A Typological Approach to the Spatial and Physical Analysis of Ardabil Native Houses

Abstract

Continuous features and characteristics in the native culture is one of the categories that has roots in the history of Iranian architecture and has instigated the components of Iranian architecture to bestow a developmental course in line with the growth and changes of Iranian culture during various centuries. There are various approaches to recognizing and analyzing the physical space of indigenous homes. One of these approaches is the typological approach. The research sample in this article is selected from the traditional houses of Ardabil. In Ardabil, the pattern used in house making is the same in terms of form and space, each with unique features. These patterns, derived from the lifestyle and social personality of individuals and the relationship between structure and architecture, have unique forms and characteristics that require analysis. The research method in this research is analytical and descriptive. In the descriptive section, qualitatively, by conducting studies and analyzing related basic theories and recognizing physical and spatial elements, indigenous houses deal with the correlation of components. The data of this research have been extracted through field observation and logical analysis. Due to the fact that no specific classification has been done in this regard, in this paper, by studying the typological background and species classification, a framework for the architectural classification of Ardabil houses has been obtained.

Research aims:

1. Improving housing design methods by identifying and analyzing the physical and spatial elements of indigenous architecture.

2. Strengthening the physical and spatial elements of contemporary house architecture and finally promoting indigenous and residential identity.

Research questions:

1. Which index can be used to classify the physical and spatial elements of a house?

2. How can the architectural factors shaping the native houses of Ardabil be identified?

Keywords: Typological approach, Spatial and applied analysis, Indigenous houses, Ardabil.
Introduction

Iranian architecture in general and its residential architecture in particular have been less studied and this issue is very evident in the region of Azerbaijan and Ardabil. This issue becomes more apparent in gaining scientific information about the architecture of this region, consequently, it seems necessary to conduct detailed studies on the typology of the architecture in the region of Azerbaijan, especially in the Ardabil region. Therefore, in order to achieve scientific studies, it is necessary to classify, or in other words, the architectural typology of these areas, since understanding the concept of species is the first step for Ardabil typology. In this study, the concept of species based on written sources and samples will be conducted. It should be noted that in most cases, physical characteristics are the criterion of typology; Of course, in some cases, in addition to those semantic factors, it must be used as a criterion. There are different methods in understanding architecture. Typology and classification based on different characteristics have been considered by thinkers of different disciplines since ancient times.

The knowledge and application of typology in various branches of science has long shown its great importance. It has been used in architecture and archaeology since the mid-eighteenth century as a tool for cognition and classification. Moreover, it has been about 2500 years since typology began in botany and entered other disciplines scientifically. Typology has a special place in sciences such as psychology, economics, mathematics and other sciences. In psychology, the classification of human behaviors based on a particular mental state is used. In economics, classification based on their source of income is a symbol of topological application. But the typology of architecture began from the time of the lodge. Laji traces its roots to architecture in the eighteenth century and he focuses on studying simple shelters. Duran used formal typology in the early nineteenth century to classify different buildings. The use of typology in the study of architecture continued in earnest until the early twentieth century, with Sydney Eddie using typology in his book: “The Evolution of the English House”. In this book, Eddie believed that art was based on standard forms and genres that always reappeared and created infinite variety.

Iranian architecture in general and its residential architecture in particular have been less studied and this issue is very evident in the region of Azerbaijan and Ardabil. This issue becomes more apparent when we want to obtain scientific information about the architecture of this region, so it seems necessary to conduct detailed studies on the typology and typology of architecture in the region of Azerbaijan, especially in the Ardabil region. Therefore, in order to achieve scientific studies, it is necessary to classify, or in other words, the architectural typology of these areas, since understanding the concept of species is the first step for Ardabil typology. In this study, the concept of species based on written sources and samples will be. It should be noted that in most cases, physical characteristics are the criterion of typology; Of course, in some cases, in addition to those semantic factors, it must be used as a criterion. There are different methods in understanding architecture. Typology and classification based on different characteristics have been considered by thinkers of different disciplines since ancient times.

Regarding the background of the present study, it should be said that an independent work with this title has not been written so far, however, some works have studied typology in architecture. In the 19th century, John Ruskin studied and researched species. Le Corbusier believed in
classification. Le Corbusier also uses the terms object species, body species, and human species. His efforts to find the essence of objects are reflected in the writings of Walter Gierpius and Moholi Nagy. But modern architects did not accept it because its type and application cannot affect the creativity of the architect and the architecture student (Memarian, 2005: 28). This is the concept that John Carloud Kahlo (1985) calls stereotyping or obstruction or freezing species (De Carlo, 1985, 54). One of the first to criticize the idea was Walter Grippus, who criticized the critics' strong insistence on classifying contemporary movements. "Trying to classify and freeze living art and architecture and turn them into a name is most likely to shut down creative activity, not stimulate or correct it." Moholi Nagy wanted to transform architecture along the Vitreous path into economics, technology, and form, or social, technical, and aesthetic execution (Bernal, 2001, 2006). Alan Kolkohen stated in his article "Typology and Design Method" in 1969 that “without more precise tools and analysis, the designer naturally acts according to his previous examples to solve new problems about typological solutions” (Kappen, 2004: 45). In the above works, the subject of this research has not been addressed, so the present research in the theoretical section provides a notional framework with a qualitative approach and library study tools and with an analytical and descriptive method. In the section related to the study of houses, the native houses of Ardabil are evaluated on a case-by-case basis. In fact, the statistical population is the native houses of Ardabil. In this regard, this evaluation is completed with face-to-face observations and field surveys along with interviews with residents and their description.

**Conclusion**

The city of Ardabil and its central texture are designed in a compact and dense and adjoining houses, one of which is due to the influx of villains into the city and resistance to them, and the other reason is to pay attention to the specific climate of such areas. Homes have also been influential. In terms of materials, almost all the houses had the same materials, most of which were brick and clay with stone and wood. One of the most important features of traditional Ardabil housing is the attention to patterns in construction that have been used in almost all buildings. A pattern that is the same in form and space in most buildings but has unique features in each building. These patterns are derived from the lifestyle and social personality of individuals and the relationship between structure and architecture, which has the following form and characteristics.

1. Meeting the needs of residents; 2. Being an identity for ordinary people and individuals; 3. Appropriateness to geographical conditions; 4. Lack of aristocracy to other buildings and attention to the privacy of space; 5. Having a central courtyard and stylizing elements of the space; 6. Paying attention to the spatial hierarchy and order in the entrance and exit area of the building; 7. Perceiving the geometry and symmetrical shapes in accordance with the functional concept of each space; 8. Considering that the exterior of buildings is simple whilst the interior is decorated; 9. Designing the space in accordance with the function and the absence of extra spaces in the building; 10. Full use of land and attention to urban patterns in the orientation of the building; 11. Noting the fact that the design of the hall or the royal seating place in the middle of the building to create a central symmetry that strengthens the space in accordance with the indigenous beliefs of the people and concentrating on to the presence of guests and hospitality. The orientation of the
houses in this area is east and west with a deviation from the east, which is due to the proper use of solar heat and also the lack of cold winds to enter the building.

Also, the unity and continuity of spaces and their regular communication, introversion, attention to privacy, unity in plurality and responding to individual and social needs of residents, creating a calm and pleasant atmosphere for residents to use, use of decorations and the relationship between decorations and religious beliefs are all considered as the general architecture of Ardabil houses. Another thing that can be mentioned is the continuity of styles used in the architecture of houses, hence, by examining the houses of the Safavid, Afshari, Zandi, Qajar and Pahlavi periods, we come to the conclusion that in all these periods, the continuity of architecture can be seen quite concretely. The physical examination of Ardabil houses, in addition to the historical typology mentioned above, in terms of physical and form, this continuity is almost present and only by changing the period, parts have been added or reduced to the main building. From this study, it can be pointed out that houses and the use of its physical and spatial elements can be very effective in the identity of today's houses and the continuity of architecture and relationship with the past architecture of Iran.

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