

Mechanisms of safeguarding urban heritage at risk - Mosul Heritage as case study

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ABSTRACT

Preservation of the cultural heritage of Mesopotamia civilization and the Iraqi architecture, especially urban heritage, is a national responsibility, and a wealth worthy of protection and attention. This national and international wealth is the responsibility of all organization and specialists in the world, and must be sustained for the future generations. This heritage is exposed to many dangers, and requires quick intervention to save it. So, the research problem appears from an ability of Iraqi decision makers to conserve this traditional heritage, which is under a grave danger, it is a threat throughout Iraqi historical cities by the forces of war, terrorism, globalization, poor knowledge, Uncontrolled investment, weak of experience and modernization on the cultural premises and building development which will eventually leads to blur local identity. So, research aim is to produce working mechanism to preserve the local Iraqi urban heritage, and specially Al Mosul Heritage which ruthlessly destroyed, and activate the possibility of benefiting from it, endeavour to stop wasting heritage stocks, distorting its originality, and integrated efforts between all relevant institutions with local and international partnerships in order to conserve it. As well as the benefits from mechanisms of preservation methods which applied in international experience, to be adopted in local experience. In order to reach a roadmap, it will save Iraqi Heritage and local identity from extinction.

Keywords: Preservation Methods; Iraqi Heritage; Heritage at risk; Architecture; Urban Heritage.

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1. Introduction

Megacities are crash points as a result of multi-layered conflicts that happened in the world, these conflicts will affect on urban development agenda, this is especially appearing for megacities in the post-war period. One of conflicts results, was destruction of urban heritage of these cities, which need roadmap to manage it, this destruction emerged clearly after second world war in response to excessive urbanization in the post-war period and their affect by new ideas. Many governments support conserving their heritage, and they changing their role of development plan and heritage management, that means the shared responsibility for conservation between all organizations [9] [20].

If we begin to look at the legacy of post-war architecture, we should consider not only preserving individual buildings, but also on other values that have contributed to the city's production, including the idea of society and its requirements that have earned the city's identity [6].

“The term heritage has different meanings to different context. World Heritage Convention classifies heritage into two categories: Cultural heritage and Natural heritage” [24] [7]. Therefore, Cultural heritage includes monuments, statues, memorial places, buildings, interiors and details, urban complexes and urban landscapes, which being a recognized with highly historical values. So, Cultural heritage appears very narrowly in urban strategies and practice, as part of urban renewal projects, because of conflict with its innovative implementation [22] [14].

Heritage can connect different generations as it is the source of social integrations and a sense of belonging. Preservation of heritage means to protect it from many dangerous effects, because the heritage is not renewed resource. So, preserving sustainable heritage is a conservation approach that preserves the most valuable

features, that contribute to preserve social capital and generate economic resources as well as enhance a sense of place and belonging [8] [21] [7]. Therefore, many threats around the world according to different situation will lead to increase the heritage problems, and minimize cultural diversity as well as reduce social cohesion. Because of the link between culture, identity and sense of place, “the alternative challenge is to promote built environments that promote cultural diversity, integration, equity, safety and social cohesion. Cultural heritage should be taken under consideration if we would like built environments that allow cultures to flourish” [14]. Now, cultural heritage is threatened by many risks over the world, and in Iraq especially.

2. Local Iraqi Heritage at risk

Iraqi Local architectural heritage occupies a privileged position in the mind and hearts of all people, and enjoys the pride of all generations as a distinctive and attractive product of past civilizations, although it is a man-made heritage, it is the result of the accumulation of time, it would be unfair that this human heritage did not receive the care and attention it deserves to keep on those traditional urban fabrics that make up the cultural property of the human existence. The importance of local urban heritage lies in being basically expression of Iraqi culture and civilization of the community and its relationship to its land, as well as, it is the image of the civilization for communities in the world. Preservation of the Iraqi cultural urban heritage is a national and international responsibility, in order to protect it, the research will focus on the most common risks that face it.

There are many types of risks faced the world heritages in general and Iraqi Heritage in particular, and historical review of any city -like Mosul- provides opportunity to investigate many challenges, such as:

2.1. Forces of globalization and modernization

Urban development is by no means limited to developed countries, but also to developing countries, and Iraq one of its. However, new conflicts that occur will affect urban areas in many Iraqi cities, stimulate the rapid growth of urban slums and increase pressure on services, influenced by ideas of globalization and modernization. Moreover, in international legal practice, control of the mega-city such as Mosul city is still linked to national power. At the same time, what might be called the dark side of globalization encourages Iraqi decision makers to get away from national thought [28] [15] [9].

2.2. Ignorance and poor knowledge

One of the problems of Iraq local heritage, face the dangers of profiling and non-personality, and neglect the vitality of the peoples and nations that express their lifestyle, as one of the main pillars of reflected identity, under the argument of modernity, the ignorance of the removal of what has been destroyed and inappropriate projects causes serious damage to this historical local heritage [25].

2.3. Weak of experience

Before 1980, Iraq specialist had good experiences in applying pool of knowledge and experience accumulated over the years, real benefits in conservation experiences, especially when the government had led this work, and that wasting these experiences generates many problems. Noting that in many cases there is no effective and flexible legislation with regard to architectural heritage and its association with city planning, in that case, the responsibilities will divide between all citizen and public authorities that are able to achieve this work [20] [25]. Now, many of specialist were retired or died, and new generation haven't applied experience to conserve heritage.

2.4. Uncontrolled investment

Iraq has not seen a real investment especially active in government and non-governmental investments in education, infrastructure, affordable housing and health, especially in the postwar periods, but emerge uncontrolled investment which forgets the cultural importance of the region, and neglects the provision of social welfare through the provision of services or public facilities, and focuses on investments of material profit only. Some Governments are often neglect heritage sites they are eager to get rid of, and the private sector is often not interest to investing in these heritage sites because of little return [20]. This uncontrolled investment led to destroy urban heritage, and will often lead to socio- economy conflicts and uncontrollable losses [25].

2.5. Forces of war and terrorism

After 2003, Some Iraqi cities have become part of the battlefields of war, they are the main area in which wars take place, and wars have become an urban phenomenon affecting cities and human societies. This is an important point facing the destruction of Iraqi Heritage, in order to save these indispensable heritage sites from the risk of degradation or destruction because of war and terrorism, Iraq must adopt active policies to protect and revitalize historical areas and their surroundings as part of development plan [11] [19] [3] [12] [9] [25].

International contributions to the reconstruction after postwar in developing countries and especially in Iraq have paid very little attention to the city problems, as well as neglect the potential causes of violent conflicts which affecting urban heritage. Crisis and conflict in postwar Iraqi cities such as Mosul appear at various levels, has a critical dimension, not only breaking the social fabric, but also in terms of changes in cultural identity and the local political system [4] [9].

3. Research methodology- Iraqi Heritage in postwar and crises era

The term 'postwar architecture' includes the achievements of architects from the end of WWII to the present day [22]. So, many questions arise here, how to deal with Iraqi postwar heritage? Is it still possible to deal with traditional methods of urban conservation, or does it need new mechanisms and methods? To answer these questions, several theses of preserving the postwar heritage has emerged frequently over the past 20 years as heritage preservation has become a distinct area of practice. The most important challenges facing the preservation of the postwar heritage are: Failure to recognize the importance of protecting heritage, Challenges of poor knowledge and expertise in maintenance, Social challenges and the capability to resilient, the shortage of common systematic approach to dealing with the postwar legacy, Decrease in government services. [20]

A few decades later, many challenges mentioned above were solved, which have to do with the postwar heritage, some of which can be used for modern heritage. where many countries have inventoried the postwar heritage and preserved only some important buildings, but this inventory is rarely inclusive, and still a lot of work to do in order to conserve fully context [20].

After reviewing Mosul Heritage problems after war, the research methodology seeks to analysis situation of destruction, and review the mechanisms of safeguarding which adopted in the world, prepared by international organizations such as (UNESCO, ICOMOS, ICCROM) and other organizations that contributed to the preservation and rehabilitation of a world heritage Due to multiple risks, especially what we can safeguard from postwar Mosul Heritage. So, many strategies that deal with the architectural heritage and its urban context are shown by the strategy of conserving heritage as a fully fixed case, treat heritage as a dynamic case that responds to contemporary requirements and adapting the urban heritage and its context to achieve identity and contemporary [1]. These strategies need practical mechanisms in order to safeguard the urban heritage, such as:

3.1. Destruction of Mosul Heritage

Mosul is located in the north, of Iraq, which is the second Iraqi governorate in terms of area and population. “It is famous and owns many archaeological sites, historical monuments and religious buildings. the most important is the ancient city of Nineveh, which contains of 486 historical mosques and landmarks of Islamic civilization, as well as 32 Historical churches and six monasteries belonging to Christian civilization” [26] and shown in Figure 1.

After capturing Mosul in 2014, terrorist forces have destroyed most of the city's historic sites and landmarks in an attempt to wipe out a civilization had more than 7,000 years old. The United Nations Institute for Training and Research -Operational Programmed for Satellite Applications (UNITAR-UNOSAT) and UNESCO published in 2015 a report on the assessment of damage to cultural heritage sites in Iraq based on satellite imagery. The second UNESCO International Expert Conference was held to follow up on the implementation of UNESCO's action plan for the urgent conservation of Iraqi cultural heritage [27].

In 2016 UN-Habitat released maps show the rate of destruction in the Old City of Mosul in particular and Mosul in general as a result of military operations to liberate the city from the forces of terrorism, where information indicates that at least 5,000 buildings and houses have been completely or partially destroyed in the Old City only, and satellite images show estimates that the old city has about 16,000 housing units, which means that the damage has affected at least one third of the area. Where damage appear in “more than 135 locations in the city were destroyed since June 2014, some completely obliterated” [26].

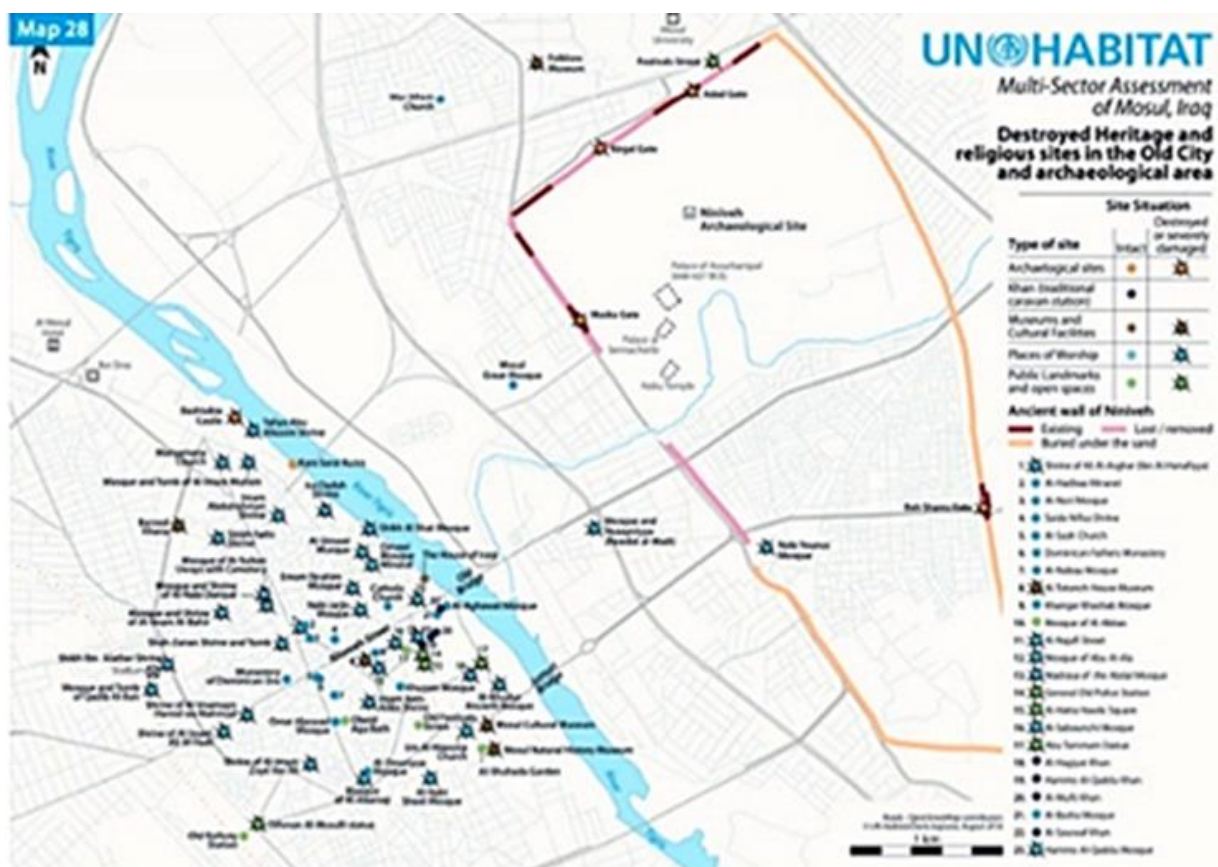


Figure 1. location of historical sites in Mosul [26] (UN-Habitat 2016, p83)

The old city of Nineveh was demolished nearly two years after terrorists took control of Mosul, and this systematic destruction of heritage is strategically motivated. “UN-Habitat and the Iraqi Tourism and Antiquities Commission estimate that approximately 37 important Islamic landmarks were devastated, partially or totally, inside the city of Mosul.”. In addition, religious buildings and historical centers of minorities were severely damaged, such as “removed or destroyed the icons of the Chaldean Church of the Holy Spirit, the Assyrian Orthodox Diocese Church, Al-Tahirah Church, and around 35 other churches” [26] and shown in Figure 2.

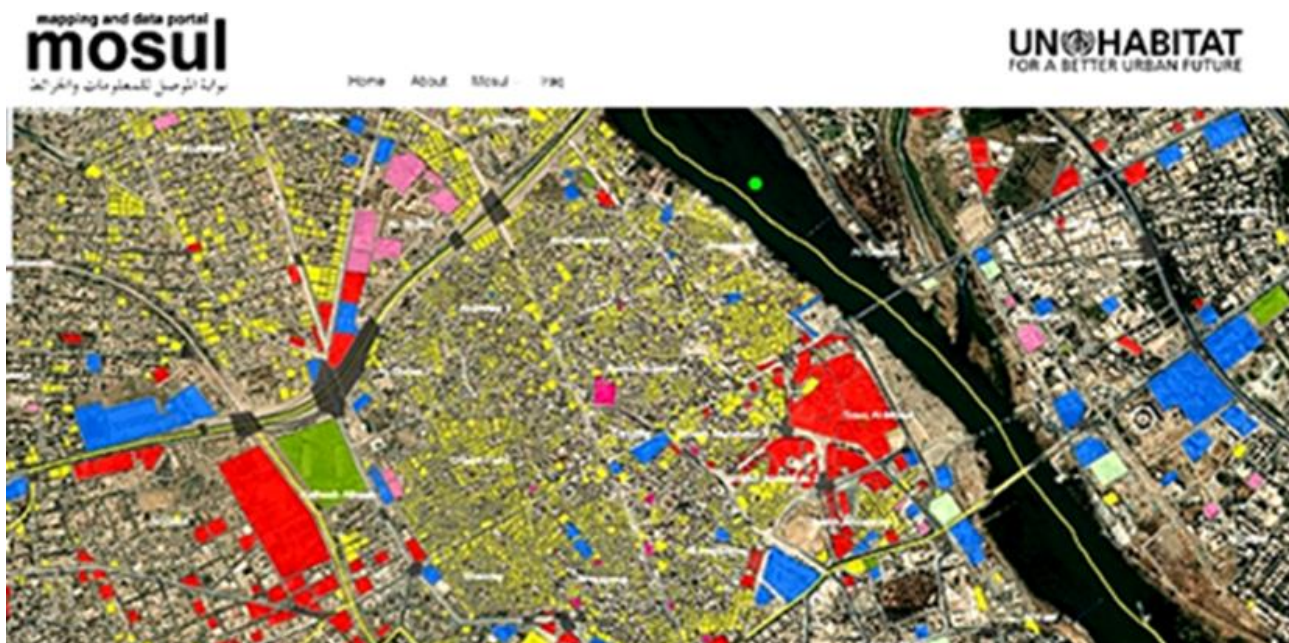


Figure 2. destruction of historical sites in Mosul [26] (UN-Habitat 2016 Mosul Portal)

3.2. Mechanism and principles to safeguard Mosul Heritage

Most cities in the world show contradictions between the desire to preserve heritage areas and urban development, housing programs and the requirements of the 21st century. Modernization pressures on world heritage (WH) areas have become an increasingly important issue for international organizations, where it seemed to focus on informal planning factors, furthermore as administrative shortcomings, because of the threats to cultural heritage in the city [13].

“Safeguarding the urban heritage means the identification, protection, conservation, restoration, renovation, maintenance and revitalization of historic or traditional areas and their environment” [25]. So, the effects of conservation procedures are studied according to standardized criteria for evaluating and comparing WH characteristics and management practices, where Strategies for regeneration, redevelopment and other urban interventions are shown from top to bottom in terms of their economic advantages [13], as well as the benefits of bottom to top interventions and its impact on the Mosul communities.

The stages to be presented are due to be followed in cultural heritage conservation projects and are based mainly on internationally adopted guidelines from ICOMOS ICCROM UNESCO. It also adheres to the standards of preservation adopted in recent practices in this area and seeks to introduce local institutions in Mosul to such practices and to encourage them to follow international standards in the preservation of cultural heritage. Adherence to these guidelines avoids cultural sites from irreparable harm. Cultural property is a non-renewable resource, and its preservation is essential not only for the preservation of history, but also for the future, as an economic resource and a social balancing factor that enhances the national spirit [16].

Diverse preservation practices will be addressed in terms of the definition, procedures and recommendations proposed, as well as the practices to be avoided. So, research methodology will focus on most important stages which lead to safeguard Mosul Heritage after this destruction:

3.2.1 First stage: Situation analysis of Mosul Heritage

In order to understand Mosul Heritage situation, the first responders are able to develop a contextual plan of action in order to identify the medium to long-term needs for cultural heritage safeguarding. Maybe Collecting reliable information during crises is difficult, essentially when it is separated and composed from uncertain sources. And so, it takes time to assess and analyze the Mosul Heritage situation before taking action to secure the cultural heritage, thereby gathering information and preparing a strategy to provide first aid in a way that minimizes damage to heritage and the protection of lives from danger.

3.2.1.1. Surveying and registration of Mosul Heritage

It is the first stage to proceed through a process that covers the historical survey for Mosul Heritage, and it is define as “the process where a number of sites and buildings that are belonging to a particular time period and distributed on a specific geographical area, within an arena timeframe for the different chronological ages”. and divided to “initial survey, which includes a preliminary inventory for what is existed, as well as, Field survey, which is systematic and important part of the survey” [2].

This survey Required for the total area of historical Mosul, as well as analysis of its spatial evolution. The survey details should include archaeological aspects, historical information, architectural details, demographic surveys and artistic information. This document must be developed that accurately documents buildings or clusters of buildings that must be carefully protected, preserved under certain circumstances, and the factors of their destruction to be diagnosed in exceptional circumstances. This would enable the Mosul authorities to stop any work that conflicts with the requirements of conservation [25]. This surveying not done correctly for Mosul Heritage till now, and limited benefits from new surveying technology, only the contribution of UN- Habitat.

3.2.1.2. Documentation, diagnosis and research of Mosul Heritage

The documentation is defined as a recording of the information stored and available for a heritage site or cultural property. Therefore, the need for a comprehensive review of the current system of Mosul Heritage is a very important issue. The information available on heritage includes systematic and integrated registrations, documentation and information management, and should not be done only before the start of a project to preserve a particular site or property, but should continue during and after the preservation process. This information forms the basis of follow-up, site management and maintenance and is the only way to pass on knowledge to future generations [16].

The rapidly changing events of Mosul situation and the risks of its heritage, documenting the tangible and intangible features of this property is even more important. Iraqi State should review their current documents from the perspective of their comprehensiveness (anticipating potential damage or loss) [18].

After all the documentation and research phases are completed, the diagnosis phase is an important step that should precede any preservation of a building or cultural property. The diagnosis is a classification of the building according to the state of its degradation, determines the cause and extent of its damage and reveals that there are urgent cases that require intervention. The multidisciplinary studies conducted during the documentation process allow for the identification of assumptions about the nature of the damage [16].

Mosul Heritage need to prepare a list of historical areas context with preserved buildings at multi planning levels, provide resources for protection, and any protection measures must be carried out urgently without waiting for full documents to be prepared [25]. Some photographic documentation done by youth people such as Eye on Mosul group, but Unfortunately, this stage of Documentation, Diagnosis and research of Mosul Heritage, not done according international charters, such as Sofia charter of monuments documentation 1996 done by ICOMOS, and absence of benefits from International experience.

3.2.2. Second stage: Conflict analysis, risk assessment and Disaster Response of Mosul Heritage

Conflict analysis can be defined as a tool to help identify the real causes of conflict, and to identify the causes that turn conflict into violence, which contributes to the damage to cultural heritage. Analysis of those affected by the conflict particularly Mosul's diverse communities, and analysis of the dynamics and causes of the conflict that happened, will contribute to the provision of first aid to the Mosul Heritage, as well as, analysis of the situation helps identify the most important historical sites in Mosul that require rapid on-site inspections, damage assessment and post-event risk assessment, which "includes visual examination and damage and loss documentation" [23]. Leaving the disaster of destroying Mosul's heritage untreated could cause more damage and loss of much of the city's memory and heritage, and it need:

3.2.2.1. Risk Assessment of Mosul Heritage

World Heritage is under numerous threats, and each country must ensure that the risks to which the property under its care are properly located are identified and that risk assessments are updated. The risks are assessed on tangible and intangible features. In accordance with the requirements of the World Heritage Committee, all properties now listed must contain a statement of exceptional global value, based on properly defined features, and submit it to the World Heritage Committee [18] [23]. Identifying and recording the damage and risks to Mosul's heritage in the aftermath of the disaster will help in the next response steps, but this stage not done.

3.2.2.2. Planning response and management of Mosul Heritage

The main objective of the management of cultural sites is to maintain their material value as they constitute an important tourist attraction. The effective exploitation of heritage components will undoubtedly support their economic growth and social fabric. As heritage is a non-renewable source, any project aimed at increasing national income must ensure that the authenticity and integrity of the heritage are preserved through accurate and sound management of its landmarks. Heritage sites are not isolated from their surroundings, they are located within a broad environmental, social, administrative and economic content [16].

An important thing in management is the legal ways to protect the postwar heritage [22], it requires the protection of historical areas and context in accordance with rules, methods, legislation and organizational structure of each country, which consists of conservative laws, and determine the official body responsible for its management, develop policy and guidance that develop seating standards [20] as well as, provide maintenance programs that must be carried out and the appointment of those responsible, and the identification of funding for conservation programs and their implementation [25].

Iraq had its own conditions and requirements such as, Antiquities and Heritage Law No. 55 of 2002, but there are many disadvantages in this law, one of its, it couldn't to submit the plans or conservation programs of the safeguarding mechanisms, where there should be a responsible authority to ensure the permanent coordination of all concerned, including the participation of the public concerned, and to determine who is responsible under the law for the authentication of documents. as well as, encourage the establishment of public and private financing agencies to protect historical areas and their surroundings, and provide grants, subsidies and loans to private sector owners and employees who do protection work, including tax exemptions [25]. The Iraqi state need to prepare an appropriate disaster response plan and risks to Mosul Heritage, providing strategies for

managing or mitigating them, explicitly taking into account the specific risks, including risks associated with urbanization, and submitting Mosul plan to the World Heritage Committee, periodically reviewing and updating it [18]. This conservation plan has never been initiated.

3.2.3. Third stage: Security and stabilization of Mosul Heritage

Security and stability include procedures that help contain damage, reduce risk, and bring damaged heritage a step towards recovery. This stage temporary and the treatment varies between tangible and intangible heritage, and aims to provide protection measures for the heritage of the affected during, so that full conservation treatments can be carried out.

Security and stability procedures depend on context and do not always follow a particular sequence, it is important to provide accurate documentation of the heritage and all activities to ensure stability, which cover (surrounding damaged buildings with a fence, placing a temporary roof over exposed buildings, converting architectural details into a safe storage place, treating the structure of the buildings of moisture, and providing temporary support for the structure of the damaged building). This stage needs cultural first aiders with adequate previous expertise in securing heritage in emergencies [23], setting priorities and assisting in the implementation of security and stabilization measures can be provided through:

3.2.3.1. Communication Protocols in of Mosul authority

Urban heritage is mostly protected by UNESCO, which established after WW II as one of the declarations of The Hague Convention on the Protection of Cultural Property in the Event of Armed Conflict in 1954. This Convention is regulating the preservation of cultural heritage, whether tangible or intangible, as consequences of the wars [10]. Protection and preservation of world cultural heritage became an international activity and a common approach, especially after World War II. The most important was the establishment of ICOMOS in 1931, the publication of the Venice Charter in 1964 as well as the World Heritage Convention in 1972, and others that contributed to the creation of an official international structure for preserving monuments and sites [17] [24] [20]. That will provide a system of international cooperation, saving the world heritage from disappearing. As well as the 1992 European Convention on the Protection of Archaeological Heritage. These conventions and treaties considered the use and damage to protected cultural sites to be a punishable offence under international law [10] [18].

Mosul authority should prepare the requirements for coordination and exchange of information between agencies and individuals, and this should be done at the regional and international level. UNESCO and advisory bodies like ICOMOS, ICRROM have resources to assist in the development of Mosul old city by effective national and international networks.

3.2.3.2. Capacity building for Mosul participants

Heritage is about the identity of the community, and increasing the capabilities of all participants will contribute to the care, use and maintenance of their heritage. Initiatives to increase knowledge and participation among the population, and the informed dissemination of local resources in ongoing management and guardianship, will increase the likelihood of restoring tangible and intangible features in the aftermath of the disaster. which is need to coordinate with first responders in order to implement the specific steps of action. Enhancing the knowledge and skills of workers through targeted heritage training programs will contribute to the protection process, especially in rapid response processes [18] [23]. The training includes restorers, archaeologists, architects, structure engineers, conservationists, anthropologists, as well as army forces, firefighters and others, to achieve stability in emergencies [23] [25].

Iraqi State should encourage and assist local authorities of Mosul in developing the potential of their cadres in seeking solutions to the conflict in order to safeguard their heritage.

3.2.4. Fourth stage: Early recovery of Mosul Heritage

The Post-Traumatic Recovery and Reconstruction Framework contains key elements through which the restoration of features that support the extraordinary global value of World Heritage property, Which Assessed by the advisory councils and the world heritage committee, these include: “Defining the supporting features of exceptional global value at the time of registration or later for the origin (before and after destruction), Documenting and recording the remaining and lost features of exceptional global value, Develop an action plan to restore tangible and intangible features and set the goals for recovery and reconstruction and It will include

the method data that determines the approach to re-establishing features and monitoring developments to enhance community cohesion and sustainability and to ensure the feasibility of future uses, Amendments to the management plan to reflect changes in exceptional global value attributes as appropriate” [18] [25].

Although Mosul had new master plan in 2008, but it needs conservation plan included with urban development or programs to remove slums and buildings that haven't architectural or historical values, that are not enough to be maintained, the treatment of expansions that contrast with context, and control over the granting of building permits according to integrated with urban context.

The analysis of Mosul urban context must be preceded by any new construction in order to determine the general character of the building group, its prevailing features, to make harmony through scale, colors, shapes, etc. Historical areas inside old Mosul and their surroundings should be protected from all kinds of distortion resulting from the installation of service poles and signs. This analysis not consider by Mosul authority and investors who begin to develop traditional markets.

3.2.4.1. Embedding of Mosul Heritage Protection

Conservation is the measure taken to maintain the status quo of a buildings to ensure its continued existences. Measures include maintaining, repairs, addressing environmental and structural degradation factors. It is divided into two main types in relation to the original material of the cultural site, namely: Preventive conservation as the preservation of the cultural property without adding or removing any part of its original components, this is achieved by monitoring the elements of the external environment surrounding the property that cause its damage and trying to limit or stop its impact on it. And Preventive measures as protection, maintenance and monitoring of the internal condition and external environment of the property and Intrusive conservation is the removal of spoilage factors, adding new materials such as stabilizers and fortifiers to support the property, and using materials to support it. In the absence of any other solution, it is possible to use materials that are close to reversible materials so that the entire property is not lost [16] [25].

Stakeholders of Mosul need to protect historical areas from the environmental dangerous happened from new technologies, and protect from all types of pollution, and reduce the damage caused by new functions.

3.2.4.2. Suitable Methods of conservation for Mosul Heritage

The conservation of historical areas requires applicable tools and methods, and since most heritage sites are owned and managed by governments and non-profit organizations, so, conservation measures and safeguarding should not cut off the social fabric. and uses Preservation, rehabilitation, restoration, revitalization and adaptive reuse or a combination of these procedures or processes [20] [5] [25].

Preservation includes the protection, maintaining and stability of the current form and materials and the integrity of a historical place or individual component, while protecting its heritage value. Preservation can include short-term and temporary measures to protect or stabilize the place, as well as long-term measures to prevent deterioration or damage [5]. Un example of the damage to the World Heritage Site represented in the old city of Aleppo, the UNITAR-UNOSAT began in preservation method through six high-resolution commercial images of satellite images that show the buildings on the site listed on the World Heritage List [27].

While Restoration is return of cultural property to the way they were at a particular time in their history. Usually, restoration takes place on sites that preserve most of their original architectural elements in their original sites only when there is good documentation of the original shape of the building to be returned [16] [5]. In Poland after World War II, the focus seemed primarily on restoration and the continuation of pre-war patterns and styles [22].

Rehabilitation includes the delicate adaptation of the historic place, while protecting its heritage value, which you can include replacing the lost historical features. The replacement may be a replica or a new design that is compatible with the style, age and character of the historical place [5]. There are multiple methods that can be followed to prepare a general plan for the rehabilitation of historic centers and buildings, and each method depends on the state of the city, the surrounding, and the community [16]. These methods and steps where appear in rehabilitation of Paris historical city.

Revitalization and Adaptive reuse should be accompanied with Preservation and restoration. Thus it will be necessary to maintain the right current jobs, particularly crafts and crafts, and to create new jobs compatible with the economic and social context of the city. These functions must meet the human needs without any damage of historical values [25] [20]. In Berlin, destroyed old buildings are often rebuilt with companies specializing in conservation and dealing with heritage areas, and they activate these areas and buildings with new activities and events in harmony with them [6] [5].

To safeguard Mosul Heritage and reach to recovery stage, It is possible to use more than one methods of multiple conservation treatments, by giving a clear idea of the basic objective of the project, Mosul plans need to use more combination between preservation, rehabilitation, restoration, revitalization and Adaptive reuse, it will be more appropriate according to the situation of the buildings after postwar damage, and their values, as well as, the availability of completed documents and drawings.

4. Results, discussions & conclusions

As a result of Table 1 and due to the lack of accurate and detailed inventories of Mosul's heritage, in addition to the lack of accurate documentation of its most important heritage buildings, it is necessary to involve the non-governmental sector in addition to the government sector to work to document that according to applicable international standards.

TABLE 1. Stages results of Mosul Heritage (Author)

Mosul Heritage		Globalization, modernity	poor knowledge, experience	weak of investment	Uncontrolled forces of war
1 stage: Situation analysis	Surveying and registration	limited surveying technology	Only Primarily surveying		
	Documentation, Diagnosis and research	no benefits from International experience	Photo documentation by youth people	not done according Sofia charter	
2 stage: Conflict analysis, assessment Disaster Response	Risk Assessment		no recording of damage		
	Planning Response and heritage management			conservation plan has never been initiated.	
3 stage: Security and stabilization	Communication Protocols			no protocol UNESCO ICOMOS,	no project or network
	Capacity building			need to develop cadres potential	
4 stage: Early recovery	Embedding Cultural Heritage Protection	no conservation plans within urban development	Control contrast expansions, building permits	protect environmental damage, pollution types,	determine, dominant features, harmony scale, etc.
	mechanism of conservation		use more than one methods of multiple conservation treatments,	need of restoration, reuse preservation, etc.	Need remove slums, value building

It requires integrating the cultural heritage of Mosul with urban development plans, utilizing all urban renewal strategies for historic city centers, and enhancing the identity of the community by strengthening social ties and improving living standards for people living in historical areas. As well as authorities must develop educational and training programs for all the relevant cadres. The reconstruction and revival of the urban heritage of Mosul needs to integrate the various conservation mechanisms with the physical and non-material cultural patterns, in order to achieve economic development, support tourism and cultural projects, in addition to preserving the lifestyles of the original inhabitants and improving their living conditions in the region, in order to contribute to the preservation of this important heritage. This analysis not consider by Mosul authority and investors who begin to develop traditional markets and other historical districts.

In order to achieve the safeguarding of Mosul's heritage which is under risk, Iraq needs to develop a comprehensive plan to protect historical areas and their surroundings, and this paper considers as action plan

that can be applied to protect the heritage of Iraqi cities in general, and the city of Mosul in particular, and has been based on international proposals with local privacy.

In Mosul, there are many types of heritage include (archaeological ruins, traditional heritage and modern heritage). Protection is not only for the historical buildings of Mosul, but its surroundings must be protected, and in certain cases the entire heritage area of the historic city of Mosul is protected from all damage, especially resulting from inappropriate use, unnecessary additions and incorrect changes. The practical and internationally adopted approach must be taken in the restoration and integration work to connecting the different parts of the buildings.

This plan will depend on the paper results, include: conservation of heritage buildings, combination between preservation, rehabilitation, restoration, revitalization and Adaptive reuse, protection of the urban fabric by land divisions and street network, respect for the nature of historical spaces and street characteristics and the lack of new streets resulting in the demolition of heritage buildings, setting architectural parameters for any new building in terms of height, building materials and architectural design, engaging communities and informing them of new decisions.

Acknowledgements

The research recommends to preparing a critical assessment to develop the rehabilitation efforts in all areas of Mosul for the purpose of avoiding mistakes and raising the success rate in the future, updating laws and regulations on the protection of historical areas, including the Antiquities and Heritage Act no. 55 of 2002, particularly those relating to the requirements for the development of administrative plans for sites nominated or potentially nominated for registration in the UNESCO World Heritage List, clearly defining the roles and responsibilities of those involved in their own revival and government. The formation of bodies at the local level of Mosul city and the national level of Iraq to coordinate between the relevant institutions, The initiative to prepare periodic and preventive maintenance programs, management of awareness campaigns for the local community in Mosul and training and rehabilitation programs for workers in the field of cultural heritage, the return of original citizens' to residence in the old historical city of Mosul, integrating the revival of the area with the development of infrastructure and modernization, the initiative to implement pilot projects, like a respected and appreciated experience of ICCROM for the restoration of the Al Hadbaa Minaret, the Al Noury Mosque and the Al Tahera Church, strengthened international cooperation and strengthened the ties between specialists from different regions of the world. It is Shared Responsibility to Safeguarding of Iraqi Cultural Heritage which need international project like respected Safeguarding Syrian heritages ... especially ANQA project and AMAL project done by ICOMOS. As well as establish (Bank of Iraqi Heritages- mechanism of documentation and recording of Iraqi Heritages and successful methods of implementation to survive heritages in risk), with governmental organizations and non-governmental organizations, in order to record urban and architectural heritages through drawings, photos and explanations according the Charter of Sofia in 1996, to deposit copies of publications to UNESCO, ICOMOS, ICCROM and relevant organizations.

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