Research Article

APPLICATION OF DECORATIVE ARTS IN IRANIAN TRADITIONAL HOUSES

*Zahra Tamjidi¹ and Alireza Bozorgvar²

¹Center of Road, Housing and Urban Development Studies, Ministry of Road and Urban Development

²Iranian Housing Consulting Engineers Co.

*Author for Correspondence

ABSTRACT

Finding a place for residence where one feels comfortable is one of the fundamental needs of humans and decorative elements are one of the factors that give entity to Iranian architecture over history. Looking at the Iranian traditional architecture, the especial role and place of house as an important element in architecture is revealed. These elements which had various construction and implementation methods and techniques have different features based on the climate and culture of each region. The patterns used in designing Iranian traditional houses are influenced by various factors such as climate, culture, etc. One of such factors is the individual and collective culture of those people who used to reside in these houses and communities. Spatial arrangement and hierarchy, internal architecture and utilization of decorations which suit the Iranian culture and identification distinguish these houses from their contemporary counterparts which are limited to merely acting as shelters. Various decorative elements such as brickwork, modeling, tiling and mirror work are but a few examples frequently observed in Iranian traditional houses and, depending on the climate, some of these decorative elements were applied to the exterior environment of the structure and other less-resistant elements which could not bear climatic factors were applied to the interior design of the house. This paper seeks to review the attributes of the decorative arts used in Iranian houses which are nearly forgotten in the contemporary era.

Keywords: Traditional House, Decorative Elements, Interior Architecture, Identity

INTRODUCTION

Application of decorations in the Old Iranian architecture was a continuous issue with great innovations. In various regions and due to different climatic, geographical and cultural factors, we may see various and several examples of using decorations in the historical and traditional buildings of this country. Further to the importance of climatic factors which have an especial influence on formation of decorations associated with architecture, cultural and local issues also play a major role in utilizing various techniques and issues.

Using several decorative methods, construction techniques, certain forms and various shapes in different parts of this vast country are indicative of this fact that creation of architectural decorations is a creative issue associated with the local architecture of each region.

On the other hand, as the internal architecture is directly associated with humans' mental-psychological features, the internal functions along with the attributes of human behaviors in the interior living spaces (public or private) must be taken into consideration in the favorable design of a building. Thus, the designer has to deal with 2 issues while designing the internal space: the function of that space and the impression that space is meant to have on the users.

Internal design includes a wide-ranging spectrum of elements and components such as form, light, color, context, floor, ceiling, wall, applied and decorative elements and furniture. These elements are the instruments for the designer's job and all must be placed in a relevant and favorable design in a harmonious and appropriate way.

Generally speaking, internal design of a building as the set of knowledge, techniques and arts which utilize the relevant elements such as form, color, context, etc to optimize spaces and achieve the appropriate efficiency and function in addition to the beauty of meanings.

Research Article

MATERIALS AND METHODS

Research Methodology

In this paper, the research methodology is mostly descriptive-analytical in addition to library investigations.

The Goal and Necessity of Raising the Issue

Like many other arts and skills, the art of architecture more or less involved designing the exterior spaces and volumetric combination. Architectural practice was not so much different than the art of architecture and people used to receive practical training and gain experience till they had reached high levels of professionalism in designing all types of spaces. Although the profession of architecture had not been explicitly divided into separate and specialized majors, it is clear that a group of architects were more professional and skilled in certain fields such as designing and constructing Muqarnas and tended to work more in their own specialized field.

The decorations used in architecture were never separated from the religious believers of their surrounding environment. As a result, one of the signs of entering the dominant religious and mental realm of a society was the decorations which expressed their own meaning and concept. As many of the durable values in Iranian architecture were forgotten in the passage of time, reviving these concepts can be a major step in reforming current structures.

One of the neglected aspects in the Iranian architecture is utilization of decorations in the internal spaces of a building usually taken from the traditional principles of Iranian construction. One of the tasks of internal designers is to refer to the records of this art in Iranian history and utilize its teachings in contemporary architecture. It is obvious that if the rules and principles governing original Iranian internal architecture replace decorations and ornaments borrowed from other countries, a part of the culture and customs of the people of this land will be revived.

Through a review of the literature and history of utilizing decorative arts, this paper seeks to investigate some aspects of application of this art in the Old Iranian architecture.

Definition of Decorative Arts

In Persian, decoration is equal to the word embellishment which means to beautify or add (adding something to something else) as contrasted against trim (to remove something from something else). Of course various meanings such as ordering, preparing, establishing, building, etc have been cited for embellishment (Moein, 1984). In the general Arabic to Persian dictionary (Ahmad Sabah: 598), embellishment is defined as "what is used to beautify, make up" (Sabbah, ?). In Arabic, the stem (Z Y N) is contrasted against the root (SH Y N) which refers to jobs or activities which lift off the flaws and shortcomings. (SH Y N) refers to everything which causes shame and flaw on humans and causes people to hate him (Tabatabai'ee, ?).

The Historical Background of using Decorations in Iranian Architecture

Ancient Egyptians used to pay a great deal of attention to arraying their internal spaces. They used to add to richness of the internal spaces of their temples and shrines by using drawings and sculptures. As far back as Renaissance period when architects came to join other artist to produce different architectural spaces, paying attention to internal spaces has been no less important than the whole building (Prada, 1978). In Iran, paying attention to the internal spaces of a building has always been of particular interest to architects. In huge complex of Persepolis for whose construction all skillful artists and craftsman were brought to Iran, lithographs are a re-enforcing part in internal spaces. Further to being masterpieces of architecture, the massive Achaemenian palaces in Persepolis and Pasargad are particularly important in terms of decorative arts. The lithographs in these palaces have been conducted with utmost care and attention and the whole nuances are written on stone. Further to lithograph, the enamel tile of Yazd is also used in decoration of palaces. A case of such use can be found in the picture of immoral soldiers in Shoush. Achaemenian tall pillars ad huge column heads were also used for decoration purposes (Pope, 1987)

Use of brick became quite common during Seljuq era and various geometrical shapes were used in bricks. The art of brickwork and decorating buildings with bricks was quite common in Iran in 5th century AH.

Research Article

Further to these very beautiful brick decorations, tokens and decorative writings using bricks was one of the properties of Seljuq architecture.

Islamic era glasses which date back to 1st century AH (7th and 8th century AD) are the result of a merger between Eastern Rome Empire, Parthia and Sassanid. Existence of stuff dating back to 5th to early 7th century AD indocates the zenith of glasswork during Seljuq era. Having discovered glass in areas near Gorgan and Neishabour, Khorasan and Gorgan can be considered as centers of glass production and manufacture.



Figure 1: Use of glass in internal architecture, House of Ameriha, Source: author's archive

Since the early Islamic era, the use of plaster in architectural decoration has been quite popular and the surface of the buildings was usually covered with them and colorful plasters were used to decorate them. In the 5th century AH, some transformation took place in the shape and appearance of these plaster modelings which were the result of innovation and creativity. In this era, plaster modeling reached an awesome level in terms of varieties in implementation and various transformations and development also took place in the way plaster was used. Little by little, plaster modeling was replaced by the huge growth in brick work in Seljuq era. However, such changes never meant that plaster modeling would lose its position, as existence of very rich plaster modeling's such as Alavian dome in Hamedan confirms this fact that plaster modeling has progressed and developed in line with brick work.

During the realm of the Safavid dynasty, wooden decorations had a major role in non-religious buildings and more calligraphies and lacquered drawings were used in them. Their design is closely linked with the art of miniature. Carving and turnery especially in doors and ceilings was a certain art in this period. The art of tile work and attractive and bright masterpieces of plaster modeling in post-Islam Iran started during the Seljuq and Ilkhani dynasties and reached its zenith during the Safavid era. Three important types of tile works are dominant in the buildings of this period: single-colored tile, mosaic or diaphoretic tile and seven-colored tile. Buildings of the Safavid era which are decorated with such types of tile works are unique in the whole world. The interesting point about the internal and external decorations in Iranian traditional buildings is that such decorations were integral parts of the building and they were never viewed as an extra element; even framing and decoration were done simultaneously in some certain period. This high level of attention paid to array and decorations helped increase the quality of the spaces used. Iranian desert architecture especially for houses, due to its introverted entity, is full of beautiful and lovely examples of internal design in which creation a space in contrast with the desert environment and induction of a sense of liveliness and freshness inside the building is the main agenda of traditional architects in internal design. Utilizing glass, mirror, plaster modeling and other fine arts in decoration and arraying the space covered all aesthetic, climatic and even religious considerations.

During Qajar dynasty when cultural interactions and political affairs with foreign countries begin to grow, more attention was paid to fine arts ad European architecture started replacing Iranian architecture in governmental buildings and some palaces. Beautiful samples of colorful buildings, plaster woks and

Research Article

mirror works can be found in the houses remaining from Qajar dynasty in Kashan. The house of Boroujerdiha as one of the best architectural works of Iran is full of the innovations of Iranian traditional artists (Gedar, 1979).





Figure 2: Wall plaster works – the house of Boroujerdiha, Source: Wikipedia

Decorations as Narrated by Iranian Portraits

While the internal spaces which have remained in the historical sites are taken into consideration and analysis, regardless of the possible changes in them, we can somehow realize how the internal spaces were designed in all historical buildings. However, it is important to remember that the furniture and the behavioral patterns inside such places do not exist anymore and it is hard to investigate the relationship between internal architecture and behavioral patterns. Iranian miniatures or portraits can be considered the only visual documents which provide us with valuable information in this field; because although their space and elements are not reflected in a mirror-like manner, some parts of the space in the individual form or in combination with other spaces and in some cases abstract spaces are pointed to in accordance with the subject and importance of the portrait. However, it still points to the elements or spaces which exist. Iranian three dimensional drawing methods helped project some parts and elements of the space, while other parts attracted less attentions. As it can be observed, the ceiling of the architectural spaces is less frequently painted in drawings, yet the floor, walls and elements which are located on it are usually represented perfectly.

The structure of the internal space and the main framework of her design follow its bearing elements. For example, we can point to the structure of a room in which a number of pillars were positioned on two sides of the room under some parts of the dome which acted as columns and a separating wall was built between them where in shallow areas it had small shelves to put some items on.

The structural organization of the room can also be described in this way: the 2 walls which were perpendicular to the yard had a bearing function. In order to lift some weight off them, shelves were dug in those parts which carried less weight in order to make the wall lighter and also utilize their empty space. Windows were placed in the surfaces adjoining and parallel to the yard. Based on the type of room or hall and its largeness and importance, different types of windows were utilized.

The plinth or the lower parts of porch walls were covered with tiles in order to be more resistant against erosion. Based on some documents, after Teymuri dynasty and particularly in Safavid era, wall paintings were used to decorate the internal spaces. Tile and bricks were used to cover the surface of the walls of some porches.

The floor of simple rooms was covered with bricks, yet tiles were used to cover the floor of halls and porches. Carpets were usually put on the floor of rooms and halls and people used to sit on them. High ranking people used to place a cushion on the carpet they put on the floor and used to lean against them. Kings, lords, and high ranking people used to seat on a special throne during especial ceremonies and other people usually would sit on the floor. It was observed in some portraits that if one or 2 high ranking guests were present in a party, a type of stool-like chair would be used for them.

Research Article

The Position of Decorative Arts in Architecture of Iranian Traditional Houses

The variety of climatic and geographical environments and conditions in Iran has resulted in formation of several concepts and ideas in accordance with environmental conditions and the function of building. The 2 concepts of introversion and extroversion are of particular importance (Soltan, 2007). The method of internal design and its place within the system of the space of architecture in each of the 2 abovementioned types of architecture is different from other types of Iranian architecture concept. In introvert spaces which can be found in the central desert areas and some parts of Azerbaijan, internal architecture is of great significance; because the external and the exterior volumetric combinations of the majority of these buildings lacks an architectural design in the compressed and uninterrupted urban context, while their volumetric combination and internal views are usually designed and also decorated. The internal architecture of such buildings can probably be divided into 2 types: first, a type of internal architecture which includes the design of the central yard and it surrounding spaces, then the internal architecture inside the spaces surrounding the yard which are closer to internal architecture in contemporary era. The simplicity of the external views of such spaces which were due to compression and coherence of the urban context and also had social and cultural reasons in some cases made their internal architecture very significant, especially because, more or less, all the life time of women and children - except for shopping, going to party, pilgrimage and going to bathroom – is spent at home.

The importance of internal architecture in introvert buildings is much more than the position of internal architecture in extrovert buildings (due to the physical context of cities and the social and cultural structure that exists in them), especially those buildings located in the vicinity of Khazar Sea; because people who live in those areas spend more time outdoors than those who live in the central and desert parts of the country. On the other hand, the materials used to build the houses in vicinity of Khazar Sea and the humidity level in the air and shorter duration of houses there compared to central and deserted areas have rendered internal spaces design and architectural decorations generally less significant (Soltan, 2005).

The glory and beauty of Iranian architecture especially during the Islamic era depends on the decoration and ornaments used in it. Using all types of decorations such as brickwork, plaster work, tile work, mirror work and painting was common during the whole Islamic era and such decorations have advanced in line with the facilities of each era.

Using all types of paintings on all types of materials, the artists of this field have given a special importance to Iranian architecture. Among all types of Iranian architecture, Iranian houses which were the show case of Iranian popular art exhibited the most beautiful and meaningful designs and shapes.

Utilizing decorations in Iranian houses, in addition to its beautifying and decorative function, also had protection and thermal insulation purposes.



Figure 3: Ceiling plaster work – House of Boroujerdiha. Source: Wikipedia

Research Article

Many of the decorative elements acted like a false ceiling or retaining wall and prevented humidity from penetrating buildings or reduced thermal exchange. In other cases, these decorations reduced the intensity of sunlight by reflecting various colorful spectrums or creating bumps and dimples.

Further to serving protective purposes, the presence of decorations in Iranian houses which were a place for mental and physical tranquility also had the function of catalyst. The presence of tranquilizing pictures along with the smooth move of Islamic drawings had a great influence in achieving this goal. As a matter of fact, Iranian houses were a place for development of spirit and physical calm.

Another point which must be considered is the presence of the culture of hospitality in her influence in house architecture. Based on the teachings of Islam and the native culture of this land, Iranian people have always been hospitable and created the best architectural spaces for their guests. The most beautiful, glorious and active decorations were those used in such spaces.

The Factors that Influenced the Architectural Decorations in Iranian Traditional Houses

Light and color are among factors which have played a major role in Iranian traditional architecture. In Iranian architecture, investigation of the influence of light and color on the volume and structure has always constituted a major part of various stages of building and her realization. Unfortunately, blind mimicry of western architecture has given a beautiful yet meaningless space to contemporary Iranian architecture.

Some researchers assert that the value and importance of living space has been investigated and studied from various psychological, phenomenological, sociological and behavioral-environmental aspects (Despres, 1991). Various writers have also emphasized the need for a more integrated and interdisciplinary approach which links physical, cultural, social, psychological and economical dimensions with one another. The value and importance of residence has been studied from different psychological, phenomenological, sociological, behavioral and environmental aspects (Moor, 2000). What is lacking here is an approach in which the residence is considered as the necessary element for behavior-environment relationships. A house is a spatial unit which combines a set of personal territory features and creates a personal space, a territory that protects us from others inspections and investigations. A house is a place for social life which is confirmed and recognized sociologically. Further to being a safe place for individuals, it is a place for the social unit called family. Thus, a house is a place in which a group of intimate and close people live. The house is appreciated as the main vector of society and as a place where identities are formed and memories begin to be created. A house is the center of intimacy. Intimacy creates personal relationships far from the eyes of people and helps us get out of our solitude and get in touch with each other (Madanipour, 2003).



Figure 4: House of Boroujerdiha – Source: authors' archive

Research Article

The Role of Light and Color in Housing

A house is the most important and, also, the most complicated space where humans respond to their needs. Since the early cave lives, daylight has always promised life and prosperity for humans and informed them of the difference between day and night. As houses became more complicated and more artificial, light used to go through windows and openings. The history of architecture is in line with creation of windows and penetration of day light into buildings which resulted in light, air, heat and cold for houses.

Since the early days, bright and shining objects that remind humans of lively and spiritual entities have been respectable. Nearly in all religions, light has been the symbol of divine wisdom and the element of all goodness and purities and moving from darkness to light has been considered to be the main goal (Phillips, 2004). The residential space is a space that reminds humans of place. If humans had no sense of space, they would get bored and exhausted, while house is a place which provides love and intimacy for all family members. Colors can influence the emotions, concentration and even the health of the individuals. The emotions and reactions created through colors are a global experience and are linked to cultural, humane, and even biological factors (Heller, 1989). Colors invoke unintentional and unconscious reactions and associations. Each culture associates colors with especial symbolic meanings and such meanings are usually congenial and with one another. Warm and happy colors such as orange and yellow are introduced as attractive and mirthful colors, while blue and green are known to be tranquilizing colors. Since Iranian architecture considers houses as a respectable territories and spaces in which all demands are fulfilled, it includes psychological factors as well. Traditional architects were also aware of the psychology of colors and applied them in a certain order and rule. Color comprehension mechanism is so complicated. In order to determine the use of color architecture through associations and tacit meanings, we require a limited comprehension of the science hidden beyond colors and the science of looking at colors.

Influences of Light Psychology on Humans

Various factors in a constructed environment influence the mental and emotional state of the user. The intensity of light and color are 2 factors that influence the performance of user in those places. While it is clear that humans can adjust themselves to various environments, it is also argued that no creativity or social welfare will be achieved if humans are not in certain conditions and situations. According to some researchers, light can play a major role in reinforcing especial comprehension, activity and mood setting (Nadeen, 2006). Light must create a mood in the individual and space which is compatible with his demands and expectations. Light synchronizes the biological clock of humans with day, night and circulation of seasons. Lack of natural light can result in disorders in autonomic nervous system, loss of energy, fatigue, tendency to solitude and metabolism disorders. On the other hand, it has been proved that light therapy can help therapeutic process.

Use of Natural Light and Color in Private and Public Spaces of Iranian Traditional Architecture

In Iran, architecture is directly linked with religious, cultural and mystical affairs. These affairs are observed with various functions separately in public (mosques and traditional schools) or private (house) spaces. Thus, the quality of architecture in these places has been completely different. Configurations of architecture are created through lightening of cohesive surfaces. Ceiling windows create a special type of lightening which is itself and inseparable part of volumetric space. These openings are directly associated with structure, walls and volumes.

Light gets in vertically through the vertical receiver and creates a connection and coherence with the whole which is considered to be of symbolic importance. In Iranian architecture, the metaphor of light creates metaphysical meanings where the divine light is always present. Light is always a blessing from sky, heaven truth and fulfillment, even if it is hidden by darkness or shadow. Light and shadow are used to understand the space, while they are never in real contradiction with one another. Classification of various lightening strategies and the way light goes through buildings in traditional architecture is viewed in 3 terms: the spatial order of building, different types of openings or detractors or other things which are not transparent but help the light in (Ayvazian, 2005).

Research Article

Conclusion

The status of decorative arts in Iranian architecture is rooted in combination of Iranian culture, religion and art which has evolved as time passes by. Using natural elements in Iranian architecture is mostly a metaphorical method.

The glory and beauty of Iranian architecture especially in the Islamic era depends upon its decoration. Using all types of decoration such as brick work, plaster modeling, tile work, mirror work and drawing has been common in the whole Islamic era and it has progressed in line with the facilities of each period. Light and refraction of color caused by light were used in the Islamic culture to create benchmark spaces and especial concepts in places. In traditional architecture and Islamic culture, light is a symbol of god and divine light. In Iranian traditional houses, colors were not used merely for decoration; but other elements were also used in place of color to make the environment colorful and using broken mirrors reflects the color of the environment to the internal spaces. Light with various qualities influences the psychological and social space of an individual in his life. The large spectrum of light whether physical or spiritual is used consciously in traditional Iranian architecture.

Using decorations in Iranian houses also serves protective and insulation purposes other than decoration function.

Further to protective issues, the presence of decorations in Iranian houses which are a place for mental and physical comfort also acted as a catalyst. The presence of tranquilizing pictures along with the smooth move of Islamic drawings had a great influence in achieving this goal. As a matter of fact, Iranian houses were a place for development of spirit and physical calm.

REFERENCES

Ayvazian S (2005). Light in traditional and Islamic architecture of Iran. *Architecture & Urbanism Journal*, Autumn/Winter 78/79.

Després C (1991). The meaning of home: literature review and directions for future research and theoretical development. *The Journal of Architectural and Planning Research* 96-115.

Gedar Andrew (1979). *Iranian Art*, translated to Persian by Behrouz Habibi, National Univesity, Tehran. **Heller E** (1989). *Wie Farben Wirken: Farbpsychologie, Farbsymbolik, Kreative Far-Bgestaltung* (Rowohlt Verlag) Hamburg.

Madanipoor A (2003). Public and Private Spaces of the City. Routledge, London

Moein Mohammad (1984). Moein Dictionary, sixth edition (Amir Kabir) Tehran 1.

Moore J (2000). Placing home in context. Journal of Environmental Psychology 20 207-217.

Nadeen A (2006). Psychological and Physiological Effects of Light and Color on Space Users. School of Electrical and Computer Engineering, Science, Engineering and Technology Portfolio, RMIT University.

Philips D (2004). Day Lighting- Natural Light in Architecture (Elsevier Publication) London.

Pope Arthur (1987). *Iranian Architecture*, translated to Persian by Gholam Hossein Sadri Afshar, Tehran.

Porada Idet (1978). Art in Ancient Iran "Pre-Islamic Civilizations", translated to Persian by Yousef Majidzadeh, Tehran.

Sabah Ahmad (No Date). Comprehensive Arabic to Persian Dictionary, 14th edition.

Soltanzadeh Hossein (2005). From House to Apartment, Architecture and Culture Quarterly 23 148.

Soltanzadeh Hossein (2007). Persepolis, 5th edition (cultural researches office) Tehran 104.

Tabatabiee Mohammad Hossein (NO Date). *Translation of Tafsir Al-Mizan*, translated by Mohammad Bagher Mousavi Hamedani, Bita **8**.