

Typology of contemporary rural housing patterns and its relationship with climate A case study of Kang village

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Abstract

Today, it is important to know the rural housing architecture, because their architectural spatial patterns are formed in interaction with the climate and environment and are closely related to the cultural, social and economic characteristics of their inhabitants. This study intends to study the housing of Kang village located in Mashhad, as a complex mixed with nature, because the differences in the sub-climates of this region have led to the emergence of different types of housing that have a structure. They are also valuable in energy optimization architecture. The study method of this article is qualitative and the information is obtained based on theories derived from data, case and documentary study, interview and observation. In this regard, this article considers various factors such as climate, materials and construction techniques, etc., Examines what gave rise to this type of architecture. The results show that there are five different species in the texture of houses due to the cold climate of the region, which results from the effect of architectural patterns compatible with environmental climatic criteria, and one of the most important factors affecting the housing pattern is the yard space. It appears 5 different structural patterns (indoor yard, Independent yard (semi-open), roof yard (staircase), common yard, no yard) . Also, from the structural similarity of the houses and the performance of the architectural elements used in them, it can be concluded that the fixed principles of thermal systems have been very effective in providing thermal comfort by using natural and solar energy.

Keywords: Climate, Habitat pattern, Kang (village), Heating system, Mashhad

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