Effective Factors in Shaping the Identity of Architecture

[1]Zohreh Torabi and [2]Sara Brahman

[1]Department of Architecture, Zanjan Branch,
Islamic Azad University, Zanjan, Iran
[2]Department of Architecture, Science and Research Branch,
Islamic Azad University, Zanjan, Iran

Abstract: An architecture that has its own identity acts like an identity certificate for its homeland and reveals the thoughts of its people. All major and lasting works of architecture have been formed based on ideas of people living in that historical period. These ideas are specific, consistent thoughts rooted in the people's ontology and have created a unique architecture in every period for every nation. In fact the architectural identity is formed based on orderly thoughts and organized action. This harmony between thought and action forms architecture with identity. If architectural identity is lost, it can lead to loss of identity and instability in the nation. In these circumstances, people do not know what they want from architecture; therefore, rather ephemeral fashion values replace authentic cultural norms and values. In this regard, Lyon Carrier deems temporary aesthetic values as one of the crisis factors and states that the beautiful architecture created today should remain beautiful two hundred years later. This kind of architecture cannot be disposed after use like an object.The present paper investigates factors shaping the architecture identity in three sections: terminology of identity, architecture identity and comparative study of contemporary works of architecture. The results show that seven factors of spatial organization, time organization, semantic organization, general design principles, building shape and form, building materials and relationship with context are considered as effective factors in creating architecture identity

Key words: Architecture identity · Spatial organization · Semantic organization · Time organization · General design principles

INTRODUCTION

The technique and art of architecture are among the most important signs and characteristics of each nation's culture and of each historical period and represents human's living environment at any time. The type of architecture people want and how they want to make it are two separate moments of a phenomenon: a cultural moment and a technological moment. These two represent the architecture culture of people, groups and societies [1].

Architecture always follows certain known rules and regulations and has a strong and unbreakable bond with the culture, values and behavior patterns of society. This is why the architectural style of each period is a reflection of the culture and art of that period. Changes in the architecture are in line with changes in other areas of life; therefore, these changes are necessary for a live and dynamic architecture responsive to new human needs.

Continuity which is necessary for consistency and strength of architecture on the one hand and creativity and innovation as one of architectural virtues can go together provided they are combined based on free thinking. The mere commitment to East or West, or tradition is not the criterion. Avoiding or limiting innovation in the form of respect for tradition is a disregard of architecture main purpose, i.e., improving the human environment. It means sedation, immobility and molder of architecture or even its death [2].

The issue of relationship between culture and identity and architecture as an aspect of relationship between human and built environment and promotion

Corresponding Author: Zohreh Torabi, Department of Architecture, Zanjan Branch, Islamic Azad University, Zanjan, Iran.

of its quality is a challenge faced by thinkers and architects of various environmental and intellectual backgrounds [3].

In this paper, we try to answer these questions: what is the concept of identity in architecture? And which buildings possess architectural identity? Answering such questions requires illustration of concepts of identity and effective factors shaping architectural identity. Therefore, in this article we will have a descriptive look at the concept of identity taking into account its multidisciplinary nature. Then, due to the impact of each nation's culture on architecture, the role of identity in architecture is investigated. In this regard, based on structural - content analysis, seven primary indicators and issues are presented and analyzed as factors important in shaping the architecture identity. In the final part, a comprehensive review of two outstanding works of contemporary architecture which have attracted attentions in scientific journals are analyzed via a comparative assessment with factors described.

The Concept of Identity: The word identity has different meanings and definitions in different disciplines and schools of thought. So scholars have presented different definitions for identity over time. The concept of identity in the field of social and political sciences is easy yet difficult. It is easy because it makes sense for everyone; yet it is difficult because as Erik Erikson puts it the more it is elaborated on the more it gets complicated and difficult to understand [4].

In philosophical terms, the word identity refers to the nature and manifestation and Type physicalism of existents. In Dehkhoda dictionary, the term Hoo is used to describe the origins of the word. Identity sometimes is referred to an external existent and sometimes refers to the nature with distinction which is the partial truth [5].

Identity can be defined as a set of material, biological, psychological and cultural signs distinguishing every individual, group, population or culture from others. It is different depending on the society or nation in question and is an expression of a kind of unity, solidarity, uniformity, persistence, integrity and non-divisiveness [6].

In general three levels can be outlined for cultural identity:

The first level of cultural identity is membership to different intellectual, professional, social, economic, political, cultural, artistic and other groups. This level is the most visible and most tangible one.

Like the first one, the second level is conscious, but is not under our control. This level of cultural identity is created during lifetime of several generations and any change in it takes generations.

The third level of cultural identity is unconscious and extraordinary that is the reason why it is often neglected. Some intellectuals have called this level of cultural identity for Iran as "Iranian spirit". This order of cultural identity takes long periods of time to develop and it is richer for societies with longer historical experience and the persistence on land [7].

Identity and Architecture: Architecture is part of the identity of each community and carries the message, concept and characteristics attributed to the community where it was born. Therefore, it depends on the geography, traditions, manners, insights and knowledge of the community as well as its history. It can show all these dependencies.

Therefore, there is no doubt that architecture and layout of buildings and their interior and exterior facades are among the obvious manifestations of civilization and culture of each tribe and nation. According to Soltanzadeh, the identity of a space is a collection of signs distinguishing a space in cultural and functional terms.

According to Rappaport, identity is the ability to distinguish and identify an element from another. It is a feature of environment that does not change in different situations. This feature can be physical features such as shape, size, decoration, construction style, etc. or it can be specific activities or practices in the environment or its functions [4].

Ideas, effects and functions resulting from the cultural features present in an architecture work define its architectural identity. Factors like beauty, knowledge and design originality are results of a dynamic thought that creates a genuine and meaningful architecture with identity.

It can be said that stability and change or rest and motion are the two main characteristics of identity because although identity is a new product according to the needs of today's society, it takes into account the past and historical features of society. Identity is the product of individual experience; therefore, because of the difference between these experiences, the meaning of identity is different in different societies.
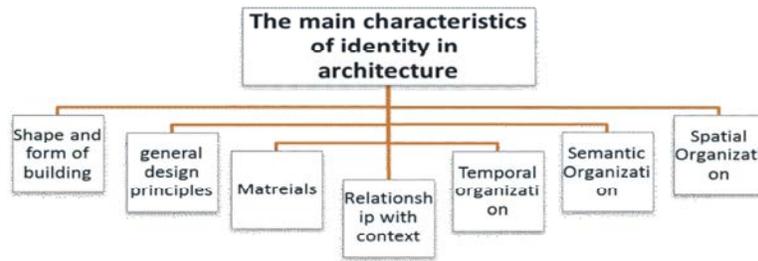
Fig. 1: Main characteristics of identity in architecture (Authors)

The identification process is an analogy between the object and the data in the mind of the subject. Although each object or space is an independent external entity, it changes to a subjective phenomenon in the process of perception [8].

We can say that understanding identity is a kind of appraisal using individual's subjective reserves gathered via experience over time [9].

The Main Characteristics of Architecture Identity: Meaningful and understandable places are suitable bases for personal memories, feelings and values. Lynch considers two major functions for identity. The first function is sense of recognition. In other words, identity gives us judgment ability and helps us understand and predict the environment. The second function is emotional function of environment identity [4].

Architectural design is simple yet difficult. Creating space appears easy but in fact is very complex and deep. It is well proven that people are affected by the environment. Human intervenes in the natural environment and builds and organizes artificial environment where he can live. Types of human intervention in nature for creating a variety of architectural spaces have changed during history [7]. In terms of time, identity has both sustainable and dynamic aspects. If identity had only a fixed status, architecture would have a consistent continuation throughout history. However, like human identity, architectural identity has had both fixed and dynamic aspects in each historical era. There have been changes in each period. Humans make sense of their architecture based on their own inner motivations and via making changes in environmental functions or in the physical environment. What people perceive are first actions and events the form and pattern of physical environment provide. Then, characteristics of shape, levels and forms take attention and get perceived [10].

Many factors can affect the process of creating an architectural identity some of which are examined below.

Spatial Organization: For understanding the spatial organization, we must first have an understanding of the concept of space. Aristotle likens space with a container. He considers it as an empty container that should be enclosed to exist; therefore, space always has limits [11].

In his book, *Aesthetics in architecture*, Jorg Kurt Grutter states that the concept of space is divided into three types of geographical space, life space and architecture space. In terms of perception, the first is subjective space that is not directly understandable. Life space is semi-subjective and some of its attributes are understood directly while many of them are known based on information. The third space can be perceived objectively, felt directly and recognized via its defining elements.

In fact, space is a set of objects with certain relations that define a system recognizable by its defining elements. Space is amorphous in nature and is defined by its form components. In fact, when the space begins being enclosed and organized by the elements architecture emerges and the character of space that is a function of relations between these elements is formed.

According to Amos Rapoport the design system of American cities do not contain any form and discipline for French people. Americans hold a similar idea about Islamic cities. Spatial organization in different uses like schools, houses, mosques, markets, bathroom, etc. are different in Persian architecture. Architecture with identity has a design system and spatial organization that can transfer semantic relationships of spaces in different uses.

Spatial organization includes design and layout of spaces in order to achieve a particular goal that determines the frequency and type of communication between elements. This organization determines the order, sequence and position of spaces. Differences in the type of organization lead to differences in semantic relationships between spaces. This semantic relationship and spatial organization are different in different cultures and applications. Using spatial concepts like passage,

vacuum and other concepts in the architecture of each culture can be the key to constructing an identity oriented building [12].

Time Organization: The concept of time is different in different cultures, as is time perception. Humans live in space and time. Therefore, environment has a temporal aspect as well. Change is related to the passage of time. Nature and the natural environment surrounding human change constantly over time under the effects of climate. Many buildings that have been constructed in the modern architecture style with iron and glass deny any connection with time [13]. Architecture with identity represents the architecture of its time and preserve the physical and social structure and culture of its time.

Nature and the environment have not been like today from the beginning of human life. Rivers, mountains and valleys have been formed over time. Human has played a role in changes his surrounding environment via building constructions.Passage of time and changes in the type of construction in the long run lead to changes in the social and cultural structure. So the amount of changes in a certain period of time should follow some conditions that do not lead to the loss of architectural identity in the built spaces. Physical changes often lead to drastic social and cultural changes. Structural changes need far more time than physical changes. Therefore, physical changes should occur taking into account the social and cultural structures, otherwise they will be destroyed. Eliminating these structures make human confused and unable to adapt to the changed identity of his environment [13]. Thus, observing certain principles and characteristics is necessary to prevent this problem in the building changes at various time intervals.

Semantic Organization: Every society has a culture which represents its own ideals, goals and ideology. Past historical events, wars and victories and so on, have created shared meaning for the community members. Different symbols in different cultures have their own unique meanings for people. Each architectural space displays community's special ideas and gives them an appropriate appearance and becomes their symbol. Architecture is a spiritual discipline that is embodied in buildings [14]. Each building, apart from its use and function, is the transmitter of a semantic load that should be understandable to users. Each building has an apparent and a semantic dimension. Apparent dimension

is displayed in architecture via landmarks, color, form, size and other physical characteristics. Many building materials have certain characteristics through which express particular semantic features. For example, gold and marble are authentic and represent wealth, durability and polish. Wood is natural and warm and provides values that wholly inconsistent with those of gold and marble [13].

Users' expectations of buildings like a mosque or church are different from those of a hospital, home or even a school. On the other hand, if we assume space as constant, the layout, light, color and space create a new sense. In office space, the layout type can change it into a management or relaxation room. An architecture with identity needs to have a sense and concept that truly represent the built space suitable for the culture and ideology of society. To this end, it needs understanding and proper use of form, color, materials and so on.

General Design Principles: General design principles include the ideas and concepts forming architectural design which provide coherence in the design process. The word idea was taken from the Greek word idos which means to see. In the human civilization, ideas have played an important role in transformation of society at various levels. Ideas are thoughts that result from our observations and thinking. They are pure thought and include the highest understanding received from each subject. It is an abstract of data that comes to mind [15].

Architecture, before being a building is thinking. The curious mind of an architect understands the environment using five senses and changes his new ideas and theories to architecture using the right tools. Furthermore, the architect's mind has the ability to extract and analyze the ideas and buildings built in the past. Idea is a tool for solving architecture problems. The architectural product that lacks idea is without cultural value.

Architecture with identity and originality needs a creative idea corresponding to the culture of its period. The need for an architecture with identity creates different design approaches such as concept-oriented or form-oriented architecture design in the past some of which have succeeded and some have failed. But the important topic in the architecture design is that of using creative ideas that suit the needs of the building to achieve an architecture with identity.

Form and Shape in the Building: Viewer or listener of a work of art finds it as a unified and decomposable whole or as a compound of form and content. The work of art is composed of words, sounds, shapes, colors or of figures and space. On the other hand it includes a subject which tries to express as well as the facts taken from the artist's life and dreams [16].

No imagination about architecture can be realized without citing shape. The visible appearance of anything is the most important and most immediate impression of the built or objective environment [1].

A correct form has proportions, size or scale (measure) and harmony [16]. Form is a mental concept. To identify it one needs elements such as lines that can create regular or irregular forms. Simple and pure forms became popular in modern architecture and meaningful forms in post-modern architecture. It is important to choose the form that is consistent with culture. Form language has formed over a long period of evolution.

The success and sustainability of a culture depends on having a valid formal language as well. Formal language is a set of concepts that are derived from visual symptoms that represent a single culture. Rapid changes in form language lead to poor culture [13].

The building form in each community represents the community's cultural concepts. Entry of foreign elements if refuses cultural adaptation, creates a product that has no identity and the architect cannot succeed in designing the building form and making logical connections with the audience.

Building Materials: One of the most important factors in understanding space is the materials of crucial space elements. Many of the features of an object, such as hardness and softness, flexibility etc. are understandable via seeing and touching materials. Every material has special properties; therefore, imagining Eiffel Tower in bricks or Chapel of Ronchamp in steel and glass is difficult [13]. The important role of building materials in architecture requires no explanation. The materials used in architecture of different historical periods represent the faith, beliefs and culture of these periods. Generally, the use of materials such as brick and wood in buildings shows the belief in world mortality in the community. While the use of resilient materials such as stone in palace of the Kings is a symbol of building stability and strength of kings. Therefore, materials are not only used for decoration but also for transferring concepts via symbolic values and meanings. Adolf Loos believes that original and fine materials replace surface and form a batter alternative that have more intrinsic value [17]. Materials used in architectural spaces are various. Using traditional native materials or the use of modern materials that show purity can give a property to architectural space that help users understand the architecture with identity.

Relationship with Context: Every living thing lives in the environment and interacts with the surroundings. This relationship helps in understanding the environment and gives power to people to control their environment. Each object takes meaning with its surroundings. For example Persepolis is understandable in its surrounding space and if it is transferred to another country such as Paris it will lose its definition. So the environment is important in understanding the architectural space. In the architectural design attention should be paid to context and exposure to the environment.

Building and architectural space interact with their surroundings in three ways. In fact, this relationship can be so that the building is integrated with nature. In this case, the changes in the context of the environment are in a way that the slightest change is made in the surrounding environment to include architectural space. The relationship between the buildings with their surrounding is a congenial relationship. In another approach, we can intentionally distinguish the shape of the building from the context. This relationship is called the conflict relationship. From the perspective of information theory being something else is meant to be a surprise and anything new should be related to the previous ones so that the message is understood [13].

Another relationship status is called opposition. In this type of relationship the building is located in opposition to the surroundings.

Relationship between architectural spaces with the environment is very important in guiding the design of an architecture. Emphasis on solidarity and visual cohesion between the building and environment can have a strong role in creating architectural identity.

Identification of Factors in Modern Works: In order to examine the architecture with identity, two contemporary buildings are studied considering the above mentioned factors effective in shaping identity.

Fig. 2: Cultural - Movie Complex, Designer: Farhad Ahmadi (Authors)
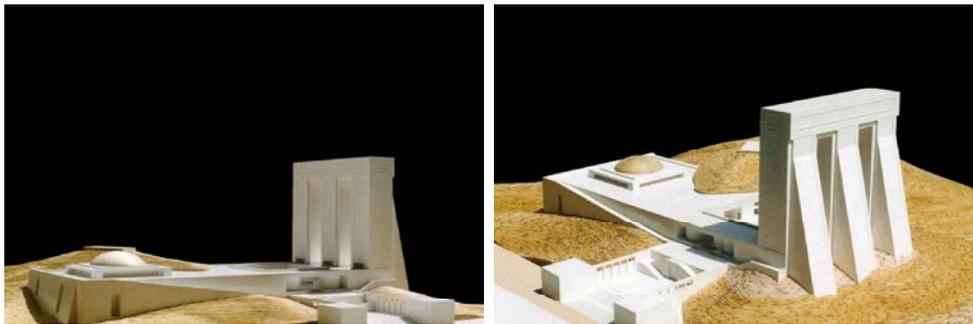
Fig. 3: Academy of Islamic Republic of Iran, Seyyed Hadi Mirmiran, Jahan Pars Consulting Engineers (http://www. njp-arch. com / Default. aspx? cnt = prjmp)

Table 1: Comparative table for two works of contemporary architecture (Authors)

Evaluation Factors	Cultural - Movie Center Dezful Iran	the Academy of the Islamic Republic of Iran
Spatial organization	Space making and different treatment of soil and the continuation of relationship between inside and outside	The purity, simplicity and iconic nature of building and innovative use of traditional patterns
Time organization	Using structures in accordance with the contemporary values taking into account cultural and social principles	Using the ancient architectural elements in the today's building
Semantic organization	Using familiar signs based on the idea of relationship between mystical thoughts and modern achievements to create architecture with identity	Using cultural concepts, principles, themes and memories
General design principles	Sorting elements based on the belief in going from material world to the spiritual one	Designing based on engagement with the Iranian culture and civilization
Shape and form in building	Using Shamseh in three dimensions and using wind towers to look at the sky	Using platforms, central courtyard and Persian patterns; focusing on form and observing historical perspective
Building Materials	brick view, white mortar and blue and turquoise tiles for architectural affinity with the regional architecture	
Relationship with context	The use of figures and pigeon hole nets appropriate for regional architecture	Harmony with site and project site roughness and with earth's natural landscapes and waves

Cultural-Movie Center Dezful: This building was chosen as distinguished design by the biennial conference in Norway in 1998. Farhad Ahmadi developed the design in 1987. It has an infrastructure area of 5000 square meters and yard area of about 10,000 square meters. The center includes the following four distinct parts in order of priority: first, the works fair section including two large and small display hall, waiting room and exhibition scene; Second, the information sector, including library and information; Third, the education sector, including two traditional art and visual arts school; Fourth, service

sector, including shops, traditional tea-rooms and public spaces for gatherings of artists and art lovers [18].

The Academy of the Islamic Republic of Iran: The building was designed in 1994 by Seyed Hadi Mirmiran to participate in a design competition. The building components include: input, platform, central courtyard, dome, assembly and the wall of the academy whose free presence on the steep hills has created a harmonized combination of natural and artificial elements and embodied beauty in the building on land [18].

CONCLUSIONS

Identity is inherent, natural, gradual and inevitable and creates our yesterday, today and in the future will lead us. as the most important challenges of our lives. Identified a space, the combination of signs and symptoms that distinguish a space and the land.

Reliable Architecture with identity and observing cultural principles, rules and features of the land. Recent Studies and reviews shows the following factors can be effective in creating architectural identity:

Spatial Organization: The relationship between architecture spaces in different cultures and applications is different. Users expect different understanding of the relationships defined spaces by entries in different environments. So the idea of using the space to make a difference in the perception of the audience is essential.

Time Organization: Every artistic phenomenon occurs at a point of time and relates to events of its time. A work of architecture occurs in a time interval. Therefore, as temporal distance in an art work is defined based on cultural features and geographic conditions, an architecture work should be able to maintain its identity according to social and physical changes in its community.

Semantic Organization: Feelings, perceptions and experiences of a community create shared ideas that lead to certain cultural symbols known to people. Understanding these signs is important to preserve the identity in architecture.

General Design Principles: Ideas in the form of opinions and thinking of designers are presented in physical elements and lead to the integration of architecture to achieve a specific purpose. So a concept can lead the designer to create a good correlation between forms.

Shape and Forms: The shape is a way to understand the culture shown in the built environment. It is the builders' talking about their architectural culture [1]. Thus using meaningful form in creating architecture spaces can be a way to achieve identity-oriented construction in contemporary architecture.

Building Materials: Building materials, in addition to acting as surface, have different characteristics such as roughness, smoothness, transparency, stability and purity. Therefore, they convey different meanings in different uses. So understanding and proper using of semantic features and materials are important in achieving architecture identity.

Relationship with Context: Constructing a building has a direct impact upon its surroundings. And the relationship between a work and its surrounding can lead designers in the creation of architectural space. Harmony between design and the surrounding environment and the least intervention in the surrounding natural environment is a solution for creating identity –oriented works.

It seems that these factors and policies can make an architecture that while being in line with modern trends, includes characteristics of its own culture and land as well.

REFERENCES

1. Falamaki, M., 2006. The formation of architecture in western experiences. Faza Publishing.
2. Mirheidar, 2008. Journal of New School, New Attitude, pp: 50.
3. Hosele Dar, S. and B. Daryalal, 2010. Review of a concept in Iranian contemporary architecture (identity). Construction Engineering Organization of Guilan, pp: 52.
4. Ghotbi, A.A., 2008. The concept of identity and modern Iranian architecture. Aeiine Khial Journal, pp: 10.
5. Moin, M., 2002. Persian Dictionary. Dehkhoda Dictionary Institute, Tehran University
6. Moharami, T., 2004. Our Islamic- Iranian identity. Research Institute for Humanities and Social Sciences, Jihad University, Tehran.
7. Torabi zadeh, M.H., 2011. Iranian Persian Architecture School Journal, Volume V
8. Behzad Far, M., 2008. City identity (a look at identity of Tehran). Tehran's Cultural Center, Nashre Shahr Institute Publishing, Second Edition.
9. Atashinbar, M., 2009. Continuity of identity in the urban landscape, Baghe Nazar Journal, pp: 13.
10. Motalebi, G., 2006. Recognition of form and function in Architecture. Fine Art Magazine, pp: 25.
11. Max, Dessoir, 1925. The history of philosophy, visbadan.
12. Mahdavi Nezhad, M.J., M.A. Khabari and R. Askari Moghadam, 2003. Renovation and Iranian contemporary architecture in the years after the Islamic Revolution, Journal of Iranian –Islamic City, pp: 2.

13. Kurt Gruter, Jörg, 2004. The architectural aesthetics. translated by Jahanshah Pakzad and Abdoreza Humayun: Shahid Beheshti University.

14. Hallin Hans, 1962. Absolute Architecture (cited from: The twentieth-century architectural manifestos)

15. Rahimi, E., 2010. Concept in the design process. Architecture and design process regional conference, Islamic Azad University, Zanjan Branch.

16. Soltani, Gh., 2010. Investigating ideas, form and content in the architectural design process. Architecture and design process regional conference, Islamic Azad University, Zanjan Branch.

17. Loos Adolf, 1982. (in German). Trotzdem, Vienna.

18. Bani Masood, A., 2011. Iranian Contemporary Architecture. The Century Architecture Art Publishing, Fourth Edition.