

## “High-Rise Apartment Buildings in Palestinian, in Response to Human Needs”

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### Abstract

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Using high-rise apartment buildings in housing design is increasing in Palestine. The dramatic limitation of land and the high demand for housing are pushing investors for rising vertically in the dense areas. However, housing design cannot be simply described as providing physical units that enclose the space for its residences to provide them with shelter and protection. It should also respond to other levels of human needs in order to reach complete satisfaction. This paper discusses the unsuitability of such typologies in term of cultural and human needs. Thus, we will examine these concepts in responding to Maslow’s hierarchy of human needs comparing with the traditional type of settlements in Palestine, which is low-rise dense typologies. The investigation has revealed that there is a mismatch between high-rise apartment buildings and the Palestinian cultural roots. Such designs may not completely respond to: privacy issues, belonging to the place, interaction between individuals, and adapting future needs.

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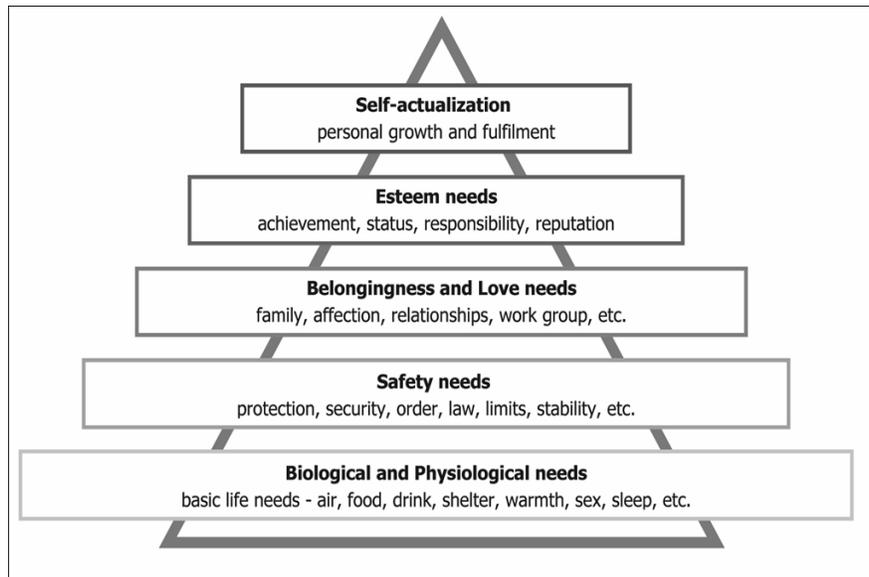
**Keywords:** housing design, human needs, apartment buildings, high-rise, Palestine.

### 1. Introduction

Many recent studies have discussed Housing design in term of human needs. The right for adequate housing is recognized in a number of international human rights instruments. Article 25 of the Universal Declaration of Human Rights recognizes the right to housing as a part of the right to an adequate standard of living (Edgar, Doherty, & Meert, 2002 , p. 17). (Hays, 2012, p. 59) in his book “The Federal Government and Urban Housing”, aimed to highlight home standards by discussing the importance of the concept of human needs in supplying relevant housing. He intended that housing is not simply “a roof over their heads”, it should address a full range of complex human desires and needs. Thus the relationship between housing design and human needs should be studied and clarified. The well known psychologist “Abraham Maslow” had put his hierarchy of human needs in 1943 (Maslow, 1975). Maslow showed five levels of needs (Figure 1) starting with basic needs, to reach other interdependent needs for complete human satisfaction.

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**Figure 1: Hierarchy of human needs (Maslow, 1975)**

(Salamati, 2001) argues that housing is an essential element for satisfying all these level of needs. Starting with the primary needs in the first level, which are the biological needs for the human being to survive, this includes the survival of the individual and his extinction. Surviving is related to many biological functions like eating, drinking, wearing cloths, sleeping, and others. In this level the house is the place for doing these fundamental activities, where the human find his own space to practice his biological life. The second level is the safety needs, desiring to be free from physical harms. In this level, the human-being needs to control his territory and property to feel secure. Housing is considered as a shelter that provides a healthy environment and protects human-beings from various dangers and environmental conditions, such as storms, rain, animals and privacy from other humans.

However, the role of housing do not stop in this level, it continues to reach the secondary human needs in the following level, which is related to the need of belonging to the place, the interaction between individuals and families. He needs a relevant place to associate his relations with others; wife/ husband, raising children and meeting family members and friends, which are related to cultural aspects. The house is playing a major role of these activities, it should respect cultural values to give individuals the feeling of pride and balance. The fourth level is the esteem level. In this level human after satisfying biological needs, safety, and right relations with others, he looks forward to make his position in the community special, such as looking for prestige, reputation and dignity. Where the relevant housing is considered as one of the main elements for respecting self and respecting each other. In this level, individuals as well as families aim to introduce their place of living including individual unit and surrounding as an important part of the society and therefore of the city. In the fifth level of human needs, is the self actualization: the human look for being creative, solving problems, and consider future needs. Thus housing design should be flexible and adaptable for satisfying all these needs.

It is essential to mention here that there is sometimes confusion between what human really needs or what he desires or wants, as not all wants are needs: want is expectations of some desirable future state. In the other hand some of these wants reaches the degree of needing if it was an important factor in the people culture (Hays, 2012, p. 61). For example separation by gender in the Palestinian culture, increases the importance for relevant spaces that provide such environment for girls and boys to be one of the important needs in housing design, which may not be an important issue in other cultures.

As a result, housing cannot be simply described as a dwelling, or a physical unit that enclose the space for its residences in order to provide them with shelter and protection from domestic harms (Oswald & Werner Wahl, 2005, p. 21) Housing is not adequate if its occupants do not have adequate physical conditions, or if it does not respect and take into account the expression of cultural identity (U.N.- HABITAT, 2009, pp. 3-5). And thus, physical needs are obvious for every society, it can be defined easily, because it is common for all people over the world, but it is not the only need to be considered in housing design.

Other terms like identity, and culture are also related to housing design and differenced from a society to another, which have a vital importance to explain the specialty of each group through the history (Senan, 1993, p. 1). A single unit can probably satisfy the first human need, which is shelter. But other levels of need are related to the whole housing design, which includes other units and elements. As these units are effecting each other, it can't separately fully satisfy these needs. In other words individuals cannot reach a satisfactory level of human needs in separation of the surrounding (Hays, 2012, p. 61).

## 2. Palestinian culture, and the meaning of home<sup>2</sup>

Housing in Arabic language is called “Sakan”, which means calm and peaceful. The house has significant meanings for Arab people, it is not only a place for sleeping; they eat the three meals there, they contact with their relatives and always invite guests to their homes. People prefer large spaces in their houses to have rest from crowding and noising of the public spaces. They prefer also to have their relatives inside their homes (Hall, 1966, p. 188). One important reason behind this attitude for housing is the high influence of the tribal roots and Islamic religion, which encourage visiting relatives frequently, hospitality, and separation by gender. The Islamic legislations discourages staying in the streets without specific purposes, and put restrictions on sitting in public areas. Due to this significance of home meaning in the Arabic culture -as well as in the Palestinian culture-, People are sensitive of respecting other people's homes and properties. They used to highly mark their territories, and avoid frivolity and intrusion by strangers (Nour, 1979, p. 355). (Rapoport, 1969) concentrate on privacy as one of the most important factors that form houses in Arabic cultures. Arab people used to define their territoriality in order to feel much secure. It is not allowed to look into other people's houses or gardens without their permission, this is considered as a rot behavior. It is also forbidden to enter others homes or gardens without permission, as local society are very sensitive in protecting their privacy.

## 3. Overview on traditional and contemporary housing design in Palestine

The Palestinian traditional housing was characterized with low-rise dense typologies, the dominance was for the urban mass and not for the space (Figure 2).

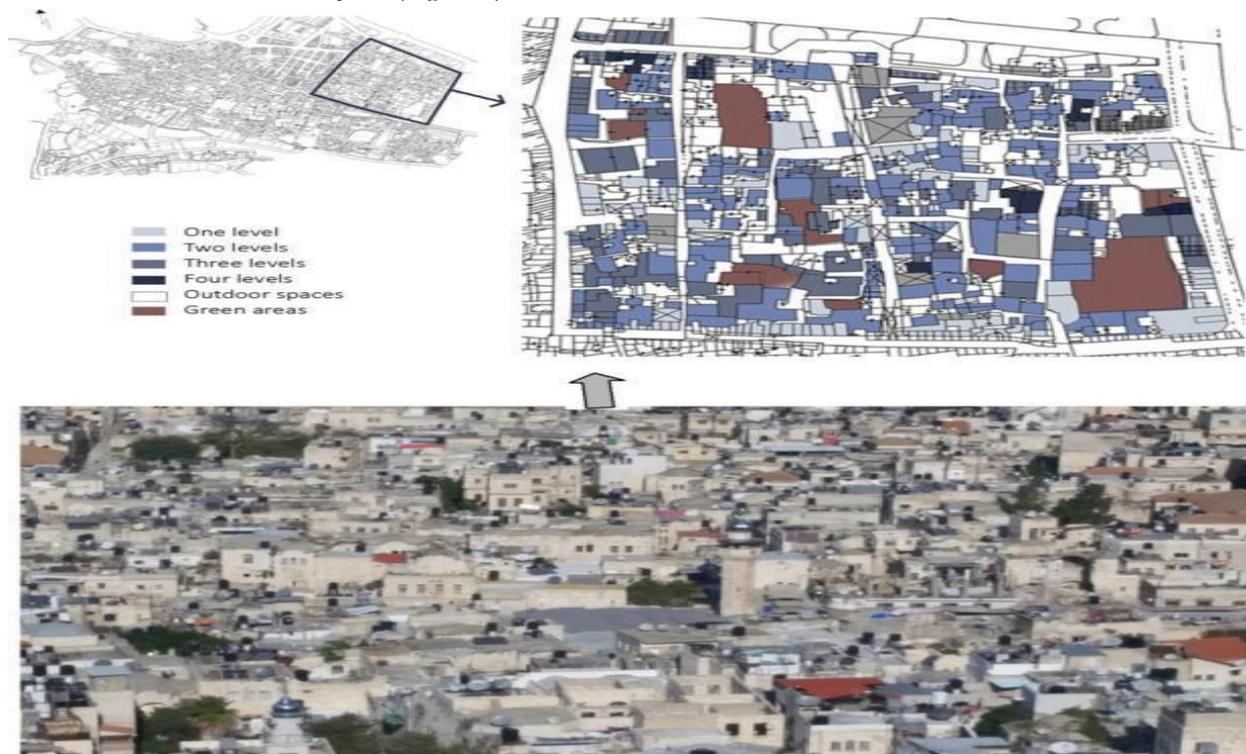


Figure 2: Low-rise dense typologies in Nablus old city<sup>3</sup>

<sup>2</sup> Palestinian culture belongs to Arabic culture, thus many references of this section refers to the Arabic culture.

<sup>3</sup> Nablus city is one of the largest cities in the Palestinian territories.

Consequently, the urban mass controlled the space and enclosed it in the form of courtyards. The compact planning is consisting of tied and attached buildings together, a one or more common walls are used to be separation between houses. Given a general preview to a traditional Palestinian city we can find a remarkable harmony: buildings are similar in height and are usually attached to each other. Using of isolated houses is rarely found inside traditional cities. One of the reasons behind compact planning in the Palestinian cities is the influence of the environment<sup>4</sup>.

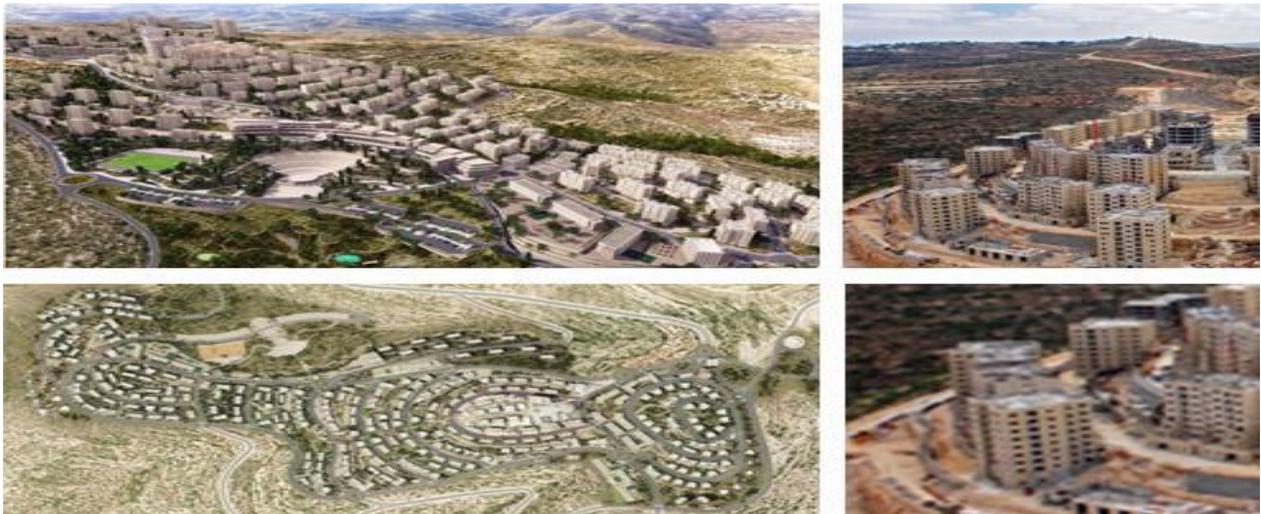
While Rapoport did not discard the influence of the environment on housing and settlement form, he assumes that house and settlement forms are not simply the result of physical forces, or any single causal factor, but the whole range of socio-cultural factors with modifications to fit the climate. He refers the compact forms primarily to cultural and human aspects (Rapoport, 1969, pp. 47, 80).

Palestinian traditional cities consist of a number of quarters, each connected with a primary street that connects it with other parts of the city. Inside each quarter there are secondary streets that almost have less importance and width than the primary ones. The secondary streets are branching also to dead end streets called “cul-de-sacs”, in which houses are distributed arrowed it (Hakim, 1986).

There are also sub divisions inside each quarter; each sub division can be occupied by five or six families. However, these quarters are not physically separated from the city; they have their definition just for emotional reasons and providing privacy.

Outdoor spaces are in different levels in a hierarchy from public to private. Moving between public and private spaces follows secondary levels of access (Ragette, 2003, p. 51). There are some identified areas as a transferring between private and public domains. These areas are also divided into semi-public and semi-private domains, Semi- public is the first area leaving public territory and entering secondary one. Semi- private is the last stop before entering private territory “the courtyard”, which is a part of this circulation system that serves both functional and cultural values. Nowadays looking to the modern districts in a Palestinian city, this whole idea of spacing is changed. The traditional forms disappeared, though it was the main concept of urban housing design for very long time- until the beginning of the twentieth century (Al-Amad, 1998, p. 1). it is replaced now with independent and separated housing typologies.

In the current Urban housing, the dominant housing typology is apartment buildings (Figure 4). It is like boxes that have some openings, with less consideration to the environmental needs. High prices of land lots inside cities prompt the designers to raise apartment buildings vertically in the same land – more than four floors-. They attempt to increase housing affordability by creating other equivalent problems (Wolbier, 2007, p. 6). The main desire of the investor is to provide high density of population. However, now it is known that it is not a condition to rise vertically to provide density, high density could be also achieved by low-rise dens typologies. (Salamati, 2001, p. 2)



**Figure 3: "Rawabi City", the First Planned Settlement for the Palestinians (Rawabi city, 2014)**

<sup>4</sup> Palestine is a part of the Arabic territories, which are mostly dry and hot, so that people were much likely to build in adjacent to each other to provide shade.

Beside the fact that these buildings are not reflecting the Palestinian identity, they also contain many disadvantages: high-rising and consuming land, climatic inadequacy, and high cost of construction and maintenance. In addition, isolated building types are not able to form good urban space; most of the outdoor spaces that resulted of configuring these buildings together are usually not exceeding the left spaces between buildings, which causes discontinuity of urban spaces, deformation of facades, and unqualified outdoor spaces. Contemporary designers may concentrate on the spatial design of the apartment units, while the whole system of connecting these units is not satisfying; neither good relation with outdoor spaces nor hierarchy of space exist, circulation concept is based on sudden transformation from public to private spaces. We believe that this type of housing is not a result of Palestinian people desire as the participation of people is not always satisfying. It is common now to see builders and investors building apartment buildings or even independent houses and then trying to sell or rent them for customers. It is an obvious transformation in housing to be just trading goods as any other production. This approach of housing design may not respond to all levels of human needs in Palestine. To verify this hypothesis, we will compare traditional and contemporary approaches of design using Maslows's hierarchy<sup>5</sup>.

### 3.1. Safety and privacy needs

The endless views of open environment in the hot dry countries like Palestine create a kind of reaction in the human mentality, which pushes people for avoiding large open spaces, and seeking for variety, tangibility and containment spaces. (Nour, 1979, p. 176) Hall in his book "The Hidden Dimension" (1966) also discussed this need, he mentioned the need for crowding in Arab societies as it is presented to provide safety for members<sup>6</sup>. Arab people have much higher tolerance for crowding in the public spaces than western people (Hall, 1966, p. 61).

Privacy and safety needs affect also people's attitude for social interaction. Palestinians are seeking for social interaction with relatives and neighbors. In the same time they protect their privacy from other unfamiliar persons, which is a dilemma in housing design. To deal with this challenge, outdoors spaces should be fragmented and equally distributed between houses. Offering private outdoor spaces in dense areas become a very important issue. It allows keeping the strength between members and families, and encourages the social interaction (Hall, 1966, p. 174).

The traditional compact planning in Palestine responds to this psychological need. Low rising allow also for small physical dimensions of residential streets which prevent to see buildings as a whole, as Palestinians may not aim to view their building in full perspective to prevent staring of strangers. Besides, residents can achieve their privacy inside the courtyard without being exposed to their neighbours. Attaching houses is not a problem for individuals, courtyards are a delicate balance between segregation and togetherness (Ragette, 2003, p. 51). The uniform height of buildings also protect s family's privacy. In the contrast, the concept of rising vertically is able to provide much larger spaces as it is required for providing natural sun and air, but the relation with the outdoor spaces is not equal for all apartments. With less privacy inside apartment units, which discards the mentioned need?

### 3.2. Belonging needs

Belonging to the place may be highly influenced with cultural issues. In the Palestinian culture, belonging to the group plays an essential rule for right relation with the environment. Because of the influence of tribal roots and Islamic religion, each member is not giving any meaning or functionally usefulness if being alone, the important thing is in the system that links the members together in right relations (Barker, 1968, p. 6).

Traditional approach embodies this idea and responds to this need much better than contemporary approach. As low rise dense typologies represent how much the community is integrated and united, all houses together form one huge mass. The part melt in the whole and the whole strengthen the part. And thus compact fabric became a significant symbol for Arabic society that reflects strength and unity, while rising vertically in architecture is contradicting to Muslims believes: it is not a good sign as it is a symbol of life ending.

### 3.3. Esteem needs

On one hand the need for estimation make differentiation in requirements between individuals, based on family's position and income. On the other hand Palestinian people learned from their religion legislations to set their relations with others based on social integration and not on economic consideration.

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<sup>5</sup> The first level of need is discarded, as both approaches can satisfy the biological and physiological needs.

<sup>6</sup> The Palestinian society is a part of the Arabic society.

This is another dilemma that housing design is facing to provide suitable solutions that respond to the belonging for the group without discarding the differences between individuals. Social variations can be easily absorbed in the traditional approach without affecting unity of housing design. Low-rise dense typologies can satisfy all social classes and keep strong belonging to the group. When walking in the street in a traditional Palestinian city, we cannot recognize the difference between houses of wealthy or poor people from outside (Ragette, 2003, p. 53). Even palaces of the ruling people inside the traditional cities were melting in the context. Social class can be noticed only from inside the house, the typology is the same: courtyard house for poor and wealthy people, but the size and facilities were differentiated depending on richness and number of family members. In the contrast, the concept of apartments is not flexible with esteem needs, units are mostly unified. Variation is not exceeding the spatial design of the apartment unit.

With less, concerning for differentiation between families needs. As a result the modern use of isolated buildings have led to more than one type of settlement in the Palestinian cities, as this kind of typologies is not able to satisfy all social classes and diversity of functions. This fact leads to segregation in the urban fabric and creates many paradoxes that affect the overall looking of the city fabric. Thus the contemporary fabric in these cities is in most cases not homogeneous. For example we can always see indiscriminate typologies, such as high rise buildings adjacent to villas of two floors.

### **3.4. Adapting future needs and creativity**

The last need of Maslow's hierarchy which is creative solutions for future problems should be also supported by housing design. In the Palestinian culture there are many complications and paradoxes that frequently regenerate architectural problems: rapid growing of population, importance of family relations, attitude for privacy and social interaction and others. This fact increases the needs for a flexible and creative system of housing design to allow for future adaptation and quality of problem solutions.

Traditional approach had the ability to be adaptable in the Palestinian area for hundreds of years. It is suitable for the Palestinian society because it was a true reflection of their social system. The traditional fabric has the ability to absorb the natural growth of the city (Addington, Kienzl, & Intrachooto, 2001, p. 71). Because of that traditional architecture survived all that period with minimum changes. Being adaptable in the traditional architecture was a result of the flexible forms, and organic planning system (Addington, Kienzl, & Intrachooto, 2001, p. 71). The courtyard houses look like living cells that have the ability to multiply and increase, without being odd in the majority. It is similar to a living organism (Ragette, 2003, pp. 50-51). Housing design in this system is naturally open ended, contrary to the modern types of settlements, or any other closed final forms, which are unable to accept changes (Rapoport, 1969, p. 5).

Structures around courtyards allow designers and users for creative solutions to meet people morality and functional needs. Changing is only required in the size and forms of these courts, which increased the ability of adaptive reuse, energy saving, and reconstruction of the old structures. Dense configuration allows also for great flexibility of spatial rehabilitation, joining an existing room needs only opening a new door in the separated wall, resulting for joining spaces together in a high degree of flexibility. (Pfeifer & Brauneck, 2008, p. 18) However, modern apartment buildings destroy the flexibility of housing; solutions are restricted and limited to systematic repetition of apartments based on rising vertically.

## **4. Conclusion**

Housing shouldn't be an international product, exporting concepts to different countries all over the world is contrasting with satisfying human needs. The mentality of Palestinian people is deferent from Westerns people, so their cities and houses must reflect that. Consequently there is a mismatch between high-rise apartment buildings and the Arabic cultural roots. This approach is not a true reflection of the Arabic socio-cultural values, as it is based on such copies of pre-designed international forms of buildings that create poor spacing, and poor environment. Such designs may not completely satisfy these levels of human needs for Palestinians: privacy issues, belonging to the place, interaction between individuals, and adapting future needs.

According to this conclusion, there is an urgent need for modifying these typologies in Palestine and looking for good solutions based on the traditional concepts, which are still a comprehensive solution for different aspects of life, It can also face contemporary social, environmental, and economic challenges if it was designed in a contemporary way (Itma, 2014).

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