

THE ROYAL PALACE AT THE MECHOUAR CITADEL IN TLEMCCEN (ALGERIA): FROM EXCAVATION TO RECONSTRUCTION

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Abstract

Since independence, Algeria has devoted particular attention to its architectural heritage by enacting legislation aimed at its protection and preservation against threats that could lead to its disappearance. Among the most significant is Law No. 98-04 on the Protection of Cultural Heritage (1998), along with subsequent complementary regulatory texts. Within this framework, extensive programs for the restoration of historical landmarks have been launched across various regions of the country. The city of Tlemcen has notably distinguished itself as one of the main urban centers to experience a significant wave of restoration works, especially during 2010 and 2011 in preparation for the “Tlemcen, Capital of Islamic Culture 2011” event. Among the most prominent of these projects is the reconstruction of the Royal Palace at the Mechouar Citadel, which represented a unique intervention on an archaeological and architectural site of this scale.

This study aims to trace the trajectory of the palace from the archaeological excavations that uncovered its remains to its eventual reconstruction, while providing a critical analysis of this experience in terms of methodology and outcomes. The goal is to contribute to the scholarly discussion on the challenges and implications of reconstruction as a strategy for the preservation of architectural heritage in Algeria.

Keywords: Royal Palace, Mechouar Citadel, reconstruction, architectural heritage, Tlemcen.

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1. INTRODUCTION

Throughout its history, Algeria has witnessed the succession of multiple civilizations, each leaving a distinct imprint across various domains, particularly in architecture and urbanism. The country is endowed with a diverse architectural heritage, spanning from the Roman period to the Islamic and Ottoman eras, and extending to the colonial period. The city of Tlemcen stands out as one of the most prominent historical cities reflecting this cultural plurality, as evidenced by its wealth of architectural and archaeological landmarks of significant historical and artistic value.

In recognition of the importance of this legacy, Algeria has, since independence, sought to establish a legislative and institutional framework for the protection and preservation of cultural heritage against various factors of deterioration or disappearance. A series of legal and regulatory texts have been enacted, most notably Law 98-04 on the Protection of Cultural Heritage, in addition to the creation of specialized institutions and bodies tasked with ensuring the implementation of these laws and overseeing field interventions at heritage sites.

However, practical application in the field of restoration-particularly with regard to reconstruction-has sparked considerable debate and controversy among researchers and specialists, given the high degree of sensitivity involved and the potential negative impact on the authenticity and historical value of monuments. In this context, the reconstruction of the Royal Palace at the Mechouar Citadel in Tlemcen emerges as a model case worthy of study and analysis. This experience raises a fundamental issue in the field of heritage restoration in Algeria: the extent to which such an undertaking aligns with international principles and charters on the one hand, and with the imperatives of safeguarding historical and architectural authenticity on the other.

Accordingly, the research problem may be formulated as follows: To what extent can the reconstruction of the Royal Palace at the Mechouar Citadel be considered a response to the requirements of safeguarding Algeria's architectural heritage, or does it rather represent a case study of the challenge of reconciling the imperatives of tourism development with the demands of preserving historical authenticity?

2. THE HISTORICAL AND GEOGRAPHICAL CONTEXT OF THE ROYAL PALACE AT THE MECHOUAR CITADEL

2.1. GEOGRAPHICAL LOCATION

Tlemcen is located in the far northwest of Algeria and, throughout its long history, has witnessed the succession of multiple civilizations, from prehistoric times to the Ottoman era. This cumulative heritage contributed to the formation of a diverse architectural and urban legacy that reflects the variety of cultural and artistic influences that shaped the region. The city reached its peak during the Zayanid period, when it was designated as the capital of the Zayanid state. This era left behind numerous architectural structures that still stand as testimony to the cultural and artistic development of that time. Among the most prominent of these monuments is the Zayanid Mechouar Citadel, which served as a major political and administrative center, embodying the status attained by Tlemcen during the Zayanid era.

The Royal Palace is situated within the walls of the Mechouar Citadel, specifically in its northwestern section. The citadel itself occupies a central position in the city of Tlemcen, approximately 228 meters away from the Great Almoravid Mosque.

2.2. HISTORICAL CONTEXT

This citadel was built by "Yaghmurasan Bn Zayan", who designated it as the capital of his state at the time. (Negadi, 1991, p. 39). Al-Hasan al-Wazzān mentioned the citadel in his book "Description of Africa": "...The royal palace, located to the south of the city, is surrounded by remarkably high walls, constructed in the form of a fortress. It encompasses several smaller palaces with their gardens and fountains. The royal palace has two gates..." (El Wazzan 1983, p. 20).

The citadel, known as al-Mechouar, was also described by the captain of the French Royal Corps of Engineers, Tataureau, during his visit to the site in 1835, stating:

"The Mechouar citadel is located to the south of the city and has a rectangular shape, measuring approximately 460×280 meters. It is fortified with square towers, and its enceinte is built of rammed earth, with a thickness ranges from 5 to 6 meters, and a height between 20 to 30 meters.

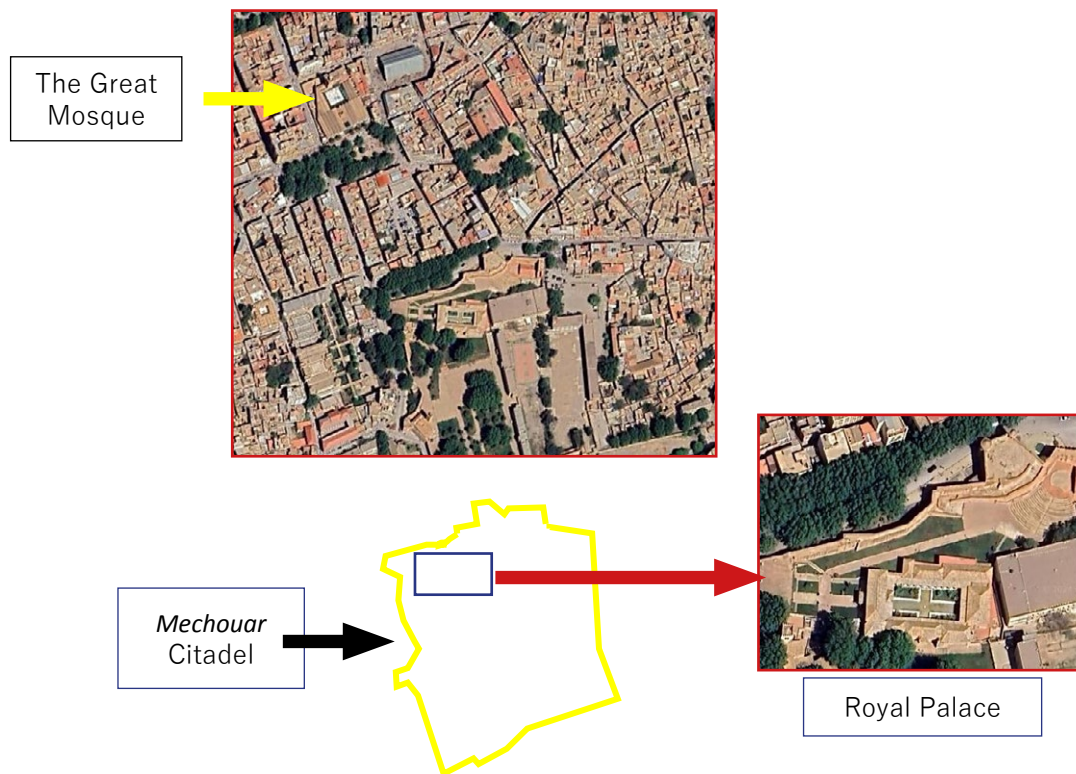


Fig. 1. Location of the Royal Palace in relation to the Mechouar Citadel. (Source: Google Earth).

The citadel has two gates: Bab al-Hadid on the western side and Bab al-Touita (al-Tarwisa) near the southeastern corner; These are double gates. The northern façade includes two adjoining round towers... Inside the citadel, there are about 80 to 100 house... and a mosque is also present” (Preliminary Report of the Archaeological Fieldwork 2008).

As for Barges, he described it as follows: “Al-Mechouar is a rectangular area, surrounded by high walls. On the western side, there is a mosque, along with a group of buildings... On the eastern side, there is a large stone-built military barracks, constructed on the site of the royal palace wings and the surrounding gardens...” (Barges 1859, pp. 358-359).

3. HISTORY OF ARCHAEOLOGICAL RESEARCH AT THE ROYAL PALACE

The citadel underwent numerous interventions during the colonial period, which affected the majority of its structures. Following independence, specifically between 1962 and 1987, it was repurposed for administrative functions by the Algerian army (Dendan 2014, pp. 104-105).

- In 1989, archaeological research began at the Mechouar Citadel following the demolition of building dating to the colonial period, which led to the discovery of a plaster fragment decorated with vegetal and epigraphic motifs on the one of the walls. Subsequent archaeological studies confirmed that the building constituted remains of Zayanid constructions that had been reused during the French colonial period (Ministry of Culture: CNRA Research Center 2010, p. 11).
- From 1990 to 1993, archaeological excavations, revealing floors covered with multicolored *zellij* tiles and a collection of archaeological artifacts. These discoveries led to the cancellation of the demolition plan and prompted the decision to study the site further (Preliminary Report of the Archaeological Fieldwork 2008).
- In 2007 and 2008, archaeological excavations were initiated through collaboration between the University of Abou Bekr Belkaid in Tlemcen, the École des Hautes Études at the Sorbonne in France, and the Directorate of Culture of Tlemcen Province. These activities consisted of archaeological field schools and received support from the French Embassy in Algeria,

the Max Van Berchem Foundation in Geneva, as well as various Algerian and French officials (Preliminary Report of the Archaeological Fieldwork 2008). During these excavations, archaeological structures were uncovered, including interwoven foundations and walls, indicating the succession of historical periods within the building. Additionally, entrances were revealed beneath these walls (Hadrach 2011).

The archaeological excavations revealed floors paved with *zellij* tiles, walls adorned with *zellij* and plaster decorations, as well as water features. Additionally, a variety of movable artifacts were uncovered, including ceramics, plaster objects, bones, coins, tombstones, and other items (Bouziani 2017, pp. 254-255).

- In 2010, a salvage excavation was conducted through a collaboration among several institutions, including the National Center for Archaeological Research (CNRA), the National Center for Research in Prehistory, Anthropology, and Human Sciences (CNRAPH), the National Office for the Management and Exploitation of Protected Cultural Properties, the Directorate of Culture of Tlemcen Province, and the consulting firm

ARCAD, which was commissioned for the Mechouar Palace reconstruction project. The excavation lasted six months (Ministry of Culture: CNRA Research Center 2010, pp. 11-12), and represents the most recent research conducted at the site as part of the preparations for the Tlemcen Islamic Capital of Culture event in 2011.

4. DESCRIPTION OF THE ARCHITECTURAL REMAINS OF THE PALACE PRIOR TO RECONSTRUCTION

The rescue excavations conducted in 2010 revealed the remains of two adjacent palaces surrounded by residential facilities, as well as gardens, water basins, and interior fountains. The halls, arcades, and fountains were adorned with *zellij* decorations of various shapes and colors. In addition, a diverse assemblage of movable archaeological finds was uncovered, including pottery, ceramics, plaster, stones, marble, and other materials (Ministry of Culture: CNRA Research Center 2010, p. 12). The excavation site was subdivided into five sectors according to the distribution of the architectural blocks.

Zone I: This section represents half of a rectangular enclosure and includes a residence

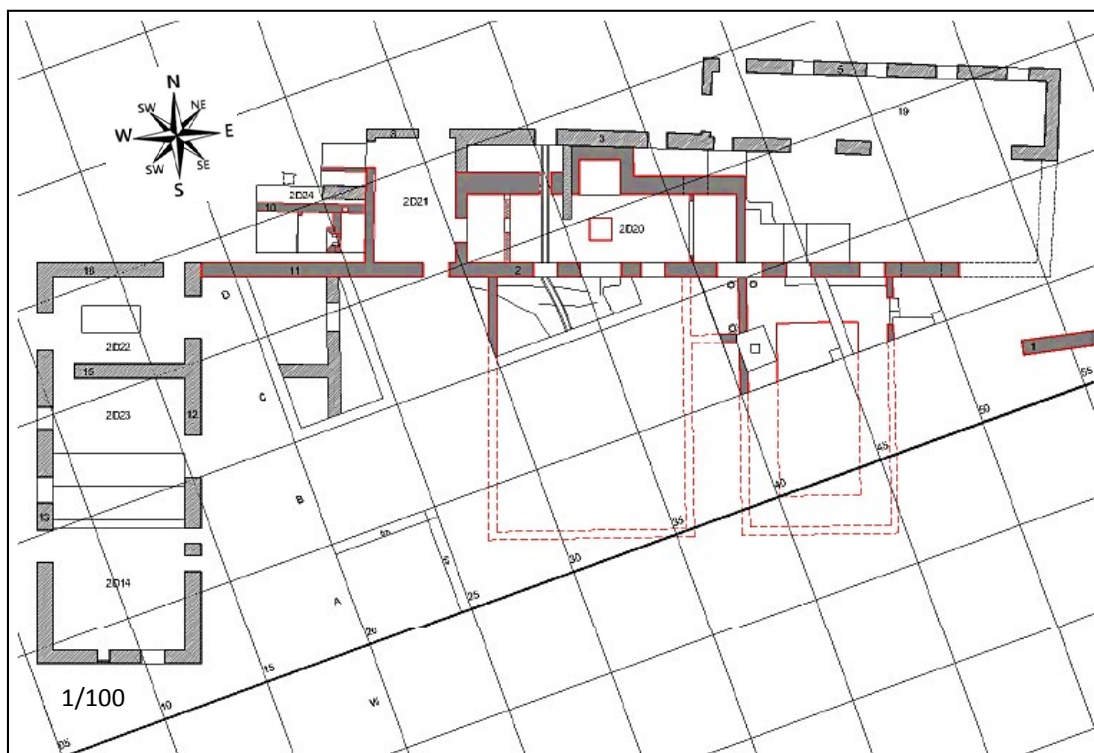


Fig. 2. Plan of the architectural remains uncovered at the Mechouar Citadel during the 2008 excavation. (Source: Preliminary Report of the Archaeological Fieldwork 2008).



Fig. 3. Some of the architectural and decorative elements uncovered during the 2008 excavation. (Source: Preliminary Report of the Archaeological Fieldwork 2008).

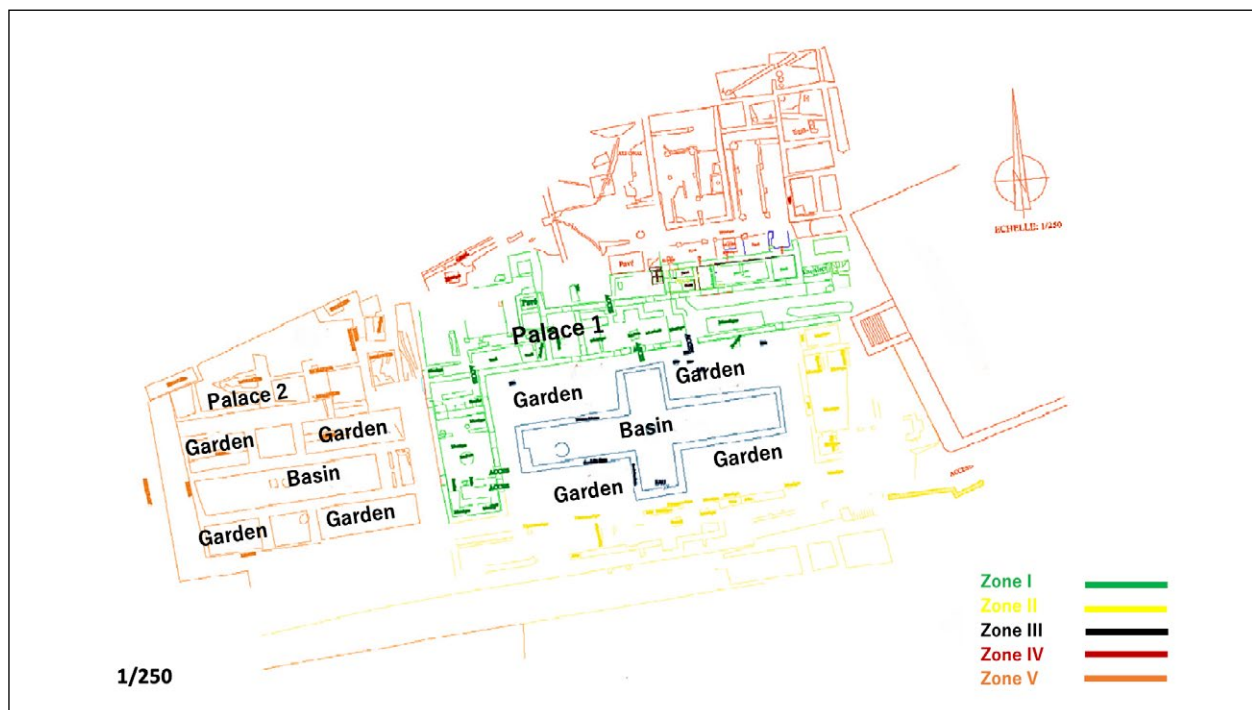


Fig. 4. Plan of the architectural remains from the 2010 excavation. (Source: Ministry of Culture: CNRA Research Center 2010, p. 13).

organized around a central courtyard with a fountain, surrounded by rooms and galleries richly decorated with multicolored *zellij* featuring star-shaped and geometric motifs. Architectural modifications were identified on the eastern and western walls, while the northern side preserves remains of staircases with *zellij* and marble elements. The southern side originally contained a passage connecting the eastern and western gardens, which was subsequently sealed (Ministry of Culture: CNRA Research Center 2010, pp. 15-16).

Access to the ceremonial hall is through a large door surmounted by an arch. The hall contains a central fountain and is flanked by rooms adorned with *zellij* of various shapes and colors. To the right of the hall is a rectangular room opens on its northern and southern sides, also centered around a fountain. To the left of the ceremonial hall are rooms decorated with black-and-white *zellij*, containing an internal corridor extending from the north to the east, ending in an arch and a staircase to the upper floor on the northern side; this corridor continues beneath the hotel building. North of this passage are three rooms that originally opened onto the rear building in Area Four (Ministry of Culture: CNRA Research Center, 2010, p. 16).

Zone II: The architectural layout of this section closely parallels Zone I, featuring a ceremonial hall, *zellij* decorations, two main entrances, and fountains. A perpendicular portico surrounds the large basin, and the rear façade mirrors Zone I, except for a seven-step staircase to the southeast, decorated with black-and-white square-patterned *zellij* from the Ottoman period (Ministry of Culture: CNRA Research Center, 2010, p. 17).

Zone III: This area features a cruciform central basin (31×15.5 m, 4.45 m wide) paved with diamond-shaped *zellij* and containing a fountain with vegetal motifs. It is surrounded by rectangular garden plots with water channels. The basin experienced modifications, including walls to reduce its size or support water conduits, and a well was added at the southwestern corner (Ministry of Culture: CNRA Research Center, 2010, p. 18).

Zone IV: This zone includes three adjoining houses, each centered around a courtyard with porticoes, a fountain, and a well. The first courtyard (18.8 × 14.8 m) and porticoes are brick-

paved, with rooms ranging from 2.40 × 8.05 m to 11 × 3 m, and a southern window decorated with *zellij* opens onto the courtyard.

The second house shows significant alterations, preserving only an eastern room and the courtyard fountain with water channels, while the southern side has a brick floor with black diamond-shaped *zellij*. The third house retains only foundations and water channels (Ministry of Culture: CNRA Research Center 2010, p. 19).

Zone V: This section starts with a portico next to Zone I, featuring traces of a fountain aligned with the western basin, similar to the eastern basin in size but differing in garden layout. To the north, adjacent to the citadel's outer wall, are rooms of various sizes decorated with multicolored *zellij*. A brick well and a water-collection basin were also uncovered near the sealed original doorway within Zone I's wall (Ministry of Culture: CNRA Research Center, 2010, pp. 20-21).

4.1. CONSTRUCTION MATERIALS AND TECHNIQUES

4.1.1 Construction materials

- **Rammed earth (*tabiya*):** According to the architectural remains identified on the site prior to reconstruction, the walls were built using rammed earth, occasionally combined with stone. This material, also known as compacted earth, consists of a mixture of clay, sand, lime, and remnants of various other materials (Marcais & Marcais 1903, p. 52).

Ibn Khaldun referred to this technique in his *Muqaddimah*, specifically in Chapter Twenty-Five on the art of construction, stating: "...Among these is construction using earth alone, whereby walls are erected with the aid of two wooden boards, measured in length and width according to customary standards—most commonly four cubits in length by two in width. These boards are set upright upon a foundation, separated at a distance determined by the builder according to the width of the foundation, and connected by wooden beams tied with ropes and cords. The remaining two sides of the cavity are closed with smaller boards. Into this cavity, earth mixed with lime is placed and compacted using specialized tamping tools until it is well pressed and blended with the lime. More layers of earth are added a

second and third time until the cavity between the boards is completely filled, with the particles of lime and soil interwoven into a single solid mass. The boards are then repositioned, and the process of tamping repeated until completion, with the boards arranged in successive courses, one above the other, until the wall is fully constructed...” (Ibn Khaldun 2001, pp. 511-512).

- **Stones:** has been employed in construction since ancient times, being one of the most abundant natural materials. It was sometimes used in its raw form without polishing or refinement, while at other times it was cut, shaped, and finished according to the requirements of construction. Various architectural structures were erected with it, and its use has been observed in certain parts of the palace walls.
- **Bricks:** It was used in the construction of arches, in certain parts of the walls, and for paving some of the floors.

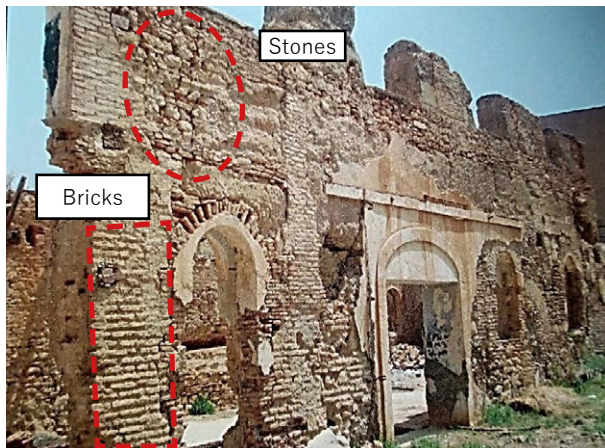


Fig. 5. Use of stones and bricks in wall construction. (Source: Technical Design Office A.R.C.A.D.E. 2011).

- **Tiles:** Tiles were employed in Zayanid architecture as a principal element for roofing buildings, where they were arranged over gabled roofs. Archaeological excavations at the Mechouar Palace have confirmed their use in roof coverings, as several tile fragments were uncovered at the site.
- **Marble:** Remains of marble elements were uncovered, including decorated capitals, columns, a column base, and marble slabs that were used for thresholds (Ministry of Culture: CNRA Research Center 2010, p. 306).

- **Zellij:** A considerable number of floor paving remains made of *zellij* tiles of various colors and shapes were uncovered. *Zellij* was also employed to cover the lower parts of certain walls, as well as to clad basins, fountains, and the remnants of staircases revealed during the excavations at the site.
- **Plaster:** Used in wall decoration, where remains of calligraphic and floral plaster decorations were found on some walls. A plaster decoration was found adorning one of the walls with floral elements and topped with a frieze of Kufic script. Another plaster piece in the shape of cartouches was found with inscriptions in Naskh script (Ministry of Culture: CNRA Research Center 2010, p. 302).

4.1.2 Construction techniques:

- **Formwork Construction:** A technique of rammed earth construction that was used in the building of the walls.
- **The Vertical Courses Technique:** A construction method based on the use of brick and mortar, where the courses are arranged both vertically and horizontally, with the mortar applied longitudinally. This technique was observed in the construction of the walls.
- **The Alternating Layers Technique:** This method consists of placing two or three horizontal courses of brick between the stone masonry in a regular manner, all bonded together with mortar.

5. RECONSTRUCTION OF THE ROYAL PALACE

The reconstruction project of the palace commenced immediately after the completion of the excavation works on the site (2010). The project was supervised by the consulting firm “ARCAD”. The reconstruction process was carried out in three phases, following the methodology commonly applied in restoration projects in Algeria.

5.1. PHASE I: EXAMINATION AND EMERGENCY INTERVENTIONS

At the outset of the reconstruction project, the building underwent a series of emergency interventions, which were entrusted to the company MOUMEN Bachir and lasted for a

duration of four months. During this phase, the following works were carried out:

- Removal of debris and vegetation, along with the sorting of stones.
- Installation of a perimeter fence around the site.
- Removal of reinforced concrete layers from the floors.
- Reinforcement of the walls with wooden planks to ensure their stability.
- Construction of a guardroom (Technical Design Office A.R.C.A.D.E. 2011).



Fig. 6. Wall reinforcement process. (Source: Technical Design Office A.R.C.A.D.E. 2011).

5.2. PHASE II: ELEVATIONS AND HISTORICAL STUDY

This phase addressed both the historical and architectural aspects of the building. However, the historical study primarily focused on the history of the city of Tlemcen in general, without delving into the specific history of the Mechouar citadel

and the palace. As for the architectural study, it was limited to the architectural survey, while neglecting the detailed architectural description.

5.3. PHASE III: RESTORATION WORKS

The reconstruction works carried out can be summarized as follows:

- Preparation of formwork for the construction and completion of the walls.
- Construction of the enclosure wall.



Fig. 7. Placement of formwork for wall construction. (Source: Technical Design Office A.R.C.A.D.E. 2011).

- Rendering of the walls, with the installation of a nylon mesh beneath the render, followed by the application of the final finish.



Fig. 8. Wall cladding process. (Source: Technical Design Office A.R.C.A.D.E. 2011).

- Covering the floors with mortar and laying a nylon mesh, then tiling them with pieces similar to those found on site, leaving antique windows that reveal the original tiling.



Fig.9. Floor tiling process. (Source: Technical Design Office A.R.C.A.D.E. 2011).

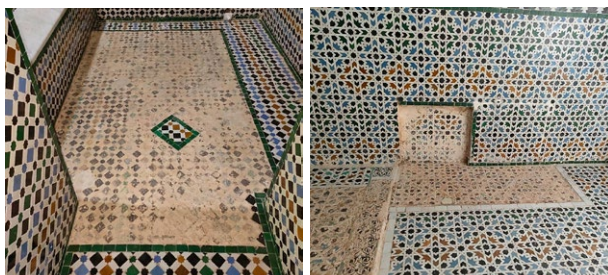


Fig. 10. Archaeological windows showing the original ceramic tiles uncovered within the building. (Source: The authors).

- Installation of the wooden structure in the shape of a gable at roof level, followed by the application of a layer of mortar on which the tiles are laid.

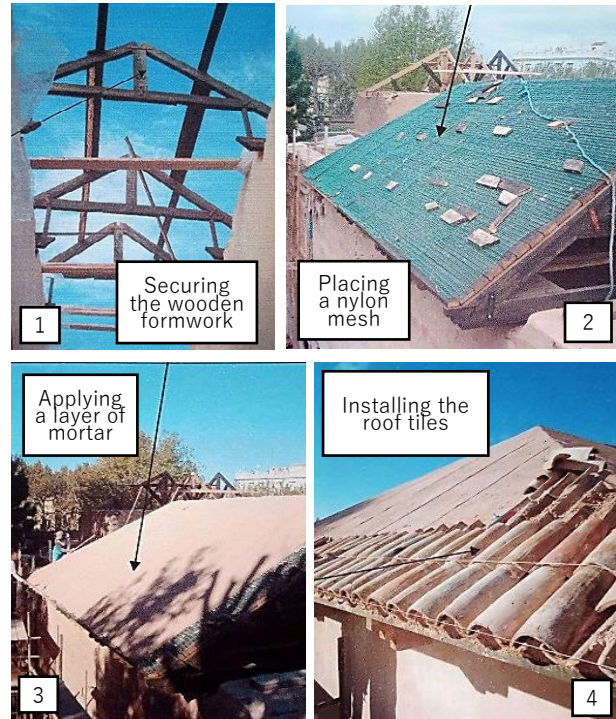


Fig.11. Stages of roof installation. (Source: Technical Design Office A.R.C.A.D.E. 2011).

- Building interior walls with bricks and installing arch moulds at the level of the entrance openings to build the arches.



Fig.12. Construction of internal walls and brick arches. (Source: Technical Design Office A.R.C.A.D.E. 2011).

- Installation of marble columns and capitals at the level of the arcades.



Fig.13. Installation of marble columns supporting capitals along the arcades. (Source: Technical Design Office A.R.C.A.D.E. 2011).

- Fixing the contract templates above the marble columns at the level of the arcades, and then building the contracts and walls.

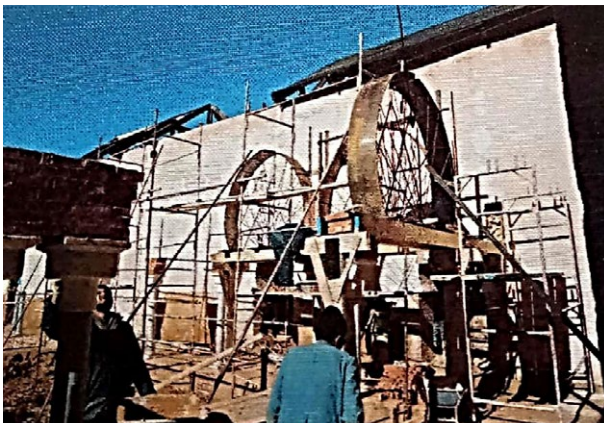


Fig.14. Construction of arches and walls along the arcades. (Source: Technical Design Office A.R.C.A.D.E. 2011).

- Installation of polyethylene pipes to supply water to the basin, then covering it with soil and tiling it with pieces of *zellij*.



Fig.15. Paving the basin floor with *zellij* tiles. (Source: Technical Design Office A.R.C.A.D.E. 2011).

- Installation of mosaic tiles on the lower part of the walls.

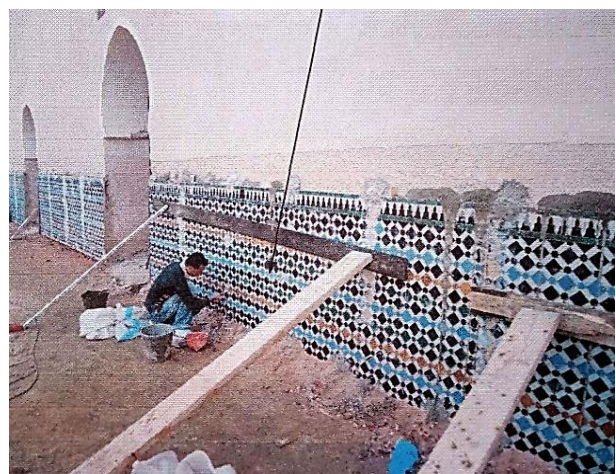


Fig.16: Fixing mosaic pieces on the walls. (Source: Technical Design Office A.R.C.A.D.E. 2011).

- Plaster decorations engraved on the interior walls, with the uncovered sections preserved as archaeological windows.

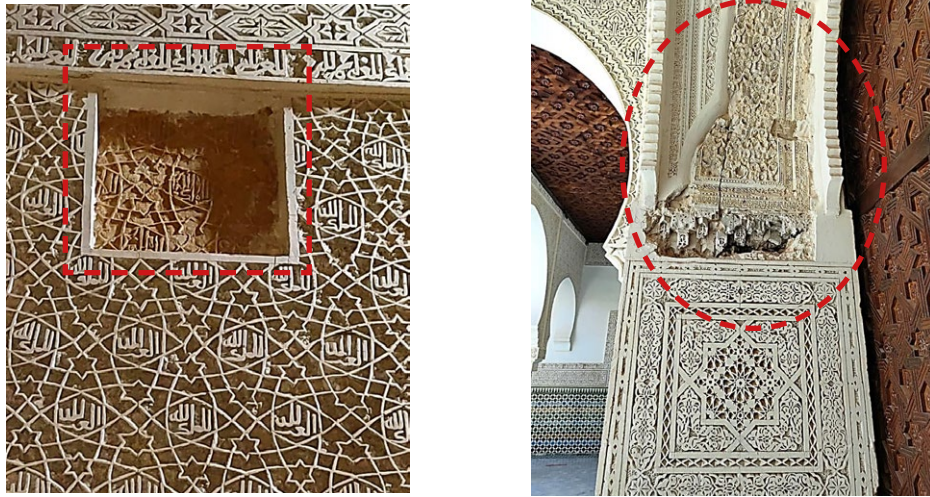


Fig.17. Archaeological windows showing the original plaster decorations.(Source: The authors).

5.4. THE FINAL ARCHITECTURAL STATE OF THE PALACE AFTER RECONSTRUCTION

The reconstruction was carried out in zones I, II, and III (Fig. 4). The current layout of the palace takes an irregular form (Fig. 18), consisting of a central rectangular courtyard surrounded by a group of rooms. The palace has four external

façades, which are simple and devoid of openings, except for the main western façade.

It is accessed through a main entrance located on the western façade of the building, surmounted by four arches, and flanked by two secondary entrances on either side that lead directly to the

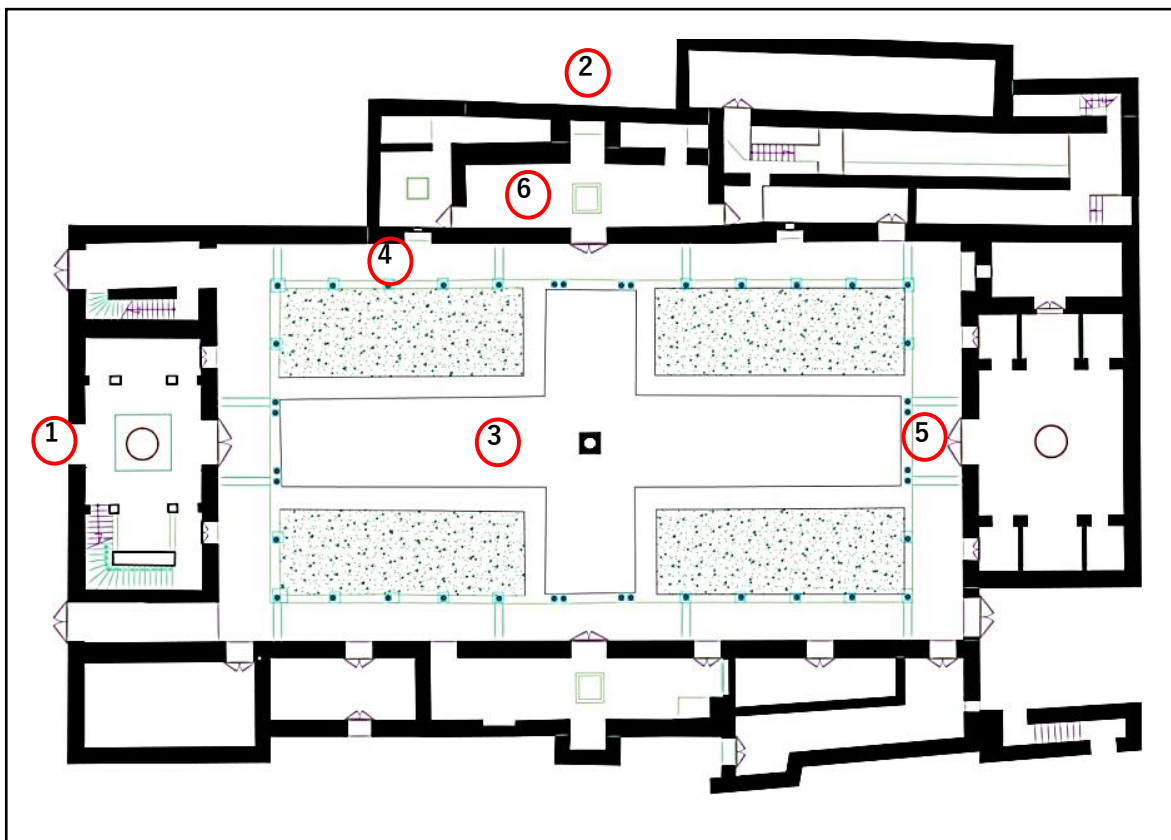


Fig.18. Current plan of the palace after reconstruction. (Source: Directorate of Culture and Arts, Tlemcen Province).



Fig.19. Current plan of the palace after reconstruction. (Source: The authors).

courtyard arcades. The lower sections of its walls are adorned with pieces of *zellij*.

Upon entering the palace through the main entrance, one encounters a rectangular vestibule with a central fountain, from which access is provided to the rectangular courtyard. This courtyard is surrounded by four arcades arranged in a sequence of broken horseshoe arches, supported by single and paired marble columns, whose façades are adorned with recently introduced stucco decorations. At the center of the courtyard lies a cruciform water basin with a central fountain, bordered by rectangular planted areas.

These porticoes are bordered by wings, each containing a fountain. On the eastern wing, which faces the entrance, there is a rectangular hall with a central fountain, flanked on both sides by two *iwans*. The northern wing follows almost the same layout as the southern one, the latter being composed of two stories.

After the completion of the restoration works, the building was repurposed as a monument open to visitors within the Mechouar Citadel, and it has since become a prominent destination attracting tourists.

6. EVALUATION OF THE RECONSTRUCTION METHOD OF THE ROYAL PALACE

6.1. CONCEPT OF RECONSTRUCTION

Reconstruction refers to the process of reinstating a historic building, or part of it, to the condition it was in prior to the loss of that part, or returning it to its original state (Aliyan 2005, p. 64), Feilden argues that disasters such as fires, earthquakes, or wars may necessitate the reconstruction of historic buildings and historic centers using new materials. However, he emphasizes that reconstruction can never acquire the quality of antiquity, and further stresses that it must be based on precise documentation and reliable evidence, rather than conjecture (Feilden 2003, p. 12).

On the other hand, Anastylis is a procedure employed when a cultural property and its fabric are in a state of significant deterioration that necessitates intervention. This process aims to restore the structure to a previously known condition by reassembling the existing elements. Traditional and original materials, as well as techniques and tools similar to or compatible with the existing fabric and overall design, may

be used. Any additions or modifications must not compromise the authenticity of the building (Aslan & Sahouri 2016, p. 56).

6.1.1. Concept of Reconstruction in the Light of International Charters

The reconstruction of architectural heritage is among the most delicate interventions in the field of conservation and restoration. It is undertaken only in exceptional circumstances, and must be based on precise documentation and reliable historical evidence. Numerous international charters have emphasized the necessity of safeguarding authenticity, particularly when it comes to reconstruction.

- Athens Charter (1931): The Athens Charter emphasized the necessity of preserving ruins and taking steps to reinstate any original fragments that could be recovered (Anastylosis) whenever possible. It further recommended that any new materials employed in this process should be clearly distinguishable (ICOMOS, 1931).
- The Venice Charter (1964): The Charter opposed the practice of reconstruction, as stated in Article 15: all reconstruction work must be excluded, allowing only for the reassembly of scattered and dismembered parts (anastylosis). The materials employed for integration should be clearly distinguishable, and their use must be strictly limited to what is necessary to ensure the preservation of the monument and the reinstatement of its form (ICOMOS 1964).
- ICOMOS Charter for the Protection and Management of Archaeological Heritage (1990): Article 7 of this Charter states that reconstruction serves two important functions: experimental research and interpretation. However, it requires careful execution to avoid compromising the existing archaeological evidence. Reconstruction should rely on evidence from all available sources in order to achieve authenticity. Wherever possible and appropriate, reconstruction should not be carried out directly over archaeological remains, and any reconstructed elements should be easily distinguishable from the original (ICOMOS 1990).
- Operational Guidelines for the Implementation of the World Heritage Convention: the

reconstruction of archaeological remains or historic buildings or districts is justifiable only in exceptional circumstances. Reconstruction is acceptable only on the basis of complete and detailed documentation and to no extent on conjecture (UNESCO World Heritage Centre 2012, p. 22).

- The Burra Charter (2013): defined reconstruction as the process of returning a place to a known earlier state, differing from restoration in the introduction of new materials.

One of the principles highlighted by the Burra Charter is that reconstruction is appropriate only when a place is incomplete due to damage or alteration, and provided that sufficient evidence exists to carry out the reconstruction. Additionally, any reconstructed elements should be clearly distinguishable upon close examination or accompanied by interpretative information (Australia ICOMOS 2013).

International charters have emphasized that reconstruction constitutes an exceptional intervention in the field of architectural heritage conservation and should only be undertaken when sufficient historical evidence and documentation exist to establish the original state of the building, ensuring a clear distinction between original and added elements. They also highlight the necessity of resorting to the reassembly of scattered elements (Anastylosis) rather than full reconstruction, in order to prevent any falsification of the historical heritage.

6.2. ADVANTAGES OF THE PROJECT

- The reconstruction project contributed to safeguarding the remaining architectural vestiges of the Royal Palace and preventing their disappearance, particularly after the excavations that uncovered numerous parts of the site.
- The palace was integrated into the cultural and touristic fabric of Tlemcen, becoming one of the city's significant historical landmarks that attracts visitors from diverse backgrounds and nationalities.
- It has been transformed into a functional space for promoting Algerian heritage through its designation as an open monument affiliated with the Interpretive Center with

a museological character dedicated to traditional Algerian clothing. The site now hosts numerous cultural activities that have enhanced its visibility and highlighted the value of the cultural heritage it represents.

6.3. EVALUATION

6.3.1. Lack of Historical and Documentary Study

A review of the restoration project report (the reconstruction of the Royal Palace) revealed a clear deficiency in the documentation process. The historical study was characterized by its generality, as it focused primarily on the history of the city of Tlemcen as a whole, without providing detailed information concerning the site itself and its historical development, particularly with regard to the palace under study. As for the diagnostic study and the restoration works, they were limited to photographs accompanied by brief comments, as previously noted in the discussion of the restoration phases.

This issue contradicts the provisions set forth in the relevant legislation and regulatory frameworks governing restoration, which emphasize the necessity of preparing a comprehensive and detailed documentary study specific to the site subject to reconstruction. Such a study is not regarded as a mere formal requirement, but rather as a fundamental tool to ensure an in-depth understanding of the site, and to document its past and present with precision. This, in turn, allows for the monitoring of all stages of the interventions it has undergone, while safeguarding the authenticity of the building and avoiding falsification. Moreover, the absence of such detailed documentation deprives the project of an essential scientific foundation that would enable researchers and specialists to refer to it in the future, whether for assessing the work already undertaken or for devising additional plans for maintenance and restoration.

6.3.2. The Extent of Adherence to Restoration Principles

- **Minimum Intervention:** Reconstruction is a highly delicate process within restoration, requiring utmost caution during implementation to avoid any damage to archaeological evidence. This stage also necessitates the use of all available sources,

whether material, historical, or archival, in order to ensure the principle of authenticity during reconstruction, in accordance with the principles set forth in the ICOMOS Charter for the Protection and Management of the Archaeological Heritage (1990). However, this condition was not observed in the reconstruction of the palace.

The reconstructed section was not based on archival documents or reliable historical sources that could accurately illustrate the original state of the building. Rather, the project was essentially of a purely economic nature, classified among the new development initiatives in the city of Tlemcen. Its primary objective was to erect an architectural landmark that would serve as a touristic attraction for the city—an objective that was effectively achieved, as the palace has become one of the most prominent historical monuments, attracting visitors eager to discover Zayanid architecture at the Mechouar Citadel.

On the other hand, the 1990 ICOMOS Charter for the Protection and Management of the Archaeological Heritage explicitly stipulated that reconstruction should not be carried out directly over archaeological remains. However, in the case of the palace, this recommendation was disregarded, as part of the site was reconstructed while the remaining original foundations and ruins—an essential component of the monument's historical significance—were obliterated. Consequently, the site was stripped of its genuine archaeological and historical value, and the current structure can, in essence, be regarded as a falsification. This approach stands in clear contradiction to Article 15 of the Venice Charter, which emphasizes the necessity of limiting interventions to the reassembly of scattered elements (Anastylosis).

Archaeological excavation reports, particularly the most recent campaign conducted at the site indicated the presence of significant architectural remains consisting of two adjacent palaces surrounded by residential annexes. Fig 20 clearly illustrates these findings, revealing architectural remains in the northwestern sector, as well as the identification of a second palace located to the west of the present structure, adjacent to the enclosure wall. However, the reconstruction works led to the complete obliteration of these remains, rendering any architectural traces indistinguishable, as those areas were converted

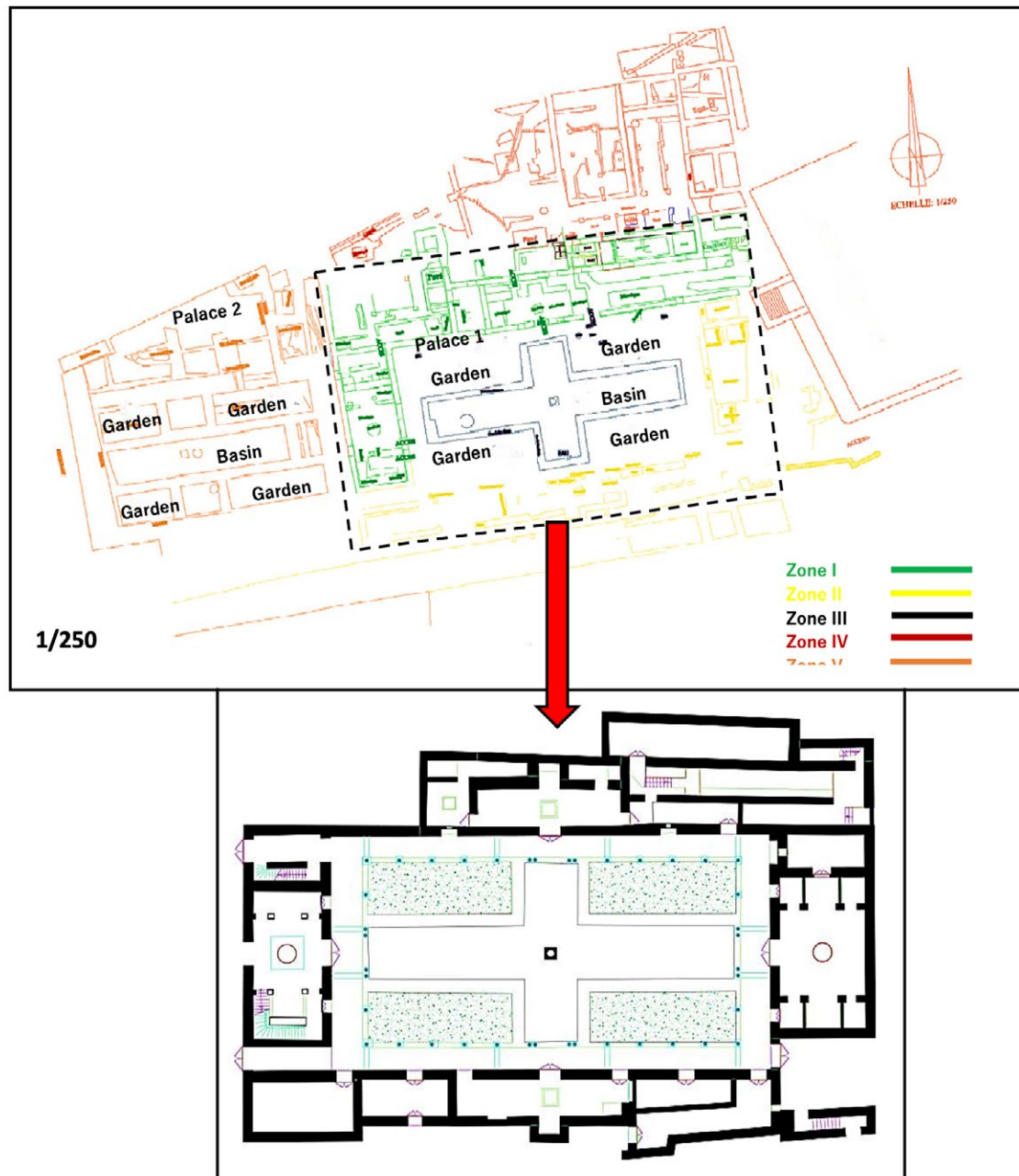


Fig.20. Highlighting the reconstructed section at the Mechouar site.

into passageways and landscaped surfaces. The interventions also included alterations to wall openings, whereby certain doors and windows were sealed while others were created in accordance with the requirements of the new building. This is exemplified in the northern façade, which originally contained three doors and several window openings that were subsequently closed, as well as in the southern internal façade, which was likewise modified. This represents only one example of the numerous changes that have affected the monument.

- Principle of Homogeneity: The restoration process did not adhere to rigorous scientific standards regarding the selection of materials used. Ideally, prior to any intervention, the original building materials should undergo precise analyses to determine their physical and chemical properties, component ratios, and dimensions. This should be followed by a phase of identifying suitable substitute materials or manufacturing new ones that match the original materials in composition and characteristics. Subsequently, these



Fig.21. Southern interior façade before and after reconstruction.



Fig.22. Northern façade before and after reconstruction.

newly prepared materials must be subjected to preliminary testing to ensure their compatibility with the original elements and to guarantee that no adverse long-term reactions occur that could compromise the stability or integrity of the building. Such materials may only be employed once they have successfully passed these stages, thereby ensuring that the intervention is carried out using materials fully consistent with the original fabric of the structure, in accordance with the principle of homogeneity between the old and the new.

This is evidenced by the damage affecting several parts of the building, most notably the slippage of a large number of roof tiles, in addition to the problem of rainwater drainage caused by damaged or entirely absent gutters. This situation has exacerbated the deterioration of the roof sections and led to water infiltration into the building's interior. Such problems emerged only four years after the reconstruction works, despite the fact that the roofing had been newly executed in its entirety (Interpretation Center

with a Museum-Oriented Character Dedicated to Algerian Costume and Traditions, 2018-2019, p. 2).



Fig. 23. Rainwater leakage through the roof and the formation of water puddles (photographs taken in 2016). (Source: Interpretation Center with a Museum-Oriented Character Dedicated to Algerian Costume and Traditions, 2018-2019).

Swelling, disintegration, and flaking of plaster and coatings were also observed on the building's

exterior façades, where such damage is clearly visible on the walls. Traces of moisture are likewise recorded in the lower parts of the walls as a result of capillary action, in addition to their presence on certain interior façades, particularly in the section containing the vestibule. This has led to significant deterioration of the ceramic mosaic tiles installed therein.



Fig. 24. Signs of disintegration and flaking of plaster and coatings on the exterior façades of the building. (Source: The authors).



Fig. 25. Effect of moisture on the walls and deterioration of mosaic pieces in the vestibule. (Source: The authors).

Instances of detachment and cracking were also recorded in the plaster decorations, where certain recently added elements became detached due to poor execution or inappropriate material selection, with deterioration becoming evident shortly after the completion of the restoration works. Cracks were likewise observed affecting some of the original decorative elements.

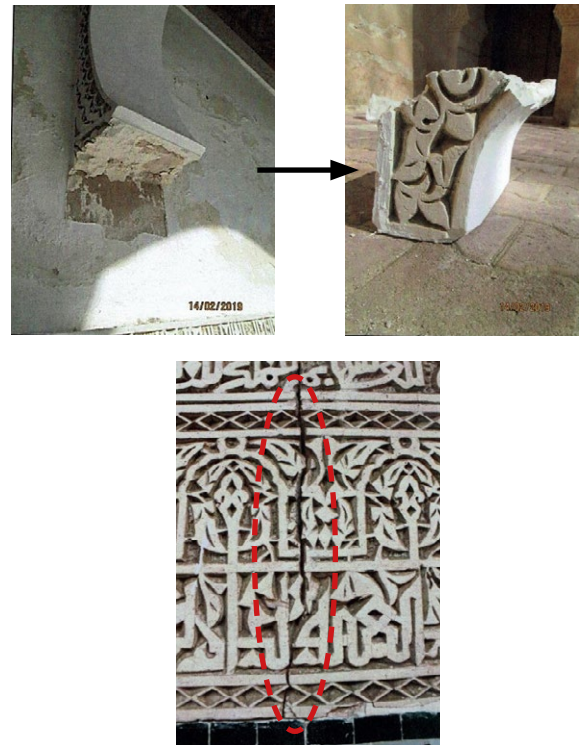


Fig. 26. Cracks and detachment affecting recently made gypsum decorations. (Source: The authors).

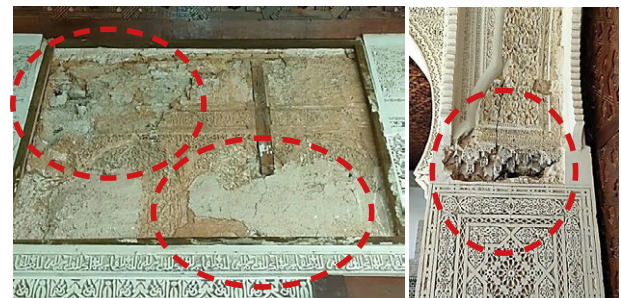


Fig. 27. Deterioration in the state of preservation of the original decorations. (Source: The authors).

- Principle of Distinguishability: Although certain archaeological windows were left exposed to showcase the original materials, the greater part of the building was reconstructed. These new additions have overwhelmingly dominated the original

elements, to the extent that the building has lost much of its archaeological, historical, and artistic value that once characterized it prior to restoration.

We observed that the original mosaic pieces were directly exposed to external factors, particularly at the level of the floors, where they were subjected to direct foot traffic from visitors due to the high tourist activity inside the palace. This contributed to their deterioration, despite the fact that they represent authentic testimonies reflecting the beauty and originality of Zayanid art. It was therefore necessary to place them within protective glass frames that would help safeguard and enhance them. This was effectively implemented in 2025, when they were finally integrated into heritage display windows covered with glass, ensuring their preservation while allowing them to be presented to the public under suitable conditions.



Fig.28. Deterioration of the original mosaic pieces.
(Source: The authors).

- **Retrievability:** This principle is impossible to achieve in the case of the Royal Palace, as the reconstruction process relied more on artistic and intuitive interpretations than on accurate historical and documentary data. Furthermore, there is a noticeable absence of any permanent exhibition or interpretive media that could illustrate the state of the site prior to its reconstruction. This deprives visitors of the opportunity to view the original form of the building and to understand its historical development, ultimately reinforcing aspects of falsification rather than ensuring transparency and authenticity in the restoration process.

7. CONCLUSION

Before its reconstruction, the Royal Palace at the Mechouar Citadel was an archaeological site containing scattered architectural remains that bore witness to successive historical phases and various functional uses. However, the decision to reconstruct a specific part of the site transformed it into a new building, distinct in nature from the original site. This raises a fundamental issue concerning the legitimacy of “reconstruction” within the framework of conservation. Such an intervention is among the most sensitive and critical, as it risks erasing authentic archaeological evidence and falsifying the monument’s authenticity if not carried out according to strict scientific standards. These standards must be based on precise archival documentation, in-depth historical and architectural studies, and clear plans that allow for the reassembly of what can be verified with the highest degree of accuracy. By contrast, relying on intuition or artistic conjecture is entirely inconsistent with the internationally recognized principles and values of conservation.

Conversely, it cannot be denied that, in its new form, the palace has become one of the most prominent cultural and tourist landmarks in the city of Tlemcen. It attracts a considerable number of visitors and official delegations on a daily basis, and it has also become a vibrant space for hosting scientific, cultural, and recreational activities organized by the Interpretive Center for Algerian Traditional Costume. This has reinforced its role as a tourist destination and a contributor to the cultural and economic development of the city, even though the question of its scientific and archaeological authenticity remains a subject of debate and controversy among researchers and specialists in the field of conservation and heritage preservation.

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