The role of open spaces in residential complexes and its impact on people’s lives

Ali Omrani Fogh and Shahnaz Farmani Saransari

ABSTRACT
Following the growing trend of urbanization in recent decades, Housing supply has become one of the most important issues. In this regard, the mass production of housing, as a model with benefits such as technical feasibility, economic, and when, attention and residential complexes can be the physical manifestation of the idea of mass housing in cities. Note that the study can be seen in the development of residential complexes that is according to the principles and criteria of Urban Planning and design dominant residential housing is reduced and thus creating "favorable conditions" are residential spaces. This is necessary criteria, planning and urban development Residential development is clear. The residential complex, principles of urban planning and creating the right environment to live and provide services and facilities Residents and open spaces designed to convert a new space residential to a favorable environment. Given the lack of research that led to the general conclusion in the design of open spaces, and spatial relationships how the residents in residential design principles, such studies seem necessary. The results suggest that in a residential complex, Quality standards in the design of open space can to issues such as security, safety, privacy, tranquility, Solitude, to connect with nature, such as the lead moderation.

INTRODUCTION
The word "home" means the place where the person resides. Home is one of the most important topics in architecture [1]. When the man came out of the cave to shelter and accordingly, it is natural to apply the most ancient architecture building a house. This was the beginning of the Stone Age other elements of the temporal branch of the architecture [2]. The house is located on the weather, how radiation, wind direction (Air conditioning, wind, dust, wind, etc.) and location of the land is made [3]. Home and housing in a general sense, a place of rest and relaxation and comfort and Interpretation of human refuge to escape from what is called non-self [4]. Following the increasing urbanization in recent decades has become one of the most important issues in the country in housing. In this regard, the mass production of housing, model with benefits such as technical feasibility, economic, time, attention, and residential complexes can be the physical manifestation of the idea of mass housing in cities. Note that in the evaluation process of residential complexes can be seen in the fact that consistently the principles and standards of planning and urban development most residential housing design reduced and thus creating a "favorable environment" Residential have taken place. This is necessary criteria, planning and urban development Residential development is clear. The residential complex, principles of urban planning and creating the right environment to live and they can provide services and facilities for residents’ new spaces to transform desired residential environment.

Statement of problem:
Statistical Center of Iran defines housing or residential unit as a location, space and boasts that one or more families settled in one or more inputs (thoroughfare or a specific lawyer) [5].

Urban housing type, housing density and the number of households living in classes and classified into several categories, but in terms of population is divided into three categories: single-family, multi-family and residential complex. With the accumulation of a number of buildings in a city block are combined to form an integrated design. [6].

Keywords: housing, residential, open space, environmental
A residential complex may be formed of a multi-storey apartments and independent homes. There are residential complexes of various sizes, some of them, such as the Integrated Complex in Tehran, the size of an average city residents.

Following the growing trend of urbanization in recent decades, housing is one of the most important issues in the country. In this regard, the mass production of housing, as a model with benefits such as technical feasibility, economic, time, attention and residential complexes have taken place as the physical manifestation of the idea of mass housing in cities. This is necessary in the planning and design criteria. Urban Residential is clear. In residential construction, urban planning principles and creating the right environment to live and provide services and facilities for residents could be new spaces to transform desired residential environment.

Need for research:
Designing a place of power, or how to select the different aspects can affect some of the key issues of optimal locations, including:
- Permeability, diversity, readability, flexibility, proportions, visual, sensory richness, color belong

Research questions:
- How can the open space play a role in residential design on the lives of the residents?
- What is the effect of the environment and outdoor architectural design on the behavior of the residents?

Research purposes:
(Includes scientific objectives 1. 2. 3. Application specific needs of research)

Scientific purposes:
The aim of this study was to evaluate the design of outdoor residential complex in many parts of the world, existing fundamental studies on the potential of is to implement such a plan.

Practical purposes:
The architectural design of residential outdoor-based approach can be very effective step towards systematic design of housing in the country of harvest. Among these residential architectural design standards can be examined is a new initiative in this is caused by the principles of design and modern architecture with open space.

Social objectives:
Designing a place of power, or how to select the different aspects can affect some of the key issues of optimal locations, including:
- Permeability, diversity, readability, flexibility, proportions, visual, sensory richness, color.

Research:
In the study, different methods were used for the design.
First, the historical approach - an interpretation in this case is first to identify the resources, information gathering, organizing and interpreting the evidence.
The next step is analytical method to analyze each of the documents concerned.
Then, according to evidence from research like undervaluing modeling, the design of the residential complex.

Literature:
In this section a brief systematic research has been done some research on the subject has been mentioned in the following table.

<table>
<thead>
<tr>
<th>Year</th>
<th>Authors</th>
<th>Title</th>
<th>Source</th>
<th>Conclusion</th>
</tr>
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<tbody>
<tr>
<td>1386</td>
<td>Azizi, MM., Malikmohammadnejad, S.</td>
<td>A comparative study of two residential pattern (Conventional and High)</td>
<td>Fine Art Bulletin, No. 32, Winter 86, page 215.</td>
<td>Lack of physical space planning and design criteria The construction of residential complexes can Fundamental problems of housing and living environment To be followed. The overall aim of identifying strengths and weaknesses Two main patterns of mass production for residential housing In creating a favorable environment for living standards in the form of physical-space.</td>
</tr>
<tr>
<td>1382</td>
<td>Eynifar, AR.</td>
<td>Model to analyze the flexibility of the traditional housing</td>
<td>Fine Arts Quarterly, No. 13, Spring 82, page 13.</td>
<td>Ability to adapt to new needs and residential spaces . Changing family, responding to various functions of the unit And the use of common spaces to accommodate different scale, the important points to observe in the design of a new residential complex.</td>
</tr>
</tbody>
</table>
In this paper the main factors influencing the formation of human and environmental housing complexes have been investigated and classified. Some of these factors include the physical and social sustainability of the environment, local identity and identity, privacy and social interaction, and how to feel secure residential complex, pedestrian access, car access, the internal structure of the residential units, the climate and energy saving.

**Definition Condominium:**

Statistical Center of Iran defines housing or residential unit as the location, space and boasts that one or more families settled and one or more input is set (thoroughfare or a specific lawyer). Urban housing type, housing density and the number of households living in classes and classified into several categories, but in terms of population is divided into three categories: single-family, multi-family and residential complex.

**History residential complex in the world:**

History residential complex in the world it cannot be said explicitly that functional residential complex that has emerged in the cities of the twentieth century, but it is clear that changes in the last century so that Due to the creation of new and different concept in architectural function [7]. History residential complex in the last century can be divided into several periods. Although there is no definite boundary between the courses cannot be found perhaps this division is very general and non-normative. However, due to the lack of more detailed studies were limited to this division:

- **The first period (1910-1940):** the first decade of the twentieth century and the emergence of the first examples of residential complexes.
- **The second period (1940-1970):** the period of reconstruction after World War II and Residential recognized by the architects of the modern architectural movement that is concurrent with the acquisition of technology and mass production in the pre-fabricated housing
- **The third period (1970 onwards):** The period of review and change a purely functional perspective Architects Modern architectural movement that is concurrent with rapid population growth, housing shortages and rampant construction Condominium in cities and suburbs in eastern and architectural concepts such as sustainable, efficient use of energy and flexible forms and spaces in architecture.

**History residential complex in Iran:**

Start a new style of tall buildings in the solar calendar from 1951 and was started in Tehran. However, due to environmental conditions, it was not felt necessary to build a tall building But just curious reluctance first designer and manufacturer of high-rise buildings Tehran, The main factor is to start the construction of these buildings. Over a decade after the completion of the building, on the willingness of the Shah of Iran (Pahlavi) after returning to Malaysia in the early fourteenth century the solar calendar quarter Especially in Tehran began construction of a high yield of commercial buildings.

**Outdoor:**

**Different views of architects and urban areas:**

<table>
<thead>
<tr>
<th>Scientists</th>
<th>The definition of urban space</th>
<th>Function of urban space</th>
</tr>
</thead>
<tbody>
<tr>
<td>Le Corbusier</td>
<td>Consequently, the neighborhood centers and organization of urban space is the space between the blocks, space is infinite and building upon the separator.</td>
<td>Pedestrians appropriate zoning activities</td>
</tr>
<tr>
<td>Kamylosyter</td>
<td>Results of the external architecture, urban space. Space that combines public buildings and monuments, and joined to create a harmonious whole. Urban space for collective life is most critical.</td>
<td>Physical and psychological needs of people, holy and pure bred feelings, national pride, satisfaction of citizens, attracting lovers of culture and art, positive effects on the human mind.</td>
</tr>
<tr>
<td>Patrick Geddes</td>
<td>Urban space in the history of artistic achievement. Cultural life of the community in the development process and effective expression of the population is thought, ideas and thoughts on the two ends.</td>
<td>To serve man and his excellence, like poetry, music, politics, etc.</td>
</tr>
</tbody>
</table>
Expression is a three-dimensional space of the action. The structural organization of urban space for human activities that based on certain factors such as the relationship between confining forms, its relationship with the unity and diversity of their absolute In contrast to the open areas in relation to their relative proportions, Street entrance angle and at the end of the memorial sites or other subsequent factors.

Creating attractive and satisfying psyche of people

Sophisticated urban space structure, which is orderly and beautiful The activities of organizations have found ... Streets and fields of various forms of urban space and Street functional features deeper into the field. If we clarify the concept of urban space without imposing aesthetic criteria, Forced all of the spaces between buildings and urban spaces are considered.

Mass political behavior, social and cultural causes of common sense and visual and sensory and perceptual habits of urban space and Different light on the social structure of the soil always at the time of its identity.

One of the most important elements of urban space is readability. In this space there is a chance that some social boundaries are broken and No impacts from the development to occur and They are mixed together in a new social environment.

Create a sense of place and connection between people and places

Urban space is where the maximum size of contact and interaction that occurs in humans.

Availability, ability to meet all human needs, the identity, 24 hour access to the urban environment, urban legibility desirability factor sequence of symptoms associated with urban areas, despite the prospect of building elements and indicators memorable, creating a favorable environment and attractive skyline and ...

General principles of architecture and urban planning from the point of view of Islam Prevent loss, communication and mutual solidarity, self-regulation of social behavior of others privacy, rights of exploitation, ownership rights to the height of buildings in the territory, respect for others’ property, the minimum width of the streets, no obstruction of the passages lack of proximity to pollution sources.

Peaceful coexistence with others to maintain mutual respect with the environment (collective participation)

The combination of spatial structure in the direction of the transitions, in the field of urban spaces, and the courtyard of the mosque had been leaning and Husseinieh.

The ancient cities of the physical link between the spatial elements, including downtown, neighborhood centers, major transitions and field based. Fields, rely on, Husseinieh and urban spaces are part of the mosque courtyard.

Artificial urban space is organized, neat and orderly as the basis for the activities and acts of human behavior. Urban space scene that opens the story in the collective life. Urban open spaces and urban public space which is a crystallization of the nature of collective life.

Place to crystallize the essence of collective life

Urban space which flows admitted to the civil life, accident and incident occur. Urban space, space for a good life.

Urban space in general expressions of cultural, social and political.

_Urban space to the scene of the activities that occur in urban life_

Urban space and encourage the movement of human communication and supply networks, communication centers and public spaces, play and recreation.

**Quality standards in the design of open space:**

<table>
<thead>
<tr>
<th>Human needs</th>
<th>Security and Safety</th>
<th>Safety of disasters and natural disasters and aggression against the people and...</th>
</tr>
</thead>
<tbody>
<tr>
<td>Confidentiality</td>
<td>Housing protects the internal spaces and protected from outsiders view of the courtyard and the local community, family and individual activities.</td>
<td></td>
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<tr>
<td>Relaxation</td>
<td>For prayer, study, reflection, dialogue and family...</td>
<td></td>
</tr>
<tr>
<td>Category</td>
<td>Description</td>
<td></td>
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<tr>
<td>--------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>Privacy</td>
<td>Man’s relationship with his good relationship members, family and loved ones together for worship, study circles and friendly</td>
<td></td>
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<tr>
<td>Connection with nature</td>
<td>Religious recommendations, and the built environment in harmony with nature and the need to respond to the spiritual needs</td>
<td></td>
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<tr>
<td>Moderation</td>
<td>The choice of materials and methods of construction and housing diversity and balance of internal spaces</td>
<td></td>
</tr>
<tr>
<td>Respect the rights of others</td>
<td>Respect the rights of neighbors.</td>
<td></td>
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<tr>
<td>Unity of society</td>
<td>Non-discrimination and polarization, due to the beauty and simplicity of the building, away from the emphasis on national identity and personal pride and self</td>
<td></td>
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<tr>
<td>Respect for the family</td>
<td>Space required for communication among family members</td>
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<tr>
<td>The response rate to the social groups</td>
<td>If all members of the community in issues concerning the right to participate in public life, one must first have a safe and comfortable for children, the elderly and the disabled into consideration.</td>
<td></td>
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<tr>
<td>The regular and permanent residents</td>
<td>Foster the use of a space not only it does not depreciate but it is so important to improve citizens' participation and continuous activity what people and urban management in maintaining it become more diligent.</td>
<td></td>
</tr>
<tr>
<td>The response rate to the personality (human dignity)</td>
<td>This space must be subdued too big and not too luxurious and crushing personality, but also worthy of human dignity and personality, and its main aim is to promote the sense of the people.</td>
<td></td>
</tr>
<tr>
<td>Developing a sense of belonging to society and space</td>
<td>Much more to address the human space and is easier to interact with him and whatever his habits and behavior patterns are more harmonious, memories, expectations and wishes him more answers belongs to bring more people.</td>
<td></td>
</tr>
<tr>
<td>To create a sense of place and identity of the person or group space</td>
<td>Spaces that are consistent with the social and cultural habits and behaviors to create more sense.</td>
<td></td>
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<tr>
<td>Degree of different human senses</td>
<td>Perception of space in the sensory organs to be used more space becomes more attractive.</td>
<td></td>
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<tr>
<td>Curiosity and excitement of exploring the use</td>
<td>Each new sign marks the beginning of the brain can be compared and ranked. No signs of previous symbols embedded in the mind is not full compliance and therefore any comparison is searching for a metaphor.</td>
<td></td>
</tr>
<tr>
<td>The space efficiency</td>
<td>To achieve the desired result should the people, customs and culture of the people and how to forget.</td>
<td></td>
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<tr>
<td>Facilitate the participation of</td>
<td>The design should not be made perfect in all area it should be a place for people to participate and influence the urban space, and a sense of participation among people again.</td>
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</tbody>
</table>

**Permeability:**

Only places that are available for people to make the right choice. With this interpretation of the permeability, the number of potential solutions to the environment, the key factor is considered to be responsive to reach places. Permeability is determined an important basic requirement for the project. Because the permeability of a pivotal factor in achieving utility should be considered at the earliest stages of design. Unit as a whole, the borders of the civil action are in the field of computing finger.

**Permeability and public spaces:**

Permeability of any place of public spaces and the number of potential ways to pass from one point to another is considered a dependent. This potential should be transparent way and see. Because otherwise the only people who can benefit from it already be familiar to the relevant area. In this regard, the visual permeability is important. Both physical and visual permeability depends on how the environment blocking the network of public spaces.

**Permeability in public:**

The following three cases are examples of methods designed to reduce the infiltration of public spaces provide:

- Considering the large-scale construction
- Implementation of a hierarchical system of spatial organization design field
- Separation of cavalry and infantry.

**Diversity:**

Permeability alone cannot meet the high performance. Easy-access sites are useful when applied to the choice of the direction their experiences.

In this way, diversity, particularly Diversity, the second quality is the key. The purpose of this step is to use a variety of projects designed to deliver superior. To achieve the Diversity and importance of the demand for
different types of land uses in determining our site, Then the functional and economical way of putting it together, we examine the types of land uses finally, while there are justifiable and the types of land use (due to having already selected a spatial response) In the case of construction and placement of elements of a three-dimensional look And then, if necessary, as we plan to expand. When the different areas of expertise in the area to be converted to single user diversity rate is decreased from the inside.

**Readability:**

In practice some degree of choice offered by a place that will connect to legibility. This means that the extent to which they can understand or appreciate the place to be attained. At this stage inducer conceptual and landscape elements People into the design process. As part of this process through the design space limitations quality, roads and intersections in the order they are organized That Be able to understand and compare the differences between them. Readability is important at two levels: Physical form and activity patterns.

**Organizing physical space legible:**

Attention to organizing a physical space is legible, clear and precise idea of the shape and characteristics of the corresponding or observed image. In fact, these are people who understand the environment to form a clear picture in your mind, rather than the designer.

The image of the city and its constituent elements:

There seems to be a general urban landscape illustration by the different parties in the mind or perhaps not quite match that several general picture of each of the large number of residents in mind that it has emerged in a large number of residents in mind. If someone wants to work and live successfully in their environment. And the cooperation of its citizens, the existence of such an overall picture is needed. Image of the face of each individual is unique and some parts of it have never or rarely been induced to others. It is somewhat similar to the general picture of the urban landscape and May be more or less attractive, or more or less uncomfortable.

**Flexibility**

Places that are used for various purposes, compared to a few places that are designed for specific applications are available to users. Enterprises that have the ability to offer such options quality that we call it flexibility.

**Flexibility and common costs:**

Within the confines of the usual cost, only by careful design of the factors that are inevitably part of a set, they can increase the flexibility. Insofar as it does not cost more to employ this method in order to provide the highest possible flexibility, it is not always possible.

**The design of the space:**

One of the principles that support flexibility the layout of the space, as far as possible so that all variety of activities without having taken their place, in the public realm to achieve the highest possible coexistence. This act organizes specifically on the way and direct the activities of the foot and influence.

**Visual proportions:**

Visual events in places that most likely used by different people with different mental aspects, especially in places where the users cannot change its appearance, are more important. The occasion of the visual field in both internal and external parts of the scheme is that people are more important. While the attention paid to the external public space which is especially important in the outer parts of buildings that have a role in defining the public domain, the relationship.

**What makes a visual occasion?:**

Interpretations and interpreted by people from one place to create a visual occasion that respondents can improve in three areas:

- By supporting the legibility of form and function
- By supporting the Diversity
- Flexibility by supporting small-scale and large

The apparent location details should match the pattern functions to help people. For example, as far as possible, for most users, City Hall auditorium like a house like a home.

**How to interpret public places?:**

People with visual symptoms has special meaning because they have learned such an act. But people are not trained in a social vacuum. Each community groups, formal and informal learning are in a large part of their subscription. So everyone has a tendency to obtain subjective interpretations similar to an unknown location.
But members of different social groups may have different definitions of a location. This occurs for two main reasons:
1. Environmental groups to different experiences.
2. The objectives of the different groups.

What we need indicators?:
Support for readability, will require that index will be interpreted as an interface between the building and its grounds. Whether these indicators reinforcing way, nodes, signs, Edges and important areas (of reading) of readability, supports and In order to be used independently or readability, these indices are called background. On the other hand, providing Diversity and flexibility, Users are used to track the project, will connect.

Sensory richness:
Variety of sensory experiences that are causing the enjoyment of users, called sensory richness. Merely a matter of pure visual sensory richness not included but others feel the influence of design requirements are considered. Feel involved in the design requirements can be outlined as follows:
- Sense of displacement (movement)
- Sense of smell
- Hearing
- Sense of tactility
If the environment is still the only two people can have different sensory experiences:
1. Focusing attention on different sources of sensory experiences to suit different occasions.
2. Move up or move from one source to another source
Impact of each of these methods depends on any sense intended to allow direct selection of a flow responsive and / or that they feel unquestionably are at any moment, the information received from different directions. They can sense a wide range of choice, a selection of Grey's unquestionably a state of flux are the ideal choice.

Principles of visual sensory richness:
Visual sensory richness was significantly related to the presence of conflicting visual level. Effective tool to achieve such contradictions to two basic factors: the dependence becomes:
1. The orientation of the study
2. The location or position possible, because there will be examined levels.
Below are listed some of the sensory richness of providing feasible solutions:
- Where it is used for the mass production of components
- Instead of using a single absolute repetitive elements in the scope of supply availability and the ability to be addressed.
- Suppose instead of hiding and unchangeable elements of the display resolution,
  They are adjustable and clear thinking.
- Visibility for providing sensory richness of the materials used on the surface are different.
- Due to the fact that we can understand and apply the proper way to harness Innovation investments makers added the sensory richness.
- Recycling and the use fine agents, and crystallization of the sensory richness of the in the current situation, they cannot bring an action.

Belonging color:
The majority of people are forced to live and work in places that designed by others. Therefore, creating the possibility that can belong to the existing color is important. The only way that most people raised in an environment of interests, they acquire their personal values and signs. To achieve the desired location on the main designer is expected with his extensive efforts to provide the necessary context for the given color.
A secondary reason is to support the assigned color: Activity patterns of a given color space is brighter. This flexible environment that over time gains a wide range of functions in its place, they are vitally important. Colors encourages the user to create different color appearances in building. Of each user makes more explicit and clear.

Conclusion:
Clearly designed to respond only to the environment cannot move. The next set of aesthetic criteria, Technical and shared experiences of living spaces, planning and construction of residential environment will not be possible. Due to the impact of the physical environment on people, according to the characteristics of such symbolism in addition to designing public spaces, it is of utmost importance. Due to the effects that symbolization is the thinking process of operators, inspiration should be chosen with care and sensitivity. To a
stronger, deeper meaning and deserves to be mentioned. The proper design of collective spaces in the design, not only visual perception but also affects the social and cultural aspects. Structure and content of the purest forms of expression should be residential. Architecture in its purest form is neutral form, the neutral environment, there is a uniform among the diversity of the field to gain attention. Such an environment should be applied to any open or blank space but there should be facilities and features of activities to meet the basic needs of people.

REFERENCES