Reconstruction and Restoration of Historic Buildings according to International Conventions (Gaza Strip as a Case Study)

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ABSTRACT: The architectural heritage is considered one of the values and attributes each nation is proud of. Such heritage represents a civil significance and a symbol expresses the identity and genuinity of those people. One who considers Palestine in general and the Gaza Strip in particular, sees that it has such identity manifests in the strip’s outstanding historic buildings, and thus it is necessary to maintain this legacy as much as possible. However, this heritage suffers from a real problem, which is the absence of international protection against the Israeli practices, especially after the last war in 2008 that led to partial or full destruction to some elements of this legacy.

This study aims at identifying ways of reconstructing and restoring historic buildings within architecture maintenance projects in the Gaza Strip according to the international conventions. It attempts to achieve such objective through discussing a scientific methodology depends on five sections:

- Section one: studying of some concepts related to study's subject.
- Section two: studying Gaza Strip and its architectural heritage.
- Section three: protecting and maintaining architectural heritage in Gaza Strip.
- Section four: discussing reconstruction and restoring steps at Architecture Maintenance Projects.
- Section five: highlighting the major results and recommendations.

Keywords:
Reconstruction – architectural heritage – architectural restoration – architectural maintenance – historic buildings – international conventions

Study Structure:

Figure(1) : Study Structure

Reconstruction and Restoration of Historic Buildings according to International Conventions (Gaza Strip as a Case Study)

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<th>The Firth Section</th>
<th>Gaza Strip And Its Architectural Heritage</th>
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Resource- (Abridged By The Researcher)
1. Gaza Strip and its Architectural Heritage:

1.1 Background:
The Gaza strip is considered one of the oldest areas in the world. The past of the strip shows many historic and political events. It also witnessed the succession of many civilizations that made it one of the most places of attraction. The Gaza Strip was established in the Canaan era in 3000 B.C. It was a main linking road between Egypt and the Middle East and the Levant. Furthermore, it is the cradle of several civilizations and cultures as Canaanites, Pharaohs, Babylonians, Assyrians, Persians, Romans and finally Muslims. Upon joining the Islamic civilization, the Gaza Strip was occupied by crusaders till it was liberated by Saladin Dan and it became a part of the Ayyubid dynasty. During the Ottoman rule, it was the center of many events as Napoleon's campaign, World War I, Balfour Declaration, the British mandate and finally the division resolution and being governed by the Israeli occupation, which did not leave the strip until the Peace treaty in 1994. However, the occupation kept some parts of the strip as Israeli settlements and they were disassembled in 2005[14].

1.2 Main Historic Buildings in the Strip:
Gaza Strip has many old buildings return to different periods. They are divided into two types: mosques – churches – cemeteries – markets – palaces – baths – Apartments compounds. See figure (2).

The following are the main historic buildings[13]:

- **Public:**

- **Private:**
  - Al Jaffarawi house – Al Alami house – Al Saqqa house – Ghalayini house – Bourno house – Sesalem house

Figure (2) : 
major historic buildings in Gaza Strip

Al Basha Palace  
Church Protestant

Figure (2) : 
major historic buildings in Gaza Strip

Al Omari Mosque

Resource –Iwan Center– (Abridged By The Researcher)

(*) Israeli Settlements: mean the liberated areas existed in the Gaza Strip and were evacuated in 2005 by virtue of a withdrawal of one side.
2. Maintaining and Protecting Historic Buildings in Gaza:

2.1 International Conventions Related to Maintaining and Protecting Historic Buildings:

Many international conventions were issued and they are known by (Maintenance conventions). They are standards and international principles have a technical feature determines general frames to deal with archeologies for maintain and protect them from being vanished or changes. The following are the main laws and conventions:

- The International Human Law, especially articles related to protecting the cultural heritage during the armed conflict in 1907.
- Hague Convention 1954 related to protecting cultures properties during the armed conflict.
- Principles mentioned in UN conventions for Education and Sciences (UNISCO) and their recommendations concerning protecting the cultural heritage.
- The International Declaration issued by UNISCO about the intended destruction of cultural heritage in 2003.

2.2 Archeological Restoration According to International Conventions:

- **Objectives:**
  
  Restoration of historic buildings is considered as a major case and it is involved under architectural maintenance. It is an international responsibility more than being individual or local one and it basically aims at maintaining the aesthetic value of the architectural heritage with respect for main substances that form the building in order to keep its genuinity, its historic roots and it civil value.

- **Main Specifications that Should be Available in Restoration According To International Conventions:**
  
  - The used material should be compatible with the original ones of the building.
  - The building should be protected to avoid changing its basic features.
  - The distinguishing of the replaced parts from the genuine ones should be taken into consideration to make identifying original parts and other new ones more easy.

3. Phases Of Reconstructing And Restoring Of Historic Buildings:

The phases are divided into two main parts [10] (see figure 3).

![Phases of Reconstructing Historic Buildings](image)

Figure (3): phases of reconstructing and restoring historic buildings within

3.1 Phase One- Studying the Current Situation:

This step includes surveying, photographic and architectural registration and documentation of the building, in addition to consider conditions of the concerned residents and study the locations. It also involves conducting tests to prepare for plans, studies and database. The following are the steps should be taken in this phase (see figure 4).

Figure (4):
main steps should be followed in the first phase (studying the current situation)

Resource - (Abridged By The Researcher)

(1)- Field Assessment for Buildings:

This plan includes prepare an initial report in association with international standards and references, which could be found in the European Macroseismic Scale (EMS-98) to be used as a basic reference to fulfill the aim. On the other hand, all damages are specified and classified into five degrees according to the international standards [11] (see figure 5).

Figure (5):
Damage Classifications of Historic Buildings According to International Conventions

<table>
<thead>
<tr>
<th>Degree</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First degree damages</strong></td>
<td>Slight damages in the non-constructional elements</td>
</tr>
<tr>
<td><strong>Second degree damages</strong></td>
<td>Medium damages in the non-constructional elements and slight damages in the constructional ones</td>
</tr>
<tr>
<td><strong>Third degree damages</strong></td>
<td>Large damages in the non-constructional elements and medium damages in the constructional ones</td>
</tr>
<tr>
<td><strong>Fourth degree damages</strong></td>
<td>Large damages in the constructional and non-constructional elements with some partial collapses.</td>
</tr>
<tr>
<td><strong>Fifth degree damages</strong></td>
<td>Full collapse</td>
</tr>
</tbody>
</table>

Resource - Ranea Taha (2009)- (Abridged By The Researcher)
(2)- Housing of Homeless People (Urgent Housing):
This step includes providing homeless people with temporary housing units or giving them amounts of money till finishing the process of restoration. Such procedure is occurred after an accurate social survey to determine support according to priorities[11].

(3)- Maintain what Deem Necessary before Damages Increase:
This step involves noticing the nature of the damages and its degree to be reconstructed to avoid any further collapses[11].

(4)- Documentation And Public Participation:
The importance of this period exists in creating a kind of local communication between authorities in concern and the citizens to rise awareness about these historic buildings. To ensure documentation, we should apply the following steps[15]:
- Training in field of survey and field documentation based on scientific and international standards.
- Presumptive documentation for historic buildings through redrawing what was destroyed and removing it many times by experts to achieve reconstruction.

(5)- Preparing of Reviving Plan:
This step depends on preparing plans and studies in all domains to be on scientific bases and by concerned sides. These plans are represented in table (1).

<table>
<thead>
<tr>
<th>Domain</th>
<th>Study plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban planning and architectural development</td>
<td>Study the area from a planning dimension, diagnose planning problems and their relations with the surrounding, and then put suggestions and alternatives depending on results of other studies.</td>
</tr>
<tr>
<td>Economic studies and tourism</td>
<td>Study the economic situation of the residents, study the commercial activities and income level, then determine strengths and weaknesses. Study fields of development of tourism and find attraction points and services at archeological areas. (most of the data is gathered from questionnaire for merchants and residents – random sample)</td>
</tr>
<tr>
<td>Infrastructure</td>
<td>Study the current situation for all infrastructural systems to determine problems and find solutions to be able to reach for comprehensive package of projects</td>
</tr>
<tr>
<td>Transportations</td>
<td>Study transportation, road systems, car parking lots, cars entrances, pedestrians and rash hours to reach for developing projects. ( a questionnaire for residents, merchants, pedestrians and vehicles is prepared in conformity with international standards)</td>
</tr>
<tr>
<td>Housing</td>
<td>Study housing situation and housing units in the targeted areas, besides focusing on the physical condition of the housing units, services and available utilities. Identify residents' trends and their needs to reach for a package of developmental projects</td>
</tr>
<tr>
<td>Social studies and institutions</td>
<td>Study the social structure of the residents, labor force, services, awareness level and evaluate the condition of working institutions in that area. (Most of the statistical data is gathered through residents' questionnaire and visits for such institutions.</td>
</tr>
<tr>
<td>History</td>
<td>A historic background about the development and growth of Gaza Strip form the past ages till this day. It shows the civil importance in general and the value of historic targeted buildings in specific</td>
</tr>
</tbody>
</table>

(6)- Prepare A Database for Historic Buildings:

This step includes preparing a database for all historic buildings through entering survey and field documentation information to be analyzed to induct data and prepare analytic maps. Some characteristics of such database are[15]:

- Prepare a computerized bilingual database (Arabic – English) and a Geodatabase by using Geographic Information System (GIS) for buildings and sites.
- Document all buildings by photos (at least one photo for each building).
- Document information about physical condition of buildings, services and different architectural methods, besides historic periods.

3.2 Phase Two- Reconstruction and Restoration:

Based on first phase studies related to the current situation, a strategic plan is made for reconstruction and restoration process. This is achieved by determining work mechanism and what is connected with it such as; materials, preparations and equipments. Moreover, in this step we should deal carefully with reconstruction and restoration process avoiding any rash decisions taken in the work location.

Such step includes[11]:

- Restoration and reconstruction should occur according to international standards.
- Modern technology and local material are preferable to be used.
- Remains of damage should be recycled and reused.
- Deconstruction measure should not be implemented if the cost of reconstruction is not available.
- Wreckages should be removed and work location should be fortified for reconstruction and restoration.
- Documentation should be scientifically achieved after fulfilling reconstruction and restoration of historic buildings.

3.3 Reconstruction and Restoration Obstacles in the Gaza Strip:

This process faces some obstacles related to political and economic conditions the strip lives in, especially after the last war such restraints are:

- Lack of trained professional staff in field of restoration and maintenance.
- Lack of basic materials and tools needed for restoration and reconstruction.
- Lack of supportive projects for informative resources in restoration sciences at local colleges.
- Lack of international support and institutional care in offering financial help for surveys and reports, besides ignorance of practical side of reconstruction.
- Lack of awareness of the significance of such buildings, since people only care for having modern houses.
4. Results and Recommendations:

Through examining concepts connected to architectural heritage, the general view of the Gaza Strip and discussing international conventions related to reconstruction and restoration of historic buildings and methods of protecting such places, the following recommendations are derived:

1) Enhance the role of the national Committee for Protecting Palestinian Architectural Heritage by contributing in achieving and supporting its aims and programs.

2) Seek for communication with international organizations that support heritage projects.

3) Register all historic buildings by the concerned authority at the UNISCO as a legacy can not be destroyed and needs an international protection.

4) Contact with international organizations related to protecting rights and heritage to sue the Israeli occupation for violating the international law relevant to protecting Palestinian archeological heritage.

5) Maintain architectural legacy should be a sustainable developmental process depends on different categories of the society as investors, technicians, educators and common people, socially owners and residents of historic buildings and this is accomplished through increasing awareness about such cultural heritage.

6) Make sure that the used material in reconstruction and restoration consistent with the original ones.

7) Encourage protecting historic buildings upon restoring them providing that their main features do not change.

8) Encourage workers at architectural maintenance process to adopt all modern methods as computer programs.
References:

2) De Filipi, Francesca, 2005 "Sustainable Living heritage conservation through community" based approach, paper presented at the forum UNESCO University and Heritage, 10 International Seminar.
4) Feidi, Jonna, 2000, Public participation and heritage conservation, master thesis, Faculty of graduate studies- University of Jordan.
5) Feilden, Bernard, m. 1994: Conservation of historic buildings, Reed educational and professional publishing ltd.
7) UNESCO- ICCROM, 2003 "Introducing young people to heritage site management and protection" first published, UNESCO Amman office - Jordan.