

Urban expansion and heritage threats: Preservation of Mansourah archaeological site in Tlemcen, Algeria

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Abstract: As a rule, heritage plays a crucial role in shaping the identity of communities, with archaeological sites, in particular, being irreplaceable material witnesses of bygone eras. However, due to their fragility and non-renewable nature, they require strict protection. In Algeria, the archaeological site of Mansourah, located southwest of Tlemcen, is noticeable for its exceptional historical and architectural significance. A legacy of the Marinids of Fez, the site notably houses the Mansourah Mosque, considered the last great mosque with a military purpose in the Muslim West. This research project addresses the issue of preserving the archaeological site of Mansourah in the face of chaotic urban expansion in Tlemcen. The research is based on a mixed methodology, combining historical, architectural, and urban analyses. Between 2021 and 2023, field surveys were conducted alongside an inventory of relevant documents and multi-temporal satellite images. These data enable a comparative study of the development of the urban fabric on the archaeological site and its surroundings. Semi-structured interviews were also conducted with residents of informal housing units, revealing their perceptions of the importance of the site and its preservation. The aim of this article is to analyse the major challenges in preserving the archaeological site of Mansourah in Tlemcen amid urban expansion, by examining the perception of this heritage by the occupants of dwellings encroaching on the site and its surroundings. The study highlights that, despite its classification, the site is often seen as a constraint rather than a resource. Finally, the article calls for a specific operational management plan to enhance the history of Mansourah while taking contemporary urban realities into account.

Keywords: heritage, archaeological site, Mansourah, Tlemcen, urban expansion, protection

INTRODUCTION

Archaeological sites are one of the many expressions of built heritage, consisting mainly of prestigious remains and more modest objects bearing witness to the traces of ancestral human life. Archaeological heritage plays a significant role in forming the identity of communities. Heritage is not a thing or a place, but a cultural process that is concerned with the construction and negotiation of identity, memory, and place-making. It serves as a means for expressing and reinforcing social and community identities and is used to build a sense of belonging or exclusion. (Smith, 2006). By definition, an archaeological site is a place where traces left by people of the past are preserved in the ground (Héron et al., 2022). It is therefore a fragile and irreplaceable cultural asset. In recent years, various forces have increased the dangers threatening archaeological sites in the world in general and in Algeria in particular: among other things, the rapid and uncontrolled development of cities and, in many countries like Algeria, the lack of resources to ensure the maintenance of these immovable cultural assets (De la Torre, 1995). Protecting archaeological sites is a moral obligation for every human being. It is also a collective public responsibility. This responsibility is reflected in the commitment of those in-

involved in the restoration, rehabilitation and enhancement of these emblematic sites, as well as in the adoption of appropriate legislation and the guarantee of sufficient funds to finance conservation programmes effectively (ICOMOS, 1990).

In Algeria, the protection of heritage in general and archaeological sites in particular has been a concern of the State since 1967. From that year onwards, archaeological sites have been an integral part of the State's heritage policies, under Order no. 67-281 of 20 December 1967, which constituted the first legislative barrier for the protection of archaeological sites and their surroundings. The latter correspond to a protection zone calculated on the principle of a field of visibility defined according to a perimeter of 500 metres from the boundaries of the archaeological site. This protection zone is automatically created as soon as the site is classified. The areas surrounding an archaeological site are those which form a coherent whole with it, and which are likely to contribute to its conservation and enhancement (Hocine and Debache Benzagouta, 2021). In 1998, the ordinance was repealed by Law 98-04 of 15 June 1998 on the Protection of Cultural Heritage. The new wording reduced the extent of the protection zone from 500 to 200 metres (Article 17).

The historical evolution of cultural heritage legislation in Algeria reveals a complex interplay between colonial legacies and contemporary practices. Despite significant legislative frameworks, the challenges of enforcement and public awareness remain prominent, affecting the preservation of heritage sites across the country (Ouzman, 2018). The creation of the extended protection zone has major implications in terms of town planning. This perimeter acquires an essential role in urban planning, since the classification induces an easement affecting the archaeological site, and also those located within its automatic protection perimeter (Poumarède, 2015). The determination of buildings in the vicinity of the archaeological site that are in co-visibility with it is subject to control by the administration (Moussaoui, 2008). The practical implementation of this requirement has proved extremely difficult to apply and interpret, with the result that the surroundings of many archaeological sites have not been safe from various forms of appropriation (Touil, 2014).

This proposal looks at the case of the archaeological site of Mansourah in Algeria, one of the remains of the city of Tlemcen, whose preservation is being severely tested by the exasperated urban expansion of the city. Dating back to the medieval period (late 13th and 14th centuries), this historic site is a rare testament to Merinid military architecture. Originally a military encampment established to besiege the central Maghreb capital of Tlemcen, it represents a fortified town unique in Algeria, incorporating economic and religious structures such as the Mansourah Mosque – an exceptional monument across North-West Africa. This site embodies invaluable craftsmanship and historical wealth, crucial for understanding Merinid influence in the region. It was classified as a national heritage site in 1967.

The situation regarding this heritage is particularly worrying. In 2008, the Mansourah archaeological site was covered by a Plan for the Protection and Enhancement of the Archaeological Site (PPMVSA), which delimited its protection perimeter (200 metres around the site) and imposed intervention in response to the danger threatening the archaeological site, as well as prohibiting any destruction, degradation or alteration of the archaeological site and its immediate surroundings. Contrary to these regulatory aims, a margin of housing described as informal in the Mansourah conservation plan, as well as in the Tlemcen PDAU (Urban Development Master Plan), continues to develop in the very vicinity of the archaeological site, generated by a population originating from the migratory flow from neighbouring rural centres, in search of employment, stability and prosperity (Sarchi, 2008), but also by urban dwellers from the city centre.

They have invested in and appropriated the regulatory easement of the archaeological site by building their homes there. On the ground, the informal dwellings are attached to the eastern ramparts of the archaeological site, preventing its visibility and the necessary dialogue that the site is supposed to have with its surroundings. Moreover, these informal dwellings do not comply with the city's urban and architectural standards and are a real nuisance to the integrity and image of the city. Between the rules (of the archaeological site's PPMV) and the inhabitants' practices, a *de facto* urbanism has been invented (Belguidoum, 2021). This urban expansion is detrimental to the archaeological site of Mansourah, considerably weakening its attractiveness to tourists and its historical and architectural value, and raises questions about the possibility – on the ground – of cohabitation between informal urbanisation and the archaeological site of Mansourah. The main issue of this article is: what is the place of the archaeological site of Mansourah in the State's urban policies? And how do the occupants of informal settlements perceive the archaeological site, its presence and importance?

METHODOLOGY

This work is part of a general line of research into the dialectic between heritage and urban planning, and the use of heritage by those involved, particularly citizens, who are called upon to participate in preserving and enhancing it, protecting its values and promoting its attractiveness to tourists. Numerous studies have looked at the survey and restoration work performed on the Mansourah archaeological site, but none have focused on the challenges and risks facing the archaeological site and its surroundings, including the urban sprawl of Tlemcen. Our research highlights an issue affecting numerous monuments and historic sites situated in urban areas threatened by urban sprawl. This article emphasises the heritage identity of the Mansourah archaeological site in Algeria, along with its architectural value. In addition, it accentuates the territoriality of the inhabitants living in the vicinity of the archaeological site and the relativity of its protection among the occupants of informal dwellings. The aim of our research is twofold: to conduct an analytical study of the Mansourah archaeological site and its components, and to expose the critical status of the site in the face of urban expansion in Tlemcen.

To address this issue, our research adopts a mixed methodology, combining historical, archaeological and urban planning analyses. The methodology employed for this article is based on the results of a field survey conducted between 2021 and 2023. We created an inventory of documents relating to the theme and built a diverse corpus of data, consisting of publications (books, articles, theses) cartographic material collected from the Tlemcen Department of Urban Planning and Architecture (DUACT), the Department of Culture, the Design Office (Sarchi) and the National Land-use Planning Agency (ANAT), as well as multitemporal satellite images, enabling us to compare the condition of the Mansourah archaeological site at different dates.

A semi-structured interview was conducted with 200 residents of this part of the neighbourhood adjacent to the Mansourah ruins. This approach combined closed questions requiring yes/no answers with sections for comments and personal opinions. By interviewing participants orally, a direct connection was established, allowing for discussions that enriched the collected data. Responses were systematically recorded and then analysed to identify trends and diverse perceptions regarding their living environment and the implications of the archaeological site's presence. This method facilitated a nuanced understanding of the residents' feelings and opinions. The combination of fieldwork and interviews enabled us to identify the relationships between the archaeological site and the people involved in its use.

CASE STUDY: THE MANSOURAH ARCHAEOLOGICAL SITE: LOCATION, DESCRIPTION AND WORK ON THE SITE

The archaeological site of Mansourah lies to the north-west of the city of Tlemcen in Algeria, about 1.5 kilometres from the present-day centre of Tlemcen (Fig. 1). Mansourah, the third largest town in the Tlemcen agglomeration, had a short-lived defensive existence. Lifted by Abu Yaqub Yusuf in 1299 after at least three unsuccessful sieges, it became a veritable seat of Merinid power, a base of conquest for Ifriqiya, with palaces, funduqs, baths and a military mosque (Charpentier, 2018). Today, the archaeological site of Mansourah is potentially rich in archaeological documents (Koumas and Nafa, 2003). Edmond Duthoit, a direct pupil of Viollet-le-Duc, conducted surveys of the Mansourah archaeological site in 1872 (Labrusse, 2015) (Fig. 2). This archaeological site is physically well defined in space, covering an area of around 102 hectares (Sarchi, 2008). It is enclosed within quadrilateral ramparts, measuring approxi-

mately 1,150 metres from north to south and 88 metres from east to west, creating a perimeter of around 4,000 metres, bounded to the north by a railway line, to the south by the Ouali

Mustapha district, to the east by the boulevard and the El Makhokh district, and to the west by a training centre, scattered orchards, and individual dwellings.

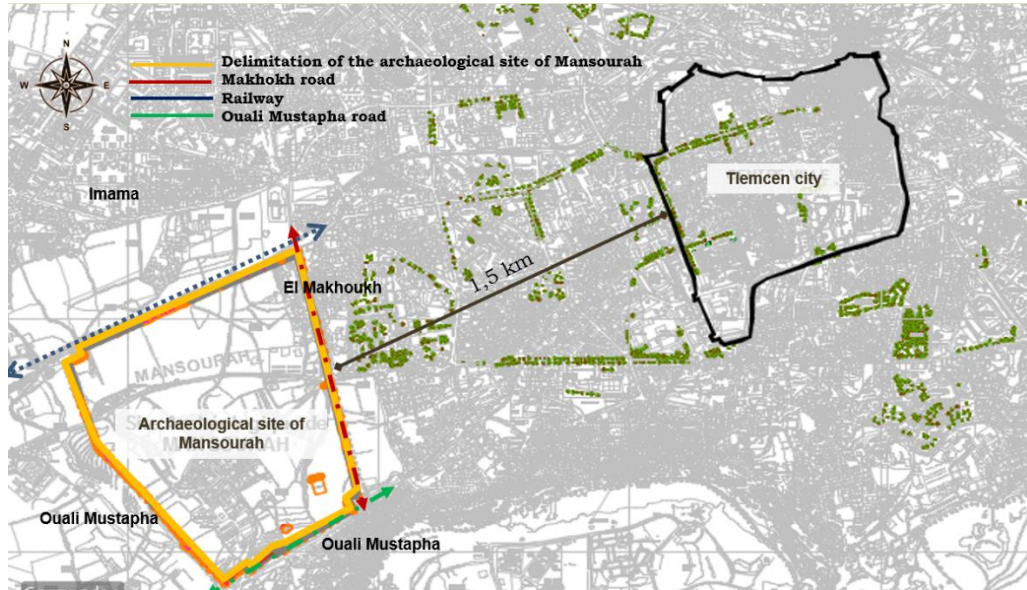


Fig. 1. Geographical location of the Mansourah archaeological site in relation to the centre of Tlemcen. (Source: Authors, 2023)

Mansourah, once an emblematic city, now features the following remnants:

The Mansourah enclosure:



Fig. 2. View of the Mansourah enclosure: 1. West front of the camp, seen from the road to Fez. (Source: Archives of the Mediatheque of Heritage and Photography, Paris, France, 2023). 2. Current view of the Mansourah enclosure. (Source: Sarchi, 2008)

The enclosure is a 12-metre-high, 1.50-metre-thick adobe wall (Fig. 2), flanked by 84 long barbed towers spread over more or less equal distances (varying from 30 to 50 metres), of which there are 3 types: towers that control the gates, each gate being guarded by 8 towers, flanking towers with a 7-metre façade and 3.7-metre sides and taller corner towers, which are square and measure 7 metres. There were also 50 curtain walls to the east and south of the enclosure, which no longer exist. There are no defence chambers in these towers, but at the level of the parapet

walk at the top of the towers, there is an alignment of whitening hooks with pyramids. Four gates on each side gave access to the town. This indicates the presence of two orthogonal axes in the town's urban planning (Charpentier, 2018). Two gates can be identified today, one to the south and the other to the north. All that remains of the northern gateway are the two large bar-long towers, 7 metres wide and 6 metres deep, which at the time flanked a passageway around 12 metres wide. The southern gateway provides more precise information on the layout of the passageway. A massif was built behind the gate. The current remains do not allow us to reconstruct the layout of the access corridor, but the layout of the mass suggests that the access was a simple elbow (Charpentier, 2018). Several tens of metres of the enclosure have been destroyed by land subsidence.

The Mansourah Mosque

Inspired by the Rabat-El-Fath Mosque (Terrasse, 2001) and built in 1303 by Sultan Abu Yakoub, the mosque is a military mosque accessible through 12 doors built of stone projecting from the four sides of the mosque. Its minaret, located on the north-west façade, is a large monumental tower, pierced by a door providing access to the central courtyard, which is square, 30 metres long, framed by a gallery of arcades and adorned with a fountain in the centre. The mosque is rectangular in plan, 60 metres wide and 85 metres long, and the prayer room opens directly to the courtyard. The mosque is surrounded by an adobe wall 7 metres high and 1.20 metres thick, and is now a vast quadrilateral with ruined walls. The prayer hall – the most important part of the mosque – measures 60 metres in length and 55 metres in width. It comprises 2 parts: the first is near the mihrab and is 14 metres wide, consisting of an empty square in the centre measuring 14 by 14 metres, 5 naves on either side and 13 naves perpendicular to the qibla wall, and 6 bays. (Fig. 3). The mihrab is an octagonal niche 2.8 metres deep and 2.48 metres wide. Behind it is the maqsura, a rectangular chamber 12.7 metres long and 6 metres wide, dedicated to preserving the dead for prayer.

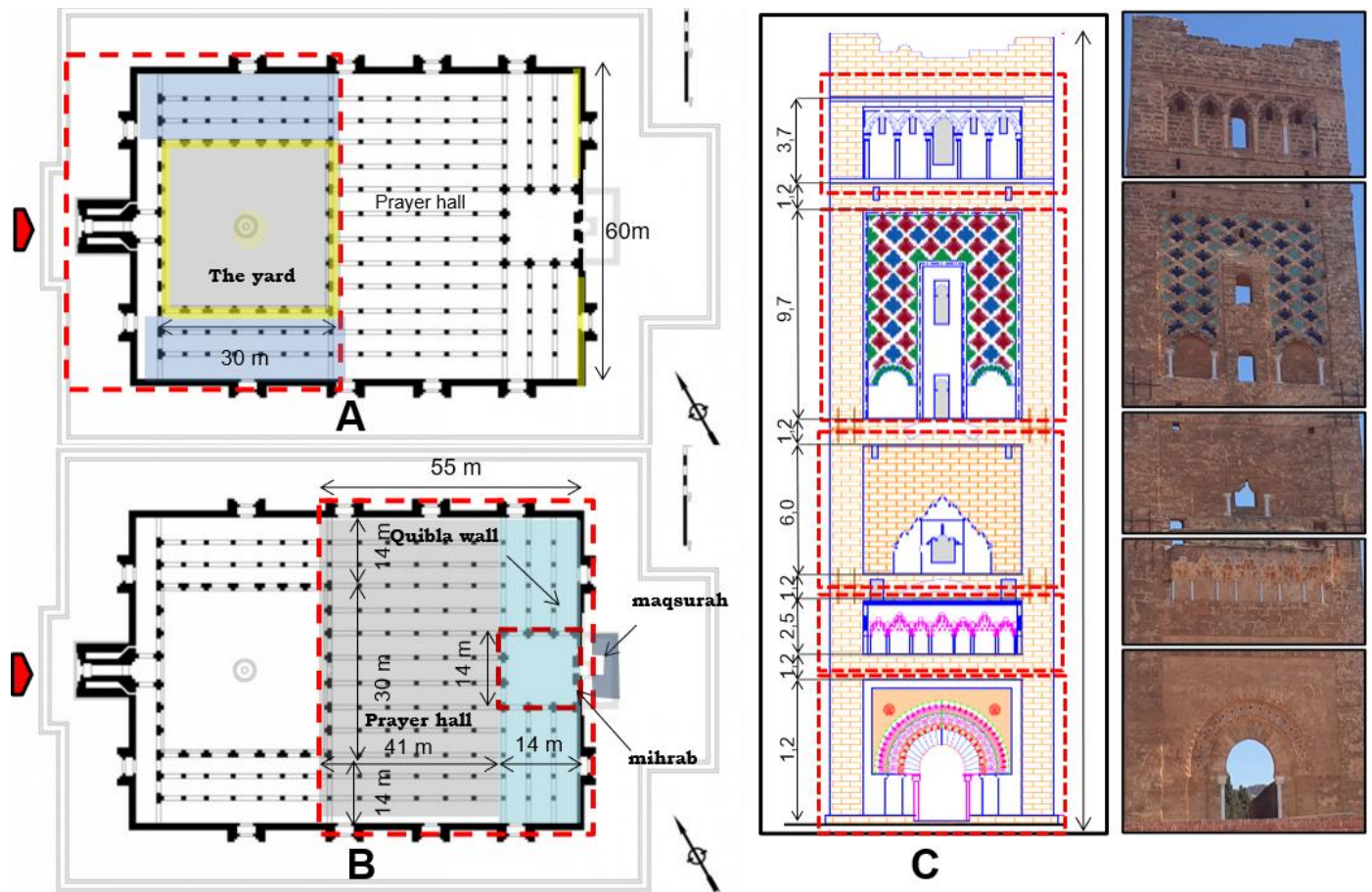


Fig. 3. Main façade of the minaret of the Mansourah Mosque and view of the Mansourah Mosque floor plan: A. la cour de la mosquée, B. la salle de prière, C. la façade. (Source: Authors, 2023).

The Mansourah minaret

The minaret is built of siliceous rubble, according to a quadrangular plan. Ten metres in width, these walls of pink siliceous stone are 1.5 metres thick and pierced by openings in its 4 sides. Housing a ramp 1.33 metres wide allowing the ascent to the level of the upper gallery, it stands 38 metres high, making it the tallest minaret in Algeria and the third tallest in Maghreb, after the Koutoubia and the Hassan Mosque in Rabat (Merzoug, 2012). It is located in the mihrab axis, and houses the main entrance to the mosque. Its main façade was indiscreetly restored in 2010 in preparation for the event 'Tlemcen capitale de la culture islamique 2011' (Charpentier, 2018).

The minaret is richly coloured with zellij inlaid into its stonework and painted decorations that have now disappeared. The use of zellij makes it possible to individualise the 2 strands of the interlacing by introducing a net of green zellij in the centre of the meshes. The gaps in the interlacing are filled with turquoise and black zellij, contrasting with the brick ribbon, giving the Mansourah minaret a very special and majestic appearance. The doorway of the Mansourah Mosque is a smooth arch resting on onyx capitals and columns, 0.44 metres in diameter, recessed into a double register of arcatures that surround it towards the extrados: the first extends a lobed arch with interlaced unequal lobes with a geometric mesh, while the second, even richer, has an arch with trefoil lobes as the base of its decoration. These three levels of staggered ornamental arches are set in a rectangular frame, the spandrels of which are decorated with smooth palms and stamped with palmettes. A set of corbelled muqarnas completes the composition at the top.

The village of Mansourah

This is a colonial village, established in 1858, which was first called the settlers' village of 40 fires. It is comprised of individual European-style dwellings, built in stone or concrete, with balconies with wrought iron railings and pitched roofs. The village was built on the remains of the Palace of Victory dating from the early 14th century. Excavations performed on the site and the visible remains bear witness to the archaeological wealth of the area. To the east of the village, traces of a pool, a tower and adobe walls running east-west can still be seen. These features are a reminder of the town's former grandeur and defensive role.

Materials and construction techniques

At first glance, the fragments of the Mansourah enclosure leave us doubtful as to its solidity, as it is made from a medieval material known as pisé. However, the strength and resistance of this material was tested in 1851 by the French military subdivision under the command of Vignon. In his report, he said that 'the material used is composed of clay earth, lime, sand and heavily rammed stone'. We think that it would be more accurate to call it concrete rammed earth' (SHD 1VH1811 dossier 3, Pablo) indicating the results of experiments performed in October 1851 to determine the effects of fire from 8-gauge guns on the concrete rammed earth founding the Mansourah tower. The various artillery tests performed on the enclosure demonstrated its solidity: 54 cannon shots were needed to breach one of the towers of the enclosure.

On-site interventions

The remains of the Mansourah archaeological site have been the subject of numerous scientific publications, research projects and restoration and enhancement work. The first interventions date back to the time of the French occupation (Oulebsir, 2004), whereby the first intervention consisted of restoring the missing part of the side face of the Mansourah minaret in 1876–1879, as well as restoring the main door frame and a new wooden door, currently to be found in the Tlemcen city museum (Fig. 4). In 1905, the Historic Monuments Department, headed by Alfred Bel (1905), performed archaeological excavations, particularly at the Mansourah Mosque, leading to its restoration in 1907. More recent work was done on fragments of the ramparts and the minaret of Mansourah in 2010, in preparation for the international event marking Tlemcen as the capital of Islamic culture in 2011. Every year, this archaeological site welcomes thousands of national and foreign tourists, coming to visit this silent witness to the history of a chapter of the region. The minaret was beautifully restored in the 19th century, with the collapsed part of the minaret's side facades being repaired and some cracks treated with metal staples and sealing. (The restoration file is kept at the Media Library of Heritage and Photography MAP 81/99-001, carton 007, dossier 133). In addition, the capitals and onyx columns of the main entrance were rebuilt identically in the 19th century.

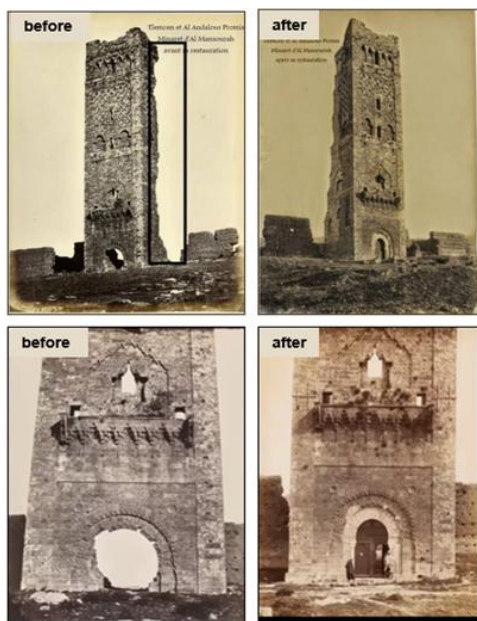


Fig. 4. Restoration of the Mansourah minaret door between 1876 and 1879. (Source: Archives of the Media Library of Heritage and Photography, Paris, France, 2023)

THE URBAN EXPANSION OF TLEMCEN AND ITS IMPACT ON THE MANSOURAH ARCHAEOLOGICAL SITE

According to the PDAU for the urban grouping of Tlemcen, the city has undergone considerable spatial growth, driven by intra-urban migration of people from the city centre and rural migration of people from neighbouring rural centres seeking to settle in urban areas. The forms of property include housing estates built by the Tlemcen Land Agency, participative social housing programmes and informal settlements. These extensions, either planned (Champ Tir, Oudjlida, Boudjlida) or informal (Koudia,

Boudghéne, etc.), are constantly creating tensions and imbalances in urban functions. As a result of Tlemcen's extensive urban development, the archaeological site is now located close to Imama, an area with a strong commercial appeal of the properties. As part of the preparations for the international event 'Tlemcen – Capital of Islamic Culture', this area has undergone major transformations, with the construction of a number of noteworthy infrastructures such as the Palace of Culture, the Andalusian Research Centre and the semi-Olympic swimming pool, as well as private property projects such as luxury apartment blocks and detached houses.

These changes have led to the conversion of agricultural areas into urban spaces. Demographic growth has gone hand in hand with the considerable extension of urbanised areas, and the consequences of urban sprawl are still not under control (ANAT, 2006). This situation has exposed the Mansourah archaeological site to squatting and the proliferation of informal housing (Fig. 5). According to Gerbeaud (2012), the term 'informal housing' is adopted when the nature of the housing is directly linked to the spatial issue and the construction process that characterises it. Whereas, according to Djatcheu Kamgain (2018), the expression is used for the settlement of inhabitants outside a formalised conceptual framework. We used satellite images covering a wide area around the Mansourah area surrounding the Mansourah archaeological site, going back to the years 2003, 2013 and 2023, to create a synthesised image providing a chronological view of the evolution of urbanisation around the archaeological site (Fig. 6).

In 2003, it was clear that urban pressure was beginning to be brought on the archaeological site and its environment: with the development of the Ouali Mustapha district to the south of the site and the proliferation of housing both inside the site and on its eastern edge. In 2013, the construction of Boulevard El Makhokh to the east of the archaeological site – linking boulevard Imama to the national road RN7 – formalised the anchoring of a line of informal dwellings along this mechanical road, within the ramparts of the site. Likewise, the installation of a hopper close to the site has led to a significant increase in the number of informal dwellings to the north and east of the El Mansourah site (Fig. 7). There has also been an increase in the density of the colonial village of Mansourah, located in the heart of the site, by informal dwellings which has tripled in size in recent years, on archaeological structures that have yet to be brought to the surface structures (Sarchi, 2008). Finally, in 2023, new structures appeared scattered around the archaeological site, in addition to an extension of the village of Mansourah by informal settlements to the east and south. These encroachments have had profound repercussions on the site, notably the irreversible transformation of its orchards (Sarchi, 2008).

Analysis of the satellite imagery highlights the rapid and worrying development of urbanisation in and around the Mansourah archaeological site. The visual data is crucial for understanding the impact of urban expansion on this archaeological heritage, which is now under threat to its very existence. To counter urban expansion around the archaeological site, a public garden has been established along its south-eastern ramparts. To the same end, the south-western ramparts of the site have been secured with fencing, and four sports pitches have been developed (Fig. 8).

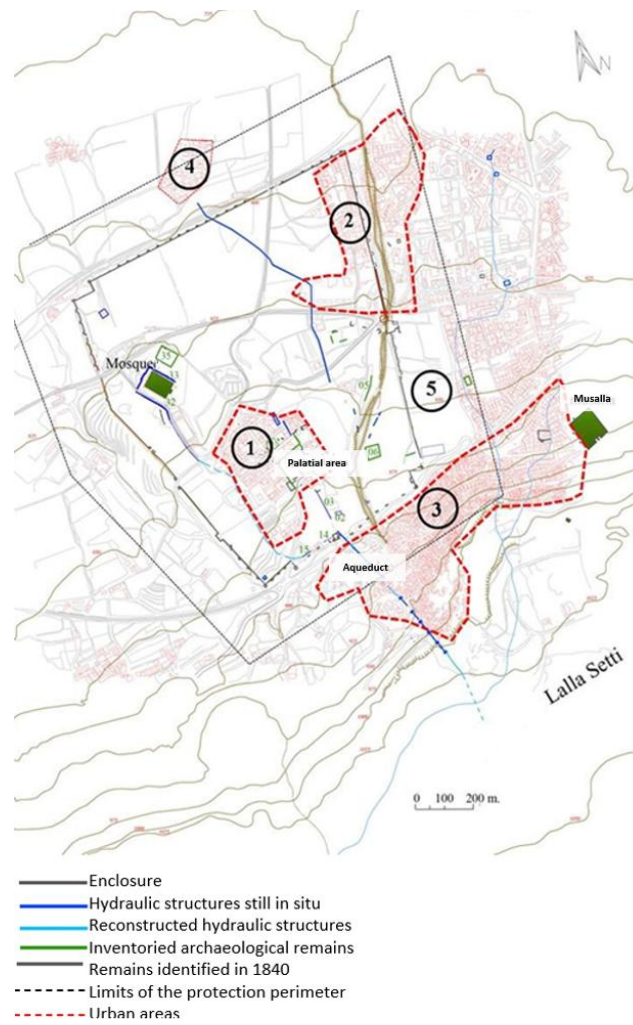


Fig. 5: Proliferation of informal housing in and around the site: 1.Village of Mansourah, 2. Informal housing within the site and on its eastern edge (El Makhokh neighbourhood), 3. Housing on the southern edge of the site (Ouali Mustapha neighbourhood), 4. Informal housing on the northern edge of the site, 5. Developed public garden. (Source: inventories of Charpentier et Terrasse treated by authors, 2023)

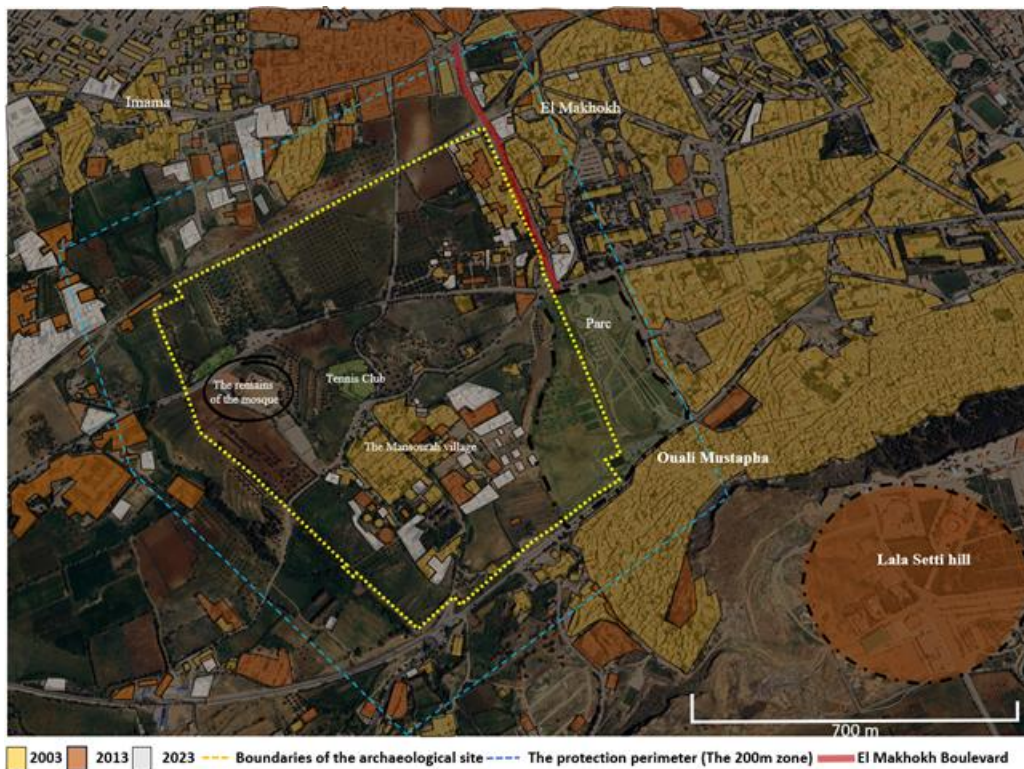


Fig. 6. Summary map of urban development around the archaeological site. (Source: Authors, 2024)



Fig. 7. Squatting of the surroundings of the archaeological site ruins by informal housing. (Source: Authors, 2023)



Fig. 8. Different methods of protecting the archaeological site of Mansourah: **A.** Protection of the archaeological site through the development of sports fields, **B.** Protection of the archaeological site through fencing. (Source: Authors, 2023)

SURVEY OF INFORMAL SETTLEMENTS AROUND THE MANSOURAH ARCHAEOLOGICAL SITE

This questionnaire (used in French, translated into English for the purpose of this paper) is intended for the occupants of informal dwellings around the Mansourah archaeological site. The answers will help us to better understand their perception of the site and the issues surrounding urbanisation in this protected area. For this study, a convenience sampling method was employed, allowing for the selection of 200 households residing in the proximity to the Mansourah ruins. This approach facilitated a swift collection of data by targeting readily available households while ensuring a degree of diversity among the respondents' profiles. Semi-structured interviews were conducted to elicit both closed responses and personal opinions, providing a nuanced understanding of the residents' perceptions.

Questionnaire

1. How long have you lived in this area?

- Since before 1960
- Since 1960s
- Since 1990s
- Since 2000 and after

2. Where are you originally from?

- City of Tlemcen
- Surrounding village (Henaya, other)
- Other places (please specify)

3. Why did you leave your hometown?

- Seeking employment
- Seeking safety
- Other reasons (please specify)

4. What materials were used to build your house?

- Masonry and reinforced concrete
- Other materials (please specify)

5. Is your house connected to utilities (water, electricity)?

- Yes, via official connections.
- Yes, via illegal connections.
- Yes.

6. What do you think of the archaeological site near your home?

- It is very important for the community.
- It is very important.
- It is not very important.
- It is not important.

7. Do you think that construction near the archaeological site should be regulated?

- Yes.
- No.
- I don't know.

8. Are you aware of the existence of a safeguarding plan to protect the archaeological site?

- Yes.
- No.

9. Do you think the local authorities should take steps to regularise informal housing?

- Yes.
- No.
- No opinion.

RESULTS AND INTERPRETATION

Ensuring the long-term survival of the protected archaeological site of Mansourah requires attention to its relationship with its rapidly changing urban environment (Le Louarn, 2002). Articles 16 and 17 of Law no. 98-04 stipulate that the 200-metre easement zone may be extended, in particular to prevent the destruction of the monumental views included in this zone. By extending the scope of protection of the archaeological site, it is indeed the archaeological site that the legislation intends to protect. However, on the ground, and very differently from these legislative aims, a territoriality has developed in the very vicinity of the archaeological site, generated by rural dwellers, but also by city dwellers who have come to join them in this area, in search of a home. Territoriality is a concept used to

describe the relationship created with space and indicates a process that attaches actors to space (Lajarge, 2014).

In Mansourah, this illegal inhabitant territoriality in terms of urban planning and land ownership took shape following the construction of the Boulevard El Makhokh, a 16-metre-wide mechanical road separated from the site's eastern ramparts by a strip of land varying from 5 to 13 metres. This situation formalised the establishment of a line of informal dwellings on the outskirts of the archaeological site (ANAT, 2006). On the ground, the relationship between the archaeological site and the informal dwellings is one of confrontation rather than coherence. On the Boulevard El Makhokh, the towers and curtain walls of the site's ramparts are now privatised and enclosed by squatters who have appropriated this heritage. The urban landscape is deteriorating. They have built their homes and, far from turning them into instrumentalised territoriality of poverty (Destremau et al., 2004), they have turned them into a dynamic space (Fig. 9).



Fig. 9. The boulevard of El Makhokh, between remains, shops and houses. (Source: Authors, 2023)

Informal housing is seizing prime locations in the city, namely the area around the archaeological site, which is one of its most attractive and most visited historical and tourist sites, and this choice is far from trivial. The semi-directive field survey, conducted with a questionnaire that targeted both male and female heads of households occupying the informal dwellings, highlighted their different relationship with the archaeological site. The survey enabled empirical data to be collected from 200 households living in the informal dwellings. The initial questions aimed to understand the origins of this housing cluster, focusing on the respondents' date of settlement at the site (Fig. 10). More than 20% said they had lived there since the 1960s, while 60% had moved there in the 1990s, at the height of the black decade, fleeing their villages to be closer to the city in search of safety. In addition, 20% of those surveyed have moved in in the 2000s, following the opening of the El Makhokh hopper and boulevard. Informal housing has therefore been taking root for several decades, with the majority of occupants living on the outskirts of the site for more than twenty years (more than 80% of those questioned) seeking refuge in the city after fleeing villages in search of safety and employment, 'My family from Henaya (on the outskirts of Tlemcen) moved into this house long before I was born' (A., bus driver, aged 58, 2023)

By definition, as Gerbeaud (2012) explains, the term "informal housing" is applied when the nature of such housing is directly associated with spatial concerns and the construction processes that define it. In contrast, Djatcheu Kamgain (2018) uses this term to describe the settlement of residents outside a formalised legal framework. According to the survey, the part of the El Makhokh neighbourhood situated within the protection zone is composed primarily of informal dwellings, which are mostly built using durable construction materials (masonry and reinforced concrete) and have access to utilities such as electricity and drinking water via illegal connections on the Boulevard El Makhokh.

They have one or two storeys and are generally no higher than the archaeological site itself. The ground floor is used for shops and services. A considerable number of shops aligned with the fragments of the ramparts and towers of the El Mansourah enclosure have been identified. Firstly, a cafeteria with a terrace designed with carefully positioned tables. A little further on, in the same line, there are two other cafeterias, a welding workshop, two car parts shops, a car inspection centre, two chemists, a paint shop, a public school, a cultural club and several shops selling building materials. This diverse concentration of shops creates a dynamic commercial environment along the Boulevard d'El Makhokh. However, it does little for the archaeological site, rather breaking its link with the town, in addition to being the result of inadequate means of controlling urbanisation (Durand-Lasserre, 2004).

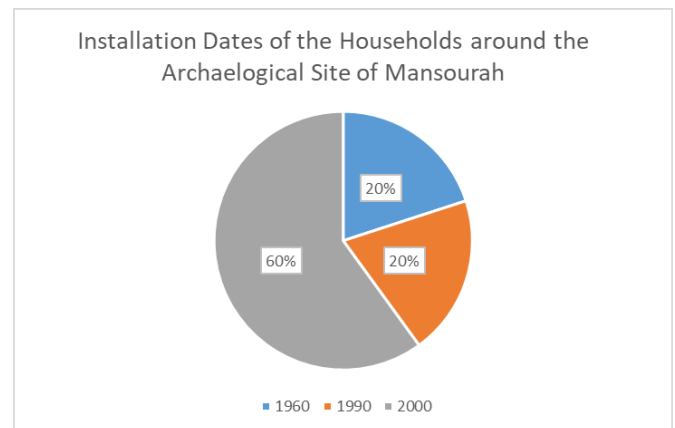


Fig. 10. Survey result, answers to question 1. (Source: Authors, 2023)

In Tlemcen, the official urban land market systematically serves the wealthiest who have the means to access the best types of land and housing, while pushing the less fortunate further away (Zoma and Nakanabo, 2022). In Mansourah, informal activities such as shops and services are mainly survival activities, often associated with a lack of guarantees for workers. However, they play a crucial role in enabling these workers to survive in the city (Lautier, 1994): 'My husband and his brother bought this house in 2001, and we moved into the ground floor, with my brother-in-law, his wife and their child upstairs. Now they have left the house. The only ones left are me and my two boys, one of whom has opened a welding workshop in the garage and the other one works in the coffee shop at the end of the road' (F., housewife, aged 68, 2023). In response to the question on the presence of the archaeological site and its importance (Fig. 11), around 90% of respondents considered the presence of the archaeological site to be important for their community, underlining a significant appreciation of the cultural and historical values of the site. 'These towers are old; I think they were there long before the 1954 war. This wall is similar to the one at Bab Quarmadine, it's part of the town's heritage, and we take good care of it' (F., shopkeeper, aged 58, 2023).

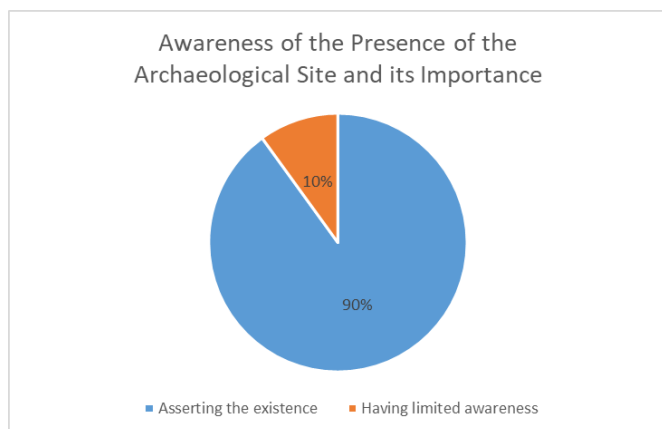


Fig. 11. Survey results, answers to question 5. (Source: Authors, 2023)

The occupants of the informal dwellings were asked about the protection of the archaeological site by a safeguarding plan that regulates construction on the outskirts of the archaeological site (Fig. 12). Around 40% of the respondents said they were aware of these rules, while the rest, around 60%, had little or no knowledge of their presence: *'These are just dead stones, we are alive and we have nowhere to go. I built this house with my sweat, and I'm not ready to leave it'* (M., nurse, aged 42, 2023). From their responses, it can be inferred that, despite their awareness of the site's importance and the need for its protection, the occupants of these buildings adjacent to the Mansourah ruins assert the legitimacy of their neighbourhood. In fact, more than half of those questioned were aware that it should not be permitted, underlining a shared concern about the potential impact on the preservation of the archaeological site. Intriguingly, a significant proportion of those questioned – over 60% – considered that the local authorities should regularise informal dwellings, highlighting a certain tension between the need to protect the archaeological site and the socio-economic concerns of the occupants. (Fig. 13)

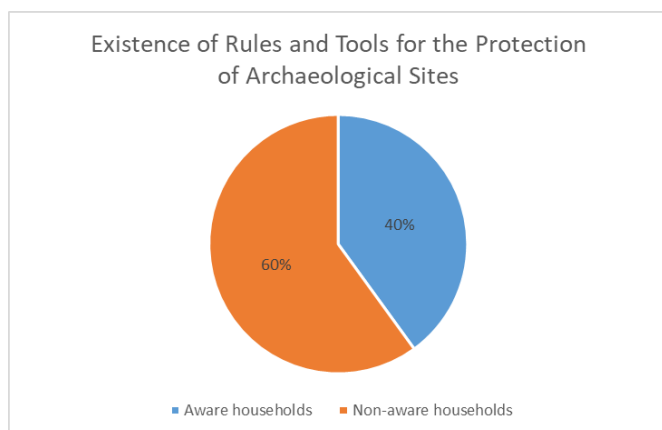


Fig. 12. Survey results, answers to question 7. (Source: Authors, 2023)

Altogether, the results of the survey show the longevity of the complex situation of the archaeological site and reveal the nuanced perceptions of the occupants regarding the cohabitation of their dwellings with the archaeological site. Despite the fact that the majority of occupants recognise the cultural importance of the archaeological site, many do not perceive any problem with settling in its vicinity and being regulated. Although informal housing is disapproved by the local authorities, it is not punished in any manner. The area around the archaeological site of Mansourah is becoming a prime location for 'making visible' and 'publicising' (Florin and Semmoud, 2014) the damage done to Tlemcen's built heritage.

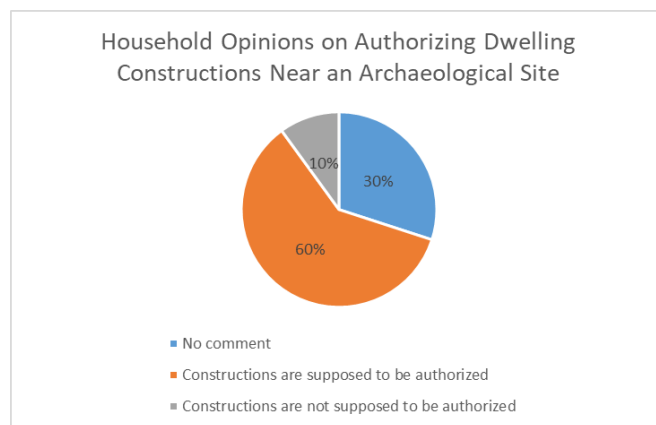


Fig. 13. Survey results, answers to question 8. (Source: Authors, 2023)

The Urban Development Plan for the Tlemcen Urban Group has outlined a number of planning guidelines for the Mansourah archaeological site, while leaving the final decision to the PPMVSA (Permanent Plan for the Enhancement of Archaeological Sites). This instrument expresses a desire to convert the site into a major archaeological site and an environmental and landscape centre (national park), along with the recreational and leisure centre (Lalla Setti plateau – Tlemcen National Park). The PDAU has been following the goal to restore the historic remains and, in particular, to consider the built-up areas on and around the archaeological site as urbanised, and has recommended to restructure them. Finally, the Urban Development Plan insisted on the need for the PPMVSA to be consulted in any new construction, reconstruction, extension, heightening or modification on the site (ANAT, 2006).

The PPMV of the archaeological site provided guidelines for the village of Mansourah and also for the area surrounding the site. The PPMVSA of Mansourah did not limit itself to prescribing the conservation of the colonial village of Mansourah; it also authorised the construction of new buildings in this village, prescribing a height limit of 10 metres and a façade treatment that must be inspired by the colonial architectural model, as an integral part of its conservation. Although the main purpose of the village is residential, the PPMVSA has encouraged the inclusion of activities within the village that promote tourism: restaurants, small hotels and other leisure services, travel agencies and traditional trades (Sarchi, 2008).

With regard to the area surrounding the archaeological site, the PPMV for the archaeological site recommended the demolition of all buildings backing onto the remains and authorised new buildings in the area surrounding the archaeological site, provided that they were part of a master plan study including: the location of the building; its volume; its purpose (housing, equipment, etc.) and the open spaces and facilities planned (play areas, car parks, etc.). This tool has been restricted to the conservation of the archaeological site and has not been used to manage town planning around the archaeological site. In this context, it places more trust in local authorities, telling them to provide protection in the form of a conservation master plan study. However, such study is overdue.

DISCUSSION

On a larger scale, rapid and uncontrolled urbanisation poses a serious threat to numerous major heritage sites worldwide, highlighting the challenges of preservation in urban contexts. In Pompeii, for example, the proximity of Naples and extensive tourism exert pressures that accelerate the deterioration of ancient remains. To counter these effects, the Italian govern-

ment launched the 'Great Pompeii Project,' a restoration programme supported by the European Union aimed at safeguarding this iconic site (Guidobaldi and Esposito, 2010). Similarly, Angkor Wat in Cambodia faces similar pressures due to rising tourism and high-water demand for local infrastructure, which affects the temple foundations. In response, the APSARA Authority and UNESCO have implemented strict regulations limiting construction around the site (Winter, 2007). These examples illustrate the need for integrated and proactive management to ensure the sustainable conservation of historic sites in developing environments.

In Mansourah, Algeria, despite the existence of regulatory instruments to protect the archaeological site (PDAU and PPMVSA), informal dwellings are accumulating in the vicinity, without the local authorities adopting appropriate coercive measures to deal with these offences. The lack of reaction from the local authorities to offences committed against the archaeological site makes this public problem invisible (Signoles et al., 1999). This situation encourages offenders to persist in their actions which are detrimental to the archaeological site. In the absence of a master plan study recommended by the PPMVSA authorising the construction of new buildings in the vicinity of the archaeological site, the PDAU becomes the reference.

The PDAU is based on a conservation policy and incorporates the 200-metre long-term protection easement without changes. However, by requiring that informal dwellings be taken into consideration, the PDAU is not only based on conservation, but also on a policy of regulation. According to this instrument, informal dwellings must not be demolished (with the exception of those built against the remains). The PDAU's policy seeks to build on a situation over which control has been lost. In accordance with the guidelines of the PDAU, of which the municipality was a stakeholder during the interdisciplinary meetings held to approve it, the municipality has formalised and even legitimised the informal dwellings, keeping their occupants on the premises. In addition to this action, on the ground, the inclusion of the 200-metre easement poses a number of problems for the local authority responsible for issuing building permits in this strip.

According to a representative of the Mansourah local authority's technical services, this zone, which is purely geometric in nature, leads to considerable confusion in its application (Gigot, 2020; Touil, 2020): *'the status of the perimeter of the archaeological site's protection zone is regularly questioned by the local authority, because on the ground, the boundaries of the protection zone have no physical connection, especially as the houses already existed when it was introduced'*. This statement denounces the absurdly automatic nature of this system (Poumarède, 2015). Another statement from a representative of the same services confided to us: *'the notion of fields of visibility is spatially very vague'*. According to the commune's technical department, the lack of control over the development of informal housing is a consequence of the conflict between the old law – Ordinance no. 67–281 – and the new Law no. 98–04, which recommended reducing the area surrounding the archaeological site from 500 to 200 metres.

On the site, problems have arisen with the management of the area surrounding the archaeological site, following the replacement of the new Law n°98–04 by Ordinance n°67–287, which was not applied immediately. According to the same representative of the technical services of the municipality of Mansourah: *'even if this protection zone for the archaeological site has theoretically been delimited on the plans prepared by the consultancy in charge of the Mansourah PPSMSA, our services are encountering enormous difficulties in managing this zone in terms of examining town planning authorisations'*. Although the PPSMSA regu-

lations stipulate that informal dwellings backing onto the remains cannot be regularised and indicate the need to prepare a conservation master plan (Sarchi, 2008), in the absence of the latter, there is inevitably much subjectivity on the part of the officials responsible for examining planning permission applications.

According to another representative of the Mansourah commune's technical services: *'...the absence of very precise urban and architectural guidelines required for the examination of applications for planning permission means that each of us (the commune's technical service agents) creates and densifies the 200-metre strip according to our own vision'*. Furthermore, according to a representative of the Department of Culture responsible for initiating the PPSM for the archaeological site, the local authority's departments issue planning permissions without consulting them: *'We have never been involved in any discussions concerning the management of the area surrounding the archaeological site, in particular the architectural and urban integration of new projects in this area'*.

The regularisations stipulated by the PDAU and formalised by the municipality reveal the passivity of the local policies in ensuring a sustainable management of the archaeological site and its surroundings. Through this tolerance, the local authority intends to maintain a population it has never served in terms of housing or housing assistance. This population is free from informality. This population is currently organising activities within its homes, whose catchment area extends beyond the archaeological site. The results of a field survey showed that the phenomenon is not recent, and it will not cease unless firm and urgent measures are taken. To solve the problem of informal housing, the municipality has not adopted a voluntary and sustainable policy. Instead, it has opted for a laissez-faire approach that has lasted and lasted, followed by regularisation as an indirect and partial solution to the housing crisis (Sakkal, 2014). With regard to the relativity of heritage value, Maria Gravari-Barbas and Sylvie Guichard-Anguis (2003) point out that once heritage is no longer a matter of sacredness and passion, it becomes a 'matter of compromise' and a political object (Zerarka and Messaoudene, 2019).

CONCLUSION

Locally, it was through Ordinance no. 67–281 and Law no. 98–04 that the need to protect not only the archaeological site itself, but also its surroundings, became a reality. The Mansourah archaeological site was classified as a national heritage site in 1967. The main aim of this study was to question the occupants of the informal settlement about their perception of the archaeological site and its importance, as well as their role in the protection and conservation of such heritage. For the local authority, the Mansourah archaeological site really is the common heritage that is experienced more as a constraint, rather than an enhancement (Gigot, 2020). On the outskirts of the archaeological site, informal dwellings raised the question of social legitimacy in the face of institutional legality (Belguidoum, 2021). Nevertheless, the lack of alternatives for rehousing their occupants led to their recognition and subsequent regularisation (Bekkar, 1995). This resolution demonstrates the priority given by public authorities to the heritage issue of archaeological sites. While this issue often recurs in the discourse of the city's local authority, in reality, it does not present itself as a necessity (Zerarka and Messaoudene, 2019; Mazouz, 2015). At the same time, the occupants of the informal settlements hardly feel concerned by the conservation of the archaeological site.

Despite the implementation of the PPMV for the Mansourah archaeological site, the latter has been devalued. This tool –

intended to serve as a resource and frame of reference for stakeholders – has proved incapable of managing the intolerable situation of squatting on the archaeological site and its protection zone. Experience on the Mansourah site shows that this is not a miracle tool capable of solving all problems (Touil, 2014). But as we have seen, it was not a matter of tools but rather a question of precision and practical application of laws and sanctions on the ground. In this context, the field of visibility needs to be further clarified, first in terms of space – to define the conditions of co-visibility – and then in terms of urban and architectural integration – to decide what constitutes the architectural and urban quality of projects that do not harm the archaeological site (Gigot, 2020) – to avoid confusion in the management of the 200-meter strip.

Furthermore, the complex situation of the Mansourah archaeological site calls for the implementation of a specific operational management system for this site, which poses problems of urban management and conservation of its cultural heritage (Zadem, 2008). This dual requirement calls for an operational intervention strategy that enhances both the historical dimension of the archaeological site and the management of its surroundings. The urgent situation at Mansourah compels us to take immediate measures, beginning with a conservative approach to heritage preservation through the use of preventive and emergency archaeology. As Nathan Schlanger (2007) explains, preventive archaeology involves proactive interventions to detect, conserve, or document archaeological elements before they are damaged by new construction or infrastructure projects.

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