# Revitalization of old Buildings in The City of Hebron

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Abstract- This paper introduces a longstanding Palestinian City which has exited - and still does - for more than 5000 vears, and which is deemed as one of the rare Islamic cities that has managed to maintain its historical architectural heritage, bearing the magnificent touches of past days. Hebron is therefore a major reference in the study of Palestine's history and of Arabic Islamic civilization in general.

Hence, it constitutes an open museum for studying not only the cultural heritage evolution of an Arab City but also its social evolution, with its buildings and urban texture depicting the story of the growth and evolution of families and tribes, social relations and the racial and religious roots of its residents (archive, 2010)

The Old Town enjoys a rich architectural heritage. It differs from many other similar cities by the fact that it mainly boasts a popular architectural, with only a few official-style buildings. It is very harmonious architecture, reflecting the social and class harmony of its citizens. Rarely does one find a palace that is architecturally and artistically different from other residential buildings, to the exception of a few Mamluk-style buildings and some mosques, thus making it especially unique. Through various contribution, this paper will attempt to shed light on Hebron's history and architecture, using a smooth style which facilitates information transfer and delightfully reveals the city's beauty. It also introduces one of the region's largest and more successful mass rehabilitation projects (Sherlock, 2010).

Although the following articles were drafted scientifically, based on sources, references and annotations, this publication is not intended to underline our scientific capabilities in academic documentation, we have therefore, forsaken all annotations and sufficed ourselves with a select list of sources and references.

We hope that this paper would boost public interest in the Old city of Hebron, as well as in Palestine's another historical center.

#### I. PROBLEM OF THE STUDY

Hard conditions and problems that face the old city in Hebron – whether from economic, political, and social aspects -, and citizens' negligence of their old homes, the fear of losing this distinguished architectural heritage, and the urban human intervention on these buildings through the annexation of some part and demolishing some old building under the pretext of having new building, and the lack of people's awareness regarding the importance of these houses in the formation of city's identity, all of these factors lead to the loss of this vast amount of architectural historical and important elements.

It is worth mentioning that, the settlements' attempt to obliterate the Arab and Palestinian architectural heritage, and the process of Judaizing these elements, along with the greatest disaster represented in people leaving their homes from the old city. Therefore, we shall realize all of these elements collectively and take them into consideration so as to keep preserve the urban and architectural heritage of the old city.

#### **II. RESEARCH OBJECTIVES**

The research includes achieving the following objectives:

Preserving the existence of original inhabitants in the city and encouraging other families to live in the city. Restructuring and re-planning the old city so as to find suitable residential, touristic, and commercial areas that include all services, cultural and social needs in a proper and manageable way.

Documenting Islamic and historical architecture in the old city.

## **III. RESEARCH METHODOLOGY**

In order to achieve the research objectives, we will be following the steps below:

Shedding light on the old city from urban, architectural, and historical aspects through referring to studies and references that tackle the topic in a way or another.

Selecting study samples on which we shall conduct our analytical study from urban and architectural aspects. This will be done through organizing field visits to these samples, visiting its inhabitants, and gathering the needed data.

### IV. THE ELEMENTS OF THE OLD CITY:

4.1 The Mosque

The mosque is considered the spiritual, religious and cultural center of the city. Usually, the mosque is situated in

middle of Islamic cities, but in Hebron the Abraham Mosque is situated at the main axis of the West-East main market street, and in front of it is the biggest open space in the city. The main relationship between the Mosque and the open space is characterized by educational, social, economic and recreational activities which take place there. With the population growth of the city other mosques appeared in the old city to serve other more distant quarters. High minarets and the big domes of the mosques in the city show the great importance of mosques in old Islamic cities, due to their religious significance.

## 4.2 Open Spaces

The open space concept applied in most of the Islamic cities, and was defined according to the form, size and function of the open space. The old city of Hebron was characterized by a sequence of hierarchical spaces, each differing in form, dimension and even in function (Hakim, 2013).

## 4.3 The Suq (Market)

Hebron was considered one of the biggest commercial centers in the south of Palestine and Bilad Al-Sham (Syria, Jordan and Palestine) and the majority of its population worked in commerce. This fact is reflected in the planning of the city with its big Suq (market) which runs from the north-west to the south-east. In addition, there are outside seasonal markets at the cross-roads (Abu Siriyya, 2009)

## 4.4 The Residential Areas

The location of residential quarters in traditional Islamic urban settlements was guided by a concern to protect and to exploit natural elements: water, sun and wind. The balance of the old Islamic cities is the structure, which was always achieved through division and subdivision into the segmental residential quarters that surrounded the various public areas. There is no absolute separation of residential and other elements in the city. Houses can be found above shops. In relatively quiet access streets there are often numerous workshops and shops, and sometimes above some spaces which were used as houses (Abu Siriyya, 2009).

## V. ARCHITECTURAL ELEMENTS:

Buildings constructed in Hebron during previous periods are classified according to function. In periods prior to the modern era, these classifications fall into seven main types as follows:

## 5.1 Religious Buildings

Islamic architecture of mosques, hospices and faith schools in Hebron represent a variety of architectural styles defined by the period. Prominent examples include the Ibrahimi Mosque, Sheikh Ali Baka'a Mosque and many faith schools like Zawyat Abu Errish in Qaitoun, Zawyat el-Adhami near the Sultan Pool, Zawyat al-Ashraf el-Magharbah near the Ibrahimi Mosque, and Sayyedna Ibrahim Khalil Hospice (Summat).

#### 5.2 Educational Buildings

Schools started to appear in Hebron hundreds of years ago, even before the Ottoman period. There were many schools, especially during the Ayyubid and Mamluk periods. Examples include the Qaymaryah School near the Ibrahimi Mosque's northern gate (now occupied by Jewish settlers), Fakhryah School and Sultan Hasan School, which was initially part of the Rabat Mansouri station. The focal point of academic life in Hebron was the Ibrahimi Mosque, where study groups took place on topics like canon, the traditions of the Prophet, the Quran and the language of science. It seems that the large number of faith schools bridged the gap left by the scarcity of regular schools.

#### 5.3 Health and Social Services Buildings

The architecture of health and social services buildings (hospitals, baths) represents a key part of the urban fabric of Hebron. These buildings are usually found near the city center for easy accessibility. A count of the baths in Hebron –according to references- revealed that they are five in number, bearing in mind that the population -until recently-was only around 4500 people. There were only a few hospitals.

## 5.4 Administrative and Military Buildings

Examples of stations in Hebron include Al-Rabat Al-Mansouri, which is believed to have been established during the Fatimid period. It was mentioned by Nasir Khusraw in his book 'Safar Tamih' as a Castle (DWEIK and SHAHEEN, 2017).

## 5.6 Commercial Buildings

Commercial buildings reflect the magnitude of trade in Hebron, which was a key commercial center famed for trade in fruit, grape derivatives, wool, and leather. It was also famous for leather bottles and the pottery industry, plus many handcrafts. Hebron was renowned for its commercial markets and variety of goods. The commercial movement was at its peak during the Mamluk and Ottoman periods, when many markets emerged.

Wakalah Market: The name 'wakalah' (which translates as 'agency') is usually given to buildings used as a dwelling for foreign merchants and to store their goods. It is a square-shaped construction accessed through one wide gate, to allow entry to camels and horses, and consists of separate warehouses on a ground floor overlooking an open yard. They have all the necessary services and facilities, while upper floors also have suites for merchants overlooking the yard. These wakalah were established by the government and many individuals who had their own wakalah. They were usually established by a senior merchant who had gained the ruler's trust and acted as an agent for foreign merchants. This is where the term wakalah or 'agency' comes from and their existence denotes the state's status and economic prosperity (Hakim, 2013).

The Wakalah market building was used to accommodate visitors and junior merchants who arrived from different villages in the vicinity to spend the trade season in the city. They sold goods on the ground floor and resided on the upper first floor. Rooms were then used in different ways, with stores on the ground floor used to manufacture traditional furniture and upholstery. Sections of the first floor were turned into residential apartments for families in 1970 and rooms were used as bedrooms, kitchens and living rooms. Concrete brick spaces were added to meet new needs. Today, the building is abandoned, except for some parts of it (Abu Siriyya, 2009).

#### 5.7 Traditional residential houses in Hebron

Some of the residential houses in Hebron's Old City date back to the late Mamluk period, at least those on the ground floor, and other architecture elsewhere dates from the Ottoman period (1517-1917).

## VI. REUSE OF OLD BUILDINGS:

#### 6.1 Importance and necessity of Reuse:

The social relations that was prevailing in the past started to change towards more independence, and that resulted with a whole change in the social and family structure as it became relying on the presence of the dependent family (nuclear), and as a result of these social and family changes number of new requirements emerged on both the level of city as a whole and level of family or the residential unit in particular.

Starting From the aim of preserving the historic buildings in the city and making it busy with inhabitants and facing the settling extension, there was a necessity to set a clear and precise philosophy aiming at the reuse of old city as a residential city which has the basic public services, and thus to reuse the large residential buildings as residential apartments for nuclear families having the necessary services and meet with the vital needs of the current family by means of making minimum adjustments in the traditional planning of the city as a whole, as well as the planning and design of the residential unit (hosh) in particular.

#### 6.2 Bases and mechanisms necessary for the reuse of the historic buildings:

The translation of this philosophy to an actual situation required to set basis by which the reuse on city level in general and on residential unit level is undertaken.

## 6.3 Reuse on city level in general:

Considering that the original use of the city is as for residential use, thus the processing of reuse of the historic Old City as a residential city is relying on the following bases:

- Offering the necessary public services for the residential buildings.
- Preserving the traditional planning and the architectural composition of the old city.

#### First, offering the necessary public services for the residential buildings:

Residential buildings are in need of offering the necessary general services to serve the inhabitants, and due to the difficulty of adding new buildings inside the borders of old city according to old cities according to protection and preservation legislations, the supply of these services are being undertaken by three ways:

- 1. Reuse of old serviceable buildings available in the city such as markets, commercial shops, public baths(hammams), yards, lakes, water, canals, mosques and other public services, in this case care should be taken when reusing to preserve the architectural and historical elements of the building.
- 2. To supply with these services within a residential building or a group of residential buildings, or within an

additional service building that is not needed, like the conversion of the public baths to a museum due to the presence of more than one Turkish bath in the city, or conversion of some of the residential buildings into schools in minimal architectural interference, in this case care should be taken when doing the convergence of the use in order to keep the availability of some elements that indicates the original use of the building.

3. Supply of these services through the rebuild of damaged parts, whereas the process of rebuild is undertaken with the same old architectural style, and care should be taken to ensure using the same methods and materials in rebuilding process.

It is also worth to indicate that some of the services are offered in the completely demolished areas which is difficult to rebuild for constructional reasons, where these areas can be used as yards or as car parks.

Second, preservation the traditional planning and the architectural composition of the city:

Even though the original reuse of the city as a residential city guarantees the preserving of its distinguished architectural features, but this process should be under taken within several adjustments which guarantee the preservation of its unity and its cultural heritage.

This can be done by preserving the followings:

- 1. The planning elements for the city such as the old fabric areas, and other styles of separated and linked buildings.
- 2. Narrow tracks and opened courtyards which link the fabric parts with each other.
- 3. Horizon line and building heights.
- 4. The ancient archeological site in the old city.
- 5. green and open areas.

## VII. THE REUSE BY RESIDENTIAL UNIT LEVEL (HOSH):

The process of reuse of the old residential buildings is undertaken based on dividing the big residential buildings (hosh) to independent apartments taking in consideration the following points:

- 1. Providing with privacy and dependency for each apartment.
- 2. Providing with necessary needs for each apartment.
- 3. Providing with suitable environmental conditions for all services.
- 4. Providing with free movement and ease of transfer between the spaces.
- 5. Preserving the architectural elements for the building.

First direction to provide the Privacy By providing the independency for the dwelling in terms of spaces, services, entrances, and securing the comfort for the residing people without any interference from the outer environment.

By studying the status of the old buildings, it was found out the availability of four different types of buildings in terms of the possibility of the convenient solutions to provide the privacy to the inhabitants and dividing the building into separated residential apartments.

Second direction, providing with the necessary needs by providing with the necessary services to meet with the new requirements to the old dwelling, which was not an available in the old building or was available in a way which does not coincide with the requirements of the modern living, and some of the most important services is providing with the sanitary units, dependent kitchens and its enclosure.

By studying the status of the old buildings. Two types of buildings were found in terms of finding the suitable solutions to provide the necessary needs.

Third direction, adding necessary treatments to provide light and normal ventilation by:

- 1. Making additional openings or enlargement of the original openings in harmony with the existing architectural composition
- 2. Good direction in terms of lightening and ventilation for all the additional services (Baths and kitchens).
- 3. Using artificial ventilation in necessary cases if it is not possible to gain normal ventilation.

Fourth direction providing with free movements and easy transports, providing with easy methods for transportations through the residential apartments, and the most important treatments that were followed: Raising the swaddles of doors that with low heights.

Enlarge the narrow doors.

Treating the stairs by changing and amending its ratios.

provide with services (baths and kitchens) whereas they are located in places easy to access.

Using metallic stairs in places not possible to use the stone stairs in.

Fifth direction preserving the architectural elements of the building: Preserving the architectural and historic elements in the building is considered as a vital as preserving the historic and cultural heritage of the city and is one of the important architectural elements which is being preserved:

- 1. Open yards (courtyards).
- 2. Covered yards (corridors).
- 3. Terraces (Almastaba), as architectural elements not to be removed unless where necessary (terraces: are spaces under the room floor, and its entrance is from the same room used for storing purposes and has various shapes).
- 4. Stone tiles for opened yards and roofed ones whereas they are treated and repaired.
- 5. Wooden doors and cupboards and windows metal safe guards as architectural elements.
- 6. Simple shape of stairs.
- 7. Stepwise and interference in the elevation.

Also, the following are considered in the preserving aspect:

- 1. Avoiding adding new architectural shapes or using new materials which does not fit with the whole shape of the building
- 2. Adding the new opening which suit the old ones in terms of shapes and ratio.
- 3. Removing the new additions which affect the general looking feature of the building (Feilden, 2007).

# VIII. EVALUATION OF THE REUSE OF HISTORIC BUILDINGS

## 8.1 In terms of providing with privacy

It was clear from field visits and the public opinion surveys undertaken in the old city that the architectural solutions related to providing with privacy mostly reached the goals, while the complicated connection of the architectural fabric does not give the inhabitants the feel of privacy, in spite they live in a separated and independent apartment.

Also, several obstacles are facing when doing the designs and the major one is the overlapping of the properties, and the staff of the engineering office may be obliged to a compromise with the owners which does not fulfill the complete privacy, and in other cases it is possible to divide the building into apartments due to the complications of this problem and failing to reach a common understanding draft between the owners.

## 8.2 In terms of providing with necessary needs

Throughout the evaluation of this experience, it was clear that all the bases that were followed have fulfilled the desired targets, whereas a number of necessary services were provided to all the residential apartments in spite of the presence of several obstacles such as the small size of some apartments which made it not possible to provide with services within internal spaces, whereas it is added to opened yards. In general, the preserving of opened courtyards by avoiding being roofed or covered is not desired by the residing people, whereas these yards cause annoyance to people residing regarding using it in winter time, and nowadays there are studies to solve this problem in two directions:

First direction, DE signatory, by partial covering of the opened yards or the movement axes, ensuing the supply of lightning and ventilation.

Second direction, utilized materials, by concentrating on using construction materials in harmony with what is available

## 8.3 In terms of providing suitable environmental condition:

By evaluating this experience it was found out that most of the set out solutions have reached the desired target in terms of providing with maximum lightening and normal ventilation in spite of the presence of some obstacles like making additional openings or enlargement of the original openings for structural reason or interference in the properties, also the connection of buildings (especially the parts of the old fabric) sometimes prevent the normal ventilation for the additional services, in this case the artificial ventilation is used.

## 8.4 In terms of providing free movement and easy transportation:

By evaluating this experience, it was found out that most of the solutions set out to facilitate the movements reached its desired goals, in spite of several obstacles which prevent finding the treatments, and mostly the difficulty of adjusting the stairs ratio due to the lack of enough area and difficulty to raise up the swaddles of doors or enlarging it for structural reasons.

## 8.5 In terms of preserving the architectural elements in the premises:

By evaluation of this experience it was found out that all the distinguishing architectural elements of the old building were preserved and were shown in spite the presence of the terraces (Almastaba) problems which are considered as a distinguished element that should be preserved, however its presence in sometimes makes an obstacle preventing the possibility of using spaces, and consequently sometimes they are removed under a condition that the building is consisting of another terrace.

IX. DISPLAY AND ANALYSIS OF A COMMERCIAL BUILDING WHICH HAD BEEN REUSED: 9.1 Project Introduction:

- 1. Location: Suq Al wakala building is located in the old city of Hebron, to the south of the Sawakneh neighborhood and to the east of Qazazin neighborhood on the Qasaba street (Qazazinst.) that links Ein Alaskar area (The northern western entrance of the old city) and the Abraham mosque close to what is called square of the Suq (Eskafiyeh Suq). The important of this building stems from its closeness to main entrance of the old city like (Khosq al far) and Al Khan (Suq Al Laban) entrances.
- 2. The composition of the building: The building consists of an open court surrounded by spaces of 2 floor height. the ground floor includes 12 shops the merchants used for selling their goods six of these stores open to the court and the other 6 opens on the Qasaba street directly. The first floor was used as a hostel (sleeping area) for the merchants coming from outside of the city.
- 3. Methods of construction: The methods employed in this building are the system of load-bearing walls where the weight is transferred from the intersecting Arab vaults to the buttresses of the columns and inside the walls in such a way that all four joints make up one ceiling, a pattern which is repeated throw out the building but with different heights and sizes the problems the building face:
  - a. Water, the storage and flow of water, and the resulting damp.
  - b. The old sanitation system, the remaining brick channels, the sewage system.
  - c. The external electrical connections, striping of the wiring.
  - d. The doors, windows, and cupboards which are made of wood and broken.
  - e. The plaster work which has deteriorated and flaked in places.

The second stage, the new function and drawings of the project.

4. The New Function: Suq al wakala building has its own special historical value, that's why "Hebron Rehabilitation Center" (H.R.C) focused on rehabilitating and planning to reuse it as a (Guest House) to cover the H.R.C needs to have a rest place for its guests.

Palestine Polytechnic University (P.P.U) -Which had a major part in rehabilitating and conservation projects to protect the city's cultural heritage- had the honor of restudying the project and designing it according to suggestions and terms set by both P.P.U and H.R.C, and the project contained many main functions, such as; Restaurant, Coffee shop, Entrance Hall, Lectures Hall, Bedrooms and the other building utilities.



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Figure 1- Panorama image shows the entrance and courtyard of the building

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