

Learning from the past: old and new ksour in the M'Zab Valley (Algeria)

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Abstract

Most World Heritage Sites in the Maghreb region are threatened by numerous natural and anthropic hazards, the latter usually due to complex economic, social and cultural dynamics. Because of changes in ways of life and housing models, traditional building cultures are often not recognised by inhabitants as heritage and are becoming unable to resist the spread of modern standardised technologies. These changes put at risk the conservation status and consequently the Outstanding Universal Value of the sites.

The World Heritage Site of the M'Zab Valley in Algerian desert is a rare example of the preservation of both tangible and intangible dimensions of heritage and their transmission to new generations through the construction of the new settlement of Tafilalt, built interpreting the traditional techniques. The contribution analyses the case of the M'Zab Valley in order to show the role of community involvement in safeguarding the authenticity and integrity of this World Heritage Site.

Keywords

M'zab valley Algeria, UNESCO World Heritage, Ethnic community, Heritage values, Ksar.

The Maghreb region is rich in its cultural heritage, reflecting a diversity of values, and spanning various periods. Since the adoption of the UNESCO World Heritage Convention, an important number of Maghreb sites were registered on the WH List. In particular, urban and rural sites have important value in Maghreb Heritage, as the *Medina* of Tunis and Algiers Kasbah in the north part of the Maghreb and the *ksour*¹ widespread in the south as the *ksour* of Ouadane.

Despite the inscription of the *Medina* and the *ksour* in the WH List, the process of conservation and transmission of their heritage values to future generations remains very complex. They are threatened by numerous hazards, natural and anthropic. Concerning the latter, the complexity of their preservation is due to the residential character of the constructions which leads to inadequate interventions by the inhabitants and the devaluation of these sites. Combined with the success of entirely legitimate changes in housing models, traditional building techniques are no longer recognized as a virtue and are giving way to standardised technologies. In this context, many restorations and reconstructions in the *Medina* and the *ksour* are not compatible with the local heritage (e.g. fibreglass roofing, reinforced concrete frames, industrial cement mortar). However, the inhabitants often lack awareness that unlike traditional constructions - durable and in harmony with the environment - "current" ones, when built informally, are not adapted to the seismic and climatic conditions of the regions, and ultimately

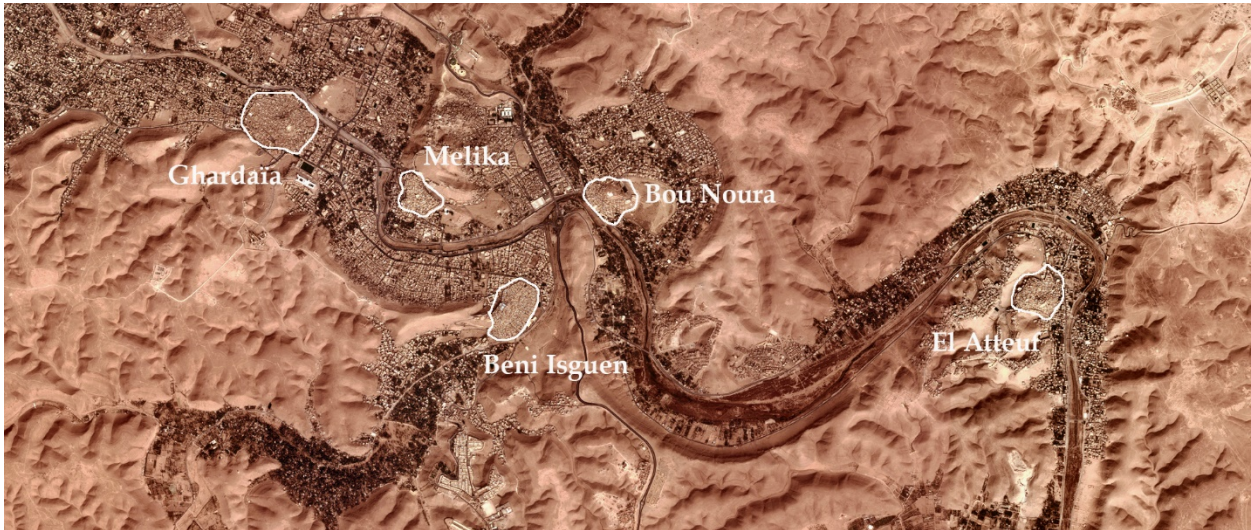


Fig. 1 The five Mozabite *ksour* listed in UNESCO WH List, elaboration from Google Earth of the authors

provide poor quality of life. Another threat is the loss of knowledge of traditional way of building, which makes consolidation more expensive, if not impossible, than demolition and reconstruction². The lack of interest in traditional constructions, and therefore the lack of care and maintenance, opens the way to all natural threats linked to harsh seismic and climatic conditions.

The M'Zab Pentapolis

In the northern area of the Algerian Sahara, between the limestone plateaus, the fascinating M'Zab valley is located in the Wilaya of Ghardaïa. Around the *oued*³ of M'Zab, from the beginning of the 11th century, the population of Ibadite Berbers, Mozabiti, found refuge. They built a unique settlement from an architectural, urban and environmental point of view, creating a society based on solid religious principles and social cohesion. The M'Zab, with its *ksour* and palm groves of El-Atteuf, Bounoura, Melika, Ghardaïa and Beni-Isguenè, was included in the UNESCO WH List in 1982 for its OUV as an example of extraordinary harmony between the environmental system and human settlement and as a testimony of an ancient civilization that has managed to preserve its cohesion and its original characteristics over the centuries (Fig. 1). Due to its peculiarities, the Mozabite settlement model has exerted great influence on Arab urban planning and architecture and on many architects of the 20th century, including Le Corbusier⁴ and André Raverau⁵.

The five *ksour*, which makes up the pentapolis of the M'Zab, founded by the Ibadites between 1012 and 1350, are built according to the same concept: on the highest point of the hill was built the mosque, the religious and social centre, on the slope were built the dwellings arranged gradually in concentric circles, in the lower part of the city, before the walls, the *souk* and, in the valley, the palm grove where summer dwellings were also located⁶ (Fig. 2 - Fig. 3). The *ksour*, were built not only according to a spatial organization that allowed the lifestyle of the local community, but also fully in harmony with the surrounding environment, so as to mitigate the rigid desert climatic conditions and make the most of the local resources at the urban and architectural scale⁷. The houses



Fig. 2 M'Zab, general view of the valley and the *ksar* of El Atteuf, photo C. Azil 2012



Fig. 3 Bounoura, view of the *ksar*, in YASMINE TERKI, *De terre et d'argile*, Algeri, Ministère de la Culture, 2012

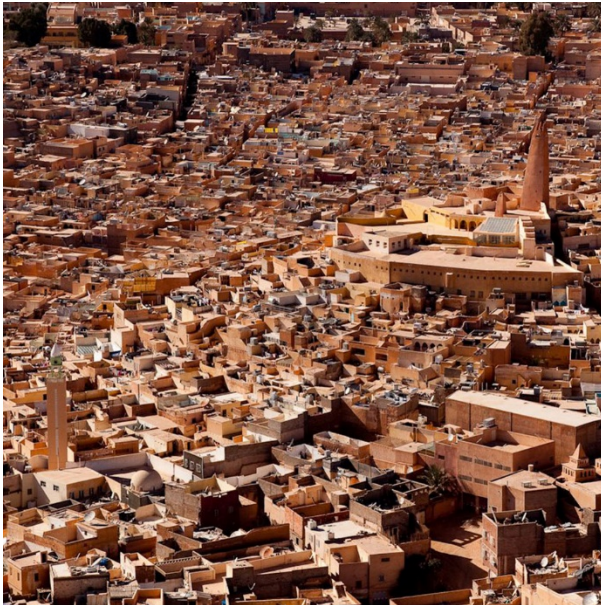


Fig. 4 Ghardaia, view of the *ksar*, in YASMINE TERKI, *De terre et d'argile*, Algeri, Ministère de la Culture, 2012



Fig. 5 Bounoura, general view of the *ksar* with the mosque on the hill, photo C. Azil 2012

are grouped harmoniously and built according to the same dimensions and configuration. Each dwelling constitutes a cubic cell of the fixed type, illustrating an egalitarian social organization based on respect for the family structure. The Mozabite *ksour* are visually very pleasing because they obey egalitarian laws of proximity, ensoulment, of extreme simplification of techniques. They are also characterized by the succession of horizontality,

provided by the terraces, the compact appearance of the city illustrates the social order and highlights the cohesion of Mozabite society⁸ (Fig. 4 - Fig. 5).

In regard of social organization, each *ksar* is self-organized. At the base of the Mozabite society is the *Achira* or fraction, it is an extended family that elects its representative, the *Mokkadem*, who join the city council. The fraction has an administrative, but also a social character, it is based on a concept of cooperation that takes the name of *Touiza* or "to help" and which is the symbol of the social cohesion of the Mozabite. It is a form of voluntary group work and mutual support that has been practised in the M'Zab since its first construction and which responds to economic and social needs.⁹

This social system meant that the Mozabites administered their towns independently for hundreds of years. After the independence of Algeria in 1962 their role was reduced, but even today, despite the presence of official state institutions, many issues related to the city and social life are still the responsibility of the fractions, which try to keep traditional values and the strong community spirit alive for the new generations.

The transmission of the cultural heritage of the M'Zab

The settlement model of the Mozabite pentapolis, consisting of *ksour* and palm groves, shows the first signs of change after the French occupation at the end of the 19th century when nomadic populations began to settle and the first buildings were constructed outside the ramparts. The need for new homes produces a partial conurbation of the palm groves, passing from a fragmented model, consisting of the various interconnected *ksour*, to increasingly compact urbanization of the valley. Starting from the 50s, and more consistently since 1980, the rapid demographic growth and the progressive settlement of new inhabitants have led to an expansion of the pentapolis and strong urbanization of the valley. The construction of new settlements, often illegal and unplanned, with no interest in traditional architecture, has completely saturated the space between the ancient *ksour* and created new poles along the valley, significantly altering the Mozabite model¹⁰.

Significant population growth and rapid urban development in the valley have threatened, and continue to threaten, the conservation status of the WH Site of the M'Zab and with it the delicate environmental balance of the area and the social and religious principles of the Mozabite.

In 1993, in this context, the Wilaya of Ghardaïa started an interesting initiative to counter the uncontrolled urbanisation, which took the name "Ghardaïa formulas". It is a social project that aims to create new settlements, for low- and middle-income families, based on the partnership between Algerian government, local community and future inhabitants. These settlements were designed and built following the teachings of the ancient *ksour*, both in terms of traditional construction techniques and materials, and in terms of urban structure and social organisation¹¹.

One of the most interesting is the settlement of Tafialt, started in 1997, it is built by various fractions of the neighbouring *ksar* of Beni Isguen, which subsequently merged into the non-profit foundation Amidoul. Tafialt is designed according to traditional Mozabite practices, but at the same time adapts to the needs of the modern life (Fig. 6). Like the old *ksour*, it was built on the hills, to preserve the palm groves of the oasis and protect itself from floods, it is confined by the walls that prevent it from expanding into the valley and favour the aggregation and strengthening of social relations. The urban structure and the hierarchy of spaces are maintained, but unlike



Fig. 6 Tafilalt, general views, source Amidoul Fondation (<http://tafilelt.com/site/>)

the ancient *ksour* some streets are wider to allow cars to pass. Traditional materials were used, and to reduce costs, workshops were set up, where traditional construction techniques were taught, also favouring the rebirth of traditional knowledge and skills and their transmission to future generations. The principle of cohesion and social cooperation of the *Touiza* plays a fundamental role also in the new *ksar* during the construction. Actually, the *Touiza* is used for the management and maintenance of public spaces and special events.¹²

"une immense leçon"

The construction of the new *ksar* of Tafilalt, inhabited by young families, has not only provided a response to the lack of housing for low- and middle-income families and the uncontrolled urbanisation of the valley, but it can also be considered a successful form of preservation and enhancement of the Mozabite tangible and intangible heritage. Tafilalt was built by re-evaluating and reinterpreting the urban and architectural characteristics of the old settlements according to modern needs. The use of traditional construction techniques has also allowed this precious heritage to be rediscovered and made known to the community.

Moreover, in addition to revaluing the local architectural tradition and disseminating the Mozabite settlement model, Tafilat has the additional effect of protecting the old *ksour* from further interventions and uncontrolled expansions, thus participating in the preservation of their integrity and authenticity.

This process of enhancement does not only concern the tangible dimension, but also the rich intangible Mozabite heritage of customs and traditions, of strong religious and social values, which finds its greatest manifestation in the practice of the *Touiza* and which emphasise the fundamental role of the community in city administration and daily life.

The inhabitants' active participation in the construction of the *ksar* and subsequently in its maintenance and management has led to a sense of belonging not only in their own fraction, but to traditional Mozabite values and to the *ksar* as a whole. The fact that the new *ksour* are mainly inhabited by young families adds further value to this project, as it succeeds, in daily practice in the difficult but necessary task of transmitting the heritage to the new generations, who will be able to experience it first-hand.

The example of M'Zab refutes the usefulness of some urban operations on historic centres, such as urban regeneration, which in some cases proposes to change the local population into a richer one, and shows the importance of the local population in the preservation of tangible and intangible heritage, which are not separable.

Fifty years after the ratification of the WH Convention and forty years after its listing, the M'Zab Valley and the recent construction of the new *ksour*, is an exemplary case study for the active role of the community in preserving the authenticity and integrity of the site. As recommended by the WH Committee in the Strategic Objectives¹³, the future of conservation moves in the direction of enhancing the role of local communities as they must be part of the solution, otherwise sound and lasting results will not be achieved.

¹ The *ksour* (singular *ksar*) are traditional fortified Berber villages originally built for defensive purposes. Nowadays and with the disappearance of defensive concerns, it designates any Saharan agglomeration of ancient construction and rural tendency as opposed to the more important structures that are *medinas*, in MARC COTÉ, *La ville et le désert: le Bas-Sahara algérien*. Paris, Karthala, 2005.

² CHEIMA AZIL ET ALII, Desert rose stone constructions covered with domes in the Souf region (Algeria), *Int. Journal of Architectural Heritage*, XVI, 2022, pp. 577-596.

³ The word *Oued* refers to a non-perennial and seasonal watercourse typical of arid regions.

⁴ Le Corbusier visited the M'Zab in 1931 and 1933, the second time he flew over the Pentapolis, which, as recorded in his writings, enabled him to understand the spatial organisation of the *ksour* and learn '*une immense leçon*'. See: LE CORBUSIER, *Aircraft: A New Vision*, New York, The Studio Publications, 1935 and LE CORBUSIER, *Sur les quatre routes*, Paris, Gallimard, 1941.

⁵ André Raverau first visited M'Zab in 1949, to which he devoted most of his studies, staying there for twenty years. See: ANDRE RAVERAU, *Le M'Zab, une leçon d'architecture*, Paris, Sindbad, 1981.

⁶ GIANCARLO CATALDI ET ALII, *The Town of Ghardaïa in M'zab, Algeria: Between Tradition and Modernity*, «Traditional Dwellings and Settlements Review», VII, 1996, pp. 63-74.

⁷ ANDRE RAVERAU, *Le M'Zab, ...*, op. cit.

⁸ *Ibidem*.

⁹ NAIMEH REZAEI, *Lessons from Tradition in the Building of Contemporary Settlements: The Case of Tafilalt in the M'zab Valley, Algeria*, «Architecture and Culture», IX, 2021, pp. 310-334.

¹⁰ IMEN BENSALAH ET ALII, *Urbanisation de la vallée du M'zab et mitage de la palmeraie de Ghardaïa (Algérie) : un patrimoine oasien menacé*, «Belgeo», II, 2018.

¹¹ MED CHERIF ADAD ET ALII, *Les anciens et nouveaux ksour: etude comparative. Cas du M'zab*, «Courrier du savoir» XVI, 2013..)

¹² NAIMEH REZAEI, *Lessons from Tradition ...*, op. cit. e MED CHERIF ADAD ET ALII, *Les anciens ...*, op. cit.

¹³ In 2007, at the 31st Session of the WHC a "fifth C" for "Communities" was added to the existing Strategic Objectives adopted in the Budapest Declaration in 2002.