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The Role of Cognitive Memory in Large-scale Shopping Malls
(Case Studies: Iran Mall and Dubai Mall)

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Abstract

Understanding interdisciplinary issues in architectural design leads to the development of a methodology for the research process. The research process seeks to redefine design challenges by answering research questions. It seems that the architectural design process has also transformed itself to keep pace with developments both in the social context and in terms of the importance of interdisciplinary issues. Changing the architectural research process according to the requirements of each time has been proposed in order to connect the design factors in a multi-directional way and respond to new challenges. In the tradition of interdisciplinary research in architecture and the humanities since the 1980s, the relationship between human behavior in space has often been measured in the form of behavioral sciences. This research, utilizing cognitive sciences, aims to address the nature of humans and their cognitive aspects with regards to the recognition of the mind and memory as an essential component of the experience of architectural space. In this regard, a conceptual comprehension of the impact of spatial eventfulness on human memory is examined. The purpose of this research is to explain the relationship between the spatial system and the sign system on the eventfulness of large-scale spaces based on cognitive sciences. It seems that the spatial system has had a profound impact on the design and event-taking process of large-scale spaces in such a way that it has also been able to transform the core of the process and production of architecture from the perspective of spatial indicators. The sign system is of great importance in recognizing spatial pieces, and the indicators of the sign system, in the form of symbolic features, have been able to reproduce the process of producing the content of spatial cognition. The method of this research is qualitative, and in some analyses, quantitative analysis will be carried out in a combined and mixed nature, with an interpretive paradigm orientation. And the information will be collected through field research, including the use of existing information, observation, and tracking. On the one hand, various manifestations of the spatial system and, on the other hand, manifestations of the sign system are categorized, in which the focus is on providing the qualitative components needed to design spatial organization in crowded spaces through behavioral mapping. On the other hand, in order to analyze and analyze space, a quantitative cognitive method has been used through the space syntax technique. This relationship is analyzed with the help of logical reasoning. In order to implement the results on real manifestations, large-scale commercial centers in Iran and the United Arab Emirates and their users are evaluated as the research community. The achievement of this research shows that these two systems, spatial and sign, have different uses and effects on the event-driven of space. The spatial system advances the field of event-driven endogenously, directly, and immediately through spatial perception and experience, and the sign system indirectly and leads to the recognition of spatial fragments and recording in memory through recording and rereading.

Keywords: Architecture, Spatial Studies, Cognitive Sciences, Behavioral Mapping, Cognitive Mapping.

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