



Recognizing the Components of Contemporary Housing and its Impact on the Cultural and Social Identity of the Metropolis of Ahvaz Using the Shannon Entropy Method

Received date: 2024/08/24

Accepted date: 2024/09/30

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ABSTRACT: In the metropolis of Ahvaz, contemporary housing plays a significant role in shaping and enhancing its residents' cultural and social identity. This research employed a questionnaire as the data collection tool. A total of 16 questions were designed for the identity questionnaire, centered around two main components: social and cultural. Additionally, 34 questions were provided to residents of various regions in Ahvaz, covering eight primary components: cultural, structural, functional-executive, physical-spatial, operational, experiential-aesthetic, environmental, and social-political, to distinguish between the internal and external housing components. The analysis of correlation coefficients and regression between contemporary housing variables and the urban identity of Ahvaz reveals a strong positive correlation between these two variables. This indicates that as the level of industrialization of buildings increases, urban identity indicators also rise across different areas of Ahvaz. The final weight of the housing and contemporary identity components was calculated using the Shannon entropy method. The results indicate that different components hold varying importance and influence in different domains. In cultural identity, the social system plays a more prominent role, while in social identity, religion is more significant. Regarding housing, functional and environmental aspects are more important, focusing on efficiency and sustainability in housing design. This analysis can be helpful for policymakers, designers, and planners to understand better the importance of various components in identity and housing.

KEYWORDS: Contemporary housing, Building, Socio-cultural identity, Shannon entropy method, Ahvaz.

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INTRODUCTION

Housing is a necessity that has acquired different meanings in various natural and constructed environments. Each community has given it a unique shape based on its needs, capabilities, and economic, social, and cultural constraints (Najafi et al., 2023; Mohammadian et al., 2021; Mohammadi Yeganeh et al., 2021). Contemporary housing architecture has weakened the connection between housing and individuals, resulting in a lack of identity for homes and satisfaction among residents. Housing is an institution created for complex purposes and not merely a structure (Khadjeh-Nazad et al., 2021). As building a home is a cultural phenomenon, the form

and plan of housing, along with its spatial organization and order, are profoundly influenced by the cultural environment to which the housing belongs. The aim and role of housing is to create a spatial social unit (Honarvar et al., 2023; Ayni-Far et al., 2020). The distinctive characteristics of a culture, namely the accepted methods in that culture for carrying out tasks and the avoidance of what is socially unacceptable, mean that housing is not only a cultural phenomenon but also a space shaped by cultural factors. In many societies, housing is more than a physical structure (Hogg, 2016; Amiri, 2017). Since housing is created for individuals, those individuals must participate in the production process (Nazoktabar and Ebrahimi, 2023). The topic of identity has garnered significant