

## Role of Urban Signs in Promoting the Place Attachment with an Emphasis on Citizens Mental Image (Case Study: Sanandaj City)

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### Extended abstract

#### Introduction

In recent decades with the development of industry and technology, we can see growth and development of cities. Urbanism and architecture today, regardless of climate, culture and geographic location, are being formed similarly in different places. The consequences of neglecting the identity of cities include creation of artificial environments and reduction of social interaction, and citizens' apathy towards their living environment.

The studies on perceived quality of urban environments are looking for the ways of establishing harmonious relationship between people and cities. In the contemporary city, this harmony cannot be seen properly in the relationship between people and elements that are important in urban legibility. The most common definitions of landmarks indicate that they are some recognizable natural or man-made features used for navigation, features that stands out from their near environment and are often visible from long distances. In urban studies as well as in geography, a landmark is furthermore defined as an external point of reference that helps orienting in a familiar or unfamiliar environment. It should also be noted that we know urban landmarks as significant elements in both urban landscape and image. They are the most fundamental pieces of spatial information as they are used for a wide collection of tasks related to the description, understanding and reasoning about our physical environment.

Semiology and its effects is one of the new approaches that recently have become very popular in urban studies. Semiotics principles of cognitive science are rooted from many cognitive sciences, relying on the concept of connotation. This causes the relationship between architectural spaces with the audience. So, different aspects of the syndrome of semantic, functional and emotional aspects are considered simultaneously in the form of perceptual space. This can make space meaningful and create the sense of place for the audience. Emphasizing signs can increase the citizens mental image and legibility of the city.

#### Methodology

This study examines the role of signs in the perception of architectural space and its role in improving semantic concepts of sense of place. Space is a phenomenon which human give meaning to it during his life and is also dependent on that. Place attachment is an intersection point between physical activity and subjective components in space. It changes the space to the

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place by specific sensory and behavioral characteristics of people. Urban signs with different semantic, functional and physical dimensions perform an important role in improving the quality of urban spaces. In this paper, Sanandaj city is explored as a case study in terms of existence of signs, the effects of environmental meanings on different groups of residents and factors to increase sense of attachment to a place. The objective of this research is to study the effects of meanings embedded in urban elements and signs on creation of people's environmental cognitive maps and place attachment. In this research, we utilized mixed-method approach, where aforementioned influential factors extracted from literature review, to form the qualitative part of the study. In the quantitative part as the validity of the research, Sanandaj City Residents were studied and evaluated. In other words, the study examined the verification of extracted theoretical framework from literature review, through conducting a survey in quantitative part. In this regard, a questionnaire was used to gather the data about citizen's attachment in the mentioned signs. Ultimately, using SPSS software the data were analyzed through descriptive and inferential statistical methods. The sample size was 200 people. This is conducted by using surveys, cognitive maps, fieldwork interviews and photo-analysis method in the city.

### Results and discussion

The results show that between attachment to place and perception and understanding a place, there is a positive relationship, as one can recognize himself by that. Those signs have features such as place in historical context with distinction form of periphery and with landuse religious – commercial functions like urban elements. In mental maps, people of Sanandaj are the most important. Based on TOPSIS technique, the sign «general mosque» is the largest and the sign «Integrated Communications» is the minimal impact that affect attachment to place.

### Conclusion

Among the important factors of attachment to place, the four top signs are including general mosque, Abidar Park, Azadi Square, Asif Market. In general, given the differences in the average values of the top 10 signs, the role of semantic factors toward two functional and emotional factors can be helpful in promoting place attachment in the city of Sanandaj. Analysis of cognitive maps of Sanandaj revealed that these features, besides affecting cognitive maps, can work as a language through which the residents can connect themselves to their environment. Therefore, urban designers can make environmental design and transformations with regard to the elements that are meaningful in private and public life of people and provide an opportunity to create place attachment.

**Keywords:** urban signs, mental image, place attachment, sense of place, Sanandaj City.

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