

The Model of Future Islamic Architecture: Adapting the Basics of Design in Native Qajar Housing

Abstract

Art is the true manifestation of the characteristics of the culture of any nation, and the flourishing of any civilization finds its reflection in the past tradition in art. In this position, the tradition of immutable principles is derived from culture, the manifestation of which can be seen at different times and places. From this point of view, any work of art, including architecture, is no exception to this rule; It contains a message that understanding this message means success in interpreting the effect. Part of this success is due to the discovery of hidden dimensions of the work (influential social layers) and the other part is due to the understanding of design.

The research approach is quantitative and analyzes the spatial system in the native housing of Qajar in Isfahan with a combined descriptive-analytical strategy in case samples and logical reasoning using intertextual principles and space syntax technique. The results of the research show that with a comprehensive look at the spatial organization of Islamic architecture, it is possible to achieve a model of housing architecture suitable for the future of Islamic architecture in Iran.

Keywords: Islamic Art, Architectural Design, Future Islamic Architecture, Adapting the Qajar Housing Model.

Introduction

Culture in the interactions of society and its shaping factors forms a cycle of two-way factors that are inextricably linked with science, art, religion and society (Grutter, ۱۹۸۷: ۵۵). Muslim artists are no exception to this rule and have reflected many common moral and religious themes in their works (Shayestehfar & Khazaei, ۱۴۰۰); Therefore, the culture of living in Iranian society can be considered on the basis of two components of national culture and religious values, which can be seen in traditional architecture as a manifestation of indigenous patterns. Patterns originating from the Islamic worldview that have been formed, developed, manifested and perfected in the context of time. These patterns have fixed and timeless attributes that have had different physical visualizations to respond to temporal and spatial conditions. With the advent of modern architecture, these fundamental and valuable principles lost their strong position and were replaced by principles that have no bearing on the identity structures of this frontier. Among these, residential architecture has suffered the most damage by recognizing its characteristic features and components (Charkhchian, ۱۳۹۸: ۷۰) and referring again to the lost principles and foundations of previous architecture, discovering and reviving values (Ahoei et al., ۱۴۰۰), It is possible to create a generation of outstanding Islamic residential architecture that can be a legacy for the future of architecture (Mahdavinejad, ۲۰۱۶: ۱۲۹). In this regard, recognizing the problem of design will support the importance of the subject and play an effective role in understanding the subject.

The category of design faces two important entities, which are context and form. Defines the context of the design problem and forms as the solution to the design problem. In this regard, the ultimate goal is to achieve a relationship free from anomaly and a kind of coexistence free of contradiction, between form and context (Alexander, ۱۹۶۴: ۱۵-۱۶). On the other hand, context is not just a matter of design; It also acts as a generator for structuring the design and is a base for starting design. These background generators are divided into two categories: a) Conceptual generators b) Objective-physical generators that deal with the role and impact of existing buildings in the field (Ansari, ۲۰۰۹: ۸). In other words, the designer, by understanding the background message, objectifies the received message as a significant nature of the arrangement, arrangement and relationship between the spaces, according to the time and place of the design (Mahdavinejad et al., ۲۰۱۱: ۳۲).

Today, literary and artistic studies have opened new windows in connection with contemporary philosophy and theories of aesthetics. Values that play an important role in both recognizing art and creating it. One of the lesser-known forms is data mining of previous architectural text and its extension to the design system.

Knowledge of design as an independent system is neither art nor science nor their combination; Rather, it is a system that is formed in connection with the two (art and science) and in an interdisciplinary space (Lawson, ۲۰۰۵: ۲۱). One of the interdisciplinary fields that is located between the two fields of design and architecture is space, which with scientific advances, the need to review and find new knowledge of it is essential (Amraee, ۱۳۹۳: ۲۶). Space in the visual arts makes sense according to the design elements, dimensions and distance between the components of a work; In architecture, on the other hand, it includes the forms and relationships between the elements in that work. In other words, with the help of elements and relationships between them,

we can talk about space, the shape of space, positive and negative space, full and empty space, and so on. By this definition, organizing space is understanding the place and time of objects and how they relate to each other. This study, with the aim of achieving a systematic knowledge of design and the relationship between form and space, seeks to answer the question that

To what extent does design depend on knowing the works of the past? And how can it be used in the creation of contemporary architectural works?

In order to respond, intertextuality has been selected as a research approach and Space Syntax technique for data mining of design basics (intertextual operation / rule) from valuable works of the past (hidden text / data) and its development into a contemporary design system. Numerous researches have been done in the field of intertextuality, but in all cases an existing text (work of art) has been compared with an earlier text and the symbols of the previous work in the later work have been searched and critiqued. Focus on data mining in works noted. In the present research, while extracting quantitative data related to the configuration structure and spatial location of successful models of Islamic architecture in Iran, it has been tried; As one of the first stages of the architectural design process (Rahbar et al., ۱۳۹۹: ۱۳۱), using data-driven methods, spatial location prediction and landscape mapping for future architecture was achieved.

Conclusion

In accordance with the framework of intertextual theory and the leading architectural discourse, the answer to the design problem with interaction and influence from the context of the design; In particular, valuable architectural works of the past and its re-creation in a new form can save space for the user; Familiarize, identify and transform the place and lead to the preservation and continuity of architectural values and create the foundation for future architecture. To this end, the first step is to re-read the valuable architecture of the past, which advanced tools can provide a good platform for this issue. Space Syntax, as a tool and technique based on mathematical principles and graphs, can play an effective role in extracting genomes and basic principles of design such as domain recognition, spatial communication, access levels and other values such as selection, control and order within the system.

On the other hand, by providing a database of architectural and algorithmic values, with the help of artificial intelligence, while receiving a bunch of answers instead of an answer, a design can be achieved in less time that meets the needs and culture of the day while having a native architectural genome. Also have in itself.

These two capabilities, ie discovering the concepts of past architecture and producing a plan based on data extracted from previous architecture, can play an effective role in maintaining the identity of architecture and create the ability that today's architecture while maintaining the past as a leading architecture. And present a precious legacy for future architecture.

Looking at the software responses in Figure ۶, the final summary can be expressed as follows: What distinguishes a valuable architectural space from other spaces is not the physical structures; Rather, the qualitative values of space such as proportion, view and perspective, the existence of

transparent and semi-transparent space in the heart of the space mass, observance of spatial domains and proper location of spaces.

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