



Analyzing the Factors Influencing the Formation of Spatial Zoning in Hut Settlements of Rural Iran and Mongolia

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Abstract

The spatial configuration of vernacular dwellings embodies a synthesis of environmental adaptation and cultural meaning. In rural Iran and Mongolia, tent-like dwellings such as Iranian kapars and Mongolian gers (yurts) serve as living expressions of the communities' lifestyles, belief systems, and social norms. Although these structures share functional similarities rooted in nomadic and semi-nomadic ways of life, their internal zoning systems reveal deep contrasts shaped by cultural ideologies and ritual practices. This study explores how spatial zoning in these two traditional dwelling types reflects broader patterns of environmental response, socio-spatial interaction, and symbolic order embedded in everyday life.

Methodology: This qualitative comparative study adopts a multi-source methodology, including on-site field observations, spatial analysis, ethnographic accounts, and interpretation of archival documents and visual materials. The research is guided by questions such as:

- What are the principal factors shaping spatial zoning in Iranian kapars and Mongolian gers?
- How do environmental conditions, social structures, and patterns of daily activity influence the internal and external spatial organization of these dwellings?

The study integrates architectural typology and cultural interpretation to compare selected case studies from rural regions in both countries. Mapping the physical arrangement of household zones and examining their functional and symbolic uses allow for the identification of cultural priorities and environmental strategies in each context.

Results: Findings indicate that while both Iranian and Mongolian dwellings respond to their respective climates, their spatial organization is more profoundly influenced by cultural patterns and social expectations.

- Iranian kapars tend to be extroverted and seasonally adaptive, with open, flexible layouts that encourage outdoor interaction, group cohesion, and air circulation—features that reflect a communal lifestyle shaped by hot, arid climates.

- Mongolian gers, in contrast, are compact and inward-oriented, built around a central hearth and structured by clearly defined zones for gender roles, guests, and household tasks. Their design emphasizes thermal insulation and spatial order, reflecting the needs of pastoral mobility and cold climates.

Despite their differences, both forms exhibit spatial flexibility and symbolic hierarchies consistent with their respective traditions.

Conclusion: This research concludes that the spatial zoning of vernacular nomadic housing is shaped primarily by cultural worldviews and lifestyle choices, with environmental factors reinforcing these spatial expressions. Iranian kapars reflect a model of extroverted communal living, while Mongolian gers emphasize internal coherence, ritualized order, and practical efficiency. These insights enrich our understanding of how traditional architecture embodies intangible cultural values and environmental knowledge. Further research may examine how modernization, resettlement policies, and evolving economic patterns are transforming these spatial traditions in the contemporary era.

Keywords: Culture, Iranian Kapars, Kapar-Dwelling, Mongolian Yurts, Spatial Zoning