The influence of the Palestinian sociocultural values in shaping the vernacular architecture of Nablus city

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ABSTRACT: Recently, environmental architecture and sustainable construction has been ranked on top of the world's interests. Making use of natural resources helps in reducing energy consumption and costs associated with the operation of buildings. The current architectural approaches and designs in Palestine are far away from environmental concepts, copying and simulating abroad approaches, without taking into account the culture, climate, and inhabitant's needs. On the contrast, vernacular architecture has achieved environmental concepts and has given suitable approaches and samples - without any need to simulate or copy - which come from people and land. This paper discusses how the Palestinian socio-cultural context shaped the residential vernacular architecture in Palestine, taking the old city of Nablus as a case-study. The research concept depends on analysing and trying to understand the effect of the socio-cultural context on vernacular architecture and trying to reach some rules or understandings of how it works in order to reach a modern environmental dwelling that is suitable to this concept. The research method goes through analysing study cases from the traditional architecture models and the Nablus city is selected as a case study. This analytical and qualitative method can lead to deep understanding for how to benefit from vernacular architecture in Palestine in finding the future environmental residential construction. One of the main findings of this research is to set general and special rules for building sustainable buildings in Palestine from the socio-cultural point view, in order to be a reference for designers, stakeholders, ministry of planning, and municipalities.

KEYWORDS: Sociocultural constrains, Palestinian vernacular architecture, sustainability.

1 INTRODUCTION

Nowadays the architectural approaches used in Palestine forgot completely the learnings from the traditional architecture and are above all based in design approaches from abroad. Therefore these approaches do not consider Palestinian's specific climate conditions, internal organization of spaces, sociocultural constrains (including specific demands for privacy), among other aspects. This models are very bad in maintaining the indoor environment within the comfort boundaries,

ignoring the inhabitant's needs, and not reflecting the cultural and religious identity of Palestinian society (Asquith and Vellinga 2006).

Vernacular architecture is considered as an environmental architecture, and cultural constrains are one of the main foundations of environmental buildings and structures. This paper will discuss the effect of the specific sociocultural context on vernacular architecture and how the learning from the past can be considered again in the design process of modern buildings. This paper will discuss some design rules and limitations in terms of cultural view, especially because of the strong and major effect of the specific sociocultural context of the Palestinian society in particular, and middle eastern society in general. An example of ignoring the specific sociocultural constrains can result in the situation presented in Figure 1.
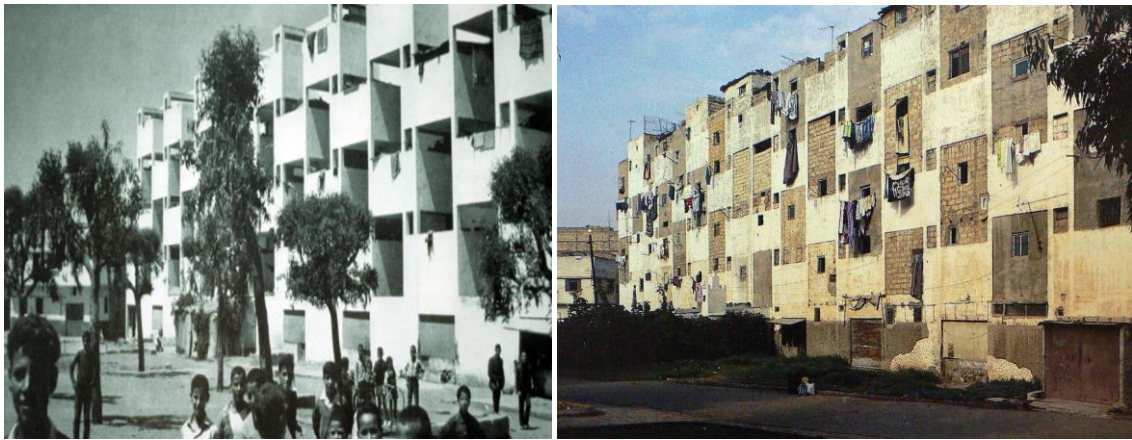

Figure 1. Changes conducted by the local citizens on buildings because of sociocultural constrains (Sarkis 2001).

2 SOCIOCULTURAL PRINCIPLES IN PALESTINIAN SOCIETY

The German orientalist Otto Spies says that "The Islamic city is affected by the neighbour rights between inhabitants which comes from the religious legislations" (Abu-Lughod 1987).

The Palestinian society is a society with people who believed themselves bound together by the most fundamental ties (family), common village origin, ethnic or sectarian Religious identity as most of Arab countries.

The strongest and the most effective bounds in the Palestinian society are cultural bounds, which come from the religious believes. Religion is very effective and touches every side of the daily life and affects it, such as the habits of clothing, food, the way of thinking and learning, and many other sides, and of Course architecture is a part of this (Stevenson and Ball 1998).

Therefore, if these specific principles are not taken into consideration, it will definitely cause negative side effects on any product, including those from the construction industry, and the current samples of contemporary building omitted this side and failed in achieving sustainable built environment.

3 THE EFFECT OF THE CULTURAL VALUES

UNESCO (United Nations Educational Scientific and Cultural Organization) has coined the term "whole life sustainability" in order to expand the general meaning of sustainable architecture from designing environmentally friendly buildings, to architecture incorporating local identity into design process (Tocher 2011 cited by Kultur 2012).

"The word culture is a determining of a very complicated concept which expresses all of the intellectual activities of a civilization. The culture is: dynamic, expressed through the community as well as the individual, interpreted with each member of the community, shared with groups and transformed to new generation. It involves a system of rules, and also attitudes, values, beliefs and norms. It conveys the sustainability of vitality of the community, and has the potential to change" (AYALP 2011).

To clarify more, an example about this effect in a small scale (design scale) is useful. According to Rapaport (1969), the cultural elements that affect the house formation in the Middle East are:

- Religion;

- Architectural language and other heritage peculiarities;

- The structure of family and relatives;

- Child raising methods;

- Settlement patterns;

- Land division and land owning systems;

- Food habits;

- Symbolic and traditional systems;

- Status defining methods and social identity;

- Cognitive maps; privacy, intensity, territoriality;

- Behavioral organization in a house;

- Working, business with others and trades.

With all these cultural, social and psychological impacts, home is more than design and drawing's, walls, and materials, it became a home that gains high symbolic and emotional meaning (AYALP 2011).

Place formation can be defined as the individual forms towards a certain environment. The concept of place involves not just a physical element but also emotional factors (AYALP 2011).

Figure 2. The old and the new city of Nablus ("Nablus Food Tales from Nablus" 2014).

With such a huge influence and effect from such impacts the home become a concept of place rather than space, so while designing a place, architect should design every single detail related to this place. Home is more than a place to live inside, it's a place filled with motion, meanings, stories, this is the feeling while looking and feeling vernacular architecture, it's a space at the beginning, and by time and culture it caries a lot of stories and experience and become a place.

Perhaps a simple and quick look at the old town of Nablus, gives us a sense of the big difference between it and the modern part of the city in terms of the general image, context, design approaches and methods of construction.

And with deeper insight the difference grows and expands in terms of achieving environmental concepts and observing the needs of the people, culture and place, unlike the modern part. Perhaps the most prominent solution is taking the cultural aspect into account within the design process, and the sustainable building process will came as a result.

Some of these cultural concepts will be discussed in the further section in terms of affecting the city and the buildings from the performance point of view. These effects can be either direct (Intentional) or indirect (Unwitting).

Perhaps privacy is one of the concepts that is mainly affecting the Palestinian society, it comes from strict cultural believes, and it means that nobody can reveal his home, cultural activities, or family life, and also it means preventing mix between men and women in social or cultural activities and daily life (Al-Tawayha 2011).

This aspect led people to find and create many different architectural solutions such as: i) the courtyard house; ii) semi-public gardens; iii) Semi-private spaces.

3.1 The courtyard house

The demand for privacy prevents the family entertainment and special activities in urban areas and public squares, therefore they created private spaces inside their houses that overcome their needs for external spaces (Figure 3).

Figure 3. Court yard house in Nablus old city (Horn 2012).

The use of courtyards also led, in an indirect way, to create a green environment inside the house, with watery elements, which helps to keep the climate suitable and comfortable especially in summer days.

Additionally, privacy prevents that neighbor's can rise their building over a certain high in order to protect these courtyard from the external views (Figure 4).
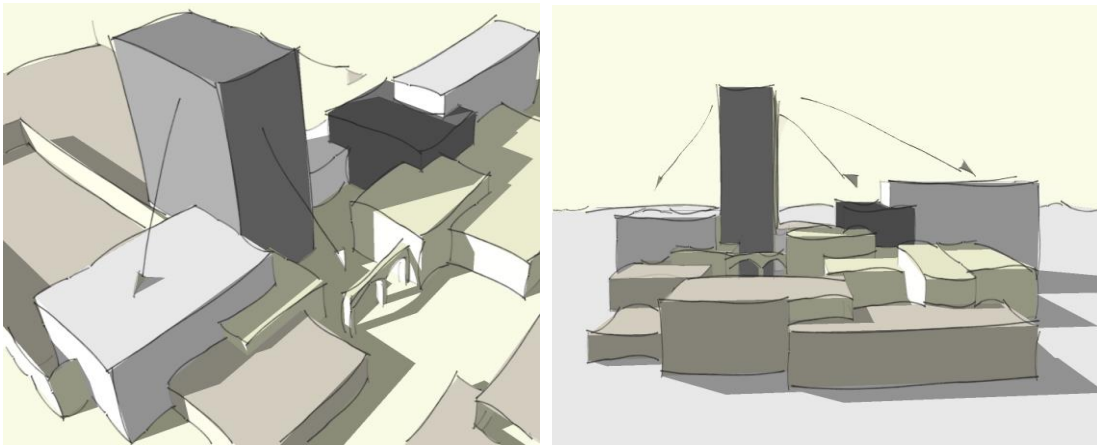

Figure 4. 3D model showing the negative effect of high-rise buildings.
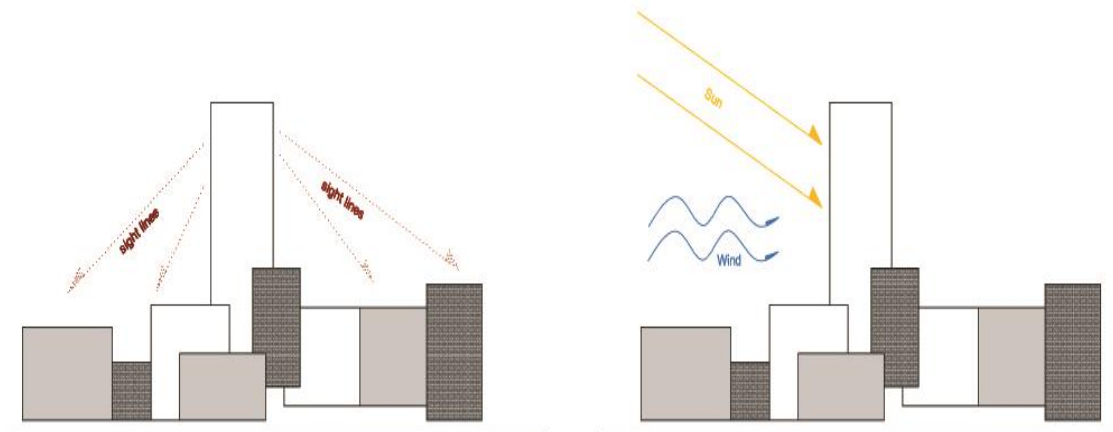

Figure 5. 3D model showing the negative effect of high-rise buildings.

This blockage has another indirect advantages, it also do not obscure sun and wind from reaching the house, and keeps a healthy climate and good ventilation in all the dwellings in the city.

3.2 Semi-public gardens

Such gardens were created for relative families in each neighborhood as an alternative solution for public parks, where free contact between people – males and females - are not allowed by the sociocultural and religious values.

The cultural and social activities were not ignored and therefore such solutions were created. These gardens can`t be used by strange people or foreigners, it's only used by people who are allowed to communicate in this community (Figure 6).
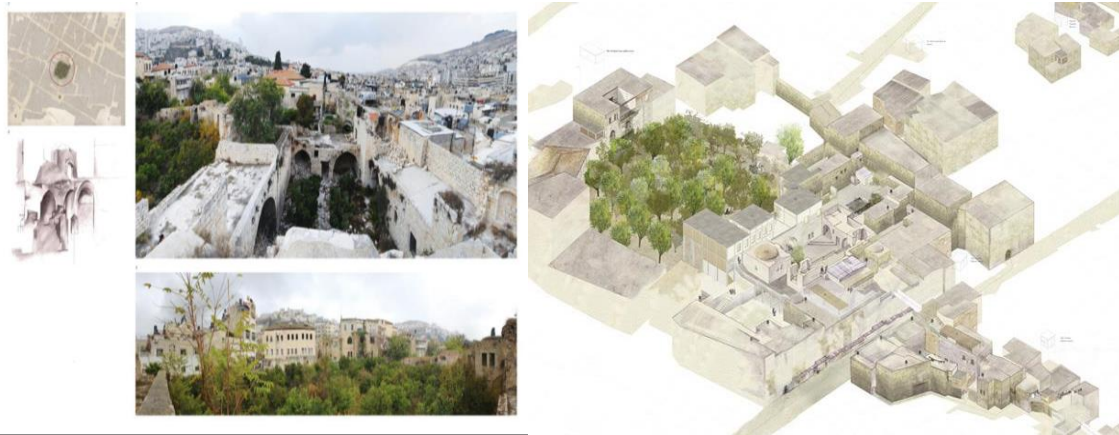

Figure 6. Courtyard house in Nablus old city (Horn 2012).

From the creation of semi public gardens, a new concept raised which was sharing the city responsibilities between authorities and people, so that people feel their responsibilities toward their city and also feeling their responsibility towards these parks, taking care of them and keeping them in a good condition as better as they could. Therefore these green areas are still used and exist all around the city. Such concept would be very useful for poor countries - developing countries, such as Palestine, and it's clearly observed in the old city of Nablus. These semi-private parks and gardens give the city vitality, healthy environment, and reduce pollution(Akbar 1994).

As a result of ignoring this concept and the lack of governmental possibilities, there is a great scarcity in public parks in Nablus city and Palestine, even the existing ones are ignored and disabled and people do not care and do not feel any responsibility towards them. This cause a lot of semi-desert lands, an unhealthy environment in addition to significant social problems. These problems are a result of ignoring the city and society culture, and as seen in Figure 8, the main parks in Nablus city are losing the green and watery elements, and also losing the interaction with society.

Figure 7. Public Park in Nablus neglected because of cultural aspects ("DOOZ" 2014).

3.3 Semi-private spaces

The semi-private spaces were created for the meeting of the very close relatives, such as "extended family" which includes the father and his wife and their married sons and their families. These spaces are called "Al Hosh" or the "Yard".
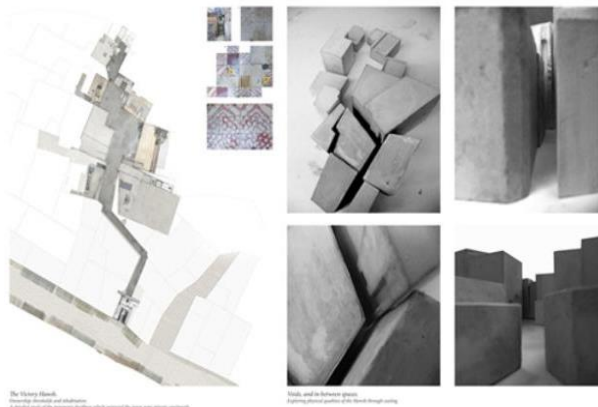

Figure 8. "Yard" space in Nablus old city (Horn 2012).

The gradual transition from public space (Figure 8), to semi-public and semi-private spaces gives the people and the families a high sense of safety (which is called Urban Security) that is considered a sustainable concept. People are very attached to such spaces, because of the high sense of ownership. All of these approaches and solutions are giving the city a vital image, from both urban and design views, it's merged more with nature and environment(Akbar 1994).

Figure 9. Gradient in public, semi public, and private spaces in Nablus old city (Nablus Municipality 2011, edited by authors).

4. DISCUSSION AND CONCLUSIONS

As discussed by Ujam and El-Fiki (2006) without cultural awareness, any attempt to create a more sustainable environment is likely to falter.

For a developing and growing country such as Palestine, it is necessary to begin and grow in a right way, and to build on a strong and clear foundation to reach suitable and sustainable buildings for the people. It is necessary to learn from the very rich background that still exists and is lived in the old cities of Palestine and this is only possible through analysing and understanding these cities and how they work.

The old cities in Palestine were strongly affected by sociocultural values and, as presented in this paper, these values are embodied in the local vernacular architecture and affected its performance, in a direct or indirect way. As an example, the development of the old city of Nablus was based in these values and therefore designers and other stakeholders should learn the advantages from these models that are working, used and improved from more than 1000 years.

This paper presents and discusses the big characteristics that could be achieved by taking sociocultural values into consideration when designing buildings. This field of research is very poor in Palestine and should be explored and developed, especially in the context of a society that is so must linked to sociocultural values such as the Palestinian society. Because of this lack of information more studies are needed to interpret and understand this deep and effective concept so that it could be applied and transposed to contemporary buildings and cities. That could be achieved by exploring the importance of these sociocultural values and how it could be affective and included in the design process, this is to provide municipalities and local governments a set of suggested design principles and recommendations in order to improve the environmental quality in future Palestinian residences.

It is demonstrated here that there is a strong effect of the sociocultural values on the design process, both on urban or building scale, and it is clear that ignoring such values causes big cultural, environmental and economical problems.

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