

# Lost and Added Values in Conserving Vernacular Architectural Heritage: Insights from Iraq

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## Abstract

In Iraq, vernacular local architectural heritage faces serious challenges. These include social, economic and construction dimensions, as a result of the obsolescence witnessed by the heritage architectural products, the change in people's lifestyles, and technical developments.

This study examines the process of preserving an architectural heritage product may be accompanied by changes in its values through adding a positive value to its original previous values, or the loss of some of the original values. Preservation is of two types: The first, the positive, is the one that preserves the original values and adds positive and good values to them. The second is the negative preservation, which is the preservation in which some of the original values of the architectural heritage product are lost or negative values are added to it that are not appropriate or underestimate its original values. The study followed the historically descriptive method and tested the hypothesis through two local urban conservative projects.

The research concluded that good conservation of architectural heritage is linked to the quality of positive or neutral values. These were visible in the two projects examined.

**Keywords:** conservation, architectural heritage, lost values, added values, conservative values.

## Introduction

Today, vernacular architectural heritage suffers from a loss in their moral or material values when the structural conservative interventions, the addition of new values through the functional conservation intervention or the conservation of the original values freezing and weakening of heritage are carried out. Indeed, there are three outcomes of conservation: removal, addition, or preservation, and they result in either an addition or a loss of values. Thus, in the modern society, the concept of values has become a major topic of discussion. In the era of postmodernism and post-ideology, the search for values, meanings, and the sources has become an urgent issue in the field of heritage conservation (De la Torre, 2013)

The concept of architectural heritage has been classified according to the European Charter of October 1975. Archaeological heritage includes the most significant buildings from

the historical, social and technical points of view. Groups of buildings may include homogeneous buildings as well as a complex set, whether they are in the countryside or the city. Historical sites include natural places or those formed by human interventions with specific characteristics. They represent historical, social, economic, artistic, and technical aspects. (Council of Europe, 1985) In fact, architectural heritage is a living and tangible evidence that carries the moral and material values as well as the chronological character of a particular era. It is considered to be a source of inspiration and knowledge for generations to come.

The study focused on the role of the values concerned with sustainability and continuity of heritage buildings. The Cambridge British Dictionary defines the concept of conservation as the protection of Nature, animals, and plants, and also adds to it the important and distinctive heritage structures as a continuous object. Golkamani points out that "it as an on-going responsibility, which is an integral part of the management of places of cultural importance" (Golkamani,2011:11). In fact, conservation is a means of transmitting valuable messages over time and the notion of conserving heritage is associated with the concept of value.

The aim of this study is to raise awareness of the missing, added, and neutral values resulting from the use of conservation mechanisms. Its objectives are:

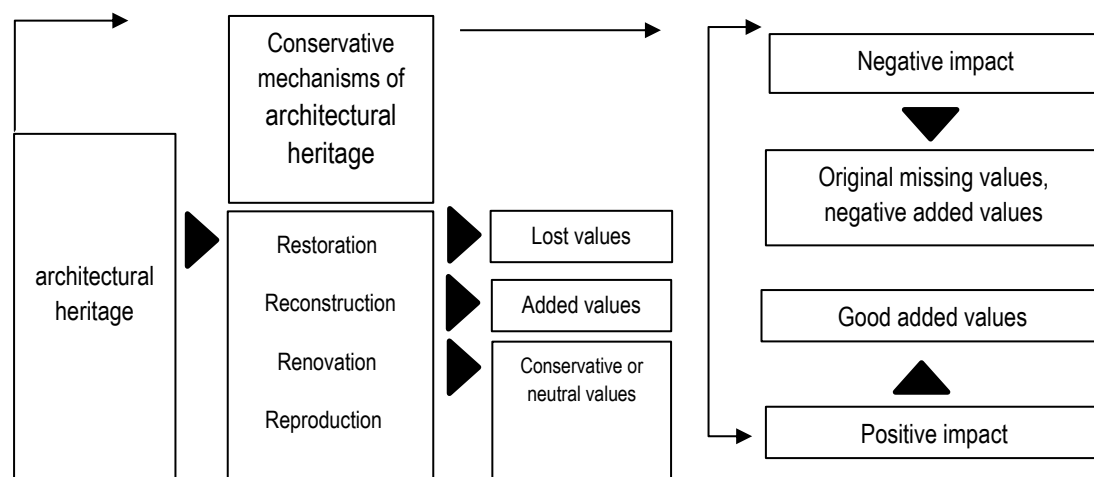
1. To construct a meaningful theoretical framework to understand values in heritage.
2. To ascertain a hypothesis as follows.

### The Measurement Indicators and the Hypothesis

This research hypothesises that the intervention to conserve an architectural heritage is in three directions that affect the value of those original heritage and that they are positive trends when the added values are good and positive enabling the heritage buildings to keep up; they are negative when the values are missing or offensive; they are neutral when the added values are freezing or weakening the values of the heritage .

To measure the effectiveness of the hypothesis, the study identified the three main terms: missing, added, and neutral values (Table 1).

### The Structure of the Study



**Fig. 1:** The structure of the study

Source: Author

## The Theoretical Framework

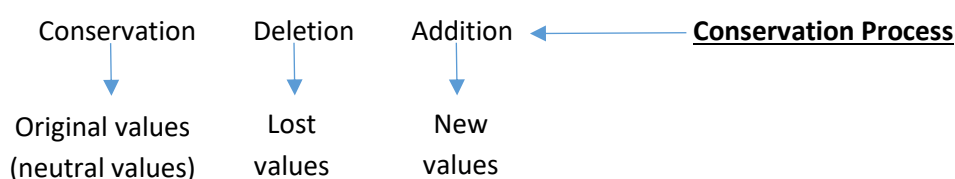
### Values and their Relations to Architectural Heritage

Under the mechanisms of conserving architectural and urban heritage, conservation processes add new values, conserve, or abandon existing values. In this context, the process of sorting and evaluating the quality of values plays an important and major role in all measures related to architectural and urban heritage. Fielden (2007) points out that the first step in any conservation program is to define the goal and then prioritize the curators of the buildings to understand the implications of conserving that heritage.

Studies show that there are at least forty urban heritage values (Taher Tolou Del et al. 2020). The most important of them are:

Cultural values	symbolic value	pride value	demolition value	educational value
economic values	architectural value	conflict value	unwanted heritage	
Identity values	scientific value	human value	moral values	universal value
historical values	uniqueness value	perception value	donated value	archaeological value
Social values	functional value	entertainment value	sentimental value	resilience value
integrity	spiritual value	political value	greatness value acquired values	local value
aesthetic value	heritage value	psychological value	hegemonic opinion	scenic value
originality	contextual value	rare value	educational value	tourist value

Through the three processes, those values that determine the positivity or negativity of a conservative intervention are manipulated. In this research, a group of literary references that dealt with the concept of values for architectural heritage are discussed, and then the conservation mechanism used are evaluated, whether negative or positive.



### Literature Review

The occupants of heritage buildings have a major role in the sustainability of heritage buildings, but there is a problem in the lack of awareness among the occupants and the lack of information among decision-makers and officials. The best solution to these two problems is to develop a sense of belonging and a sense of identity among the occupants. As for decision-makers, the solution to their problem is related to decision-making by specialists, as it is required to develop master plans for cities and to be competent with the help of those who have a large amount of information related to urban heritage. Thus the two problems are: the negative impact by the occupants of the buildings, which leads to the loss of the original values in the building, for example, the values of use, and the second problem is related to decision-makers

(officials) on heritage products, as their negative interventions affect conservation processes negatively, The first needs emotional awareness support for the architectural heritage, and the second needs to study the intervention in the preservation of the architectural heritage (Al-Sunbuli & Al-Baqi, 2022).

Munawer (2017) has dealt with the ways of continuous attempts to return heritage products destroyed by ISIS during the war in Syria, and the reconstruction of heritage sites stemmed from political decisions, The process of destruction was large, so the reconstruction was loaded with new values, such as ISIS's attempts to turn churches into mosques, which are radical attempts that erase the historical evidence of the Christian religion to replace them with new values that were made for the goals and interests of certain parties (Munawer,2017:33). An example, of this is the Arc de Triomphe duplicate of its originality in London, as originality here is not just a theoretical and practical matter, but requires the involvement of the local community in making the necessary decisions to rebuild the destroyed heritage product to achieve community participation in building new values for the products. The thesis analyzes the influence of the political aspect in making negative decisions about heritage products and achieving their personal goals in reconstruction (Munawer, 2017).

Al-Allaf (2014) has pointed to the gradual transformation of the concept of conservation to sustainable conservation, and has defined sustainable preservation as the procedures for preserving property and heritage elements and extending their physical life. He divided conservation policies into two parts: preventive preservation and therapeutic conservation, and relied on both sections on the restoration mechanism that preserves the original values of the architectural heritage. Since the beginning of the idea of conservation at that time, architects have relied on the restoration method, through which a building is returned to its original form; extraneous elements are removed, and torn pieces are replaced with new ones similar to old ones on the basis of historical evidence and real documents (added values that delight architectural heritage), Currently, structural restoration is carried out by adding new materials by relying on elements of sustainable positive conservation, which include refinement, reconstruction, redevelopment, repair, renovation, recovery, and replacement (Al-Allaf, 2014).

The office of Quimby McCoy Preservative Architecture has presented conservation guidelines and principles for the restoration of residential properties and historic monuments listed in the City of Texas National Registry in the City of Lancaster, the purpose of which is to provide effective cost-cutting options for rehabilitation or renovation to property owners, In addition, they provide thoughtful reforms linked to historical characteristics and achieve sustainable conservation. Their directives were general design guidelines related to the construction process of heritage buildings using appropriate preservation mechanisms by adding new values that delight heritage, preserving the original values of heritage, or adding new values that harm the architectural heritage due to negative preservation (Quimby McCoy Preservation Architecture, 2010).

Gokmen explains that most heritage buildings lose over time from their functions due to lifestyle and contemporary changes, addressing them through conservation methods and contemporary additions, and evaluating the proportions of contemporary additions from restoration processes. Conservation practices may be inefficient due to the unavailability of traditional materials or insufficient financial resources as well as manpower. Thus, when new functions are added to a heritage object, it faces two problems. The most important of them is that the new function is not compatible with the original form of the heritage product, so it becomes added values that are offensive to the heritage. Thus the preservation is negative. The second problem is that contemporary additions surpass the heritage buildings and ignore the charters of historical restoration and rely only on the original design approach, which entails many problems for the historical structure that leads to the loss of original values and the addition of contemporary values. Therefore, there are two problems that arise from heritage

products when preserved, and both problems depend on the contemporary addition of architectural heritage and the preservation of original (neutral) values (Erdogan, 2021).

Shibing Dai & Yan Zhong (2019) intervening in the preservation of the authentic fabric of the architectural heritage helps in preserving the values of the heritage, and non-interference leads to the loss of those values. One of the most important interventions is to preserve the surface of heritage buildings through three types of conservation methods (sacrificial plastering, staining or coating and sacrificial mortar repair or repointing). The plastering process is stickers that are glued to restore the broken parts, but this process faces criticism by the community when one of the temples was painted. The lime plaster did not give the appearance of the temple and it began to lose its emotional value. There, new values have been added that harm the heritage with the loss of original values. Since the architectural heritage is still a living building, it is difficult to deal only with a demonstration; it is necessary to interact with the members of that building in order for the preservation processes to be positive.

It has been noted that there is a gap in literature on conservation processes that examine issues such as those that lead to negative preservation through the loss of positive values or added values that harm the architectural heritage or neutral values that are the original values that may weaken the architectural heritage from continuing. Most research focus on sustainable positive conservation with a knowledge gap in the impact of architectural heritage preservation methods.

**Table1: The Concepts extracted from studies (in Iraq?)**

Source: Author

No	Thesis	Thesis's content	Main terms	Secondary terms	Potential values
1	Maye M. Alsunbuli & Sahar M. Abdulbaqi, 2022 "The role of building occupants and decision makers in the conservation process in Iraq"	The study focused on the negative impact of building occupants and decision-makers (government officials) on heritage products; The first needs emotional awareness support in the architectural heritage, and the other needs the intervention of specialists in the architectural heritage	Lost values	Negative conservation	—
2	Noor Munawer (2017) "Rebuilding the Cultural Heritage in Conflict Areas"	The study emphasized the principle of authenticity and community participation in the process of heritage reproduction, in order to achieve new values that serve the production and the public interest.	Added value	Negative conservation	—
			Added value that tarnish the historical heritage		
3	Emad Al-Allaf (2014) "Sustainable Urban Conservation"	The study focused on structural conservation and the new materials it adds to replace the worn-out parts of the heritage building, based on the principle of preventive restoration. The study relied on a set of elements in achieving sustainable positive conservation, which are: (refinement, reproduction, re-enactment, redevelopment, repair).	Conservative values	Positive conservation	Originality
			Added values that delights the historical value		Sustainability
					Scalability
4	Quimby McCoy (2010) Preservation Architecture,	The study is a general design guidance in regard of the construction process of heritage buildings using appropriate preservation mechanisms	Conservative values	Positive conservation	Sustainability
			Added values that delights the historical value		Social participation
					Scalability
			Added value that tarnish the historical heritage	Negative conservation	—
			Lost values		

5	Banu Gokmen Erdogan (2021) "An Evaluation of Contemporary Additions to Re-functioned Architectural Heritage"	The study indicated that there are two issues come cross the architectural heritage when the conservation intervention, and both issues depend on the contemporary addition to the architectural heritage.	New modern values	Negative conservation	—
			Lost values		
6	Shibing Dai& Yan Zhong (2019) "Sacrificial Protection for Architectural Heritage Conservation and Preliminary Approaches to Restore Historic Fair-Faced Brick Façades in China"	The study includes intervention in preserving the appearance of architectural heritage and its impact on heritage values	New modern values	Negative conservation	—

## Background Studies

### 1. Mechanisms and Methods of Conservation and their Impact on the Three Values

Urban Conservation is one of the types of conservation concerned with the permanence of heritage buildings and facilities that carry certain values and have an important impact without changing their appearance, depending on the methods used for conservation. (Al-Haj & Al-Allaf, 2013:72) Previously, urban conservation was concerned with historical and aesthetic values, but recently, new values have emerged, the most important of which are the cultural values and emotional values. These are various and relative according to the value and importance of the place (De la Torre, 2013)

Conservation mechanisms vary according to the type and condition of the heritage or urban heritage, and include the following methods:

1. **Reconstruction:** Rebuilding the building to its original condition that it previously had, and the reconstruction process is distinguished from restoration by introducing new material .(The Burra Charter, 1999:2)
2. **Restoration:** This involves rebuilding old buildings to the original condition in which they existed in the past.
3. **Renovation:** This includes the use of modern materials to bring antiquity to a state, close to its state at the time of its creation (Podrigo, 1990)
4. **Reproduction:** This is the process of copying through the repetition of the original architectural heritage: "it means making a copy of an existing or previous structure or place, or building general representations of typical features or structures." (ICOMOS New Zealand Charter for the Conservation of Places of Cultural Heritage Value, 2010:6)

### 2. Architectural Heritage that need to be Conserved

By reviewing the most important international charters, including, "the Athens Charter for the Restoration of architectural heritage (1931), the Venice Charter for the Conservation and Restoration of heritage, the Declaration of Amsterdam (1975), Florence Charter for the Conservation of Historic Gardens (1982), and the ICOMOS Charter of Protection and Management of Archaeological Heritage (1990)", the most important aspects of architectural heritage, can be summarized as follows:

1. The heritage building should have an important impact on the history of the nation, whether it was positive or negative.
2. Whether the historical impact of the heritage is new or ancient .
3. It may be a permanent or temporary residence for a figure with an important impact on the history of the country.
4. It represents an important transitional stage, with historical and contemporary architectural values.
5. A construction of functional value that has stopped, for example, streams of springs or small rivers...etc.



6. An interesting historical district associated with important events and personalities.

Recently, the criteria and conditions have been established for the inclusion of properties in the World Heritage List, in order to evaluate the properties and guide countries to protect and manage them. Ten basic criteria have been set for inclusion in the World Heritage List, six of which are related to architectural heritage, and four are related to Nature reserves. These criteria can be summarized in a table of criteria for architectural heritage as follows:

**Table 2:** The most important standards relied upon in determining the values.  
Source: Author, based on Al-Shazly & Al-Ashmawi, 2019:29.

Standard No.	Standard's content	Value indicator	Available values
1	A masterpiece of genius and human creativity.	Material perception indicator (Shape, image.)	Aesthetic value
	Have a high level of technical or technological skills.	Sensual perception.	Normative Value
2	The embodiment of an idea or concept acquired from another area or from another field that led to a transformation in the creativity of the original speech. It shows the local and cultural fusion.	Cognitive indicator / gaining experience.	Academic value
3	Represents living or buried traditions and also expresses construction methods. It expresses the layout of the place and urban patterns.	Reflection of beliefs, sense of identity and belonging.	Cultural value Social value
		Religious events, holiday celebrations, periodic festivals.	
4	Connection to a fateful period in human history It represents an important stage of history, whether it is a political, economic, artistic or scientific.	Expressive indicator (helps in interpreting and understanding the character of the past)	Cultural value
		Communication indicator (The building achieves a connection with the past and recalls the memories of the historical event.)	
5	It has an exceptional culture Measuring changes that affect the property and are subject to irreversible changes, of which it acquires exceptional value	Integration between the heritage and site.	Contextual value
6	It expresses a religious or national symbol that achieves positive values when looking at it, with months of awe and wonderment, and to recall memory.	Emotional and sensual connotations.	Emotional value
			Social value

### 3. Conservation Laws in Iraq and their Implications

There are many laws, legislations, and organizations that are concerned with the conservation process around the world, as their mission is to determine the importance of the building, district, or heritage. However, the focus of the study is on conservation in Iraq. According to legislation, any building that has been built before more than 200 years is considered a historical building, while any building that has been built for less than 200 years is considered a heritage building (<http://iraql.d.hjc.iq:8080/LoadLawBook.aspx?SC=15>). There are also legislations that prevent the owner of a building from disposing of it (the building

specified by the specialists) stipulated in the Article 28 of 2002 by the Ministry of Culture, the General Authority for Antiquities and Heritage for the year 2002:

1. It is not permitted to encroach on heritage buildings, demolish them, change their profession, or cancel their job that granted them the status of heritage.
2. It is not permitted to cancel the heritage character of a heritage shop existing in the property of others by abandoning it, and the General Tax Authority shall estimate the rent allowance in the event of a dispute between the lessor and the tenant in order to preserve the heritage shop and prevent its demise.
3. It is not permitted to demolish buildings covered by preservation or documented, rebuild, restore or change their use except with the approval of the archaeological authority and a license from the participating authority that ensures harmony with the architectural characteristics and general standards of the preservation area and the documented buildings and their preservation, and decides to prevent the license within 30 thirty days from the date of submission of the application (Ministry of Culture, Antiquities and Heritage Authority, 2002: 28)

Often however, the cost of restoration could be exorbitant, and this may burden the owners. Moreover, the recent conservation interventions of the competent authorities in Iraq have taken decisions that have led to the loss of many heritage buildings and traditional fabric as a result of ill-considered plans. In order to reduce this phenomenon, interventions have been made by institutions that have developed laws to preserve urban identity.

Some studies and field scenes have confirmed the damage that have befallen the old houses which have been transformed into shops and warehouses, which contradicts their importance (Mahmoud, 2012:92). In fact, one of the important reasons why conservation operations have been negative is the decision of the authorities. Among the negative examples that exist include what the Mayoralty of Baghdad did in 1942 by removing the largest part of Al-Rashid Street to make it straight. There are also similar projects, such as the construction of Queen Alia Street (Al-Jumhuriya Street), which led to the removal of 2,000 heritage houses and many mosques (Al-Igeeli, 2012). Therefore, urban renewal processes have a great impact on the planning of cities and the disappearance of their first features, and the development of border laws that can participate in positive conservation processes that prevent encroachment on architectural heritage.

### Research Methodology

The research adopted the descriptive historical measurement of projects, depending on the observation method, by presenting all verified information in a descriptive manner and analyzing it within an architectural and urban equation, and to measure the effectiveness of the hypothesis, The research identified three main vocabulary that include the mechanisms of conservation intervention: Restoration, Reconstruction, Renovation, and Reproduction while the secondary vocabulary is: missing values, added values, and neutral values (Table 3)

The three stages of the research are as follows:

1. **The first stage:** includes a general description of each sample supported by detailed drawings, and based on the above different interpretation of the selected samples. This information was analysed according to the measurement variables. It also includes the paragraphs extracted from the descriptive notes of the sample, and provides a more comprehensive picture of the situation.
2. **The second stage:** measuring the variables with numerical values (-1,0,1), as the number (1) represents positive values, and the number (0) for conservative neutral values, while the number (-1) represents the negative values.
3. **The third stage:** analysing the results and collecting sample values in Microsoft Excel.



## The Research

### The Case Studies

This research involves two case studies as follows.

1. Rehabilitation of the Umma Garden and the Freedom Monument) in Tahrir Square in Baghdad, 2022&
2. Al-Rasheed Street Revitalize Project in Baghdad 2022

### The Basis for Selecting the Case Studies

Two local urban projects were selected according to the indicators that imposed the hypothesis as follows.

**Table 3:** Indicators derived from the theoretical framework

Source: Author

Main terms				Secondary Terms			Potential Values
Mechanisms of conservative intervention				Lost values	Added values	Conservative values	Negative values resulting from the loss of the original values in the heritage building.
Restoration	Reconstruction	Renovation	Reproduction				Positive values resulting from the addition of values enabling the heritage to cope
							Negative values that tarnish the historical heritage.
							Conservative values to the originality and identity of the historical heritage.
							Negative values resulting from weak values that freezes the historical heritage.

## The Project 1: Rehabilitation of the Umma Garden and the Freedom Monument in Tahrir Square in Baghdad, 2022.

### Description of the Project

The Freedom Monument, by the fine artist Jawad Salim has received extensive fame that no other monument has achieved in Iraq, the Arab world and the Middle East. The monument was associated with an important historical event, which was the establishment of the republican regime and the fall of the Monarchy on July 14, 1958, as Iraq was waiting for the sign of the end of an era and the entry into a new one. The story of this memorial began in early 1959, when the Prime Minister Abdul Karim Qassem received a proposal to erect a monument Memorial in Iraq to commemorate the founding of the Republic. Qassem communicated with the prominent architect at the time, "Rifaat Chadirji", and was inspired by him in particular, as Baghdad witnessed mass demonstrations against the counter-revolutionary movement in 1958. Chadirji wanted the monument to symbolise all people and to express that

they were heroes of the revolution: those who stood against any political party that wanted to harm them (Jabra, 1974).

Al-Chadirji (who died on April 10, 2020) began implementing the monument project, as he, the sculptor Jawad Selim, and the fine artist Qassem were authorized to carry out the project without any political influence or prior determinants.

Selim designed the memorial on a paper ground plan (sketch) of several interconnected statues over an area of 50 meters, and sent it to Chadirji to present it to Abdul Karim Qasim. (Jabra, 1974)

If we look at the Freedom Monument from the Southwest side of the Umma's Garden, and the opposite (artistic painting) from the Northeast side adjacent to Al-Tayaran Square (by fine artist Hassan Faeq), we find that they express the reality of distress and tragedy, the reality of the Eastern people and Arab culture, terrorism, political parties and organizations. They are two images of political strife, violence, and circumvention of positions that left many victims in denial of rights and encroachment. Therefore, the Freedom Monument expresses the truth since Allah (God) created Adam and his descent into the land of Mesopotamia, extending to the present (Al-Khazraji, 2020).

### Rehabilitation of the Freedom Monumen:

The monument was suffering from neglect, and the stones had not been maintained despite the passage of a long period of time and the loss of many pieces. Thus the advisory office of the University of Baghdad prepared a structural study, and it was examined by many specialists. It became clear that it is impossible to replace the missing pieces. (<https://www.aljazeera.net/amp/arts>). The monument was re-clad with "Travertine" stone, of Turkish origin, which is of the same quality, dimensions, and size as the previous stone. There was no change to the technical specifications. The biggest challenge was carrying out the maintenance without compromising or taking down the sculptures. (<https://www.mawazin.net/Details.aspx?jimare=204986>)

After the completion of the process, the restoration process faced a torrent of both rejection and acceptance, despite the fact that the added material was structurally close to the colour of the original stone. In addition, the nation's square near the monument was redeveloped



**Fig. 2:** The Freedom Monument before and after the restoration

**Source:** alaraby.co.uk, 2022

## The Project 2: Al-Rasheed Street Revitalization Project in Baghdad 2022

Al-Rasheed Street is located on the Rusafa side of Baghdad, and it represents the main or biggest pulsating artery of Baghdad. By observing the map of the district, it was found that Al-Rashid Street is divided into five distinct areas as a result of the bridges that were built in 1939. The five parts include: "Al-Sinak, Al-Murabba'a, Al-Suq, Al-Haydar Khana, and Al-Maydan" (Al-Qaisi, 2016).

### Revitalizing of Al-Rasheed Street in 1985

A project to renovate the city centre was launched by adding multi-story car parks. Through this project, three buildings designated as car parks were demolished. At the same time, two bridges were constructed, one in Sinak and the other in Bab al-Moadam, which resulted in a significant negative impact on parking lots due to the great discrepancy between the urban character of the Old City and the skyline of the car park. As for the Sinak Bridge, which was built in a way that lacks urban and aesthetic values, the "frustrating urban landscape" was completed by adding a car park that does not match the contextual values of the site.



**Fig. 3:** The negative impact of parking lots on the height of the urban landscape shows the loss of contextual value

Source: Al-Waeli, 2017



**Fig. 4:** The straightness of the Al-Sinak bridge before and after its construction

Source: Repeat

### Al Rasheed Street in 2008



The first piece of news was published in Baghdadna newspaper (Fig. 4), “the provincial council launches the plan for the development of Al-Rasheed Street,” but it is Baghdadi’s dreams and wishes that were neglected without knowing the reasons. Since then, the neglect has led to the dissolution of the old buildings, and it has become difficult to control them, which has led to their demolition. The regeneration method was used to change its function (Al-Waeli, 2017).



**Fig. 5:** The publication of the first news with regard to the development of Al-Rasheed Street in Baghdadna magazine for the year 2008.

Source: Al-Waeli, 2017



**Fig. 6:** The disintegration of old buildings, many of which were removed as a result of the Baghdad Municipality's neglect of the decision issued in 2009 to develop Al-Rasheed Street.

Source: <https://caugh.org/al-rasheed-street,2018>

### Al Rasheed Street in 2019

The mayoralty of Baghdad announced the rehabilitation and development of the Al-Rasheed Street, and the rehabilitation works included: "Restoration of poles, rehabilitation of hallways and replacement of the sidewalls mould, cladding Al-Nahr Street, designing carts for vendors, unifying the facades of buildings, establishing a garden near the Arab market to add an aesthetic touch to the street" (Mayoralty of Baghdad, 2019).



**Fig. 7:** The rehabilitation of Al-Rasheed Street before and after 2019  
Source: Author

The main objective of the plan was to restore life to the historic centre of Baghdad, which reflects the civilization of the city, and to stimulate economic and social potential. But this process is not achieved by painting buildings, replacing sidewalls, restoring windows, planting gardens or installing lights...etc. These are just patch worked operations.

This stage represents the model of measurement and collection of values, both negative and neutral values.

**Table 4:** The measurement model  
Source: author

Value symbol	Possible values	Key vocabulary			Key vocabulary			
		Conservative values	Added values	Missing values	Protected intervention mechanisms			
					Reproduction	Renewal	Rebuild	Restoration
The first project: (Rehabilitation of the Umma Garden _ Freedom monument) in Tahrir Square _ Baghdad, 2022								
-1	Negative values resulting from the loss of historical value of the original material	Memorial value, symbolic	Aesthetic value	The value of the original building material (original stone.)	Copy of the original stone material.	---	---	Cladding the monument with Travertine stone, of Turkish origin,
1	Aesthetic value							

1	Positive values resulting from the addition of values that enhance production and enable it to keep pace and continue			Promoting (social values) through new events and activities					and it is of the same quality, dimensions and sizes as the previous stone.
0	Memorial value, symbolic								
The second project: the project of reviving Al-Rasheed Street - Baghdad 1985									
1-	Contextual Value	Missing value	Social value, collective memory	Functional Value	Contextual Value		1- Renovation of the city centre by adding multi-storey parking 2- Construction of two bridges, one in Al-Sinak and the other in Bab Al-Mu'azza m	Demolition and removal of three historic buildings and construction of parking lots on site	—
1-	Historical Value				Historical Value				
1-	Urban Value				Urban Value				
1-	Heritage Value				Heritage Value				
1-	Aesthetic Value				Aesthetic value				
1	Functional Value								
0	Social Value								
The second project: Al-Rasheed Street Revival project – Baghdad 2008									
1-	Loss of all Value	Abandoning Heritage buildings	—	All Value		Removing old historical buildings due to their neglect or keeping heritage buildings and leaving them	Construction of new buildings with new function	—	
-1	Survival Value (architectural heritage)								



							until they are destroyed		
The second project: the project of reviving Al-Rasheed Street - Baghdad 2019									
-1	Historical Value	Missing Value	Memorial Value, Symbolic	Promoting social value (collective memory)	Historical Value	—	Designed carts for vendors	—	Columns restoration
-1	Urban Value			Cultural Value	Urban Value		Establishing a park near the Arab market		Rehabilitation of hallway
-1	Heritage Value			Educational Value					
1	Social Value	Added Value		Economic value (investment of shops)	Heritage Value		Flyers		River street cladding
1	Cultural value								
1	Economic Value								
0	Memorial value, symbolic								
0.06%								6	Positive value
0.11%								11	Negative Value
0.03%								3	Neutral Value

### Analysis and Discussion

- As indicated in the table 4, the negative values achieved a higher percentage than the positive ones, and this indicates that the conservation operations deal with the architectural heritage individually without looking at the urban system in its entirety.
- Neutral values depend on the strength of the heritage and potential energy. They may be beneficial values for the architectural heritage, or they may weaken the heritage and freeze the values it contains. The ratio of the neutral value was very low compared to the rest of the values, and this indicates the weakness of the heritage against challenges.
- Positive values obtained a somewhat acceptable percentage, but not in the required form, and this indicates the negligence of designers and specialists in the missing values in the conservation processes.
- There are differences in the positive, negative, and neutral values of the two projects (Fig. 1).



**Fig. 8:** The amount of values

Source: author

## Conclusion

1. The process of conserving any architectural heritage, in its architectural and urban dimensions, affects the values of that heritage, and the impact is in three trends:
  - A. Positive impact: resulting from the addition, where new values are added by methods of preservation to the architectural heritage, which leads to the addition of new values that delight the architectural heritage.
  - B. The negative impact, which takes place through the loss of some of the original values of the architectural heritage due to wear and tear, or due to their abandonment by conservation specialists. It is also possible that there will be a bad and inconsistent addition to the values of the architectural heritage, to be a negative addition.
  - C. Neutral influence or values that preserve themselves: Despite the temporal change, they have two dimensions, the first of which is positive in maintaining their level without decay. For example, the values of authenticity, belonging and a sense of identity as a result of interaction between the society with the architectural heritage, and a negative dimension that includes freezing heritage as it is away from interaction with the spatial and temporal environment.
2. The positive impact of conservation processes (good added values, neutral values that preserve themselves) leads to access to four elements that help the continuation of architectural heritage, including originality, scalability, sustainability, community memory.
3. Valuable architectural heritage is the one that is required to be preserved according to the six criteria mentioned above, which contains a set of values or some of them, which include emotional values, aesthetic values, social values, cultural values, contextual values, and scientific / academic values.

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