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The Heritage and its surroundings in the face of damage.

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Abstract

Heritage is the rest of the past nations, the Inspirational of the present nations, and the embodiment of their values, and due to the importance of the architectural heritage in human civilizations, and due to the increasing risks that encroach on this heritage and distort its value, this study deals with the impact of these distortions, whether on the heritage building or its surroundings, indicating the importance of preserving the architectural heritage from the damages facing it, whether it is natural or manmade, by reviewing many examples of damages and infringements, discussing the weakness of regulations and procedures to preserve this heritage.

Keywords: Heritage damage; urban expansion; conservation; awareness; restoration; regulations.

1. Introduction

Architectural heritage expresses the truth of the history of nations and human societies, and is considered the link between the people of the era and their ancestors, as this heritage represents the values of society through the ages, and reflects its cultural and economic structure that the ancestors reached in their time.

As well as, Urban development is one of the aspects of development in all eras of history, as it is affected by the needs of the stages of development, but we have to distinguish between it and that negative development that may affect other aspects such as the effects of the heritage property when it considers this heritage an obstacle to the rise in the standard of living of the community, so the architectural development in the community exceed these heritage boundaries, and continues at their expense.

That is since the outbreak of the industrial and development revolutions in various fields, the global ambition of architectural requirements has focused on modernity and the superficial needs of the era, ignoring the importance of the architectural heritage that gives the architecture its identity and authenticity.

but after the damage caused to many heritage buildings and architectural monuments in the contemporary era, whether due to wars, natural disasters, or intentional destruction, human awareness of the importance of preserving this heritage has increased due to the rapid expansion of urban growth, and human activities towards the heritage, and their negative effects on this heritage.

So, many regulations have been put in place to organize procedures on heritage buildings and their surroundings.

This study focuses on cases of distortion of heritage due to external factors, in an attempt to address this phenomenon, and make suggestions to develop the organizing regulations.

2. Research methodology

This study uses the descriptive analytical approach

By presenting examples of the causes of distortion, analyzing them to find out their reasons, and trying to find solutions to these examples.

The study structure:

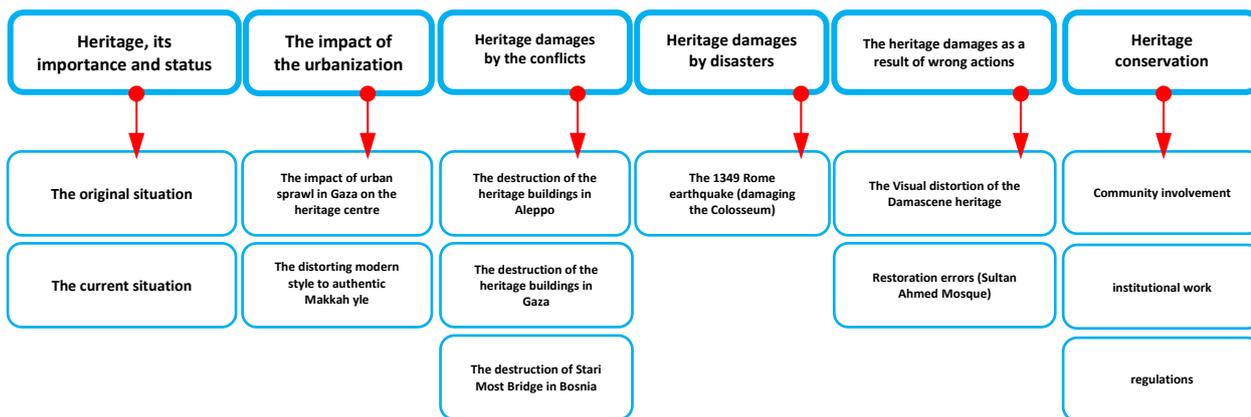


Figure 1. Structure of the Study (Developed by Author).

3. Heritage, its importance and status

As it was defined by UNESCO: The heritage is the entire corpus of material signs - either artistic or symbolic – handed on by the past to each culture and, therefore, to the whole of humankind.

And while studying the state of heritage buildings to define the impact of external factors (human or natural) on them, and develop appropriate strategies for conservation, we have to distinguish the difference between two stages of their life:

1. The original situation.
2. The situation after damage.

Then it is possible to accurately determine the external impact to the building, the percentage of the damage, and how to restore and preserve it.

3.1. The original situation:

The state of the building's prosperity can reach us through some architectural plans or historical description of the original state of the edifice or building in its era, restoration plans, or through photos documented in previous field visits to the building, one example of historical description is Ibn Jubayr description of the Great Umayyad Mosque in Aleppo during his journey in (580 AH / 1183 CE), saying: "It is one of the best and most beautiful mosques in Islamic countries. its wide Courtyard is surrounded by a big and wide court, opened to it by palace-beauty doors, they are more than fifty, and the southern court has no compartment, so it is observably wide".

And also, as an example of plans drawn basing on historical descriptions is the plans for the Solomon's Temple, which Isaac Newton imagined using the texts of Ezekiel which describe the temple.

And among the examples of documenting by photos taken before the crisis, those taken in the Syrian Documentation Project from which the following photo of the great mosque of Aleppo that shows its situation before the outbreak of the war in Syria in 2011.

3.2. The current situation:

Is the condition of the building after the changes or procedures or damages that occurred to the building or its surroundings and the consequent impact on its value, these include:

- The impact of the urban expansion on heritage.
- The heritage damages by the conflicts.
- The heritage damages by the disasters.
- The heritage damages as a result of wrong actions.

The situation is documented after the damage either by visiting the site and using traditional documentation, or by using satellite images that illustrate the state of the site after the damage, or by using advanced technologies, including aerial photographs (drones) that document the details of the damage. After comparing the current situation with the original situation, appropriate strategies for restoration and preservation can be devised, depending on the building or heritage monument itself, and according to the type and size of the damage caused.

4. The impact of the urbanization on heritage:

As the urbanization is the expansion and rapid growth of urban areas because of the rapid global changes, so the impact of urban expansion on heritage buildings is concentrated, in most, in the historical centres that mediate cities that are already suffering from urban problems, and this effect comes due to the weakness of laws organizing heritage conservation in these countries, the absence of popular awareness of the importance of these areas, or the preponderance of other aspects on the heritage one, such as economic aspects or housing projects in crowded cities, and in many urban development cases, the institutions concerned with these actions demolish or distort the value

of heritage buildings, as a result of poor coordination between the authorities responsible for preserving heritage and the implementing institutions.

4.1. The distorting modern style to authentic Makkah style:

During the last five decades, the historic city of Makkah has undergone major and radical urban developments. This accelerated development coincided with the increasing discovery of oil in the Arabian Peninsula, which raised the economic level of the country, and the expansions extended to include the entire historical area of the city, and with each expansion to the urban surrounding, the grand mosque was witnessing a change in the urban characteristics of this surrounding in terms of heights and uses, with the aim of raising urban efficiency and absorptive capacity of that region, which was not affected much by global economic changes. ”

The dominance of the features of modernity and the overcrowding that accompanies it on the scene in Makkah , and that is evident through the tall hotel buildings that changed the original architectural identity of Makkah , from the city of simplicity and spirituality, to a field for contractors to compete for the height of the buildings in order to contain the largest possible number of visitors to the grand mosque, and achieve greater economic benefit through these investments, for example; the Abraj Al Bait projects was launched, which are tower hotels with heights of no less than 232 m, the last of which was the Royal Clock Tower, which was completed in 2012 with 601 m and 120 floors.

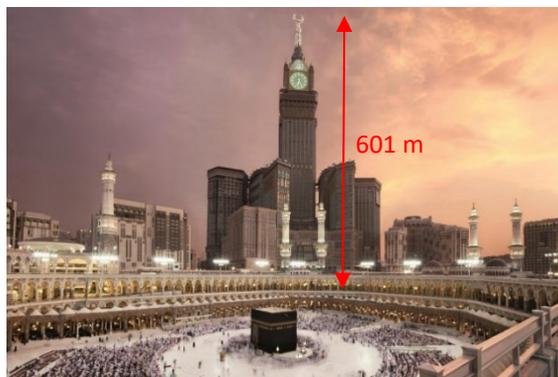


Figure 2. "Makkah, the clock and hotels towers surrounding the great mosque”

If this scene does not affect the historical value of this sanctuary among its visitors who witnessed it before this urban revolution, then, it surely will create an impression that makes these tall buildings overwhelm this sanctuary by their presence, by the eyes of future generations.

In cases that may affect the heritage surroundings, such as the case of Makkah, governments must regulate laws that specify the permissible distances for implementing near activities, that threaten and overwhelm the heritage value of the building and its surroundings.

4.2 The impact of urban sprawl in Gaza on the heritage centre:

Gaza is considered one of the oldest cities in the human heritage, as it was built before more than 1500 BC, and it still has an important architectural heritage that dates back to different eras, Rashidi, Mamluk and Ottoman times. The historical buildings of the city are mainly located in its centre, but the population increase has led to the expansion of urbanization reaching the historical centre of the city, and this has led to the violation of the heritage fabric and building within it in contravention way, and the removal of parts of the heritage fabric in response to the requirements of urban expansion, in addition to weakness in urban plans, government neglect for these actions, and weak protection and restoration procedures for the heritage area.

Among the manifestations of this change in the texture of the heritage of the city, Khan al-Zayt, near this area modern buildings began to appear, covering the heritage of the region, and obliterating the identity of the area.



Figure 3. "The urban fabric in Gaza in the past and present centuries, Al-Jazeera Channel website, Adwwa website by the media Hanan Rajab"

5. The heritage damages by the conflicts

Conflicts are one of the greatest disasters that affect humanity, and it is primarily a human-made disaster. Modern-day wars are not limited to the human and economic losses that they cause, but go beyond that to demolish buildings, infrastructures and monuments and cause damage to them, and hundreds of buildings, that have been classified within the world heritage list, have been damaged by wars, in Syria, Iraq, Palestine, Bosnia, Yemen etc...

5.1. The destruction of the heritage buildings in Aleppo

After the beginning of the Syrian conflict in 2011 and its extension to the neighbourhoods of the city of Aleppo, the conflict extended to include the neighbourhoods of the old city which are classified on the World Heritage List, so heritage mosques, souks, and the Aleppian-style houses were bombed, 50% of these areas was partially damaged, and 10% was completely destroyed, and among the long list of heritage that was subjected to destruction in the city: the minaret of the Umayyad Mosque that was mentioned at the beginning of the study, nearly 60% of the ancient Souk, which is about 1,200 meters long, heritage schools such as Al-Najat School, and a large number of Luxurious heritage houses dating back to the Mamluks, Zengid, Ayyubid, and Ottoman eras, especially the ancient houses of the ancient Farafra and Jallum neighbourhoods.

5.2 The destruction of the heritage buildings in Gaza

Heritage buildings in Gaza City have been systematically destroyed throughout a long history of wars, starting with the First World War, in which the Allied bombs destroyed nearly half of the city, including important archaeological mosques from the city's archaeological centre, such as the Al-Omari Mosque, and ending with the Israeli aggression at the end of 2008, when the Israeli forces bombed many buildings whose an important historical value, such as the Dhiafa Palace and the Al Saraya Military Complex.

5.3 The destruction of Stari Most Bridge in Bosnia

One of the most prominent examples of the impact of wars on heritage facilities is the Stari Most Bridge in Mostar, Bosnia, which was built by the Ottomans in the 16th century and remains an important symbol of Ottoman architecture in the Balkans, until it was bombed with 60 bombs by Croatian forces in the 1993 which led to the destruction of large parts of it and leaving it out of service I, until it was rebuilt in 2004, and this example indicates the danger of the systematic targeting of old cities on the heritage facilities in them, especially when the target is the heritage element itself.



Figure 4. "The wreck of Mostar bridge before rebuilding it, wonders of the world site"

The terms of the published conventions cannot be activated on the ground without strict obligations and penalties criminalize the parties that are proved as involved in damaging heritage buildings, and deter the conflicting parties from systematically targeting the heritage of hostile countries, and far from being affected by the balance of conflicting forces, for any bias will lead to the persistence of obliterating the identities of the target countries, which are often represented in their heritage monuments, and in the case of the Syrian conflict, the silence of international monitoring of violations of human and heritage rights led to the continuation of the conflicting parties within the historic centre of Aleppo and making it a centre of armed conflict and destruction, and in Gaza, international bias towards the attacking parties has, throughout history, prevented the effective implementation of the laws that protect ancient historical centres, and these laws were useless when the Stari Most Bridge was systematically destroyed without making any efforts to prevent that.

6. The heritage damages by the natural disasters

Natural disasters and weather factors are among the factors whose occurrence or non-occurrence cannot be controlled by humans, and the role of natural disasters is not limited to the material damage they may inflict on societies, but the past few years have shown that disasters caused heavy losses in the world heritage, and just as the effects of these disasters on humans and buildings in general can be mitigated or prevented, it is possible to take procedures to mitigate these effects on historical buildings.

6.1. The 1349 Rome earthquake (damaging the Colosseum)

One of the most famous examples for the natural effects on the historic buildings was the earthquake that hit the Colosseum in 1349, and despite the resilience of large parts of the building which was built in 80 AD, it suffered major damage to its structure, and it has been restored several times, one of these restorative procedures was when the architect Raphael Stern reinforced the arches on the northwest side in 1820.

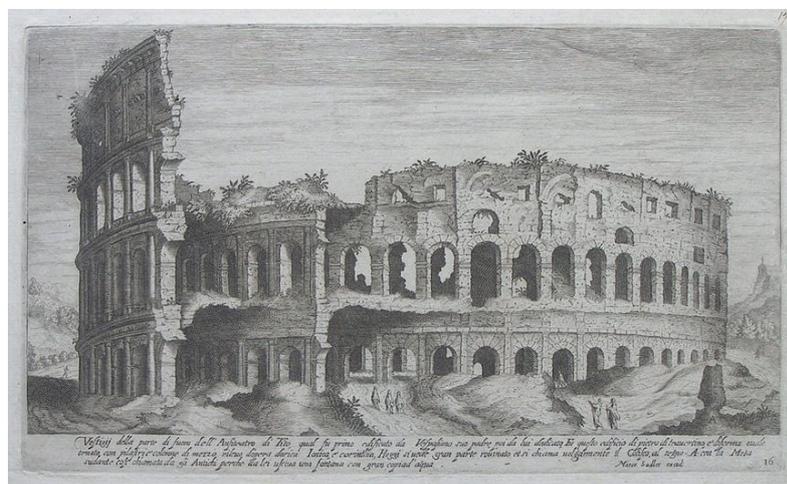


Figure 5. " An imaginary image of the Colosseum after the earthquake".

7. The heritage damages as a result of wrong actions

Most of the heritage buildings are located in undeveloped residential areas in city centres, as in Aleppo, Damascus, Gaza, Bursa, ...etc, and as a result of the demography of the area, some damages to the heritage value of the buildings are often inflicted, by modifying some parts of these buildings to suit their livelihood, such as removing wooden windows of heritage value and adding aluminium and glass windows instead in some traditional homes classified within heritage areas, or because of the lack of popular awareness of the importance of preserving this heritage as it is across the generations, such as painting on the walls of historical buildings, or making the historical squares as a garbage dump.

7.1 The Visual distortion of the Damascene heritage

governorate organized a campaign of plastic art that affected the walls of the old Damascus neighbourhoods, thus provoking the exasperation of those interested in Damascene heritage who criticized the futility of laws that punish those who distort monuments.



Figure 6. "The campaign of painting on the walls of old Damascus, stepagency".

This persistent behaviour against heritage buildings comes due to the absence of control over the safety of these buildings, and the lack of laws that criminalize any action that could harm them.

7.2. Restoration errors (Sultan Ahmed Mosque)

Among the wrong actions that cause damage to historical buildings, errors that occur during the restoration process, whether due to lack of experience or insufficient study of the building's situation, and these errors may not harm the structure of the building, but rather some of its decorations, as happened in the Sultan Ahmed Mosque. In Cairo, where some errors were discovered in the restoration of the Qur'anic inscriptions adorning its columns in 2019, six years after its restoration in 2013.

8. Heritage conservation

Some researchers consider that the first conservation and restoring attempt of the heritage began in the Middle Ages in Italy with the first restoration of the wall paintings in the Sistine Chapel frescoes, but the historical narrates show that preserving and restoring the heritage goes back to pre-Islam times, which is the procedures of the Quraysh tribe to preserve the Kaaba in Mecca as stated by the historian Ibn Katheer and this happened in the year 600-601 AD after parts of it were damaged by a fire, and there might be older not mentioned by historians.

In our time, organized efforts must be made at the global, regional and local levels to preserve the architectural and urban heritage, focusing on the main pillars of this mission: social interaction, institutional work and regulations.

8.1. Community involvement

Although there are international organizations that organize heritage protection conventions on a global scale, the role of involving communities on a smaller scale in protecting this heritage should not be overlooked, by holding

popular conferences to raise awareness in clarifying the importance of heritage and preserving it, with the participation of influential people in different groups in the community, to be the facilitation link, and then the actual public participation in preserving and restoring the heritage, starting with preserving the identity of the archaeological houses and alleys in which they live without changing and distorting, and ending with the experiences acquisition to participate in the recovery process.

8.2. Institutional work

The institutional role in the heritage preservation process is located in the middle between the upper levels of the global and local organizations, and the levels that lower it in the societal level, and its role, mainly, is the executive part, by organizing guarding for the heritage buildings to ensure that they are not tampered, putting signs warn of damaging to buildings, taking urgent procedures if any damage occurs, It undertakes the development of regular restoration and maintenance plans and implementing it, and employing experts in maintenance and restoration procedures.

8.3. Regulations

Many procedures have been taken from the middle of the last century to the present day within the framework of protecting the architectural heritage, and many charters and recommendations of international conferences have been issued in this regard:

Table 1. The international conferences for protecting the architectural heritage.

Event	Date	Content
The Athens Charter	1931	establishing the basic principles for the preservation of historic buildings
The Venice Charter	1964	Indicating that historical monuments include the surrounding urban fabric, and emphasized the importance of preserving this surrounding from changes, demolition or additions
ICOMOS	1965	developing principles, techniques, and policies for the protection and assessment of historical monuments and sites, and to support all relevant researches.
Ankara conference (ICCROM)	1980	Recommendations to study of the causes of damage and the quality of protection required for each kind of heritage building
The Washington Charter	1987	Affirming the need to take preventive procedures to protect the heritage cities from the effects of disasters
The Charter for International Cultural Tourism in Mexico	1999	Clarifying the impact of globalization on the urban heritage of cities

9. Conclusion and recommendations:

The possibility of exposing heritage buildings to damage cannot be non-existent, human beings increasing requires urban expansion to meet the needs of this increase, likewise wars, with the insanity of their parties, do not keep neither stone nor people, and are not restricted by treaties put by the big guys, and natural disasters are inevitably occurring, but if eliminating the causes of the damage is not possible, it is possible to prevent damage to those buildings, or at least mitigate its impact, and to take care of them, by insuring the frequent restoration operations of buildings of heritage value by specialists, preserve them from tampering and wrong interventions, regulating the inevitable urban expansion, and prevent it from distort the heritage areas, expand towards them, and encroach on them and their surroundings, take effective decisions that guarantee heritage protection, while adhering to international charters in this regard, and not neglecting the societal and individual role and procedures of awareness-raising about the heritage buildings importance, and how much it affects the community's identity, and this can implemented by the following recommendations:

- Taking care of developing documentation methods and increasing this field's workers by training courses.
- Establishing research centres for the continuous documentation of the state of heritage buildings.
- Organizing local regulations governing expansion towards buildings and heritage centres.
- Organizing neutral international committees in the event of conflict, to undertake the task of preventing damage to heritage buildings and centres and documenting violations against them.
- Reinforcement of heritage buildings as much as possible to resist potential disasters in vulnerable areas.
- Drafting local laws that set strict penalties for any violation or sabotage inflicted on the heritage buildings and surroundings.

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Conflict of interests

There is no conflict of interest.

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