

# Approach of architectural conservation environmental sciences essay



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## **2. 1 Introduction**

This chapter provides some definitions and concepts concerning the heritage building conservation. It outlines previous researches related to objectives of this research. In addition, the chapter summarises past researches conducted on the heritage buildings in the old city of Ghadames, world heritage site, Libya. Theory of conservation, laws and international legislations, and international organisations that have an interest with heritage buildings are also discussed in this chapter.

## **2. 2 Definitions and Concepts**

### **2. 2. 1 Heritage Buildings**

Heritage buildings are defined as those which are old and significant either in terms of architecture or of history (Chien, 1992). Heritage buildings are also defined as existing buildings with significant cultural value to society (CIB Commission, 2010). Feilden, (1994) defines heritage building in his book, Conservation of Historic Buildings, that building which gives us a feeling of admiration and make us need to know more about the people who lived in this building and their culture as well as knowing it's beautiful, historic, archaeological, economic, social, and political value. At the beginning of last century and after signing the Venice Charter in 1964 for architectural conservation, the heritage building concept has been extended to include all buildings that have architectural value and cultural. The architectural conservation concept has also been extended. It has not been limited on archaeological landmarks and religious and palaces as was in the past but

according to Itma (2007), the buildings that should be conserved have been divided into two main types:

## **Monuments**

They are important buildings correlated with a collective humanitarian value on international, regional, or denominational religious level, and to conserve them, their original case must be retained without any change, this can be applied only to archaeology and some distinctive architectural buildings such as the Dome of the Rock - Jerusalem (Kobbat Assakhra- Kodos) in Palestine and Colosseum in Rome, Italy.

## **Documentary buildings**

They are considered as documentation for historic phases of a heritage area. In general they have less historic value than the previous buildings due to their availability in several areas around the world. They usually are found in heritage centres for old cities and towns. In addition, UNESCO World Heritage, (30 December 2012), UNESCO's Convention related to the Protection of the World Cultural and Natural Heritage (1972) has defined and classified cultural heritage as follows. Monuments: works of architecture, monumental sculpture works and painting, structures or elements of an archaeological nature, inscriptions, cave dwellings and features combinations, which are of outstanding universal value (OUV) from the standpoint of science, history or art; Groups of buildings: groups of separate or connected buildings which, because of their architecture, their homogeneity or their place in the landscape, are of outstanding universal value from the point of view of history, art or science; Sites: works of man or the combined works of nature and man, and areas including archaeological <https://assignbuster.com/approach-of-architectural-conservation-environmental-sciences-essay/>

sites which are of outstanding universal value from the historical, aesthetic, ethnological or anthropological point of view. Deciding how old a building must be in order to be called "heritage" is difficult. In some places, 100 years old is heritage, while in other places, 50 years old is enough. However, based on the Italian Law, Itma (2007) classified buildings as heritage buildings if their age is more than 50 years. In Malaysia, if a building has fifty or more years old, then the building is heritage except buildings underwater which should have hundred or more years old in order to be called heritage (Malaysian National Heritage Act, 2005).

## **2. 2. 2 Approach of Architectural Conservation**

Strategies for action are being identified in present time in the field of preservation and restoration for heritage buildings according to international standards created by UNESCO, whether through International Conventions issued by International Council on Monuments and Sites (ICOMOS) or through versions of International Centre for the Study of the Preservation and Restoration of Cultural Property (ICCROM) and conventions issued by World Heritage Centre (WHC), where standard definitions for methods of cultural properties preservation and standards have been issued. Generally, there are seven (7) approaches in a conservation program, used individually or a combination, depend on the circumstances and objectives of a conservation project. In the following context, some approaches of a conservation program are explored.

### **Conservation**

Heritage building conservation can be described by many words. According to Norlizaiha Harun (2011), conservation is a technical activity towards <https://assignbuster.com/approach-of-architectural-conservation-environmental-sciences-essay/>

heritage buildings. It includes physical action to preserve the fabric and construction material of the heritage buildings. It is a process to prevent decay and the action is aiming to prolong the life of the buildings. According to the National Heritage Act 2005, Malaysia, "conservation" includes preservation, restoration, reconstruction, rehabilitation and adaptation or any combination. An article, Historic preservation projects can be green, by Wishkoski (2006), defines conservation as a process that preserves, protects and maintains during physical change. The International Charter for the Conservation and Restoration of Monuments and Sites in its Venice Charter (1964) describes the process of conserving a historical monument as: "it implies preserving a setting which is not out of scale. Wherever the traditional setting exists, it must be kept. No new construction, demolition or modification which would alter the relations of mass and colour must be allowed." Burra Charter (1990), Article 1. 4, defines conservation as all the processes of looking after a place so as to retain its cultural significance.

## **Preservation**

Preservation is a process aiming to stop the deterioration, decay or dilapidation state. It provides structural safety and should be carried out only in such a way that evidence of the construction or use of the fabric would not be obscured (Norlizaiha Harun, 2011). According to Civic Amenities Act, (1967) as quoted by Farayune Hajjar (2008), preservation is to protect individual buildings, structures and other artefacts that were preserved because of their relation to the great figures from the nation's heritage. Moreover, it was concerned with groups of historic buildings, townscape, and the spaces between buildings. Preservation is also concerned with limiting

change, and the conservation is about the inevitability of change and the management of that change. The National Heritage Act 2005, Malaysia, defines preservation as a process aiming to halt further deterioration, decay or a state of dilapidation and to providing structural safety and well being but does not contemplate significant rebuilding and includes: Techniques of arresting or slowing the process of deterioration, decay or state of dilapidation of an item or structure; Improvement of structural conditions to make a structure safe, habitable, or otherwise useful; and Normal maintenance and minor repairs that do not change or adversely affect the fabric or historic appearance of a structure.

## **Restoration**

The Burra Charter (1999) as referred in Article 1. 7, defines the restoration approach as returning the existing fabric of a place to a known earlier state by removing accretions or by reassembling existing components without the introduction of new material. The Venice Charter (1964) as referred in Article 9, defines the process of restoration as a highly specialised operation that aims to preserve and reveal the aesthetic and historic value of the monument with the main focus on respect for original materials and authentic documents. Accordingly, restoration is the process of returning a building to its original condition at a specific time period. It should work from actual evidence, as stated in the secretary of interior's guidelines (See Appendix F Standard no. 6) that repair or replacement of missing architectural features should be based on accurate duplications of features, substantiated by historic, physical, or pictorial evidence rather than on conjectural designs or the availability of different architectural elements from

other buildings or structure. Therefore, the restoration in any case must be preceded and followed by an archaeological and historical study of the monument (Venice Charter, 1964).

## **Reconstruction**

Reconstruction approach means the building of a historic structure using replicated design and/or materials. This approach is taken when a historic structure no longer exists but needs to be physically in place for contextual reasons. Reconstruction means also returning a place to a known earlier state and is distinguished from restoration by the introduction of new material into the fabric (Burra Charter, 1999, Article 1.8). Additionally, according to Appleton Charter, (1983) reconstruction means recreation of vanished or irreversibly deteriorated resources.

## **Rehabilitation**

According to the Malaysian National Heritage Act 2005, rehabilitation means the process of returning a property to a state of utility through repair or alteration, which makes possible an efficient contemporary use while preserving those portions and features of the property which are significant to its historic architecture. Old building sometimes becomes unfit for the modern needs and that requires some modifications. These modifications make this building able to continue and perform its functions again with retaining its original value. In particular, architectural rehabilitation means a series of stages of rebuilding a building to its original case to perform its old functions or a suitable new function. In other words, it means repairing and developing the building by preserving its parts and components that possess historical, architectural and cultural values during the eras in which the <https://assignbuster.com/approach-of-architectural-conservation-environmental-sciences-essay/>

building has passed since its construction. This means finding a new function for the building that makes the building useful and usable, and at the same time able to continue to insure the existence of people who perform maintenance works (Itma, 2007). According to Tyler, (1994), rehabilitation describes a suitable approach when existing historic features are damaged or deteriorated but modifications can be made to update portions of the structure, even rehabilitating the building for a new purpose. When rehabilitation is chosen as the appropriate intervention technique, alterations or additions may be made, but they should not be confused with original historic elements.

## **Maintenance**

Maintenance means the continuous protective care of the fabric and setting of a place, and is to be distinguished from repair. The repair involves restoration or reconstruction (Burra Charter, 1990, Article 1. 5). Maintenance can also be defined as some work focuses on retaining a property in good working condition by repairing features as soon as deterioration becomes apparent, using procedures that preserve the original character and finish of the features. In some cases, preventive maintenance is carried out before noticeable deterioration. Maintaining properties in good condition often assures that more aggressive (and expensive) measures of rehabilitation, restoration, or reconstruction are not needed at some future date (Denver Landmark Preservation Commission & Planning and Development Office, 1995).



## **Renovation**

Renovation is refurbishing and/or adding to the appearance of an original building or elements of a building in an attempt to "renew" its appearance in keeping with contemporary tastes and perceptions of conservation (United Nations Educational, Scientific and Cultural Organisation, 2008). Renovation means also to improve by repair, to revive, and thereby enhance the usefulness and appearance of the building. The basic character and significant features are respected and preserved, but some alterations may also take place. Alterations that are made are generally reversible, should future owners wish to restore the building to its original design. The words rehabilitation and renovation are often used interchangeably (Denver Landmark Preservation Commission & Planning and Development Office, 1995).

### **2. 2. 3 Conservation Guidelines**

The conservation guidelines are prepared to assist property owners, developers, architects, and designers of projects. In other words, they are written to be used by the city planners, Landmarks Commission, architects and developers, and especially the property owners, tenants and construction trades who may be doing work on an older or heritage building in a city (Williams & Elmer, 2010). They offer suggestions for conservation of heritage buildings and compatible new design to maintain buildings historic identity. According to Gioulis (1997), these guidelines are intended to: Increase public awareness of the value of historic architecture and the importance of design issues. Help reinforce the character of heritage buildings and protect their overall appearance. Preserve the integrity of

designated heritage areas. Assist property owners and architects in making basic design decisions. Improve the quality of development. Protect the value of public and private investment.

## **2. 3 Purpose of the Conservation Guidelines Organisation**

The conservation guidelines are to assist in making improvements to the exterior of eligible residential, commercial, industrial, institutional and agricultural heritage properties, and are not to be interpreted as bylaw requirements. According to Heritage Restoration Grant Program (2009), guidelines for building conservation have two objectives: Ensuring the long-term stability of the building, in terms of its economic viability, structural improvements and compliance with building codes, when applicable.

Restoration and retention of the architectural features which caused the building to be originally approved for assistance. The guidelines help protect the overall character of the heritage buildings by emphasising preservation of architectural styles, building character, original features and streetscape elements that make up the community's unique collection of heritage buildings. They provide background information and recommendations to help guide the appropriate conservation work and alterations to existing buildings. For additions, new construction and site work, they emphasise the compatibility of new buildings or features with existing or established historic character (Williams & Elmer, 2010).

## **2. 4 Building Defects**

Some previous studies reviewed the conservation activities and assessed the existing conditions of heritage buildings with taking into consideration, the conditions of building defects and conservation approach used for these <https://assignbuster.com/approach-of-architectural-conservation-environmental-sciences-essay/>

buildings. For example, in Malaysia, S. Johar et. al. (2009) reviewed the conservation activities on a traditional old mosque in Malaysia. They studied the concept and importance of conservation in general, the conservation activities on heritage buildings and mosque in Malaysia, and the approaches used for conserving to preserve the Muslim's house of worship. They found that the four key conservation principles namely minimal intervention, conducting scientific research and laboratories testing, documentation of conservation work and applying effective methods and techniques for conservation. Meanwhile for conservation programs, the seven approaches are reproduction, preservation, maintenance, restoration, rehabilitation, redevelopment and consolidation. Several approaches are normally adopted for one building conservation project. What is most important is the justification in adopting the approaches so that it complies with one of the key conservation principles, namely minimal interventions. Other research in Malaysia by A Ghafar Ahmad et. al. (2008) highlighted the existing conditions of heritage buildings in Malaysia with the main focus on the conditions of building defects and conservation approach to these buildings. The study conducted a pilot survey on several heritage towns and cities based on the existing heritage trail in Malaysia. The broad objective of this pilot survey was to examine the level of building defects and the location of building defects that normally occur in various types of historical buildings in Malaysia. At the same time, it also looked into the conservation approaches that has been done to these heritage buildings either the method are acceptable according to the basic principles and philosophy of building conservation. The study found that Malaysia faces several problems in dealing with the issues of heritage buildings. In addition, Hashimah Ismail & <https://assignbuster.com/approach-of-architectural-conservation-environmental-sciences-essay/>

Shuhana Shamsuddin (2005) highlighted the qualities that support the old shophouses as part of Malaysian heritage. They examined these qualities from two broad aspects, namely contribution to urban form and aesthetic aspects. They sought to highlight the strength of the old shophouses and the impending factors that threaten the continuous presence of these heritages building Malaysian town. The findings indicate that the practice of conserving the old shophouses is still not effective. A more effective measure in preserving the old shop houses needs to be undertaken. A research by Alattar, (2010), investigated a number of issues involved in the conservation process of the urban heritage of central Baghdad, Iraq which encompasses a unique collection of urban forms that belong to different phases of Baghdad's history. Her study of the conservation efforts in this area revealed the appreciation of the built heritage and the will to maintain them. On the other hand, it disclosed the uncertainty of the strategies and tools utilised in the conservation process. Itma (2007) presented the situations of conservation projects in Palestine especially in the city of Nablus, by shedding light on the local institutions of labour in the domain of architectural conservation, and their important projects since the agreement of Oslo until 2007. He proved that there was not a complete or an extensive project of conservation in the old city of Nablus, during the mentioned period, but only small projects of maintaining and optimising the old destroyed buildings. In addition, there was a very limited number of conservation projects conducted on some important heritage buildings in the old city of Nablus, Palestine. Mokadi (2008) highlighted the architectural and physical fabric of the throne villages in Palestine. The study attempted to study the historical centre of Deir Estia as a case study for the throne villages. The study attempted to highlight the <https://assignbuster.com/approach-of-architectural-conservation-environmental-sciences-essay/>

aspects of shortage and suffering, recent attempts of development, focusing on the available factors that can support establishing a tourism track which can cooperate in keeping the centre and enhancing the economic level, and to achieve building a strategy of developing that area. The study found that the throne is now facing rapid change of its physical fabric as a result of political, economic, social, and planning factors, in addition to the shortage of awareness level for the Palestinian character and values. Swilem (2008) aimed at keeping on the sustainability of the popular markets in Palestine and conserve them as an economical cultural and tourist aspect. Her research attempted also to find solutions to the current market problems as well as to motivate investment in the popular markets through creating job opportunities and investment opportunities. She found that the traditional streets suffer from some problems. To overcome on these problems, the researcher suggested some strategies and policies to achieve sustainable development for the traditional streets.

## **2. 5 Conservation Guidelines of Heritage Buildings**

Conservation guidelines for developing and utilising heritage building must be created to protect these buildings from random works that influencing the historic value of a heritage building. Preparation of the conservation guidelines helps guide the development of heritage area as well as the development of heritage buildings and lots located within a heritage area. At the same time, these guidelines guide the conservation of this underutilised area into one of vibrant urban destinations. The guidelines direct development of the site; chiefly its public places, individual buildings and lots. This controls the utilisation of heritage and new buildings for uses that

will conserve as well as indirectly preserve the area and its heritage buildings. Several previous studies established conservation guidelines of heritage buildings. Alattar, (2010), explored the references for heritage understanding other than the physical structure, including culture, history, and traditions. The researcher tried to promote the awareness of all heritage aspects, and developed guidelines for a strategy that considers all active elements of the historical experience and provided a sustainable framework for future conservation plans for heritage buildings in Baghdad. Farayune (2008) provided the conservation guidelines of Jakarta Kota, Indonesia as a heritage area, which improves and enhances the physical element and environment facilities. Farayune aimed to revive Jakarta heritage area to become attractive place and tourism place in Jakarta. The guidelines were based on the survey and analysis of the study area. The study found that conservation of Jakarta Kota was not only about conservation and preservation of the heritage buildings, but also about some aspects that need to be put in focus such as social, economic, culture, people activities and environmental facilities. These things can encourage the Jakarta Kota area to be liveable. Abu-Hantash (2007) investigated the issue of adaptation of traditional residential buildings to contemporary needs. Her study was an attempt towards the development of a general policy for conservation and adaptation of traditional residential buildings in the heritage centre of Palestinian cities. The study demonstrated the high potentiality of the traditional house to satisfy the contemporary needs of its inhabitants. In addition, the research revealed that the modification needed varies from one building to another and are to be determined according to the building value and the level of intervention it allows. The research outlined a general policy

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and guidelines for housing conservation that could be applied to other heritage cities in Palestinian. In addition, Rabba I. H. (2004) examined the present reality of Dhahrieh old town, Palestine by documenting its heritage monument and diagnosed the old town's problems and difficulties, in order to identify policies to safeguard its historical heritage. He concluded a set of policies, guidelines and suggestions to conserve the old town of Dhahrieh, Palestine.

## **2. 6 Benefits of Conservation of Heritage Buildings**

Conservation of heritage buildings can generate social, economic and environmental benefits that reach far beyond the virtues of conserving a legacy for future generations. Investment in heritage properties conservation can, for instance, boost property values and tax revenues, create local jobs and skills, attract new businesses, and promote tourism (Municipal Heritage Partnership Program, 2012). The incorporation of many abandoned heritage buildings in the redevelopment process presents numerous advantages. The benefits of conservation of heritage buildings can be classified under three main topics: environmental, social, and economic (Stas, 2007).

### **2. 6. 1 Economic Benefits**

Conservation of heritage buildings generates economical benefits (economical returns). It represents a good way for national economic development across tourism (Itma, 2007). Conservation of a heritage building is more economic than its demolition or its rebuilding. Several economic impact studies discussed if heritage conservation yields significant benefits to the economy. In other words, these studies ask the question, " Is heritage conservation considered as an economic development tool?" A <https://assignbuster.com/approach-of-architectural-conservation-environmental-sciences-essay/>

significant number of these studies have been undertaken across the USA, and the answer to this question is a resounding "yes"-heritage conservation yields significant benefits to the economy. Rypkema (1991) compared the relative costs of building conservation versus new construction, and found that conservation makes more economic sense than new construction. Wolf et. al. (1999) reached the same conclusion documented by Rypkema (1991), in many cases; it is more efficient and profitable to conserve heritage buildings than construct a new building.