Behavior pattern crosscheck in the revival of cultural environment identity (Case study of Tonekabon Cultural Center)

[1]Maryam Shahpari , [2]Morteza Seddigh

[1]M.A student of architecture, Department of architecture, Islamic Azad University of arak, Iran
[2]P.H.D in Architecture,faculty member at institutions of higher learning Deilaman, Lahijan, Iran

---ABSTRACT--

Subject of this research is about the identity and behavioral pattern of users and the rate of their mental dependence on the natural, human, physical and behavioral domains. The Objective of this research is to provide a new approach to improve the quality of the cultural spaces in order to enhance the social interactions and balance the identity of cultural environment in sync with its behavior patterns. So, the components of identity in the Tonekabon cultural center were studied and by using questioners, the behavior patterns of the research's specific groups were observed. Then a new framework was suggested to improve the conditions of available spaces in the cultural center. The result of analysis shows that the locations of cultural center nearby a local park has a positive effect on users and improves the compatibility and adaptability of its space and increases the normal behaviors.

KEYWORDS: *Behavior Pattern, Identity, Cultural Center, Mental Dependence, Compatibility*

I.   INTRODUCTION

Some environments without the need for reconstruction and changes in their physical location have the capability to respond to various and different activities. A compatible design is a kind of design that include the constant and varying behaviour patterns without requiring physical changes at different times or simultaneously [1]. Identity of a place is created by the natural environment and people's interaction and makes them interdependent [2].So, the cultural center as a behaviour setting should respond to different age groups' behavioural needs. As regards few studies have been done in the area of behaviour pattern and identity in the cultural environment, it is necessary to deal with it.

The two primary questions of this study are:

*   Has the behaviour pattern affected the design of cultural centre?
*   Is there any relationship between the identity and behaviour pattern of abnormal use and misuse of cultural centre?

II.   METHODOLOGY AND RESEARCH LIMITATION:

Tonekabon Cultural center as a case study is located in the city center and in the middle of local park space. Firstly, the questionnaires were distributed among the target groups and the data was collected in the Excel software. The population of target group is around 100 people. It should be noted that the field study was done in the peak hour of using the cultural center (Hours 10 to 12.30 am and 16 to 20 pm). The field study and observation has been carried out in the spring and summer and within various days of the week .In addition to above method, experts and staff of cultural Center were interviewed in order to be comprehensively identified the components of behavioral pattern. During the interview with responsible individuals and authorities of the cultural center, they announced the greatest group of people who come to the cultural center are 15 to 34 year old and youngers. All studies have limitations, and this research is no different. For example, some users were not interested in filling the questionnaires or they didn't like to answer some questions. As a result, the interpretation of questionnaires and data was so difficult.

III.   CULTURAL CENTER AS A BEHAVIOR SETTING

Behavior is the way in which one acts and does an activity. Behavior is not obedient to activity merely, but it is a combination of activity, time and place[3]. Space, as a physical part of environment, can affect the behavior and control it. It means, it can encourage or discourage some behaviors [3].

Special feeling can be created in the individuals byencouraging some behaviors and discouraging some other behaviors in the space in order to perceive a particular quality of space [3] .Environment is the surroundings or conditions in which a person, lives or operates. . However, the individual could not receive all available information. Environment is all information sent from our surroundings. However, only some of them are selected and interpreted in the perception and sense of each individual. Activity systems show the motivation, way of thinking's, recognition or imagination of people in connection with surrounding environment and their cultural norms[4][5]. Design in each scale, must recognize the environment's activity system. Since behavioral setting creates the activity systems, it is so important [6][7].Barker believed that a behavior setting is a fixed set of activity and place that a repetitive activity or a fixed behavioral pattern happens there. Moreover it has a special design of environment and establishes an appropriate relationship between repetitive activity and environment which carries out in a specified time period. A behavior setting enables the person to achieve a set of his interests. These interests can be very useful for various individuals [8].Cultural center is a behavioral setting because the fixed behavioral patterns are observed in it within a specified time intervals. Spiritlessness and boredom of the space is often due to shortage of varieties of the fixed behavioral pattern in the environment. Traditional spaces in comparison of modern spaces have faced less with this fact. Social relationships and public communication between people happen in behavior setting. People are absorbed by the place which tent to be adapted with fixed behavior patterns carried out over there. It is necessary to create harmony, conformability and adaptability between a behavior pattern and a physical environment in which the behavior occurs. This feature causes that some places, in connection with some behavioral patterns, are more appropriate and have higher capability.

An environment adaptable design is able to include fixed and different behavioral patterns in to itself in various times or simultaneously without requirement for physical changes. A design is flexible when its structure is appropriate to respond to behavior pattern and can be changed easily. It is so important that cities, buildings and, generally, the designs having these two attributes, (adaptability and flexibility) have greater life span, even if they have not a good design. As a behavior setting, cultural center must respond to the fixed and different behavioral needs of the various democratic groups. Cultural center is a place which must respond to the human's various needs and various human's need. As a result, adaptability and flexibility of space assists to create an appropriate platform of normal behavior pattern, and lead to activeness, attraction and vitality of space. Although the user groups are unknown direction of taste, preference and values is different and sometimes more than common characteristic, a designer should have a communicative model of human's behavioral and activity. The design will be successful. Concentration on one level of behaviors and activities will stop the design process in the same level and decrease the adaptability and flexibility of space with different users. In order to define identity in the buildings and cities, Christopher Alexander has brought up as following: we must start understanding this subject that identity of each spaces takes from continuous repetition of a specific pattern of events which happen in that place. Identity of each city is affected by an event occurred in it. Activity, events, forces, states and etc. are the events from which each individual's life has made[9]. Thus, identity of each space from alexander's viewpoint is Identity can be studied from three aspects: Natural identity, human identity and artificial identity. These three aspects can be described as following:

Components of natural identity : Natural elements show the natural identity of each place. Whereas the nature has been a part of human being since early times, and the individual reaches the calmness alongside it and it has the emotional, physical and psychological aspect too. Thus, the natural elements, including mountain and river are familiar signs of landscape design for individuals and lead to connection between citizens and space of designation.

Components of human identity : Design based on urban identity, has been combined geographic and physical environment with social-human discussions and doesn't embrace specified concept without considering these aspects. When individuals are in an urban space or place, they just remember their understanding of physical space which leads to realize the platform of surrounding environment.

Components of artificial identity : Human made elements and artificial physical elements, with all features such as form, dimensions, size and proportionsshow and express social, cultural, economic and natural features of environment. The environment reminded under topics of human identity and natural identity is propounded as one of the main factors of formation of urban identity. Artifact identity embraces different dimensions of construction and structure of city, including physical, functional, spatial and visual features [10][11]. We will study the case study of Tonekabon cultural center by considering features of behavior pattern and including the identity attributes (physical, functional and sematic) in order to revive identity of cultural space.

IV. LOCATION OF TONEKABON CITY

Tonekabonis a city in and the capital of Tonekabon County, Mazandaran Province, Iran. At the 2006 census, its population was 43,128, in 13,087 families. Tonekabon is located on the shore of the Caspian Sea 257 kilometers north of Tehran, between Ramsar and Chaloos. The township of Tonekabon (Shahsavar) exists along the Caspian Sea in the north and has common borders with the province of Qazvin from south. In its northern regions it has a moderate and humid climate and in the southern portions cold weather prevails. Tonekabon (Shahsavar) has a semi tropical climate. The temperature is mild all the year. (Fig 1)

Fig 1:I. Locationof Tonekabon City

The name of Tonekabon Main Street is Imam Street which is connected to the Imam square by the bridge. Regarding to the pictures which have been taken near the bridge and before and after it, the city's main identity can be realized easily. Two components of natural identity could be observed: This city is directed toward the sea from north and toward the mountain from south. Moreover, there is a park as an artificial component of identity under the bridge has led to increase people's interactions in this area and make it as behavior setting. There is a good combination of natural, human and artificial identity that lead tocreate an adaptable environment. (Fig 2, 3, 4)

Fig2:Tonekabon Bridge, the main identity of city

Fig. 4: Natrual identity (view to sea in the North)   Fig3: Human Identity (the increase of interaction in open space)

Artificial Identity the people behavior in the park under the bride (the increase of normal behavior and interaction)

Fig5, 6, 7:behavior pattern of local people in both sides of the bridge

People behavior pattern in the East and the West of Tonekabon Bridge and in Emam Street create some conditions that Increased the probability of appearance of some behaviors local people are interested in doing outdoor activities such as shopping and communication, so Imam street is a dynamic street with commercial – recreation activities   this behavior pattern is the most interesting and unique behavior pattern among the streets of this city which has the background(precedence)beyond 30 years. So, in order to manage the behavior pattern of street peddlers and sellers, it is suggested to design a permanent and temporary market under the bridge and near the park tohave both components of natural identity (the sea, the river and the mountain) and components of human identity (protection and guidance of behaviorpattern) and to revive the component of artifact identity (the interference in the neighborhood park of under-bridge). (Fig 5, 6, 7)

V.   GENERAL STRUCTURE OF THE STUDIED CULTURAL CENTER

Tonekabon cultural center has located in the Mother Park which has led to increase it's quality and attraction. Without creating a spatial separation in the park, culturalcenter has allocated a unit identity to itself in the south west part of park.

Having an artificial identity in the middle of natural identity has attracted different age groups of users and enhanced the interaction between them. (Fig 8)

Fig8: Central culture building

| Fig9: building's hall | Fig 10:corridors, input space | Fig 11:theater class |

Dynamic space the hall and individuals' tendency to participate in the practical classes compared to theory classes can be observed.(Fig 9, 10, 11) there is an outdoor cafe in the second floor of the building which had a perfect view toward the park's yard, and created a safe environment for users as well as member individual of the cultural center. Thus, the cultural center has provided a social space for people to be familiar whit each other and new-users and to interact in the safe and proper platform and environment. In other words, this coffee shop has created a dynamic space by making a mixed use of cultural –recreational land use and led to revivalof human identity in cultural center. (Fig 12)

Fig12: landscape view from the Café in the park

Fig13,14,15:people's behavior pattern in the park and revival of human identity to the environment

By observing the individuals tendency to pause space and open space in order to create social interaction, it can be concluded that we can design a pathway and open spaces as a platform for people's social interaction by use of or Ornamental plants. (Fig 13, 14, 15) The design of benches and distance among them, have a direct relationship with the social interactions and behavior pattern of their users. Forexample, if we design the benches far from each other, the interaction between users will be decreased. It can be observed that by designing the outdoor benches closer to each other, interactions and dynamics of space has increased in comparison with single benches. In other words, by changing the artificial identity in the physical domain of design, we could revive the human identity in the social human domain and enhance the normal behaviors. (Fig16, 17)


Fig16:stepped coach- increasing the interaction Fig17: single benches – decreasing the interaction

VI. RATE OF EFFECTIVENESS OF BEHAVIORAL PATTERN ON DESIGNATION

the behavior pattern of the cultural center, the highest rate of space used by people was open spaces (the space between cultural center building and park's green space) because interaction happens there more. Around 47.1% of respondents announced that they use open spaces more than other spaces. People refer to the cultural center higher in order to use this place. Because this part of cultural center creates some conditions that probability of appearance of some normal behaviors compared to some abnormal behaviors increased. In other words, this place has converted in to the behavioral setting for them.28.3% of respondents to questionnaire mentioned that they refer to cultural center in order to benefit from the hall. Around 20% of people go to the cultural center to visit the gallery. Regarding theater, visual arts, calligraphy classes, only 10%of respondents has attracted to come to cultural center. It seems that environmental design creates a kind of compulsion based on a type of specific behavior and it leads to young people are more interested in participating in the group performances, gatherings, meetings, discussions, debates and lecture class instead of theoretical classes. (Fig.18)

Fig.18: the percentage of Cultural center users' tendency based on behavior pattern
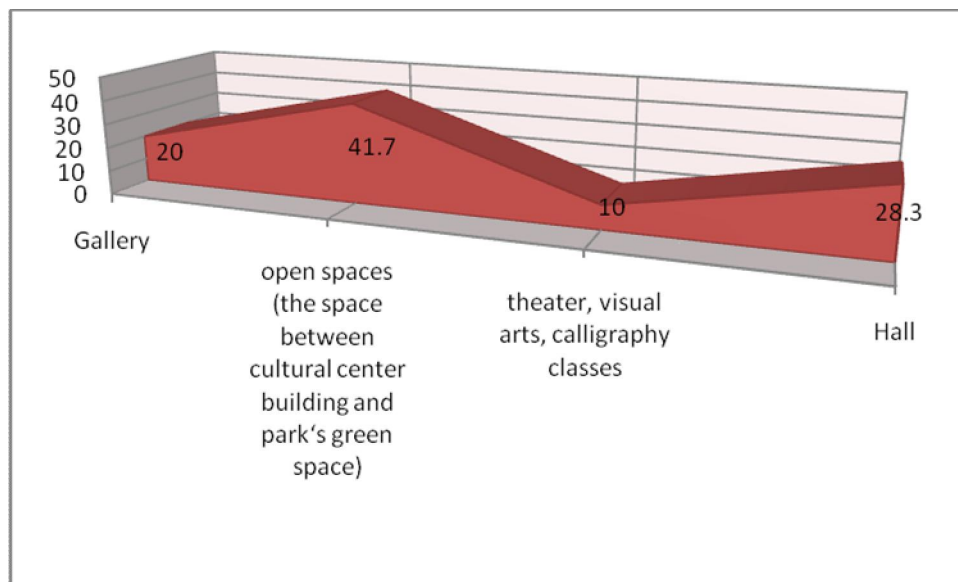
VII. THE IDENTITY IMPACT ON MENTAL DEPENDENCE

Landscapes view and predomination of plants in the Mother Park made it so natural and green. Observing people behaviors and studying the questionnaires show that existence of cultural center in the park's space has led to increase use of land and normal behavior and usage of the park's various spaces. The result of study shows that the mixed use of land for the cultural center and park has led to overweigh the natural identity in design of the cultural space in comparison with the Artificial identity and to revive the spirit to the place and to increase of space's dynamics in the cultural center.Therefor,80% of individuals who refer to cultural center, remember and remind the cultural center as dynamic space with lots of social interactions and discussion, open spaces, and natural scenery rather than physical domain.(artifact identity).20% of the respondents expressed that the artifact identity has had the highest rate of the influence on the increase of the readability and sense of belongs to the space.(Fig.19)

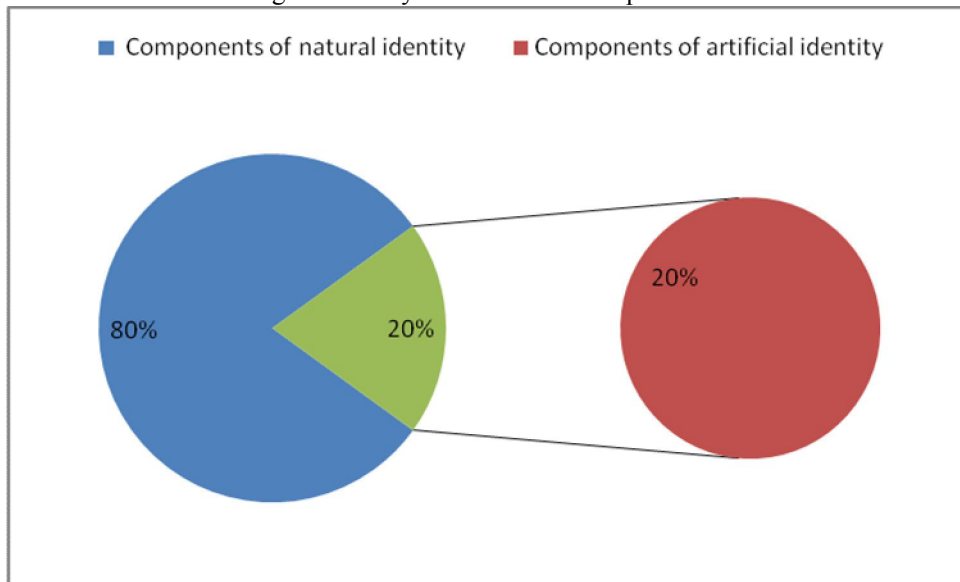Fig.19: identity effect on mental dependence

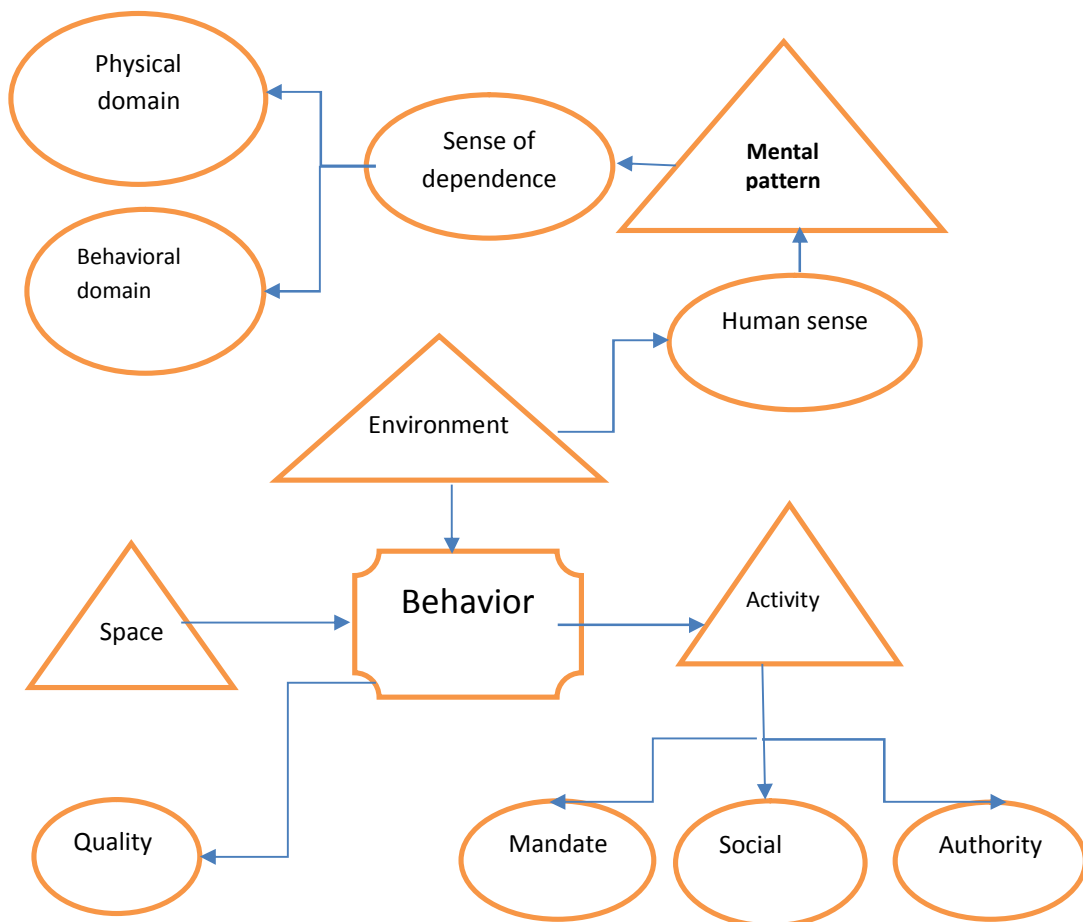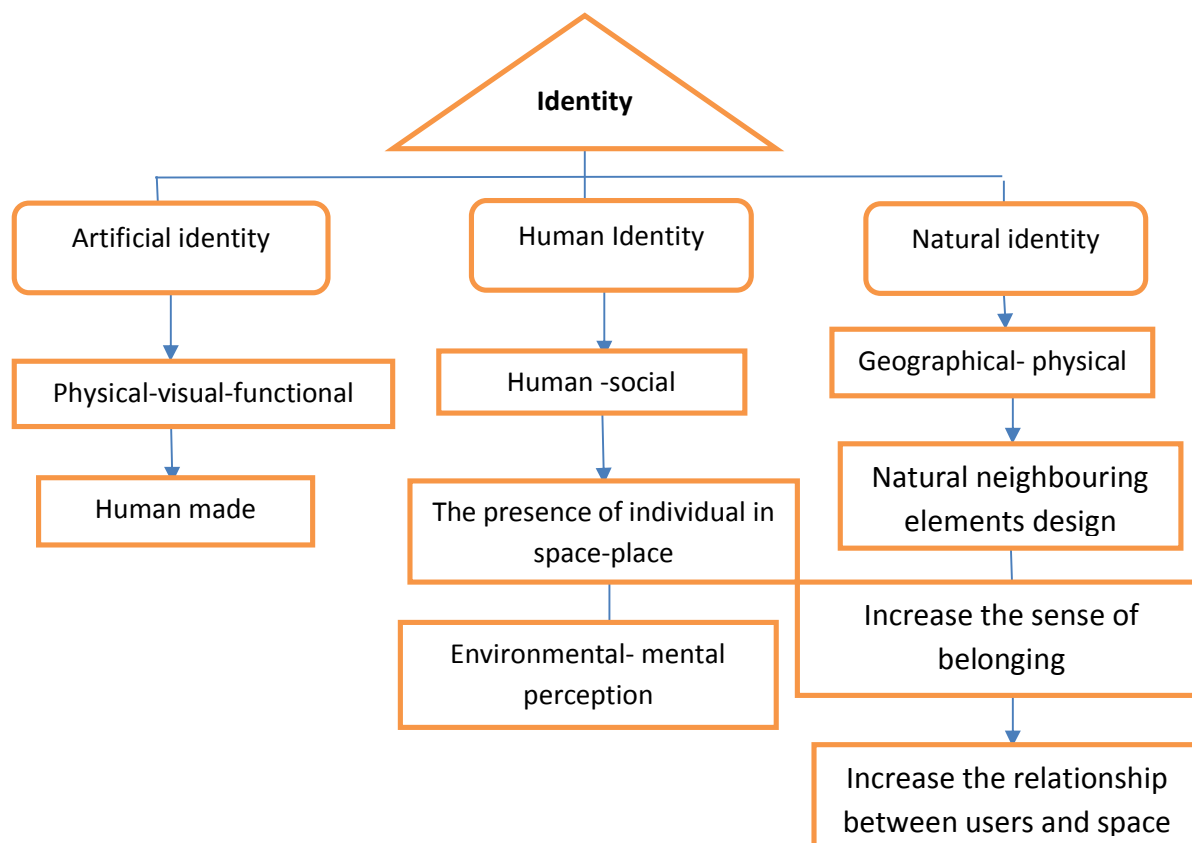Fig 20:Suggested pattern for the relationship between behavior, activity and environment

Fig. 21: Suggested pattern for identity components

VIII.   CONCLUSION

Based on the research findings, it can be concluded that the compatibility of space is increased by changing the cultural center to the behavior setting and improving the relation between activity and environment. It is possible to create identity in cultural space by taking an advantage of behavior pattern. Thus, the sense of belonging to building and place will be increased through behavioral domain and it will be balanced. Although young people go to cultural center more than other groups, it is possible to improve the compatibility and safety of cultural center by using facilities and getting the other age groups point of view. by designing some temporary outdoor spaces, including restaurants, paintings, sculpture and crafts stores, the cultural center will be made more dynamic and people will be encouraged to sign up for classes by designing an outdoor and open spaces for theoretical classes in the cultural space green space, students could perform outside and persuade a lot of groups to take part in the literature classes. In other words, an open space can be mounted for each theoretical class in order to perform practically. The components of natural identity (green space) and components of human identity (behavior pattern) and components of artifact identity (building) could be revived by creating and connecting open spaces to cultural center building. (Fig 20, 21)

RESOURCE

[1]   J Lang, Creating architectural theory: Therole of the behavioral sciences in environmental design(Van Nostrand Reinhold ,New York,1987)

[2]   Dana Lyn Dougherty, Embodying the city: Identity and use in urban public space (Virginia 2006).

[3]   J Pakzad, Theoretical foundations and Urban design process(Shahidi publications, Tehran,2006).

[4]   J.Porteous, Douglas, , Environmental and Behavior: Planning and Everyday Urban life, Reading Mass (Addison-Wesley1977)

[5]   F.S. Chapin, and R. Brail, , human Activity systems in metropolitan United State in Environment Behavior , 1969 1:107-103

[6]   S. H. Lennard, et al., Public life in Urban Places: Social and Architectural Characteristics Conductive to Public Life in European cities, Southampton, NY: Gondlier. 1984

[7]   Bechtl, R., Enclosing Behavior, (Dowen, Hutchinson and RossStroudsburg. 1977)

[8]   Barker, R.G., , Ecological Psychology, Stanford, Ca: Stanford University Press. 1968

[9]   R. Karbalaei-e-Noori, „Identity of the memory of a city,A set of articles regarding identity of the new cities, Tehran , 2007

[10]   H.Taheri, Protectionof the urban identity in the renovation of central texture of Mashhadcity, M.A. Thesis, Iranian University of science and Industry, Tehran, 2002.

[11]   M. Behzadfar,Urban Identity, a glance at identity of Tehran city,(Cultural artistic organization of Tehran municipality,Shahr publications, Tehran. , 2007)

Maryam Shahpari was born in Tonekabon, Iran, in 1989. She received the B.E. degree in Architecture from the Islamic Azad University of Noor, Mazandaran, Iran. In 2012, she was accepted to do aMaster degrees in Architecture Azad University of Arak, Markazi, Iran.She is currently works as a teacher and designer. She teaches sketch and randoat University of Tonekabon and she also teaches AutoCAD, 3dMax and V-ray in Ofogh Institute of Tonekabon. She also works as an interior designer at Arzhan & Raz-e-Noo Company. She has been awarded (1st rank) student in the field of Architecture in the academic year 2008-12, Azad University of Noor, Sep. 2012 and also she was distinguished(1st rank) student in the field of Architecture in the academic year 2012-14, Azad University of Arak, Sep. 2014.

Morteza seddigh was born in Hamedan, Iran, in 1976. He received the Master degree in Architecture from the Islamic Azad University of Hamedan, Iran, in 2001, and the PHD degree in Architecture fromIran University of Science and Technology, Tehran, Iran, in 2010.He is currently works as a teacher and designer. He teaches sketch and rando in more than 50 cities in Iran. He published more than 60 architecture book and published more than 17 papers in ISI journals.He also works as an interior designer at Taha Company and consulter Qom Municipality.