

Analysis of The Concept of Privacy and Its Features in House Designing (Examining the Criteria Related to Privacy and Neighborhoods in Different Cultures)

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ABSTRACT

House is the place of rest and relaxation to humans and observance of human-environmental factors play a major role in the satisfaction and comfort of people in their lives. Building a house is a cultural phenomenon and the shape and its spatial organization is strongly influenced by the culture to which it belongs. This study aims to provide efficient and healthier environments and spaces to examine the desired privacy in housing as an effective human-environmental factor in designing residential complexes and is seeking to answer to this question: Do paying attention to visual privacy for private and public sector housing, observed in different cultures? In this context, developing criteria for sustainable construction in other countries will be studied. In this study, the rules of construction in several countries from different continents will be discussed using several methods of descriptive-analytic with reviewing the concept of privacy and understanding its fundamental principles. Introducing the architecture of different regions shows that the importance of privacy and neighborhood in different cultures is so that it considered as a fundamental issue in developing criteria for sustainable architectural-urban planning.

KEYWORDS: Human-Environmental Factors, Privacy, Neighboring, Culture, House Designing.

1. INTRODUCTION

House is a structure that came into existence in line with a series of complicated purposes and it is not merely a structure. Considering that building a house is a cultural phenomenon, its shape and its spatial organization is strongly influenced by the culture to which it belongs. For this reason, in the prehistoric era, housing was something more than basic human shelter and almost from the beginning the "performance" of housing is something more than a material or applicable and consumer concept and always its foundation, its building and staying in it were accompanied by religious ritual. If the power of a shelter be the passive role of a house, so the active aim of a house is creating an environment that is consistent with the life of people in the best way. In other words, the purpose and role of housing is creating a social unit space [1].

As Rappaport says, the house is a manifestation of the world. People with different values and worldviews have different houses. It seems the concept of privacy was born in environmental and cultural conditions of Western countries or at least in countries where the population is smaller than residential units. In countries such as Iran which had less population in a few decades ago and people were able to live in larger spaces and pieces of land, the need for privacy was not significant. New approach to planning and housing design is based on the comprehensive interdisciplinary model. These approaches which have been considered in recent decades in different countries of the world, take into account the coordination of humanitarian and environmental aspects of the design. On the other hand, the difficulties of life in big cities, made the use of more compressed and planned collections and coordinate design inevitable. Considering the human factors involved in planning and design can improve lives in residential complexes. The human factors are a set of social and psychological criteria that are effective in the perception and receiving residential complex and therefore in their planning and designing [2]. The study on the relationship between humans and the environment shows that the feeling of privacy will obtain with the control of human on his private life environment and the feeling of authority and power will obtain in social interactions. Making a balance between privacy and social interaction is possible both with physical concepts and socio-cultural concepts that create the necessary mental basis [2].

In countries such as Iran which had less population in a few decades ago and people were able to live in larger spaces and pieces of land, the need for privacy was not significant. But today, because of population growth, unplanned development of the city and reduce the area of the house, as well as the lack of appropriate design criteria in the face of human need for the issue of privacy, it has suffered many problems. One of the methods of private ensuring is through the control of the audio-visual nuisances that this study was conducted with an emphasis on visual privacy and neighboring.

1.1. The Importance of the Study

Having a suitable house is a basic human right like other human needs. Lack of or poor quality of house is an important factor in the emergence of some phenomena such as anxiety, depression and behavioral disorders and reduces a person's mental and physical strength to deal with the problems. Altman [3] noted that the private setting system is a

dynamic system that is subject to change over time. This change is the result of efforts to achieve the desired level of privacy that in this case, if the mechanisms of achieving the privacy do not have the necessary efficiency therefore it will lead to physical, physiological and psychological costs for person that we can also call them disease, stress and anxiety [3]. In short, humans move away from the incentives and events by creating the right conditions for being alone and seclusion. In this case, humans can “self assess” themselves. Vacant places can protect humans from exposure in public and it will give them authority particularly in the exchange of information about themselves. If this requirement is not satisfied as well as other needs, people feel the tension and conflict [4]. Increasing the administrative and human compression make difficult the privacy and social interaction of people and cause the separation, distance and alienation in the human environment. By reducing the distance between the residential units, more limited private open space, the use of common walls between units, increasing building height, increasing the bustle and noise pollution, and neighboring to private spaces raise some problems. With the increase in residential density, private open space of each unit will be reduced and more intensive physical proximity will be created. Therefore, privacy and territories will be so important. The definition of territory can help to increase privacy and security and helps to reduce conflict between social and neighborhood problems. Considering the human factors involved in planning and designing can improve lives in the residential complexes. This study aims to provide efficient and healthier environments and spaces to examine the desired privacy in housing as an effective human-environmental factor in designing residential complexes and is seeking to answer to this question: Do paying attention to visual privacy for private and public sector housing, observed in different cultures?

2. REVIEW OF LITERATURE

The age of psychology is not more than five or six decade. During this period, researchers achieved many different results about designing environment and its impact on human behavior. Including Altman in his book “environment and social behavior”, that described four concepts of privacy, personal space, behavior of the territory and crowd and attention to the needs, interests and culture of people. He also examines the style of various people and nations in his book for analyzing the concept of privacy in the regulation of social communication. It is clear that different cultures have different perceptions about the concept of privacy and apparently it does not exist in some ways of life. But closer observation reveals that there are some certain behavioral mechanisms for social interaction in all human cultures. What is different between the cultures is the ways of monitoring social interaction. Some studies were conducted about the role of physical environment on ensuring the privacy in the area of family life. Hill in 1989 demonstrated that the bedroom window and curtains are very useful to keep out noise and looking of other people. McGenly in 1959, with a look at the history suggested that privacy is a valuable asset of human beings and it showed the distinction and greatness in many ancient civilizations like the world today. For example, Egyptian people planted vine around their gardens to prevent the abuse against others, Greeks built veranda around their homes and wealthy English people surrounded their houses among stone walls and parks [3]. Chermayeff and Alexander in 1963 [3] conducted a research in this case and suggested that house should create a strong and firm boarder between the individual and his outside world and its interior design should be in such a way that create a balanced relationship between the family member and outside nature and also ensure the engagement of members inside the house [3]. Altman noted that the private setting system is a dynamic system that is subject to change over time. Mentioned examples were related to local architecture and antiquity however this study attempts to examine the ways of observing privacy and its place in contemporary architect.

3. MATERIAL AND METHODS

In this study, the standards of construction and evidences of architecture have been studied by using descriptive-analytic methods and reviewing the concept of privacy and understanding its knowledge bases in order to achieve the forming criteria and values of the concept of residence in different cultures. In order to avoid prolixity, the evaluation of criteria and samples were taken in several countries from different continents. Data were collected using the library and documentation methods.

4. The Concept of Privacy

Privacy is the process of setting the boundaries between individuals and it determines how to interact with others. The process is somewhat similar to the cell membrane permeability properties. Sometimes, individual or group opens the way to get external data and sometimes closes the way on any contact with the outside world and cut off any contacts with it [3]. Privacy has an optimal mode at any point in time. In other words, there is an optimal degree of individual desired access with others. Deviation from this degree leads to more or less interaction with others and creates undesirable state [3].

The study on the relationship between humans and the environment shows that the feeling of privacy will obtain with the control of human on his private life environment and the feeling of authority and power will obtain in social interactions. In the house designing, privacy and social interaction are two mutual concepts. Excessive emphasis on privacy can lead to seclusion and out of control interaction can cause to loss private life. Increased density can make difficult the privacy and social interaction between residents of a complex and around units. These concerns cause by reducing the distance between residential units, limited private open spaces, using common walls between residential units, increasing the height of the building, increasing the bustle and noise pollution, and neighboring. Providing a sense

of privacy as the control and authority instead of isolation need flexible solutions in house designing that can be achieved with difficulty in normal conditions[2].

In the scale of samples, the way of controlling on life privacy is providing a defined hierarchy of open spaces of “public”, “semi-private” and “private” that prevent disturbance by non-residents and provides intermediate space between residential units and common access areas. If the possibility of greater control were given to residents to create the private sphere therefore, the possibility of achieving optimal privacy will increase [2].

4.1. Environmental Factors Affecting Privacy

From the Rappaport's point of view, environmental factors affecting privacy include: characters, ideologies, do's and don'ts, culture and values of the individuals. Individuals can achieve different ideologies by locating in two different environments. In this study, we will examine these factors and examine their formation in different environments.

Culture is a set of ideas, institutions and activities in the form of a conventional power for a nation or people.

Ethics is a sense of my self-organized.

Ideology is the particular way in which nations see the world.

National character is the character of people in fact, the kind of man who will appear in this community.

As a result, they are having a single ideology and common imagine as well as having their own value systems that make possible the process of making local practices on one hand and also the existence of coordinate and harmonic relations on the other hand, what is the purpose of the urban composition [1].

In addition to the general concept of privacy that is somewhat in all cultures, the legal concept of intimacy in our culture adds some restrictions to previous cases. These limitations of proximity scale of complexes to internal divisions of residential units are significant. Neighboring and noise pollution that are the important points of these commands are the design constraints in other cultures. In many developed standards of design, these aforementioned issues are the basic issues [2].

4.2. The Concept Of Privacy In Different Cultures

It is obvious that different cultures have different perceptions of privacy issues, and in some ways of life this item does not exist, but closer observation reveals that in all human cultures there are a certain behavioral mechanisms for social interaction. What is different between the cultures is the ways of monitoring social interaction [3].

The need for privacy is different in different cultures and there is a difference between individuals in particular culture depending on the mode and social status. The shape of a house is not only the result of physical forces, but also it is the result of socio-cultural factors in its widest form.

Special features of a culture is the accepted method of this culture which things are done based on it and what is not socially accepted will be avoid. Also, the implicit idea should be considered because these factors affect the shape of the houses and complexes. This focus and attention includes very subtle differences and obvious or fully functional aspects of the culture as well [1].

In a certain region with access to and supply of building materials there are some bottlenecks and barriers, and also the possession of a degree of technical ability which ultimately determines the shape of the house and shapes its space and relationships is an insight that people have in an ideal life. So this environment (an environment that we are looking for) is the interpreter of many different socio-cultural forces, forces that include religious beliefs, family and ethnicity structure, social system, way of living and social relations between individuals [1].

5. The Way Of Developing Design Criteria Based On Physical And Social Research In Different Countries

5.1. New Zealand

New Zealand is a Western country in the southwest Pacific Ocean. New Zealand is far from other land on earth. Australia is its nearest neighbor which is in two thousand miles. Most of the population of this country is from European immigrants (especially British and Irish). Christianity is the main religion in New Zealand. Some percentage of people introduced themselves as without belief in religion. Buddhism, Hinduism, Islam, Baha'i and other faiths make up the population of New Zealand. In New Zealand, the religion is separate from law According to the law, religion is free and everyone can freely express their particular religious ritual. New Zealand culture rooted in British culture. Generally, New Zealand is a multicultural country due to massive immigration where different ethnic and religious groups are free to organize their customs.

5.1.1. Terms Of Designing House In New Zealand

Architecture terms are as follows:

Providing enough privacy for each home is very important. This is especially important for high-density housing such as terraces and in this situation requires more attention. In these terms, the strategies for auditory and visual privacy are considered and it will suffice to mention the description of visual privacy.

1. Adequate visual privacy between residential units should be considered based on development terms.
2. Windows should not be directly in front of residential rooms or private open space in adjacent houses (Figure 1).



Fig. 1. Optimal private outer space that is not in the nearness of neighboring units and has a good relation with inner space [5].

3. Balconies should be design such a way that do not have any sight to adjacent private open space or residential windows.

4. Direct view of streets from residential windows should not be possible (inner space of the house should not be seen from outside) [5].

Design criteria are as follows:

Privacy is essential in native environment. Local plans include specific requirements for outside private space and audio privacy between neighborhoods.

1. This space should be in the appropriate dimensions and should be sufficient for outer space furniture and provide play area for children.

2. This space should not be seen directly by neighbors. To add to privacy and create private space vegetations can be used (figure 2) [6].

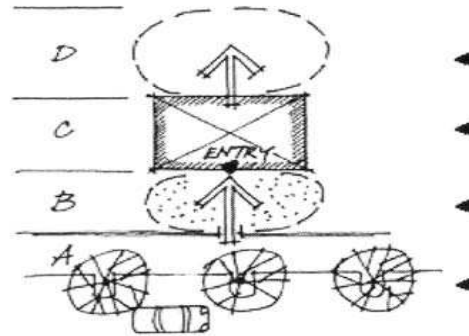


Fig.2. Optimal dimensions of private outer space for using plants and sun light in the morning [6].

(A: public area; B: Personal control but public visibility or shared semi-private space;
C: private house; D: private outer space.)

In a residential space of one floor, B represents a front garden; D represents the backyard, while in a space with an average density, B may represent a public common pathway and D represents the private courtyard.

In the case of neighboring the windows to neighbors' properties the following issues should be considered:

1. Windows of a residential unit must not be directly in front of the neighbor's window.

2. The Window should open directly to the neighboring private space.

3. It is desirable to increase security, windows were somehow that have sight to the street and near the neighboring property. When the private outer space be in front of the property it is not desirable (Figure 3) [6].



Fig. 3. Direct neighboring of neighbors to a dark small back courtyard [6].

5.2. Ireland

Ireland is on the island of Ireland, in the North West continental Europe. Ireland's position in the West Europe has become a decisive factor for Irish society in general and for Irish culture in particular. Ireland is located in the West of England. Irish people are Christian.

5.2.1. Residential Rules Of Sustainable Development In Urban Areas In Ireland

5.2.1.1. Privacy And Security

Privacy is an essential factor in desired residential space and it helps the sense of security to people in their homes. When the ground residential units that have not the front garden or have a little space then, providing a defensible space is important in the public area. For example, to create such an environment vegetation and ground windows designing should carefully considered. Similarly, in the back of the building there must be adequate separation (traditionally about 22 meters between the two floors houses) between the mutual windows of the first floor. However, these rules should be flexible, the accurate positioning and detailed designing front windows can prevent neighboring even with less distance behind the back. Hall and decks windows do not require the same degree of privacy as well as balconies and receptions [7].

5.2.1.2. Sustainable Design Standards For New Buildings (Ireland 2007)

Enough open space with adequate privacy for each apartment is effective in consumer's needed amenities. In particular the use of outer space for families is preferred. Private open space can be in the form of back garden or patio for ground floors or can be created as balcony on the upper floors. Creating the semi-private gatherings open space is important in the area. Private open space in ground needs some surrounding forms for providing security and privacy. Balcony (or winter garden with glass plates, separated from the living environment) need to have a minimum width for optimal usage, vision and perspective and have the ability to insert chairs and a small table. At least the width of 1/5 meters is recommended. In total for the entire length of the outer wall of drawing, while the deeper balcony may be optimal in specific places that this should be set by lighting up the drawing room [8].

5.3. Ottawa

Ottawa is the capital of Canada and the fourth largest city in the country. This city is in North America and is under the influence of English and French cultures.

5.3.1. Urban Regulations For High-Rise Housing In Ottawa

Common areas of residential and possessions can be located a floor above (on the roof or parking structures and buildings) or under the floor in the yard or a combination of all three. It should be ensure that the common space has adequate space for meeting and gatherings and is directly accessible and is visible from a public area and corresponded with comfort and security (Figure 4) [9].



Fig. 4. Create opportunities for setting light and tree in the courtyard [9].

Outer space required for residential units should be designed with both private and public space. Architecture and use of private outer space include balconies and ensure that enough space with suitable dimensions of private space can create a useable space. Shape and dimensions of the key values used amenities) [9].

There should be enough distance between the towers to get enough light and energy from the sun and observe the sight and privacy for the people in the building as well as people in the street. Separation of towers on a site or in connection with the adjacent site can be achieved by the distance separating or checkered the towers or rotation (Figure 5). Similarly, this distance should also be considered to prevent tangential of the seat or base of towers[9].



Fig. 5. Appropriate distance of towers [9].

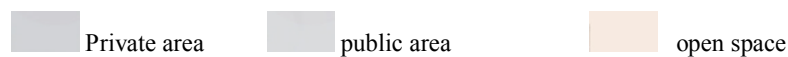
Sufficient space is created by checkering the towers. Separation distance between adjacent towers that is the same distance in the street (about 20 to 23 meters) is a comfortable and acceptable distance when basic living spaces, large windows and balconies are in front of each other. High towers and balconies rotation when in the context of development, the two buildings are placed against each other to prevent the approaching balconies (Figure 6) [9].



Fig. 6. Balconies rotation to reduce direct view to the neighbors[9].

6. Examine The Examples Of Architecture

After reviewing the criteria for the creation of private housing in four different continents, the analysis of samples carried out in different countries in different years have been paid. In order to preventing prolongation, the subjects such as culture and religion were disregarded in examining the samples and only the way to create privacy will be discussed. Separate areas of the plan shown by 3 colors.



6.1. Residential Complex For The Elderly, Finland(1995)

Wilhelmiina Housing in Finland that includes numerous applications is planned and designed for residence of aged people that requires daily care and their staying in the set is relatively high. Although the density of residential units, buildings and floors in this project is relatively high, but the appropriate locating of this complex in the site and creating the central courtyard surrounded in the collection was very skillful (Figure 7) [10].



Fig. 7. The roof plan of whole complex[10].

This construction is separable into three main sections functionally. This separation is evident in the physical structure of complex based on a variety of materials and colors (Figure 8).



Fig. 8. Images of whole complex[10].

At the first part of the construction the residential units are located. There are three separate residential units in this construction and there are 15 small residential units, a semi-open space and a shared lobby in each construction (Figure 9). This block contains a total of 60 residential units of one and two bedroom that are separated into three neighborhoods of 10 people (five units) on each floor. The emphasis on social communications of aged people and also observing their privacy are the main valuable point in designing this block. Public space in the area is connected to semi-public space- that is the central courtyard. This space is also reached the semi-private space- shared hall among several units- and then move toward the most private sectors which is residential units [10].

The second building is the largest building of the complex that some parts located in this building for medical care and services to elders. Good light of pool and public areas are significant points in this complex (Figure10) [10]. The third volume is an apartment that includes residential units. Each floor of this apartment consists of five residential units with triangular communication space and a good light at the center [10].

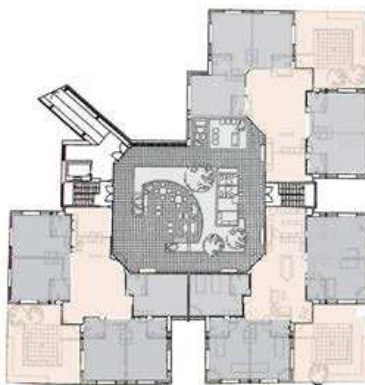


Fig. 9. The ground plan of the residential sector [10].



Fig. 10. The ground plan of whole complex[10].



Fig. 11. The apartment's floor type plan[10].

6.2. Residential Complex, Spain(2012)

The design of apartment is staircase and there is an open space of each floor in front of the building. Privacy observance in designing the plans is so that based on the staircase of building there is not the possibility of the neighboring of upper floors to lower floors (Figure 12) [11].



Fig. 12. Images of complex [11].

In plan designing both public and private spacing observed and service terrace were designed for all units and front open space of building has not service aspect.

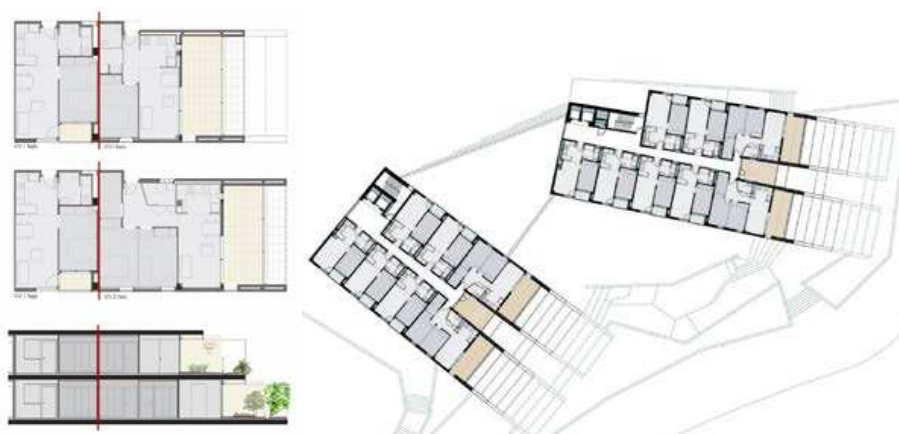


Fig. 13. The plan of complex and showing spacing in plans [11].

6.3. Residential Complex, Italy

sight from the yard to terraces. All units have private outdoor areas (Figure 14 and 15).



Fig. 14. Image of inner area and plan of complex and showing spacing in plan[12].



Fig. 15. Images of complex [12].

6.4. Residential Complex, Singapore

In this 36-floors residential tower with detailed building facade and organic texture, large windows and a balcony with a height of the second floor give a view of panorama to the total of city. To adjust the height and create a human scale, facade pattern is repeated in each 4 floor. This system also provides a unique view of the characteristics, framing space, protecting and blocking from the heavy West sunlight (Figure 16 and 17) [13].



Fig. 16. Plan and images of complex [13].

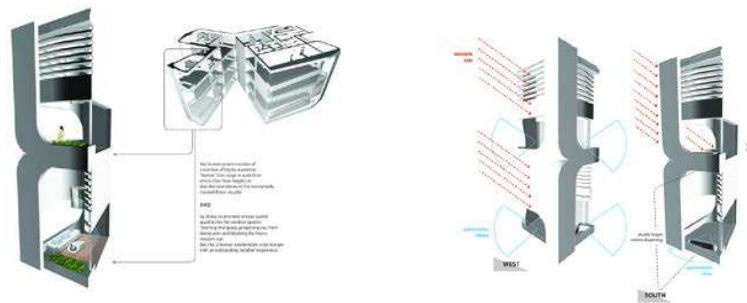


Fig. 17. The graphical view of façade[13].

6.5. Residential Complex, Italy (2013)

As shown in the image spacing observed completely (Figure 18).



Fig.18. Plan and images of complex[14].

6.6. Housing, London (1979)

The most important feature of this project is not only its plan, but also is the plan typology (terrace hoses). According to project architect: Contiguous space to the street with a good view of architectural distinction between "front view" of building (which is public) and the back of the building (which is private) are created. There were public discontents in England in decades of 1960 and 1970 in tower and surface blocks due to "non-private spaces" and "undefined open space". Future projects were not from public streets and city squares and nor completely private in front garden and back yard. Housing design of Cent Mark Street was tied boldly to site background and was close to traditional street patterns and rich history of British terraced house [15].

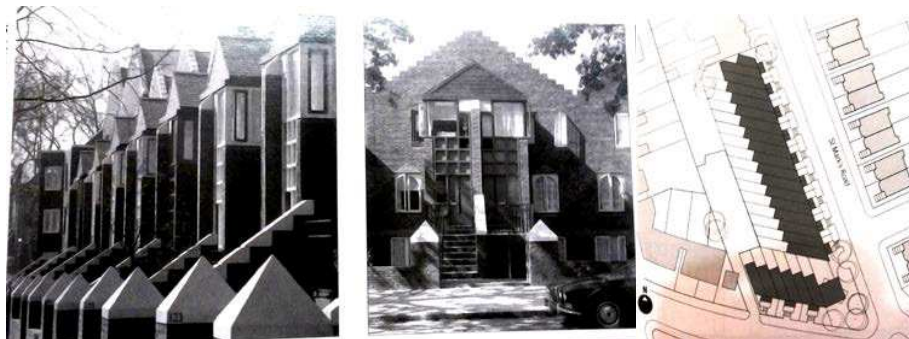


Fig.19. Plan site and complex images [15].

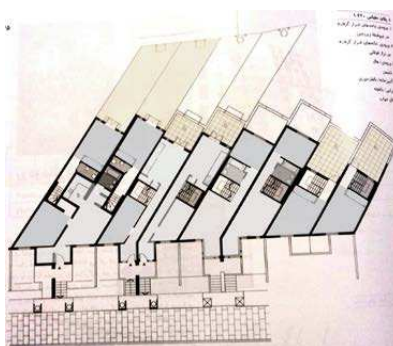


Fig.20. Showing spacing in plan [15].

7. CONCLUSION

Due to population growth and increasing demand for residential complexes in cities, clarifying patterns and policies to achieve the planned objectives is necessary that the observance of human - environmental factors plays an important role in the satisfaction and comfort of people in their lives. As mentioned above, behavioral patterns are the cultural characteristics including privacy, personal space, power space and sense of bustle and congestion are public, but the linguistic and non-linguistic expressions are culturally specific and cultures specified the degrees of severity of expressions. As a result, a house shapes is a means to express the worldview of culture, norms, images and designs, lifestyle, functions and sub-functions of housing. In the past architecture of our country, people's beliefs in addition to climate issues was very promoting in organizing various organs and especially the building of traditional houses. One of the beliefs of Iranian people was valuing the personal life and its dignity which made the Iranian architecture introvert and some precautions were thought to protect the privacy of home. However, at present, there is not any emphasis on the subject of privacy and neighboring in developing the criteria for construction and there are only some criteria for proximity of complexes, units and light dimensions which focuses on residential favorable light. The consequences of non-compliance of neighboring and intimacy issue in city can be cited as follows: apartments with high altitude provide sight to surrounding buildings and intimacy will be destroyed and internal security and safety of family stirred. It should be noted that, in a place of city that had a special character, a great residential complex with many different residents, characters and site features which were along side with specific status of familiarity and neighboring can be altered and this issue can alter the hierarchy of present spaces. Therefore, inappropriate proximity leads to losing social interactions in site and short space intimacy of adjacent. According to ways of life in different cultures it seems that the concept of visual privacy in house designing is rarely considered in different cultures. According to some examinations, visual privacy and its control by providing define hierarchy of open space, exist in all cultures and it is one of the major issues in developed criteria in constant architecture and urban planning in each country and its observance is essential but it has different appearance. On the other hand, by studying the Islamic religious doctrines associated with desirable characteristics of a house we face with some issues such as the recommendation to have the house privacy, to avoid cross neighboring, lighting at home, avoid idleness, peace, security, tranquility and so on. As a result, with regard to the Islamic religion and jurisprudence relating to intimacy, attention to privacy and neighboring in terms of its construction

will be doubled. Housing programs should follow the right policies that do not consider only economic aspects and little housing in their respective fields and count the quality of housing as well as its quantity. As this paper investigated, this meaning can be utilized as a model for the construction of modern housing in the future.

REFERENCES

1. Rappaport, A., *Housing anthropology* 1392, translated by Khosro Afzalian, Kasra Library Press, Mashhad. P.82-84.
2. Einifar, A.R., Human-environmental factors affecting the design of housing complexes. *Journal of fine arts*, 1379. 8,112,113.
3. Altman, A., *Environment and social behavior* 1382, translated by Ali Namazian, Shahid Beheshti University Press, Tehran. p. 13-15, 45, 46, 60.
4. Mortazavi, Sh., *Environmental psychology and its application* 1380, Shahid Beheshti University Press, Tehran. p. 89.
5. Housing New Zealand Corporation, June 2002. - <http://www.hnzc.co.nz/about-us/our-publications/design-guidelines/design-guide-site/design-guide-site.pdf>. Design guide-architecture. p.17.
6. Design guide-site. Housing New Zealand Corporation, June 2002. <http://www.hnzc.co.nz/about-us/our-publications/design-guidelines/design-guide-site/design-guide-site.pdf>. P.23-24.
7. Guidelines for Planning Authorities on Sustainable Residential Development in Urban Areas (Cities, Towns & Villages). Government of Ireland may 2009.
<http://www.environ.ie/en/Publications/DevelopmentandHousing/Planning/FileDownload,19164,en.pdf>. P.58.
8. Sustainable Urban Housing Design Standards for New Apartments. Guidelines for Planning Authorities. September.2007.<http://www.environ.ie/en/Publications/DevelopmentandHousing/Planning/FileDownload,15335,en.pdf>. p.11.
9. Urban Design Guidelines for high rise housing in Ottawa. Approved by City Council October 28, 2009. <http://ottawa.ca/en/city-hall/planning-and-development/community-plans-and-design-guidelines/design-and-planning-0-1-14>. p. 12, 13, 23, 24.
10. Talebian, N., Atashi, M. and S. Nabizadeh, *Residential complex* 1389, Kasra Library Press, Mashhad. P.70-75.
11. <http://www.archdaily.com/445485/114-public-housing-units-sauquet-arquitectes-i-associats.spain>
12. <http://www.archdaily.com/442646/la-corte-verde-di-corso-como-cino-zucchi-architetti.italy> 2012
13. <http://www.archdaily.com/448924/ardmore-residence-unstudio/.singapur>
14. <http://www.archdaily.com/457927/nuovo-centro-civico-in-scandicci-rogers-stirk-harbour-partners>.
15. French, H., *Urban architectural masterpieces of the world (Apartments-complexes) in the twentieth century* 1390, translated by Amin Lavafa, Vares Press, Tehran. p.164.