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THE IMPACT OF RESTORATION PROCESS ON THE CULTURAL HERITAGE VALUES

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ABSTRACT

This study aims to understand the impact of the restoration process on historical values in developing countries. So, this study is intended at explored the confluence of the restoration process and heritage value of the historical building and raises concerns regarding the conventional definition and conceptualisation of 'preservation.' Based on the reality of developing axis to the treatments and architectural regulations, the article calls for more research on the subject and active involvement in restoration efforts in the conservation sector. In this qualitative study, after documenting literature, a case study has been observed with an analytical description for understanding the reality of the conservation process in Iraqi Kurdistan. With an introduction to specific recommendations to conduct the conservation process following engineering and scientific methods, the building achieves renewal, sustainability, and the region's highest historical, architectural, social, cultural, economic, and tourism potentials. General goals and strategies have been suggested to conserve the old castle of Sherwana. The cultural heritage of a region reflects the identity and the civilisation of that nation. It also represents the connection between its past-present-future. That architectural heritage must be looked after, conserved, rehabilitated and updated to suit Modernisation.

Keywords: *Cultural Heritage, Architectural Conservation, Restoration Process, Historical Values, Castles.*

Introduction

The threats and harm to Iraq's cultural heritage have grown substantially in recent decades. Continuous conflicts between the 1980s and the present, massive plundering, the impacts of the erosion and silting process, infrastructure-building issues, and land extension have had a profound influence on the cultural heritage across the nation. The degree of such harm has only been partially recognised, and extensive analyses and reporting have yet not been generated. Furthermore, the scientists have focused on threatening and destroying the cultural heritage caused by environmental processes or violent conflict, following up on recent policy developments and the constantly growing issue of climate change, which have less emphasis on international architectural heritage conservation regulations (Zaina, 2019).

A place's features are tied to its history since it was created during a certain period (Oppong, Marful, & Sarbeng, 2018). Preserving a society's products/buildings is an architectural responsibility, so architectural conservation is considered one of the scientific fields that its importance is growing especially in the modern age. Since architectural heritage is a cultural treasure that gives good components for inspiration and introduction in current architecture and construction activities, it is considered a cultural asset. Preservation, as defined by 'Fielden,' is a combat against collapse and destruction aspects brought to buildings or facilities by a variety of reasons, the majority of which are produced by humans. While the humankind is a part of construction, it is also a primary cause of destruction for a variety of reasons. The most fundamental cause is ignorance and lack of interest in the legacy.

Moreover, as described by Petzet (2009), architectural preservation maintains the edifice and buildings and prevents them from falling, in case not repaired, and repairing the parts that were tarnished in the past. When it became more comprehensive, preservation is called urban preservation, which is considered a planning process, protection and raising the value of a complex of buildings and sites of historical or architectural value. According to Elsayed (2020), the conservation process in the Middle East, as she describes Cairo as an example, is working on individual buildings rather than the context of cultural heritage, which leads to the increase of risk at Iraqi Cultural Heritage.

The reports on the heritages that are at risk from International Council on

Monuments and Sites (ICOMOS) (Arlotta, 2019) and some funding organisations such as UNESCO (Wilcox, 2020), Iraq and Iraqi Kurdistan, in specific, has not been mentioned in the last two reports on the sites that at risk. While Iraq has many archaeological, historical and cultural heritages; thus after the ISIS battle, most of those heritages had demolished(Stone, 2009). Therefore, pay attention to Iraq's heritage is one of the weak points in protecting the world's heritage, as it is out of advising, having committees for protecting its heritage. Even though there are a few studies on Iraqi heritage, more specifically, no scholar has been found about Iraqi Kurdistan's heritage and its historical and architectural value, as there are no theoretical standards for the conservation process in this country.

So, this study aims to emphasise the importance of the architectural heritage of Kurdistan across different ages, focuses especially on Sherwana castle in the Kalar district as the case study, which is considered as the cultural identity and character of that area. Accordingly, the study deals with the conservation of the architectural heritage of the Kalar district done to the Sherwana castle, which was exposed to re-building processes in two different periods, leading to the loss of the original features of the building.

Theoretical Understanding of the Architectural Conservation Concept

Depending on the definition of the word of 'conservation' is anything done to maintain artworks or historical items in excellent condition (Joudifar, 2016). Preventing decay and degradation is the act of conservation. It covers all methods that prolongs the life of cultural and natural assets in order to preserve it for subsequent generations. The idea of architectural conservation dates back to the ancient ages. A glance at the history of ancient Iraq confirms that this idea existed in the ancient civilisation of the Mediterranean and appeared with different styles, such as keeping important buildings like temples and palaces. In the modern age, the idea originated in Europe as a trial to protect immovable cultural properties (Appelgren, 2019; Braudel, 2002). As a result, the architectural legacy/conservation is interpreted, understood, and managed in such a way ensures its survival for future generations (Foster, 2020).

In the late eighteenth century, some archaeologists and museum experts have made studies and scientific research on preservation work done in the past. 'Steward & Rivett' prepared drawings of Athens city in 1764; 'The Adam Brothers' worked on a documentary study accompanied with valuable drawings for the 'Diocletian Castle' in 'Split'' city in Yugoslavia, in 1777 (Thom, 2017), as they accompanied Napoleon in his trip to Egypt with several scientists and wises, who performed studying and analysis to the ancient Egyptian arts. Their researches affected the art style in the empire all over Europe. However, the first one who established concepts for architectural preservation in the modern age was the Englishman' W. Morris' (1834- 1896), an artist, craftsman, poet, critic, and political thinker in Victorian England (Yount, 2005). He has been impressed by the great loss of cultural heritage due to the stylistic restoration performed by Great Britain's artists. He suggested establishing a special organisation that undertakes to observe the historical monuments, draw the public's attention, and awaken their sensation that historical buildings are unique monuments. In 1877, Morris achieved success and established an organisation for protecting historical buildings, 'SPAB – Society for the Protection of Ancient Buildings' (Donovan, 2007). There are two basic directions and methods in architectural conservation and treatment. (a)The first direction emphasises the structure's originality. This direction stresses the necessity to maintain the original structure using original raw materials. (b)The second direction emphasises the importance of the structure as a historical symbol, and this direction accepts the idea of building re-construction and creating a second copy, which is considered by the first direction as

counterfeiting of the historical facts (Committee, 2003).

As for conservation methods, there are traditional methods and contemporary methods. (a)Traditional Method of Conservation: It seeks to halt and suspend the visible consequences of the building's degradation without addressing the underlying reasons. (b)Contemporary Methods of Conservation: The primary goals of these approaches are:

(1) Ensure that the building has a continuous purpose via maintenance and renovation, and that its cultural and economic values are protected.
(2) Assigning a specific framework to the building that is similar to the original purpose does not create a significant gap between the past and the present.
(3) Considering the original character and objectives of the building before performing any modifications and considering a relationship with the neighbouring (Heritage & Copithorne, 2018).

The contemporary methods in conservation may include the following three levels:

(1) Gradual destruction: Using the underpinnings as a core to create the structure in the same shape as before. This process becomes acceptable only when it is impossible to keep the historical remains of the building for a long time and when normal maintenance costs are very high.
(2) Partial Conservation (Retention): A technique for applying to a structure was kept, although its function is no longer suitable for current use. As a result, minor adjustments would be made to rehabilitate it and find a new purpose that is specific to the demands of the region. It is important to consider that the changes, to be the least, do not affect the original character of the building.
(3) Complete Conservation: It is the conservation and preservation of buildings that could be preserved in its original forms while performing the same purpose (Stanley-Price & King, 2018).

1. Methodology

In this qualitative study, after documenting literature, a case study has been observed with an analytical description for understanding the reality of the restoration process concerning architectural values of historical heritage in Iraqi Kurdistan. This documentation process has three facets: the first step is documenting the literature, then documenting the original history of the case study and the restoration quality, finally, forming a comparison between the literature and what has been done in the case study; Sherwana castle.

3.1 Case study

Sherwana castle is located on the Sirwan (Diyala) river in Kalar, Iraqi Kurdistan, to the east of Kifri and to the west of Qasr Shirin and Sarpol Zahab in Kermanshah Province in western Iran. Kalar is one of the twin towns of Smud and Kalar. After the 1991 Kurdish revolt against the Ba'ath party, Smud was renamed (Rizgari). During Saddam Hussein's administration, the Smud neighbourhood served as a Kurdish displacement camp (URL1, 2021).

The castle is resting on two hills. It is believed that the second hill that is directly under the castle is an artificial hill created by piling up soil sacks when the castle was constructed. While the first hill (Sherwana Hill), with a height of 20m, the width is more than 180m, has special importance since it is an ancient hill. Due to the significant historical value of this hill, it was inspected in 1989. As a result, some archaeological relics of ancient civilisations were discovered. The remains of an Islamic civilisation go back to the (Abbasid & Umayyad) caliphate between the 8th and 10th Centuries, consisting of some potteries (glassware and ordinary) been found under the topsoil layers. In addition, some remains of the Sasanian civilisation consist of many antiquarians such as houses, bricks, gold and silver currencies. Apart from

the above mentioned, more findings addressed such as; volcano stones and glass, historical tools used by humans, contemporary to the same period of Charmo village (Kopanias, MacGinnis, & Ur, 2015).

The castle is home to the Jaff family and can be visited by travellers. According to many historians' opinions, such as; (Taha Baqir, Fuad Safar, Mohammed Amin Zaki, and Mustafa Nariman, etc.), the castle was built by (Mohammed Pasha Jaff) and still stands to this day. Concerning the year of construction, many believe that it was constructed between 1866-1874 when Mohammed Pasha Jaff was only 54 years old (Jamie, 2017). There are many interpretations about the reason behind constructing the castle, which is including, military basis. It is believed that it was used as a military fort, while in fact, it does not imply any of the military bases; therefore, this belief is considered incorrect. Secondly, love promise, it is said that 'Mohammed Pasha' has promised his lover and then fulfilled the promise. Moreover, the most accepted belief is that 'Mohammed Pasha' has built this castle as an administrative centre for his clan, to manage people's affairs. Furthermore, as a tradition at that time, it was common for such a man to have his castle, along with the line of other clan leaders and kings (URL2, 2014).

3.1.1 The features of the Sherwana Castle

The castle's style is similar to the style of buildings in 'Sanandaj' (Kurdistan of Iran) during Ardalan principality, which is known as a staid Kurdish style. At the same time, it is common to see similar castles in the other regions of Iran (Reference).

In General, Sherwana Castle has been used as follows:

- The basement was used as a prison, water storage, and storehouse.
- The first floor was a place for cookers, servants and on-duty patrol and had special places as a reception for guests.
- The second floor was a special living room for Mohammed Pasha's family, a special meeting room, and another private room for the Pasha (King), located to the south, which overlooks the frontal side of the castle. It is a beautiful room full of ornamentations.
- Room of (Klaw Farangy): another special room of the castle was a private room for the Pasha (King). The arches of this room overlook the four sides of the castle.

However, the ornamentations of the castle are (Botanical, Geometrical animal) engraved on gypsum, lime, and brick, mixed giving a beautiful touch to the castle at the locations where implemented. The scenes mostly consist of images of flowers, stars, fabulous creatures.

Throughout the history of Sherwana Castle, the following stages of restoration and adapting to re-use has been four times recorded as shown below:

1) In 1927, rented by the Iraqi Government from the Jaff family and used as an administration office for the district after renovation. The major changes affected the top of the towers, and stairs added for vertical circulation.

2) At the beginning of the 1940s, the castle been renovated by (Karim bag, the son of Fatah Bag). The main modifications were changing the doors, windows and using steel in the penthouse room.

3) In 1990, the former president of Iraq (Saddam Hussein) visited the district and gave instructions to renovate the castle to convert it into a tourism landmark; the renovation was done by unqualified staff.

4) In 1997, another renovation was made by the Regional Government – Sulaimani Administration.

In every stage, there are changes either in space organisation, façade of the building, the floors, features of used architectural elements, or in the materials that used in the restoration process.

Findings of the Study

The castle went through many restoration processes that were hypothesised in this study as losing its original shape for many reasons, such as (a) natural factors (represented by rainwater, humidity, and other factors), caused big damages to the façade. (b)Human factors, whether deliberate, represented in negligence and lack of periodical maintenance of the building, or preservation and renewal work performed aimed at developing and renovation, led to the annihilation of the architectural and historical value of the castle. Moreover, (c)accidental, represented in the absence of awareness by official departments regarding the importance of historical and heritage buildings.

In this research, the evaluation of the restoration process aimed to rehabilitate the castle by reaching its original shape. The aim is to restore the authentic form of the castle. Many steps have been followed in this research to achieve this goal. However, there is a lack of historical documents related to the castle to prove its origin. Moreover, the loss of original architectural elements was investigated to conclude the shapes and properties of the original elements of the castle. These steps are accomplished as documentation of the existing castle, reaching the possible original shape of the castle before its renovation. Personal interviews with experts, historians, engineers, and citizens of the region to get their opinions about the original shape of the Sherwana Castle.

Components of the Castle: It consists of a basement, two stories, and a big room (Klaw Farangy). Currently, the basement is filled up. It has been used as a prison, water storage or storage for materials, livelihood, etc. has several rooms. Structure of the Castle: Forms a square, having a tower at each corner; each tower is heptagonal in shape, giving the castle a beautiful appearance, including some arches of different sizes. The Ground Floor consists of one sitting room (Iwan), two large rooms, and two passageways. Those two passageways have functional importance, leading to the back towers and the stairs connecting the ground floor to the first floor. The First Floor consists of four main rooms, a hall, and a passageway leading to one of the towers. It also contains the stairs that connect the first floor to the upper floor. Farangy Room (Foreign Room): It can be considered the second floor, having an octagonal shape, it contains some arches. It is one of the most attractive parts of the Sherwana Castle. Materials used in the Castle: The main materials utilised in the castle's construction are burned brick, gypsum, lime and timber. Measurements of the Castle: The height of the castle's three floors is 12.30m, the width of the frontal side is 19.35m, while the backside is 18.50m, and the length of the eastern side is 15.40m, while the western side is 15.20m.

The castle has been restored many times, none of them has been performed based on heritage preservation principles. In each renovation, the building has lost parts of its architectural properties. We realise a big difference if we compare the castle's images from the 1980s and the current ones. Experts believe that the local authorities did not pay enough attention to the historical and heritage value of the Sherwana Castle, used as governmental offices instead, and suffered from many changes.

Analysis of architectural dimensions

Analysis of the Sherwana Castle's Façade

As can be seen in table 1, the general view of Sherwana Castle has been changed. For instance, after restoration, there is a two-floor penthouse, which did not exist in the past, as this is true for both towers. Despite the ornamentation on the parapet did not appear in the photo of the past. However, in the original building rounded arch/Roman arch has used. After restoration processes, the arches are switched to pointed/ gothic arches. Without depending on the castle's original features, the conservation of the façade has been completed, such as opening the windows in the main façade.

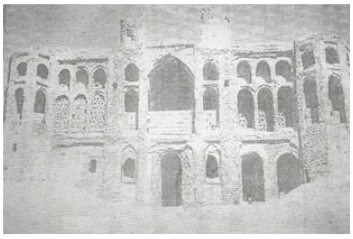
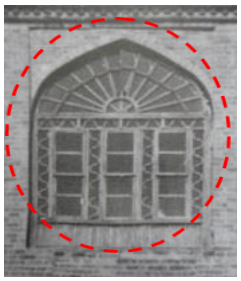
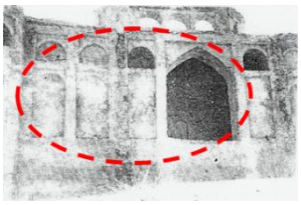
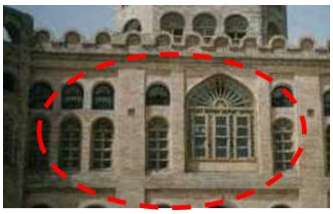
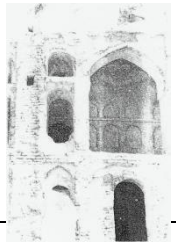
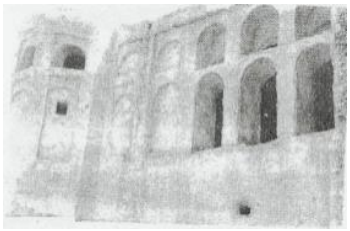
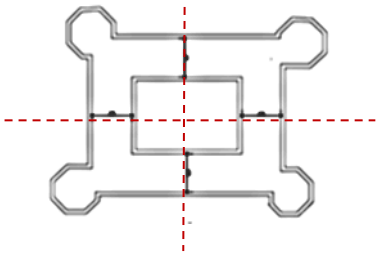
Before Restoration	After Restoration
	
General View of the Sherwana Castle before and after restoration	
	
A complete distortion of the original form of the net	
	
Baseless conversion of parts of the façade without proper study of the origin features	
	
Changing the shape of the main	
	
Changing the original features of a part of the building	

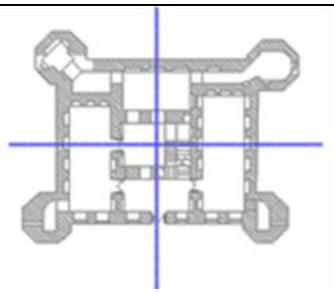
Table 1. Analytic study of Sherwana castle (Source: Researchers)

Architectural Context Analysis of the Castle

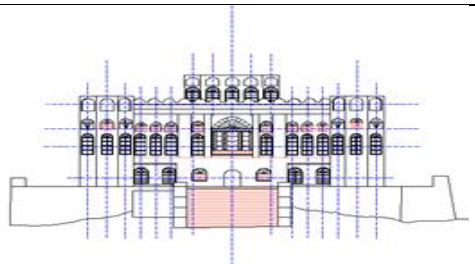
As a collection in the local history books existed about the castle, the plan has four symmetrical axes that opposed each other with a simple plan and a courtyard. While after restoration processes, those axes shifted, and the partitions are added. In addition, from the first constructing until the present, with all of the restoration steps, the overall plan, façade and overview of the castle have been tried to maintain the general context, the height of the building and the symmetrical balance, see fig. 1



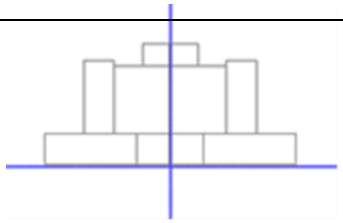
Keeping the broad context of the mass

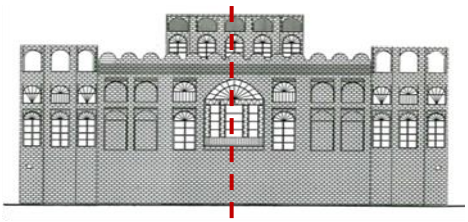


Castle Plan (after restoration)



Keeping the height of the blocks consistent with the overall proportion (after restoration)





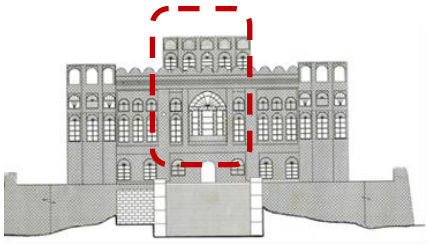
The inclusion of additional components (after restoration) resulted in the development of an exterior formal balance.

Combine pieces from several styles. (after restoration)

Fig. 1: Architectural Analysis of the Castle of Sherwana changes compiled by authors

Analysis of the Sherwana Castle's Architectural Elements

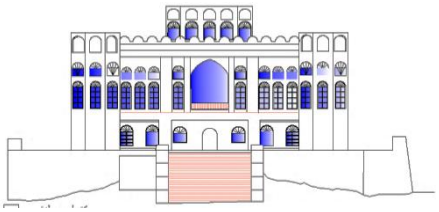
Throughout the restoration stages, remarkable changes have been made, leading the castle to lose its originality parallel to its architectural and historical value. As illustrated in fig. 2, the dominance of the element is clear within the overall form with a partial change in its original shape—the addition of decorative elements and inscriptions in the interior space. The use of pure and quiet colours is in line with the function of the building. The proportion of parts together has been balanced after the last restoration process. The use of local materials led to the creation of a kind of formal unity. In addition, the combined elements derived from different civilisations affect the overall composition, although the simplicity of the entrance lines has been maintained obviously. Finally, lines in facade formation have been blended.



The dominance of the element within the overall form with a partial change in its original shape

Addition of decorative elements and inscriptions in the interior space

The use of pure and quiet colours is in line with the function of the building



The proportion of parts together and part with all

The use of local materials led to the creation of a kind of formal unity

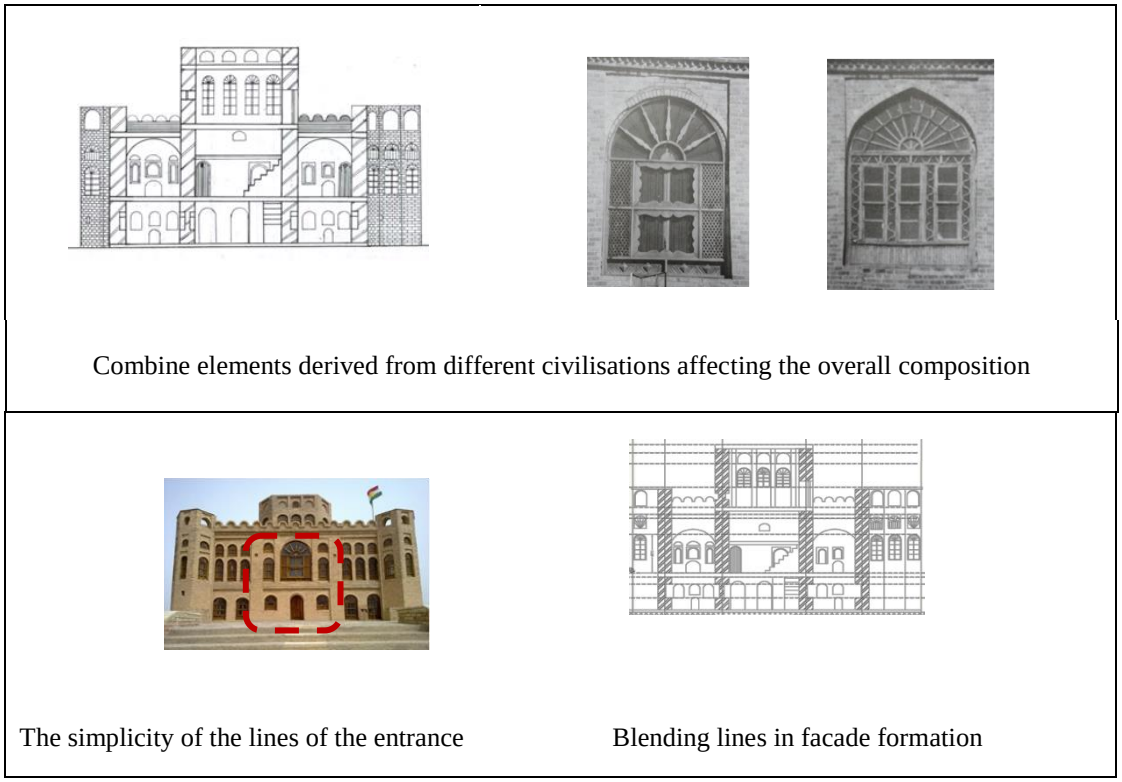


Figure 2. Analysis of Sherwana Castle's Architectural Elements, by authors

Overall, the influences of the restoration process that the castle underwent has been illustrated in table 2 below:

Table 2. Main/secondary variables and the corresponding indicators (Source: Researchers)

Field	Main Terms	Secondary Terms	Indicators	100 %	75 %	50 %	25 %	00 %
A	Architectural Order	Architectural style	Construction materials are incompatible with the heritage				■	
			Forms are not similar to the original			■		
		Architectural configuration	Forms are based on different cultural backgrounds				■	
		General Context	Mixing old and new			■		
			Fusion of elements from of different orders				■	
		Unity	Unity in modern heritage style			■		
			Unity by the designer style				■	
			Unity by domination in the inclusive shape		■			
			Unity by domination in the general context	■				
			Formal unity	■				

		Façade colours	Variation in colour				■	
			Mixing of lines		■			
			Type of colour				■	
	Architectural treatment	Complementary elements	Ornamentations		■			
			Calligraphy				■	
		Entrances			■			
	Extensions	Heights				■		
		Proportionality	Parts with together		■			
			Part with whole	■				
		Harmony	Functional	■				
			Symbolic		■			
		Element configuration			■			
		Scale	Humane		■			
			Inhumane				■	
		Balance	Formal	■				
			Functional		■			
			None-formal				■	
	Transformation	Size-wise					■	
		Subtraction						■
		Addition					■	

The negative impact of the renovations

Although, all the above renovations were done just to maintain the building. Nevertheless, it resulted in the following damages to the building:

- Decrease in the height of the floor to the ceiling due to frequent flooring construction with different materials.
- Using new materials led to the effacement of the original materials
- Filling the basement with soil.
- Using gypsum plastering and concrete for inner spaces.
- Using lighting elements in contrast to the building's historical nature.

Proposal of re-restoration of the Sherwana Castle

As a result of the analysis and findings of this study, several points were derived from being useful in the future restoration of Sherwana Castle to maintain it. These suggestions are presented below:

- Following the theoretical framework and documentation of the existing status of the Sherwana Castle, the research proposes the following as a guideline for preservation:
- Removal of additional flooring layers was added through the different renovations to reach the original level of each floor.
- Re-activate the basement that has been filled with soil during the 1990 renovation.
- Restoring the original pointed arch of the main windows of the main elevation.
- Review the design of all doors and windows in general, since they have been changed during the previous renovations. The advantage of similar castles having the same style in Iran cities, such as 'Sanandaj', can be taken to reach a shape similar to the original.
- Using lighting fixtures appropriate with the traditional shapes rather than the ordinary fluorescent bulbs. All electrical cables have to be hidden.
- Removal of the gypsum plaster on walls and ceilings shows the original material of the inner walls.

Conclusion

Heritage buildings in developing countries faced negligence concerning restoration or conservation. Sherwana castle in Kalar district in Iraqi Kurdistan is one of the examples that underwent several endeavours of restoration. However, back in time, through documenting the past literature, it has been found that the restoration endeavours affected the architectural values and the history of the castle. This study delved into the existing literature, and personal interviews were done to know the date of the building and the conditions of its usage.

Performing survey processes at a level of the urban fabric of Kalar district in Iraqi Kurdistan is to define the heritage and historical buildings by the involved bodies in this concern. So, documentation and registration of all historic buildings in the district depending on architectural and historical records. This is to guarantee completing rehabilitation work, to ensure the compatibility of renovation works and future modifications with the new architectural character of the building. This research paved a way to confirm the axis of active understanding and perception between academic and professional offices involved in architectural preservation by reaching centralised instructions by concerned parties such as the Museum of Antiquities, the Directorate of Religious Endowments, and Kalar University.

The study suggests having cooperation with concerned international parties, such as; the United Nations Education, Scientific and Cultural Organization 'UNESCO' and the International Assembly for historical buildings and sites, as well as signing agreements and protocols with the councils of Arabic, Islamic, and international cities aiming to exchange experiences and recognise the best positive practices in architectural and heritage preservation. Therefore, this study proposed a theoretical framework to return the historical and architectural value to the Sherwana Castle.

The establishment of a central office for architectural preservation in Kalar University, suggested by this research, offers engineering, technical, and historical consultancy in architectural preservation for ancient, historic, heritage buildings in the district. That can present pioneer examples in reparation and architectural preservation, supervised by top experts in architectural preservation.

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