Evaluation of Place Quality in a Traditional Neighborhood, the case study; Hasirforoushan Neighborhood, Babol, Iran

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Abstract— Urban design has been defined as the collaborative and interdisciplinary process of shaping the physical setting for life in cities, towns, and villages, in which paying attention to the residents' opinions is one of the most important factors. According to this definition, a new technique should be adopted for assessment of quality of a place to prepare materials required for essential modifications to be made in the next stages by residents' participation. Therefore, the main question is, "What are the characteristics of space and environment in an example place in order to attracting residents?"

Since the sense of belonging is a criterion for high quality environments, the required measures for promotion and improvement of spaces can be through identified quality assessment of environment and identification of important factors in neighborhoods. These measures result in residents' fixation. Therefore. the Hasirforoushan Neighborhood of city of Babol. province of Mazandaran was selected as research sample.

In this study, field methods were used for data collection. The research instruments included Robert Kwan's place-assessment checklist and questionnaire. In this regard, 25 subjects were selected from the residents and passers-by.

Finally, space quality assessment was done in Hasirforoushan Neighborhood to identify the attachment to different areas of it. Then, the quality declining factors were codified on the basis of these findings and some recommendations were proposed to improve environmental quality and residents' sense of belonging to the given environment.

Keywords; Quality of environment; Sense of belonging; Participation; Hasirforoushan Neighborhood

I. INTRODUCTION

City is like a container holding residents with different needs, interests, and relationships. In the past few decades, many neighborhoods in Iran, especially the old ones in downtowns, suffered from social damages and environmental deterioration, and were forgotten by construction of new and modern buildings, neighborhoods, and towns. Indeed, the lack of attention to these neighborhoods has faded the values and tendency towards staying in the neighborhood and maintaining it in the residents. In addition, the bilateral resident-neighborhood relationship that forms the sense of belonging and interaction in residents is going to be forgotten. As a result, paying attention to these neighborhoods for maintaining the sense of belonging in residents and hearing their voice to encourage them to revitalize such neighborhood seems essential.

Place-oriented studies related to the sense of place and belonging to it, have played an important role in deepening the knowledge of human-environment relationships. Theoretical attempts in extending the concept of "place" are insofar as the meaning of being a human is equated to living in a world full of places [1] .Several attempts, pioneered by such thinkers as Lynch (1960) and Jacobs(1961), have been made in explaining the qualitative principles and components of urban design, and then have extended by Norberg Schulz (1976), Edward Rolfe (1976), Donald Appleyard and Alen Jacobs (1987). According to Lynch, places are unique insofar as their characteristics have given them identity and distinguished them from each other. Jacobs emphasizes the importance of streets as specific spaces capable of containing vital activities [3]. People's participation in urban decision-making is one of the main foundations of democracy, and their increased participation in urban affairs can play a valuable role in striking urban balance [17].

This article uses a place-oriented view to investigate the quality of Hasirforoushan Neighborhood of city of Babol of province of Mazandaranand evaluate the residents' sense of belonging to it. To this end, the influence and the amount of importance of constituents of the place were investigated, using interview and questionnaire. In this regard, qualitative criteria and components were first recognized and then the environmental quality was measured on the basis of criteria defined for the place. To achieve this, the Hasirforoushan Neighborhood of city of Babol of Mazandaranwas studied province of as the investigation scope.

The research questions are as follows:

- 1. What are the main reasons for losing the quality of Hasirforoushan Neighborhood?
- 2. What are the main reasons for losing the sense of belonging to Hasirforoushan Neighborhood?
- 3. What are the factors strengthening the sense of belonging to Hasirforoushan Neighborhood?
- II. THE PURPOSE OF STUDY

The main objective of this study is to investigate the quality of Hasirforoushan Neighborhood according to its residents. It also seeks to categorize the factors that decline or heighten the sense of belonging and interaction in residents to their neighborhood.

III. THE HYPOTHESIS OF STUDY

It seems that the identification of constituting components and elements of place can contribute to the discovery of main criteria for quality assessment of a place and the effect of people's participation and interaction. The discovered criteria can then be used for the assessment of the neighborhood.

IV. THE METHOD OF STUDY

This is an applied study in terms of objective and an qualitative study in terms of the nature of data and is done in descriptive-analytical way. Its theoretical framework was developed using bibliographic method through note-taking, texts comprehension, and data analysis. In this regard, the qualitative elements, which affect the formation of a physical setting according to experts, were gathered and analyzed. In addition, field techniques (observation, interview, and questionnaire) were used in the investigated area through the analysis and comparison of existing theories to assess the quality of place and the residents' sense of belonging to Hasirforoushan Neighborhood. In this regard. Robert Kwan's urban space quality assessment inventory was employed and distributed among 40 male and female subjects aged more than 20. Finally, 25 completed questionnaires were obtained from the mentioned groups containing passers-by, businesspeople, and/or property owners in Hasirforoushan Neighborhood. Among interview limitations was the lack of cooperation from interviewees. Therefore, the interview method and time were modified and it was carried out by a specific interviewer to ensure the accuracy of research, which was threatened by interviewees' boredom.

V. THE HISTORY OF STUDY

Many attempts have been made for explaining the qualitative principles and components of urban design. Such these attempts are Buchanan in 1988 and Tibbalds in 1988 and in recent decades the study which is done by Commission for Architecture and the Built Environment (CABE) with Departmentfor Transport in England (DETR) in 2000 is mentioned [3].

Among these studies are Setha Low's placeattachment research [1] which mainly looked at the sense of belonging from the cultural perspective and represented the quality of assigning symbolic meanings (social, political, historical, emotional, and even economic) to a physical setting. The qualitative method of this research led to the introduction of a sixfold mean for symbolic people-place ties. These relationships are manifested in genealogical bonding, linkage through loss of land, economic ties, cosmological bonding, linkage through religion, and finally narrative ties. Each of these connections leads to the creation of a sense of belonging to place through making a symbolic tie with the environment. Brocato also performed a study in an attempt to develop an analytical model to assess the effects of public perception of physical design factors, environmental factors, employees' conditions, quality of service provision, and satisfaction on different dimensions of the sense of belonging to the place in service-provision environments [4].

The Canter's model (1977) combines those urban perspectives that emphasize on mental plans and relevant imaginations that comprehend the characteristics of a physical setting and focus on whatever related to natural incentives or commercial town.

David Engericht interprets that cities are invented for facilitating the information exchange process. friendships, production of materials. culture. knowledge, insight, and skills, as well as emotional and physical exchanges, and spiritual support is that without commercial settings in cities, they would gradually turn into dead, slow, and static places, known as "countryside." Indeed, urbanism does not exist without active spaces.

Therefore, it seems that successful urban settings should be a combination of three important components, namely physical space, activities inside it, and emotional experience of it. Such theorists as Rolfe (1976), Canter (1977) and Panther (1991) have addressed the components of place and the relationship between them [10].

The significance of this subject encouraged us to perform this study in an attempt to achieve an appropriate conceptualization that paves the way for future studies in this area. Therefore, the present study investigated this important subject with an emphasis on Hasirforoushan Neighborhood.

VI. THEORETICAL FRAMEWORK

A. The Concept of Place

An artificial setting is a complex network that consists of various ties forged not only between people, but also between people and the environment. "When human-environment connection is based on a human experience, the environment becomes a place. This relationship defines a place as an environmental experience, along with the convergence of cognitions, effects, and behaviors of people who live with them [11]. "Place is not limited to specific physical settings, rather it consists of many symbolic meanings, emotional attachments, and feelings that people have about a certain collection" [16]. In fact, "as a collection, a place can potentially contribute to a trend, in which people develop the senses of place, belonging, and identity, and maintain them" [16].

B. Sense of Place

To consider place as an experimental process, investigation into such concepts that relate people to a place or position, and attempt to create the sense of place is very significant. Development of the sense of place is a main objective of urban design. "Sense of place depends on feeling and imagination of goals that have completely experienced the place and it relates to the need for giving identity to personal environment and being in a place with identity" [14]."Therefore, the sense of place is a complex combination of meanings, symbols, and qualities that one perceives about certain space or region intentionally or unintentionally" [10]. "In fact, sense of place is an abstract distance between a person and place that allows the perception of place" [19]."A physical setting, regardless of size, is not capable of developing a sense of place by itself; rather, this sense is created through people-place and people interactions" [11]. This relationship is more complex than human activities, "these are concepts which can be comprehensible just through emotion and remembering the individual and collective memories" [2].

C. Place- Attachment and Place- Belonging

The human-place tie is a bilateral relationship that is turned into place with time by humans either individually or collaboratively through giving meaning to the space. The sense of place is usually joined with the sense of belonging, i.e. place-attachment. Therefore, the sense of belonging to a place becomes more important to us when the place is connected to not only the past, but also the present and the future [7]. In addition, the need for the sense of belonging is fulfilled when a hierarchy of human needs including belonging and love are met [6]. In fact, it can be said that one's past experience of place is a mean for cultural, social, psychological, meeting and physiological needs of the stakeholder [12]; in addition, place-attachment as well as this emotional interaction lead to human-space linkage and meaningfulness of space [14]. As a result, place-attachment is the foundation of human-space positive emotional tie and interaction, created through individual, collaborative, cultural and social characteristics [14].

D. Participation: Its Importnce and Necessity in Neighborhoods

Participation refers to a set of voluntarily activities, through which the members of a community get involved in the affairs of their neighborhood, city and/or village. They are involved in the formation of their social life directly or indirectly. A study has defined participation as a process in which residents organize themselves, have voice in its development, and take managerial or executive roles [8]. If residents consider such participations as engagement with their fate, they will work in groups to form and empower such self-leadership characteristics as and selfresponsibility. In this way, they pave the way for development in favor of urban dynamicity [20].

E. Participation: Its Importance and Necessity in Neighborhoods

Finally, participation is a vital element in a sustainable development process. In addition, social relationships and interaction are two important factors in creating the sense of attachment, insofar as social interaction forms the foundation and central core of group and community and plays a salient role in the formation of human groups. People have emotional exchanges in interactive fields, and this process deepens the connection between group or community members, leading to the formation of the sense of community. This feeling paves the way for a moral community, in which commitment, trust, forgiveness, and dedication are developed in people [8]. Therefore, participation can play a huge role in such activities as quality assessment of a place to increase the quality of sense of belonging in people. Performing these types of activities should be taken into consideration in such neighborhoods.

F. Place and its Three-Fold Constituents

In terms of spatial approach, the quality of urban environment depends on the creation of physical settings with an urban quality. Urban design and architecture should be capable of promoting the quality of urban settings. Therefore, dimensional identification of a place can contribute to the determination of different aspects of environmental quality. "Ralph defines place as mental images and memories of people and considers it as the most important factor in place identity. He attributes a unique index and characteristic to each place, which depends on the existence of physical structure, activity and meaning" [5].

The Canter's model (1977), known as "place model," refers to urban environment as a place consisting of three intertwined dimensions; skeleton, activity, and imaginations (Figure no.1and no.2) and attributes the place identity to the combination of these three fundamental aspects. The observable physical characteristics convey the idea that activity in that place can develop residents' mentality [13].







Fig 2. THREE-FOLD CONSTITUENTS OF QUALITY OF URBAN ENVIRONMENT IN PANTHER AND CARMONA'S MODEL

Although John Panther's model for the sense-ofplace may be presumed as a deviation of Canter's model, Panther's activities have been more effective as they provide more details about the constructed form of city, urban landscape, structures, and permeability, as well as about meaningfulness and imaginativeness such as legibility, qualitative evaluation and perception of function [10].

Therefore, as Montgomery puts, it is very difficult to say why a certain place is successful and how this success can be achieved; whereas, meanings of place are rooted in physical characteristics and their relevant activities. Therefore, the environment offers what our valuable action has formed [10].

According to the next table, Panther and Montgomery, as well as Canter, replaced meaning with mental image, which is considered as the major factor affecting the sense and identity of place by Ralph, to specifically emphasize such factor as memory and symbolism, legibility and visibility, emotional and perceptual experiences and psychological tie with place. They present it in two dimensions namely personal/global or individual/group. All these concepts represent the presence of the man in place and depth of this presence.

Finally, a qualitatively eligible environment capable of developing person-environment interactive, and forming and reinforcing collective behaviors in traditional neighborhoods and consistent with certain characteristics of this place requires strengthened sense of belonging in such fabrics. Therefore, identification and evaluation of factors that heighten the sense of belonging to this place, and improve its quality will lead us to sound strategies.

It is noteworthy that according to Table 1, among the factors presented by experts, there is not any component or sub-component addressing residents' participation in formation and reconstruction of such neighborhoods. As a result, by adding the fourth dimension of Canter's place component, this study can use this model in traditional neighborhood to assess the quality of environment and improve the sense of place and belonging in people.



Fig 3. PLACE COMPONENTS

Since the subject of participation is very complex, vast and multidimensional, this study has only introduced this model and used it merely within the scope of questionnaire's items. The main components and elements that form participation will be addressed in future studies.

	Sense-of-Place	Assessment Criteria
Ralph	Meaning	Cultural collaboration, perceptional functions, diagnosis and quality assessment
	Activity	Use of place, sidewalk fluidity, vehicle fluidity, behaviors, patterns, legibility, smell and etc.
	Physical Structure	Furniture, urban landscape, perspective, permeability, construction form
Panther and Montgomery	Place	Assessment Criteria
	Mental Image	Memory, Symbolism, legibility and visibility, sensory experiences, psychological ties, personal perception
	Activity	Diversity, vitality, vitality of streets, activity hours, traditional and local recreations, attractive activities, transaction and economy
	Form	Scale, centralism, permeability, signs, constructed space, ratio and public space
Canter	Place	Assessment Criteria
	Imaginations	Symbolism and memory, capability of imagination and legibility, sensory experiences and association of meanings, understandability, acceptability, psychological achievement, glamor/globalism, fear
	Skeleton	Scale, plurality, permeability, signs, space between the masses, ratios and shares, adaptability and limitations, vertical buildings, public arena (spatial systems)
	Activity	Diversity, vitality, street life, watching people, café culture, circumstances and local traditions
Panther and Carmona	Sense-of-Place	Assessment Criteria
	Meaning	Legibility, association of cultural meanings, perceptual functions and attractions, qualitative evaluation
	Physical Structure	Urban landscape, constructed form, permeability, landscape architecture, furniture
	Activity	Land use, pedestrian flow, behavior, patterns, sound, vehicle-users flow

TABLE I. FACTORS INVOLVED IN THE DEVELOPMENT OF SENSE-OF-PLACE AND THEIR ASSESSMENT CRITERIA

VII. STUDYING

This part assesses the quality of place according to four place components (skeleton, activity, meaning, and participation) and residents' opinions. The aim was to pave the way for promoting the quality of Hasirforoushan Neighborhood through identification of the main and influential elements. Results from the respondents are presented in the form of following diagrams.

A. Component of Activity

According to the diagram of the constituents of activity and their impact on the quality of neighborhood, more than half of the male and female respondents related the improvement of neighborhood quality to the condition and modification of passages. The majority of respondents stated that the replacement of passages, construction of commercial and collective paths exclusive to pedestrians, and the presence of police were necessary.



Fig 4. DIAGRAM OF ACTIVITY; THE ROLE OF ACTIVITY FACTORS IN NEIGHBORHOOD QUALITY FROM RESIDENTS' STANDPOINT

According to both gender groups, activity holds the second rank by importance in improvement of the use, in which use injection and greater diversity of it were followed by the improvement and exploitation of previously lively uses (such as fruit, vegetable and fish markets) and categorization of them to avoid turbulence. In addition, permanent police presence to control traffic and provide the neighborhood's security, which was threatened by robberies in the market, has also been mentioned.

B. Component of Skeleton

Results show that the improvement of vegetation and natural landscape of the city was the most frequently mentioned factor. In this regard, respondents indicated to the use of trees along the paths and increasing the number of house gardens as the most important factors in the improvement of natural landscape in the neighborhood. These factors were followed by the use of flower pots at the stores' entrances and houses' windows, and construction of parks.



 $Fig\ 5$. DIAGRAM OF SKELETON;THE ROLE OF SKELETON FACTORS IN NEIGHBORHOOD QUALITY FROM RESIDENTS' STANDPOINT

Improvement of the old fabric via reconstruction and renovation, consistent with the existing fabric's patterns, and also destruction or modification of buildings, constructed with inconsistent materials, were mentioned with the lower priority. These were followed by the renovation of pavement with materials that match the pattern of the old pavement of the neighborhood. The next step is increasing physical comfort (by using furniture and shelters), deciding an entrance for the neighborhood and better lightening held the next ranks.

C. Component of Meaning

According to diagram no.3 and previous studies into the component meaning, two questions were raised to investigate the factors perceived more by the residents. These factors also gained residents' sense of belonging, insofar as they knew Hasirforoushan neighborhood by these factors. Results indicated that its traditional fabric, type of materials used (red bricks with white grouting), and rows of flower pots developed the deepest sense of belonging in residents. These were what left residents with pleasant feeling and were thus perceived more by them. In terms of importance, they were complemented and followed by harmonized system of buildings' height, as well as rows of commercial buildings that defined the path to the center of the neighborhood.



Fig 6. DIAGRAM OF IMAGINATIONS; THE ROLE OF MEANING FACTORS IN NEIGHBORHOOD QUALITY FROM RESIDENTS' STANDPOINT

Some residents, who had nostalgic feeling to this neighborhood, mentioned their family history in it. They attributed the decline in these feelings (belonging, attachment, and perception) mostly to the large number of passing vehicles, mismatch between street's width and traffic, lack of safety (especially for pedestrians), chaos, and relocations of uses that substituted vehicles for people and their bargaining activities.

D. Component of Participation

Most of the residents and those who attend in the neighborhood consider the presence of organizations such as municipalities and city council in the first place, cultural heritage, individuals and ultimately law enforcement personnel helpful to create changes in this fabric. Also informing in general and making people and residents aware of the adopted and implemented programs is necessary so that those who are willing to and capable of helping for better implementation of programs would collaborate and also informed people would have better collaboration with the authorities. Therefore by holding meetings and gatherings in mosques and public places in the neighborhood and acknowledging the residents and using the experience of the experts, they would improve implementing programs.



Fig 7. DIAGRAM OF PARTICIPATION, THE DEGREE OF IMPORTANCE AND THE IMPACT OF DIFFERENT METHODS TO FOSTER RESIDENTS' AND AUTHORITIES' PARTICIPATION

VIII. CONCLUSION

According to research findings the factors related to the loss of quality of neighborhood of Hasirforoushan can be classified as follows:

As mentioned before, the most influential factor in the loss of quality of neighborhood of Hasirforoushan is related to the loss of skeleton and the lack of harmony between the old and new construction that has been effective in the perception, mental image and the sense of belonging of the inhabitants about this place. Then the loss of the applications wide spread in the past and now have moved to other parts of the city are mentioned and the overcapacity crossing of the vehicles within the fabric falls in the next place.

As a result the absence of residents and their lack of interaction, erosion of physical level, and the replacement by high-rise with heterogeneous views with the fabric have led to the loss of quality and the sense of belonging in the neighborhood. This has been followed by displacements to other points. So it is possible to strengthen the sense of belonging in the people and improve the quality of the neighborhood by strengthening the mentioned factors and using the views of citizens (especially the pioneers) and their improve rehabilitation ideas to the of the neighborhood, using the labor, experience and knowledge of public and private organizations and institutions and also the prevalence of security in the fabric.

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