



BLUE SHIELD
International



BLUE SHIELD
Türkiye

EFFECTS OF WAR TRAUMA ON STUDENTS FROM WAR AREAS

HERITAGE DESTRUCTION AND COLLECTIVE MEMORY

- Blue Shield Türkiye -

and

- Blue Shield International -

CONTENTS

Introduction	5
Dr Zeynep Aygen	
Architectural Trauma In Urban Memory: The Case Of Gjakova And Prizren.....	7
Hadis Abdula	
The Impact of Long Wars on the Cultural Heritage of Afghanistan: The Herat Musalla Complex as a Case Study.....	25
Nasir Ahmad Yawar	
Revealing the Collective Memory in the Digital Reconstruction of the Lost Cultural Heritage – Example of Al-Nuri Mosque in Mosul	41
Sahar Riyadh Naser	
Colonial Destructions of Natural and Cultural Heritage: Tunisia’s and Algeria’s Cases During the French Colonisation	69
Asma Jemmali	



INTRODUCTION

Professor Dr Zeynep Aygen

As an academic supervising students during their Masters degrees and PhDs, I observed that the majority of my students coming from war affected regions chose to dedicate their research theses to war destruction of built and natural heritage. This shows once again how important our heritage is for both collective and personal memory. When I visited Sarajevo following the Bosnian War, most people I talked to told me of their feelings now that they were unable to see their favourite historic building on their way to work or school any more. They spoke of how this made them unbelievably sad – many shed tears when they mentioned the destruction of their heritage. That heritage, and its loss, are part of their collective memory. Places shape experiences, contain memories, and in turn shape memory and identity. Such memories are not only those of individuals, but of society – of collective urban memory. Consequently, destruction of any part of a city, and especially the destruction of places that are shaping memory, affects urban memory, and that is the theme of these papers.

Among these war sufferers, my postgraduate students in particular seem to have discovered a way to express their feelings in their academic work. It is my belief that this helps their healing process and, at the same time, it becomes a way for them to show people what they are going through, and to raise awareness about war damage. Blue Shield Türkiye, supported by Blue Shield International, undertook this effort to introduce their work to a wider international audience. Four students have researched and written these papers about the destruction of built and natural heritage during conflict in their respective countries. Their research and their stories are worthy of international attention. All four were excited and happily agreed to do the hard work of bringing their research, and their experiences, to publication standard, although I know it was a more challenging, and a somewhat longer process, than they envisaged. In this, we were grateful to be supported by Dr Emma Cunliffe of Blue Shield International.

The editing process, as with everything else, was interrupted by the Covid-19 Pandemic, which significantly impacted the work of Blue Shield International and closed Mimar Sinan Fine Arts University (as with many others). The resulting complications meant the publication of these important papers took a long time. But we never gave up: our team of postgraduate students and academics have finally reached the last stage – publication. It has been my great pleasure to work with my students to realise this volume. By reading these papers, our readers will not only see how these young people suffer, but the situations in their home countries will come a little closer to you – and you will come a closer to what historic heritage means for human beings. Historic heritage is not only buildings and landscapes; it is a great support for the psychological health of a nation.

Professor Dr Zeynep Aygen

Mimar Sinan Fine Arts University and Blue Shield Türkiye

Istanbul-Türkiye



ARCHITECTURAL TRAUMA IN URBAN MEMORY: THE CASE OF GJAKOVA AND PRIZREN

Hadis Abdula¹

Keywords: Architectural trauma, destruction, Gjakova, Prizren, urban memory, war

1 Introduction: urban memory and trauma

How does war and the destruction it brings affect architecture and architectural products? How do such demolitions leave a mark on urban memory? During and after war, the architectural product and its meanings can become a direct target, as well as an indirect one. In such situations, sometimes it is clear that the goal of those fighting can be to attack and destroy an idea or ideology manifest in tangible heritage, rather than attacking a physical object for military reasons. For this reason, it could be said that war actually targets memory. Attacks on cities are, in one sense, attacks on the urban memory. Urban memory is formed not only by the physical integrity of the city, but also by the coexistence of its history, its culture, identity, and experiences. In other words, it is the spatial representation of the collective memory of the urban dweller. Boyer (1994) defines the physical structures and traces that carry our past memories from the past to the present as the elements that make cities unique, and describes the city as the theatre of memory. Even though cities are constantly being transformed, the traces of the past continue to be hidden and transferred to the future. In other words, the physical integrity of the city forms its memory as well as the society and environmental factors that live in it. Memory is one of the basic features that establishes and creates the city. At this point, it can be said that the urban memory of society is actually remembering the information that has taken place in the collective memory through buildings and places. In other words, societies living in cities recall past events through the buildings that shape urban memory. These buildings, structures, urban places or, as Pierre Nora (Nora, 2006) identifies, 'places of memory', are the key elements of the remembering process. While societies remember the past events collectively, some elements of culture or tradition – tangible or intangible heritage – have a crucial role transmitting the memories. That is why the buildings and spaces that shape the urban form could be considered the main reminders of the past. These components of the cities shape memory. In short, urban memory recollects the past by coding the old memories into the buildings and places. Then, these codes also shape the collective memory. For this reason, such structures or spaces carry the traces of the past, culture and identity of the societies and transfer them to the future unless they are exposed to external interventions.

Bodganovic describes the destruction of cities as "*a vicious opposition to the highest values of civilization*" (in Herscher 2008: 39-40). Of course, with this definition, Bodganovic tries to explain that cities are much more than just a physical phenomenon. Cities are identified with civilization, and are places where people constantly add, experience, and interact in the historical process. As a result of all these interactions and experiences, cities begin to form their own memories over time. Urban memory is the place where all this information is stored, existing by remembering the 'highest values' that Bogdanovic mentioned, as well as important social events through the physical environment. Therefore, the destruction of any part of a city, and especially the destruction of places that are

¹ This article represents an extract from the author's Masters thesis, awarded at Istanbul Technical University, 2019.

shaping memory, affects urban memory. This destruction causes traumas in the urban memory, just as in the societies themselves. These traumas that occur in urban memory with the destruction of architectural structures and physical environment can be defined as 'architectural trauma'. During war there may be acts of destruction against the cultural traces that represent a community, alongside the built environment. However, when focusing on the destruction experienced through architecture in wars, it can be argued that 'architectural traumas in urban memory' are experienced as a result. Questioning the relationship between architecture and trauma, Stoppani (2016) argues that this relationship is possible with the similarity established between architecture and the physiological structure of the human body throughout history. In other words, just like a human, the physical destruction of a structure destroys it both materially and semantically, and the values it reflects disappear with it.

From this point of view, the question to be asked is: how does a traumatised building affect its environment? Traumatized structures/urban spaces destroyed by wars also traumatize the urban memory of which they are a part. Architecture, which is in an uninterrupted interaction with its environment, is constantly affected by life, history, and events: *"it traumatizes its context, its inhabitants, its environment and ultimately the planet"* (Stoppani, 2016: 138). Therefore, urban memory is one of the directly affected elements. With the demolished buildings, the social values they represent, the experiences and the information coded on them are also erased or transformed from the urban memory. Freud emphasizes the importance of memory in the sustainability of the past:

*"When a village develops into a city or when a child grows up and becomes an adult, the village disappears in the city and the child disappears in the adult human. The only thing that can trace the old features in the newly emerged picture is memory. But the truth of the matter is that old materials and forms have been removed and replaced by new ones"*²
(Freud, 1915 (2018): 26).

The only way to maintain the past in the present is memory, and with the destruction of memory, the past is also destroyed. With the destruction of buildings and urban spaces, cities also take a new form and begin to lose their past situation. When the cornerstones of identity are destroyed, just as communities experience amnesia (Bevan, 2006), urban memory is also subject to partial or general amnesia, depending on the extent of the destruction.

The destruction experienced in wars not only destroys memory but also begins to reshape it. Destruction becomes part of urban memory and transforms it. Urban memory begins to forget and renew itself. In this context, first the major urban demolitions experienced in the historical process will be discussed. Then, study will focus on the destruction that occurred in the cities of Gjakova and Prizren during and after 1999 Kosovo war.

2 Aim, Scope, and Methodology

The wars and destruction that have taken place in recent times, especially with the collapse of Yugoslavia, contain important data in terms of examining the trauma experienced in urban memory. The trials at the independent International Criminal Tribunal for Former Yugoslavia (ICTY) determined that parts of the destruction in Yugoslavia were a crime against humanity and constituted genocide

² Translation by the author.

(Bevan, 2016). An evaluation of this is therefore valuable in terms of examining the cultural genocide (Novic, 2016) that took place. This study, which aims to question the impact of the war on urban memory, concentrates on the cities of Gjakova³ and Prizren, which were damaged during the 1999 Kosovo war. These cities both have a rich historical and cultural heritage and, despite being close to each other, they were subjected to different types of destruction in different phases of the war. The city of Gjakova, and especially the historical city centre, experienced great destruction in the 1999 war. For this reason, in this paper it is studied as an example of a city damaged during the war. Prizren, on the other hand, did not receive any serious injuries during the war except to the Prizren Union building in the city centre. However, after the war, the city centre was damaged during an uprising in 2004.

The aim of the study is not to emphasize who did the destruction. The study focuses entirely on understanding the architectural destruction in cities and the impact of these demolitions on urban memory. While many previous studies have focused on listing destruction experienced during the war, taking inventory, and the sociological dimension of the events, the main purpose of this study is to focus on the destruction of the war and how this destruction transforms the urban memory, after analysing the sociological and psychological situation. While making analyses, comparisons and evaluations, the experiences will be approached in an impartial manner without being influenced by any thoughts, and the change of urban memory will be examined. In summary, the main motivation of the study is to question the traumas caused by the destruction experienced in the wars on the scale of urban memory, analysing and interpreting the data obtained in the most objective way possible, without targeting anyone but without ignoring the tragedies.

2.1 Methodology

Focusing on a comprehensive analysis of the relationships between war-destruction and urban memory, this study deals with the selected cities both physically and phenomenologically. Gjakova and Prizren are evaluated in particular on the basis of the destruction experienced in the years 1999-2004. The research proceeds through the sample cities and events using a case study approach within the framework of qualitative research methods paradigm. A literature review was conducted on both general concepts and specific evidence of urban memory, trauma, and destruction, focusing on Gjakova and Prizren in the Kosovo war. The cities were evaluated in terms of their history, development, historical layers, macro form, architectural culture, style, and landmarks, and a contextual infrastructure was created, especially at the scale of urban memory.

Interviews were held with city residents, architects, artists, and journalists in order to understand the destruction of the cities during the war and the changes before and after it. Participants were selected from people who experienced the war and still live in Gjakova and Prizren – in other words, who can interpret the pre-war and post-war situations of the cities. The interviews aimed to determine the changes that occurred to the cities' tangible and intangible layers before and after the war from the view of the residents, with open-ended questions focusing on the historical texture, multi-cultural sociological structure, and important historical monuments of the cities. The questions were constructed on the city image and the changes in each city's memory, usually before and after the war. The interview data was analysed and coded according to certain conceptual titles, and then

³ Gjakova in Albanian, Djakovica in Serbian, and Yakova in Turkish.

interpreted by comparing it to archive scans, and literature and media research. Archive scanning can be summarised as the compilation of pre-war and post-war photographs of cities, city plans, development plans and other works. Documents were collected from the municipality, library, books, theses, articles, and websites. These comparative studies aim to reveal how the war left a mark on the cities, the urban scale equivalent of individual architectural trauma experienced, and how the urban memory was affected by this trauma.

3 1999 Kosovo War and architectural trauma

3.1 History of Kosovo and 1999 Kosovo War

Kosovo is a country geographically located in the centre of the Balkans and has a surface area of approximately 10,887 km². Its capital city is Pristina and, according to the Kosovo Statistical Institute, in 2006 the average population of Kosovo was 2,100,000, of which 92% are Albanians and 8% are other ethnic groups. The first settlement in the region was in the Neolithic age (approximately 6,000 BC), evidenced by archaeological excavations (UNESCO, 2004). The region has been under the rule of the Illyrians, Roman Empire, Byzantium, Slavs, Bulgarians, and the Ottoman Empire; then, as a result of the rebellion initiated by the Prizren Union in 1912, the Albanians declared their independence from the Ottoman Empire (Gashi, 2016). In the process, as a result of the Balkan wars, the region was dominated by the Serbs (Demirel, 2016). Having been occupied during the World Wars, Kosovo joined the Yugoslav Federation as an autonomous region in 1945 under the leadership of Tito. However, with the death of Tito in 1980 and the ongoing economic crisis problems in Kosovo, and in Yugoslavia in general, increased markedly. The discourse of "*Yugoslavia crisis started in Kosovo and will end in Kosovo*" (Malcolm, 1998), which is repeated among the people, summarizes the next process very well.

3.1.1 1999 Kosovo War and 2004 Uprising

According to the statistics published before the war, Kosovo had a total of 607 mosques – 225 of which were destroyed or demolished during the 1999 war (Herscher & Riedlmayer, 2001). In addition to religious structures, high-rise stone houses – 'kulla' structures built in the 19th century – were targeted; 90% of the 500 kulla structures were damaged (Herscher & Riedlmayer, 2000a). In Kosovo, where approximately 120,000 houses were destroyed (Judah, 2008), Ottoman-era mansions and Catholic Churches belonging to Catholic Albanian communities were targeted independently of the surrounding buildings, as in other examples: seven churches were damaged, two were destroyed (Herscher & Riedlmayer, 2001). After the NATO forces entered Kosovo, and the Serbs migrated from Kosovo to Serbia, a total of 70 Serbian Orthodox Churches (some of which date back to the Middle Ages and some of which were built in the 1980s and 1990s) were left unprotected in emptied villages and rural areas. Many were then attacked, burned, and destroyed (Herscher & Riedlmayer, 2000b). During this period, most of the churches, which were built under Milosevic's rule and which had become symbols of nationalism, were destroyed (see also Herscher 2010).

Afterwards, as a result of frictions, protests, and finally some news reflected in the press⁴, on March 17-18, 2004, there was a country-wide uprising: 29 Serbian churches and monasteries across the country were burned and destroyed (Judah, 2008, chapter 9). From one point of view, one of the reasons for the attacks on the Serbian Orthodox Churches after the war was that the churches were

⁴ These include the news of Albanian children drowning in the river, and the events of Çaglavica (Judah, 2008).

built or restored during the Milosevic era as a political method to strengthen Serbian control in the region. However, another important reason, as Judah (2008) emphasizes, was the belief of the Albanians that the existing Serbian Orthodox Churches were actually built through the demolition of the Albanian Catholic Churches located in the same places (Morel, 2013). In this sense, the Orthodox Churches were targeted because they were seen both as symbols of an authoritarian regime but also as representatives of the destructions of an earlier history.

3.2 The example of Gjakova

3.2.1 Gjakova: location, history and spatial development

Gjakova is located in the west of Kosovo and borders mostly with Albania and a little with Montenegro. Along with Peja (Pec), Vushtria (Vucitrn) and Prizren, Gjakova was one of the most damaged cities during the war, although it has one of the most well-preserved urban centres throughout Kosovo. For this reason, the city of Gjakova, which has created its own traditions and culture for centuries, contains important data on the impact of destructions on the urban memory. It is thought that the settlement in and around Gjakova started in ancient times, but the foundations of the modern city were laid with the marketplace built during the Ottoman period (Plani Zhvillimor Urban i Gjakovës, 2008).

In 1485, Gjakova was mentioned as a village; the formation of the city started with the construction of the Hadim (Xhamia e Hadumit) mosque and surrounding structures by Süleyman Hadım Ağa in 1594-95. The city, which developed around the Old Bazaar during the Ottoman period, started to grow rapidly during the Yugoslavia period (1970-1990). The surroundings of the bazaar have many modern Yugoslavian architectural structures, but the historical texture and bazaar have been preserved. The Old Bazaar consists of single or two-story shops, the Hadim mosque, the Catholic church, the clock tower, the kulla houses, mansions, bridges, and the historical centre with the houses lined up towards the Chabrat hill. It is one of the most important urban spaces where Gjakova comes into contact with its past and where the urban memory is kept alive. The bazaar and its surroundings, where all the monumental structures built since the foundation of the city and the places that form the dominant image of the city, are located, are known as the largest bazaar in southeast Europe (CHwB, 2015) and are the cultural centre of the city with the craft workshops and other historical buildings.

3.2.2 Destruction in Gjakova

Gjakova is one of the cities that witnessed great destruction both during and after the Kosovo war. While certain structures belonging to Serbian culture were destroyed after the war, the city itself received major injuries, especially during the war. During the Kosovo War, most of the historical kulla houses located in the countryside in Gjakova were destroyed and many mosques were burned. However, one of the biggest losses in Gjakova (and in wider Kosovo) is the destruction of the 'Old Bazaar' (Figure 1). In the Old Bazaar, 431 out of 525 shops were burned, along with the Hadim mosque and other structures in its complex. Only 290 are actively used today (CHwB, 2015).

The Hadim Mosque Complex consisted of the cemetery, the madrasah, and the library which housed an important collection. As a result of the destruction of the mosque, these were also destroyed along with it. Adjacent, the 'Hysni Koshit' kulla structure, located in the centre of the bazaar, and two bridges from the Ottoman period were damaged. Anthony's Roman Catholic Church was destroyed while it was being used as a headquarters by Serbian soldiers (Herscher & Riedlmayer, 2000). With the entry of NATO forces into Kosovo and the return of the Albanian population, the Serbs started to migrate.



Figure 1: Gjakova Old Bazaar, 2017. © Author.

As a result, more and more structures were damaged in the following years, and especially in 2004. With the targeting of Serbian cultural buildings, there were no monumental structures in the city centre and especially around the Old Bazaar that were not damaged (Figure 2).

In the 2004 uprising, the Holy Trinity Cathedral (located in the city centre and built on its own earlier ruins between 1994-95), the Church of the Blessed Virgin (rebuilt on ancient ruins in the 19th century), the Church of St. Elias (built in 1991), the Chapel of St. Gradis (built in 1990), and the Chapel of St. Lazarus (built in 1994), were damaged or completely destroyed (CHWB, 2004; UNESCO, 2004). The Holy Trinity Church, which was destroyed and rebuilt by the communists during World War II, was first burned in 1999, then totally destroyed with the explosives in 2004, and then the wreckage was cleared, leaving no trace. Today, the remains are covered with soil and have been turned into a city park.



Figure 2: Map of buildings destroyed in 1999 and 2004 in Gjakova. These were highlighted in interviews as the most important buildings of the historic backbone of Prizren destroyed during the war. Maxar Technologies image, August 2020, via Google Earth, edited by author.

3.3 The example of Prizren

3.3.1 Prizren: location, history, and spatial development

Prizren is located in the south of Kosovo and is the second largest city, with a population of approximately 200,000. One of the reasons why Prizren was chosen in the study is that, together with the city of Gjakova, it is one of the four most well-preserved historical city centres in Kosovo and has a rich cultural heritage. In particular, the historical city centre has been shaped by the stratification of structures belonging to different ethnic and cultural communities. The city, which has been under the rule of Ilir-Dardans, Romans, Byzantines, Serbians, Bulgarians and Ottomans since ancient times, has a multi-ethnic and rich cultural heritage with structures built and destroyed in different periods. It is one of the oldest settlements not only in the region, but in southeast Europe.

When focusing on the spatial development of the city of Prizren, it can be seen that the settlement started around the castle and then spread to the plain: today the city continues to grow in the same direction. The city centre is the area where Ottoman mosques, mansions, bridges, and the bath are located, as well as Serbian Orthodox churches and monasteries. Around the city centre, a part of the city is dominated by Ottoman houses, mosques, narrow streets, and old mansions. There is a castle on the hill, with historical houses and Orthodox Churches located at the foot of it, and historical houses scattered on both sides of the river (Figure 3). The Catholic church, mosques, and the Stone Bridge connecting the two sides of the river constitute the dominant view of the city of Prizren, and are its historical backbone. In 1970, the area below the castle was taken under protection by the Prizren Monuments Board under law no: 460. 110 houses located in the area between the river and the castle were registered for protection.



Figure 3: The “below-castle” area in Prizren, 2017 © Author.

3.3.2 Destruction in Prizren

In the 1999 period, as in the rest of Kosovo, in the villages and rural areas of the municipality of Prizren many monuments were damaged or destroyed. However, in Prizren's historical city centre, only the Prizren League Building was destroyed. The building, which gained importance with the meetings held in 1987 to establish Albanian unity and declare their independence and which was used as a museum, was completely destroyed by soldiers in March 1999 (Herscher & Riedlmayer, 2000).

In June 1999, with the entry of NATO troops into Kosovo, Serbian forces began to withdraw from Kosovo and the Serb population began to migrate: Kosovo Albanians began to return to the region. However, during this period, Serbian Orthodox churches and other structures belonging to Serbs were attacked in the vacant rural areas.

Many monumental structures belonging to Serbian culture were destroyed in the uprising that took place on 17-18 March 2004. According to an OSCE report, in the city of Prizren itself, 300 houses were burned as a result of the uprising (some of which may have been registered as historic), leading to 97% of the Serb population leaving the country (Judah, 2008). Serbian Orthodox churches, monasteries, and buildings in the area below the castle where Serbs generally lived (where two of the Serbian Orthodox churches are located), were burned and destroyed. 78 of the 110 protected buildings were destroyed due to the conflicts and others were left in poor condition (Toska, 2009). In addition to the area below the castle, the Church of the Savior (XIV. century) located in the centre of the historic city, St. George's Church (XIV. century), the Church of St. Tutiç (XIV. century), the Church of Saint Runovic (XV. Century), the Church of St. Friday (XIV. century and located on the opposite bank of the river), and the Monastery of the Archangels located outside the city (which dates back to the XIV-XVI. century), were burned and heavily damaged (CHwB, 2004, UNESCO, 2004) (Figure 4). Protected houses are not always perceived as monuments by the local people; however, those buildings, in part because of their religious nature, are seen as the real losses because they have an important place in the memory of the city.

3.4 Gjakova and Prizren: evaluation of interviews

3.4.1 Spatial components of urban memory in Gjakova and Prizren

In the interviews about the city of Gjakova, the participants were first asked to define the city, compare it with other Kosovo cities, and talk about the features they find important (Table 1). Residents of the city drew attention to the historical importance of the city: in fact, they emphasised the city centre and especially the Old Bazaar, in parallel with both literature studies and observations. This special place of the city is one of the features that distinguishes Gjakova from other cities that do not have a historical urban texture. In addition to the bazaar, the clock tower, the Catholic church and the kulla structures inside the bazaar are some of the buildings that are considered important throughout the city of Gjakova.



Figure 4: Buildings destroyed Prizen: 1 – location of the Prizren Union building, destroyed in 1999; 2-6 – location of buildings destroyed in 2004 uprising. These were highlighted in interviews as the most important buildings of the historic backbone of Prizen destroyed during the war. Maxar Technologies image, August 2020, via Google Earth, edited by the author.

Table 1: List of people interviewed in Gjakova.

Age	Profession	City	Interview date
38	Officer	Gjakova	January 27, 2019
32	Teacher	Gjakova	January 29, 2019
67	housewife	Gjakova	January 29, 2019
34	Consultant	Gjakova	01 February 2019
34	Restorer	Gjakova	02 February 2019
55	Architect	Gjakova	February 2, 2019
67	Dentist	Gjakova	February 4, 2019
42	City and Regional Planner	Gjakova	September 5, 2019

“Gjakova is one of the old and beautiful cities of Kosovo... However, the city comes to mind both in terms of its historical monuments and the tragedies experienced. The Old Bazaar, Hadim mosque and Bektashi lodge are among the most important historical buildings” (Teacher, 32, Gjakova, personal interview, 29 January 2019).

“Gjakova is built on the slope of Chabrat hill and the river Krena is another element that defines the city. However, the place that defines the city the most and comes to mind first is the Old Bazaar. The Old Bazaar is the centre of the city” (Consultant, 34, Gjakova, personal interview, 01 February 2019).

The Old Bazaar area stands out from the rest of the city with its different and historical texture. With its denser historical texture, low floor height, paving stones, and historical structures, the area is separated both physically and metaphysically from the modern urban texture, with large spaces filled with larger and modern buildings built during the Yugoslavian period. In this context, the Old Bazaar is the most important urban space where the daily life flows, where the city communicates with the past, and where socialization has been conducted since its establishment.

“The Old Bazaar is the key point of the city. With more than 500 structures, it was an important place especially before the war. The Old Bazaar was at the centre of life with the presence of craftsmen such as jewelers, silversmiths, coppersmiths, woodworkers and cobblers. At the same time, the bazaar has a strong relationship with other important monuments in the city” (Officer, 38, Prizren, personal interview, 28 August 2018).

“The Great Bazaar or the Old Bazaar, as it is more commonly used among the people, is the historical region located in the Hadim district and containing the Hadim Mosque. The Old Bazaar is also the heart of Gjakova's economy. However, there was great destruction during the war and it was burned” (Teacher, 32, Gjakova, personal interview 29 January 2019).

In the interviews about Prizren (Table 2), it was determined that the most important structures and places of the city are the castle, Sinan Pasha Mosque, stone bridge, houses below the castle, Ottoman bath, and the Prizren Union Building. According to the citizens, the most important features that

distinguish Prizren from other cities are its rich historical past and the stratified texture of the historical city centre stretching along the river.

Table 2: List of people interviewed in Prizren.

Age	Profession	City	Interview date
42	Journalist	Prizren	25 August 2018
33	Academician / Photographer	Prizren	27 August 2018
32	Lawyer/Journalist	Prizren	27 August 2018
38	Architect	Prizren	28 August 2018
32	Lawyer	Prizren	28 August 2018
55	Doctor	Prizren	30 August 2018
37	Academic	Prizren	1 September 2018
34	Architect	Prizren	2 September 2018

“Prizren actually has a very old history. As far as I know, it has been under the influence of different cultures throughout history. Especially in the Roman, Byzantine and Turkish periods, important cultural and religious monuments were built... Most of them are still an important part of Prizren. Bath, castle, “Ljeviska” (Saint Friday) church are some of them. Important structures are generally located in the area between the Bistrica river and below-castle area. The castle and fountain area of the city is the historical centre of the city. The rest of the areas are newer and the new constructions do not match the texture of the city... However, Below-castle area is the heart of the city, it has an authentic atmosphere” (Doctor, 43, Prizren, personal interview, 30 August 2018).

“Prizren is a city with a very old history, found in both the Roman civilization and the Ottoman civilization, and it contains traces of both civilizations. The most important feature that distinguishes it from other cities is the historical silhouette of the city and its unity with nature. The intertwining of history and nature gives the city a difference and spirit. The mosques, the stone bridge, the Orthodox and Catholic churches in the centre, the castle, the Prizren Union museum make the city uniq. All of these structures have connections in their own historical process. None of these structures are independent of each other in the historical process” (Hukukçu/Journalist, 32, Prizren, personal interview, 27 August 2018).

The city centre and area below the castle, which were destroyed after the war, are among the prominent urban spaces. The first settlement of the city started from here and almost all historical monuments and monumental structures are located in this region. Therefore, the Şadırvan region between the castle and the river is one of the most important building blocks of urban memory.

“Below-castle area is one of the places where the view of Prizren can be watched best. Generally, it was a district where Serbs lived in the pre-war period, and when below-castle area was usually connected with Serbian population. The ancients called this district 'The suburb'. However, today the Serbs have sold their real estate and the sociology of this

district has changed. For this reason, it would not be correct to define the below-castle region and the centre as places where separate groups live. This was the case before the war” (Lawyer/Journalist, Prizren, personal interview, 32, 27 August 2018).

“The historical centre of Prizren and the rest have two different textures and are among the places that can be divided into regions in the city. In the historical city centre, below-castle and the central district are separate. Yes, it has always been known that way throughout history. The region mostly inhabited by the Serbian people, who were in power before the war, is used as the settled place of the Catholic Albanian people after the war” (Architect, 34, Prizren, personal interview, September 2, 2018).

3.4.2 Gjakova and Prizren: architectural traumas in urban memory

Although the destruction caused by the war in Gjakova pales in comparison with the tragedies experienced, the complete burning of the Ottoman period city centre and the destruction of important historical monuments remain current in the memory of the citizens. In particular, the destruction of the Bazaar not only affected the urban fabric, but also seriously injured the memory of society. Therefore, when asked about the destruction experienced during the war, the first place that comes to mind for those interviewed is the Old Bazaar. While the rest of the city was virtually undamaged (except for the factories and terminals), the Old Bazaar was levelled and almost completely destroyed (Figure 5).

Other destruction that remains in people’s memories are the Hadim mosque and the Hysni Koshit kulla structure, both also located in the bazaar. The demolition of the bazaar and other monumental structures stopped life in the centre of the city. It was not until after the restoration it started to revive. However, although the Bazaar was restored, it could not regain its former power. Cafes took the place of craftsmen, and the region known as the 'heart' of the city and the centre of social life experienced a shift in meaning.

“Destroyed structures have caused traumas that have left deep traces in the life of the citizens of Gjakova. At the same time, there are trade and economic losses as side-effects of the demolitions. With the demolition of shops with very different functions and now turning into a cafe area, the meaning that was remembered in the past has changed and although it has actually been restored, the bazaar is far from its old days. It is possible to say that it has lost his role in the past. Because in the past, this place was the heart of the city and the economy, now it has lost its meaning with the demolitions” (Teacher, 32, Gjakova, personal interview, 29 January 2019).

“Intensive migration has changed the structure of the city. However, the city suffered great damage during the war, and almost all historical monuments were destroyed. As a result of the demolition, the information about the buildings was also erased and forgotten in the memory of the citizens. Because the Old Bazaar, in particular, was known as an urban space with a philosophical meaning. It was in a key position for the city... However, it cannot be said that the restorations carried out to restore the region after the demolition fully achieved its purpose” (Consultant, 34, Gjakova, personal interview, 01 February 2019).



Figure 5: Gjakova, section of destruction. Images and composite by the author.



Figure 6: Prizren, section of destruction. Images and composite by the author.

In Prizren, churches, houses below the castle, and the Prizren Union Building stand out in terms of the destruction experienced during the war and the 2004 uprising. Again, as in Gjakova, the city centre was damaged. While churches and the houses below the castle constitute one of the most important historical layers of the city according to the inhabitants, the destruction experienced affected the city both physically and metaphysically⁵ (Figure 6).

According to Toska, *“when the people of Prizren look at this hill, they see a mess, mostly deserted, sad in itself and tied to the worst memories of the city’s recent history. For this reason, the below-castle area means pain”* (Toska, 2009: 5-6). Coming out the other side of the war, the League of Prizren Building is among the most important and well-established museums in the region. Due to the archives it contained, and the valuable content belonging to the Albanian population, its destruction has taken its place in the memories of the residents. Today, as a result of the restoration, the new generation is not even aware that the building was destroyed in 1999 Kosovo War.

“After the war, many things have changed, there have been migrations, destructions. In the war, we lost the Prizren League building along with the churches as important structures, all of them suffered great damage” (Doctor, 43, Prizren, personal interview, 30 August 2018).

“As far as I can remember, the Serbian Orthodox Church in the Şadīrvan Square in Prizren, the place of worship known as the Friday Mosque, which was converted from a church to a mosque during the Ottoman period, and many religious buildings belonging to Serbs are among the important structures that were damaged” (Journalist, 42, Prizren, personal interview, 25 August 2018).

4 Discussion

Freud (1920 (2016): 37) said, *“We are what we are; because we were what we were in the past”*⁶. While saying this, it can be deduced that he wanted to emphasize that what is happening in the world consists of a continuous cycle, that humanity never changes, and perhaps that the same mistakes are made all the time, even though the conditions are different. Increasing violence, terrorist attacks, and destruction in the Middle East are not perhaps different from the destruction experienced in Carthage two thousand years ago. Whatever the motivation of the destruction in the war was at that time, similar motivations remain today, and as a result, important buildings and urban spaces are doomed to be destroyed. Besides any strategic imperatives for destruction, buildings and urban components were – and still are – destroyed with the intent of wiping out the traces of certain communities. The destruction of urban memory can be equivalent to the destruction of common cultures and cultural heritages, the past, memories, consciousness, and therefore a part of humanity. For this reason, to seek an answer to the question of how urban memory is affected as a result of recent and current wars, and to examine the motivations and results behind the destruction of urban memory is important both to those who were affected and to scholars.

⁵ Not only tangible components, but also intangible components and atmosphere of the city have experienced a radical transformation.

⁶ Translation by the author.

In this paper, the Kosovo war and its consequences were evaluated in terms of architectural destruction, and steps were taken to understand how urban memory was affected. The data obtained tries to draw attention to the fact that, regardless of what cultural heritage is destroyed and who made it, wars always and in all respects have negative consequences. When considering the historical importance of the destroyed structures, the background of the destruction, and considering their importance for the memory of the citizens, it is clear that significant destruction took place deliberately and as a result, the urban memory was injured.

Another inference that can be made regarding the demolitions in Kosovo is 'destruction against heterogeneity', which Coward (2009) put forward while addressing the phenomenon of urban genocide. In other words, one of the goals of the destruction in Gjakova and Prizren was to achieve homogenization. The destruction of Islamic structures, traditional structures identified with the Albanian population, and Orthodox churches and houses that represent the Serbian presence, can be defined as a process of destruction against heterogeneous cities as well as heterogeneous society in Kosovo. These structures are targeted as the most important proof of the existence of societies and the repository of collective memory. In the destruction of both the cities, these demolition processes, carried out against heterogeneity, targeted a certain layer in the city fabric. In Gjakova, this was the Old Bazaar, which is the centre of urban memory and social life in the city, and in Prizren it was the district below the castle, the heart of the city. As the responsible parties tried to homogenize the cities through demolitions, the urban memory also began to undergo transformation and homogenization through changes to the memory of older generations and formation of the memory of younger generations. The destruction experienced caused traumas in the memory, and the memory was interrupted while trying to reconstruct the past when remembering conflict as part of ongoing urban memory. As a result of the scars left by the traumas, some of the past has been erased, some has transformed, and some has become blurred.

5 Conclusion

Although the motivations behind the destruction experienced in other wars throughout history vary, as in the Kosovo war, as a result, the buildings are destroyed and the values they represent disappear with them. Every war experienced directly or indirectly affects cities both physically and metaphysically. The reasons for these wars are not the societies themselves – even though they play a crucial role, albeit often resulting from massive manipulation of truth and artificial narratives – but the governments that try to keep the collective memory under control and cause innocent people to die and cultural values to disappear for their own interests.

As argued in this study, whether the destruction experienced in the wars was intended to change the past or shape the future, to politicize the buildings, to target common values, or to take revenge, the structures that have a place in the urban memory are destroyed, and the urban memory is injured. In other words, the destruction of buildings and spaces during the war, which physically and metaphysically construct cities, and at the same time form urban memory as a result of mutual interaction with the collective memory, causes architectural traumas in the urban memory. Experienced traumas damaged memory, caused amnesia, and redefined it. As a result, societies begin to forget past events and lose the essential connection between the past and present. While partially damaged buildings create new layers in memory, the buildings or urban places that were completely destroyed create amnesias in urban memory and so affect collective memory. When the physicality of the buildings is destroyed, the ideas that they represent also disappear. While what was destroyed

was partially forgotten in the memory, the things that were rebuilt – for example, the League of the Prizren Museum – were added to the memory and the memory began to transform. Further, during and after the wars, the socio-cultural state of the cities changed due to migration, and this movement also directly affects collective and urban memory. In addition, the change across generations also has an important impact on memory. Memory is dependent on those who remember it: who remembered before the war, and who is remembering now, are not the same.

Just like in human physiology, the traumas experienced have a place in the memory never to be fully healed. The state of forgetting that occurs with destructions re-established the memory, and the traumas experienced left an indelible mark on memory.

6 References

- Bevan, R. (2016) *The Destruction of Memory: Architecture at War*. London: Reaktion Books
- Boyer, C. (1994). *The City of Collective Memory, Its Historical Imagery and Architectural Entertainments*, London, Cambridge MA: MIT Press
- CHWB. (2004) *Damage to Churches and other Cultural/Religious Properties During The 17-18 March 2004 Attacks on Orthodox Heritage In Kosovo & on Islamic Heritage In Serbia*, Cultural Heritage Without Borders.
- CHWB. (2015) *Historic Urban Area, Framework for the regeneration of the Great Bazaar in Gjakova*, Cultural Heritage without Borders.
- Coward, M. (2009) *Urbicide: The Politics of Urban Destruction*, New York: Routledge
- Demirel, N. (2016) *Kosova'nın Tarihi ve Sosyolojik Yapısı*, Istanbul: Eğitim Kitabevi Yayınları
- Freud, S. (1915 (2018)). *Savaş ve Ölüm Üzerine*, 1st edition, (first published 1915, reprinted 2018), Istanbul: Oda Yayınları
- Freud, S. (1920 (2016)) *Mutluluk Dediğimiz Şey, Aforizmalar*, 3rd edition (first published 1920, reprinted 2016), Istanbul: Aylak Adam Yayın evi, Zeplin Kitap
- Gashi, Sh. (2016) *The History of Kosovo In The History Textbooks Of Kosovo, Albania, Serbia, Montenegro and Macedonia*, Prishtine: Alter Habitus
- Herscher, A. (2008) "Warchitectural Theory", *Journal of Architectural Education* 62(1), pp.35–43
- Herscher, A. (2010) *Violence taking place: the architecture of the Kosovo conflict*, Stanford, California: Stanford University Press
- Herscher, A., and Riedlmayer, A. (2001) *The Destruction of Cultural Heritage in Kosovo, 1998-1999: A Post-war Survey*, Kosovo Cultural Heritage Project, USA: Cambridge, Massachusetts
- Herscher, A., and Riedlmayer, A. (2000a) "Architectural Heritage in Kosovo: A Post-War Report", *ICOMOS-US Newsletter* 4, July-August.
- Herscher, A., and Riedlmayer, A. (2000b) *Monument and Crime: The Destruction of Historic Architecture in Kosovo*. MIT Press in Gray Room, Volume 1
- Judah, T. (2008) *Kosovo, What Everyone Needs to Know*, New York: Oxford University Press

- Malcolm, N. (1998) *Kosova, Balkanları Anlamak İçin*, Istanbul: Sabah Kitabevi
- Nora, P. (2006). *Hafıza Mekanları*, trans. Mehmet Emin Özcan, Dost Kitabevi Yayınları
- Noviç, E. (2016) *The Concept of Cultural Genocide: An International Law Perspective*, Oxford, New York: Oxford University Press
- Plani Zhvillimor Urban i Gjakovës (2008) *Plani Zhvillimor Komunal dhe Plani Zhvillimor Urban i Gjakovës 2006 -2015+*, Prishtine: Kuvendi Komunal, Gjakove, Instituti i Shkencës dhe Teknologjisë
- Stoppani, T. (2016) "Architecture and Trauma", in: Ataria, Y., Gurevitz, D., Pedaya, H., and Neria, Y. (Eds.), *Interdisciplinary Handbook of Trauma and Culture*, Springer: New York, pp.133-149
- Toska, E. (2009) *Urban Revitalisation and Reconstruction of Nënkalaja Neighborhood and Syndicate Building In Prizren, Kosovo Management and Conservation Plan*, Cultural Heritage without Borders (Sweden) Prishtina – Kosovo: Kosovo office
- UNESCO (2004) *Cultural Heritage in South-East Europe: Kosovo, Protection and Conservation of a Multi-Ethnic Heritage in Danger, Mission Report, 26-30 April, 2004*, Cultural Heritage in South-East Europe Series No. 2.

THE IMPACT OF LONG WARS ON THE CULTURAL HERITAGE OF AFGHANISTAN: THE HERAT MUSALLA COMPLEX AS A CASE STUDY

Nasir Ahmad Yawar

Keywords: Afghanistan, Herat, Musalla Complex, Cultural Heritage, War, Destruction

1 Introduction

This paper is about the impact of the war on Afghanistan's cultural heritage, taking as a case study, the Musalla complex of Herat. Afghanistan has a long history of war, and the events that took place in this historical area and the damages caused by the war to the existing buildings are a testament to the impact of conflict on cultural heritage. This paper begins with an introduction to the rich heritage of Afghanistan, of which Herat is a significant example, before providing a (necessarily brief) overview of the various conflicts and their impacts. Having outlined the general destruction experienced across the country, it then moves to Herat, introducing it and the damage sustained, as a detailed example of the effect conflict has on cultural heritage. Protecting cultural heritage damaged by conflict, this paper argues, is a critical activity for national and international institutions, but even more important is the need for peace, without which, such activities cannot be realised.

2 Introducing Afghanistan

Afghanistan is located between the regions of Central Asia and South Asia. This geographical location resulted in rulership of different empires in this land throughout history, and different civilizations merged. Today, the co-existence of cultural heritage layers from different historical periods proves the richness of the historic remains in this country. Afghanistan is a centre of quintessential “crossroad of cultures” where the civilizations of the Near East, Central Asia, South Asia, and China interacted over the millennia in a constantly shifting mixture of trade, emulation, migration, imperial formations, and periodic conflict (Stein, 2015). As a result, the country has both become rich in cultural heritage and has lost part of this cultural heritage through various wars. Today, Afghanistan's cultural heritage includes archaeological and historical sites, architectural heritage, and museum artifacts that are left throughout the country from different historical periods. The country's heritage includes archaeological remains, art, and architecture. However, much of this has been damaged or destroyed over twenty-three years of recent war (Adamec & Clements, 2003).

Afghanistan holds some the most important, diverse, and quite simply spectacular remains in Asia (Ball, 2008). It was estimated the number of historical remains in the country consisted of more than 1,600 archaeological sites⁷ (Ball 2019), as well as a large number of historical monuments, buildings, archives and museums. However, there are also numerous unexplored and undocumented sites, which would certainly increase this number⁸.

Excavations at sites such as Ak Qupruq, Bamiyan, Begram/Kapisa, Ghazni, Hadda, Surkh Kotal, Ai Khanoum, Dashly, Mundigak, Shortugai, and Tillya Tepe revealed the outline of a long and complex

⁷ Due to differences in the way sites are counted and grouped, the 1600 sites recorded represent approximately 2100 individual sites (Ball, 2019: 4).

⁸ See the work of the Afghan Heritage Mapping Partnership, who aim to “*Inventory and map known and previously unknown archaeological heritage sites*”: <https://isac.uchicago.edu/research/camel/afghan-heritage-mapping-partnership>

cultural sequence ranging from the Paleolithic through the Islamic periods (Nashar & Noshadi, 2015). The oldest archaeological sites are in the foothills of the Hindu Kush Mountains in northern Afghanistan. Evidence exists of early Stone Age settlement in Afghanistan, with plant remains in the foothills of the Hindu Kush suggesting that this was one of the earliest places in which plants and animals were domesticated (Adamec & Clements, 2003). In southern Afghanistan, the Mandigak area has a history of 3,000 years, between 300BC and 2000BC, urban centers grew up in the area. Mundigak, sited near present-day Kandahar, was an economic centre for raising wheat, barley, sheep, and goats, and it possibly served as a regional capital for the Indus Valley civilization (Clements, 2003). In eastern Afghanistan, the ancient site dates to the first century AD. The largest gold treasure, dating back 2,000 years, has been recovered from the Tala Tape area in Jawzjan, which is an example of the cultural heritage preserved during the war. This treasure has been exhibited in most important cities of the world in recent years under the name of "Western Treasure" (Nashar & Noshadi, 2015).

Most of Afghanistan's major cities are historical, as their name suggests; names of cities such as Balkh, Ghazni, Herat, Kabul, Kandahar and Nimroz are abundant in historical sources. They have been destroyed and rebuilt many times throughout history; however, the old fabrics of these cities remain (Nashar & Noshadi, 2015). The architecture of Afghanistan dates back to Achaemenid, Hellenistic, Kushan and Sassanid periods. At different periods in its history Afghanistan has been subject to Harappan, Greek, Persian, Indian, Central Asian, Chinese, Arab, and European influence. The architecture of Afghanistan is syncretic fusion of these divergent traditions, the origin of which can be traced in the prehistoric, Achaemenid and Hellenistic periods (Ball, 2008). Islamic architecture includes the Seljuk, Ghaznavid, Ghorid and Timurid periods, and the works made in the 19th and 20th century, following the example of traditional architecture that has its own beauty. These contemporary buildings represent different architectural styles and most of them are decorated with traditional decorative arts such as tiling, plastering, muqarnas, and other arts.

3 Afghanistan's history of conflict

Afghanistan has also a long history of war; due to its geographical location the country has always experienced war from its earliest remembered history. Afghanistan's narrow passes have borne mute witness to armies of Persians, Greeks, Mauryans, Huns, Mongols, Moghuls, British, Soviets, Americans, and more, including many of the most famous commanders in history (Tanner, 2002:2). After conquering Persia, Alexander the Great invaded Afghanistan between 329–326BC (Adamec & Clements, 2003). This era was followed by a period of changing influences, with Seleucid, Roman, Arab, and Chinese influences in the area until the invasion of the Huns in 400AD, which resulted in the destruction of Buddhist culture and a country left in ruins. In 550AD, the Persians again ruled over a rebellious people who were constantly in revolt against the occupiers (Adamec & Clements, 2003).

In the 7th century AD, Muslim Arabs conquered the region and the people of the region fought against them. In the 11th and 12th centuries AD, it was the scene of conflict between the empires of Ghaznavid, Seljuks, Mongols and Ghorids. In the 13th and 14th century AD. The Mongol ruler unleashed more than 200,000 Mongol soldiers into Afghanistan, crippling cities such as Herat, Balkh, Ghazni, and Bamiyan and slaughtering every man, woman, and child along the way (Runion, 2007). In the late 14th century, Timur, the founder of the Timurid Empire in Central Asia, made Afghanistan his territory and many wars took place. In the 16th century, the Sheibanids invaded Herat and later the Safavids, destroying the Timurid Empire. Nader Afshar came to power in the 18th century, and after his death the Afghan government was established by Ahmad Shah Durrani. Each of these successive conquests damaged

and altered the historic buildings and monuments of their predecessors: the heritage of Afghanistan today is an intermingled blend of empires and conflict.

3.1 Damage in the 19th century

In the late 19th century, rivalry between Great Britain, which ruled India, and Russia, which was seeking control of Central Asia, resulted in the relocation of British troops to Afghanistan to prevent Russian influence in South Asia. Afghanistan was seen by Britain as a crucial buffer state, given the increasing power and widening interests of the Russian Empire in the region; British policy was determined by the desire to protect the security of its Indian Empire against the Russians, who were deemed to be the greatest threat to British interests in the region (Adamec & Clements, 2003). The three Anglo-Afghan Wars (1839-42, 1878-81, and 1919) are famous wars in the history of Afghanistan, standing out above the rest (Barnes, 2009).

Damage to Afghanistan's heritage from fighting was (and has always been) common. One example of the damage in the 19th century Anglo-Afghan wars is the damage to the historic fortress of Bala Hissar which dates to the Bronze Age in the Kabul. The British delegation was killed there on 3 September 1879, resulting in riots which lead to the second Anglo-Afghan war (1879–1880). During that conflict, the castle was damaged when the British Residency burned down, and damaged further when the armoury exploded. British Army officer General Roberts also ordered the levelling of several Mughal and Durrani-era structures in the fortress (along with the Bazaars and the Armenian Church in Kabul), and consequently very little of their architectural contributions remains (Lee N.D.). By the end of the conflict, most of the fortification had been destroyed by British imperial troops. The alleged culprits were hanged in front of what remained of the Residency. According to some reports, sharing the fate of the Great Bazaar in 1842, the Bala Hissar was destroyed as a warning against further violence (Barnes, 2009, though see also Ewing N.D.).

3.2 Damage in 20th century

In the second half of the 20th century, the Soviets invaded Afghanistan. This time the war used air and ground forces, and various military weapons, which together caused great damage. Millions were killed and wounded, and a large part of the Afghan population was forced to leave the country. Old cities and historical monuments were destroyed with light and heavy weapons, whilst others were subjected to excavations. Some areas were also mined – and some of these still have unexploded ordnance. Military bases were built by the Soviets and the communist government inside historical buildings between the cities and around them, which were also targeted by the Mujahidin. After the defeat of the Soviet Union, civil war broke out: Afghanistan's cultural heritage continued to be damaged by various weapons and destroyed, and museum artifacts were looted. The war continued: in the past two decades, a UN-mandated international coalition called the International Security Assistance Force (ISAF), which includes troops from more than 40 countries, including the United States and other NATO members, was stationed in Afghanistan. Their mission did not lead to an end to the war and the establishment of security in Afghanistan: the war continued, eventually leading to the collapse of the government in 2021. The international forces left the country, and another page was opened in the history of Afghanistan. It is not clear when the war in this country will end, and the people of this country will live together in peace and tranquillity.

Although legal excavations of archaeological sites began in approximately 1922, started by the French Archaeological Board and followed by Italian, British, and American, Soviet, Japanese, Indian, and

Afghan archaeologists, with the outbreak of war in 1978, all these activities were stopped, and the sites and even museums were looted. In 2009, the UK repatriated c.15,000 looted Afghan antiquities – over 3.4 tons (!) that had been confiscated at Heathrow airport (Stein, 2015). The problem continues today (Solly 2019, Aikins, 2021).

3.3 Looking backwards and ahead

Whilst there has also been damage because of natural disasters, urban and agricultural expansion, lack of proper maintenance, and lack of financial and human resources, I believe the greatest damage to Afghanistan's historical monuments has been because of wars. Countless ancient sites and monuments have been destroyed damaged, and looted (Ball, 2008 Hammer *et al.*, 2018). Through Afghanistan's history, cultural heritage has been deliberately destroyed due to political, religious, and military considerations, such as the demolition of the Goharshad Begum Musalla complex in 1885 in Herat, and the destruction of Buddha statues in 2001 in Bamiyan. War related damage and mitigation efforts centre on several key aspects of cultural/archaeological heritage: objects, monuments, sites, museums, and intangible heritage, but it is unclear what success these initiatives can have without the security to properly establish them.

4 Herat as a case study

4.1 Introducing Herat

In western Afghanistan, Herat is one of the most important historical cities with a variety of cultural heritage left over from different historical periods. The importance of Herat from the standpoint of history and architecture is outstanding. Alexander the Great invaded Herat in 330 BC. At that time, he built a fort and built his first Alexandria. After that, Herat became part of the Parthian, Kushan and Sassanid empires until 652AD. As a city of a culture and crucible where diverse civilizations met and fused, Herat has a diverse cultural heritage from different historical periods. The old city of Herat has historically been one of the most important cultural and commercial cities. In 1221AD, Herat was captured by the armies of Genghis Khan the Mongol and the city of Herat was destroyed. In 14th and 15th centuries, Herat, as the centre of the Timurid Empire, was ruled by the Timurids for more than a hundred years. One of the most important parts of the history of Afghanistan is the Timurid period and many relics of this period can be found in different parts of the country. During this period, Herat became the capital of the Timurid Empire, and the cultural transformation of the Timurid Renaissance began in this city. In the fields of architecture, culture, art and literature, significant growth was unveiled, and rich cultural works were produced. In line with this development, many buildings were restored and new religious, public and government buildings were built. It has survived as a traditional Islamic city well into the twentieth century (Tirard-Collet, 1998), and today is the third largest city in Afghanistan.

4.2 Damage at Herat

Herat, as a historical province, has the most cultural heritage, especially historical monuments in the country and, on this basis, its cultural heritage has suffered the most during the wars. In Herat, the historic urban quarters, particularly the west and south-west sections of the Old City, were depopulated because of intense fighting. This caused a lack of maintenance and deterioration of the older fabric. Outside the city of Herat, the monumental minarets and Goharshad's mausoleum, remains of the Timurids architecture of the 15th and early 16th centuries, were severely damaged by artillery shells fired by Soviet troops stationed on the northern heights in 1985 (Najimi, 2011).

One of the most important structures of Timurid period in Herat, the remains of which are left today, is the Musalla complex of Herat, which includes Masjid-I Jami and Madrasa of Gauhar Shad, as well as the Madrasa of Sultan Hussein Bayqara. A great building project was initiated by Queen Gauhar Shad, wife of Shah Rukh, in about 1417AD to build a madrasa (place of learning), and a mosque (place of worship) as parts of a single complex (Tirard-Collet, 1998).

These structures have been severely damaged by war over the centuries. From the beginning of the 16th century, after the end of the Timurid Empire in Herat, until the end of the 20th century, the Musalla complex of Herat was almost completely destroyed. It is one of the great tragedies of fortune that a complex of architectural monuments which elicited such admiration from its contemporaries should have left barely a trace (Golombek & Wilber, 1988).

In the 19th century, as a result of internal conflicts between the rulers of the time, the Musalla complex was hit by artillery shells. As travellers described it, the destruction, and subsequent lack of care, severely damaged these buildings. Then, in 1885, the whole area was totally levelled for defensive reasons by order of 'Abd al-Rahman in 1885, at British insistence, to counter a predicted Russian offensive. This resulted in the destruction of a large part of the remains of the complex (Tirard-Collet, 1998) (Figures 1, 2, 3). After that, only nine minarets and the Mausoleum of Queen Goharshad (836AH) (also known as the Tomb of Baysunghur) remained. Although the minarets and the Mausoleum of Goharshad were spared, the damage caused by the explosion of gunpowder and axes of the people weakened them and the predicted "Cossacks" (Russians) never came! Earthquakes in 1931 and 1951 collapsed some of the remaining minarets (Tirard-Collet, 1998), and by 2021, of the original ten minarets in the whole complex, only five remained. Today only a ribbed domed mausoleum and two minarets remain (Figures 4, 5) of the famous masjid-i jami' and madrasah of Gawhar Shad (Golombek & Wilber, 1988).

In 1972, the World Heritage Convention was adopted at the 17th session of UNESCO in Paris and most countries of the world, including Afghanistan, joined in the same year. Since then, activities have begun to restore historical monuments in Afghanistan, including the Musalla Complex in Herat. UNESCO started studying possible conservation and restoration approaches in 1976. Preliminary studies were undertaken by the Italian architect Andrea Bruno, and UNESCO launched a preservation program (Tirard-Collet, 1998). Unfortunately, these projects did not last long, continuing only until Soviet Armed Forces occupied Afghanistan in 1978.

From 1985, the Musalla was a war zone and a barrier, exchanged between the Government and Mujahidin. When the area was in the hands of the Government, they moved their armoured vehicles through the historic area and set fire to the Mujahidin-held areas. Government forces moved two tanks over the two artificial high hills along the western minarets of Sultan Hussein Madrasa where they opened fire on the Mujahidin areas. It was natural that the Mujahidin would respond to the tank fire, and such blows and injuries were inflicted on this historic area and its minarets. The north of Herat, and subsequently the whole site, became a heavily shelled and bombed battlefield: the pine trees which surrounded the buildings were cut down, and the area was seeded with mines (Tirard-Collet, 1998). The area of Sultan Hussein Madrasa was mined by government forces during this period, some of which exploded later, killing and wounding civilians. It was not demined until 2016. A later excavation program in Sultan Hussein Bayqera Madrasa revisited the area, during which several unexploded Russian mine rings and various bullets and ammunition were found (Tirard-Collet, 1998).

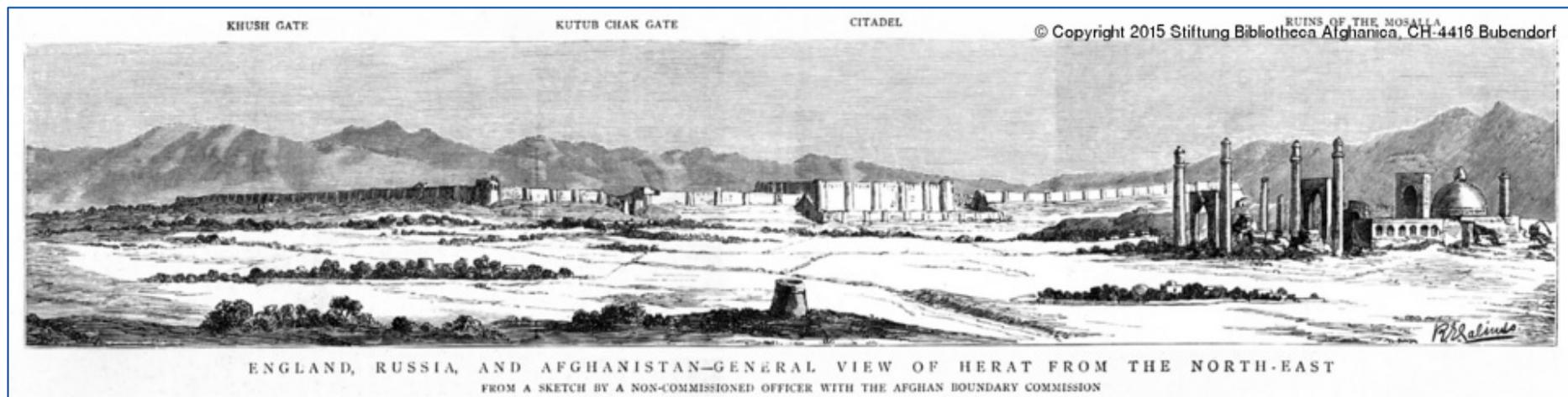


Figure 1: Herat Musalla complex north of the old city before demolition, 1885⁹

Afghan Boundary Commission ABC 4, ELD Sketches, picture 020-3 © StiftungBibliotheca Afghanistan, CH-4416 Bubendorf, www.phototheca-afghanica.ch.

⁹ This engraving was first published in THE GRAPHIC, Vol. 32 (1885/2) p. 173, on Aug. 15, 1885

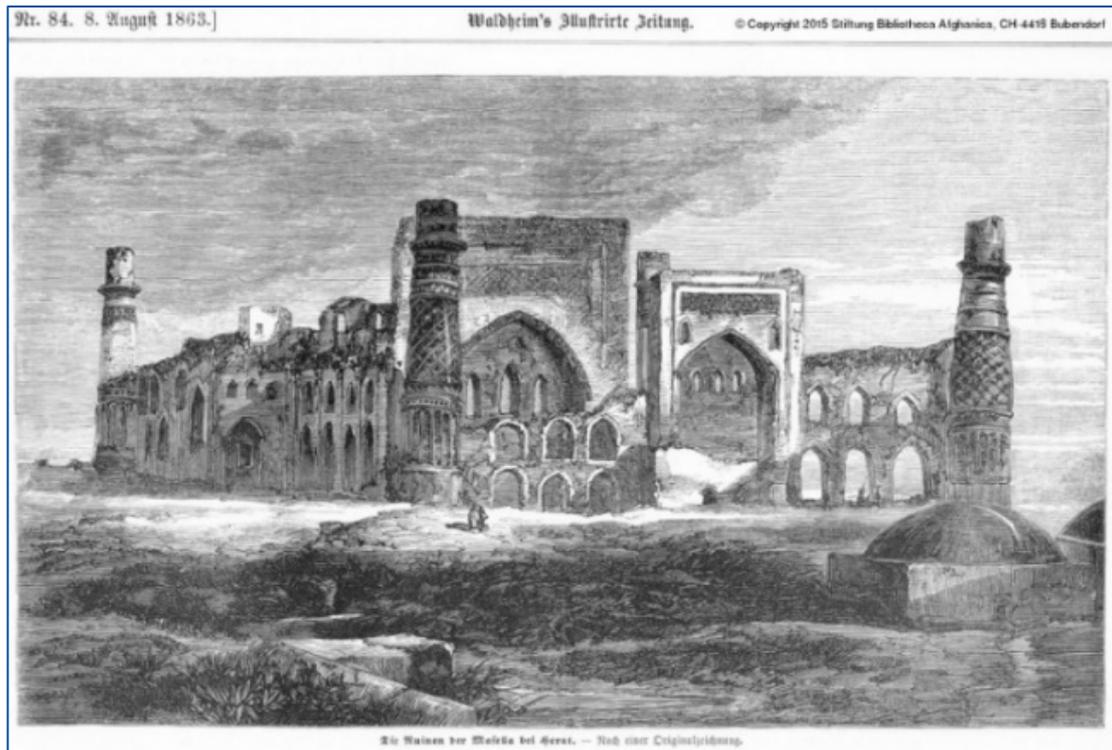


Figure 2: Goharshad Bigum Mosque, before demolition, 1863. Engraving based on a sketch by Major Th. H. Holdich. ILN 1885/2, 06 Afghan Boundary Commission 1884-86 Series ABC 8, ILN Engravings 1885/2-1887 © StiftungBibliotheca Afghanistan CH-4416 Bubendorf, www.phototheca-afghanica.ch



Figure 3: Madrasa of Gohar Shad before demolition, 1863. Sketch by Edward Law Durand, about the same time as Holdich's sketch, but from the opposite direction. ILN 1885/2, 06 Afghan Boundary Commission 1884-86 Series ABC 8, ILN Engravings 1885/2-1887 © StiftungBibliotheca Afghanistan CH-4416 Bubendorf, www.phototheca-afghanica.ch



Figure 4: The only remaining dome of the Gohar Shad Mausoleum, 1935. Image No. DHE 304 – 307, Deutsche Hindukusch-Expedition Collection, DHE 254-307, Rückreise durch Nord-Afghanistan © StiftungBibliotheca Afghanica, CH-4416 Bubendorf, www.phototheca-afghanica.ch

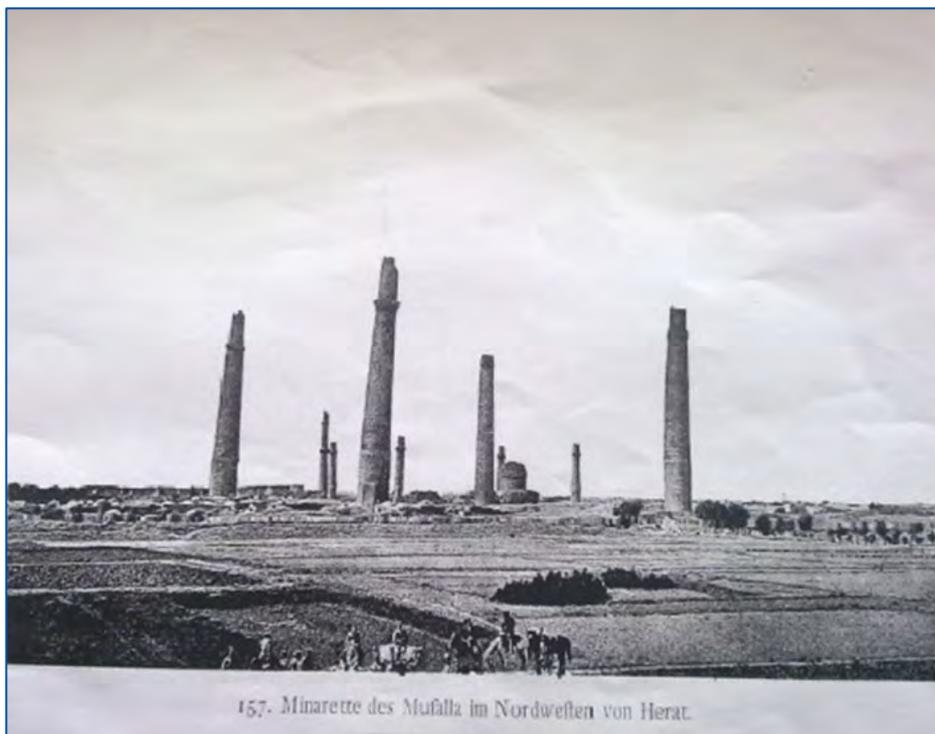


Figure 5: Minarets in Musallah complex after demolition, 1915, Oskar Niedermayer¹⁰. © StiftungBibliotheca Afghanica, CH-4416 Bubendorf, www.phototheca-afghanica.ch

¹⁰ First published in *Afghanistan* (1924), plate 157

The remaining minaret in the northwest corner of Goharshad Shad's mosque, the remaining leaning minaret in the Madrasa, and the ribbed dome of Goharshad Mausoleum were all seriously damaged by air operations carried out in these areas. For example, in an operation on the Musalla complex, the remaining minaret in northwest corner of Goharshad Mosque was hit and destroyed by Soviet war jet bombs (Figure 6). It was 37.5m high before the war, and the base was inserted in the building of a school constructed at its foot in 1940. Ninety-two shells from Soviet heavy artillery entirely destroyed it, possibly in 1985. Only 12m of its base remains today (Tirard-Collet, 1998).



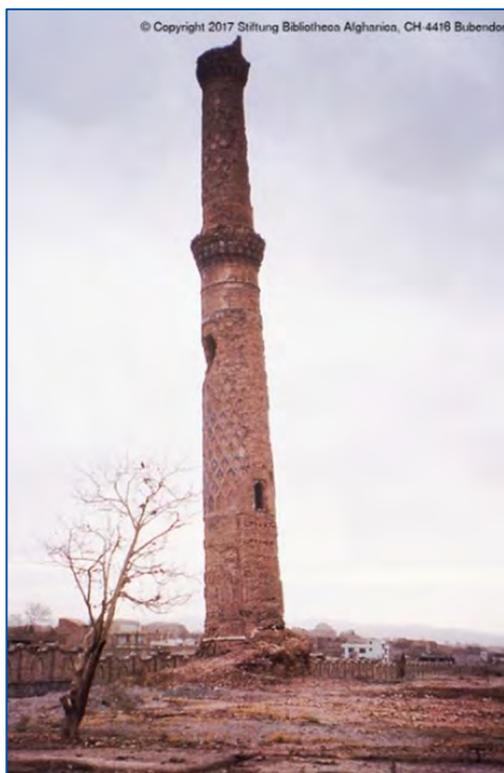
Figure 6: Current condition of the only remaining minaret of the Gohar Shad Mosque, collapsed by the bombing of Russian planes, 2016 © Author.

The minaret of Goharshad madrasa separated from the main body of the school building (Goharshad Begum School) due to the damage sustained in 1885, and it began to seriously tilt. During the wars, the minaret, and the school were hit by bullets which caused damage to the body of the buildings: large and small holes in the facade of the minaret were found and the tile decoration of façade destroyed. Most of the tile decoration of the ribbed dome destroyed and the tiles were lost, in part due to the dramatic tilt and cracks due to both rotation and compression. The Minaret also had a large hole at mid-height caused by a missile (Han & Liwanag, 2015).

4.3 Saving the site

Following the end of the Soviet War and the civil wars, in 2002, the protection of this complex was reconsidered. UNESCO renewed their restoration process of the Musalla complex (UNESCO N.D.a) (Figures 7, 8) with the government, focusing on strengthening the sloping minaret of Goharshad Begum School. In 2003, during a visit to Herat province, UNESCO experts examined the condition of the minaret: according to their measurements, the deviation of the minaret was 2.7m. This amount of deviation and the deep cracks in the body of the minaret indicated its critical condition: they

considered it prone to collapse and decided to take urgent action to prevent the minaret from falling. Temporary stabilization measures, such as steel cables to control the deviation of the minaret and prevent it from falling, were designed and implemented by Macchi and the Italian engineering firm ALGA. The work started with the embedding of concrete blocks in the soil up to 25m from the minaret, covering an area of 15 degrees on each side of the direction of its tilt. These blocks were then connected to the structure using high tensile steel stays which, after the application of force through jacks, reduced the inclination enough to close the crack at the structure's base and bring its masonry back to a state of total compression (Han and Liwanag, 2015).



Figures 7, 8: The only remaining minaret of the Gohar Shad Madrasa that was hit by artillery during the war. Left 2001, right 2016. © Left: P. Bucherer, Rudolf Stuckert Collection RS 373-386, StiftungBibliotheca Afghanica, CH-4416. Right: Author.

In 2004, the Afghan government nominated the City of Herat to the Tentative World Heritage Site List, for consideration to include on the World Heritage List, under the criteria that it

“(i)represent[s] a masterpiece of human creative genius; (ii) exhibit[s] an important interchange of human values, over a span of time or within a cultural area of the world, on developments in architecture or technology, monumental arts, town-planning or landscape design; (iii) bear[s] a unique or at least exceptional testimony to a cultural tradition or to a civilization which is living or which has disappeared; (iv) [and is] an outstanding example of a type of building, architectural or technological ensemble or landscape which illustrates (a) significant stage(s) in human history” (UNESCO 2004).

However, the site has still not been put forward onto the World Heritage List due to the destruction of the historical fabrics resulting from the construction of modern buildings inside of old city, which the authorities have not been able to prevent.

Between 2009 and 2011, some efforts were made by UNESCO to document and repair the dome of Goharshad's Mausoleum, along with further repairs to the tilting minaret, including repairing a hole in the body of the minaret that was hit by a bullet. In 2013, UNESCO, in collaboration with the Ministry of Information and Culture, launched a project on the protection, sustainable management, and development of cultural heritage in Herat: the author of this paper was also involved in the project (Figure 9, 10).



Figure 9: Goharshad Mosque and Madrasa, 2014 © Author



Figure 10: Goharshad's mausoleum, 2014 © Author

In line with this project, archaeological studies were carried out on the site of Sultan Hossein Bayqara Madrasa (Figure 11, 12, 13), and a surrounding wall was built to protect the area and block the passage of vehicles from a road built through the middle of the Madrasa building. In the meantime, the area was cleared of mines and shells. In addition to finding and defusing three mines, unexploded ordnance was also discovered and cleared.



Figure 11, 12, 13: Remains of the Sultan Hosain Bayqera Madrasa, 2014 © Author

After the completion of this project in 2019, another project was undertaken by the Afghan government: the surrounding walls to the north and west of Goharshad Begum Garden were rebuilt. In Sultan Hussein Bayqara Madrasa, the remains of the old walls of Sultan Hussein Bayqara's Mausoleum were repaired, and some of the remaining tile decoration in the two minarets to the west of the Madrasa were restored.

Recently, the Aga Khan Culture Services in Afghanistan (AKCS-A), who have also been working to restore the Old City since 2005, have undertaken studies and documentation to strengthen the tilting

minaret of Gohar Shad madrasa with funding from the ALIPH Foundation (AKCS-A, N.D.). The implementation of the minaret consolidation project will begin if the situation in Afghanistan improves.

5 Conclusion

This article has demonstrated the effect of war on cultural heritage, using Herat as a case study. Afghanistan is a country with rich and diverse cultural resources, of which Herat is just one example. Unfortunately, these cultural and spiritual assets have always suffered greatly because of the ongoing wars that have taken place in this region. Many ancient sites and monuments were destroyed, and many others remain in ruins. Undoubtedly, war is a terrible phenomena, and always causes extensive destruction. However, in addition to the war, there are other damages to the country's cultural heritage, including the financial and human inability of governments to protect and manage cultural heritage, and people's lack of awareness of cultural heritage values. Substandard urban development also cause further destruction of buildings, and usurpation of historical sites.

If the war ends and peace is restored in Afghanistan, there will be more activities in the field of cultural heritage protection so it may be passed on to the next generation. Afghanistan's cultural heritage shows the process of human development and is a witness to the prosperity and cultural richness of the region throughout history. To protect and preserve all this cultural wealth, war must end, and peace must be established in the country. All the people responsible for the development of Afghanistan must make special efforts to protect cultural heritage. The assistance and cooperation of the international community also plays an important role in protecting the cultural heritage of Afghanistan. In the last two decades, cultural heritage protection and restoration activities in Afghanistan have been undertaken largely due to the attention of the international community, and the financial and technical assistance they have provided, although some projects were carried out by government agencies and international institutions. With the fall of the Afghan government last year, most of these activities have stopped and they must be restarted. Cultural heritage protection activities in war-torn countries can help to eliminate the danger to the remaining cultural heritage and preserve it for the future.

The Jam Minaret in Ghor Province (“Minaret and Archaeological Remains of Jam”¹¹) and the Bamiyan Valley (“Cultural Landscape and Archaeological Remains of the Bamiyan Valley”¹²) are two of Afghanistan's World Heritage Sites: today both are considered endangered and are on UNESCO's World Heritage in Danger list. For both sites, UNESCO list the security situation as a key challenge to the safety of the site. The war must end in order for the protection of cultural heritage to be implemented and for these two World Heritage Sites to be out of danger. Once that happens, there will also be an opportunity to register other cultural heritages on the World Heritage List. Although

¹¹ Inscribed on the In Danger List until the “*desired state of conservation is achieved [...] This must include the increased capacity of the staff of the Afghan Ministry of Culture and Information who are in charge of the preservation of the property; precise identification of the World Heritage property and clearly marked boundaries and buffer zones; assurance of the long-term stability and conservation of the Minaret; assurance of site security, and a comprehensive management system including the development and implementation of a long-term conservation policy*” (UNESCO N.D.b).

¹² Removed of the site from the In Danger list requires “*progress in addressing security risks, the structural stability of the remains of the two giant Buddha sculptures and their niches, the conservation of the archaeological remains and mural paintings and implementation of the Management Plan*” (UNESCO N.D.c).

currently there is no hope of inscribing Herat Old City being, historic sites such as historic religious buildings can be included if they are protected and managed well. For example, Herat Great Mosque could meet the World Heritage registration criteria if its originality and integrity can be preserved, and in this case, the remnants of this historical complex of the Timurid period, which is an example of war-torn cultural heritage, can be better protected.

This article is written in the hope that one day peace will be established in Afghanistan and the opportunity for its prosperity and development will be provided again, and at the same time its unique cultural heritage will be preserved and passed on to the next generation.

6 References

Adamec, L. and Clements, F.A. (2003) *Conflict in Afghanistan An Encyclopaedia – Roots of Modern Conflict*, London, New York: Bloomsbury / Santa Barbara, California: ABC-CLIO, Inc.

Aikins, M. (2021). "Bringing Home the Loot: Repatriating Afghanistan's Stolen Treasures", *The Sydney Morning Herald*, 2 April. Available: <https://www.smh.com.au/world/asia/bringing-home-the-loot-repatriating-afghanistan-s-stolen-treasures-20210204-p56zn1.html> [Accessed: 24 January 2024]

AKCSA (N.D.) "Restoration in Herat", Aga Khan Culture Services in Afghanistan, *Aga Khan Development Network* website. Available at: <https://the.akdn/en/where-we-work/central-asia/afghanistan/cultural-development-overview-afghanistan/restoration-in-herat-afghanistan> [Accessed: 24 January 2024]

Ball, W. (2008). *The Monuments of Afghanistan, History, Archaeology and Architecture*, London: Tauris & Co.

Ball, W. (2019). *The archaeological gazetteer of Afghanistan*, 2nd Edition, Paris: ADPF

Ball, W., and Hammond N. (2019). *The Archaeology of Afghanistan, From Earliest Times to the Timurid Period*, Edinburgh: Edinburgh University Press Ltd

Barnes, G.F. (2009) *The Anglo-Afghan Wars 1839-1919*, Oxford, New York: Osprey Publishing.

Ewing, G. (N.D.) "The Truth about the British and the Bala Hissar and the Second Anglo Afghan War", *The Second Anglo-Afghan War 1878-1880* website. Available at: <https://www.garenewing.co.uk/angloafghanwar/articles/balaHissar.php> [Accessed: 24 January 2024]

Golombek, L., and Wilber, D. (1988). *Timurid Architecture in Iran and Turan*, New Jersey: Princeton University Press.

Hammer, E., Seifried, R., Franklin, K., and Lauricella A. (2018) "Remote assessments of the archaeological heritage situation in Afghanistan", *Journal of Cultural Heritage* 33, pp.125-144.

Han, J., and Liwang, M.A. (2015) *From the Past and For the Future: Safeguarding the Cultural Heritage of Afghanistan – Jam and Herat*, Paris: UNESCO

Lee, J. (N.D.) "KABUL v. MONUMENTS OF KABUL CITY," *Encyclopaedia Iranica*, XV/3, pp.310-318. Available online: <http://www.iranicaonline.org/articles/kabul-05-monuments-of-kabul-city> [Accessed: 24 January 2024]

Najimi, A.W. (2011) "Built heritage in Afghanistan: threats, challenges and conservation", *International Journal of Environmental Studies* 68(3), pp.343-361 DOI: <http://10.1080/00207233.2011.573961>

Nashar, B., and Noshadi, S. (2015) *Keeping History Alive: Safeguarding Cultural Heritage in Post-Conflict Afghanistan*, Kabul: UNESCO Office Kabul. Available: <https://unesdoc.unesco.org/ark:/48223/pf0000232932> [Accessed: 24 January 2024]

Solly, M. (2019) "Hundreds of Artifacts Looted From Iraq and Afghanistan to Be Repatriated", *Smithsonian Magazine*, 9 July. Available: <https://www.smithsonianmag.com/smart-news/hundreds-artifacts-looted-iraq-and-afghanistan-repatriated-180972584/> [Accessed: 24 January 2024]

Tanner, S. (2002) *Afghanistan, A Military History from Alexander The Great to the Fall of the Taliban*, Cambridge: Da Capo Press

Tirard-Collet, O. (1998) "After the War. The Condition of Historical Buildings and Monuments in Herat, Afghanistan". *Journal of the British Institute of Persian Studies* 36:1, pp.123-138, DOI: DOI: <http://10.1080/05786967.1998.11834586>

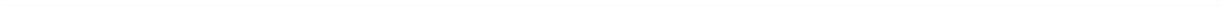
Stein, G. (2015) " "The War Ravaged Archaeological Heritage of Afghanistan": An Overview of Projects of Assessment, Mitigation, and Preservation", *Near Eastern Archaeology* 78:3, pp. 187-195, DOI: <https://doi.org/10.5615/neareastarch.78.3.0187>

UNESCO (N.D.a) "Emergency consolidation and Restoration of Monuments in Herat and Jam, Phase I and II", UNESCO website. Available at: <https://whc.unesco.org/en/activities/246/> [Accessed: 24 January 2024]

UNESCO (N.D.b) "Minaret and Archaeological Remains of Jam", UNESCO World Heritage Centre website. Available at: <https://whc.unesco.org/en/list/211> [Accessed: 24 January 2024]

UNESCO (N.D.c) "Cultural Landscape and Archaeological Remains of the Bamiyan Valley", UNESCO World Heritage Centre website. Available at: <https://whc.unesco.org/en/list/208> [Accessed: 24 January 2024]

UNESCO (2004) "City of Herat", UNESCO Tentative Lists website. Available at: <https://whc.unesco.org/en/tentativelists/1927/> [Accessed: 24 January 2024]



REVEALING THE COLLECTIVE MEMORY IN THE DIGITAL RECONSTRUCTION OF THE LOST CULTURAL HERITAGE – EXAMPLE OF AL-NURI MOSQUE IN MOSUL

Sahar Riyadh Naser

Keywords: Collective Memory, Lost Cultural Heritage, Digital Reconstruction, Al Nuri Mosque

1 Introduction

The heritage of nations has always been a symbol of their cultural identity and an expression of their pride in their civilised history. It is a source of inspiration and differentiation among civilisations. Cultural heritage consists not only of monuments, buildings, and architectural landmarks, but also of everything that concerns a nation in the form of intangible expressions, folklore, folk tales and traditional knowledge. Cultural heritage represents the living memory of individuals and societies and is historical evidence of a society's existence. The loss of a society's cultural heritage therefore means the loss of that society's collective memory.

There are many reasons for the loss of architectural monuments, including time, wars, and natural disasters. One of the most egregious aspects of war is the damage it does to World Heritage. The extent of loss ranges from partial to total loss, as well as the loss of tangible and intangible features of cultural heritage sites in conflict zones. In war, attackers often target not only antiquities, but also the memory, history, and identity of a people. Because of the negative impact that historic buildings damaged by terrorism or war leave in the minds of people and the world at large, UNESCO works with Blue Shield International, ICCROM, and many other international organisations involved in the protection of cultural heritage by facilitating international interventions related to emergency situations that threaten urban cultural heritage. One focus is on cultural heritage protection interventions in conflict zones such as Iraq, Syria, Yemen, and others.

Lost buildings and their forgotten stories have long attracted the cultural interest and curiosity of scholars and ordinary people around the world (Mascio et al., 2016). Today, in the midst of the digital revolution, the digital reconstruction of historical buildings lost in conflict zones offers the possibility to restore their historical value. Recently, new trends have emerged for the digital reconstruction of lost historical sites and heritage buildings in conflict areas using 3D modelling and 3D printing, such as the use of ICONEM technology, Building Information Modelling (BIM) and the creation of a virtual reality space (VR) and environment for the sustainable preservation of these historical buildings. The main purpose of 3D digital reconstruction is to digitally reconstruct a 3D model of the object under investigation. In Winchester, England, 3D modelling software was applied to the Anglo-Saxon cathedral Old Minster. This is believed to be the oldest 3D computer modelling application in the UK for visualising archaeological data (Kafel, 2012). A number of 3D modelling and virtual reconstruction applications have also been applied to many historic buildings that no longer exist, such as the mediaeval church of Cluny III, Dudley Castle and ancient Rome (Messemer, 2016). The whole 3D modelling process is influenced by three main aspects: the data collected (and the method of data collection), the characteristics of the object to be modelled and additional applications of 3D digital reconstruction (related to the purpose of digital reconstruction) (Mascio et al., 2016).

In this article, we believe that digital reconstruction is the most important tool for recovering the lost collective memory, as it can have a significant impact. When examining previous studies on digital reconstruction of lost buildings, most of the studies focused on the physical dimension of digital reconstruction, but did not go into detail on how collective memory is achieved in the digital reconstruction of lost historic buildings? What are the strategies and mechanisms to achieve it? And what are the ethical aspects of digital reconstruction in restoring the collective memory of lost buildings? Therefore, from an epistemological point of view, it was necessary to focus on the role of digital reconstruction in restoring the collective memory of lost architectural monuments in conflict areas. This article aims to adopt strategies and mechanisms of digital reconstruction as a new method in recovering lost collective memory. Accordingly, this article explores methods for 3D digital reconstruction of historical buildings that have lost their value or have been destroyed by war through their development in virtual reality environments, information systems, simulation tools and analysis, and measures their effectiveness in restoring the collective memory of a community.

The first part of this article outlines the stance taken by heritage organizations that oppose acts of aggression targeting cultural heritage sites in areas of conflict. The second part deals with the concept of digital reconstruction and the collective memory of lost heritage sites. The third and fourth parts examine some exemplary models of digital reconstruction of lost heritage sites in conflict zones and explore the ethical implications of digital reconstruction in restoring lost collective memory. It then looks at the Al-Nouri Mosque in Mosul as a case study for digital reconstruction to recover collective memory lost during conflict, chosen based on the author's memory of the destruction and the personal impact it had. Finally, in the last part of the article, conclusions and recommendations are made.

2 The position of cultural heritage organisations against attacks on cultural heritage sites in conflict regions

In recent years, brutal wars in the Middle East have led to the destruction of ancient city centres, magnificent mosques, churches, ancient temples, and many other historical sites that are on the World Heritage List UNESCO. Several historic cities have been destroyed in the conflict areas in Iraq and Syria. This has led to a loss of collective memory and intergenerational communication in many destroyed cities. UNESCO, the Blue Shield, the International Council of Museums (ICOM) and many international conferences and organisations concerned with the protection of world heritage condemned the recent terrorist attacks on cultural heritage sites by the Islamic State organisation in Iraq, Syria and elsewhere and called for necessary measures to be taken to protect and preserve cultural heritage in conflict zones. In Iraq, the Association of National Committees of the Blue Shield expressed its deep concern about the terrorist attacks by the Islamic State (ISIS) on cultural heritage sites in Mosul. They condemned the deliberate closure of educational institutions, the destruction of libraries and the remains of the cultural heritage of ancient communities, housed in Mosul's museums – and added this criminal act "*fundamentally and categorically contradicts what the modern, civilised world believes*", while calling for awareness of history in order to understand our present and build the future of future generations (Blue Shield, 2015a). In addition, the international Committee of the Blue Shield stressed the need to protect Iraq's cultural heritage sites and called on all participating States to comply with the following obligations in the event of armed conflict (Blue Shield 2015b): ICOM defines measures to protect cultural heritage as follows (ICOM-CC, 2007):

Preventive Conservation: – Includes archiving and regular monitoring of cultural heritage to reduce, control or recover from disasters.

Curative Conservation: – Includes restoration and rehabilitation of the heritage site and its conservation, including reconstruction.

The preventive conservation concept uses digital systems for documentation, however without community participation. For example, United Nations Security Council (UNSC) Resolution 2347 (2017), which is the only UN Security Council Resolution to deal exclusively with heritage destruction,

“17. Calls upon Member States ... to consider adopting the following measures in relation to such cultural property:

(a) Introducing or improving cultural heritage’s and properties’ local and national inventory lists, including through digitalized information when possible, and making them easily accessible to relevant authorities and agencies, as appropriate” (UNSC, 2017).

One of the aims of this article is to bring these two concepts, preventive and curative conservation, together in order to curate not only objects but also damage to communities. Psychologically, the destruction of World Heritage sites in conflict zones has a negative impact on people's emotions and collective memory: images of destruction and devastation left behind by wars often remain in people's minds and memories (Bevan, 2006) and can damage a community's cultural identity. But what if we turn images of damaged heritage into digitally processed data, by archiving photos and regularly monitoring heritage before and after destruction, as well as collecting documents from people and stakeholders at damaged sites? We can then analyse the areas of damage, assessing their extent, and then restoring the structures digitally? In this case, will digital reconstruction play an effective role in restoring the war-damaged cultural heritage with its cultural identity and collective memory? This is what we will try to answer in the next sections.

3 Collective memory and reconstruction of lost cultural sites

The term "lost buildings" is defined as buildings that have lost their original form and belong to one of the following three related categories: partially lost, completely lost, and transformed (Mascio et al., 2016). Lost monuments can be defined as historic buildings that lose their tangible and intangible properties because of massive damage caused by unnatural conditions such as wars or natural conditions such as disasters. The loss or destruction of monuments caused by wars may be of a different character from losses caused by other factors, such as direct physical forces that can have cumulative effects, such as shocks and vibrations; chemicals and insects; natural factors such as earthquakes, volcanoes, hurricanes and floods; and human factors caused by neglect or ignorance of conservation procedures, or by inappropriate passive interventions (Feilden, 2007). Images of war-related destruction and devastation of World Heritage monuments and other major landmarks are quicker to stir people's emotions. Therefore, international organisations and resolutions dealing with the protection and preservation of urban heritage have identified measures that must be considered on a case-by-case basis when dealing with lost historic buildings. This study focuses on the mechanism of reconstruction as one of the mechanisms of curative protection, especially digital reconstruction, including the revival of the collective memory of lost buildings. So, what is collective memory?

3.1 Memory animation of lost buildings in the age of digitalization

The French philosopher and sociologist Maurice Halbwachs first introduced the concept of collective memory in the 1920s, focusing on the link between collective memory and the two main dimensions of time, space, and history. He defined collective memory not as a socially constructed notion of the past, but as a socially shared notion (Cordeiro, 2015). Collective memory is defined by a group of researchers from a social, historical, and cultural perspective:

Social: Collective memory is concerned with the social character of the human subject. Collective memory can be defined as the act of remembering the past and reconstructing the present; it aims to understand the past at the moment of its awareness and its compatibility with the social identity of the community or group. The collective memory of society establishes a relationship with the real reality of the past based on the mechanisms of choice and transformation that allow society to change according to its identity (Moliner and Bovina, 2019). Sociologist Barry Schwartz, defines collective memory as the identification of beliefs, emotions, moral judgments, and knowledge about the past in a society, and this definition contains three important points (in Conway, 2010).

1. Collective memory is related to a social phenomenon because it belongs to society and not to the individual.
2. Collective memory is not objectively about what exactly happened in the past, but about how the group thinks about the past.
3. Collective memory is about the recovered past and its relationship to the living present and the imagined future.

Historical: Hewer and Roberts (2012) defined collective memory as: a dynamic interaction between history, culture, and knowledge, including emotions and decisions. However, Foot and Azariahu (2007) also defined collective memory as a matrix in which space and time are separated and used together with shared historical experiences and a shared sense of the past in the public life of a community or religious or social group.

Cultural: The process of collective memory is related to the formation of a society's cultural identity and is presented as a product of its collective memory, where the dominant function of collective memory is to establish or verify collective identity and ensure its historical continuity (Szpunar & Szpunar, 2015).

Collective memory not only refers to individual memory, but is a general term that indicates the commonality of a group of individual memories that all belong to the same group or community (Ekman, 2013). Assmann and Czaplicka (1995) point out that human memory remains alive and can only survive within a continuous cultural network. There is always an alternation between an individual's personal memories and the collective memory of the social group to which they belong. Collective memory includes the past embodied in many cultural practices, especially commemorative symbols. In recent years, the development of digital technology has brought lost memories back to life through new images and similar ways in which certain stories and images are repeated, rewritten, and shaped (Felasari, 2013). Thus, collective memory represents the past and memories of a particular

group or community that are shared by the members of that group or community in a way that preserves the cultural identity and future dreams of that group or community.

Glaveanu (2017) proposed a possible model of collective memory in terms of a hierarchy of ideologies and representations about the collective past and events, as well as meaning-making around this shared past. The proposal aims to connect rather than separate the different levels and to ensure the interdependence and mutual complementarity of the processes involved. These different levels express themselves not only symbolically (in texts, language, visual images, etc.), but also physically in the form of monuments, memorabilia and their ideological foundations – in each case, these different phenomena (such as ideologies, representations, narratives, etc.) constitute a collective memory when they are linked to the collective past.

The levels of memory are divided according to their development from the specific individual level to the general collective level and are interconnected to ensure coherence and integration between the different levels of action in terms of symbolism, matter. and meanings.

The mechanisms of collective memory formation are achieved in the following ways (Licata & Mercy, 2015):

- A- **Narratives:** Narratives have a significant impact on the formation of collective memory and the preservation of a sense of cultural identity; that is, the transmission of collective memories through texts and written descriptions of the group's distant or near past.
- B- **Conversation:** Conversations play a crucial role in the formation of a group memory through the reiterating the occurrence of past events that are significant to the group.
- C- **Emotions:** When an event affects the lives of many individuals, it triggers emotions which are shared by group members, which facilitates the association of collective memories of the event. The formation of a collective memory thus depends on the reconstruction of the past through the support of spatio-temporal memory with mechanisms of expression, language, and emotion.

Collective memory is closely linked to technology because it is a medium for the transmission and retrieval of memories. In most cases, this transmission refers to information and communication technologies and artificial intelligence techniques, which serve as a means of forming public memories. Digital technology has the potential to support the memories of individuals and societies. Information and communication technologies (such as BIM) and artificial intelligence (AI) offer the possibility of recording, storing and sharing. People then form collective external memories to mitigate the chaos caused by external circumstances that can have a devastating effect on their memories. Cyberspace can also be seen as a memory space that has the potential to support personal and collective memory in the modern age. Together with technological advances, digital technologies can now create a collective vision of the future based on an understanding of the past. "*It is the future acting in the present that creates the past and writes history*" (Randall, 1939: 462).

3.2 Reconstruction of lost buildings: selected case studies

Technology is a means of stimulating collective memory through the application of digital technologies. ICT offers the possibility to record, swop and share, exemplified by the archiving of

memories of ancient (and recent) civilisations and their reconstruction. Experts in the field of archaeological conservation agree that the reconstruction of a historic site should be done when there is enough reliable documentation and data for its construction, without adding new elements or damaging the original features. Instead, it is necessary to preserve and fortify them. The term "Reconstruction of Lost Buildings" is used now in historic sites and buildings that have been vandalised or destroyed by natural disasters or wars, and which are being reconstructed through digital recreation using digital modelling software, digital surveys, and virtual reality environments (Hani, 2020). The sustainable conservation of archaeological sites and historic buildings does not begin after the project is completed, but when the initial plans for it are developed. This is done through the use of preventive conservation measures using digital technologies such as Building Information Modelling (BIM) (Oberste-Ufer, 2019) and others, and the subsequent preparation of conservation measures such as maintenance procedures, periodic inspections and archiving to be prepared for any problems that may arise in the future, in order to extend the physical and functional life of the historic building and to economically preserve its resources, urban fabric, and the ecological and cultural features of society (Al Alaf, 2020).

Now, technology and artificial intelligence techniques are revolutionising the world of archaeological site construction and renovation, as major technology companies compete for their latest innovations, from robots to self-driving excavators or recently deployed 3D printers that perform many complex tasks. So, what are the smart technologies that can effectively help restore heritage and revive the memory of cities lost to war?

Major technology companies are competing with their latest innovations in reconstructing lost archaeological sites, as seen in these examples by leading organisations.

A- 3D Drone Scans: This form of data capture is well represented by the work of ICONEM. ICONEM are specialists "*in the digitisation of endangered cultural heritage sites in 3D. [They] work with international organisations, national governments, local authorities, and world class museums such as UNESCO, the Aga Khan Trust for Culture, the Sultanate of Oman, the City of Paris, and the Louvre. [They] design site-specific architectural 3D models; large-scale urban and rural 3D models; museum exhibitions; and training for local professionals*" (ICONEM, N.D.). It helps designers and professionals identify and assess damaged areas to preserve memory and restore what has been lost (ICONEM, 2019), and has been used to record conflict and disaster damaged sites around the world. Most recently, Microsoft, in collaboration with ICONEM, launched the "*Open Notre Dame*" project to explore lost archaeological sites using drones. Microsoft and ICONEM's advanced artificial intelligence algorithms enable the integration of many images shared by humans and captured by drones, and these are then digitally processed to create high-resolution 3D virtual graphics of damaged archaeological sites (Bellamy, 2018).

B- Historic Building Information Modelling (HBIM): Autodesk has developed Building Information Modelling (BIM) technology for the sustainable preservation of architectural heritage. This is a digital representation of historic buildings whose physical and intangible characteristics have been affected by the influence of anomalous factors, it also takes into account previous alterations to the building, in the protection of historic buildings, HBIM technology depends on the accurate visualization of damaged buildings through laser

scanning and photogrammetry – the data is then transferred to a digitally processed electronic cloud to assess the damaged areas, and then the 3D design process begins, it is also possible to add and track the fourth dimension during the construction phases of the building (Murphy et al., 2017).

- C- **Virtual Reality Environment (VR):** Virtual reality technologies and immersive virtual reality applications (VR) provide the opportunity to virtually recreate lost historic cities by visiting, exploring, interacting with, and identifying historic monuments to preserve cultural heritage for future (Soto-Martin et al., 2020).

ArchDaily recently highlighted the potential of digital technology, and in particular Artificial Intelligence (AI), in post-war reconstruction, not only of lost historic buildings but of entire cities, by analysing the lost urban environment, identifying and assessing the affected areas, and then presenting future plans for reconstruction. The role of society in digital reconstruction is becoming more apparent, as researchers are able harness AI together with people's memories of social events and forgotten experiences to generate useful data. *"Counting on the collective memory to help generate useful data, AI can translate the lost and sometimes forgotten urban surroundings"*, Harrouk argues (2020). AI has proven that digital reconstruction can be a crucial tool in mapping post-war cities based on people's memories, stories, and experiences. AI can recreate a space that no longer exists and translate the lost and sometimes forgotten urban environment by using group memory to create useful data (Harrouk, 2020).

The understanding that identity, urban destruction, and reconstruction are interlinked is neglected when decision-makers propose plans for the future. According to research by Nurhan Abu-Jidi (a leading scholar of urbicide, the deliberate wrecking or "killing" of a city), *"reconstruction projects and strategies often focus on the physical dimension of reconstruction and inevitably ignore the identity and marginalisation of the destroyed city, especially its spatial, social and cultural dimensions"* (in Harrouk, 2020).

Such collaborations between major technology companies and the heritage sector may be an indication for a future where these two sectors may work together to save the collective memory of war damaged heritage. However, most international organisations are NGOs, and so lack the financial resources to properly engage with the development of cutting-edge technology. Technology companies will need to change their attitude and cooperate directly with international organisations to meet already known needs, rather than developing their own concepts independently, enabling more success in preventive conservation of collective memory.

Of course, digital technologies alone are not enough to restore the collective memory of lost buildings without relying on community participation in digital reconstruction. As already mentioned in the Introduction, it is the collective memory representing the shared past and memories in a way that ensures the preservation of the cultural identity and future dreams of a particular group or society. Moreover, the formation of collective memory depends on reconstructing the past by supporting societies with mechanisms for expression, language, and emotion, as well as spatial and temporal memory, something existing organisations are only just beginning to explore. So how can the collective memory that is lost in digital reconstruction be restored? What are the ethical implications of this?

4 Applications for the digital reconstruction of lost cultural heritage sites in conflict areas

"Heritage sees the light after the darkness of war".

In the age of digitalisation, a new trend has emerged in the protection of threatened or lost cultural heritage: digital exhibitions of World Heritage sites and major monuments. One major early example of the cooperation of digital companies with international heritage institutions was the exhibition *"Ancient Cities; A Virtual Journey from Palmyra to Mosul"*, a collaboration between ICONEM, Ubisoft (a major video game company) and UNESCO. It was launched on 9 October 2018 at a major cultural venue – the Institut du Monde Arabe in Paris. The exhibition took visitors on a journey through *"space and time"* of four ancient cities destroyed by war (Institut du Monde Arabe, 2018).

The exhibition used the latest digital technology in 3D digital reconstruction to show the original beauty of heritage details and the current ruined state of four ancient cities destroyed by war: Palmyra and Aleppo in Syria, Mosul in Iraq, and Leptis Magna in Libya. In the exhibition, visitors can fly over three-dimensional digital views of the destroyed cities, including the Great Mosque of Al-Nuri in Mosul and the Baal Temple in Palmyra (both blown up by ISIS). The video allows the viewer to see the destroyed cities emerging from the rubble (Bollag, 2020). In addition to the videos, visitors can explore the ancient history of the monuments from before their destruction to their dilapidated state in a VR environment through documents and images as well as the testimonies of local residents, local archaeologists, and cultural experts (Bollag, 2020). In this way, it helps to recover the memory of the destroyed city for the visitors, and enables a spiritual communication between the past and the future.

Another example is the *"Rebuilt From Memories"* project. The project (SXSW) was a finalist in the Artificial Intelligence and Machine Learning category at the Interactive Innovation Awards, 2020 (Springwise, 2020). ARHELPS and Jung von Matt (a German advertising agency) were able to create a virtual reality experience of three historical sites in Aleppo (Umayyad Mosque, Saqiyah Bazaar, and Aleppo Citadel) before their loss during the war. The experience was created using photogrammetry and people's memories shared on the social media platform Instagram. Location data was also captured using deep learning technology (AI) and then digitally processed as photogrammetric data. In collaboration with Exozet (a digital transformation company), 2D data was transformed into 3D digital environments that allow a live representation of the destroyed cities in a collective memory within an immersive virtual reality environment (Arthelps & Exozet, 2020).

"Rebuilt From Memories" shows how artificial intelligence and modern digital technologies can help revive the collective memory of lost cultural heritage and enable generations to access and pass it on across different times and eras. *"Modern technologies and digital solutions can help us remember and retell history, the memory of an entire society. We want to go back in time – to create a better future"* (Arthelps & Exozet, 2020).

The third model is *"The Syrian Case: Reconstructing Collective Memory and Future Expectations"*. The project, titled *"Recoding Post War Syria – When numbers meet Architecture & Culture"*, was presented at the Bi-City Urbanism/Architecture Biennale in Shenzhen, China, curated by Carlo Ratti Associates. It explores the evolving relationship between urban space and technological innovation between cities, people, and machines in renewing the future of cities after disasters (Reparametrize Studio, 2020a). Reparametrize Studio & Digital Architects presented their strategy for smart urban regeneration in post-war Syria. They are using 3D AI technology to survey devastated cities and build

a research and data platform integrated with culture and community engagement – with a focus on innovation, using the latest technologies to capture, generate data, and analyse damaged urban fabric through 3D scanning and the use of 'point cloud' technology to create regeneration plans and map the future of smart sustainable cities in post-war Syria (Reparametrize Studio, 2020b).

Reparametrize Studio's mission is to visualise and collect this data and enable both the community and decision makers to interact with each other. This is done by using apps, platforms, and social media to collect data from local citizens and refugees, who are asked about their memories of the past and their expectations for the future development of the cities after the disaster (Reparametrize Studio, 2020b). From these reflections, the idea of 'digital exhibitions' emerged as a language for restoring the collective memory of lost cultural heritage through the use of modern technologies and community participation in data collection, as heritage organisations have recently become increasingly concerned about terrorist attacks on cultural sites in conflict zones. The language of the exhibition aims to open horizons for planning the recovery of lost cultural heritage, both materially and morally, by inviting the viewer into the history of cultural heritage and its present, marked by destruction. In this context, note that the exhibitions usually address the people in their communities who lived through the war, encouraging them to participate in the reconstruction of the lost cultural monuments, and to educate the world about the destruction of cultural heritage and strategies to protect it. It also ensures that the new generations, who are considered to be the biggest users of digital technologies and social media platforms, have easy access to them to ensure the continuity of the transmission of cultural heritage across different generations within and outside their local communities, thus saving the collective memory of cultural heritage from extinction.

Although digitisation in general helps to solve problems of access to digital information, there is an imbalance in the right to access, as not all people have the communication tools, devices, or applications needed to contribute to digital reconstruction, especially cultural heritage owners who have had to flee their homes due to war (Thompson, 2017).

ICONEM, at the request of the Syrian Directorate-General of Antiquities and Museums, carried out a detailed photogrammetric survey of part of the site of Palmyra and its museum after it was destroyed by ISIS. They aimed to determine the location of the damage and then transform it into accurate digital data and documents to be submitted to archaeologists and international experts, in particular UNESCO, to help them develop new plans for the reconstruction of the site (Louis, 2016). Yves Oppelmann, an architect, explains: *“By analysing individual blocks, you can get an accurate picture of where this or that block was located when the building was still standing – you can make connections between blocks and so, if you’ve got enough of them, you can reconstruct the explosion phenomenon”* (Louis, 2016).

Digital technologies can help inform future proposals to rebuild lost buildings and create an improved environment that is more responsive to the needs of people in affected areas by collecting and processing data based on people's memories, stories, and experiences, and by engaging local communities. However, this is not without risks, as the digital reconstruction of lost cultural heritage can also have negative aspects associated with certain ethical responsibilities. In the field of cultural heritage, these concern the digital representation of cultural heritage, access to authentic interpretations, violence against provenance, transparency of data sharing, and ease of manipulation and surreptitious digital image capture (Cole, 2008). In her article *Legal and Ethical Considerations for*

Digital Recreations of Cultural Heritage', Thompson also highlighted her concerns that the creators of digital models of cultural heritage sites in conflict zones in Iraq and Syria were not seeking a consistent opinion on approaches to data collection, processing or interpretation by local people at the sites concerned (Thompson, 2017). This creates an imbalance of rights, where creators of digital models of heritage sites destroyed by ISIS in Iraq and Syria protect the rights of their innovations and vision of the past, while refugee and resident cultural heritage holders have limited input to shape their interpretations in digital reconstruction projects (Thompson, 2017).

Following an analytical study of a group of selected projects on the digital reconstruction of lost cultural heritage, an assessment was made of the role of digital reconstruction techniques in recovering the collective memory of lost cultural heritage (see Table 1). The contribution of digital technologies, (3D photogrammetry, VR technology, and the ICONEM project) to the recovery of the collective memory of lost monuments at the (Severe and Major) level was explored by examining the capacity of each technology to represent collective memory historically, socially, and physically, along with the mechanisms or strategies for digitally reviving collective memory. The vocabulary for each of the representations and mechanisms of collective memory was selected from the definitions and previous studies on the concept of collective memory and digital reconstruction.

The research demonstrates the effectiveness of VR technology in reviving the collective memory of lost historic buildings and providing an immersive virtual reality environment in virtual museums and exhibitions, and in involving the local community in the process of data collection, as well as achieving the goal of continuity of temporal and spatial context through digital presentations. The effectiveness of 3D photogrammetry has been proven in analysing the destroyed urban structure, identifying areas of damage, incorporating social applications for data collection, and then developing future plans for the reconstruction of post-war cities. Finally, the ICONEM project is able to assess areas of damage by integrating thousands of images into high-resolution 3D models. The data is collected digitally by drones and humans to create what is known as a point cloud that can be converted into 3D copies that can be digitally displayed or printed.

Digital Technology Type	Damage Level				Collective Memory								
	Severe	Major	Moderate	Minor	Representations of collective memory			Mechanisms of Reviving Memory					
					Social	Physical	Historical	Animation of the Lost Collective Memory	Embodiment of the Lost Collective Memory	Modes to Revive Lost Collective Memory			
Collective Context	Cultural Attractions	Historical Context	Photos / Novels	Cultural and Social Values	Moral	Physical	Digital Applications	Collective Narration					
Virtual Reality Technology (VR)	√	√			√	√	√	√	√	√		√	√
					Specifications It is used for 3D digital reconstruction of the lost buildings. Provides an immersive virtual reality environment. - Retrieved from local community participation in conflict zones . - Reviving the collective memory of lost historic buildings. -Application in museums and virtual galleries. -Continuity of temporal and spatial context.								
Digital scanning (2D, 3D scan)	√	√			√	√	√	√	√	√	√	√	
					Specifications -Laser scanning and photogrammetry technology are used for digital reconstruction. - Depending on Community Participation. - Social apps are used to collect data. -The ability to analyze the destroyed urban fabric. - It can highlight areas that need to be rebuilt. - Assist in making recommendations for rebuilding lost buildings of cultural value. - The lost building is creates in a virtual animated environment.								
Iconem project	√	√			√	√	√	√	√	√	√	√	√
					Specifications - It is able to assess damage by combining thousands of images into high-resolution 3D models. - This AI technology uses drones and humans for the digital scanning process. - Collect data digitally to create a point cloud that can be converted into 3D copies that can be viewed or printed.								
Severe					Major			Moderate			Minor		

Table 1: The role of digital reconstruction techniques in recovering the collective memory of lost historic buildings. Designed by author.

In the context of war and destruction, digital reconstruction applications for heritage sites lost to war have proven effective in restoring the collective memory of forgotten sites by recreating the vivid image of lost historic buildings in people's minds and engaging local communities in recovering their lost heritage and developing real plans for future reconstruction. As we see in this diagram, projects helped the local community to search for their memorial items, such as photographs, objects, and personal memories, sharing them with the team. This cooperation contributed to their reconciliation with loss they had experienced and showed them a way to revive their collective memory. Exhibiting lost buildings in museums increased the revival experience of the local public and made them feel that they are actively involved in bringing the lost heritage back to life, even if it is digitally. Raising awareness of heritage loss during conflict and preserving cultural identity through the use of the digital archive can thus serve as an important reminder to local communities and all those interested in the pre-conflict condition of important cultural heritage. In addition, professionals who may be restoring such sites in the future will have material readily available for understanding the original concept.

5 The memory of Mosul between past and present: Proposal for renovation of Al-Nouri Mosque

The famous Al-Nuri Mosque is located in a strategic place in the heart of the ancient city of Mosul, from its foundation in the second half of the 12th century AD to the present day. It is an important cultural symbol for the people of Mosul: before the outbreak of the latest conflict, visitors strolled along Nineveh Street (the main east-west axis of the old city) and were guided by the city's most important symbols, the Clock Tower and the Nuri Mosque with its minaret (UNESCO, 2020). However, 80% of the old city, and many of its monuments, were badly damaged during ISIS's occupation and the fighting that followed. The disappearance of Mosul after the control of ISIS poses a threat not only to the memory and cultural identity of Mosul, but to the entire world culture.

After ISIS destroyed the Mosque (Figure 1) and its minaret (Figures 2, 3) in Mosul, Iraq, in 2014, UNESCO condemned the destruction that hit the city of Mosul in general, and the loss of the Al-Nuri Mosque and its minaret in particular. The United Nations High Commissioner for Human Rights also condemned the attack. *"This wanton destruction is an attack on the religious and cultural heritage of the whole world and of the Iraqi people,"* said Ravina Shamdasani, a spokeswoman for the Office of the High Commissioner for Human Rights. The UN spokeswoman stressed that the perpetrators of the attack could be tried for war crimes related to the destruction of buildings on the World Heritage List (Sun, 2018), though in fact, a site does not have to be World Heritage for the attack to be a punishable war crime: it must only be sufficiently important to its country, like the al-Nuri Mosque.

Many parties interested in the lost heritage have tried to digitally reconstruct Al-Nouri Mosque by using the latest digital technologies such as cameras and drones to capture realistic images from different angles and dimensions of the destroyed site. Architects and archaeologists went there to collect and model data to create 3D models that can be used for digital reconstructions of the lost building. UNESCO has taken it upon itself to support the rehabilitation of the Al-Nuri Mosque complex by launching the *"Revive the Spirit of Mosul"* initiative, a global initiative



Figure 1: Al-Nuri Mosque after destruction. © Levi Clancy, CC0, [via Wikimedia Commons](#).

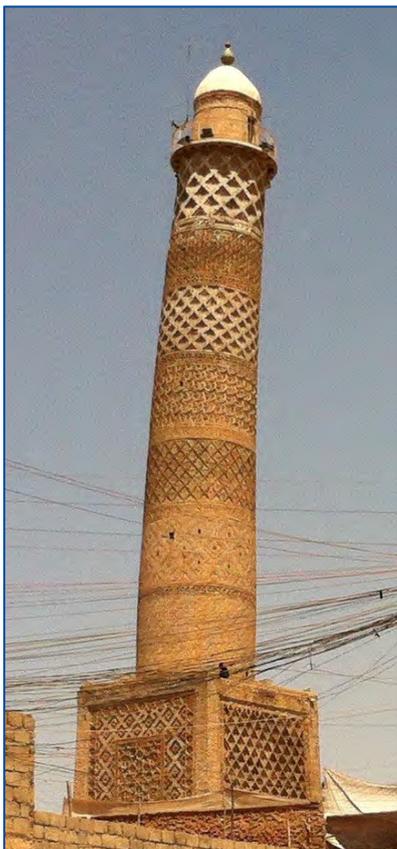


Figure 2: (Left) Al-Nuri Mosque Al Hadba Minaret before destruction, 2013. © Faisal Jeber, CC BY-SA 4.0, [via Wikimedia Commons](#).



Figure 3: (Right) Al-Nuri Mosque Al Hadba Minaret after destruction. © Levi Clancy, CC0, [via Wikimedia Commons](#).

“based on three pillars: heritage, cultural life and education, as essential drivers for the recovery of Mosul. UNESCO intends to reconstruct the iconic Al-Nouri Mosque and its Al-Hadba Minaret, Notre-Dame de l’Heure Convent and Al Tahera Church, 122 heritage houses, the Aghawat Mosque as well as Al-Ekhlash school in the Old City of Mosul”

which represents the city's history and are a testament to the richness of its cultural diversity (UNESCO N.D.). The reconstruction of Mosul's landmarks aims to give a sense of belonging and identity to all Mosul residents and to restore the traditional spirit of Mosul as a multicultural place of creativity, peace, and prosperity (UNESCO, 2020), and should be seen not only as a physical reconstruction but as a symbolic act of revival and rebirth (though see Isakhan & Meskell, 2019 for a counter-view). However, this requires finding solutions to complex architectural and technical problems, in addition to the many challenges posed by the digital reconstruction process.

The damage to the Al-Nuri Mosque and Al-Hadba Minaret is the most obvious example of the price paid by cultural heritage for the war. The destruction of Mosul's cultural heritage by ISIS was not the only target, it also targeted the identity, history, and memory of an entire community. In cases where the physical reconstruction of lost monuments in conflict areas is not possible due to political instability, an unsafe situation, or lack of funding, digital reconstruction can have a greatest impact on restoring lost cultural heritage and its collective memory in the post-conflict era, not only for the people of Mosul, but for humanity as a whole.

5.1 Digital reconstruction of the Al-Nuri Mosque: the international option

"Heritage, Memory and Identity in the Arms of Technology: A Journey through Memory Al-Nouri Mosque"

Mosul paid a heavy price in the last war with the loss of the Al-Nuri Mosque. All that remains of it is a tall dome, standing in the face of the destruction of its history and cultural heritage, and part of the inner wall of the prayer hall. On 16 November 2020, UNESCO, in close coordination with the Iraqi Ministry of Culture and with the support of the United Arab Emirates, launched an international design competition for the reconstruction and rehabilitation of the Al-Nouri complex in Mosul. Audrey Azoulay, Director General of UNESCO, said that *“the initiative to rehabilitate and reconstruct the Al-Nuri Mosque sends a strong message of resilience and hope in the post-conflict period, given its historical significance”* (UNESCO, 2020). UNESCO, with the support of Sketchfab, shared a 3D digital archive of the Al-Nuri Mosque site before and after the events of 2014. This digital archive offered designers participating in the competition for the reconstruction of the Al-Nouri complex the opportunity to view the building before and after demolition, to help them present design proposals for the redevelopment of the Al-Nuri Mosque.

Numerous architectural teams from around the world applied to participate in the redevelopment of the Al Nouri complex. However, after UNESCO announced the winning design of the competition, the results met with criticism and upset reactions from local Iraqi architects and international experts in the field of cultural heritage preservation. The rehabilitation of Al-Nuri Mosque was awarded to a team of Egyptian artists and not designers from the local community, or even Iraq. Critics claimed that the results of the winning designs were "modern" and not closely related to the culture and history of the local community of people in Mosul. However, this could be due to conflicting views on the data and elements included in the design, and the different interpretations by the local people. Indeed,

there is a moral responsibility that the designer bears in relation to the subject of the image that he or she presents to the public. Thompson (2017) noted that there are ethical considerations in digital heritage reconstruction that relate to the assumptions and arguments embedded in input data, such as previous images or digital models of heritage sites, as well as the assumptions about the sites, visitors, and local people. In this context, there are many ethical considerations that it may be much harder for non-native designers to consider, resulting in the insertion of ideas and elements outside the cultural context of the local community of people in Mosul.

5.2 Digital reconstruction of the Al-Nuri Mosque: an Iraqi view

This proposal for the restoration of the Al-Nouri complex was developed as part of the requirements for obtaining a Master's degree at Mimar Sinan Fine Art University in Turkey. It draws inspiration from the indelible memory of the Al-Nouri Mosque event, a moment deeply etched in the memories of Mosul's residents, the city itself, and the global community. The mosque's demolition by ISIS had a profound and enduring impact on the psychological well-being of Mosul's inhabitants and reverberated across Iraq. The mosque's connection to the collective memory of Mosul's inhabitants – and the wider Iraqi population – played a significant role in generating widespread negative effects. The proposal for the renovation tells the story of the live images waiting inside, and recounts the resilience of the Al-Nouri Mosque dome in the face of the devastation caused by war.

The shrine is a 'witness to the event' for those who did not see it today, and for future generations: it reflects a vivid image of the devastation of war on Mosul's cultural heritage. Yet, the use of modern architectural technology in the narrative of the Al-Nuri Mosque event can draw the attention of viewers to the memory of the Mosque before its destruction. Using translucent threads, we can reproduce the exterior structure of the Al-Nuri Mosque as it was before it was lost, overlaid on the image of the destroyed structure, reflecting the living image of the Al-Nuri Mosque event and its unshakable remains.

The endeavour necessitated the active participation of some of the local community, comprising experts, specialists in heritage sites, and engaged members of the general public in the digital reconstruction process of the mosque. This multifaceted approach involved the acquisition of pre-destruction photographs from experts adept in archiving historical sites through the utilization of drones. Additionally, laser scanning and photogrammetry techniques were employed, leveraging Historic Building Information Modelling (HBIM) technology. The active participation of mosque visitors, who contributed by sharing photos on social media platforms such as Instagram, played a pivotal role in this comprehensive data collection effort.

Subsequently, the amassed data was uploaded to a digital cloud, where it underwent meticulous processing to assess areas of damage. This facilitated the development of comprehensive 3D virtual representations of the adversely affected archaeological sections within the mosque, aiding in the reconstruction process. Furthermore, this concerted effort in merging community-generated memories with cutting-edge technology serves as a conduit for the preservation and retrieval of memories imperilled by conflict.

The refurbished exhibition is located opposite the mosque, where it plays a vital role in evoking the collective memory of peaceful days from the past. The guest traverses the recollections of the Al-Nouri Mosque incident, navigating through sections and passageways reminiscent of the mosque's historical

components and its surrounding edifices. They proceed to the Mosul Memory Gallery and Museum, where virtual reality (VR) technologies transport them on a chronological and spatial expedition, showcasing the resilience and restoration efforts surrounding the Al-Nouri Mosque event.

- The transparent parametric structure is a point of attraction for visitors (Figure 4) to discover what is reflected inside it in the vivid images of the remains of the Al-Nuri Mosque as a witness to the event of the war.
- Technology can allow us to recreate the components of the mosque, from the arches that distinguish it to the structures that support it, as we navigate through the memory of the Al-Nuri Mosque event (Figure 5).
- In my proposal, Portico units (Figures 5, 6) are formed as meeting points for "encounters" in different places of the historical arena of the complex, contributing to the spread of peace and national reconciliation among the people of the Mosul community of different sects and the diversity of their culture.
- Movement routes are proposed that allow potential visitors to walk the historical corridors of the site (Figure 7), whilst engaging with a new presentation of it.
- The viewer can see interior views of the reconstruction (Figure 8), and exterior views (Figure 9).
- Finally, the renovation should also be keen to use the local materials for which Mosul is famous, such as Al-Halan stone, in the process of rehabilitating the entire Al-Nouri complex, which can also be visualised with 3D technology (Figure 10) while creating water and green spaces to give life to the site (Figure 6, 9, 10).

When visiting the project, the visitors (some of whom helped to the team to collect the material), are proud to see their contribution in the final result. Other parts of the community also feel happier as the exhibition brings their collective memory of peaceful days back. The project aims to win the affection of the local community for the people of Mosul, and the world, at large in the face of the destruction and annihilation of their cultural heritage by war, by restoring the living image of the memory of Al-Nouri Mosque between the past and the present in a way that guarantees the preservation of cultural identity and keeps pace with the developments of modern technology in the age of digitalisation, to be a place of encounter, peace and national reconciliation between all sects and religions of the community of the people of Mosul.

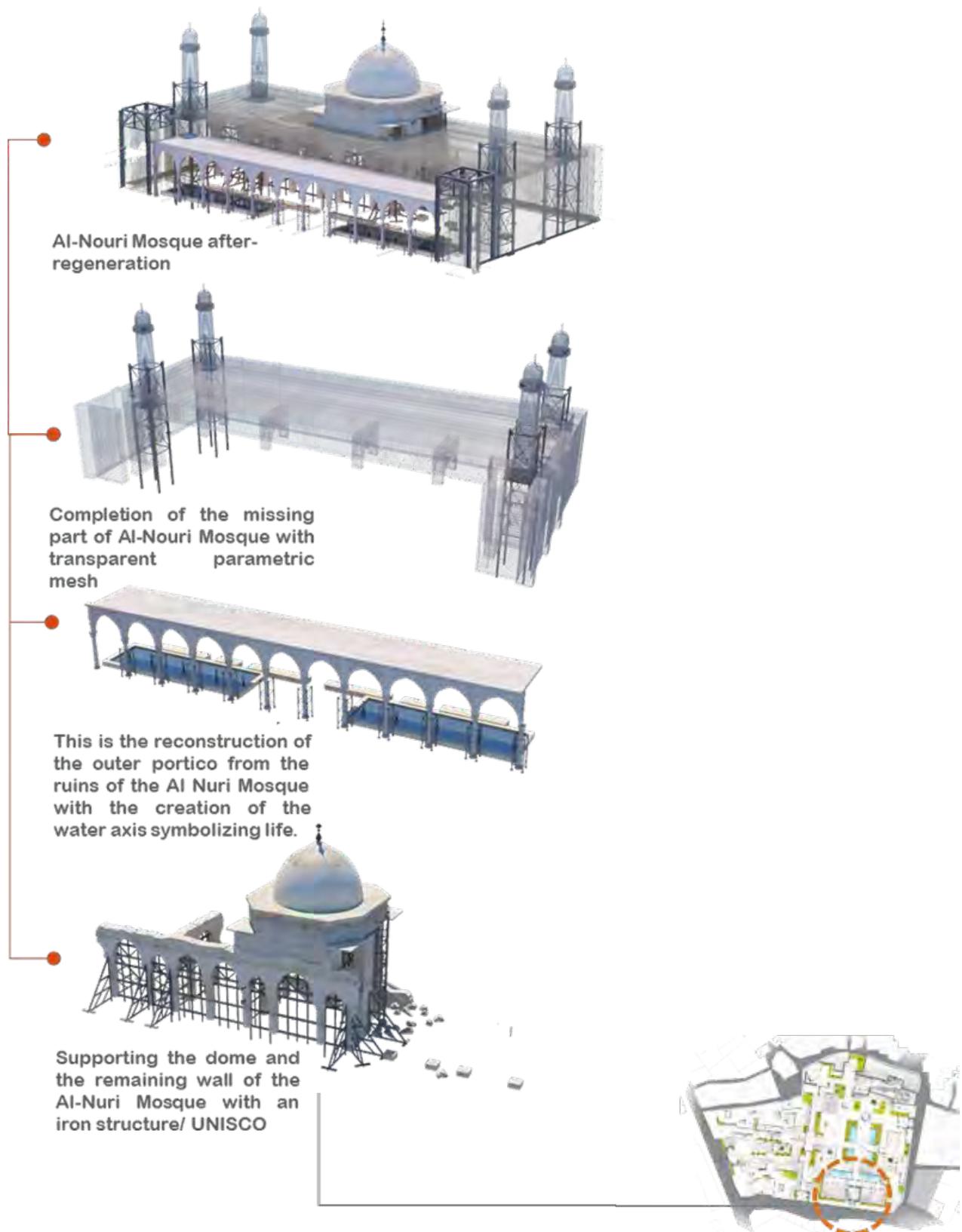


Figure 4: The stages of the proposed digital renovation of the Al-Nouri Mosque, aimed at restoring the section of the mosque destroyed during the conflict, employing a translucent parametric structure to enable the viewer to see each stage, while safeguarding the resilient dome as a testament to the incident. Source: Author.

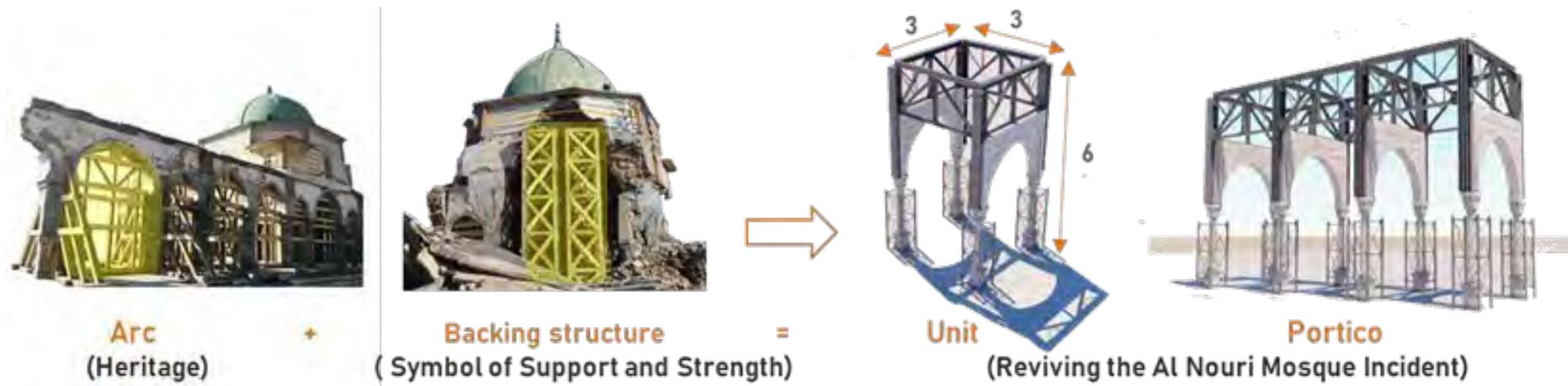


Figure 5: Reconstruction of individual components of the Al-Nouri complex, showing the cultural and symbolic values of the reconstruction elements. The scene tells visitors about the steadfastness of the still-visible, unreconstructed dome of the Al-Nuri Mosque in the face of war, and shows the memory of the Al-Nuri Mosque before its destruction by adding transparent structures to the destroyed parts Source: Author

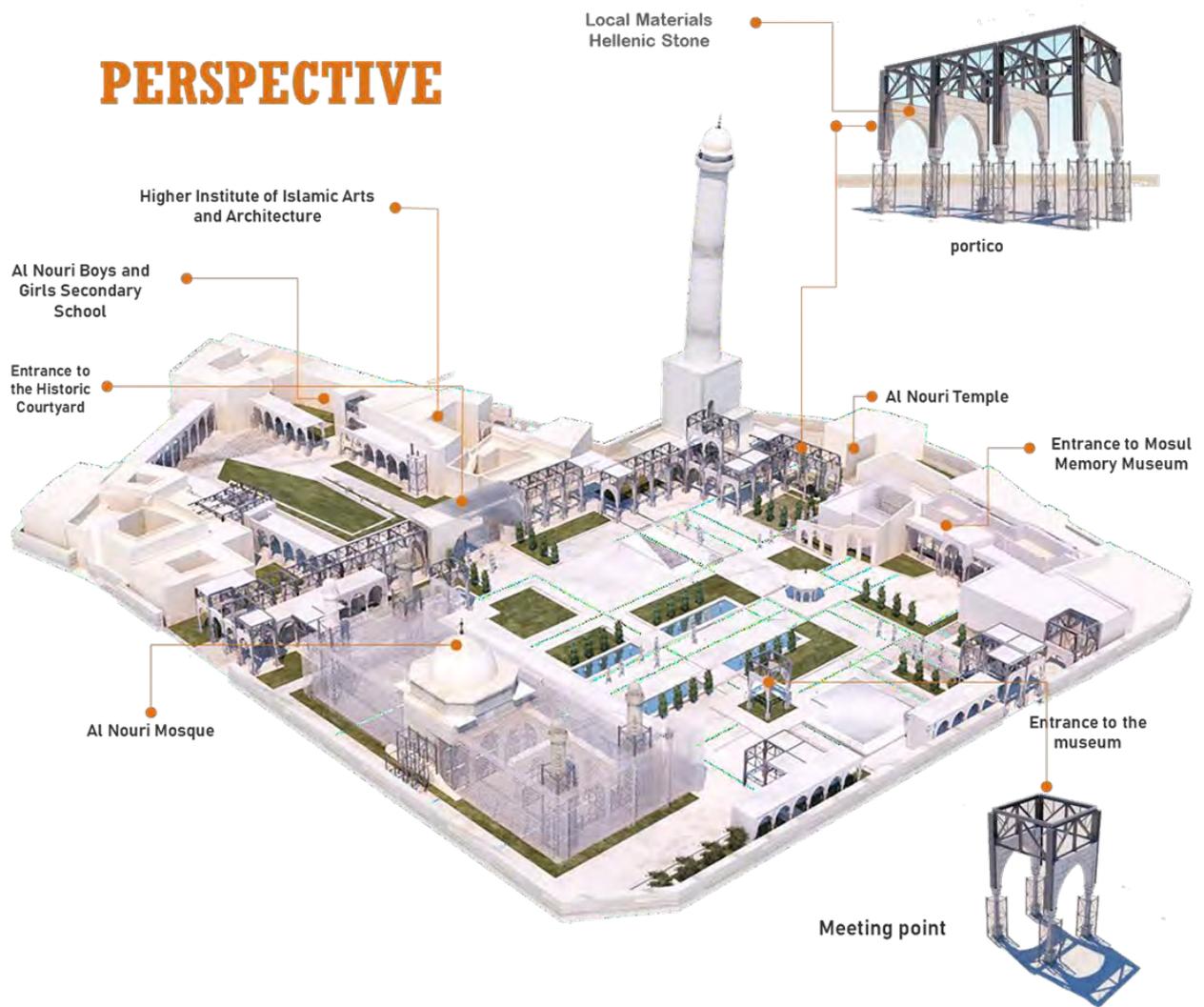


Figure 6: An aerial view of the proposal to renovate the Al-Nuri Mosque. Source: Author

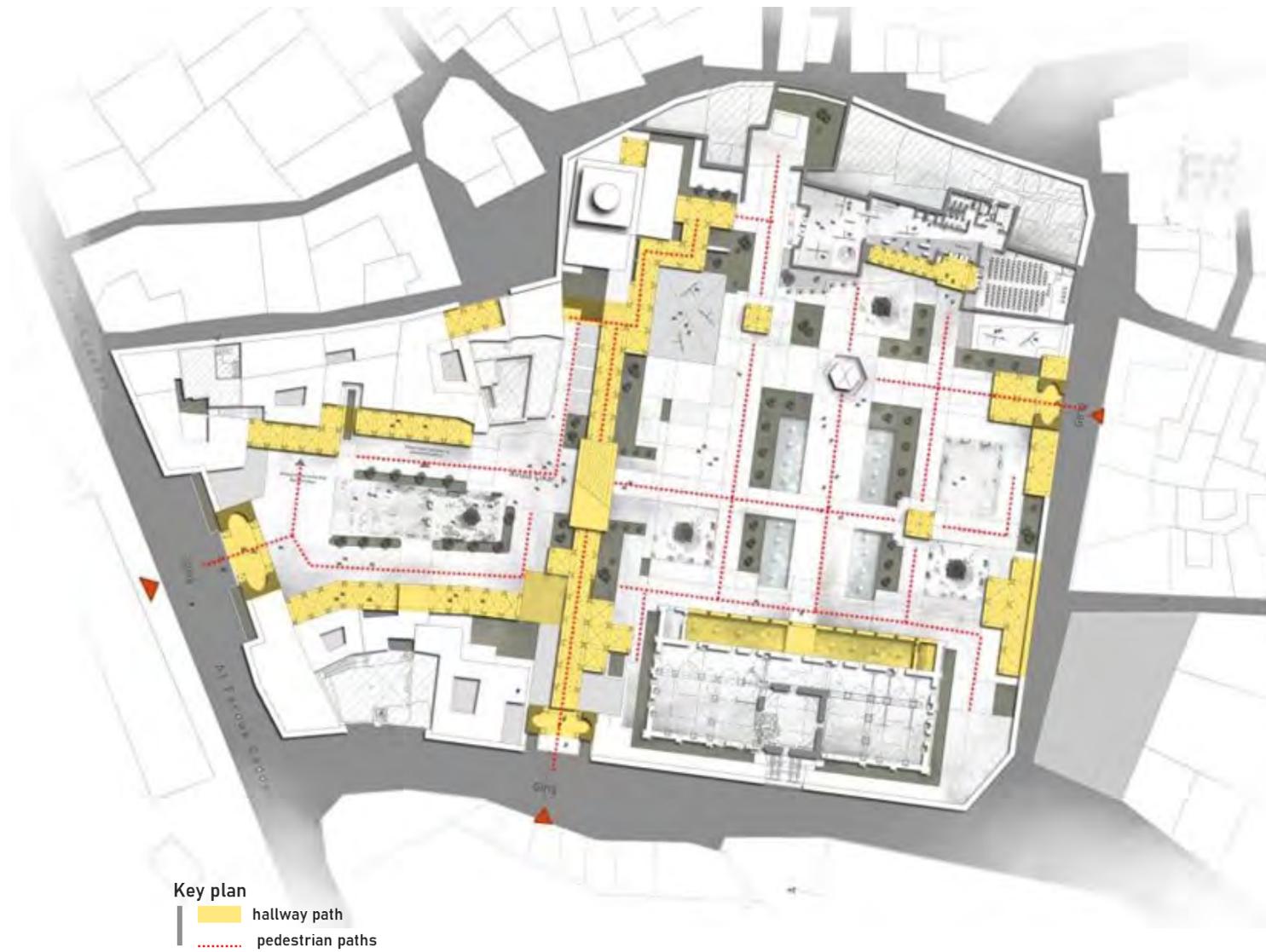


Figure 7. A movement route through the historical corridor within the Al-Nouri complex. Source: Author



Figure 8: Interior views of the proposed Al-Nuri Mosque reconstruction. Source: Author.



Figure 9: Exterior view of the Al-Nuri Mosque after renovation. Source: Author

MATERIALS OF THE AL NURI MOSQUE

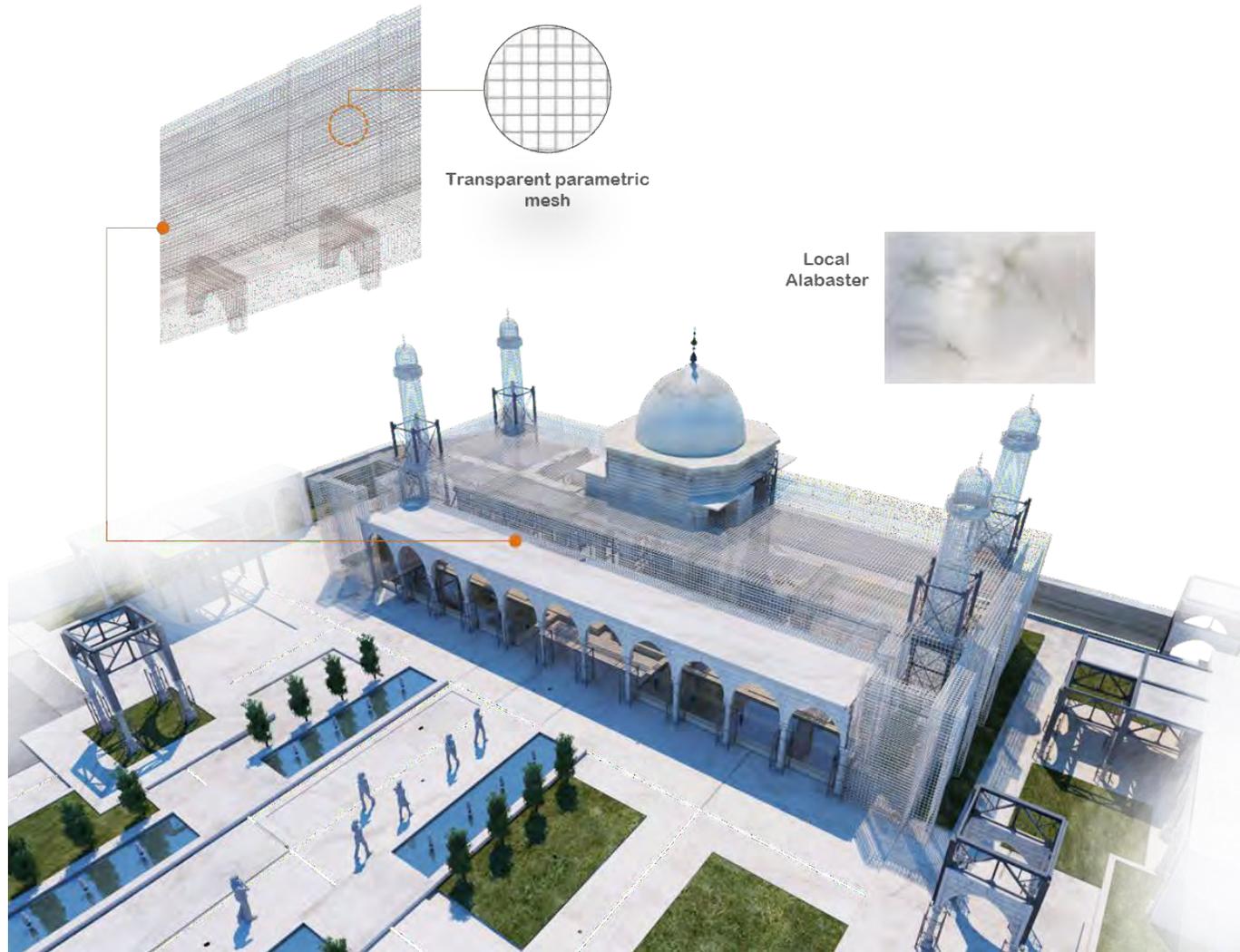


Figure 10: An illustration of the materials used in the renovation of the Al-Nuri Mosque. Source: Author

6 Conclusion

Wars have devastated what was once a historical symbol and part of a cultural identity that distinguished peoples from one another – the sites deserve a revolutionary renaissance by us as a modern people to save the remnants of our cultural heritage from the loss, in Mosul as in other countries shattered by war. Collective memory represents the shared past and memories in a way that ensures the preservation of not only past and current cultural identity but also the future dreams of the communities by supporting them with mechanisms of expression, language, and emotion, as well as spatial and temporal memory. This is where digital reconstruction can play the biggest role in restoring lost historical buildings and sites. However, as shown, too few international organisations and agencies are engaging with communities in their digital work. As wars negatively affect people's memory and emotions, the task of digital reconstruction is to restore the vivid image of the lost historical buildings in a virtual reality environment in people's minds and pass it on to future generations. Digital technologies alone are not enough to restore the collective memory of lost buildings but must rely on community participation. The collaboration of community members, including experts and enthusiasts in heritage, played a pivotal role in digitally reconstructing the Al-Nuri Mosque, and enabled further community engagement with the final exhibition. This integration of community memory with technology serves as a conduit for preserving and recalling memories threatened by conflict.

The designers of digital models have a moral responsibility for the way the subject is presented to the target audience, whether as a presentation of the lost heritage, an examination of a virtually destroyed object or site, or a presentation of plans for the reconstruction of the lost heritage in the future. Destruction is linked to images of the events that become fixed in people's minds and which are inextricably bound to the memory of their society. Therefore, it is important to convey the image of the lost heritage in a way that does not destroy its moral and material value for the target society.

Digital reconstruction does not stop at this point. With the advancement of artificial intelligence techniques and machine learning technologies, digital reconstruction can become an impetus for real reconstruction because with these developments, it has become possible to digitally analyse target sites, assess the damage, and then create plans for real reconstruction. But does digital reconstruction stop then? Or are there no limits to it? That is what the development of artificial intelligence will show us in the future.

7 References

Al Alaf, H. (2020) "What are the ways to rebuild the historic Al-Hadba minaret in Old Mosul?" *Arab Portal for Architectural News*. Available at: <https://www.arch-news.net/-/محوار-البوابة/زاوية/7068-ما-هي-سبل-إعادة-بناء-مئذ> [Accessed: 09 October 2021]

Arthelps and Exozet. (2020) "Rebuilt From Memories", *Arthelps*. Available at: <https://www.arthelps.de/en/projects/rebuilt-from-memories/> [Accessed: 21 October 2022]

Assmann, J., and Czaplicka, J. (1995) "Collective Memory and Cultural Identity", *New German Critique* 65, pp.125-133. DOI: <https://doi.org/10.2307/488538>

Balen, K. van. (2015) "Preventive Conservation of Historic Buildings", *Restoration of Buildings and Monuments*, 21(2–3), pp.99–104. DOI: <https://doi.org/10.1515/RBM-2015-0008>

Bellamy, D. (2018) "Middle East's war-torn cultural sites get digital makeover", *Euronews*, 18 October. Available at: <https://www.euronews.com/2018/10/18/middle-east-s-war-torn-cultural-sites-get-digital-makeover> [Accessed: 26 September 2022].

Bevan, R. (2006) *The Destruction of Memory*, 1st Ed. London: Reaktion Books.

Blue Shield. (2015a) "ANCBS Statement on ISIS in Iraq", *Blue Shield International* website, 10 March. Available at: <https://theblueshield.org/ancbs-statement-on-isis-in-iraq-10-march-2015/> [Accessed: 25 September 2022]

Blue Shield. (2015b) "Protection of Iraqi Cultural Heritage Sites", *Blue Shield International* website, April. Available at: https://theblueshield.org/wp-content/uploads/2018/06/Blue_Shield_Int_Iraq_statement_April_2015.pdf [Accessed: 24 September 2022]

Bollag, B. (2020) "Devastated Middle Eastern Heritage Sites Are Recreated Digitally", *Al-Fanar Media*, 12 February. Available at: <https://www.al-fanarmedia.org/2020/02/devastated-middle-eastern-heritage-sites-recreated-digitally/> [Accessed: 26 September 2022]

Conway, B. (2010) "New Directions in the Sociology of Collective Memory and Commemoration", *Sociology Compass* 4(7), pp.442–453. DOI: <https://doi.org/10.1111/J.1751-9020.2010.00300.X>

Cordeiro, V. (2015, August) *Conceptual (re)construction of Maurice Halbwachs' Theory of Collective Memory*, *American Sociological Association Annual Congress, August 2015*, Chicago, Available at: https://www.researchgate.net/publication/327270104_Conceptual_reconstruction_of_Maurice_Halbwachs'_Theory_of_Collective_Memory [Accessed: 26 September 2022]

Ekman, M. (2013) *Edifices: Architecture and the Spatial Frameworks of Memory*, PhD Thesis, Oslo School of Architecture and Design (AHO), 361. Available at: <https://www.academia.edu/8632155> [Accessed: 26 September 2022]

Feilden, B. (2003) *Conservation of Historic Buildings*, 3rd Ed. Routledge.

Felasari, S. (2013) *Enhancing Virtual City With Collective Memory to Support Urban Design Learning*, PhD Thesis, University of Sheffield, School of Architecture. Available at: <https://etheses.whiterose.ac.uk/4670/1/> [Accessed: 26 September 2022]

Foote, K., and Azaryahu, M. (2007) "Toward a Geography of Memory: Geographical Dimensions of Public Memory and Commemoration", *Journal of Political and Military Sociology* 35(1), pp.125-144.

Glaveanu, V. P. (2017) *Thinking through creativity and culture: Toward an integrated model*, Abingdon: Routledge.

Harrouk, C. (2020) "The Fundamental Role of AI in Current Post-War Reconstruction", *ArchDaily*, 11 May. Available at: <https://www.archdaily.com/938705/the-fundamental-role-of-ai-in-current-post-war-reconstruction> [Accessed: 21 September 2022]

Hewer, C. J., and Roberts, R. (2012) "History, Culture and Cognition: Towards a Dynamic Model of Social Memory", *Culture and Psychology* 18(2), pp.167–83.

ICOM-CC. (2007) "Terminology to characterize the conservation of tangible cultural heritage. Resolution approved by the ICOM-CC membership on the occasion of the 15th Triennial Conference, New Delhi, 22-26 September 2008". *Conservar Património* 6, pp.55–56.
https://doi.org/10.14568/CP6_7 [Accessed: 19 September 2022]

ICONEM (N.D.) "About ICONEM", *ICONEM* website. Available at: <https://iconem.com/> [Accessed: 23 Jan 2024]

ICONEM. (2019) "Open Notre-Dame: Microsoft et Iconem associé". *ICONEM* Website, 17 May. Available at: <https://iconem.tumblr.com/post/184920965639/opennotredame> [Accessed: 20 September 2022]

Institut du Monde Arabe. (2018a). "Age old cities. A virtual journey from Palmyra to Mosul", *Institut du Monde Arabe* website, 8 October. Available at: <https://www.imarabe.org/en/exhibitions/age-old-cities> [Accessed: 26 September 2022]

Institut du Monde Arabe. (2018b). "Cités Millénaires – Bande annonce de l'exposition", *Institut du Monde Arabe YouTube*. Available at: <https://www.youtube.com/watch?v=BHjcPITLcqw> [Accessed: 18 September 2022]

Isakhan, B. and Meskell, L. (2019) "UNESCO's project to 'revive the spirit of Mosul': Iraqi and Syrian opinion on heritage reconstruction after the Islamic State", *International Journal of Heritage Studies* 25, pp.1189-1204.

Kafel, A. B. (2012). *3DVisA Index of 3D Projects: Archaeology*. Winchester Research Unit, IBM UK and 3DVisA, 12 March. Available at: <https://3dvisa.cch.kcl.ac.uk/project12.html> [Accessed: 18 September 2022]

Licata, L., and Mercy, A. (2015) "Collective Memory, Social Psychology of", *International Encyclopedia of the Social & Behavioral Sciences*, 2nd Ed., pp.194–199. DOI: <https://doi.org/10.1016/B978-0-08-097086-8.24046-4> [Accessed: 18 September 2022]

Mascio, D., Di, Chiuni, M., Fillwalk, J., and Pauwels, P. (2016) "3D Digital Reconstructions of Lost Buildings. A first critical framing", *ECAADe (Education and Research in Computer Aided Architectural Design in Europe) and Oulu School of Architecture, University of Oulu*, Volume 2, pp. 511–520.

Messemer, H. (2016) "The Beginnings of Digital Visualization of Historical Architecture in the Academic Field", In: Hoppe, S., and Breitling, S. (eds.), *Virtual Palaces, Part II. Lost Palaces and their Afterlife*, München: PALATIUM e-Publications, pp.21-54. Available at: <https://www.digitale-kunstgeschichte.de/w/images/0/0f/> [Accessed: 30 August 2022]

Moliner, P., & Bovina, I. (2019). "Architectural Forms of Collective Memory", *International Review of Social Psychology* 32(1), 12. DOI: <https://doi.org/10.5334/IRSP.236> [Accessed: 29 August 2022]

Murphy, M., Corns, A., Cahill, J., Eliashvili, K., Chenau, A., Pybus, C., Shaw, R., Devlin, G., Deevy, A., & Truong-Hong, L. (2017). "Developing historic building information modelling guidelines and procedures for architectural heritage in Ireland", *International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences, Volume XLII-2/W5- 26th International CIPA*

Symposium 2017, 28 August–01 September 2017, Ottawa, Canada Archives, 42(2W5), pp.539–546. <https://doi.org/10.5194/ISPRS-ARCHIVES-XLII-2-W5-539-2017> [Accessed: 28 August 2022]

Oberste-Ufer, K. (2019). "From Drawings to Digital Technology: How BIM Works", *Architecture Blog*, 07 October, Dormakaba website. Available at: <https://blog.dormakaba.com/from-drawings-to-digital-technology-how-bim-works/> [Accessed: 23 Jan 2024].

Reparametrize Studio. (2020a). "Re-Coding Post-War Syria", *Reparametrize Studio*. Available at: www.reparametrize.com [Accessed: 26 September 2022]

Reparametrize Studio. (2020b). ""Recoding Post War Syria" at Bi-City Biennale of Urbanism\Architecture in Shenzhen – China", *Reparametrize Studio YouTube*, January 8. Available at: <https://www.youtube.com/watch?v=IsSNkiTgZZU> [Accessed: 26 September 2022]

Soto-Martin, O., Fuentes-Porto, A., & Martin-Gutierrez, J. (2020). "A digital reconstruction of a historical building and virtual reintegration of mural paintings to create an interactive and immersive experience in virtual reality", *Applied Sciences (Switzerland)* 10(2): 597. DOI: <https://doi.org/10.3390/APP10020597> [Accessed: 09 September 2022]

Springwise. (2020). *Rebuilt from Memories creates virtual versions of each location and building. DIGITAL PROJECT RECONSTRUCTS HISTORICAL SITES LOST DURING WARTIME*. Available at: <https://www.springwise.com/pdfgen/innovation/nonprofit-social-cause/rebuilt-from-memories-instagram> [Accessed: 12 September 2022]

Sun, G., Reuters, and AA. (2018). "Musul'daki tarihi Büyük Nuri Camisi ve Hadba Minaresi yeniden inşa ediliyor", *Euronews*, December 17. Available at: <https://tr.euronews.com/2018/12/17/musul-daki-tarihi-buyuk-nuri-camisi-ve-hadba-minaresi-yeniden-insa-ediliyor> [Accessed: 27 August 2022]

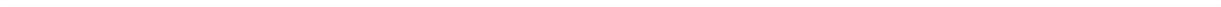
Szpunar, P. M., & Szpunar, K. K. (2015). "Collective future thought: Concept, function, and implications for collective memory studies", *Memory Studies* 9(4), pp. 376–389. DOI: <https://doi.org/10.1177/1750698015615660> [Accessed: 20 August 2022]

Thompson, E. L. (2017). "Legal and Ethical Considerations for Digital Recreations of Cultural Heritage", *Chapman Law Review* 20(1), pp.153-176 Available at: <https://digitalcommons.chapman.edu/chapman-law-review/vol20/iss1/6> [Accessed: 25 August 2022]

UNESCO (N.D.) "About the Initiative", *UNESCO Revive the Spirit of Mosul* website, Available at: <https://www.unesco.org/en/revive-mosul/about> [Accessed: 23 Jan 2024].

UNESCO. (2020). *Architectural Brief "The architectural competition for the reconstruction and rehabilitation of the Al Nouri complex in Mosul."* UNESCO, November 16. Available at: <https://en.unesco.org/news/architectural-competition-reconstruction-and-rehabilitation-al-nouri-complex-mosul> [Accessed: 10 September 2022]

UNSC. (2017). *United Nations Security Council Resolution 2347 S/RES/2347, adopted at its 7907th meeting, on 24 March 2017*. Available at: <http://unscr.com/en/resolutions/doc/2347> [Accessed: 10 September 2022]



COLONIAL DESTRUCTIONS OF NATURAL AND CULTURAL HERITAGE: TUNISIA'S AND ALGERIA'S CASES DURING THE FRENCH COLONISATION

Asma Jemmali

Keywords: colonisation, natural heritage, cultural heritage, Tunisia, Algeria

1 Introduction: The coloniser, the colonised and the colonisation

Confrontation of Western societies and non-Western ones has been influenced by the inclination of humans to overlook the Other and to un-differentiate diverseness. Jean-Paul Sartre refers to the confrontation of the indigenous colonised societies and the colonisers through the newspapers of New Orleans and “French” Algeria where they:

“tell us that the coloniser alone is qualified to speak of the colony. The rest of us, who live in the mother country, do not have his experience, so we are to view the burning land of Africa through his eyes, which will just show us the smoke” (Sartre, 1957: 17).

This submissiveness described by the colonised, along with the coloniser’s denial and superiority, reveals portraits of the colonised and the coloniser. These portraits are where colonisation begins as *“the existence of the coloniser requires that an image of the colonised be suggested” (Gordimer, 1957: 28)*. In this image, the colonised is a lazy, mediocre, and “hopeless weakling” Other who justifies the coloniser’s premise and legitimates his “protectorate”. Unlike the poorly assessed colonised societies, the coloniser is the supervisor for whom “heavy responsibilities” are reserved (Memmi, 1957: 29).

The inclination to oppression and marginalisation within the colonisation context generates heated conflicts with a high level of violence. Built upon the claim of the “mother-country’s” identity, these debates around who should be evaluated as a “settler” highlight one of the crucial faces of colonialism. The coloniser’s attitude towards the colonial settlements demonstrates an important distinction in colonial rules. In his book *“De La Colonisation Chez Les Peuples Modernes” (1882)*, Leroy-Beaulieu distinguishes two distinct types of colonies: *“colonies d’exploitation”* in which colonial settlements are exploited to ensure the coloniser societies’ prosperity, and *“colonies de peuplement”* in which colonised territories are perceived as a “new home” in which the coloniser is a permanent inhabitant. Maintaining this differentiation suggests that the two types of territorial holdings have various impacts on the colonised settlements and their heritage. The value of a nation’s heritage, and the harmful effects of its destruction, are two of the main reasons why a colony’s cultural and natural heritage were a major target and a colonisation “tool” to exclude indigenous populations. *“The killing of a person destroys an individual memory, [...] the destruction of heritage, [...] erases the memory of a people. It is as if they were never there” (Riedlmayer 2002; quoted in Pinto Coelho et al. 2013: 24)*. Different patterns of colonial rule were all built on this same notion of destroying both the natural and cultural heritage of richly diverse colonised settlements. In this paper, the evaluation of the coloniser’s impact on the natural and cultural heritage of colonies is particularly relevant in North Africa where various French colonial patterns are examined. Case studies from Tunisia and Algeria are analysed to identify the relationship between the different types of French colonisation rule and the destruction of heritage. Tunisian agricultural lands along with Algeria’s architectural heritage will be highlighted as examples of the deliberate targeting of heritage during military conflicts.

2 The natural heritage of Tunisia under the French colonisation:

Tunisia, as the smallest of North African Maghribian countries, has always been essentially an agricultural country with important varieties of cultivation that are widespread from north to south. The area known today as Tunisia was home to Punic settlements which, concentrated along the edges of the coastal plain and hills with ready access to the Mediterranean Sea, gave birth to a highly skilful agriculturist Carthaginian civilization. Generously endowed with fertile soils and a suitable climate, Carthaginians practiced highly advanced and productive agriculture that made them become “*the teachers of the Roman in this respect*” (Mahaffy, 1889). The fertile lands along with the strategic location were the main assets for Carthage (today’s Tunisia) to flourish as a transit between Africa and Europe (mainly Rome) and grow into one of the richest cities to be invaded and colonised.

From Vandals, Byzantines, Arabs to Ottomans, Tunisia’s lands were occupied to become a historically, socially, and ecologically constructed natural heritage. Until the French protectorate in 1881, its’ natural heritage was subject to multiple land tenure systems that allowed the colonial authorities to gradually appropriate Tunisia’s soils. Before the French colonisation the land tenure system was characterized by a mixture of various tenure types resulting from long historical processes: private (*melk*), traditional public (*habous*), dead lands, private domain of the bey, etc.

The overlapping legal references, the interconnected land status, and the vague confusion between owner, farmer, operator, etc., offered the French colonisers a favourable means to take a large part of Tunisia’s agricultural lands (Elloumi, 2013). Initially, the appropriation of this natural heritage started through private colonisation, but this turned into official colonisation based on suitable Western legal references. Before the French protectorate, land grabbing consisted of speculative purchases by financial foreign groups and private settlers (Figure 1). Then, during the process of colonisation, natural heritage was used as a technique for acquiring new settlements and attracting French and European immigrants to settle in the colony.

Starting from 1881, the agricultural sector underwent a radical transformation, after the implementation of modern cultivation methods and new settlement policies that resulted in several colonisation centers. During these first years of colonisation, the purchase of lands at low prices and the unlimited development possibilities presented French immigrants with the possibility to purchase agricultural lands without residing in Tunisia. Thus, with just 3,500 French inhabitants, Tunisia remained a land of exploitation rather than settlement. However, the colonial administration intervened to “*encourage the installation of a permanent French population large and capable of constituting a solid base and a framework for its work of expansion and influence*” (Ammar, 2018), for example developing a colonial School of Agriculture (Figure 2), and by 1903 the French settlement population had reached 54,000. This settlement policy gave rise to several rural centers that took the form of villages, for example the village of Massicault (Figures 3, 4), where French settlers cultivated Tunisian soils.



Figure 1: Poster inviting French people to buy Tunisian lands and immigrate to Tunisia, circa 1890. Original poster title (in French): “Colonisation de la Tunisie, Billets à demi tarif, Terres à vendre”. Author translation: “Colonisation of Tunisia, Half-price tickets, Lands for sale”. © Public domain via [Wikipedia Commons](#)



Figure 2: Colonial School of Agriculture of Tunis – date unknown. © Public domain via [Wikimedia Commons](#)



Figure 3: Assembling room of French settlers in Massicault village, Tunisia, in the 1930s. Author translation of original title (in French): “*Massicault – Salle de l’association des colons Français*”. © [Archival Collection, Mohamed Hamdane](#).



Figure 4: Le Munchar colonial village in Tunisia – date unknown. Original title (in French): “*Le peuplement Français de l’Afrique Du Nord est l’œuvre nationale de la France au Xx^{ème} siècle*”. Author translation: “The French settlement of North Africa is the national work of France in the 20th century” © [Archival Collection, Mohamed Hamdane](#)

3 The cultural heritage of Algeria under the French colonisation:

Conquered and colonised in 1830, Algeria, particularly Algiers, was the capital of the French settlement colonisation in North Africa. Considered as a pace-setter, Algeria's colonisation process was defined through the competition between *colon* and *indigène* for space and place (Brown, 2018). Thus, asserting the French sovereignty over Algerian lands relied on spatial constructs that reflected the colonial power over the colony. In this context, the first episode of colonial spatial planning introduced urban renewal plans to the city of Algiers with claims of "modernization" and improvement of what was considered to be "*inappropriate to the French way of life and needs*" (Amel Bellala, 2019). This urban transformation was not only going to bring the modernism to which the West aspired, but would also push back the indigenous population of Algeria. A member of the (French) African Commission expressed: "*Our establishments will push them back (...) their ways of living, their numerous herds, even their agriculture, cannot live in common with ours*" (Oulebsir, 2004). The exclusion of the indigenous population relied on the destruction, appropriation, and mutation of their civil, cultural, and religious heritage. Thus, it can be deduced that this heritage destruction was a deliberate act of vandalism by the colonisers and their army. Over the first decades of the French colonisation, the urban landscape of Algerian cities changed dramatically: the colonial destructions and transformations reached Arab Muslim architecture as well as ancient monuments.

The first urban renewal plans started in Algiers where the French colonisation authorities planned to have an immense space (*Place Royale* or *Place D'Armes*) in order to assemble the colonial troops and, no doubt, to also have a central area from which to control the whole city. The historical centre of Algiers was the most suitable site to meet to the political aims of the French coloniser. A *Place Royale* was arranged at the expense of existing constructions, as the new square was immediately opened in the middle of the densely built-up area of the city centre. The demolitions began in the weeks following the French occupation, and dozens of official, residential, religious buildings of great historical, political, religious, and cultural value were rapidly destroyed. Civil buildings from the surrounding district were demolished during the enlargement of three existing streets (Bab El-Oued, Bab Azzoun, and Marine streets) converging on the new *Place Royale*. The studies of this part of the city are difficult to carry out today, due to the almost total disappearance of the buildings and the lack of available material to study as

"the soldiers who ransacked a vital district of Algiers never thought of carrying out at least a survey of the buildings which were demolished, and of the streets which were suppressed to make room for a large empty space" (Raymond, 1981).

Religious buildings were also the focus of rapid destruction and mutation plans. The *Sayyida* Mosque, already old and rebuilt in the 16th century by Mehemmed Pacha after an earthquake that destroyed a large part of the city, was demolished and replaced by the new *Tour Du Pin* hotel (Figure 5). The destruction of the *Sayyida* Mosque was a deliberate part of the new urban plan for Algiers, suggested by the French authorities several times. They also aimed to destroy several other existing religious buildings: the Mausoleum of Sidi Abdelkader al Djilani, Khedar Pasha Mosque, Ach-Chemain Mosque, Ain-Al Hamra Mosque are a few examples. The results of this eradication policy were remarkable. In 1830, Algiers counted 13 large mosques, 109 small mosques, 32 chapels and 12

zaouias¹³. In 1862, only four large mosques, eight small mosques, and nine chapels were left. The same policies were applied in other cities of the country: Annaba counted 30 mosques and two zaouias including schools. Following the occupation of the city, 22 mosques disappeared, and only two schools were kept (Girard, 2010).



Figure 5: Sayyida Mosque before demolition, 1830. © Public domain via [Wikipedia Commons](#)

Ketchaoua Mosque, built in 1612 and considered to be one of the main religious centers of Algeria, narrowly escaped the destructive French plans to convert it into Algiers's first cathedral, Saint Philippe. Due to the opposition of the Algerians, the Ketchaoua Mosque was violently occupied to undergo, initially, slight modifications to adapt to Christian religious practices. The plans to destroy the Mosque were discussed again in 1840, when the French authorities wanted "*a more spacious cathedral*" (Bellala, 2019). However, the demolition plans were cancelled due to the modest budget available for the proposed transformation: as a result, the authorities were forced to conserve the mosque and simply extend it. The construction of the new Saint-Philippe Cathedral's lasted from 1845 to 1860. It was considerably enlarged, ultimately occupying about four times the area of the old mosque (Bellala, 2019) (Figure 6).

4 Conclusion

Both Tunisia and Algeria were subject to official French colonisation that had various schemes representing an assertive colonial ideology. The schemes relied on "*free or cheap land, easy credit and other perquisites to include French settlers onto the land*" (Brown, 1973). On the eve of the colonisation, both the countries, formerly regencies with significant autonomy under the authority of the Ottoman Empire, were subject to social, political, and economic crises that led to the weakening of the central power of the two countries. On one side, a population decrease in Tunisia caused by epidemics and

¹³ A zaouia (or zawiya) is a building and institution associated with Sufis in the Islamic world. It can serve a variety of functions such as a place of worship, school, monastery and/or mausoleum.



Figure 6: Façade of the Saint Philippe Cathedral, 1899. © Reproduction number: LC-DIG-ppmsc-05523 from Library of Congress, Prints and Photographs Division, Photochrom Prints Collection. Public domain via [Wikipedia Commons](#)

natural disasters resulted in a low demand for sharecropping and a scarcity of labour. These crises gave rise to the sales of Tunisian lands for the benefit of foreign investors, in particular the French. The following French colonisation of Tunisia, particularly the agricultural colonisation of its natural heritage, relied on the notion that the key to permanent control lay in settlers living on the colonised lands. As the colonial historian Augustin Bernard expressed: “*the only way to ensure French supremacy in a sustainable way by taking effective possession of the land. A country always ends up belonging to the one who cultivates its lands*¹⁴” (Bernard, 1929: 532). On the other side, the regency of Algeria had been in decline since the Napoleonic wars limited the trade in the Mediterranean. The economic situation before the French colonisation, along with social crises, triggered a political weakness that led to a maritime blockade by French authorities. The circumstances of the two countries on the eve of the colonisation was used by the French to justify the “weak” portrait of the colonised, and the “supervisor” image of the coloniser. Cultural and natural heritage were used as colonisation “tools” that served the French colonisers to allow them to eliminate indigenous culture and identity.

These two patterns of colonisation are founded on a deeply rooted double conviction: the superiority of Western civilization and the inferiority of the Other. The two patterns testified the lack of interest in, or even acknowledgement of, the local cultures, blended with the “dream” of a French empire as the new Rome (Bernard 1930: 523), bringing back a European North Africa, and disregarding any heritage which did not meet that vision.

5 References

- Ammar, S. (2018) “Massicault, un village de colonisation dans les environs immédiats de Tunis”, *Al-Sabil: Revue d'Histoire, d'Archéologie et d'Architecture Maghrebines* 6, pp.1-6. Available at: <http://www.al-sabil.tn/?p=5119> [Accessed: 24 January 2024]
- Bellala, A. (2019) “Sur les traces de la première cathédrale d’Alger”, *Livraison d’Histoire de l’Architecture* 2, pp.63-73
- Brown, L. (1973) “The many faces of colonial rule in French North Africa”, *Revue de l’Occident musulman et de la Méditerranée* 13(1), pp.171-191
- Çelik, Z. (1996) “Colonialism, Orientalism and the Canon”, *The Art Bulletin*, LXXVIII (2), pp.202-205
- Pinto Coelho, L. X., Marques L. M. S., Orvañanos Murguía, R. (eds) (2013) *Mundus Urbano: (Re)thinking Urban Development*, Berlin: Frank and Timme GmbH
- Elloumi, M. (2013) “Les terres domaniales en Tunisie”, *Études Rurales* 192, pp.43–60.
- Girard, Y. (2010) “Eradiquer L’Islam: Politique Française Dans l’Algérie Colonisée”, *jaZaireiss (first published in Le Quotidien d’Algérie*, 18 March. Available at: <https://www.djazaireiss.com/fr/lequotidien/11596> [Accessed: 15 November 2021]
- Bernard, A. (1929) *Histoire des colonies Françaises et l’expansion de la France dans le monde. L’Algérie*. Paris. Digitised 2008, A.J. Garcia. Available at: <http://sinistri.canalblog.com/archives/2008/01/17/7602411.html> [Accessed: 14 January 2024]

¹⁴ All translations by the author.

Leroy-Beaulieu, P. (1882) *De la colonisation chez les peuples modernes* (3 volumes), Paris: F. Alcan

Marthelot, P. (1965) J. Poncet, La colonisation et l'agriculture européenne en Tunisie depuis 1881. Étude de géographie historique et économique; J. Poncet, Paysages et problèmes ruraux en Tunisie, *Annales. Economies, sociétés, civilisations*, 4, pp. 817-822.

Oulebsir, N. (2004) "Les usages du patrimoine: Monuments, musées et politique coloniale en Algérie(1830 – 1930)", *La Maison des sciences de l'homme* 411, pp.249-251

Rahal, M. (2018) "Les vies de Ketchaoua, le choc de la conquête et la ville rinventée", *Hypotheses: Textures of Time*, 2 November. Available at <https://texturesdutemps.hypotheses.org/3050> [Accessed: 15 November 2021]

Raymond, A. (1981) "Le centre d'Alger en 1830", *Revue de l'Occident musulman et de la Méditerranée* 31, pp.73-84

Sartre, J-P. (1957) Introduction, In Memmi, A., *The coloniser and the colonised*, UK, Earthscan Publications Ltd edition, pp. 17-27



28 March 2024

© The Blue Shield
Prins Willem-Alexanderhof 20
2595 BE The Hague
Netherlands
www.theblueshield.org

Contact: blueshield.international@theblueshield.org
