ARCHITECTURAL AND URBAN HERITAGE OF CONSTANTINE MECHANISMS FOR UPGRADING THE PROTECTED SECTOR

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Abstract - Algeria boasts a diverse heritage, given the richness and diversity of its architectural and urban heritage; it can be considered a museum of heritage that is exploited in an optimal and thoughtful manner, according to strategies that take into account all the characteristics of the local community. The cultural and heritage features of Algeria vary according to its different climates and terrains, reflecting the diversity of civilizations that have passed through it. Some civilizations, such as the Phoenicians, preferred the coast, while others, such as the Hammadids, chose the desert. The French colonial period also left its mark on Algeria, with Constantine being a prime example. The old city, built on a solid limestone rock mass and divided by a deep valley called ouad al-Rimal, is rich in archaeological sites dating back to prehistoric times. It was the capital of the Numidian state and has witnessed the succession of numerous civilizations, leaving behind a cultural and architectural heritage that continues to testify to the ancient history of the city and its region. Ottoman archaeological sites constitute the majority of the remaining archaeological sites in Constantine, the most notable of which is the old city. Constantine was chosen as the Arab Capital of Culture for 2015, which was an opportunity to showcase its cultural and historical value, as it is rich in testimonies of successive civilizations. The province authorities mobilized all stakeholders to ensure the success of this event, and all province directorates were assigned various tasks, the most notable of which was the Directorate of Culture in cooperation with the National Office for the Management and Exploitation of Protected Cultural Properties. They proposed 78 operations within the protected sector, divided between restoration, rehabilitation, and renovation, in line with the recommendations of a permanent plan for the preservation and restoration of protected areas. This is what we will address in this research paper, focusing on architectural and urban heritage landmarks from the identification of the protected sector of Constantine to the post-Capital of Culture period.

Keywords: Constantine, ,The Ancient Rock, Rehabilitation, Architectural Heritage, Urban Heritage Table of Contents

INTRODUCTION

Algeria is characterized by its strategic location which made it a meeting point for many ancient civilizations. These civilizations, after their disappearance, left a great historical and cultural heritage embodied in their sites and archaeological cities spread throughout the national territory, witnessing those periods of time. There is the Roman city of Timgad, built in the first century AD, the Roman ruins of Tipaza, in addition to the Hoggar and Tassili N'Ajjer parks, classified as the oldest sites in the world witnessing the history of early man. Algeria also has 430 archaeological sites and landmarks (Bazin2006), seven of which are classified as World Heritage by UNESCO, representing 10.6% of the classified Arab sites and 0.7% of the classified sites worldwide. The architectural heritage in Algeria is classified into several categories according to the size, archaeological value, type of ruins found and the area in which it is located, such as heritage complexes that distribute many activities of archaeological value, so they can be considered old neighborhoods (Hamida 2019). Several sites have been classified as Islamic heritage, including the Beni Hammad Citadel in 1980 and the Roman archaeological sites in Bejaia, Tipaza and Timgad in 1982. In the south, the Tassili N'Ajjer Park and the M'zab Valley in Ghardaia were classified in 1982 AD, and the last was the kassaba of Algiers in 1992. Algeria has been interested in heritage since 1967 (Dahdouh 2010), under the framework of all the legislation and regulatory laws governing the

archaeological field and the protection of heritage and archaeological sites. Algeria is one of the first countries to sign the World Cultural and Natural Heritage Convention.

The architectural and architectural heritage is a basis for the cultural heritage that any nation is proud of, as it highlights authentic elements and manifestations specific to the cultural identity and its importance. States have been keen to increase awareness of heritage as a cultural, historical and civilizational source (Guerroudj 2000), and the promotion of heritage is for its protection and reuse, by setting the planning and design principles and standards that contribute to highlighting its value and importance in social and cultural development and its employment as a main tributary of tourism (Louis 1999). Considering that this heritage is vulnerable to damage either due to natural or human factors, which affects these landmarks and distorts some of their components, in addition to urban expansions that are the reason for the removal of some historical landmarks, which made the cultural heritage threatened with deterioration and loss of its characteristics (Babelon et Chastel 1980) and it must be preserved. Through this research paper, we will study the city of Constantine and its region which contains many archaeological sites that perpetuate the historical and cultural importance of the city and stand on the landmarks of the different civilizations that Constantine knew. This is what made us look for the reasons that led to the deterioration of the architectural and architectural heritage there? And evaluating the previous restoration and rehabilitation works, especially after the announcement in 1988 that the Souika is a fragile neighborhood, and thus registering it within the project to eliminate fragile neighborhoods, without taking into account the nature of the site or the legislation related to historical sites and landmarks (Ghanem 1999). Here lies the ambiguity surrounding the future of the site, whose name is changed, according to estimates, places and circumstances, from a site of ruins, to a site that expresses heritage and identity. The reality is that the rank of the Souika, the most authentic neighborhood of the city, has declined due to age, intentionally or unintentionally, and the Souika has become a real obstacle due to events.

We will know the most important landmarks of the architectural heritage in Constantine through different civilizations. Despite the enactment of many legislations to protect, preserve and value the tangible heritage and urge different actors, especially the population, to protect it, it was vandalized, especially by its inhabitants in the eighties in order to benefit from social housing outside the old city on the one hand, and the lack of awareness of the importance of heritage landmarks on the other hand. This is what our research will address based on the descriptive analytical approach, in addition to analyzing case studies of some archaeological and architectural landmarks in order to protect and preserve the architectural and architectural heritage and to enhance the historical identity of the city, and to improve it for history because it is the identity of future generations. We also relied on the field study in our research through the use of questionnaires and the adoption of this research tool in the study to extract the trends of the residents of the old city towards the architectural heritage. We used only two questions from the field study, because the questionnaire is directed to an in-depth architectural study.

1. Field of Study: Constantine City, Natural Heritage and Cradle of Civilizations

Constantine: the capital of eastern Algeria, a metropolitan city ranked third nationally in terms of population, built on a rock of hard limestone, which gave it a world-renowned location. The deep Wadi Rummel cuts through the limestone rock, making the bridges a link between the two sides of the rock, which is why Constantine is known as the city of suspended bridges, of which there are eight (Lifa, Belkhelfa: 2018). The wilaya of Constantine is located in the northeastern region of Algeria, which is one of the most important economic and population regions. It is about 437 km from the capital and is distinguished by its ancient history. Human groups settled in the city of Constantine and settled on the banks of the ouadi after the drying up of Lake Mansoura. Despite the differences between researchers about the date of the foundation of the city of Constantine, excavations have shown that it was between the fourth and third centuries BC, where the Massilian tribes spread in eastern Algeria (Bahra & Abdelouhab 2017). Many civilizations have inhabited the city of Constantine, starting with the Numidian, Roman, Vandal, Byzantine civilizations, passing through the Arab Islamic civilization represented by the Zirids,

Hammadids and Hafsids, and ending with the Ottomans before the French colonizer entered it in 1837, occupying its territories and changing its architectural heritage and building landmarks (Larbi 2010). Constantine is full of landmarks dating back to prehistory, both at the level of the mother city and its region, varying between caves, funerary monuments, tombs and other inscriptions and excavations. We have the Cave of the Bears, which is 60 meters long and is located on the northern rock of Constantine. The Cave of the Aurochs is located near the Cave of the Bears and is 6 meters long. Both caves are archaeological sites dating back to the prehistoric period. As for the Ghar al-Hammam Cave (Ghar al-Skaken), it is located under a bridge at the entrance to the Zighoud Youcef Street tunnel. Primitive artifacts were found there and are kept in the Cirta Public Museum in Constantine (Ghanem 1999).

As for the megalithic cemetery of Bonwara, it is located 32 km from Constantine and on National Road No. 20 leading to Guelma. The megalithic cemetery of Bonwara is located on the southwestern slopes of Mount "Mazala", 2 km north of the village of Bonwara. These dolmens are made of cohesive limestone layers dating back to the prehistoric era. It seems that a large number of them have been damaged and destroyed. The general model of these historical landmarks is in the form of a table consisting of four vertical rock blocks and a table, forming a triangular room. The dolmen is usually surrounded by a circle of one stone, and sometimes by two, three or four circles. The ancient inhabitants of the region used to use them to bury their dead in this fortified way, which seems to have continued until the third century BC. (Bahra & Abdelouhab 2017)

2 Constantine: Architectural Heritage and Legacy of the Numidian and Ottoman Civilizations

The Numidian Era: The Numidian tribes inhabited Constantine at the end of the 9th century BC. It started as a small village but soon became the political and administrative capital of the Numidians. The favorable geographical conditions helped the Massilian tribes to settle in the lands suitable for agriculture. Its proximity to the flourishing Phoenician Carthage at that time made Constantine develop rapidly from the Paleolithic era. Constantine developed even more during the reign of the Numidian king Massinissa. He wanted it to be a military, commercial, and industrial power. Its construction expanded within the walls, and the city was fortified with watchtowers to continue its development and greatness, which reached its peak. This made the Romans aspire to conquer it (Laroui 1997). The Ottoman Era: The Ottomans ruled Constantine from the 16th to the 19th centuries. They left their mark on the city in the form of mosques, palaces, and other architectural landmarks.

2-2 Mosques as a Symbol of Islamic Civilization

Mosques are among the architectural structures that distinguish Islamic cities. Ottoman mosques were distinguished by the precision of their construction, the use of zellige and marble in the mihrab and luxurious carpets, and the abundance of endowments. The city has many mosques, including:

- The Great Mosque: Built by the Hammadids in 503 AH, 1136, on the ruins of a Roman temple. It is characterized by the Arabic inscriptions carved on its walls.
- The Mosque of Bai Hussein: Considered one of the most important mosques in the city. It was built by Bai Hussein in 1720.
- The Mosque of Saleh Bey: Located in the "Souk al-Asr" square. It was built by Saleh Bey bin Mustafa in 1776.
- The Green Mosque: Built by Bai Hassan bin Hussein in 1743.

Constantine is a city with a rich and diverse history. It is a UNESCO World Heritage Site and is a popular destination for tourists and scholars alike. Despite the suffering of the inhabitants of the city of Constantine from French colonialism, the French architectural heritage is considered part of the Algerian architectural heritage, such as the bridges that were built to connect the two banks of the city and ensure the smooth running of its daily activities, including the latest Salah Bey Bridge built in 2014. The bridges of Constantine are a testament to the city's rich history and its diverse



architectural heritage. They are an important part of the city's landscape and play a vital role in its transportation system.

Here are some additional details about the bridges of Constantine:

- Bab El Kantara: The bridge is named after the nearby gate of the old city. It is a stone arch bridge with a single span of 25 meters.
- Sidi Rached: The bridge is named after a nearby mosque. It is a concrete arch bridge with 27 spans, the largest of which is 70 meters wide.
- Salah Bey: The bridge is named after the Ottoman governor who commissioned its construction. It is a cable-stayed bridge with a main span of 290 meters. The construction of the bridge started in 2010 under the supervision of the Brazilian company Andrade Gutierrez with Algerian funding. The project took 4 years, with construction work ending in 2014. It was inaugurated on Science Day, April 16, 2014, and opened to traffic on July 26, 2014 (Ministry of Transport 2022)
- Sidi M'Cid: The bridge is named after a nearby saint. It is a suspension bridge with a main span of 168 meters.
- The Cascades: The Bridge is named after the waterfalls that cascade over it. It is a concrete arch bridge with a single span of 20 meters.
- The Diable: The Bridge is named after the legend that it was built by the devil. It is a small stone arch bridge with a single span of 10 meters.
 - The bridges of Constantine are a popular tourist destination. They offer stunning views of the city and the gorge, and they are a great place to take a walk or a bike ride.

2-RESULTS AND DISCUSSIONS

The old city of Constantine is rich in architectural landmarks that reflect Islamic art and heritage. These include mosques, zawiyas, traditional Arab-Islamic houses with a central courtyard and blank facades, hammams, alleys, paths, shops, hotels, and squares. The old city was also distinguished by its large and luxurious houses inhabited by the wealthy, known as "seraias" (palaces). These houses had a large area and were owned by large and prominent families in society or by the beys who ruled Constantine. These houses are distinguished from the rest by their arches, capitals, wooden works, use of domes, and the use of marble and decorated and carved tiles (Lifa, Belkhelaf 2018). We also noticed that Constantine was a melting pot for many civilizations. If each civilization has its own architectural and urban heritage, these landmarks are not exploited as heritage landmarks that testify to the historical era of the city. This is because they are neighborhoods that have been abandoned by their owners and rented out, and some have been demolished due to natural disasters, especially earthquakes. To understand the old city well, it is divided into three fabrics: the Arab-Islamic fabric (Souika), the mixed fabric (hybrid), and the European fabric (Kasbah). Over time, the old city has become known for the widespread presence of demolished buildings, especially within the Arab-Islamic fabric "Souika". This poses a danger to passers-by, residents, and neighboring buildings. In addition, there is a limited number of spaces and squares within the urban fabric. After the 1993 study that called for the relocation of the Souika residents (the demolished and collapsing part), investigations revealed that the residents of the old city "Souika" are tenants of the housing units. They caused damage to their homes in order to obtain social housing from the state according to the relocation program.

Through the following table, we will show the various operations that have affected the old city for the purpose of rehabilitation and restoration. The ultimate goal was to preserve our architectural heritage and succeed in classifying the old city as a world .

| | Event |
|------|--|
| 1988 | 1988: Selection of 127 historical and cultural landmarks |
| 1989 | 1989: Conducting architectural studies of Souika and the street |
| 1992 | 1992: Establishment of a body for the classification of the old city "Sakhra" according to |

| | the decision dated 20/03/1992 |
|------|--|
| 1993 | 1993: Study for the relocation of Souika residents |
| 1995 | 1995: Preparation of a file for the classification of Sakhra as a world heritage |
| 1998 | 1998: Sakhra declared a historical area for preservation according to Executive Decree |
| | 89/83 |
| 2003 | 2003: Rehabilitation Cell tasked with preserving the old city "Sakhra" |
| 2011 | 2011: Creation of the Office for the Management of Cultural Property |
| 2013 | 2013: Permanent Plan for the Preservation and Restoration of Preserved Sectors |
| | (PPMVSS) |

Source: Directorat of Culture of Constantine Province 2022

Over the course of 25 years, efforts were made to classify the old city of Constantine "Sakhra" as a preserved and world heritage site. However, the result was disappointing. The following photos illustrate the current situation

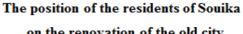




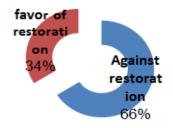
Fig01: Souika current situation, auteur 2022

The field study came to answer the hypothesis of the nature of real estate ownership by the residents of the old city and their position on the process of restoration and rehabilitation. We found that more than half of the residents of the old city, specifically Souika1, are tenants. There are also those who live illegally, having taken over some abandoned houses due to the relocation of their residents because they are in danger of collapse. 24% are heirs, i.e. owners of these old houses.

¹ Souika: The diminutive of the word "Souk" (market), it is the lower part of the old city of Constantine and dates back 500 years. It preserves the history of the city of hanging bridges, with its narrow alleys and old houses, and it preserves the memories of the inhabitants of the ancient rock. "Souika" remains the place where the Constantine families clung to









The légal statues of Souika

Source: Analysis of a questionnaire addressed to the inhabitants of Souika to identify the population origin and the position of the population on the restoration process

Some residents of the old city of Constantine are destroying their own homes in order to be eligible for social housing. These residents are against restoration efforts because they do not own the homes they live in. Their presence in the old city is considered a transitional stage before they move out of the rock into social housing programs. The real estate nature of the old city has benefited from the process of reconsideration) due to the lack of interaction of the residents with the idea of preserving the architectural heritage. Despite various attempts to preserve the architectural heritage of the old city of Constantine, the most important project is the general plan for the protection of the rock. This plan was developed after the ratification of Law 98/04 on the Protection of Cultural Heritage. The University of Rome was responsible for the development and implementation of the plan. The plan is considered a technical, administrative, and organizational tool for the rehabilitation of old buildings in the city. It also aims to provide the competent authorities with methods and mechanisms for intervention in the old city. The process began in June 2003 (Ben Sheikh Al-Hussein 2018). However, the project has not yet been implemented. The only thing that has been implemented in the old city is the pilot project (Suleiman Malah Street, Bab al-Jabiya). The project involved the treatment of the facade of two houses in Bab al-Jabiya and some work on Suleiman Malah Street, such as paving the ground and trying to restore some buildings that pose a danger to passers-by, which are exactly 8 buildings (Lifa, Belkhelfa 2018).

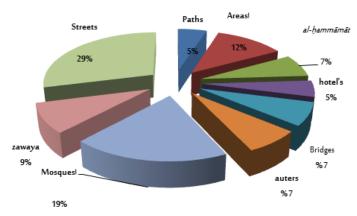




al Property has not been able to restore this heritage, due to its very limited financial resources and the lack of the necessary number of qualified personnel to manage such a huge heritage. Despite the city's celebration of the Capital of Culture in 2015, the results were unsatisfactory, because the projects were selected by the ministerial committee responsible

for managing the event, and the Office played the role of an intermediary between the study offices and the ministerial committee

Interventions for the rehabilitation of the architectural and urban heritage of Constantine, In the framework of Constantine, the Capital of Arab Culture 2015



Source: Directorate of Culture of the State of Constantine + Processing by the Researcher

In order to enhance and rehabilitate the architectural and urban heritage within the framework of the Capital of Culture in 2015, 78 operations were proposed inside the protected sector and three operations outside it (the Mausoleum of Massinissa, the archaeological city of Tiddis, the Zawia of El Ghrab). However, unfortunately, 35 operations have not yet been processed. The interventions were in the form of rehabilitation of streets, paths and squares, representing 46% of the total number of interventions. Mosques and zawiyas represent 28%, restoration and rehabilitation of baths and hotels 12%, rehabilitation and lighting of bridges 7% and finally restoration of miscellaneous equipment represents 7% of the total number of interventions. It can be concluded that the upper part "the Kasbah" had the lion's share of the various programmed operations of restoration, rehabilitation and rehabilitation in this event. It was the opposite of previous studies which focused on the lower part. The reason is that its buildings need light restorations that can be carried out in a short period (2013-2015) to host the Constantine event. As for the interventions on the housing estate, the interventions were carried out by the Directorate of Construction and Building within the framework of the modernization of the neighborhoods. It painted the facades of the main axes such as Rue Zighoud Youcef, Didouche Mourad, and laarbi ben Mhidi where the work has not been completed to date. As for the streets of Didouche Mourad and 19 June 1965, their results were completely unsatisfactory. At the end of 2022, the freeze on the restoration projects of the old city of Constantine was lifted. According to the Directorate of Culture of Constantine, the restoration process of four building projects located in the old city started out of eight, including the house of the scholar Abdelhamid Ben Badis. The restoration of 12 mosques was planned within the framework of the Capital of Culture. Only two mosques were restored "Hussein Bey" on 19 June Street and the Grand Mosque. While 10 mosques are still open workshops, such as the Mosque of Sidi Lakhdar, Bachtarzi, Rabeine Cherif.....

As for the project of rehabilitating the zawiyas, which is represented by the lower Tijaniyya zawiyas, the upper Tijaniyya zawiyas, the zawiyas of Bach Tarzi, the zawiyas of Aissaouia, the zawiyas of Sidi Hafssa, and the restoration process of the baths such as the Batha, and the hamam Boukeffa, and the project of restoring the Koranic school, and the restoration process of the alleys of the old city and its hotels, the Directorate of Public Equipment was involved and will take care of part of the programmed operations in this framework. The restoration and rehabilitation process of the old city of Constantine failed during the period 2013-2015 due to a lack of funding, poor coordination between stakeholders, a lack of technical expertise, and a lack of public awareness. Other factors contributed to the delays in the projects, such as:



- Tight deadlines
- Complex administrative procedures
- The presence of commercial activities
- The high number of bi-national offices
- The discovery of ancient ruins

In addition, the neglect of the inhabitants, the complex structure of the city, and the private ownership of the buildings led to the neglect of this rich heritage.

CONCLUSION

The preservation plan that was launched in application of the texts of Law No. 98-04 of June 15, 1998, relating to the protection of cultural heritage, and following the classification of the city of Constantine as a preserved sector according to Ministerial Decree No. 05-208 of June 4, 2005, is a tool that aims to preserve historical, cultural and architectural values.

The permanent plan for the preservation and rehabilitation of the preserved sector is a tool equivalent to the land use plan, meaning that it is more concerned with land allocation and the stability of the buildings that make it up. It aims in particular to re-diagnose the site and put in place some urgent measures that were dictated by the prevailing conditions at the time of its preparation.

We also concluded that there is no country in the world that restores its heritage in a "single and independent" way, while we find that the old city of Souika has been emptied of its inhabitants through residential buildings in a state of dilapidation. The majority of the houses are inhabited by families with no social ties between them. In fact, each family lives in a single large room on a rental basis and in unhealthy conditions.

Since the inhabitants are not the original inhabitants of the city and are just passers-by who intended to stay temporarily in order to obtain social housing, they have no interest in preserving the housing, which has resulted in its deterioration. In the absence of a permanent solution to preserve it from the effects of time and the transient tenants who occupy its walls waiting to benefit from social housing, the old city is slowly dying.

The event "Constantine, Capital of Arab Culture for 2015" was initially considered as a real opportunity for the "renewal" of the city, but "the rehabilitation of an archaeological site covering an area of 37 hectares is not a short-term operation that responds to a circumstantial event only". Here are some additional points that can be made:

- ✓ The preservation plan for the old city of Constantine is a valuable tool that needs to be implemented effectively.
- ✓ The lack of social ties between the inhabitants of the old city is a major obstacle to its preservation.
- The transient nature of the inhabitants of the old city has also contributed to its deterioration.
- ✓ The event "Constantine, Capital of Arab Culture for 2015" was a missed opportunity to renew the city.
- ✓ A long-term plan is needed to preserve the old city of Constantine.

RECOMMENDATIONS

- Strengthen the relationship between the university and the economic sector through start-ups working on the rehabilitation of the architectural and urban heritage.
- Engage in survey work through digitization by introducing modern technologies where the knowledge of the ancestors can be used in reconstruction, rehabilitation and restoration operations.
- Encourage citizens to protect architectural landmarks and preserve identity and history because they are evidence of values and authenticity.
- Include heritage in educational curricula and encourage the proper upbringing of future generations.

REFERENCES

- [1] Assia Lifa and Ibrahim Ben Lakhlef, 2018 The Old City of Constantine, Architectural Heritage Threatened with Extinction, Horizons of Sciences Journal, Volume 3, Volume 3, Number 1 (2018): issue 10 | Horizons of Sciences (afak-revues.com)
- [2] Abdelhamid Marsili, 2007 Algerian Cultural Heritage and Related Legal Texts, Dar Al-Kitab Al-Arabi, Algeria 2007.
- [3] Abdelkader Dahdouh, 2010 The City of Constantine during the Ottoman Era, Architectural and Archaeological Study, PhD Thesis in Islamic Archaeology, University of Algiers.
- [4] Abdelaziz Filali, Mohamed El Hadi Laroui, 1984 The City of Constantine A Study of Historical Development and Natural Environment, Dar Al-Baath, Constantine, First Edition.
- [5] Abdelouhab Wahiba, Nadia Bahra 2022, La préhistoire de la région de Constantine, HAL Id:halshs-03671878 https://shs.hal.science/halshs-03671878 Submitted on7Nov2022.
- [6] Babelons (Jean-Pierre) et Chastel (André),1980 , La notion de patrimoine, Revue de l'art, n°49, pp.5-32.
- [7] Bonet Louis,1999, Traduit de l'espagnol par Maffre Philippe, La politique culturelle en Espagne: évolution et enjeux.: Pôle Sud, n°10,. P. 58-74.
- [8] Bullen laire unravelling histories 2020, researching uneasy heritage association's in oran, Algeria international journal of heritage studies, 26.DOL.
- [9] Dominique Audrerie,1998, la notion et la protection du patrimoine, revue de géographie alpine,pp142-143.
- [10] Fatiha Arabi, 2010 Heritage Tourism Memorandum through the City of Constantine Memorandum for obtaining a Master's degree in Heritage and Archaeological Studies, Faculty of Humanities and Social Sciences, Mentouri University of Constantine. 2010.
- [11] Faouzi Adel,2000, Un patrimoine en danger ,Insaniyat / إنسانيات , 12 | , 45-53.2000
- [12] Habiba Bouzar, 2008 The Reality and Prospects of the Legal Protection of Archaeological Heritage in Algeria, A Memorandum for Obtaining a Master's Degree in the Department of Popular Arts, Department of Culture, Faculty of Arts and Humanities and Social Sciences, University of Abi Bakr Belkaid Tlemcen Algeria 2008.
- [13] Hamida souad, 2019, Elements of Algerian Intangible Cultural Heritage and Its Conservation Methodology, Volume 19, Number 01, pp. 98-118.
- [14] Leila Kandkji, 2001 Design Criteria for Intervention in Historic Buildings in the Old City, Example of Aleppo, Faculty of Architecture, Master's Thesis, University of Aleppo.
- [15] Line.Touzeau,2011, La protection du patrimoine architectural contemporain; recherche sur l'intérêt public et la protection en droit de la culture, l'ARMATTAN.
- [16] Marcel bazin,2006, Protection du patrimoine et dynamique au Caire et à Istanbul, travaux de l'institut de géographie de reins /p43-71.
- [17] Mohamed Mehdi Ben Ali Shoaib, 1980 The Mother of Civilizations in the Past and Present History of Constantine, Al-Baath Printing Press, Constantine, Algeria 1980.
- [18] Mohamed Al-Saghir Ghanem, 1999 Constantine Through Its Ancient History, Journal of Humanities, Journal of Humanities "Number 12 p. 134.
- [19] Mohamed El Hadi Laroui, 1984 The City of Constantine A Study in the Geography of Urbanization, National Office of University Publications.
- [20] Mohamed Abdel Fattah Ahmed Al-Aissawi, 2002 Upgrading Heritage Areas of Value, A Comparative Study of Policies for Preserving Architectural Heritage, Faculty of Engineering, Fayoum University, Egypt.
- [21] Poulot Dominique,1998, Patrimoine et modernité cultivé l'émotion culturel et musée, Arles, actes sud n°8, p13.25.
- [22] Plan de sauvegarde et de mise en valeur de la vieille ville de Constantine :Phase1 : « Diagnostic et mesures d'urgence », Constantine, mai 2009
- [23] Unesco,2005 : La Convention de 2005 sur la protection et la promotion de la diversité des expressions culturelles est un instrument juridique.



- [24] Saleh Larabi, 2010 The Urban Environment within the Old Urban Fabric and Sustainable Development, The Case of Constantine, p. 127
- [25] Tewfik Guerroudj, 2000 , la question du patrimoine urbain et architectural en Algerie, revue algérienne d'anthropologie et science sociale,N12, p31-43,https://doi.org/10.4000/insaniyat.7892.
- [26] Walid Ben Cheikh El Hussein, 2015 Rehabilitation of the Architectural Heritage within the Framework of the Constantine Capital of Arab Culture 2015 Event and Its Impact on Tourism Development in the City of Constantine, Cultural Dialogue Magazine, Volume 4, Number 2, pp. 109-119, 2015 www.asjp.cerist.dz/en/article/101038.
- [27] Yahia Bouaziz, 2000 Conditions of Religious Institutions in Algeria during the 19th and 20th Centuries, Cultural Magazine No. 63 1981 National Publishing and Distribution Company Algeria p. 13.
- [28] Zeliha Bouamza, 2010 The Old City of Constantine and the Problem of Architectural Heritage, Notebooks of Humanities No. 2, pp. 119-131.