

Simple Intervention in Order to Sustain Local Environment of the Architectural Heritage in the Palestinian Cities Old City of Hebron for an Example

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Abstract- Historical and heritage buildings and areas in the cities of Palestine are exposed for several problems affecting their shape, performance and beauty. One of those problems is resulting from unconscious behaviors of the residents of these cities and regions as well as the behavior of workers with activities craft, trade, economic and other social activities located in these mentioned areas. Another problem is resulting from the use of new building materials or new modern techniques which is not suitable and may cause distortion to some of original architectural elements.

But if there is some historical areas still retain their personality and heritage features thoroughbreds largely in the face of recent developments, the maintenance and preservation of the urban fabric and heritage buildings, as well as preserve the architectural features of historical motifs and elements calls for reducing these negative effects, directing and rehabilitation of historic areas in response to the innovations of these days. Here, this article aims to study the simple environmental and technological means that supports the preservation of historical buildings and heritage areas, and aims to guide the local community and the decision makers how to avoid negative influences that affect historical buildings and heritage in order to keep the original nature of these areas . Finally, this research paper attempts to find successful solutions to maintain and raise the value of heritage and to appreciate its effective role.

Keywords: Hebron, Palestine, Environment, Architectural Heritage, Historical Buildings, Sustainability.

I. INTRODUCTION

Hebron is located in the south of Palestine (35Km south of Jerusalem). It is one of the largest Palestinian cities in terms of population as well as one of the largest industrial and commercial communities in Palestine. Figure (1), (Abu Rmeiles, 1985).



Figure 1: Palestine map

Buildings and heritage areas in the old city of Hebron are exposed for several factors affected on their shape , performance , beauty and function , some of these factors are resulting from the behaviors of unconscious residents of these areas and the behavior of staff activities, craft , trade and other economic and social activities that resides in historic areas . The Old City was destroyed and distorted by the movement mechanism impacted negatively on the motion paths and on the facades of buildings value of civilization and if there is some historical areas still retain her personality and heritage features inherent to a large extent in the face of recent developments , the maintenance and preservation of the urban fabric of the heritage as well as maintaining the features of the architectural heritage of the

motifs and elements calls for reducing these negative effects , directing and rehabilitation of historic areas to respond to the innovations of the times.

There is no doubt that our cultural heritage and architectural wealth must be preserved, so the deal with the historical areas requires directing the behavior of the local community to respect the historic buildings with using of appropriate environmental materials which keeps the character and identity of the region depending on the previous global and local experience in dealing with such sites.

This calls that we have to benefit from the global and local communities experiences in dealing with the archeological sites so as to keep them through methodologies, architectural conservation policies which derive their responsibilities and specialist from the international conventions and successful business management process of architectural conservation. Accessible to these methodologies choosing what suits from them to Palestinian reality who needs to be local inexpensive economic means that encourage the community.

II. RESEARCH AIMS

This research aims to study the environmental and technological means that supports the preservation of historical buildings and districts, and also aims to guide the community and decision-makers about avoiding negative influences that affect archeological buildings in order to keep the nature of the heritage areas.

III. CITY OF HEBRON-

The city is one of the oldest cities in the world, originally built on a hill northwest of the town. Hebron is at a crossroads between Egypt across Gaza and the Mediterranean Sea (west) to Jordan through the Dead Sea (east). It is considered to be the second oldest city in Palestine and is the site of the tomb of Abraham. For this reason the city is of religious significance to Jews, Christians and Muslims. (Abu Hijer, 2003)

3.1. The Name of the City-

Hebron was named after the Prophet Abraham, nicknamed Khalil Al-Rahman, who arrived at Hebron six thousand years ago from Mecca to build the first house for all people (House of Abraham Mosque). (Abu Hijer, 2003).



Figure (2-a): The Abraham Mosque



Figure (2-b): Hebron Town - 1830

The city then became home for Assyrians, Babylonians, Chaldeans and the Hyksos people. However, it was the Arab Canaanites who were credited with building most of the ancient monuments. The Canaanites named the city after their leader 'Arba'. In ancient times, people would refer to the city using different names, namely the City of Abraham and the City of Vines.

In the Roman era Hebron was a village named Chepron, a Castle beside the tomb of Abraham and his family was built , and in 565 AD a church cemetery also was built during the reign of the Emperor Justinian, after that the Persians in their raids on the place demolished it in 638 AD. It appears that the devastation caused to the house of Ibrahim (Hebron) because of the raid, it was great. (3), and remained so until the Saracens in 632 AD. (Amro, 1987) Hebron is largely mountainous, with some areas rising 1032 meters above sea level. The Hebron mountain chain is the largest in Palestine, stretching from the Hebron mainland in the east to the Palestinian coast in the west, and Beit Ummar in the north to Al-Thahiriya in the south. Hebron mounts feature terrain diversity: ranging from flat to rugged to steep, in addition to some plateaus and hills in the west of Hebron. (Abu Rmeiles, 1985).

3.2. Urban Fabric -

Historically the city Benefited in its formation from three important elements:

Location next to the grave of Abraham, it is natural to be concerned with the Muslims of the city after they opened the city contains the grave of father of the prophets Abraham.

The second thing, which helped to form the urban fabric of the city and its Morphology that it lies within the valley of Hebron, which was comprised of different types of fruit trees, grapes, olives and others , besides having springs of drinking water. At the same time the valley was considered one of the important trade routes that link Hebron with Egypt and Jordan.

Thirdly had to mount Tel Rumeida and its proximity to the tombs of the prophets of particular importance, as this mountain is the site of the first Arab Canaanite city remained a tributary of the new city, it remained full of some of the flanks until the Crusades. Reminds travelers who visited the city in 1173 which was under Crusader occupation, the buildings old city, which lies on top of the mountain experience, the new city was built in the bottom of the valley at the field of the cave, and this means that the urbanization of the city was fueled by side of the mosque, which was called the city of Hebron. (Dweik, 1998).

Building in Tel Rumeida during historical times successive since the Bronze Age, the first 3500BC. (6), the excavations at the site displayed the presence of the effects of urban dating back to prehistoric times, continued and mingled with the age of the Islamic, and found the remains of dwelling Islamic and possible inferred that housing remained full of the population for a long time.

These signals are combined with information primary in which we can visualize the urban fabric and the expansion of the old town around the Mosque of Abraham, if the mosque before the Crusader presence is located at the end of the city, it means that the neighborhood, which lies to the south of the mosque has been added at the time of a later century atheist century AD. It is clear that these expansions have been added to the city gradually beginning of the era of the Crusader presence in Hebron , especially after the prestige enjoyed by the city following the discovery of the remains of the prophets, and the publicity this matter among the general Crusaders Europeans arrived . As we can confirm that the Muslims may be interested in this matter, we find that Heravi, who visited the city in that period, has separated the story of the discovery of the remains, also increased the interest of Muslims in the city over the Islamic eras until they linked organizationally and administratively two holy mosques, Jerusalem, Hebron, and the expansion of the urban fabric of the city out of its old borders since the end of the nineteenth century. (Dweik, 2003).

3.3 Architectural characteristics and planning of Hebron-

The architectural characteristics of the historical areas are considered to be nucleus of features specific to the character and style of architecture in those areas and reflect the behaviors of people and their way of life, in our study of the properties of architectural city of Hebron, we found that those characteristics appear clear in heritage and archaeological buildings and on the main axes such as: Old Shalala street, Ein Alaskar street, Alqasaba and others.

The aspects and architectural characteristics different depending on the ages , functions types of the building (mosques - Agencies - homes - markets - etc.), but what concerns us in this study is a processor of natural existing since antiquity as one of the solutions to overcome the climatic conditions and to adapt to the natural environments , social environments and cultural which was employed by the architect Arab Muslim past through the use and recruitment of environmental material and local elements .(Dweik , 2003) .



Fig (3-a) Urban Fabric



Fig (3-b) Old Town

According to the characteristics Urban Hebron, we found that there are features emerged from the customs and traditions of Arab Muslims in how to maintain the privacy and respect in the squares, spaces and on main roads. As well as at the level of the urban fabric in terms of the lack of integrity of the roads and the presence of voids frequent, especially next to the mosques where populations as well as respect visual perspective of the residential blocks from where most of the buildings that were formerly within the limits of the four-storey high at the latest.

IV. HEBRON COMMUNITY

4.1. Pros in the community of Hebron-

Habits, traditions and inherited values play an important and positive rule in determining the behavior of the society within the old city of Hebron and clearly demonstrates it in the manifestations of the interdependence of the population in weddings and grief, as the common spirit of participation in helping neighbors, and to unite efforts in preserving heritage buildings, especially mosques, as well as many of the people involved in maintaining the cleanliness advocated by Islam.

4.2. Negatives that lead to the deterioration of the urban environment in the old city of Hebron-

The main negative problems and dangers facing the old city of Hebron can be summarized in the following major aspects:

4.2.1 Aspects of Modernization-

The use of modern building materials which were away from the traditional pattern prevailing in the city.(figure 4-b)
The use of modern means of living in old buildings offend and distorts its buildings, such as telephone and electricity wires and antennas electrical appliances and air conditioners on the interfaces .(figure 4-a)

The use of cars and modern means of transportation and what it represents of the burden on the streets and lanes were not planned to match the density of traffic and modern.



Figure (4-a): the old town



Figure (4-b) : the old town

4.2.2 Human and Social Aspects-

The economic factor is the main cause of the presence of human and social aspects of the negative, which is a direct result of increasing in population, and the subsequent filling of some historical buildings by commercial and industrial activities.



Figure (5): The old town 2010

4.2.3 Aspects of Neglect in some facilities within the old city-

This has arisen as a result of negligence & halt in the use of some facilities that are no longer commensurate with the current time, as well as deficiencies in the periodic maintenance that should be made for many of the facilities as processes clean interfaces and various maintenance work.

4.3 The factors leading to the emergence of negative effects in historic areas-

4.3.1 The economic factor-

Most of the shops overlooking the main axes of the old city turned to shops selling popular products of eastern craft items and products, competition between these shops led to become their windows greatly exaggerated expression through the use of modern materials for facades and was also going too far in the emergence of signs assigned to the outside which caused to hide or destroy the original view.

4.3.2 The social factor-

As a result of the in need to increase in the size of housing units because the increase of the number of the family members and needs to change the shape and composition of the housing unit. This factor is resulted of the lack of awareness among the citizens towards archaeological and heritage, especially if it is not beneficial to the sensible people of this region, which does not encourage the preservation and care of.

4.3.3 The environmental factor-

Environmental factors have a direct impact on the shape of heritage buildings, particularly as a result of increased pollution, as well as the increase in temperatures around the world, the colors has been changed as a result of air pollution and the increase of ground water level led to erosion in the buildings and foundations, As well as the use of industrial tools and mechanization resulting in a change in the form of interfaces without discrimination between the guidance and the need, instead of exploiting the environmental architectural elements such as Aalghemriaat (Fig 1.1) and mashrabiyya, and replace it with elements of industrial inappropriate in terms of shape or efficiency. (Baker,1983).

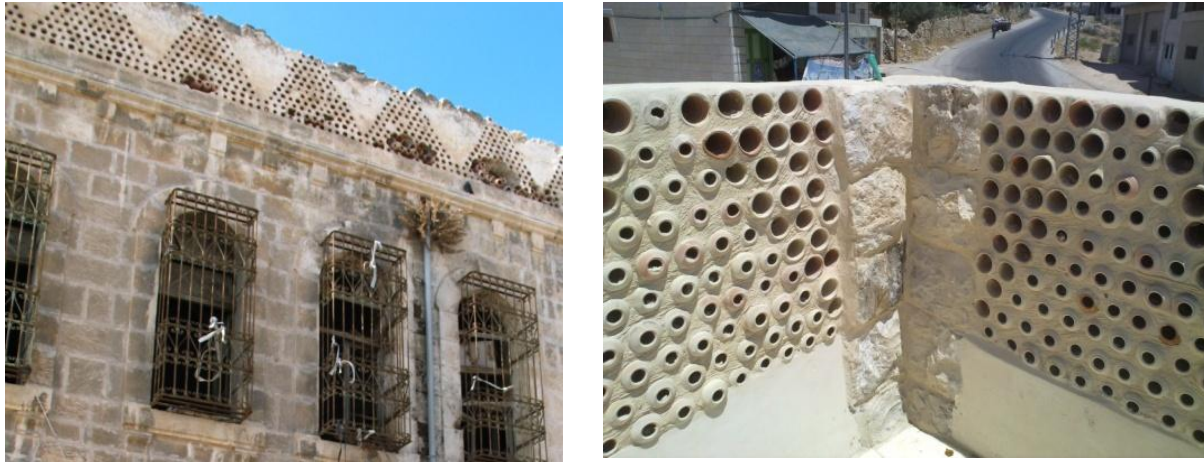


Fig (7): Aalghemriat which was used for obtaining privacy

And generally some environmental affecting the historic areas could be identified as follows:

Accumulation of dust on the roofs and walls causing the destruction of paint and historical motifs.

Deterioration means of sanitation, nutrition, drinking water and rainwater resulting in water seeping into the foundations of these buildings and moisture intrusion into the walls and ceilings.

Air pollution as a result of enter modern means of transportation for the region and the establishment of polluting industries within historic buildings.

Deterioration of stones used in historic buildings as a result of sulfuric acid in water and sewage leak acid into the walls.

4.3.4 Legislative Regulatory factors

4.3.4.1 Inconsistencies in the terms of reference between the agencies overseeing the historic buildings such as the Department of Antiquities and the Ministry of Awqaf and local agencies and municipalities .

4.3.4.2 Lack of sufficient centers to process care for antiquities under the auspices of the maintenance and recording of archaeological and historical buildings.

4.3.4.3 There was a lack of interest in this legislation in the old buildings without the same interest in the region surrounding these buildings. Laws were not so interested in repaired, maintenance, and if that happens any action as is the case of the Hebron Rehabilitation Committee has been directed to the ancient buildings individually, without regard to its surroundings .

4.3.4.4 Political conditions experienced by the country since the Israeli occupation of the Palestinian territories for the rest of this century and still not experienced of the ancient heritage and there is no attention or care.

4.3.4.5 The absence of deterrent law to punish the infringer, or anyone who creates a modern buildings in the ancient city.

4.4. Global example to preserve historical buildings and districts

4.4.1 The city of Aleppo – Syria

Aleppo is one of the rich cities in Islamic ruins, the city still retains its personality, unique architectural character, historical buildings, alleys and streets, markets, mosques, castles and schools.

To keep traditional character of this city a legal decision was taken by a ministerial of 1976, the following steps were through:

a) Prevent the demolition, construction and renovation of all real estate located in that neighborhood, but with the approval of the competent authorities (Department of Antiquities in partnership with municipalities, and Ministry of Awqaf).

b) Formed a committee on behalf of the (the old city) to look at the licenses offered by the owners for the repair and reconstruction of dilapidated buildings, and all the problems of the city in total.

- c) Create a committee to monitor the ancient city Composed of several institutions, its main task is daily inspection of the old city, and record each violation and transmit to the judiciary.
- d) Develop a plan by the General Directorate of Antiquities and Museums to own some important buildings, which may be vandalized, to perform maintenance and reuse them in fits and functions or functions of origin.

V. MECHANISMS AND POLICIES TO PRESERVE DERIVED FROM INTERNATIONAL EXPERIENCES

In the study and analysis of International , Arab and Islamic experiences that have succeeded in the development and application of policies to maintain the buildings and heritage areas , can get strategies and methodologies applicable easily with the lowest cost and the max Impact. The most important characteristic of these methodologies may be the possibility of its application in developing countries, especially in Palestine and the cities through the use of simple and inexpensive supports maintaining historical buildings and districts.

It is important to preserve the region surrounding the impact and deal with it in general and to avoid uses and activities that could threaten the historic district and avoid negative influences that may affect archeological buildings. This is done by placing a long-term scheme puts the whole historic district in one campus determined the form of urbanization and the surrounding activities without damage to the role of the historic district in the provision of housing, commercial and craft activities and services that are already associated.

This could be achieved through one of the following techniques:

5.1 Non-unloading area surrounding historical building -

The building represents a monumental period for Archeological city's history

This building could not be separated away from the subsequent period.

The planner must take in to consideration the other buildings and areas surrounding the historical building.

5.2 Unloading area surrounding historical building -

The building should appear as heritage, one of the most important means of preserving is the way of dealing with buildings located in historical and heritage areas, so they could be divided into four types: the existing buildings of a bad situation, buildings with a median situation, buildings of a good situation and historic buildings and relics.

a) Buildings of a bad situation:

The evaluation of a building is a relative issue, but generally we can't decide that the building is of a bad situation unless there was a malfunctioning structured construction and is irreparable, or preserving it will cost much which means a process of rehabilitation is useless. In historic districts, when we remove a building the public image aesthetic should be studied, according to this study the decision is:

Should we leave the building site as an open space or we can construct on the same lines of the previous construction, or we have to go back from the previous construction line. In general, to avoid the financial problems of the reactions of some members of the community as well as the financial problems of compensation for expropriation and administrative problems, it is preferred in many cases, when the removal of an existing building to be built on the same property boundary lines as it doesn't interfere with technical, aesthetic and environmental aspects. (Figure 8).



Figure 8

b) Buildings with a median situation

These buildings need at some repair work or renovation, the situation is different from building to another depending on the situations of each building separately, Overall, these kind of building does not have a structural defect, which can be renovated with a cost less than half the cost of bad building if they were removed and re-constructed under the supervision of an engineering.

c) Buildings of a good situation

Does not mean that if the building was in a good condition there is no need for interest in the project of renovation the historic areas, this building in the absence of repaired and maintained and misuse may turn into a poorly building or may need to be repaired early, based on the renovation project must include maintenance and repair plan for these kind of buildings.

d) Historic buildings and relics

The technique of dealing with archaeological and historical buildings must be different from what is used with other buildings which could be handled in repair, maintenance, replacement and removal, which means that in archaeological and historical buildings we must preserve and rehabilitate them. Also it is required to preserve the historical building's to be in good condition structure as well as its external and internal appearance ,but if the building is dilapidated or desolation or undergoing radical changes, we must take into account some of the controls and conditions that do not allow the following actions:

- Any changes in the work of archeological building itself.
- Reuse the archaeological building into another use inconsistent with the primary purpose that created to.
- Development of any activity or use inside the historical building or the surrounding environment.

VI. CONCLUSION AND RECOMMENDATION

This research discussed the problematic of dealing with the monument environment and how could the local community play an important role to preserve the archaeological and historical buildings.

It is important to cooperate on all the levels in order to preserve the old cities from deterioration and to start conserving and rehabilitating the old buildings, moreover we should start promoting for these sites.

It is recommended to take care of:

The development of environment and heritage awareness for the local community.

The monitoring of the maintenance of the archaeological and historical buildings.

It is recommended to:

- The new material must be chosen carefully so as to become a part of the urban fabric.
- Constructing new building in the old city must compatible with original architectural elements.
 - Reduction of car traffic inside the old city, and provide parking places close to the old city.
 - Provision of public services (drinking water, electricity, sanitation ...etc)

It is important to emphasize that the purpose of development is not to change of the appearance of the historical building but to preserve them as their original elements, or rehabilitate and re-use them with a suitable task taking into consideration the surrounding environment.

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