

## **ANALYSIS OF TWO SQUARES IN THE CITY CENTER OF SAMSUN: INTELLIGIBILITY, IMAGEABILITY AND SPACE USE**

By K. Fusun Erkul  
Taubman College of Architecture and Urban Planning  
University of Michigan, Ann Arbor

---

Analysis of the relationship between spatial and cognitive structure of a city is fundamental in order to examine how society and space affect each other. On one hand, theories of spatial cognition question models of space in individuals' minds which affect and guide behavior and use in space. On the other hand, theories of spatial configuration focus on spatial structure, which is defined as a system of relationships in different scales.

The focus of this paper is the analysis and comparison of different readings of urban space; subjective and objective. Subjective reading depends on spatial cognition, how people perceive and behave in urban space, whereas objective reading is the analysis of urban morphology, the characteristics and the relationship of its elements. In this study, the aim is to compare these two different ways of reading and to examine how spatial characteristics of urban space, land use, and space use are related to each other.

In this respect, the study areas are two urban squares in the city center of Samsun, which is a port city in northern Turkey. Saathane (Clock Tower) Square is the historical center of the city which was planned in the 19<sup>th</sup> century whereas Cumhuriyet (Republic) Square is the new public plaza built in the 1990s. Although being situated close to each other in the Central Business District, these two areas have significant differences in terms of physical-spatial and social-behavioral aspects of urban spaces, which are studied comparatively.

The method of this comparative study is to make in-situ observations in order to understand space use and movement and to analyze the data using space syntax tools like axial maps, isovists and depthmaps. These data is composed of surveys, cognitive maps of inhabitants, and observations on space use and movement. Space syntax provides the tools for objective analysis of urban space with respect to cognitive and behavioral characteristics, and space configuration. By comparing global properties of the city to local properties of the squares, the study aims to understand the relationship between integration and connectivity values that defines the intelligibility of the areas. Moreover, the visual field and the connectivity analyses help correlate movement patterns, moving and static people preferences, space use and gender preferences. Since the two squares have different spatial configurations, the results of this study might be significant in design research to understand the relationship between different spatial configurations and human behavior.