RESEARCH PAPER

The Iraqi Practice in Urban Conservation An Assessment of Some Projects in Baghdad After 1950

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A B S T R A C T:
Many countries have witnessed experiments in various urban projects. The main objective of many of these projects has been the reconstruction and preservation of cities that have been subjected to natural or human disasters. This has led to the enhancement of expertise in this type of project in order to preserve the cultural and historical identity of the city, especially the old ones with specific architectural character.

The Iraqi practice in the field of urban conservation and reconstruction has been characterized by a specificity resulting from the length of time that exceeded 50 years. The aim of the paper is to review and analyze a range of successful local Iraqi attempts in the fields of conservation, reconstruction, urban development and rehabilitation projects, which took place during the 1950s to the present in an order to draw a set of guidelines for this type of projects, and the adoption of the scientific basis and benefit from the experience accumulated from those experiences.

These attempts can be grouped into four levels: the level of a single architectural building or landmark, the level of a group of adjacent buildings (complex or complexes), the level of urban fabric, and the overall level of the master plan, and the second level was selected for the study of the historic urban centre in Baghdad in the period after 1950.

Keywords: Urban Conservation, Reconstruction, Preservation, Built Heritage, Assessment, Baghdad.

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INTRODUCTION

The experience of Iraq in the field of urban conservation and reconstruction projects is characterised by the length of time that exceeded 50 years. As the cities of the western and northern provinces in Iraq witnessed of partial or total destruction because of the war that took place between 2014-2017, including cities such as Mosul Ramadi, Baiji, Fallujah and others. Mosul, for instance witnessed a partial level of destruction as a result of the war, on both its east and west banks, especially the old part with a huge amount of historic and traditional architectural monuments received the largest part of the damage. Efforts are made today and on all levels of reconstruction which is also happening in other affected cities. This situation demands that the architects, engineers and specialists should have their role in the attempt to reveal ways to successfully reconstruction for those buildings and parts of the cities, relying on the scientific approach and research and avoid improvisation in a manner that ensures the preservation of the identity of these cities with the historic nature.

The paper aims at highlight the Iraqi practice in the field of development, preservation and reconstruction of buildings and urban fabric that took place in Baghdad, the capital either by the pioneers Iraqi architects or governmental or...
international institutions mandated by the government. Informing the public about such experiences will contribute to the efforts of the destroyed parts, and works to increase their awareness of the demand for the establishment of specialized engineering bodies and staff, and to take advantage of the experience of the former Iraqi specialists from the fifties to the nineties of the last century.

2. LEVELS OF CONSERVATION OF URBAN HERITAGE

There are many levels of conservation of urban heritage depending on the size, type of historical origin and its importance. The rehabilitation project can be classified into two main categories by size and function: the architectural rehabilitation which focuses on a single with a specific function and size such as a house or a dispensary, and the urban rehabilitation which concerns on multiple buildings in a specific location previously occupied (Hilal, 2008, p. 1-2). The level of conservation of the architectural heritage according to the size and type of the heritage and its importance can be classified as:

- preservation of heritage elements (pieces and monuments after restoration and scientific treatment, preservation of the single building (restoration of historical building), preservation of a group of buildings, the preservation of a heritage path in the presence of groups of heritage buildings representing the connection between the area and the other side of the road, the preservation of the entire heritage area: including the total buildings and heritage corridors as a whole part of the urban fabric, conservation on regional and national, and to maintain the international level as examples of the architectural heritage of human (Mahjoub, 1995, p. 2).

According to above, the limits of research can be set in the Iraqi experiments on the conservation and rehabilitation of a group of buildings or complex of adjacent buildings (complexes) during the last century as it implies attempts to preserve the elements and individual buildings, and a number of them within the city represent the experiments to preserve the part of the ancient urban fabric of historic cities.

As Iraqi projects in general have been on four levels: the level of one building or architectural landmark historical or heritage one, the level of a group of adjacent buildings (complex or complexes), the level of urban fabric of the entire city, the level of the master plan for the city in general, This research has adopted the presentation of projects of the second level only (the level of a group of adjacent buildings (complex or complexes), and this is necessary to avoid excessive expansion. These projects, which will be presented after completion of the theoretical framework of the research, are illustrated in the following table:

3. PRINCIPLES OF RECONSTRUCTION OF HISTORICAL MONUMENTS

Although it is difficult to provide fixed standards for the rehabilitation of historical and heritage buildings in general, as each case is treated separately and independently according to the requirements of the project and its limitations. However, in the process of reconstruction of historic monuments it should be adhere to a set of rules and determinants based on laws according to previous global experiences, the most important of which are:

1. Following the identification of the rules, determinants and scientific foundations in the field of preservation of historical buildings and sites through scientific conferences and international conventions, it was necessary during the recommendations to grant an appropriate extent to the freedom and flexibility of dealing with historical buildings and historical sites.

2. Plans of conservation and preservation vary widely according to the nature of their place (Marasovic, 1975:8) The restoration and preservation processes must be adapted and maintained according to the quality and characteristics of the required state in terms of their material. A material entity devoid of intellectual, artistic and cultural content ([Shaheen, 1994: 10)

3. It is important to integrate reconstructed parts in harmony with the historical building, while distinguishing it from origin [ICOMOS, 1966, Article 12], avoiding counterfeiting in work interventions with historical monuments.
4. Study the urban context of the historical monument and its elements and redesign it in order to give the building its archaeological and historical value.

5. It is not possible to reconstruct or complete missing or destroyed parts without the existence of guiding points from the body of the ruins, or to rely on a definite scientific or historical document, with the aim of preserving the monument.

6. It is possible to rely on all available means to realize the limits and details of the elements missing from the historical monument, especially when distinguished by the scarcity of its type, with the absence of guides, especially documents, drawings, photographs, historical sources, or the remains of archaeological buildings of the same era.

7. Treatments and conservation interventions may sometimes be acceptable even if the building loses some of its historical value, as long as the objective is to preserve the elements of the building coherent for future generations (Pupageogion, Alexander, 1971).

The most important factors influencing the reconstruction and rehabilitation of heritage and historical facilities can be identified. These include the possibility of preserving the original materials of the origin, reusing the elements that are valid after their maintenance, preserving the details and elements of the original site and protecting the original materials of the origin within the surrounding context, And to avoid the inclusion of modern materials and technologies in origin as much as possible and without necessity, while retaining the origin as an element of the city identity, and keep the image of origin as an urban landmark and investment elements of origin as a historical landmark, And the possibility of presenting the original materials and elements of origin to the public whether in the original site or in the associated exhibition halls or museums.

4. THE CASE STUDIES

1 - The Conservation and Redevelopment of Al-Khulafa Mosque:

This project by the Iraqi architect Dr. Muhammad Makiya has been in two stages: first - the reconstruction of the historic minaret of Suq Al-Gazil (spinning market), while the second stage implied the reconstruction of the mosque after the restoration of the minaret besides design and construct the complex buildings related to the mosque. The site is located on the front of the Al-Jamhuria Street near the market Shorja. It was only the minaret that left of the historical mosque which was built in the Abbasid period which it was in very bad situation at the middle of the twentieth century. Makiya supervised the reconstruction of the entire building with the same specifications and in its old form with the traditional original material (the bricks. In the 1960s. The current minaret of the mosque, known to the Baghdadi as the "the minaret of spinning market", has always been a landmark of the city of Baghdad. It is the highest building compared to other buildings in the old city of Baghdad before the modern urban expansion. In the historical sources it is called (the minaret of the caliphs or the mosque of the palace). (Jawad 1969:275). Historians see that the minarets dates back to the era of Harun al-Rashid and that he ordered the construction of it.

The second stage was completed in 1967 and the project is regarded as a master-piece in reproducing the Islamic architecture in the present in continuity with the past. The mosque contributed to the urban development of the surrounding areas both spatially and economically, and became with its historical minaret a distinctive landmark with high contribution in architectural identity of Baghdad, and preserves the cultural identity of the Al-Jamhuria Street.

Makiya studied the heritage in depth, understood it well, and created a distinctive architecture that combines heritage and modernity (Al-Chalabi, 2018:86). In parallel with his architectural work, Makiya has actively contributed to the refinement of contemporary Islamic architecture with many new studies and researches.

The reconstruction of the minaret of the Khulafa Mosque in the responsible and creative manner of Makiya is an excellent evidence that the restoration of such features which has been completely or almost completely destroyed could be possible if the scientific and objective controls are adhered to, as long as it is almost impossible to return the monument with the same original materials. Some specialists consider it inappropriate to attempt to reconstruct the historic
building when it has been completely destroyed or has remained a minor part, unless most of the components of the archaeological building are in a form to be reconstituted, while others see that the use of a new building materials in a reconstructed historical building in some emergency situations is a necessity, but using the same quality, characteristics and nature of the old original materials, which may not satisfy the first group, but may satisfy the general public and society, mind over time, arriving together for future generations.

Makiya’s experience supports the vision of the second group in the possibility of reconstruction of such monuments, which avoids the state of complete disappearance of the historical or heritage landmark if the international standards are considered in the reconstruction process. As for the reconstruction of the buildings of the Al-Kulafe Mosque itself, it was carried out in accordance with the principles of urban conservation by the mechanism of reconstruction: re-assembling the parts of the historical building and its composition completely or partially to restore the original form of the building (Mustafa, 2009: 100). It is the process of reconstructing a historic building or complex destroyed as a result of natural extinction, natural disasters or wars and using modern materials based on significant factual documents.

2 - Conservation and Redevelopment of Al-Kadhmain Shrine , Al-Kadhimiye:
3 - Conservation and Redevelopment of Al-Gaylani Shrine, Bab Al-Sheikh:

Warren referred to the general principles that governed the development of the Al-Kadhmain and Al-Gaylani Shrine, which show how to deal with the historical context around them. He said " By its very nature the Arab Medina , cannot effectively be conserved in part. If important individual houses are to be saved , they cannot be isolated , to be left standing as individual monuments with bared party walls , in reversal of the original condition . The Arab Medina is a complex matrix like a honeycomb and the whole of the fabric must be brought into repair and upgraded coherently. In order to permit a vigorous social life in a thriving environment in the conservation areas, the city authorities have chosen quarters of traditional housing and commerce around the great shrines. Substantial blocks of the old city can be retained, with their streetscapes and courtyard life intact " (Warren, 1982:204)

Among the recommendations of the studies accompanying these projects:
1. Fill the gaps in the urban fabric with new buildings consistent in the measurement and characteristics and appearance of traditional buildings.
2. Expanding Al-Gaylani Shrine to the east, where the Ministry of Awqaf has the required areas (some of these were implemented in the 1980s).
3. The renovation project includes a group of small gardens and greenery in the tiled areas. (Al-Jabri, 1999:107-108)

4 - Conservation of Traditional Houses and Buildings ,Bab Al-Sheikh: Bab Al-Sheikh district is located in Rusafa in Baghdad. The name of Bab al-Sheikh is due to the presence of the shrine of Sheikh Abdul Qadir Al-Gaylani in it. (Al -Jabri,1999:106). The main recommendations that emerged from the study are the following:

1 - The possession of the houses with high heritage value by the government which some has been maintained and developed in the late eighties of last century .
2 - It was planned to support the owners of houses with lower level of heritage than the previous ones, and give them financial grants to meet the requirements for restoration , improvement and maintenance. If the owners do not be able to maintain the house, the government will acquire and maintain it.. Maintenance includes the supply of hot and cold water pipes and sewerage, electrical installations, bathrooms, laundries, kitchens, refrigeration and air conditioning.
3 - Allow the owners of the houses that has no heritage values, but its existence is important in integration of the overall fabric to destruct and reconstruction according to the control of
quality, by the authorities responsible for the project.

4. Reduce through traffic to the minimum, and make parking and other services underground in the preservation area (Al-Jabri, 1999:107).

The project includes the preservation of a specific list of buildings of mosques, houses and historic and heritage baths in the district of Bab al-Sheikh. One of the most important ideas which accompanied this project is the foundation of a special department called The Bank of Materials, which represents a very successful experiment in these types of projects aimed at preserving the parts of the building and the components of the traditional houses, as well as maintaining and reusing them in houses selected for maintenance in the area.

5. ANALYSIS AND EVALUATION OF THE CASE STUDIES

The projects are characterized by a high degree of commitment to reflect the local materials, shape and features of each building or landmark relative to the surrounding context, thus preserving intellectual content and value. As well as the impressive architectural value of it. However, these projects differed in conformity with other criteria as detailed below:

1- Al-Khulafa Complex:

The design has achieved a high degree of compatibility in the integration of the historical minaret of the mosque, after its restoration and revival, as well as its integration with the buildings of the complex as a whole, as well as achieving a good level of compatibility of the complex with the urban context. As well as the quality of coordination approaches to increase the value of the complex within its location and make it a landmark in Al-Jamhuriyya street in downtown Baghdad.

As for the fourth criterion, the designer's skill in reconstructing the minaret, which was the only remaining monument on the original mosque, and the completion of its parts for the purpose of maintaining and preserving it as a historical monument, was of great significance.

As for the fifth criterion of the interventions, it is noted that the designer has used face face concrete on the facades of the building and in very limited percentages, while the local bricks the largest proportion, as is the case in the historic buildings in the city of Baghdad since its foundation in the Abbasid era, characterized by such interventions brilliantly, did not occur or lead to distortions or inconsistencies but on the contrary strengthened the possibility of the emergence of modern architectural currents emanating from the elements of Islamic architecture.

2- Conservation and Redevelopment of Al-Kadhmain Shrine, Al-Kadhimiyeh:

In this project and for the second and third parameters, it is noted that the proposed plan was completely based on the clearance of the urban fabric around the shrine. This leads to the isolation of the shrine from its surroundings. Many contemporary critics of this matter due to the obvious influences of the western ideas in urban design that aim at making the building stands alone in the open public space as in the European city based on the principle of the (outward) which it is in contrast to the trend in the Islamic city that based on the principle of (Inward) represented by the building blocks surrounded the Great median court. This difference between the two trends made the position of experts tends to reservation and non-recognition of the quality of such solutions or to obtain the quality of the evaluation of those proposed designs, which led the authorities of the city then to adopt the partial clearance of the built area around the shrine on the west and north-west only in order to facilitate the arrival of cars and connect the entrants with public network of vehicles' traffic, especially towards the Aden circus.

As for the fourth criterion for the completion of lost or collapsed parts, the city authorities have adopted the recruitment of skilled builders and technicians from local craftsmen in this regard to ensure the best results.

As for the fifth criterion, it has already been noted that there are (interventions) of the ideas of Western architecture, without taking into account the local identity in dealing with the openness of the shrine on the modern city streets. As explained by the experts, these interventions have been negative and have been implemented
only in a limited range, and just for to the functional needs.

3 - Conservation and Redevelopment of Al-Gaylani Shrine, Bab Al-Sheikh:

The main points mentioned in the previous project of Al-Kadhimain Shrine, Al-Kadhimiyyeh are treated in the same manner here, as a result of that both projects were submitted by the same consultant bureau.

4 - Conservation of Traditional Houses and Buildings, Bab Al-Sheikh:

For this project, the lists for the selection of houses and heritage buildings in the district of Bab al-Sheikh has been based on the studies and in situ questionnaires, and on the basis that the selected buildings should have recognized value both architecturally and functionally which qualify after the end of the reconstruction process to contribute to develop the value of the district. As a result, the second and third criteria in it were of a quality.

As for the fourth and fifth parameters, the restoration of missing or collapsed parts of the building has been carried out according to high standards of quality, in order to maintain the parts and complete them according to scientific basis through the adoption of a similar project for those works.

The accompanying figures illustrate the possibilities that have been identified for this, which helped restore the mentioned parts of the elements of the building with high quality. Here, the material bank, made the exterminator procedure in terms of materials or style unlikely, even if the city authorities had to act on it, it was done at the maximum possible minimum limits, which did not affect the overall result of the building. After its maintenance and reconstruction. The results in the table above and in the review of the level of project compliance with the standards of the analysis process, all projects have been taken in consideration the compatibility between the material, the form and the features of the historical monument in a good manner (A). The amount of compatibility in integrating the reconstructed parts and their familiarity with the historical environment in most projects was good. Taking into account the urban surroundings of the historical building and landscape and approaches to suit its historical or heritage value in two were good (A) and the other two were bad (C). All projects have been adopted to build or complete the missing or collapsed parts for the purpose building maintenance to conserve it, while the level of acceptance of treatments and interventions within the survival of extraneous or historical heritage of the building, making it the effective and coherent as it is for future generations uneven in different experiences between good and bad.

6. CONCLUSIONS AND RECOMMENDATIONS

The practice and the review of reconstruction projects of various types after the second half of the last century in Iraq shows the possibility of getting benefits and lessons from this experience in the reconstruction of the cities affected by the destruction totally or partially. The following conclusions emerge:

1 - The project of alkhlafa indicates the possibility of reconstructing the completely destroyed minarets like Al-Hadbaa minaret in Mosul or others, provided that local and international scientific bodies are diligent in the preparation of their detailed designs and then proceed to rebuild them on sound scientific bases and efforts that suit the identity of the city and its history.
2 - The case of Al-Khulafa Mosque complex project shows the possibility of regrouping the parts of the historical building or the total buildings and the composition of the new and completely, in a way to take into account the original historical elements of the complex, with the adoption of local building materials and in keeping with the development of construction techniques. And in a deliberate manner of scientific interventions as permitted by international standards. The model of Al-Khulafa Mosque Mosque complex is valid for being a role model in other similar case.
3 - It is necessary to activate the experience of the pioneer project (the Department of the Bank of heritage materials) for the purpose of restoration and reconstruction of historic buildings and heritage in any old city such as the old city of Mosul, which is currently destroyed, in order to achieve the objectives of preservation.
4 - The importance of preparing engineering and consulting staff specialized in the field of preservation and reconstruction is evident. The

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review of these experiences of reconstruction and preservation and local urban development of all kinds was the result of the availability of a local staff with high quality based on scientific and practical foundations.

5- The need to develop a sustainable urban development policy that balances the preservation of the local identity and originality of the destroyed cities, and the projects with contemporary technology.

6- The cities affected or destroyed - especially the historical fabric of them - are in urgent need today for all types and types of urban projects including reconstruction, restoration, preservation, and urban renewal without exception.

Table (1). Projects at a complex level of adjacent buildings (or complexes for the case study)

| Name of Project | Type of Project |
|-----------------|-----------------|
| 1 | Conservation and Redevelopment of Al-Khulafa Mosque | Restore & Redevelopment Urban project |
| 2 | Conservation and Redevelopment of Al-Kadhimain Shrine Al-Kadhimiye | Conservation Urban Project Redevelopment Urban project |
| 3 | Conservation and Redevelopment of Al-Gaylani Shrine Bab Al-Sheikh | Conservation Urban Project Redevelopment Urban project |
| 4 | Conservation of Traditional Houses and Buildings Bab Al-Sheikh | Conservation Urban Project |

Table (2). Criteria for comparison between the projects according to the principles of the reconstruction process

| Criterion Serial | Criterion Description | Criterion grades |
|------------------|-----------------------|------------------|
| 1 | The project has taken into account the compatibility between the material, form and features of the historical monument, bearing in mind that the content of the monument is a cultural, intellectual and artistic. | A = Good B = Accepted C = Bad |
| 2 | The amount of compatibility in the integration of reconstructed parts and their familiarity with the historical surroundings. |
| 3 | The extent to which the urban surroundings of the historical or heritage monument are taking into account, and the location and the approaches are adapted to suit their historic, heritage or cultural value. |
| 4 | Building or completing missing or collapsed parts for the purpose of maintaining the monument or building to conserve it. |
| 5 | The acceptability of external treatments and interventions within the survival of the heritage or historical building, making it as effective and coherent as it is for future generations |

Table (3). The summary of criteria evaluation in the projects of the case study

| Project | Criterion 1 | Criterion 2 | Criterion 3 | Criterion 4 | Criterion 5 |
|---------|-------------|-------------|-------------|-------------|-------------|
| Conservation and Redevelopment of Al-Khulafa Mosque | A | A | A | A | A |
| Conservation and Redevelopment of Al-Kadhimain Shrine Al-Kadhimiye | A | B | C | A | C |
| Conservation and Redevelopment of Al-Gaylani Shrine Bab Al-Sheikh | A | B | C | A | C |
| Conservation of Traditional Houses and Buildings Bab Al-Sheikh | A | A | A | A | B |
Figure 1. The minaret of Al-Khulafa Mosque before and after restoration

Figure 2. The Conservation and Redevelopment of Al-Kadhimain Shrine Al-Kadhimiye

Figure 3. The Historic Fabric in Al-Kadhimiye Surrounding Al-Kadhimain Shrine

Figure 4. The Historic Fabric in Bab Al-Sheikh Surrounding Al-Gaylani Shrine

Figure 5. Conservation and Redevelopment of Al-Gaylani Shrine, Bab Al-Sheikh

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