# **Migration Letters**

Volume: 21, No: 8 (2024), pp. 680-690 ISSN: 1741-8984 (Print) ISSN: 1741-8992 (Online)

www.migrationletters.com

# **Current Challenges In Preserving Urban Heritage In Algeria: A Case Study Of Constantine City**

Dr. Nadira Bouguebs

Received: 05/2024 Published: 11/2024

#### Abstract:

Constantine city boasts a diverse architectural heritage that reflects its rich history and the various civilizations that have passed through it. Although this heritage holds significant cultural and historical value and plays a vital role in reinforcing national identity, it has endured periods of neglect, leading to deterioration. This decline can be attributed to various factors, including natural forces, economic and social challenges, and insufficient management. While efforts were made to revitalize the urban heritage during the 'Constantine, Capital of Arab Culture' event in 2015,<sup>1</sup> many of these initiatives did not fully achieve their objectives, for unclear reasons. This research seeks to establish a strategic framework for revitalizing urban heritage, balancing its preservation with the evolving needs of the city and its inhabitants to meet the requirements of the 21st century. The importance of this study lies in examining the specific challenges of preserving urban heritage in Constantine through developing and suggesting strategies that can contribute to the city's sustainable tourism development.

*Keywords:* Current Challenges, Constantine City, Urban Heritage, Preservation, Degradation, Local Development.

#### Introduction

Urban heritage is a non-renewable precious wealth that narrates the cultural, social, economic, and architectural history of civilizations, expressing the authenticity of cities. However, it is often fraught with natural risks and human violations, both intentional and unintentional, which negatively impact it, making it susceptible to disappearance and loss in both the short and long term. It has also become a focus of international and global attention, with many world organizations advocating for its preservation through various charters and conferences.

Most Algerian cities are rich in diverse urban heritage, distinguished by a unique specificity that has evolved through various historical eras. This heritage reflects the personality, culture, history, and civilization of the Algerian society, serving as a link between the peoples of the past and present.

Despite the importance of urban heritage in terms of historical, civilizational, and cultural aspects and its role in enhancing national identity, and although it is currently considered one

Higher Normal School - Assia Djabbar - Constantine (Algeria). E-mail: bouguebs.nadira@ensc.dz

of the most important economic factors internationally and globally through its exploitation in tourism attractions, Algeria, like other countries, has focused on urban heritage by framing it with numerous legal legislations that mandate its protection. Nevertheless, it suffers from many negative manifestations, with the city of Constantine providing a true picture of the significant neglect and marginalization its venerable architectural heritage endures.

The problem posed within this research evaluates the current status of urban heritage in Constantine city, the impact of previous projects on its valorization, and explores appropriate policies and mechanisms to reintegrate it into the urban fabric of the city to enhance its role in activating local development.

This research aims to establish a clear policy for the preservation and protection of urban heritage by reintegrating it into the components of the urban fabric of the city in a way that serves the residents and meets the needs of the era, without compromising its heritage value, which can be harnessed to serve tourism in the city through rehabilitation and restoration processes of various historical landmarks and general urban heritage.

The research follows a descriptive analytical method by reviewing some previous studies on the subject of protecting urban heritage, and relies on fieldwork through field trips to the old city and examination of the buildings and heritage landmarks present there.

#### I. Theoretical Framework for Studying Urban Heritage

Urban heritage is a topic of great importance that requires precise handling and analysis. For an accurate and detailed evaluation, it has been studied through a comprehensive and purposeful vision, encompassing its various theoretical aspects as follows:

#### **1. Definition of Urban Heritage**

Numerous definitions have addressed the concept of urban heritage, as defined by various global organizations like UNESCO and ICOMOS, as well as by many researchers and specialists.

One of the most significant definitions provided is: "Urban heritage includes everything built by humans such as cities, villages, areas, sites, buildings, and gardens that have archaeological, architectural, urban, economic, historical, scientific, or cultural value, proving their authenticity in the face of constant societal changes, becoming a living record, as well as serving as a historical, artistic, and economic document of the state" (Mohamed Ali, 2020, p.107).

Urban heritage is part of the tangible cultural heritage that enhances the identity of peoples, reflecting their personality, culture, and historical civilization, and is linked to the economic development of countries.

According to the Arab Organization for Education, Culture, and Science (ALECSO) in January 2004, urban heritage is classified into the following (Arab Organization for Education, Culture, and Science, 2017, p. 4):

**1.1. Heritage Buildings:** Include buildings of historical, archaeological, artistic, scientific, and social significance, including fixed decorations and furniture and their associated environments.

**1.2. Urban Heritage Areas:** Include cities, villages, and neighborhoods of historical, archaeological, artistic, scientific, and social significance with all their components such as urban fabric, public squares, roads, alleys, and infrastructure.

**1.3. Urban Heritage Sites:** Include buildings connected to a distinctive natural environment, whether natural or man-made.

#### 2. Importance of Urban Heritage

Urban heritage is of immense importance, encompassing economic, social, cultural, and historical domains. It directly contributes to the development of cities through its use in tourism attraction operations, generating profits and providing employment opportunities for local residents.

It also revitalizes social values of all kinds, such as returning to traditional professions and crafts and preserving local culture and the identity of communities derived from their history and past civilizations.

#### 3. Reasons for the Deterioration of Urban Heritage

Urban heritage serves as the memory of communities, through which the current urban situation with its problems can be understood and future prospects can be envisioned. Neglect of urban heritage poses a threat to the historical, civilizational, and religious identity of communities, especially since it is often affected by numerous threatening factors, including:

#### **3.1 Natural Factors:**

Primarily involve climatic elements such as rain, wind, and heat, which due to their severity and frequency, lead to the erosion of the structural integrity of urban heritage components, especially historic landmarks that are old and cannot withstand harsh climates. Additionally, natural disasters like earthquakes, landslides, and volcanoes can cause total or partial destruction of these landmarks.

#### **3.2 Human Factors:**

Include various threats to the disappearance of urban heritage, some related to the population such as their migration towards historically valuable buildings and residing in them without considering the deteriorated technical condition of these old buildings. Others relate to management aspects and the lack of strict law enforcement on the ground by the relevant services.

#### **3.3 Economic Factors:**

Elevating urban heritage requires clear policies and precise scientific and technical mechanisms. Achieving these practically necessitates a solid economic base, by allocating significant financial resources to various projects aimed at uplifting and valorizing urban heritage and preserving it, such as investing in tourism through the rehabilitation of its buildings.

#### 4. Methods of Preserving Urban Heritage

Urban heritage represents the cultural, social, and economic history of societies, reflecting through the authenticity of its buildings the imprint of previous generations and the characteristics of their civilizations and cultures, which have been passed down through the ages. Neglecting urban heritage is considered a threat to the identities of communities. Thus, protecting and preserving urban heritage has become an essential necessity, a responsibility that belongs to everyone because it is a trust to be handed down to future generations in the best possible condition.

Preservation has been defined as "a comprehensive and significant concept that encompasses several axes ranging from the protection of the natural environment and its resources to the protection of the urban environment, which includes the built environment and the human environment with its interactions and the relationships of its individuals" (Mohamed Ali, 2020, p. 108).

From this perspective, it can be said that protecting urban heritage is a fundamental necessity for the development of cities in all countries that strive to preserve their long-acquired authenticity. This protection involves various methods and approaches that vary according to the requirements of the areas, sites, and buildings of heritage value, including:

#### 4.1 Rehabilitation

Involves various repairs made to historically valuable buildings according to their condition, through some non-radical changes and minor additions that qualify them for reuse without compromising their historical value.

#### **4.2 Reconstruction**

Entails the complete or partial rebuilding of old buildings of historical value by collecting all their original components and reconstructing them anew. This particularly occurs when these buildings have suffered damage to the extent of complete or partial demolition, especially in cases of natural disasters or wars.

#### 4.3 Restoration

Consists of various repairs and modifications concerning old buildings of historical value that have been affected over time by various natural and human factors, with the intention of returning them to their original state while attempting to preserve all the distinctive details such as decorations and building materials (maintaining the original artistic and technical aspects).

#### 4.4 Renovation

Renovation has been defined as "adding modern features to a building such as electricity, elevators, heating, etc. These additions may cause varying degrees of damage to the building; therefore, engineers specialized in restoration are very cautious when handling such cases" (El Hadi Hamish, 2017, p. 5). Renovation involves equipping historically valuable buildings with what is required at the time of the operation but requires meticulous study by specialists.

# 4.5 Maintenance

Comprises various simple and appropriate technical and artistic operations that are applied regularly and permanently to historically valuable buildings, protecting them from damage and prolonging their good condition.

# 6. International Charters for the Protection of Urban Heritage

The necessity of protecting urban heritage has been one of the priorities for countries for a long time due to its immense importance in solidifying the historical, civilizational, and religious identity of cities, and contributing to their economic, social, and cultural development. Among the most important international charters advocating for the protection of urban heritage (Ministry of Municipal and Rural Affairs, 2005, p. 6) are the following:

• The International Charter for the Conservation and Restoration of Monuments and Sites (The Venice Charter) ICOMOS 1964

- The UNESCO Convention issued in 1972 (Protection of the World's Cultural and Natural Heritage)
- The World Heritage Convention of 1976
- UNESCO's decisions and recommendations from the International Symposium on the Conservation and Restoration of Islamic Architectural Heritage, Lahore (Pakistan) 1980
- ICOMOS Charter on the Protection of Historic Cities and Urban Areas Washington 1987
- The bulletin issued by UNESCO in 1994 titled (Intergovernmental Committee for the Protection of the World's Cultural and Natural Heritage)
- The international standards of the Organization of Capitals and Cities Islamic titled (Foundations and Criteria for Classifying Islamic Heritage Buildings and Cities) Iran 1997.
- The Dubai Document for the Conservation and Maintenance of Historical Buildings and Areas 2004 (Apolleila, 2019, p. 133)

#### II. Geographic Analysis of the Constantine City Area

The spatial framework of Constantine City will be studied through understanding its geographic importance within its eastern region and the key spatial features across its historical expansion stages, by examining the following elements:

#### 1. Geographic Characteristics of Constantine City in Northeastern Algeria

Constantine City has held a prominent position in the eastern region of Algeria for centuries, serving as a capital for over two thousand years, which has made it a city rich in heritage with many civilizations succeeding one another. Today, it stands as a regional capital for the eastern Algerian region, one of the country's vital economic regions.

Constantine is centrally located in the northeastern region of Algeria, positioned between the coastal urban network overlooking the Mediterranean Sea and the interior extending to the desert. It acts as a linkage between the northeastern cities and the southeastern ones, connected by a dense network of national and regional roads that converge in the city in a star-shaped layout.

Additionally, its connectivity is enhanced by the East-West highway, which facilitates traffic movement towards it, making it a major transit and communication hub for all cities and states in eastern Algeria. Constantine boasts a strategic geographical location that has qualified it to be a capital and a significant hub in the eastern Algerian region.

# 2. The Old City: Analysis of Its Urban Features and History

Historical writings have sparked significant debate among historians and researchers about the origin of Constantine City, with some arguing that the history of this city remains shrouded in much mystery, posing a barrier to its narration like other city histories (Ben Ali Shughieb, 1980, p. 7).

Since its inception, Constantine has seen the succession of numerous civilizations, making it a stage for many changes primarily linked to the requirements of the historical periods it has

witnessed. Thus, the city has distinguished itself during its expansion stages with urban features that directly contributed to the formation of its rich urban heritage that it boasts today.

Constantine City (the Old City) initially emerged on a triangular-shaped rock, its base in the north and its peak in the south, precisely on the sides of the Rhumel and Bou Merzoug valleys, surrounded by steep declines which enhanced the importance of its location.

Consequently, the choice of this site was primarily for defensive purposes, and until the Roman era, the city did not experience any kind of urban expansion. With the arrival of Islam and specifically during the Ottoman rule that lasted for over three centuries from 1528 to 1837 (Benidir, 2007, p. 45), the city flourished and developed significantly in various fields.

Economically, due to its important geographical location across the eastern region, which made it a broad exchange zone between the hills and the desert, culturally through the focus on building mosques and zawiyas, which served as places for worship, Quran memorization, and the study of various sciences, and urbanistically as it expanded within its walls reaching an area of 30 hectares.

It had four gates: Bab El Wad, Bab El Kantara, Bab El Ghabiya, and Bab El Jadid. The city's architectural design, derived from Arab-Islamic planning, featured a uniform compact pattern consisting of residences, mostly three-story buildings, totaling fourteen (14) dwellings (Mazhoud, 1995, p. 26). The city was characterized by its narrow streets and a lack of green spaces.

The Old City is an architectural heritage acquired over time, representing the authentic Arab-Islamic city during that period, which has enhanced and valued the rich urban heritage that the city boasts today.

The city, built upon the rock, represented the full extent of the city's borders until it fell to French colonial forces on October 13, 1837. Like all Algerian cities at that time, Constantine did not possess a guiding plan for urban development; it was developed gradually according to needs. This involved intervening in the fabric of the original city by removing a large part of its residences, dividing it into an upper and lower section by cutting a road through its center (Arabi Ben Mhidi Street).

This road was intended to connect the nearby Kantara bridge to the train station square (La brèche), flanked by European-style communal buildings. The lower part of the rock or city was designated for Muslims and a portion for Jews, while the majority of the upper part was for the French.

"In 1840, construction began on a military barracks (the Kasbah) with an area of 5 hectares, and the French supported their civil presence by building administrative buildings on the old city's space such as the Prefecture established in 1849 and the City Hall in 1845. This was done to give the city a distinctly French character" (Mazhoud, 1995, p. 30). Thus, during the French colonial period, Constantine managed to blend Arab-Islamic and European styles, enriching and diversifying its urban heritage.

Several civilizations have succeeded one another in Constantine, blending over time. The city was characterized by its defensive military position, making it a fortified military base, and also served as a cradle for intellectual and civilizational radiance, especially during the Islamic era.

#### III. Analysis of the Urban Heritage Reality in Constantine City

Constantine City is rich in diverse urban heritage, built by many civilizations that succeeded one another over different periods. Most of this heritage is concentrated in the Old City atop the ancient rock. This is because all the ancient civilizations that settled in the city built each new civilization on the remnants of the one before it, without expanding beyond it until the French colonial period.

Among the most important types of existing urban heritage in the city, which has maintained its authenticity through various natural and human factors, are the historically valuable buildings such as mosques and palaces built during the Ottoman rule, as well as bridges and some historical landmarks left by French colonization, some of which will be showcased below:

# 1. Mosques

During the Ottoman rule, building mosques in cities was a priority in urban and architectural planning due to their social, religious, educational, and cultural significance. They served as places of worship, Quran memorization, and acquisition of many sciences.

This contributed to the spread of science and Islamic culture among the city's inhabitants at that time, exemplified by Constantine City, which flourished culturally during this period. Among the prominent mosques classified as landmarks of Islamic urban heritage in the city, which still bear witness to Islamic authenticity with their ancient architectural art until 2021, are:

# 1.1. The Great Mosque

This mosque is one of the oldest mosques in Constantine, built on "the remains of a Roman temple" (Redjem, 2020, pp. 1-9) and is the sole witness to the Hammadid architecture in the city. It was constructed between 1136 and 1137 AD by the Hammadids in the southern part of the Old City.

During the French colonial period, part of it was severed when Arabi Ben Mhidi Street was created. However, later, its main façade facing this street was redesigned in a way that somewhat preserved its original architectural character (Bouchareb, 2006, pp. 139-140). This mosque is one of the most prominent achievements in the city's urban heritage.

# 1.2. Sidi Lakhdar Mosque

Sidi Lakhdar Mosque is located on the eastern side of the Old City in the Butchers' district, constructed during the Ottoman era under the rule of Hussein bin Hussein between 1736 and 1754. It features marble columns and its mihrab and minbar are made of intricately carved wood.

The mosque was chosen by scholar Abdelhamid Ben Badis as the headquarters for the Association of Muslim Scholars (Centre National de Recherche en Archéologie, 2017), where lessons on Tafsir (Quranic exegesis) and Hadith were taught. This mosque is a landmark of religious significance with architectural historical value, adding to the urban heritage of Constantine City.

# 1.3. Hussein Bey Mosque

Located adjacent to Ahmed Bey Palace and Si El Haouas Square in the Old City, Hussein Bey Mosque, previously known as the Spinning Market Mosque before the French occupation, was named after the wool market nearby. It was commissioned by Bey Hussein around 1720 (Bouguebs, 2020) and is considered an architectural masterpiece reflecting the authenticity of

Islamic architectural art through its exquisite decorations, precisely carved domes, stained glass windows, and multicolored ceramic tiles (Bouguebs, 2020).

#### 1.4. Sidi Elkettani Mosque

Situated north of the Old City, near the modern market, Sidi Elkettani Mosque was built in 1776 by the Ottoman governor Saleh Bey ben Mustafa, who ruled Constantine from 1771 to 1792 (Centre National de Recherche en Archéologie, 2017). The mosque is an architectural gem reflecting the authenticity of Islamic architectural art, with marble pillars and other important building materials imported from Italy.

#### 2. Ahmed Bey Palace

Located in the Old City adjacent to Hussein Bey Mosque, Ahmed Bey Palace was built during the Ottoman rule in the city. Construction began in 1826 by Bey Hussein, the last Bey of Constantine, and was completed in 1835. Spanning an area of 5609 m<sup>2</sup> (Centre National de Recherche en Archéologie, 2017), it is an architectural masterpiece and one of the most important palaces built during the Ottoman era in Algeria.

#### 3. Bridges

Constantine is synonymous with bridges, marking a unique feature distinct from other Algerian cities. Thus, its bridges constitute a precious urban heritage inherited from the civilizations that have succeeded each other over the ages. The oldest was built during the Roman presence, while most were inherited from the French colonial period. Some examples of these heritage landmarks are:

#### 3.1. Bab El Kantara Bridge:

This is the oldest bridge in Constantine, built during the Roman era and renovated during the Ottoman rule by Saleh Bey in 1792 (Kherouatou, 2016, p55).

#### 3.2. Sidi Rached Bridge:

Constructed during the French colonial era 1908-1912, this bridge connects the two banks of the Rhumel River and links the Old City to new neighborhoods beyond the rock. It is one of the longest stone bridges in the world, measuring 447 meters in length with 27 arches, the largest spanning 70 meters (Pincent, 2008, p197).

**IV.The State of Urban Heritage in Constantine City: Challenges and Valuation Strategies** Despite its rich historical, civilizational, and cultural heritage, Constantine has suffered from significant neglect of its urban heritage for many years, leading to its deterioration due to a combination of natural, economic, and social factors, along with poor management. At the end of 2012, the Arab Organization for Education, Culture, and Science declared Constantine the Capital of Arab Culture for 2015, in recognition of its ancient history and cultural heritage (Baziz, 2018, p39).

During this event, the city benefited from several projects aimed at rehabilitating and valorizing various historically valuable buildings and urban heritage sites. Many studies and projects proposed by university researchers, built on scientific and field-based foundations, were developed by the organizing committees, particularly the Directorate of Culture; unfortunately, despite significant efforts, these proposals were not taken into consideration (Sara Kermiche, 2015, p126).

It is also worth noting that most projects targeting various historically valuable buildings in the Old City through rehabilitation and valorization efforts remain ongoing to this day (as of 2021),

such as Sidi Elkettani Mosque, while other mosques have been closed for this reason and remain closed, further deteriorating their condition, such as Sidi Lakhdar Mosque.

Some historical buildings in the Old City, such as Ahmed Bey Palace, remain untouched by restoration and rehabilitation projects. Other buildings have been completely neglected, leading to their deterioration and a trend towards extinction.

# V. Sustainable Strategies for Preserving and Integrating Urban Heritage in Constantine City

Constantine City faces significant challenges in preserving its urban heritage, which is threatened with extinction. This has led to the search for effective strategies to preserve this heritage and utilize it as a tool for local and tourism development. The main ideas for these strategies include:

- 1. Enhancing the Preservation of Urban Heritage: Efforts should focus on reviving and valorizing historical buildings through restoration and adaptive reuse that respects their history and architectural integrity. This can involve introducing modern or traditional activities that serve the community, attracting residents and tourists, and improving the economic and social standards of the community.
- 2. **Supporting Traditional Crafts:** Constantine is known for crafts such as copper engraving, traditional embroidery, and rose distillation in spring. Promoting these crafts can attract tourists and enhance local development.
- 3. **Restoring Historic Buildings**: This involves appointing a special body overseen by researchers and specialists in architecture, urban planning, and archaeology to conduct restorations. This process should blend traditional techniques, which allow the historical building to be reconstructed in its original style, with modern techniques that enhance the aesthetic character of the building, such as facade painting and decorative ceiling and wall finishes.
- 4. **Implementing New Laws and Regulations for Urban Heritage**: New legislation should define how to preserve and exploit urban heritage for tourism, with careful implementation by specialists.
- 5. **Encouraging Investment in Urban Heritage**: Investments in heritage areas, especially in the Old City, should be stimulated through rehabilitation projects aimed at transforming these areas into attractive tourist destinations, directly enhancing local development.
- 6. **Promoting Cultural Awareness**: Associations should be created to educate the population about the importance of urban heritage in enhancing national identity and how it can be leveraged for economic and local development, encouraging their participation in preservation and investment efforts.
- 7. **Providing Necessary Financial Resources**: Sufficient funding should be available to agencies and authorities responsible for urban heritage to facilitate the implementation of preservation projects, such as restoration and rehabilitation efforts.
- 8. **Securing Financial Support**: A sufficient budget should be allocated to competent authorities in urban heritage to facilitate the management and realization of preservation activities, such as restoration and rehabilitation processes.

9. Leveraging Successful Global Experiences: By exchanging expertise and knowledge between local and international experts, Constantine can benefit from successful international experiences in preserving urban heritage, both from Arab and Western countries.

#### Conclusion

Constantine City has witnessed the succession of numerous civilizations, each contributing to its rich and diverse urban heritage. The city's strategic location has made it a fortified military base and played a prominent role as a center for intellectual and civilizational radiance, especially during the Islamic era. However, it's important to note that most of this heritage is concentrated in the Old City, atop the ancient rock.

Despite the noble efforts made by the responsible authorities during the event "Constantine: Capital of Arab Culture 2015" to revive and valorize the urban heritage components, these attempts often did not achieve the desired success for reasons that are unclear and require further study by specialists. Furthermore, these efforts did not encompass all the buildings of historical value and did not take into account the scientific studies proposed by researchers and specialists.

Therefore, it is recommended to establish clear policies and mechanisms for the protection and enhancement of urban heritage in the city, requiring the concerted efforts of all community members, including officials, researchers, and residents. These policies aim to integrate heritage within the urban fabric in a manner that serves the city's inhabitants' needs, preserves its heritage value, and utilizes it to enhance tourism and local development.

#### References

- 1. Abouleilah, M. M., & Al-Barqawi, W. B. A. (2019). Methodologies for protecting architectural and urban heritage in Arab countries. International Journal in Architecture, Engineering and Technology, 1, 127-144.
- 2. Arab Organization for Education, Culture and Science. (2017). Charter for the Preservation of Urban Heritage in Arab Countries and its Development. Arab League.
- 3. Baziz, N. (2018). Revaluation of the Downtown of Constantine in an Event Context: The Case of Bennacer Bachir Square. Urban Development Journals, 37-52.
- 4. Ben Ali Shughieb, M. (1980). The Mother of Cities in the Past and Present: History of the City of Constantine. Dar Al-Baath, Constantine, Algeria.
- 5. Benidir, F. (2007). Urbanism and Urban Planning the case of Constantine (PhD Thesis in Architecture). Mentouri University-Constantine, Department of Architecture and Urban Planning.
- 6. Bouchareb, A. (2006). Cirta or the Urban Substratum of Constantine: The region, the city, and the architecture in antiquity (State Doctorate Thesis). Mentouri University, Department of Architecture and Urban Planning, Constantine.
- 7. Bouguebs, N. (2020). Field Investigation.
- Centre National de Recherche en Archéologie. (2017, August 22). Ahmed Bey Palace. Ministry of Culture. Retrieved from <u>http://cnra.dz/atlas/palais-ahmed-bey/</u>
- 9. Centre National de Recherche en Archéologie. (2017, August 22). Mosque of Sidi Lakhdar. Ministry of Culture. Retrieved from <u>http://cnra.dz/atlas/mosquee-de-sidi-lakhdar/</u>
- 10. Centre National de Recherche en Archéologie. (2017, August 22). Mosque of Souk El Ghezel. Ministry of Culture. Retrieved from <u>http://cnra.dz/atlas/mosquee-de-souk-el-ghezel/</u>
- 11. El Hadi El Hani, J., & Al Rumi, R. S. (2017). Reuse of historical and archaeological building (of value) as an approach to preserve it. International Journal of Science and Technology, 9(1), 1-20.
- 12. Kermiche, S. (2015). When history feeds a vision of the future. Synergies Mediterranean World, 5, 121-130.
- 13. Kherouatou, M. (2016). The living memory at the heart of constructive cultures in Constantine: A challenge of preservation. Science and Technology Journal D –, 43, 49-57.

- 14. Mazhoud, S. (1995). The Housing Crisis in the Context of Urban Space: An Applied Study on the City of Constantine. Dar Al-Noor Al-Hadif, Algeria.
- 15. Ministry of Municipal and Rural Affairs. (2005). Guide to the Preservation of Urban Heritage. First Edition. King Fahd National Library, Riyadh.
- Mohamed Ali, A. D. (2020). The Role of Egyptian Legislation in Preserving Urban Heritage and its Touristic Exploitation. In Symposium Webinar on Future of Urban Development: Al-Jouf Province (Opportunities and Challenges) (pp. 104-126). El-Jouf University.
- 17. Pincent, B., Rougdal, R., Panet, M., & Bentabet, A. (2008). The Sidi Rached Bridge in Constantine (Algeria): an abutment in a large landslide. National Geological Service Bulletin, 19(3), 197-215.
- 18. Redjem, M. (2017). The role of the mosque in Algeria in the configuration of the city during the French colonial era. Architecture, Arts Magazine, 1-9. Retrieved December 15, 2020, from <a href="https://mjaf.journals.ekb.eg/article\_20680\_73fe073521bd5a9cfbf62e7f7a092353.pdf">https://mjaf.journals.ekb.eg/article\_20680\_73fe073521bd5a9cfbf62e7f7a092353.pdf</a>