

Redefining the middle area in the today apartment housing

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Abstract

Human beings during the course of life and all the time need to connect with their surroundings and other people. The scope of this relationship has been extended among public, middle and private area. Middle area encompasses a scope of the public area to the private, so that it can begin from boundary of any home in the residential units and extend to the neighborhood and make a connection to the public space. Today, because of the limitations of apartment living, including increasing the density of residential units, Spaces for each residential unit have been dropped and middle areas as an interface between the inside and outside are vague or have been forgotten. This article by taking into consideration the importance of attention to middle area attempts to investigate these spaces in a residential apartment with limited units. This research is based on library studies and qualitative methods. Studies show that in the redefining of the middle area needs such as the relationship with nature (the seasons change, feeling the rain, seeing the sky), communication with other people (neighbors), as well as a sense of security and attention to children and the elderly are particularly important. The present paper has attempted the relationship of any of these needs to be investigated with different scales of middle area. In other words, the middle area is defined based on three parts including the way to the building (the first turning point), the route to each house (the second turning point), and within each home. The offered strategies in the part of route to each house (the second turning point) show attention to this route and its integration reduce individual "street temper" and improving mental relaxation at the moment of entering the house. Following the link with the main courtyard, creating dynamic spaces and related with outside, the availability of floors (alley in height) and middle courtyard model will link them with inside house and vice versa.

Keywords: Inside and outside, middle area, apartment house, hierarchy

Introduction

Human has been placed in a vast network of communication which establishes his relationship with family, neighbors, neighborhood and town. "In order to the house is not a prison, it should be have windows and pores to the outside world and relevant the inside to outside, because the basis of any life is action or reaction with the environment (Norberg-Schultz, 1974: 43-44). Thus, the house as a place of comfort and context of human settlement has the task of continuing this relationship to provide the human need to interact with the environment and other people. If in the past, every house had a share of the yard and a frame of the sky, now with the increasing density of residential units, this possibility is not exist for all units. Usually, the spaces especially open and semi-open space of any unit has been dropped and people lives because of physical proximity of have been compressed. But, still people need to communicate and interact with others and touch the nature remains.

The speed of apartment housing construction has caused less attention to the quality of living spaces and the middle spaces and the concept of "inside and outside" in the residential complex

(Eynifar and Alinia Motlagh, 2014: 55). Privacies and private and semi-private areas as an interface between the inside and outside are often vague and poorly are controlled and maintained (Eynifar, 2000: 114). Thus, in this article the middle area as one of the aspects of life in the context of settlement has been considered and the need to redefining it in creating social and space relations is raises. Then, considering the middle area linking the inside house to urban space, a number of solutions will be provided to improve the quality of the between relating inside and outside spaces.

Background and significance of the study

Men belong to many groups and have different social roles in any period of life (mother, father, husband, wife, partner, teammate, etc.) that each of these roles want different area and area. It seems that architectural experts agree that the two private and the public area are linked with another area called secondary, semi-private or semi-private. Altman (2003: 140-138) has defined three types of primary, secondary and public area and has considered the secondary area as a bridge between the primary (in which the individual has complete and wide supervision (control) and the public area, that almost everyone can use it. Eynifar (2000: 114) defines types of area as private, semi-private and public. Hertzberger (2009: 12-15) divides the property of areas into two areas of private and public. He, like Altman and Eynifar, do not talk about the semi-private or secondary area but believes that public and private concepts can be Partially Regarded as a range of quality of architectural space. Considering how is the access space, who responsible to its maintenance and responsibility and that space relationship with the private property of an individual or a collective will, that space in this range (between public and private) finds its place, may be more public or more private. Madani (2008: 8-7) also talks about three private, middle and public and defines middle area as the intermediate between private and public and considers it as confrontation place with neighbors and acquaintances.

The necessity of this research is because in today architecture only one "door" plays the role of barrier between the city and housing space, so that people unwittingly and immediately enter the city space and involve in a sudden scale (Ashari, 2011: 75). In general disregard for the space, activities and lifestyles in contemporary homes starts by eliminating or minimizing the input space, joints, stairs, porches and entrance to the house and continues into the house and neglect to landscape and light and air (Haeri Mazandarani, 2009: 25). In the today apartment housing, the middle areas (semi-private and semi-public) have been disappeared. The life pass within the area of private (family) and hide from strangers or hastily ongoing on public areas (Ghasemi esfahani, 2004: 32). In general, this study in terms of purpose is applied and has been carried out qualitative. In this respect, this article seeks to answer the question "how can the middle area cause continuity of the private area and public area?" Then, another question arises: "what strategies can improve quality of intermediate spaces of within and outside?"

Areas of life in the context of settlement

The areas of life in the context of settlement generally are divided into three private, middle and public areas. The private area is an identified and privacy-based. This area both meets the basic needs and is a factor that improves the contraction with the external environment (Madani and Shafaei, 2013: 156). Man needs to the private area that meet some needs like love expression, privacy, and the possibility of individual autonomy. Public area belongs to the public and on the other hand is temporary because all people have access and the right to use it (Altman, 2003: 148-145). The human needs to participate in the public area that gain his/her popularity there benchmark it (Madani, 2008: 8-7).

The "middle area" is a part of settlement context that prepares human for the transfer from his/her quiet and privacy to the public area (the place of emergence of the social emotions). Middle

area on one hand has of quality housing in the private area and on the other hand, provides the background to communicate with others in the public area. In fact, it can be said that middle area forms the boundary between home (private area) and the city (public) which contains a range from semi-private to semi-public so that begins from continuity of the private area and continue to the public area. In homogeneous societies, neighbors at the door of their house attempt to speak, children play near the house and the residency flow beyond the physical boundary of houses. But, in heterogeneous societies like today newly constructed towns, usually living in the middle area does not flow (Lang, 2002: 178- 177). Carelessness in the designing of middle area has discrete continuity of residence from the private area to the public area (Madani, 2008: 11).

Necessity of redefining middle area

Outdoor spaces of house linked together, define a hierarchy from small to large. People feel calm and comfort in spaces that are connected to the smaller space and a larger space (Alexander, 2009: 283-282). Hierarchical feature of spaces with separation of areas is effective in organizing social relations (Madani, 2008: 38). In fact, it can be said spatial hierarchy and the hierarchy of the various functions form the connection between inside and outside spaces, so that the functional structure space are effective in behavior in the environment and mutually are influenced from behaviors and prediction of them (Eynifar and Alinia Motlagh, 2014: 58).

The hierarchy of housing organization as private, semi-private, semi-public and public spaces is as follows: creating a social structure and related physical structure with social spaces on different levels allowing movement of smaller groups and spaces to larger groups and spaces and from private spaces to more social spaces and provides a sense of security and stronger sense of belonging to areas outside the private housings. Area where a person sees and perceives it as a residence and residential environment, can spread beyond the settlement location, for example, parents allow their own children that in an age earlier than usual, play outside (Gehl, 2008: 53-52). It should be noted that the transition between different species of social spaces should be very smooth and fluent.

In the past, there was a hierarchy of public open space to private in residential areas. One to pass out from the house space and reach the city had to pass the distance; confined spaces and deadlock alleys as semi-private spaces were playing an intermediary space between private courtyard of houses and public open spaces of city (Ashari, 2011: 75). In fact, it can be said that in historical houses the themes and meanings related to home and shifting the area from the outside into inside of space has been reflected. Semi-private, semi-public area belonging to several neighboring is formed between the city and house and with space application in the form of deadlocks and sealants. The port of houses is the reflection of waiting space for the door to opening of it and a short gab with neighbor (Haeri Mazandarani, 2009: 29 and Mansouri, 2010: 42-41). While middle in today housing has been forgotten so that people unwittingly and immediate enter the city space and involve in a sudden change scale.

Although in the residential apartments main entrance which from the alley or street Connects to home places in the hierarchy of middle area and is a semi-private space and is common for neighbors, but the quality of these spaces have declined to a neutral area. According to Meiss (2005: 154) the inside joint space of complexes that generally are composed of stairs, the hallway and the elevator has become a neutral-zone between inside and outside and between the private and the public area. Passing from these spaces has created a set of lock and boundaries that has formed a bay between house, street and neighborhood that neither belonging to house nor city, but has declined to a “neutral area” which belongs no one. Also, sometimes they hire a guard to maintain and secure from this dark and anonymous passage.

On the other hand, to enter the residential units, after passing the stairs because the entrance to the residential units designed within landings and the width of staircase based on space separation to pass the stairs and access to housing units and inputs are unforeseen, among the airspace pause in front of the driveway and privacy passing stairs an interfere has been created and has caused the confusion of this space (Haeri Mazandarani, 2009: 162). Today, some behaviors such as welcome and escort of guests, maintenance the shoes out house and like them bother neighbors. In order to avoid interference, the need to interface space between the private area and middle area is felt (Madani and Shafaei, 2013: 160). Thus, taking into account the hierarchy in the middle area to establish social relationship and attention to quality of spaces in redefining of the middle area is necessary.

Redefining of middle area

As it was stated middle area covers a range of the private area to public space (the city). In this range a hierarchy of social relationships, spaces and various areas are placed which should link together in a slow and continuous way to be along each other and balance each other force and regulate it. People as a part of the family are considered as a member of the neighborhood and a member of the community, too. Man place in a chain of communication which is not finished still in an area another begins and simultaneously the people relationship with family members, neighbors and neighborhoods to be raised and living is the continuation of this type of connection (Figure 1). Social relations and space occurring in the middle area are the complement of each other and influence mutually on each other.

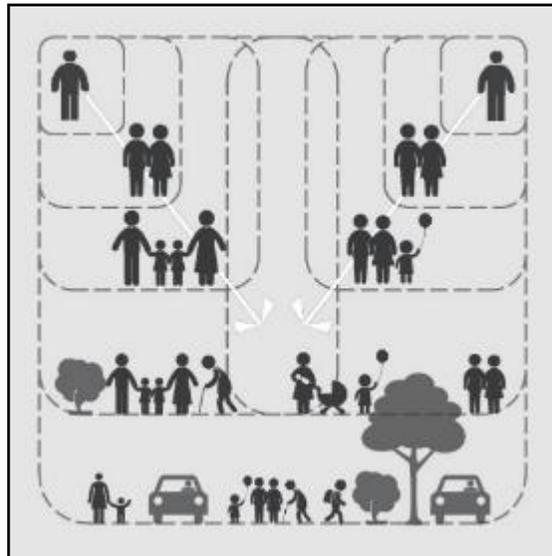


Figure 1: The chain of human communication (Drawing: authors)

Social relationships in the middle area

Social relationships in a wide range of low to high intensity have been extended. The hierarchical feature of spaces in the social relationships and interpersonal communication is very effective. Simple words "visual-auditory communication" can be considered associated with other forms of communication and social activities as part of the range of social activities from very simple and non-identified to complicated relationships and emotional involvements (Gehl, 2008: 9) (Fig. 2).

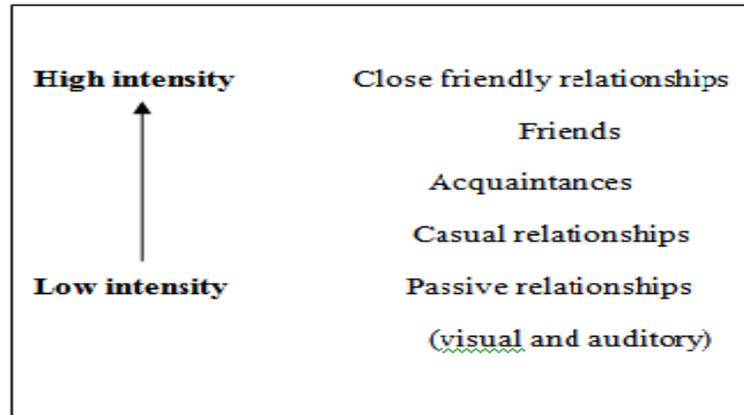


Figure 2: Different forms of relationship (Gehl, 2008: 9)

If there is no activity in the middle area, the bottom part of figure will be removed. Although these communications are seemed inconsequential but as independent communication and as a prerequisite to other more complicated interacts are very valuable. In fact, transitional forms of communication between the two extremes of aloneness and being with others are disappeared and the boundary between isolation and connection will be clearer. People living alone or have communication with others in a high level. The communication in the middle area is an opportunity to being with others in a comfortable way. The low-intensity (weak) communication (relationship) is the position from which other forms of communication could develop. From this simple level, to the extent that the parties have a desire, relationships can be grown in the higher levels of growth. The attendance and meetings in the same space, in each of these situations are the essential and necessary condition (Gehl, 2008: 9-13).

Gehl (2008) states there is no possibility to spontaneous expansion the relationship and close communication between neighbors: "something more than architecture to spread such interactions is required but proper design will strengthen it. To go beyond neighborly relations there must be something in common, common background, common interest or common problems "(ibid, 47). Thus, the spatial relationships in the middle area somewhat strengthen social relations (interaction to privacy) and vice versa each person's presence and his/her relationship with others (neighbors, neighborhoods, apartment neighbors, family and personal privacy) will create hierarchy and space diversity. Meanwhile the children and the elderly affected more (Figure 3).

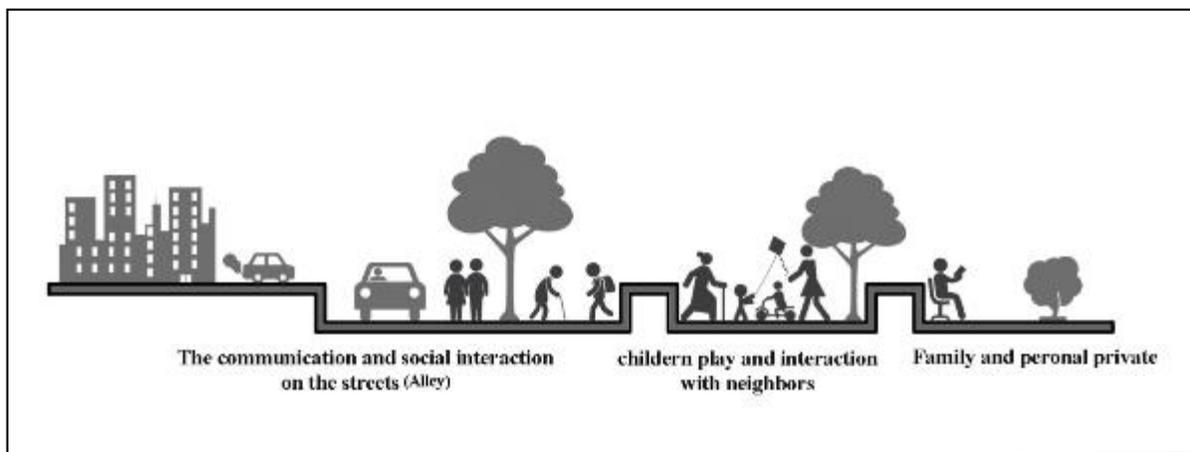


Figure 3: Social relationships in the middle area (Drawing: authors)

The middle area is the meeting place of different age and social groups. The presence of children and elderly people due to limited physical ability in the middle area which is the closest border to private area is important and considered significant. Children tend to communicate with the outside world and finding friend among their peers (e.g. neighbor's child) and parents to control the children have to be present in the middle area or have control over it. On the other hand the elderly due to physical aging and disability use areas that are appropriate to their physical condition (Madani, 2008: 29).

The people presence is also effective, social interaction and relationships in the middle area on children's relationships. Gehl (2008: 18) points children stay somewhere and play in which the most activity is going on. They do not play in spaces which are designed in backyards or sun side of multi-storey buildings designed and where there is no traffic or people that could be looked into them.

Spatial relationships in the middle area

The spatial relationships in this redefinition, has been considered as a spectrum intended that consist of multiple spaces and in which spaces borders have been intertwined. This spectrum is not linear and every space and every component of this spectrum space effect on other and be affected. The middle area spectrum tends from street temper toward the private temper. When people are on the street take a kind of "street temper", but when come to home, it is natural to seek a way to get rid of this tempered and streets tiredness and try to immerse themselves in the peace and comfort of their home. The spectrum of middle area should be as a path between the street and the home to rid the stress and mental confusion in people which is the feature of street temper and give the warm and comfort environment of house to him (Alexander, 2009: 278).

In fact the street is shown as a public space and the starting point of spectrum and with approaching to alley and path to enter to house its force is reduced and the building imposes equivalents and mutual force. This communication and forces exchange will continue to reach the other end of the spectrum meaning private area. The interaction of forces is three-dimensional so that in addition to the effect of street, alley space and private area on building and lower floors of buildings, due to closeness to ground establish more link with land, soil and the trees and gradually the amount of the bond is reduced and upper floors link with other elements of nature such as the sky and the moon and stars (Figure 4).

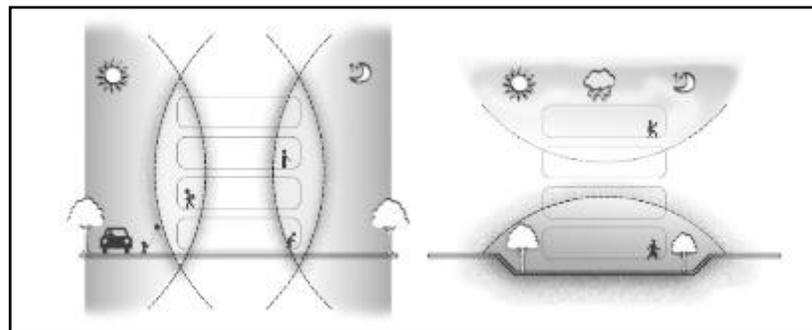


Figure 4: Communication and exchange of forces in the middle area (Drawing: authors)

In this spectrum the entrances including entering to the apartment and into every house, both are milestones. As far as Gehl (2008: 90) points out entrances are where most events take place there. It should be noted that the middle area should not be interrupted in turning points and create absolute borders, but various spaces in this in this area can be turned into each other smoothly. The relationships begin from alley and pathway to the apartment (the first turning point), then with route

and access to floors inside the apartment and entrance to any house (the second turning point) continue. By entering into every house by elements such as windows and doors as well as semi-open spaces like terraces, communication (relationship) with the outside world again begins (Figure 5).

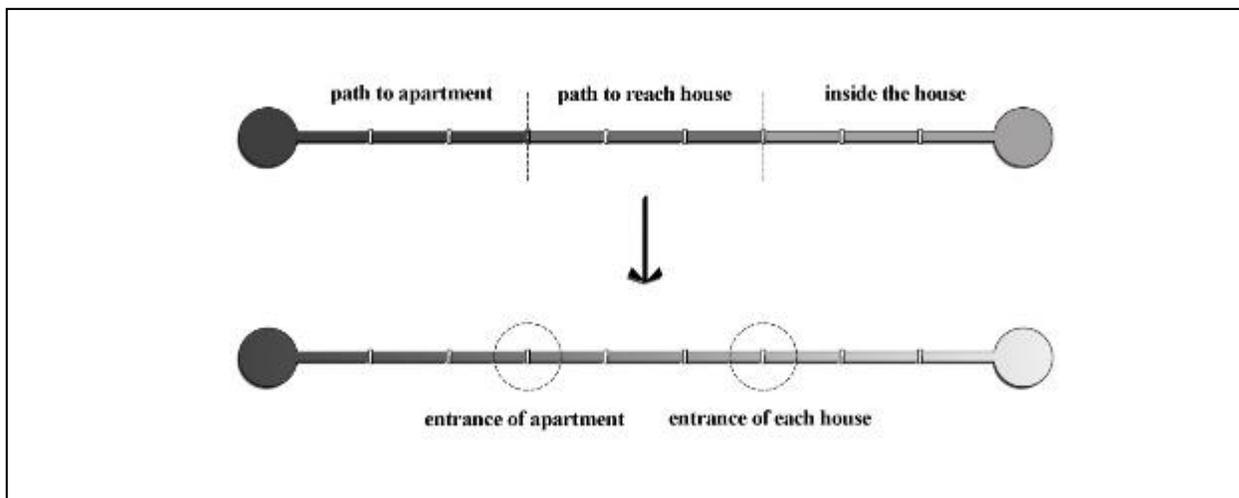


Figure 5: The lack of firm and absolute boundaries and continuity of spaces in the redefining of middle area (Drawing: authors)

The presentation of strategies to reach every house

The presentation of strategies and related analyzes in this paper in the part of path to each house (the second turning point) have been analyzed. Because on the way to the apartment what is important is reducing the street temper and approaching house private temper that considering the site conditions and location of the apartments and mounted and dismounted people this path can have different qualities and develop in different ways. Finally, it is better to become a place where people linger and children can play and feel free to engage in social interaction. On the other hand inside of any house due to its constituent elements are placed differently in relation to the middle area that its investigation requires another research.

Providing guidelines on the way to every house are examined in three parts, of linkage to the main courtyard, the linkage of floors with alley, middle courtyard model. It should be noted the possibility of taking advantage of solutions in redefining the middle area in every situation is different and depends on many factors. Accordingly, we have tried to point out the more general solutions.

The linkage with the main courtyard

After entering the apartment on the path to reach every home, the "yard" should be as a place to pause and contemplate not only to cross the road. Alexander (2011: 93-94) calls the yard which is limited to wall in every side and there is no any porch or interface between interior and exterior space and has only one entry, as dead yard in which the forces are at odds with each other and conversely, if the yard has a landscape to larger space, and the path of access to different rooms pass through which and has portico or porch, these forces can be adjusted to each other. In such a case the yard for people could be familiar, vivid and natural place and there is need to go there and use it. Under the direction of access to modern apartments, two cases arise. Or persons enter the courtyard firstly in which, in which case it is better a way to be considered that enjoy the trees and flowers, as well as separated from parking space, or yard can't be seen and on the other side of the building is located. In this case, convenient access and a view of the courtyard are important at the time of

entering. The individuals with seeing the yard or framed tree from afar if desired move to the courtyard and attend there, children play and the yard comes live (Figure 6).



**Figure 6: The yard linkage with floors- passing the bridge to reach the yard
(Drawing: authors)**

Yard surrounded by walls, taking down the yard to the rest surfaces and indirect input (entrance) into the yard together help to create the sense of being inside and pause in the yard (Nahvi, 2012: 65). Also the existence of semi-open spaces between the courtyard and enclosed spaces increases this feeling and create spaces to sit and touching the nature intimately.

The linkage of floors with alley

Floors and stairs access also is better set in relation to open and semi-open space. The quality of stairs and access to floors should be such a way people, especially in the first and second floors sometimes pass stairs, children play in the middle spaces of it and not be a dull and dark and merely to pass in the lack of lift (elevator) (Fig. 7).



**Figure 7: First and second floors closeness to the ground and upper floors into the sky
(Drawing: authors)**

The staircases of floors can be as an alley in the height which yet interacting with outer space (alley or street). In this case, people in the path of approaching to the entrance of their house still linked with the alley and its stream and in time of getting out first see the alley, they understand climate change, in the event of cloudy or rainy weather, get the necessary equipment and will be aware of the events of streets before getting into it. This causes they not be indifferent towards the events in the alley and also a sense of security will be achieved. With the existence of these staircases child's school bus seen from further away and prepares on time to ride and no longer need her/his mother accompany him to convey him.

The middle courtyard model

Generally the comparison of hierarchy of reaching to home in the houses with courtyard and residential apartments shows in the houses reaching hierarchy has been as shown in Figure 8, respectively, streets, alleys, courtyards and then inside the house, but today in residential apartment has no certain definition and often include street, staircases of floor, inside the house and then semi-open space (balcony), respectively.

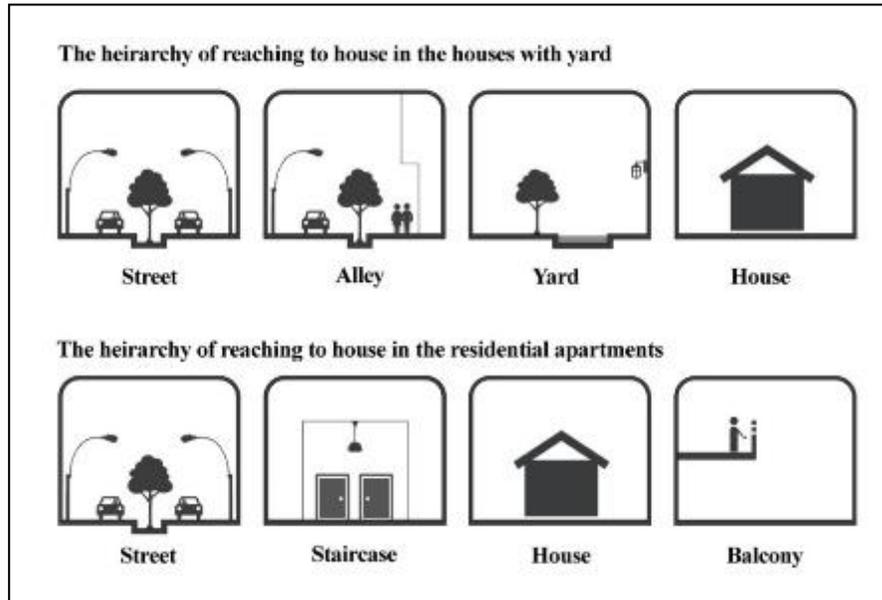


Figure 8: The comparison of hierarchy of reaching to house in the houses with yard and common residential apartment (Drawing: authors)

On this basis, we can speak of a model derived from the hierarchy of houses with courtyard and additionally appropriate with to today's conditions of apartments. In this model, after being in the space between floors (an alley in height), people firstly enter the courtyard then enter to the main space of the house. In fact, this "middle courtyard" as a turning point and interface area between the indoor (the inside space of house) and outside (the space between floors) play a role and different functions such as welcoming guests, neighbor children's games, mothers interaction and the possibility of control them are occurred there. The existence of these courtyards in the first and second floors due to closeness (proximity) to ground (land) and connection with the main courtyard of complex is appropriate. But in the higher floors the connection is reduced with the ground (land) and connection with the sky occur (Figure 9).

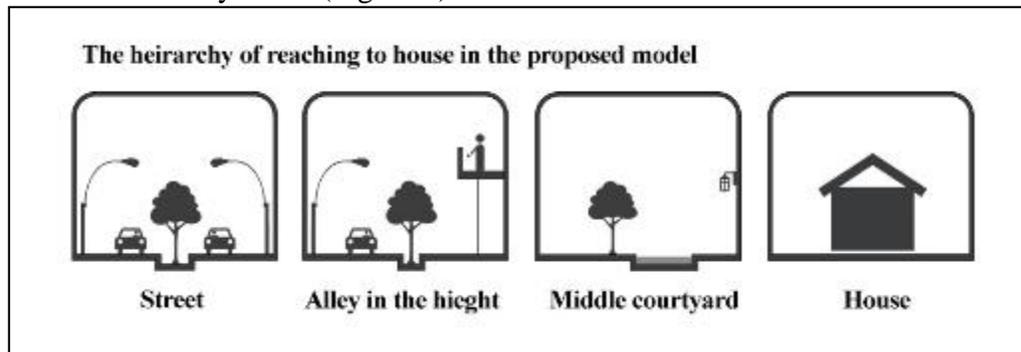


Figure 9: The hierarchy of reaching to house in the proposed model (Drawing: Authors)

Conclusion

Based on the studies, both public and private area requires an intermediate area called "middle area" that encompasses the continuation of actions and behaviors of both these areas. The area that on one hand has the quality of housing in the private area and on the other hand provides the background of linkage with others in the public area. On the other hand living in the apartment housing has caused the interfaces spaces are reduced and their quality is declined. Accordingly, looking back into the middle area seems necessary.

The middle area as the interface of public area and the private area contains a wide range. In this range, there is a hierarchy of social relationships, spaces and different territories. Social relationships and the space that occur in the redefining of middle area are complementary of each other and have mutual influence on each other. The spatial relationships to some extent strengthen the social relations (interaction to privacy) and vice versa the presence of each person and his/her relationship with others will create hierarchy and spatial variability. In this article the middle area in the three parts of the way to the apartment (the first turning point), the path to each house (the second turning point), and within each home has been redefined. Strategies such as linkage with the main courtyard, the linkage of floors with alley, the middle courtyard model in the part of way to every house in the (the second turning point) were studied and analyzed and are important (Figure 10).

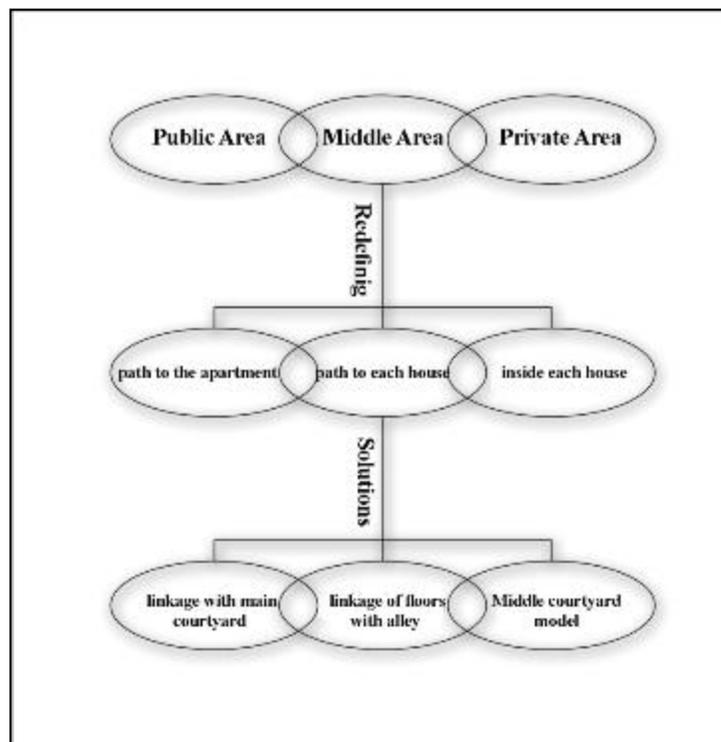


Figure 10: The redefinition of middle area in today apartment housing (Drawing: authors)

Considering the middle area as the boundary and interface between the public area and the private area and its redefining in this study shows that spaces within houses in the apartment housing alone has not the ability to meet the people social and spatial relationships in different age, because the scope of these relationships (communication) is beyond the confines of the home. As indoor spaces such as living room, kitchen, bedroom and ...are integral parts of the private area and

defined by it. The mentioned items in the redefining a wide range of middle area should be happened to the residence continuation and linkage of inside and outside is established.

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