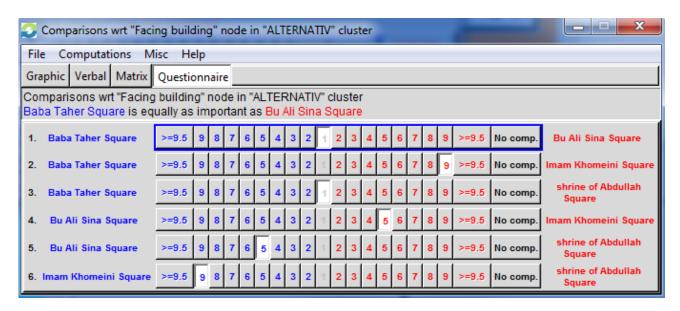


Fig. 4. Example of weighte method in the ANP model (Super Decisions). Source: authors.

By weighting the criteria in the AHP model based on numerical range is 1 to 9, the network is divided into smaller branches and each branch of the individual elements like i and j-th compared to a paired element in our branch And preferred (priority) earned them and we paired comparison matrix form. Fig. 4 is an example of weighting method based on the results of the questionnaire, experts and citizens in the ANP

Diversity and 7 5 5 Color 3 rhythms walls Diversity Scale and and 7 3 proportions rhythms of space walls Diversity 7 Lighting 5 3 5 rhythms walls Diversity Geometry and 7 5 rhythms of space walls

Questionnaire 1. Examples of questions in the questionnaire by expert's connoisseurs and valuation indicators. Sources: authors.

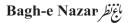
(Software Super Decisions) show. Software Super Decisions, network analysis process introduced by doctor Thomas hour to do. This software was written by ANP working in the creative decisions. In fact, the 3's network analysis process and analysis software for the model performs. In research that ANP method is used to analyze the model and the development stages of the software it has been used.

# Step 3. Make Super matrix weight based on the data and information

Based on the comparison test was performed in the previous step, super weight matrix is formed and

Bu Ali Sina Square	9	7	5	3	1	3	5	7	9	Imam Khomeini Square
Bu Ali Sina Square	9	7	5	3	1	3	5	7	9	shrine of Abdullah Square
Bu Ali Sina Square	9	7	5	3	1	3	5	7	9	Baba taher Square
Imam Khomeini Square	9	7	5	3	1	3	5	7	9	shrine of Abdullah Square

Questionnaire 2. Certified sample of questions in the questionnaire and how to value options by citizens. Source: authors.



the weight of each measure based on the operation system is defined. In fact, every column matrix of multi-vector super special that forms the vector sum of the relative weight of criteria and indicators and options used (Fig. 5).

# **Research findings**

In this model each group and the specific results of their model is capable of. Since the presentation of the results of its sheer size, so in this section to highlight some of the major conditions of implementation of the mentioned models. Fig. 6 priorities urban landscape indicators to the criteria (groups) shows that based on the analysis of data from surveys of library and provided results of the questionnaire obtained expert professionals.

These images show that the physical cluster - frame

the "facades of buildings" (0.351) than the "water" (0/330) is more preferable. The lowest score in this group related to the option "Water" is. The cluster identity - a place index historical Monuments and tomb (normalized with a score of 461/0) index most preferred symbols and signs (with normalized score 089/0) is the least advantage. So on in aesthetic physical cluster index scale and proportions of the space is of utmost importance and body symmetry index of less importance than other factors associated with the above criteria.

Fig. 7 prioritization criteria and urban landscape indicators based on the results of field studies based on the results field studies Complementary analysis of the questionnaire obtained by citizens in relation to the options show.

Based on the analytical results can be seen from the

Super Decisions Main Window: MANZAR-ENGELISI.mod: Unweighted Super Matrix  Aesthetic (skeletal)							ALTERNATIV		×	
Cluster Node Labels		Color	Diversity and rhythms walls	Geometry of space	Lightin g	Scale and proportions of space	Symmetry walls	Baba Taher Square	Bu Ali Sina Square	
	Color	0.348138	0.062394	0.166667	0.166667	0.166667	0.207977	0.166667	0.166667	Ē
Aesthetic (skeletal)	Diversity and rhythms walls	0.072791	0.230578	0.166667	0.166667	0.166667	0.107837	0.166667	0.166667	
	Geometry of space	0.096602	0.077194	0.166667	0.166667	0.166667	0.125455	0.166667	0.166667	
	Lightin g	0.265979	0.041357	0.166667	0.166667	0.166667	0.166634	0.166667	0.166667	
	Scale and proportions of space	0.174463	0.143688	0.166667	0.166667	0.166667	0.331317	0.166667	0.166667	
	Symmetry walls	0.042027	0.444789	0.166667	0.166667	0.166667	0.060779	0.166667	0.166667	
ALTERN ATIV	Baba Taher Square	0.250000	0.250000	0.250000	0.250000	0.250000	0.250000	0.250000	0.250000	
	Bu Ali Sina Square	0.250000	0.250000	0.250000	0.250000	0.250000	0.250000	0.250000	0.250000	
		ш								

Fig. 5. Example of Super matrix weighte method based data and information of the survey question naires and the operation results in the city in the ANP model. Source: authors.

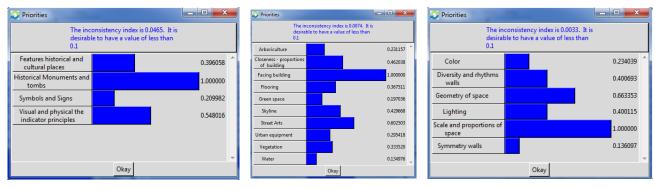
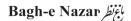


Fig. 6. priority indicator in the clusters (Criteria) based on expert opinion. Source: authors.



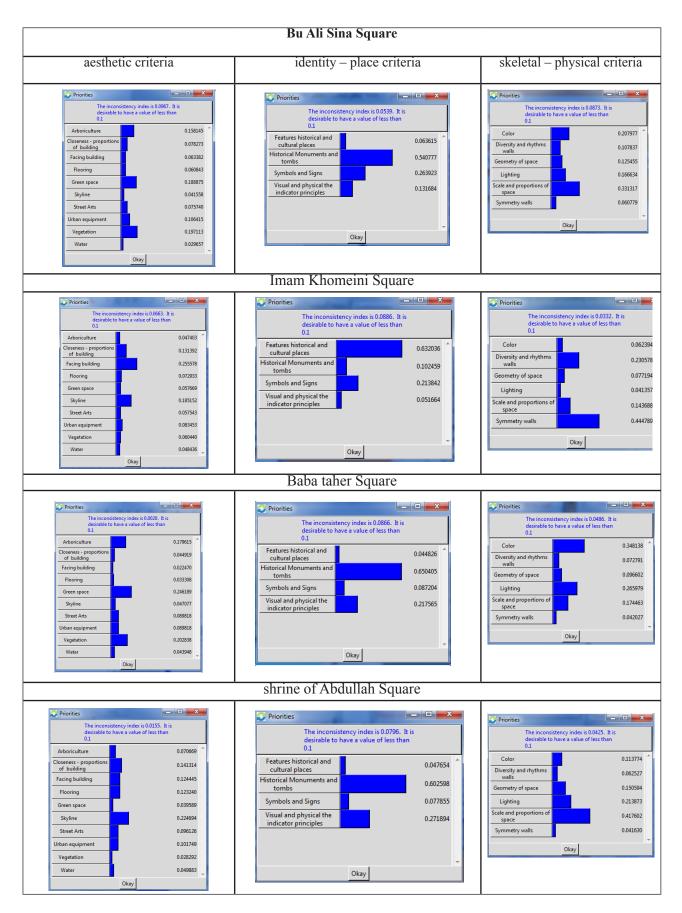


Fig. 7. Priority indicators into alternatives and criteria based on the citizen's viewpoint. Source: authors.

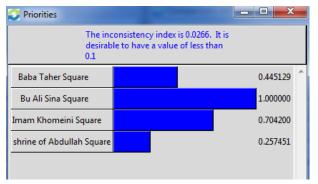


Fig. 8. prioritize options based on results data analysis and information Super Decisions software. Source: authors.

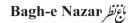
perspective of citizens' priorities in terms of urban squares of indicators "of vegetation and trees", "memorial monuments and tomb" and "scale and proportions of the space" in the respective clusters in the field of Avicenna and Indicators "The facades of buildings", "historical and cultural characteristics of

the place" and "body symmetry" in Imam Khomeini Square and indicators "green border", "memorial monuments and tomb", "light and color" Baba Tahir Square and indicators "desirable skyline", "memorial monuments and tomb" and "scale and proportions of space" at the Imam Abdullah his group had more points than the other indicators. Based on the table above and the relative weight of criteria and indicators Landscape urban spaces, as well as data analysis and information software Super Decisions prioritize options in terms of reading Landscape urban squares Hamadan, according to residents of the (Fig. 8) is where the the tomb of Bu Ali Sina (normalized with a score of 0/480) in the first, Imam Khomeini Square (normalized with a score of 0/278) in the second priority, the Baba (normalized with a score of 189/0) in the third and Imam Square Abdullah (normalized with a score of 0/123) Finally, from the perspective of citizens is a priority.

#### Conclusion

In this way, the ANP model - based urban squares landscape of Hamadan, including3cluster (criteria/group) and 20 option (node/sub-groups), using the Super Decisions softwares were produced and the results of the field investigations in the software were analyzed. The research results show that, from the standpoint of citizens, indicators of vegetation coverage in physical - bodily cluster and memorial and cemetery monuments within the cluster of identity – place, Scale and space proportion perspective of -Skeletal -aesthetic of cluster, has the highest priority relative to other indicators in each cluster to the item(the BuAli Sina squire). Similarly, in Imam Khomeini Square, clustering building indexes features, in the cluster of physical -body, historical and cultural features of places in local – identity clusters, in Skeletal body aesthetic symmetry of cluster, have the highest priority, Babataher Square, the green indicator in the cluster periphery of the physical body, memorial and cemetery monuments in the cluster identity-place, lighting and color, in bodily aesthetic, have the highest priority and 'desirable sky line' indicators within the cluster bodily- physical buildings, and memorial and cemetery monuments" within the cluster of local identity,"Scale and proportions of the space "the cluster of a bodily-aesthetic too, from citizen perspective have the highest priority relative to other indicators in each cluster to the item(Squar eshrine of Abdullah). Results of the analysis indicates from experts opinions the "buildings facades" indicators had top priority and symbols and signs had the lowest priority within placeidentity cluster: and indicators of scale and appropriateness of space had the highest and lowest priority and body symmetry than any other indicators in bodily a esthetetic cluste.

from the results of the analysis can be deduced that is concerned with the reading preferences of the urban landscape by citizens and experts in the field. There are this differences From Insight between the two groups urban issues. While the experts comments often formed on the basis of scientific and technical knowledge. So experts and urban managers should be guide and lead the new developments in urban spaces, along with the comments of citizens and users of this space.



#### Reference list

- Afsharian, A. (2007). Gozinesh esteratejhiha- ye modiriat- e danesh ba estefadeh az farayande tahlil- e shabakeh [Selection processes of knowledge management strategy Using ANP Model]. *Journal of Behbood*, 9 (23): 8-11.
- Alon Mozes, T. (2006). From "Reading" the Landscape to "Writing" a Garden. Journal of Landscape Architecture, 1(1):30-37.
- Amin Zadeh, B. (2010). Evaluation the Beauty and Identity of the place. Journal of Identity City, 4(7): 3-14.
- Afhami, R. & Alizadeh, M. (2011). Aesthetics flexible spaces. Ketabmah- e Honar, (173): 56-63.
- Abdullah Khan, G. (2008). City Images: been abandoned urban policies in Iran. Journal of Abadi, (53): 6-19.
- Bill bookkeeping and management image and Urban Landscape. (2010). Tehran: Publishing Organization of Municipalities country.
- Gospodini, A. (2002). European Cities in Competition and New Uses of Urban Design. *Journal of Urban Design*, 7(1): 59-73.
- Golkar, K. (2008). Conceptual Evolution of Urban Visual Environment; From Cosmetic Approach Through to Sustainable Approach. *Journal of Environmental Science*, (4): 95-96.
- Crow, T., Brown, T. & De Young, R. (2006). The Riverside and Berwyn experience: Contrasts in landscape structure, perceptions of the urban landscape, and their effects on people. *Journal of Landscape and Urban Planning*, 75(3-4): 282-299.
- Cheng, Eddie W.L., Li, Heng. (2007). Application of ANP in process models: An example of strategic partnering. Journal of Building and Environment. *ELSEVIR*, (42): 278-287.
- Carmona, M., et al. (2003). Public place and urban space. London: Architectural press.
- Cullen, G. (1961). Townscape. London: The Architectural Press.
- Dougherty, D. L. (2006). Embodying the city: Identity and use in urban public space. Virginia: Virginia State, University.
- Faraji sabokbar, H. (2010). Assess stability of of rural areas based on network analysis, using the techniques Borda case study: city rural sciences. *Journal of in Human Geography*, (72): 141-147.
- Hsieh, Ling-Feng, Lin, Li-Hung, & Lin, Yi-Yin. (2008). A service quality measurement architecture for hot spring hotels in Taiwan. *Tourism Management*, 29, 429–438.
- Jabalamoli, M. S., Rezaifar, A. & Chaei Bghash Langroodi, A. (2008). *Ranking in Project Risk, by Using of Prose's Multi Decision-Making*. Tehran: Faculty of Taconic.
- Karimi moshaver, M., Mansouri, A. S. & Adibi, A. A.(2010). Relationship Between The Uurban Landscape and Position of Tall Building In The City. *Journal of Bagh- e Nazar*, 7(13): 89-99.
- Kiani, A. & Salari Sardari, F. (2011). Studying Priorities for Designing Urban Landscape of Public Spaces in Assalouyeh Using ANP Model. *Journal of Bagh- e Nazar*, 8(18): 25-38.
- Lynch, K. (1960). The image of the city. Cambridge, MA: MIT Press.
- Lang, J. (1987). Creating architectural theory: The role of the behavioral sciences in environmental design. New York: Van Nostrand Reinhold.
- Levy Jason, K. Kouichi, T. (2007). Group decision support for hazards planning and emergency management: A Group
- Analytic Network Process (GANP) approach. ELSEVIR, Mathematical and Computer Modeling, (46): 906-917.
- $\bullet \ Mohammadilord, A. (2009). \textit{Farayanhaye tahlile shabakei va selsele maratebi.} \textit{ (ANP and AHP)}. \textit{Tehran: Alborz fardanesh.}$
- Momeni, M. (2008). *Mabahese novin tahghigh dar amaliat* [Topics in Operations Research]. Tehran: University of Tehran.
- Momeni, M. Atashsoz, A. (2007). Erae- ye model- e tarkibi- ye GP-ANP jahate tarhrizie mahsoul dar QFD [GP-ANP hybrid model for product planning QFD]. *Journal of Industrial Management*, (4): 41-74.
- Mansouri, S. A. (2010). Masters Landscape Architecture course booklet. Tehran: University of Tehran.
- Mahmoudi, S. A. (2008). Urban landscape overview of several theory. Journal of Abadi, (53), 54-61.
- •MirMoqtdaiee, M. (2006). Criteria Cognition and Assessment physical identity cities. *Journal of Honar ha-ye ziba*, (19):29-38.
- Proshansky, H. M., Fabin, A. K. & Kaminoff, R. (1983). Place Identity: physical world socialization of the self. *Journal of Environment psychology*, (3): 57-83.
- Partovi, F. Y. (2006). An analytic model for locating facilities strategically. ELSEVIR, Omega, 34(1): 41–55.
- Porta, S. (1999). The Community and Public Spaces: Ecological Thinking, Mobility and Social Life in the Open Spaces of the City of the Future, Futures; The Journal of Forecasting. *Planning and Policy*, (31): 437-456.
- Poorjafar, M. R., Taghvaei, A. K. & Sadeghi, A. R. (2009). Readings of the organization; the promotion of urban axes



(environment quality) in urban public spaces (typical case: the streets of Tehran). Urban Management Quarterly, (24): 41-47.

- Pakzad, J. (2008). Theoretical and urban design process. Tehran: Department of Housing and Urbanism publication.
- Qodsipour, S. H. (2005). *Farayand- e tahlil- e selseleh maratebi -ye AHP* [Analytical Hierarchy Process AHP]. Tehran: AmirKabir University (Poly Technique).
- Rossi, A. (1984). The Architecture of the City. Cambridge: MIT Press.
- Relph, E. (1976). Place and placelessness. London: Pionnt.
- Rezazadeh, R. (2009). *Principles and Criteria bookkeeping requirements and Regulations urban Image*. Research project conducted at the Studies Center Architecture, Urbanism investigations.
- Bell, S. (2007). *Manzar: olgou, edrak va frayand* [Landscape: pattern, perception and process]. Translated from the English by Aminzadeh, B. Tehran: University of Tehran.
- Spirn, A.V. (2008). *Zaban- e manzar* [The language of landscape]. Translated from the English by Aminzadeh, B & Bahreyni, S.H. Tehran: University of Tehran.
- Sajadzadeh, H. & Pirbabaie, M. (2012). Concepts of urban space in Islamic city. *Journal of Studies On Iranian Islamic City*, 3 (10): 25-34.
- Saaty T. L. (2005). Theory and Applications of the Analytic Network Process: Decision Making with Benefits, Opportunities, Costs, and Risks. Pittsburgh: RWS Publications.
- Tuzkaya, Gulfem, Semih O nut, Umut R. (2008). Tuzkaya and Bahadır Gulsun, an analytic network process approach for locating undesirable facilities: an example from Istanbul, Turkey. *Journal of Environmental Management, ELSEVIR*, (88): 970-983.
- Taylor, N. (2008). Elements urban landscape and Art Urban Design, Translate: Vahid Taqiyari. Journal of Abadi, (53), 86-92.
- Williams, D. R. & Vaske, J. J. (2003). The measurement of place Attachment: validity and generalizability of physical world psychometric approach. *Forest Science*, 49 (6): 830-840.
- Walmsley, D.J. (1990). Urban Living. Harlow UK: Longman Scientific& Technical.
- Yuen, B. (2005). Searching for place identity in Singapore. Habitat International, (29): 197-198.