### Examining the Sense of Belonging to Places in terms of Physical and Nonphysical Indices in Stand-alone Houses and Apartment Complexes (Case Study: Tabriz City)

Hojjatollah Rashid Kolvir<sup>1</sup>

Assistant Professor, Department of Architecture, Faculty of Engineering, University of Mohaghegh Ardabili, Ardabil, Iran

Fatemeh Abbaszadeh Diz

MSc Student in Architecture, Faculty of Engineering, University of Mohaghegh Ardabili, Ardabil, Iran

Hassan Akbari

Assistant Professor, Department of Architecture, Faculty of Engineering, University of Mohaghegh Ardabili, Ardabil, Iran

Marziyeh Shahroudi Kolour

PhD Candidate in Architecture, Department of Architecture, Khalkhal Branch, Islamic Azad University, Khalkhal, Iran

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### **Extended Abstract**

#### 1. Introduction

The sense of belonging is a significant dimension in the relation between man and environment. As humans interact with places, they give meanings to those spaces; they also feel a sense of belonging and attachment to them. Belonging to places plays a significant role in terms of humans' utilization of the space and their constant presence; it also describes various layers of perceptions, concepts, and experiences in the place. This spatial sense of belonging can sometimes venture beyond individual levels of sensual-cognitive experiences; it can expand along collective, mutual senses in a larger spatial area within the range of a district to a whole nation. According to the official statistics published by Tabriz Statistics Yearbook (2017), the city is faced with growing urban population along with an increasing annual population growth rate (0.97%). On the other hand, restrictions on the city's horizontal development has led to

vertical constructions and increased collective housing, altering the city's residential style. Subsequently, it appears essential to pay attention to the mental and physical requirements in designing and constructing residential spaces. The present study seeks to examine the physical and nonphysical dimensions of sense of belonging to places as well as its effective indices in stand-alone houses compared to apartment complexes in Tabriz City. To this aim, it is attempted to provide answers to the following questions: What are the effective factors on creating a sense of belonging in stand-alone houses and apartment buildings? What is the role of physical elements in creating such a sense?

### 2. Review of the Literature

Researchers such as Low and Altman (1992) have pointed out sociocultural interactions and communications in spaces and interpreted the sense of belonging in terms of social belonging (users) by emphasizing the social role of spaces. Alternatively, Proshansky (1990) asserted the

<sup>1.</sup> Corresponding Author- Email: h\_rashid@uma.ac.ir

role of physical sense of belonging in the environment, believing it to be a part of the individual identity and ultimately, the social identity of individuals within various environments. This type of belonging is derived from physical components and elements of the place and are considered as a part of human cognitive processes and identity. According to Scannell and Gifford (2010), the individual's sense of belonging to an object or a concept is formed when the person can meet their needs and expectations through them and be able to assess them using their own constructed mental patterns regarding the "self". In general, the theory of belonging is based on the fact that attachment, emotional connections, and spatial belonging occur when the needs and expectations of those who live in these environments are met. The more these requirements are met, the higher the likelihood of residents' increased sense of belonging to their surrounding environment. Furthermore, different indices are introduced in physical terms as factors affecting sense of attachment and belonging to spaces; these include accessibility, view, and landscape (Sadeghi, Daneshgard Moghaddam, & Dejdar, 2011), the shape and size of elements, textures and decorations, connections, and layout (Heydari et al., 2013).

# 3. Method

The present study was conducted using the survey method in which documents were used in addition to questionnaires in order to gather the residents' views on both physical and non-physical areas. According to Cochran's formula, 292 questionnaires designed by the researchers were prepared for distribution. Through clustering, 196 questionnaires were distributed across 6 blocks in Aseman Apartment Complex and 62 were distributed in 4 blocks in Atiq Apartment Complex; moreover, 34 questionnaires were given to 34 stand-alone houses located in Magsoodiah District, Tabriz. Ultimately, 273 questionnaires were completed by the respondents and then collected by the researchers. Descriptive statistics were used to describe the variables

and inferential statistics were employed to explain and test the research hypotheses. In this regard, sense of belonging and effective physical elements were analyzed as dependent independent variables, and respectively. Data were analyzed using mean comparison test (t), Pearson's correlation test, and regression using the SPSS software. Values obtained from Cronbach's alpha and Bartlett's test suggest the adequate reliability and validity of the questionnaires and the generalizability of results.

## 4. Results and Discussion

According to the results, the most important indices for the formation of spatial sense of belonging include physical elements such as the shape and size of elements, accessibility and layout, materials and decorations, and privacy. Such a sense in physical elements manifest themselves mostly in stand-alone houses in three features including the form and dimensions of elements, materials and decorations, and privacy; while in apartment complexes, features such as accessibility and spatial layout had higher mean values compared to stand-alone houses. Apartment complexes also had a better performance in terms of non-physical indices. Activity and comfort were observed to have a relatively similar effect in both types of housing predictors examined. Confident for residents' increased sense of belonging in apartment complexes and stand-alone houses include and individual social dimensions, and meanings and symbols, respectively.

## 5. Conclusion

At a first glance, the obtained results confirm the simultaneous impact of both physical and non-physical dimensions of environment and residents' sense of belonging. Given the comparative-based approach adopted for this study and the examination of research variables in stand-alone houses and apartment complexes, it was shown that the physical dimensions have a higher impact on sense of belonging to a place in the residents of standalone houses. Conversely, non-physical dimensions of environment have more considerable effects in apartment complexes which can be justified with respect to the present theoretical foundations and the differences in social dimensions of human existence and housing methods. All in all, although the housing complexes examined in this study involved suitable potentials and features in terms of location and architecture,

the residents of stand-alone houses in historical districts showed a higher average satisfaction and interest. To answer the second research question, it can be concluded that physical elements are an important, effective criterion in the extent of individuals' interest and sense of belonging to places.

**Keywords:** Sense of Space, Spatial Belonging, Stand-alone Houses, Apartment Complexes

## **References (In Persian)**

- Daneshpour, A., Sepehri Moghaddam, M., & Charkhian, M. (2009). "تبيين مدل "دلبستگی به مکان"
  Explaining the "attachment to place" model and exploring its various elements and dimensions]. Journal of Fine Arts, Architecture and Urban Planning, 1(38), 37-48.
- Falahat, M. (2006). مفهوم حس مكان و عوامل شكل دهنده أن [The concept of sense of place and its shaping factors]. *Fine Arts Journal*, 26, 57-66.
- Falahat, M. (2005). نقش طرح کالبدی در حس مکان مسجد [The role of physical design in the sense of the mosque location]. *Fine Arts Journal*, 22, 35-42.
- 4. Foruzandeh Javan, A., & Motalebi, Q. (2011). مفهوم حس تعلق به مكان و عوامل تشكيل دهنده آن [The concept of sense of place and its constituent factors]. *Hoviat-e-Shahr*, 5(8), 27-37.
- 5. Habibi, M. (2002). جگونگی الگوپذیری و تجدید سازمان استخوان بندی محله [Patternability and reorganize the configuration of the neighborhood]. *Fine Arts Journal*, *13*, 32-39.
- Heydari, A., Motalebi, Q., & Negin Taji, F. (2014). تحلیل بعد کالبدی حس تعلق به مکان در خانههای (2014). تحلیل بعد کالبدی حس تعلق به مکان در خانههای (2014). [Analysis of the physical sense of place in the traditional houses and modern residential apartments]. *Fine Arts Journal*, 19(3), 75-86.
- Heydari, A., Motalebi, Gh., & Nekoui Mehr, F. (2014). بررسی نحوه ارتباط میان دو مفهوم حس مکان و [Finding relationship between sense of place and place attachment in student dormitory]. *Fine Arts Journal, 19*(1), 15-22.
- Mostaghni, A., & Etemadi, Sh. (2016). چگونگی شــکل گیری حس مکان در کودکان [Sense of place formation among children]. Armanshahr, 17, 103-114.
- 9. Sadeghi Fereshteh, R., Daneshgard Moghaddam, G., & Dejdar, O. (2012). بررسی رابطه طرح . (2012). بررسی رابطه طرح . (مطالعه موردی: مجتمع های مسکونی امام خمینی کالبدی در مجتمع های مسکونی و حس دل بستگی به مکان در بین ساکنین (مطالعه موردی: مجتمع های مسکونی امام خمینی [Studying the relationship between skeletal scheme of residential complexes and sense of interest to the place among the residents]. Urban Management Journal, 10(30), 253-264.
- 10.Schultz, K. (2002). مفهوم سكونت؛ به سوى معمارى تمثيلى [The concept of dwelling: On the way to figurative architecture] (M. A. Yarahmadi, Trans.). Tehran: Agah.

- 11.Shahcharaghi, A., & Bandarabad, A. (2015). محاط در محیط: کاربرد روان شیناسی محیطی در معماری و [Environed in environment: Application of Environmental Psychology in architecture and urban design]. Tehran, Iran: Jahad Daneshgahi.
- 12.Shams, M., & Khodakarami, M. (2010). بررسی معماری سنتی هم ساز با اقلیم سرد مطالعه موردی: شهر [An analysis of traditional architecture compatible with cold climate; A case study of Sanandaj]. *Quarterly Journal of Environmental Based Territorial Planning*, *3*(10), 91-114.

### **References (In English)**

- 1. Bonaiuto, M., Aiello, A., Perugini, M., Bonnes, M., & Ercolani, A. P. (1999). Multidimensional Perception of Residential Environment Quality and Neighborhood Attachment in the Urban Environment. *Journal of Environmental Psychology*, 19(4), 331-352.
- 2. Bonaiuto, M., Fornara, F., & Bonnes, M. (2003). Indexes of Perceived Residential Environment Quality and Neighborhood Attachment in Urban Environments: a Confirmation Study on the City of Rome. *Landscape and Urban Planning*, 65(1-2), 41-52.
- 3. Bonnes, M; Secchiaroli, G. (1995). *Environmental psychology, a psycho-social introduction*. London, England: Sage.
- 4. Fried, M. (1963). Grieving for a Lost Home. In L. Duhl (Ed.), *The Urban Condition: People and Policy in the Metropolis* (pp. 151-171.). New York, NY: Simon and Schuster.
- 5. Low, S. M., & Altman, I. (1992). Place attachment. In I. Altman, S. M. Low (Eds.), *Place attachment. human behavior and environment (advances in theory and research).* Vol. 12. Boston, MA:
- Springer.Proshansky H. M. (1990). The Pursuit of Understanding. In I. Altman & K. Christensen (Eds.), *Environment and Behavior Studies*. *Human Behavior and Environment (Advances in Theory and reSearch)*, (pp. 9-30). Vol. 11. Boston, MA: Springer.
- 7. Relph, E. (1976). Place and placelessness. London: Pion.
- 8. Riley, R. B. (1992). Attachment to the Ordinary Landscape. Boston, MA: Springer.
- 9. Scannell, L., & Gifford, R. (2010). The Relations between Natural and Civic Place Attachment and Pro-Environmental Behavior. *Journal of Environmental Psychology*, *30*(3), 289-297.
- 10.Shamai, S. (1991). Sense of Place: An Empirical Measurement. Geoforum, 22(3), 347-358.
- Stedman, R. C. (2003). Sense of Place and Forest Science: Toward a Program of Quantitative Research. *Forest Science*, 49(6), 822-829.
- 12.Steele, F. (1981). The Sense of Place. Boston, MA: CBI.
- 13. Tuan, Y. F. (1974). *Topophilia: A Study of Environmental Perceptions, Attitudes, and Values.* Columbia University Press.

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