

Comparative Assessment of People's and Experts' Perception of Urban Space (Case study of urban collection of Emamzadeh Saleh, Tajrish, Tehran)*

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Abstract

The most important issue in urban design thought is consideration of designing process as a short time process rather than a long term and continual process that is entangled with social and political mechanisms. Therefore, designing may fail due to ignoring essential processes that are effective on forming projects. Processes form actions while adding meaning to it. This leads to flexibility and conservativeness in expressing definite solutions. The approaches that change urban design form a passive state of being into an active one, from formal to functional-formal, from being design-oriented into process-oriented and from administrative into participative situation, mostly focus on real quality enhancement. Here, both users' and manufactures' (urban planner and designer) role in considered in perception of urban space. Consideration of place quality perceived by users in an urban space accompanied by place components considered by urban designers demonstrates the social aspect of the space. Citizen's reception of space according to their cultural origin and community norms, embody the users' personal framework in use of space and demonstration of environmental and social behaviors. There are three main factors in the regeneration and reorganization of every urban environment: environment or urban space, users of space, and urban planners and designers of space. Each urban environment should continue its identifying and semantic structure basis throughout time in order to embody time (sense of time) into its place characteristic. What seems obvious in the background identity of urban spaces is the degradation of place from its epistemological foundations and undermining of the perception of different layers of time in space. The current study attempts to examine users' and experts' perception of place quality with an emphasis on their "common existential space". In this regard, urban collection of Emamzadeh Saleh (The enclosed space across Emamzadeh Saleh and market place, between riverside space and Tajrish square) is assessed as a case study. This research specially tries to answer this question: What are the differences and similarities in assessment of perceptive measuring according to people's and urban experts' points of view in the case study (urban collection of Emamzadeh Saleh).

The quantity and quality data are obtained questionnaire that captured people and quality of place in frame of map and graph that is assessed descriptive - imaginative. The results are obtained from the research that indicates suitable measurement level of citizen rather than expert inform of factors that assess. But citizen's measurement in two factors is less than average tend to well. So in assessment the total of one space by the time that first needs of individual don't replied in facing to public space, the individual is unable to acquire higher stages perception of qualities environment. Use of the technique that approximates viewpoints of experts and users space must situate among specialist's agenda of organizing spaces.

Keywords

Perception, People, Urban experts.

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Introduction

Homogenous harmonious cities are mostly resultants of a united society. In these cities, the prominent design principals meet the prevailing culture and social beliefs and they are in agreement with cultural frameworks. As a result, the urban physics of these cities are certainly designed to be accepted by both people and designers (Rezazadeh, 2010:40). Environmental intermediation cannot be completed ignoring perceptual processes and environmental perception of people and their relating mechanisms; because their perception makes the interpretation and explanation of the environment meaningful. Therefore, people's behavior within the environment is embodied out of their perception (Barati & Soleimannejad, 2011: 19).

Urban space is the setting for embodiment of public life and social flow in a context with responsive measures of place quality. The urban public context comprises the maximum number of users with different cultural levels and experiences and different level of perception of place. This urban context should be able to boast its capacities in presenting physical-identifying legibility, its functional performances and a meaningful desirability. Hence, whose opinions should be considered in assessing space desirability: those of the people or those of the experts? Considering the assessment of people's and experts' perception of urban space, this paper tries to answer the following questions. What are the interfering factors in enhancement of spatial perception considering the space-designer-expert interrelations? What are the differences in assessing the perceptual measures of the studied case Imamzadeh Saleh urban complex-according to people and experts?

Therefore, this paper hypothesizes that people and citizen assess the quality of place and place identity differently and people's preferences and experts' viewpoints should be "both" discussed and studied in order to alleviate urban place quality. This ratifies the necessity of involving identifying measures of place, origins of space formation as well as empowering

economic potentials, solving the current problems of space and defining space in a sequence of place continuity and conceptual continuity.

Research framework

One of the most significant aspects that have to be taken into consideration in environment design is the feeling, perception and cognition process which makes the experience of place possible for human beings. The relation of human and environment should be recognized accurately in order to create an apt environment compatible with perceptual-behavioral needs. In other word, cognition of the interrelations of environment form and elements and their influence of different levels of user's sensation and perception is of great importance in environmental design (Barati & Soleimannejad, 2011: 20). The human-environment knowledge that considers this specific approach was emerged after destruction of Pruitt-Igoe urban housings.

Advent of environmental physiology and its relation to perception of space

Environmental psychology as a branch in science of psychology has presented significant achievements in people's environmental perception in urban environments since 1960s. The researches of "Brunswik", "Berlyne", "Lynch", "Altman", "Rapoport" and others have revealed new scopes of the science of environmental psychology (Barati & Soleimannejad, 2011: 20). "Gifford" believes that "Egon Brunswik" and "Kurt Lewin" were the main founders of environmental psychology. Brunswik first used the term "environmental psychology" in 1943 (Barati & Soleimannejad, 2011: 23). Proshansky defines "environmental psychology" as a discipline concerning the people and environment interactions (Mc Andrew, 2008: 1). This science is also known as "human-environment relation", "environmental sociology" and "human ecology" (Motalebi, 2001: 55). Gustav Theodor Fechner studied the relation of physical stimulus and psychological

perception by using the term Psychophysical.

Brunswik admits that people have an active role in organization of their perception from environment. This pattern shows that we are trying to give meaning to our sensory information based on our previous experiments in the environment in order to embody a valuable resultant from the real situation of the environment (Mc Andrew, 2008: 3). He believes that organisms and environment are influential in the perception process in his theory of Probabilistic Functionalism. The environment has different stimulus and the observer should interpret the most important of them for demonstration of the appropriate behavior. Berlyne in his theory of arousal fluctuation explains that perception and cognition processes are discrete and described through stimuli such as novelty, complexity, surprisingness and incongruity. Lynch also believes that recognition and organization of wide spaces and navigation depend on the level of legibility and readability of the space (Barati & Soleimannejad, 2011: 28).

• **Basic concepts in environmental psychology**

In environmental psychology, sense and perception are described as sensory perception based on the findings of empirical science, especially physiology and experimental psychology (Barati & Soleimannejad, 2011: 21). Thomas Hobbes, the renowned philosopher, has noted in 1651 that: "no concept is formed in the human mind unless all or parts of it are shaped through sensory organs." Protogoras, the Greek philosopher in 450 B.C., believed that: "Human is a complex collection of senses." (Panahi Shahri, 2004: 2). Feeling is the transmission of stimulus influence of sensory receptors in the central nervous system can be followed objectively (Irvani & Khodapanahi, 1992: 23). There are four major senses in feeling the environment: vision, hearing, smell and touch. These senses are attributed to aesthetic senses by the German philosopher Immanuel Kant. The human senses are rarely used individually. However, some senses are stronger or more important than the others under special

circumstances (Bell, 2007: 58-59). Bentley believes that: "If the environmental conditions are stayed stable, people can only have different sensory experiences in two ways; first, focusing on different sources of sensory experiences that are suitable to various opportunities and second, shifting or moving from one source to another source." The senses can vary in a wide range of choice, from a purely peremptory mode selector to a selective mode (Bently, et al, 2003: 266).

The nervous system instills cognition and perception after analyzing and interpreting the stimulants (Irvani & Khodapanahi, 1992: 18). Perception is not the same as feeling, but rather the result of clearing the process by the user through his cognitive experience. Ittelson describes that every individual is a part of perception system, because we are nothing rather than long-term cognitive memory (Barati & Soleimannejad, 2011: 23). Cognition is another concept in psychology which is closely related to perception. However, perception and cognition are not distinguished by clear boundaries. Cognition comprises acquisition, storage, retrieval, processing and use of knowledge and information. Once you understand a specific music and the first notes of the national anthem, you know you have to rise; this means you have entered the cognition phase. It is not exactly clear where the perception of a place is followed by cognition (Panahi Shahri, 2004: 5).

Perception theories, with an emphasis on the importance of human perception, establish a bond between the subjective image formation process and factors influencing this image and the expected qualities in the environment (beauty, legibility, vitality, meaning, memorability, and ...). They are more affiliated with Gestalt concepts. Perceptual theory considers the pedestrians movement in urban spaces based on the vision in order to form a mental model of the surrounding world (Tabibian & Sholeh, 2010: 2). regarding the movement concept, environmental vision and navigation in space, the model of "arranging visual structure of

the environment” is resulted from combination of mutual vision and space composition –that is related to environmental composition- models. It is user oriented model based on visual perception and vision. In this model, the new term “Isovist” was introduced that is an idea for assessment of perception analysis of a place (Tabibian & Sholeh, 2010: 7).

Research background

The realization of perceptual urban design pattern leads into formation of city images that can be referred as “contextual /perceptual urban landscape” (Golkar, 2011: 178). Perceptual structure includes a collection of visual elements and the viewer’s mental image of the urban environment and its qualitative elements, understanding of physical, place and time legibility and recognition of identifying elements (Zekavat, 2000: 11). The perceptual structure of the citizens can be clearly detected in the investigation done by Kevin Lynch and Appleyard. Lynch explored the subjective images of American citizens in Boston, Los Angeles and Jersey City. As he concluded the people’s subjective images were results of two factors: personal memories, relationships, experience and expectations (perceptual collection of man and landscape relation) as well as three-dimensional understanding of landscape (Pakzad, 2010: 167-168). Appleyard collaboration with Lynch and John Mayer led to a research in urban scale that was published in 1963 as “the view from the road” (Bahraini, 2008: 10, 13). Their methods emphasized on visual-perceptual factors of the environment in relation with vehicle movement (Pakzad, 2010: 157). In order to understand people’s idea about the environment, visual impressions, the research of Lynch and Appleyard was consisted of two parts: first, the identity of visible environment (existing elements), second, the environmental values perceived by the addressees (what was perceived). The results showed that achieving environmental values perceived by citizens is as important as the perceived existing

quality (Zekavat, 2006: 28-29). Lynch researches highlights the conceptual elements of the perceptual urban landscape elements by defining path, edges, nodes, landmarks and districts. Although he did not mention the people and citizens’ (with different intellectual backgrounds) perceptual difference in his studies, Appleyard referred to different views of these two groups partially.

Appleyard believes that involving different groups in design process makes the totalitarian urban design distinct from pluralist urban design. In pluralist urban design, the experts have their rightful position despite the centrality of the role of people in urban design (Pakzad, 2010: 176-177). Appleyard considered the difference between perceptions and product as a serious matter for experts. He believes that one of the reasons for the differences between people’s and experts’ attitudes is their way of considering the city. The designers look at the site vertically to visualize their maps, while local residents imagine the environment as a site where they stroll in as a pedestrian (Ibid: 162-165). However, the different constitutive aspects of urban design in assessment of place quality and its recreation to achieve desirability are ignored. Therefore, establishing qualitative meaningful-perceptual norms and measures will be pursued in this study. Comparative study of measures and norms between citizens and experts can lead to realization of differences in understanding of place quality. So, what are the components involved in the promotion of spatial perception? Whose viewpoint has to be considered in enhancing place quality, the people’s or the experts’? In order to answer the research questions, it is hypothesized that people’s and experts’ preferences have to be “both” studied and discussed in enhancement of urban place quality.

Case study

• Research methodology

The current study has a theoretical-applicable entity. Considering the studied case which is an urban area with and urban function, this research is assessed in

the urban scale. The research approach of this study is “survey” research methodology as well as “case study” and “content analysis”. Survey research method describes the attitudes and behavior of

a population based on a random selected sample which represents the community in order to answer a series of questions that are carefully prepared for the group members (Barati, et al, 2012: 98);(Fig. 1).

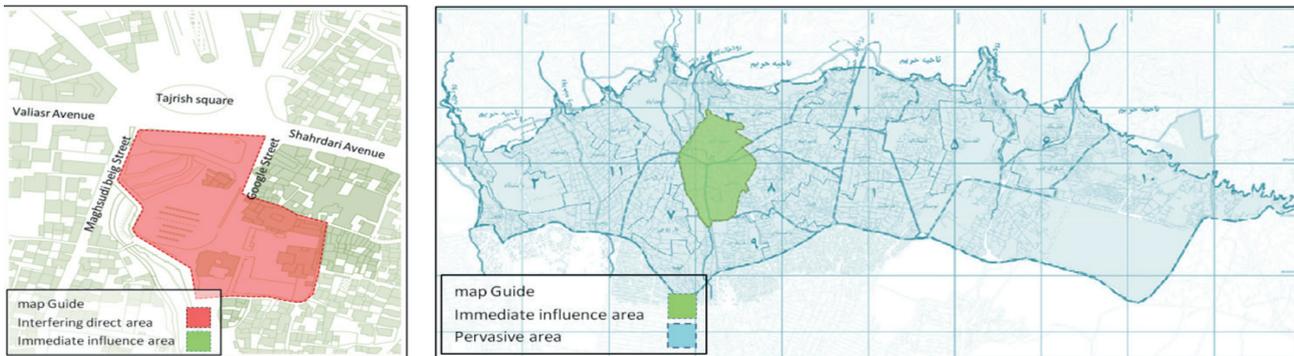


Fig. 1. Range of Pervasive area, Immediate influence area, Interfering direct area. Source: authors, 2015.

• The studied population

The defined population of this study is consisted of addressees, experts and creators of urban areas with different levels of familiarity with the issue. Considering the multifunctional role of the studied case including religious, economic, recreational and transportation functions, a wide range of business clients and pedestrians contribute to this population. Regarding the residential fabric, residents also contribute to the third group of people in this population. urban arena experts are considered as another group of this population. This group includes all people that are directly involved in decision making, policy making, design and implementation of architectural and urban projects (policy makers, urban planners, urban designers, architects, psychologists, sociologists and etc.). In other words, Appleyard believes that this includes “people, organizations or groups whose administrative, financial or political authority is influential in success or failure of the project despite not being directly profiting from the projects.” (Pakzad, 2010: 178); (Diagram 1).

• Data and information collecting method

The data was generally collected through library studies and specifically by in-depth case study as well as organized field researches supported by questionnaire. In order to prepare the questionnaire, the environment quality indicators, considering the

professionals and practical urban design projects, was collected through researches in hardcopies. Having coded the indicators, they were categorized into functional (function, access and activity), physical, perceptual and semantic categories. Definition of indicators associated with each of the four aspects led into establishment of urban design measures and eventually establishment of measures of semantic and perceptual aspects in this study. These measures were organized as qualitative measures of urban design in Bogardus distant scale. However, measures were simplified for ease in understanding the meaning and improving respondents’ perception and they were scored from 1 as inappropriate to 6 as appropriate in order to reread and assess the addresses’ mental images (Table 1).

In completing the questionnaire, a number of 170 citizens and experts were selected by using random sampling in assessing the case and evaluating their mental images.

• Pre-test and research validity

In the pilot stage, the questionnaire was filled by a group of 35 citizens and experts (including practitioners of urban development field located in District 1 in Qods Sq. and urban planning and urban design graduates and professors).

The reliability of the questionnaire in Bogardus scale was determined in Cronbach’s alpha test

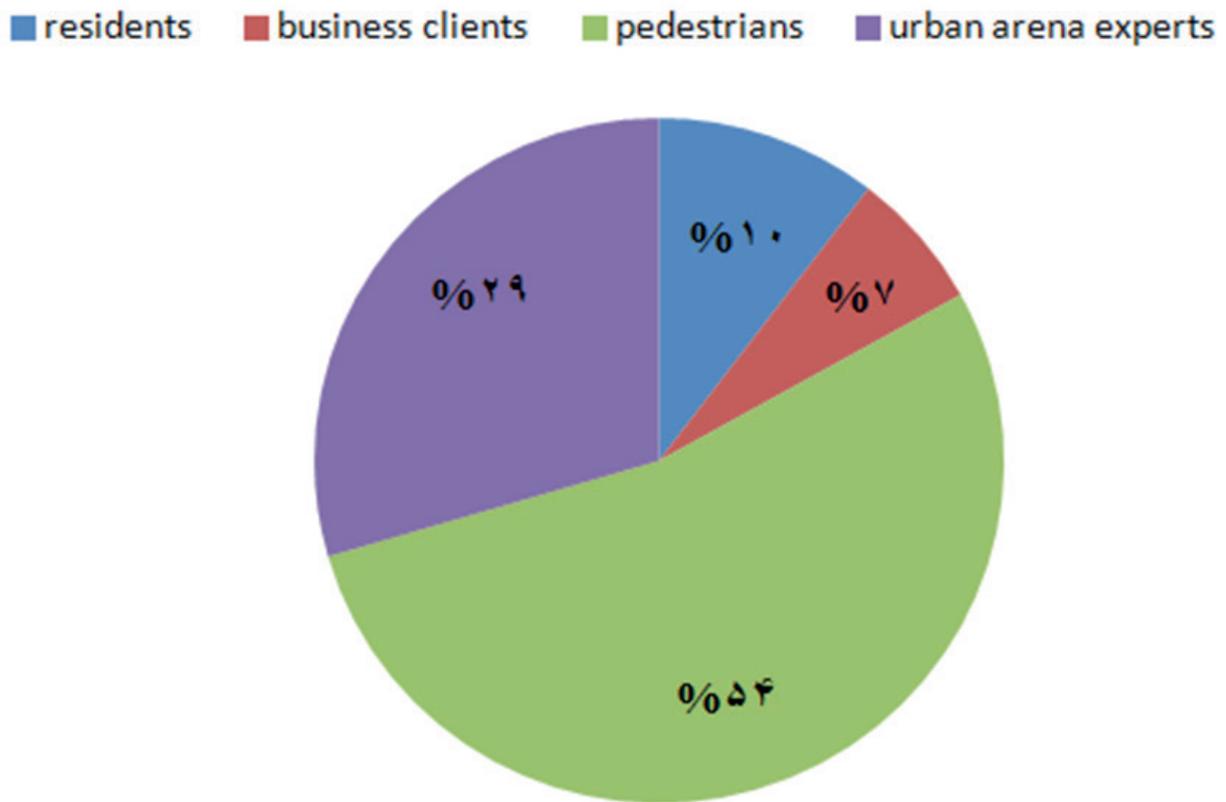


Diagram1. Comparison of respondents to questionnaire in citizen and urban arena experts. Source: authors,

which defines the validity of research results at the same time and place. Cronbach’s alpha coefficient varies between 0 and 1. If the assessment is scored higher than 0.7, the questionnaire’s reliability will be admitted. Firstly, an overall alpha for all 28 questions in the 35 tested samples and then for each of qualitative norms in perceptual semantic aspects were calculated. The Cronbach’s alpha value calculated for the sample of 35 individuals was equal to 0.92 which indicates a high level of reliability. Therefore, description and examination of the variable relations is valid (Table 2).

Norms that were evaluated less 0.6 are invalid and had to be removed out of the model. Cronbach’s alpha values for the “view and landscape” norm are introduced by “visual corridors and viewpoint” and “control of high-rise buildings” measures. Invalid Cronbach’s alpha value in the “view and landscape” norm can be affiliated with Maslow’s

hierarchy in the necessity of responding and average satisfaction of the physical-functional and mental needs primarily that are followed by responding to space aesthetic needs. A person is unable to perceive higher level of environmental qualities unless the fundamental needs are met in the public level.

Exploration into the responses obtained on the basis of the respondents’ familiarity with the study can detect the causes. In the next stage, qualitative perceptual and semantic norms and measures of place reveals the subjective images of citizens and experts and will be analyzed by their differences.

Research findings

• Perception on the level of familiarity with place

Schulz presents the term “existential space” based on Heidegger’s philosophy –existence and being- that is definable by perceptual aspects of

Table 1. Measures and Qualitative norms in Perceptual and Semantic aspect of urban design. Source: authors, 2015.

	Perceptual and semantic qualitative norms of urban spaces	Measures of qualitative norms of semantic-perceptual aspects of environmental responsiveness
Perceptual aspect	Visual perception	Including visual proportion, visual pleasance, visual periodicity, decoration, art.
	Mental interaction with environment	Including openness, human scale, space enclosure, instilling motivation by creation of contradictory urban forms, safety, pedestrian oriented design, and an environment for all.
	order	Including consistency, unity, continuity (of edges), balance, compatibility, harmony and coordination.
	Quality of view and landscape	Including the quality of visual corridors, visual permeability, viewpoints, controlling axis and perspectives.
Semantic aspect	reading	Environment readability, legibility, clarity, symbols and signs.
	Semantic relation	Flexibility, vitality and excitement, sense of affiliation, sensory richness, place personification.
	identity	Including historical conservation and urban restoration, forming of centers, characters, authenticity and meaning, identity, stability, decoration, art, sense of place.

Table 2. Calculated Cronbach's alpha in assess reliability Perceptual and Semantic norms. Source: authors, 2015.

Perceptual and Semantic norms	Visual perception	Mental interaction with environment	order	Quality of view and landscape	reading	Semantic relation	identity
<u>Cronbach's alpha</u>	0.842	0.688	0.855	0.344	0.885	0.807	0.843

man and environment relation (Pakzad, 2010: 104). He considers two forms of existential space for human. First, "private existential space" which is human contemplation of space connections and is of his own, it is shaped by the mental evolution and stimulated by human and environment interaction; Second, "public existential space" which are the space aspects commonly shaped in minds of all citizens (Ibid: 106-107). Appleyard also considered factors such as age, gender, educational level and person's familiarity with the environment effective in different formation of mental images. Different people will experience different patterns when looking at a landscape based on their previous knowledge, culture and experience. Despite of the passive imaging of landscape, the latter strengthens the theory that defines perception as a conscious, selective and active issue. The more the involvement of observers in landscape, the greater the degree of conscious perception and active visual thinking will be. Conscious perception is a refinement that determines what is worth looking and thinking in a complex landscape (Bell, 2007: 75). Our perception and feeling of space has a place in our minds that evokes us and makes of familiar with the place when confronted with a real place (Kakavand, et al, 2013: 102). Different levels of familiarity with place are:

Deep familiarity with place: This can occur when a person is present in the place and unconsciously experiences it. In this case, the person and place are merged into one.

Normal familiarity with place: This is occurred due to unconscious experience of place rather than a personal experience. It is a communal and cultural experience and includes deep and thoughtless involvement in symbols of a place. This participation especially occurs in holy and familiar places.

Minor familiarity with place: This level is the experience of sensitive and unfamiliar person who wants to understand what are the form and meanings of place to its residents. The sense of place is consciously felt in this level and the person tries to participate in the meaning of place without adoption

of social agreements (Ansari, et al, 2009: 75-76). Therefore, the level of familiarity is influential in qualitative assessment of place. The occurrence of spatial activity will lead to changes in level of subjective understanding of strength points and weak points of the space. In this way, the success in responsiveness to addresses needs is enhanced and will lead to mental-comparative analogy of "place performance" in the present situation and different local expectations (Table 3);(Diagram 2). In the level of unfamiliarity with the space in this study, expectations of individuals in confrontation with space remains in level of general expectation from an urban space and are limited to the functional dynamics, social vitality and identity of a place in evaluation of a place. At lower level of familiarity with place with annual and monthly site visits, space aspects are majorly understood and recognized and connection to the underlying space layers is impossible. Success in recognizing the aspects of the studied case requires scrutiny of different space layers in finding historical elements of the context, active movement in the complex and active visual communication with space forming walls. This can underlie recognition and analysis of façade formation and proportion, observation of harmonious elements, ability to draw attention to a particular element or location, encouragement of an element to move in space, compatibility of current activities in space with the entity of the complex, existence of favorable landscapes, existence of guiding elements and signs, access to a rich sensory experiences, possibility of creativity in social relations, holding of ceremonies and formation of people's activity center, existence of symbols and signs of national and religious identity in the shape and appearance of the complex and possibility of formation of functions other than the existing function...

extent to which his perception matches the final and true meaning of the space. Although different people with different beliefs and cultures receive a spiritual meaning from a religious place or a temple, their reception quality differ in degree

Table3. Comparison of Perceptual and Semantic qualitative norms of urban space according to levels of respondent's acquaintance with studied limited area. Source: authors, 2015.

levels of acquaintance	Visual perception	Mental interaction with environment	order	Quality of view and landscape	reading	Semantic relation	identity
Without acquaintance	3.67	3.80	3.50	3.75	4.00	3.50	4.00
Minor (little)	3.20	3.63	3.40	3.18	3.38	3.40	3.48
Normal (medium)	3.14	3.74	3.62	3.27	3.80	3.52	3.85
Deep (high)	2.91	3.66	3.44	3.36	3.74	3.59	3.98

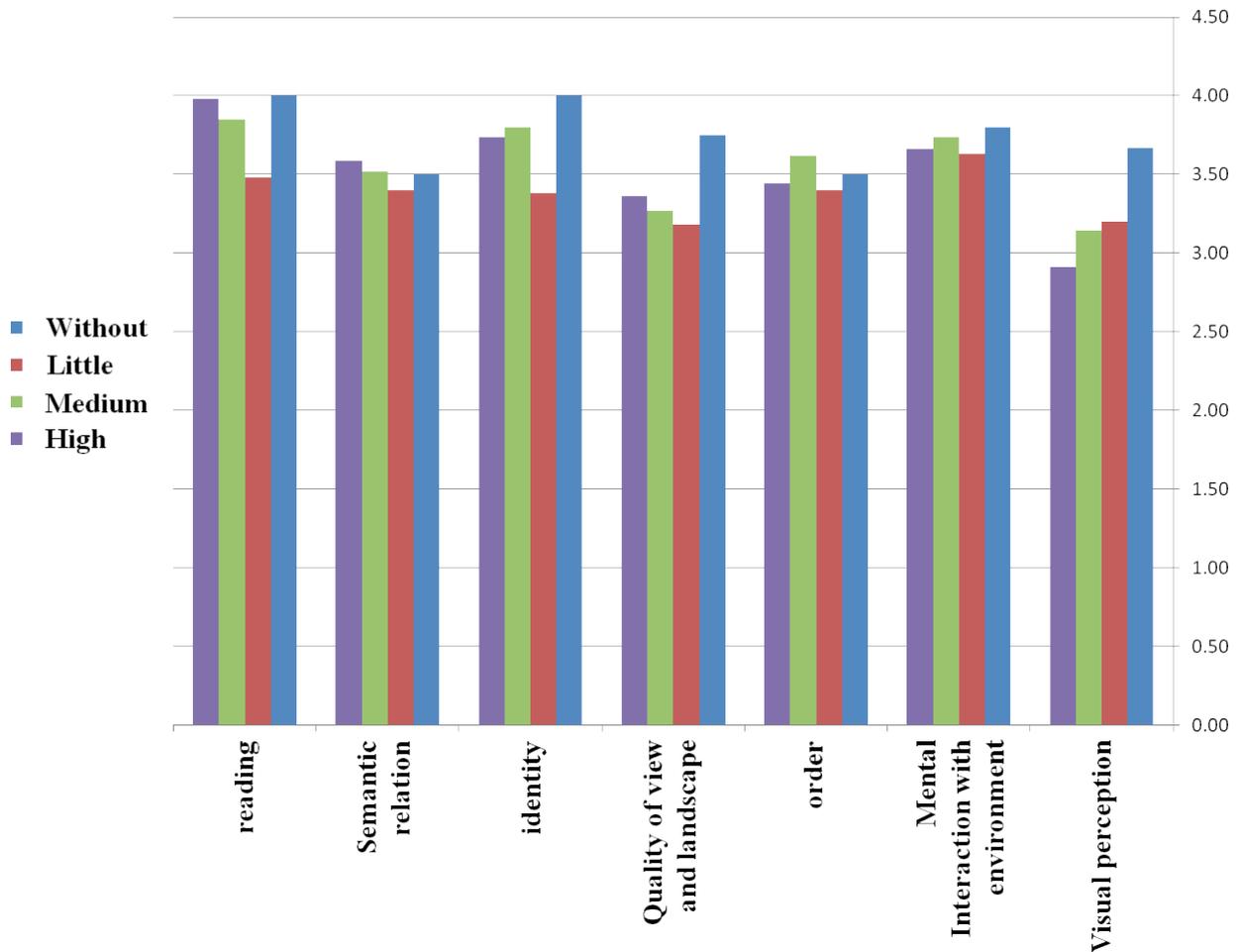


Diagram 2. Comparison of Perceptual and Semantic qualitative norms of urban space according to levels of respondent's acquaintance with studied limited area. Source: authors, 2015.

(Naghizadeh & Aminzadeh, 2003: 111). he experience of presence in place, regardless of human perceptions and feeling, is different from the meaning of place, while being detached to it. Experience of being in a space, depends on the following: A- Intensity and power of meaning that can be instilled in humans (design or creator power in embodiment of his ideas); B- The addressee’s familiarity with the underlying beliefs and theoretical

foundations – a human as the user of space can perceive the place meaning as far as his thinking system is in accordance with the space creator (Ibid: 116); C- the addressee’s psychological condition; D- person’s ideology; E- moving stimulant (Ibid: 112); (Table 4);(Diagram 3,4).

Quantitative analogy of perceptual and semantic measures of evaluated area according to viewpoint of citizens and urban experts reveal their differences.

Table4. Frequency and comparative frequency distribution of measures in aspect of Perceptual and Semantic norms by differentiation citizen and experts. Source: authors, 2015.

		Perceptual aspect				Semantic aspect		
		Visual perception	Mental interaction with environment	order	Quality of view and landscape	reading	Semantic relation	identity
Citizen	Frequency	326	385	544	335	389	345	385
	comparative frequency	3.23	3.85	3.59	3.32	3.85	3.41	3.81
Experts	Frequency	148	184	181	172	186	196	207
	comparative frequency	2.75	3.41	3.36	3.19	3.44	3.64	3.83

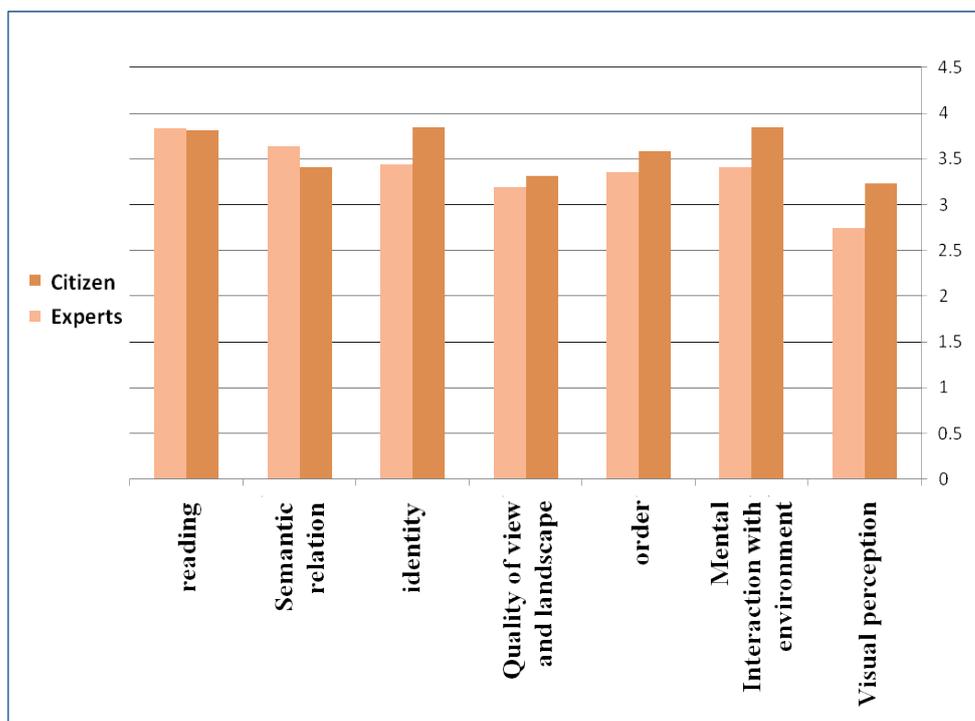


Diagram3. Comparative analogy qualitative norms in aspect of Perceptual and Semantic from viewpoint of citizen and urban arena experts. Source: authors, 2015.

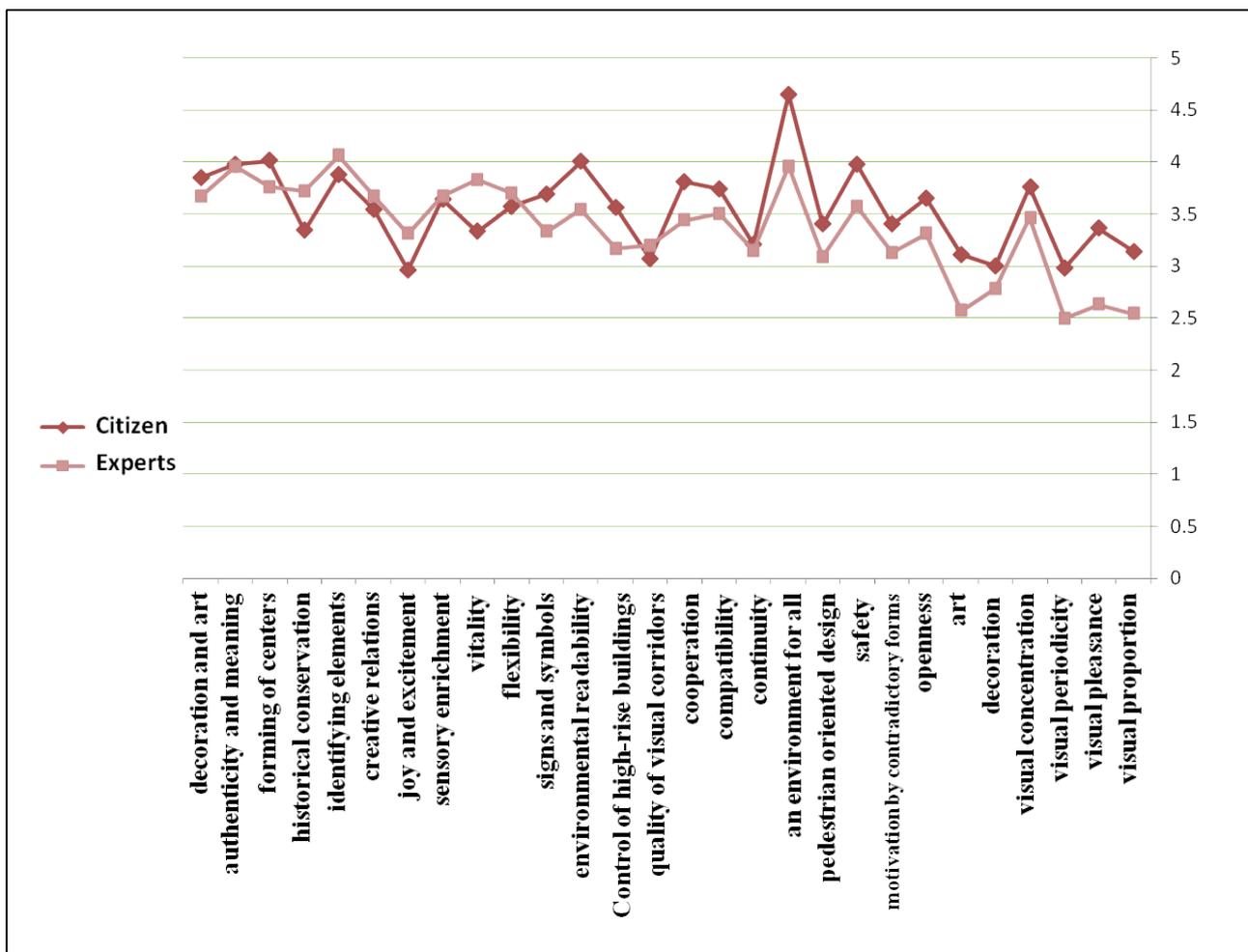


Diagram4. Quantitative analogy of Perceptual and Semantic measures of evaluated area according to viewpoint of citizen and urban experts. Source: authors, 2015.

The average of assessment point is in a range of 3-4 for citizens and 2.5-4 for experts. The measures of quantitative norms including “visual perception”, “mental interaction with nature”, “order” and “reading” are assessed lower by the experts; however, the qualitative norm of “communication meaning” is assessed higher by the experts. Comparing the qualitative norms of the two groups requires case comparison of the measures. This could be due to the different assessing criteria for citizens and professionals. For example, assessment of “visual proportions” measures in the study area is defined by experts in the field of urban studies. Bentley believes that people interpretation of a place creates visual relations that could empower the responsiveness in three levels: legibility

in form and function, diversity, flexibility in small and large scale (Bentley, et al, 2003: 227). He considers: vertical and horizontal rhythms, sky lines, details of walls, windows, doors, and parts of the ground in defining façade proportions (Bentley, et al, 2003: 241-242). However, these measures are referred as visual pleasance by citizens. Lang believes that environmental design experts are influenced by visual aspects and consider the city as work of art rather a place for life of people. Hubbard also agrees with this thought and says: “design and education provide specific view for the experts. They pay more attention to the measurable aspects of the environment quality rather than perceptual aspects. The difference between designers and non-designers lies in their way of thinking about

the environment...” (Carmona, et al, 2009: 532). It cannot be expected that the favorable environment in terms of urbanism and architecture be interpreted the same by the community; because humans relate to their previous knowledge and experience to interpret environmental data (Barati, 2010: 34).

Certainly, assessing adaptation of space quality and mental image is conducted by urban experts through criteria and principals provided by scholars. The experts’ understanding of public area principals and its comparison with the research location reveals the inordinate difference between desired and actual situation. The failure of the urban space responsiveness to aesthetic and visual qualities and mere expression of its functional role indicates the inefficiency of space in forming of various communities and shaping human events. Nevertheless, they might respect environmental identifying elements and provide proper context with historical functional fabric and its position in the general plans. Perhaps another reason of it can be found in the first question of the questionnaire: “Which aspect of the case study is more important?” Domination of functional aspects and access according to people’s opinion showed that other aspects are unable to get a position in mental images of the addressees. Visual, movement and spatial disturbance in parts of the case study prevents the accentuation of physical and environmental aspects in mental images of the addressees.

• Assessment of place measure according to respondents

During reading an environment, it is revealed that a single environment has different meaning to different people and the way these meanings changed is described. Therefore, it can be interpreted that social meanings of the environment is related to people and users of the space. Imagination and mental background of designers and builders will be effective in formation of social meanings in the minds of the future users of the space (Carmona, et al, 2009: 182).

Paul Knox and Steven Pinch have distinguished

between two messages: the message “expected” to be understood and sent by architects, planners and environmental builders, and the message received by people and users. Barthes believes that people create a new text in their minds during reading a text (Ibid). Space and society are explicitly linked. Understanding the space disregarding of its social context or understanding of society ignoring the spatial condition is very difficult. This relationship is a mutual process in which people create and alter spaces, while being affected by space in different ways (Ibid: 211). Successful public spaces are characterized by the people so that such places are reinforced from the inside (Ibid). In the other hand, the imaginable environment and favorable environments have to be distinguished from favorable environment of people (Diagram5).

In the table for assessment of qualitative norms of semantic-perceptual aspects according to respondents, the measures vary in a range of 3-4.5. Here, 3 equals “medium to bad”, 4 equals “medium to good and 5 equals “good” condition. So, respondents assess the measures in a range from “medium to bad” to “good” condition. Space assessment in the studied case is set to medium point and does not confirm the total condition of the studied case in responding the local and spatial expectations. Maybe the reason could be found in Maslow’s hierarchy of needs. Maslow presents a model of human needs and motivations according to which the semantic and aesthetic needs of human will not be met unless the fundamental needs are provided (Motalebi, 2001: 61). Maslow used the terms “physiological”, “safety”, “belongingness” and “love”, “esteem”, “self-actualization”, and “self-transcendence” to describe the pattern that human motivations generally move through. The needs that are placed at the bottom of this hierarchy pyramid should be met prior to those placed on top of the pyramid. Satisfying the needs of the higher ranks require a better external condition than satisfying those of the lower ranks. Maslow describes a decline in satisfaction level as we rise to the higher ranks in the hierarchy (Pakzad, 2009: 33).

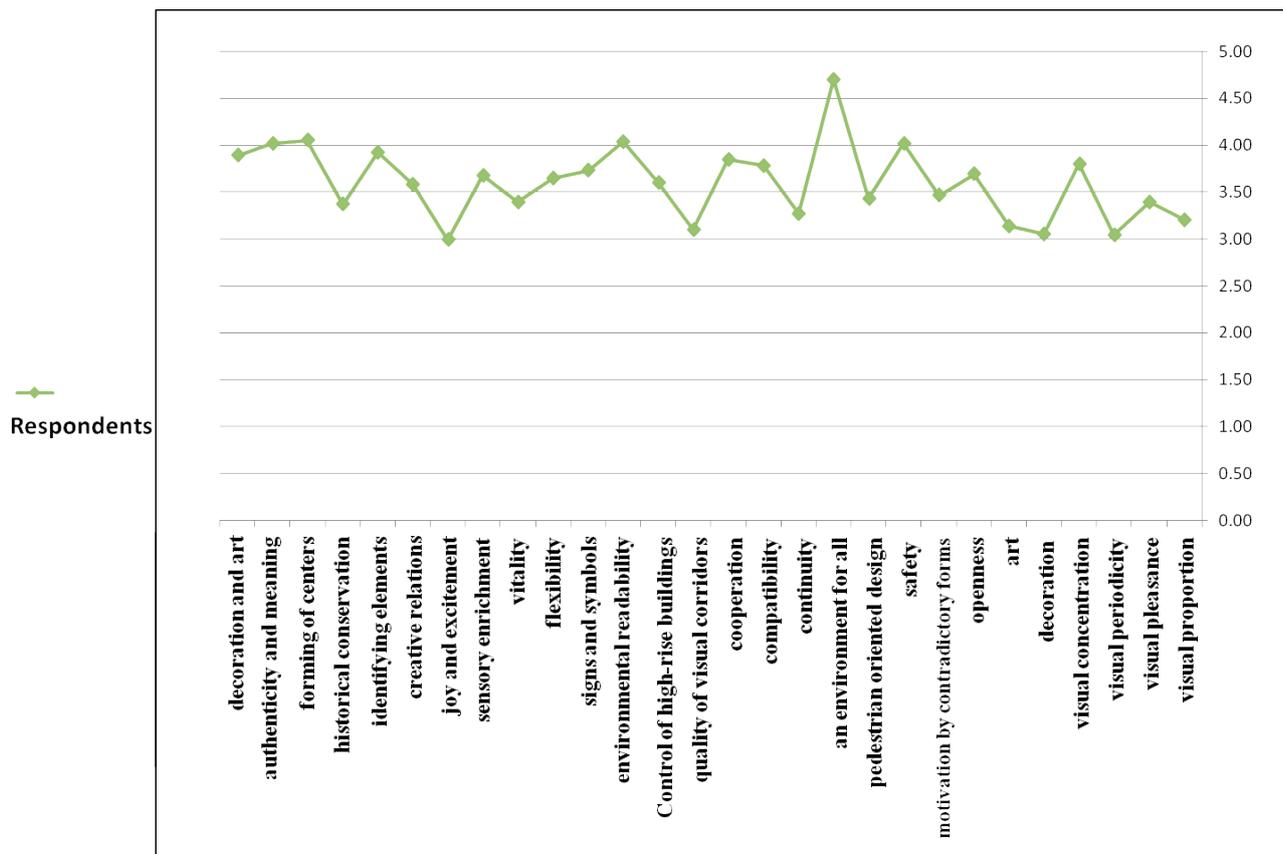


Diagram5. Perceptual and Semantic measures of evaluated area according to viewpoint of respondents. Source: authors, 2015.

Therefore, as long as the fundamental needs are not met in the public space, one is not able to perceive higher levels of environmental qualities.

Rafieyan indicates that “no environment is substantive, environment is mentally structured”. According to this hypothesis, the environment should be analyzed from top to bottom. From the top, the politics, monetary and powers systems are concerned where scientific researches provide an objective perception to build a space (by urban design experts). From the bottom, the daily life is concerned where “human behavior in and during using the urban space (by citizen) offer a meaning to space.

Discussion

Appleyard and Lynch emphasize on the necessity of reading citizens perception of their environment and studying of their behavior in compatibility of space design and behavioral-cultural structures in a “participatory design” framework. Appleyard sought

to inform the public and professionals about their differences in perceiving the city by the way they look at the city. This research steps even further and discusses background studies in form of sketches to read pedestrian perception in Lynch research and vehicle riders in “the view from the road” by Appleyard, Lynch and Mayer. It investigates citizens’ and experts’ perception and their differences in form of “visual perception”, “mental interaction with the environment”, “order” and “view and landscape quality” norms considering perceptual aspects. In addition, it studies the intertwined perception aspects and environment meaningfulness aspects by scrutinizing “reading”, “communication meaning” and “identity” semantically and tries to discuss the measures of each norm.

Vischer suggests that the research model be transformed by changing the role of space users from inactive people to active people who are agents of environment change. According to studies

conducted in the field of environmental quality and its theoretical approaches, creating a place where people feel tranquil requires the environment quality to be assessed by both users and builders as a selective approach in a “conceptual model” framework of assessing the quality of place perception.

The findings indicate that besides the measures obtained through the theoretical basis whose influences are observed in this study, the period of time for people interaction with the environment is dominant in perception of space, its entity and extent. The study revealed that despite the public and experts agreement on some issues, there are still some differences in issues such as “vitality” and people’s and experts’ expectations about the studied

case. Regarding our particular situation in Iran, an agreement on urban space qualities is not expected unless having a public informing network. If the current situation does not progress, the people may be discontent. Certainly, conscious involvement and interaction merged with public knowledge of people from urban spaces can lead to space enrichment, space perception enrichment and progression of people knowledge; since man is a part of space. Moreover, common public perception can result in formation, continuation and extending of the collective memories of the environment and eventually instill a sense of public belonging to the environment and society and development of identity as well.

Conclusion

Having assessed the urban space perception, the indicators involved in spatial perception was presented through measure organization method – that was described in detail in this paper. These findings answer the research questions and are categorized and evaluated in Table 1. Considering the perceptual aspects, these measures are categorized into qualitative perceptual norms including “visual perception”, “mental interaction with the environment”, “order” and “view and landscape quality”. As for semantic aspects of urban spaces, these measures are categorized into qualitative norms of “reading”, “communication meaningfulness” and “identity”. Regarding the differences of attitudes and priorities between citizens and urban builders, it is concluded that experts have global experiences, while people have local experiences. Therefore, both groups should be taken into consideration in order to create meaningful places that meet their needs. In this context, measures concerning qualitative norms of semantic and perceptual aspects of place were assessed by experts and people through a questionnaire. It has to be mentioned that the measures concerning qualitative norms of semantic-perceptual aspects of urban space design were achieved by division of obtained indicators into 5 functional/ perceptual/ semantic/ and environmental aspects. Thereupon, these indicators were redefined in the framework of perceptual-semantic norms with self-defined titles.

The questionnaire results were presented by reviewing of existential public space of the respondents in form of research findings, analysis, tables and graphs. The results indicate that citizens’ assessment of the studied area was more appropriate than experts’ assessment. The hints given by them indicate the priority of inner-spatial space quality to physical. Hence, “visual perception”, “mental interaction with the environment”, “order”, “reading” and “identity” norms are prioritized by people. In general assessment of norms, they assess the research territory in the lower than average level while experts believe that physical proportion is more important and prior.

As for “communicative meaningfulness” measures that refers to flexibility, vitality, sensory richness, excitement, and creative relations, the citizens assessed the situation in a lower quality level than the experts. This means that this space is unable to provide potentials for social behaviors expected by the users. Therefore,

functional-social aspects of space were more important to citizens in assessing the space quality while experts were more focused on quantitative and physical measures. The intersection of environmental quality based on citizens' opinions and qualitative norms in promoting urban space considered by city planners can provide a responsive place for use of a miscellaneous group of people and space designers. Therefore, adopting a way in which people and experts opinions are acceded should be programmed in urban space organization agenda.

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