

Preserving the Old Ksar of Beni-Abbes- Algeria

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Abstract

This study aims to showcase the architectural and cultural significance of the historic ksar located in Beni Abbes, Algeria. Additionally, it seeks to foster cultural tourism activities and improve the quality of life for the local community. The Beni Abbes Ksar serves as a historical monument and represents the Berber culture and identity. The ancient ksar of Beni Abbes is situated in the heart of the palm grove in the southwestern area of Algeria. Beni Abbes is widely recognized as one of the most significant and aesthetically pleasing oases in the Saoura region. This study employs a historical and descriptive methodology to analyze the physical and cultural factors that contributed to the formation of the Old Ksar. Our findings showcase the alluring charm of Beni Abbes and highlight the need for further research, investigation, exploration, and appreciation of its remarkable socio-cultural fabric.

Keywords: Cultural heritage; immigration; Algeria; Beni Abbes; old Ksar.

1. Introduction

Beni Abbes is a small town in the southwest of Algeria. Located in the Sahara Desert, it is known for its beautiful landscapes and traditional Berber architecture. The town of Beni Abbes itself is a peaceful and tranquil place, with its traditional mud-brick houses and narrow streets. It offers a unique insight into Berber culture and heritage. The local population is predominantly Berber and their traditional way of life is still preserved in the town. Tourism is an important aspect of Beni Abbes' economy, as visitors come to explore the surrounding desert landscapes, and experience the region's rich cultural traditions. The town also has a museum that displays Berber artifacts and provides insight into the history and culture of the area. Overall, Beni Abbes is a place of spiritual significance, natural beauty and cultural heritage. The problem of understanding the cultural and social aspects of life in the Old Ksar and its construction will be addressed in this research. Also, it is needed to fill this gap through in-depth research to provide valuable insights into the region's social and cultural life before evacuation. To achieve our research goals, we have formulated the following research questions:

1. How did the cultural and social aspects of the Old Ksar contribute to the community's identity?
2. How did the architecture of the Old Ksar reflect and influence social interactions and community dynamics?

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2. Background

The Old Ksar of Beni Abbes is a fortified village in the Sahara Desert of Algeria. A ksar is a traditional fortified village in North Africa, typically built with mud-brick houses and surrounded by high walls for protection. The Old Ksar of Beni Abbes is one of the best preserved examples of this architectural style. Located on a hill overlooking the town of Beni Abbes, the ksar consists of narrow, winding streets and mud-brick houses. The walls of the ksar are made of the same material and are designed to protect against the harsh desert climate and potential attacks. Inside the ksar, there are several communal spaces, such as courtyards and squares, where people gather for social activities and celebrations. These spaces often contain decorative elements, such as intricate tile work and fountains, which add to the charm and beauty of the ksar.

The old ksar of Beni Abbes has a rich history and cultural significance. It has been inhabited by the Berber people for centuries and serves as a reminder of their traditional way of life. The ksar also attracts tourists and researchers interested in exploring its unique architecture and learning about the local culture. Overall, the ancient Ksar of Beni Abbes is a testament to the resilience and ingenuity of the Berber people and stands as a significant cultural and historical landmark in the Sahara. (Pugliese, and Sacco, 2007).

2.1. Construction of the Ancient Ksar

A history of conflict and perseverance is the secret behind the creation of the Old Ksar. There is some debate over the initial founders of the old Ksar, and the prevalent account suggests the following, at the beginning of the 12th century AH/end of the 17th century AH, (Trabelsi, 2020, p.37) the inhabitants of Beni Abbès had to face numerous invasions, the so-called 'razzia', prompting them to ask the king of Fès for help. Following this, a Company of Mkhaznia was sent to defend the area against any potential threat. However, the inhabitants remained vulnerable to various neighboring enemies despite the region's prosperity and progress.

On their way to Beni Abbes, the Mkhaznia passed through the Zaouia't Menlaykhaf in Tafilalet, where they met a pious marabout named Mohammed Ben Abdessalem. The inhabitants of Beni Abbes, who were scattered over several ksours, reproached him for leaving without giving them religious instruction and the Holy Quran. In response, he agreed to do so on the condition that he was allowed to choose the site for a new, well-fortified ksar in the middle of the palm forest.

A remarkable testament to the ingenuity and perseverance of its builders and inhabitants, the ancient ksar of Beni Abbes still stands today. It is a proud reminder of a turbulent past and a beacon of hope for a better future. (Souleyman Teyebi,2021,p30)

2.2. The arrival of the French colonialists in Beni Abbes

According to the article "Bulletin of the Historical and Scientific Works Committee" published in 1908: "Beni Abbes was occupied only in 1901 and Captain Bérenger stayed there for a year, which allowed him to inform us in detail about the topography, geology, hydrology, climate, natural resources and population. His important monograph is accompanied by two brand new maps. Another map is dedicated to the "Zaouia" of Kerzaz, in the same valley of Saoura, to the south-east of Beni Abbes, seat of the religious order of Kerzazia, which has absorbed three others and plays a sufficiently important role in the region to deserve to be studied with care, Mr. Interpreter Albert".³

However, the French entered Beni Abbes in 1900, according to ALIDRISSI in his book *El Manaqib El Khafia*. Therefore, we can conclude that for many reasons, especially the

³ Comité des travaux historiques et scientifiques. Section de géographie. "Beni-Abbès." *Bulletin de géographie historique et descriptive*, no 1-27. France. 1908.p 18-19

resistance of the people, the French colonization did not reach Beni Abbes until the beginning of the 20th century. (Alidrissi,2013, p79)

The French government has tried to portray the inhabitants of the Sahara as a peaceful people who do not support the ideology of the terrorist groups that advocate the secession of the Sahara from France. They downplayed any actions against the French presence in the Sahara. They called them isolated incidents. However, it was no longer possible for the French to cover up the situation after the discovery of an organized army under the National Liberation Front (FLN) in the region.

It was in September of 1957, after the French had discovered the presence of militants in the area. They decided to take a strong and decisive action against them. On the night of the 4th of September, they sent paratroopers to the village, which caused fear and panic among the local people. Due to the harsh treatment by the colonial forces, many residents left the village. This event marked a significant escalation in the presence of the French colonial forces in Beni Abbes.

The hermitage built by Charles de Foucauld is one of the most important legacies of French colonialism in Beni Abbes. He began his life as a Saharan in Beni Abbes in 1901. His life would end tragically fifteen years later in Tamanrasset. (Rames, 1941)

His hermitage consisted of a chapel and its outbuildings, which were located in a small "Chaaba" or valley that cuts into the Hammada to the east of the Ksar of SIDI MOHAMED BEN ABOU and joins the Saoura valley by passing under Ksiba. (René, 1921). (See figure 01 and figure 02).



Image 01 : Herimtage of De Foucauld in Beni Abbes

(<https://www.guer-coetquidanbroceliande.fr/livretxt/chap160.html>)



Image 02: Hermitage monks and nuns of nowadays taking a meal (<https://eglise-catholique-algerie.org/beni-abbes-et-saint-charles-de-foucauld/>)

3. Architecture and Urban Design

The Old Ksar of Beni Abbes embodies the region's rich heritage with its impressive architecture in the heart of the vast desert. Using local materials and a layout that served both practical and defensive purposes, this ancient fortified village was cleverly designed.

However, the Old Ksar is more than just a fortress. It has great historical value and offers a glimpse into the vibrant social and religious life of the people who once inhabited it.

The impressive architecture and urban design of the old Ksar are a sight to behold. The intricately carved facades, winding streets, and communal spaces harken back to a bygone era where beauty and functionality were seamlessly integrated. This historical gem provides a captivating window into a rich cultural heritage that blends harmoniously with its natural surroundings.

3.1. The Physical Layout and Appearance of the Old Ksar

Viewed from the plane or from the nearby cliff named El Ga'da, the Old Ksar resembles an island within a sea of palm trees. The houses within the Ksar are arranged in an illogical arrangement of terraces and courtyards, lacking any central open areas or streets. The Ksar is fortified with corner towers, adobe ramparts, and walls. Due to its enclosed nature, the flow of interior circulation cannot be seen from above.

The Ksar features a generally rectangular shape, with one side curving inward and the other facing towards the southeast. This structure is fortified by a defensive ditch, locally known as an Ahfir, which encircles the Ksar except for the northeast, where the primary entrance lies. (Gerhardt,2014). The ditch is marked by a depression that is 4 to 5 meters in width, and may occasionally descend well over 2 meters below the level of the palm groves. During the winter season, this depression may also become partially submerged in water. (Marçais, 1955. p226)

About the selection of this particular location (the oasis center, as shown in figure 03) to build the ksar, two distinct oral traditions are cited. One account reports that Sidi Mohammad Ben Abdessalam cast his stick from a hilltop on a dark night, and it miraculously landed at the center of the oasis in the garden belonging to one of Sidi Ali ben Yahia's descendants. In contrast, another version claims that Sidi Mohammad Ben Abdessalam planted his stick in a certain spot on a dark night instead of tossing it, and the owner of the garden received compensation in the form of other lands situated outside the oasis. (Rames,1941,p85)



Figure 03: the Old Ksar in the middle of the palm grove

3.2. Building Materials and Techniques

The ksar was constructed with clay bricks, one of the oldest building materials available. Clay was a natural choice for early human settlements as they transitioned from caves to plains, valleys, and plateaus due to its abundant availability in those areas.

Several types of clay bricks were utilized in construction, but rectangular bricks were the most common. These bricks were created using wooden molds that measured 30 cm in length, 18 cm in width, and 12 cm in height. The cement for the bricks consisted of a combination of clay and water, whereas rocks were used for the building's foundation.

Lime was used in construction primarily for painting purposes. However, due to its scarcity in the region, lime was typically reserved for mosques, tombs, and special occasions such as Al Mawllid. It was rarely used inside residential houses.

The houses' walls measured approximately 30 cm thick, while the rampart ranged from 60-80 cm thick. Pillar size and brick arrangements differed according to each building's characteristics. Post-construction, a water and clay mixture smoothed over the walls, sealing any cracks. Stairs were built with clay bricks, palm tree trunks, or other tree types and often utilized for storage space beneath.

The roofs had a common design, supported by both tree trunks and palm tree trunks. However, due to the poor durability of these materials, the distance span was restricted to around 2-2.5 meters, leading to narrower rooms. To widen the rooms, additional columns were added to the center.

The roofs were constructed using both trees and palm tree branches, which were later covered with clay. In larger buildings, like mosques and Dar Elkaid, supplementary brackets were integrated. (Bouanini & Touhami, 2017.p34)

4. The Key Features of the Old Ksar

4.1. The Arcades and Corridors

The corridors in the Ksar were intentionally winding and had covered ceilings, resulting in a dimly lit atmosphere. While the locals were accustomed to navigating them without light, new visitors needed assistance to avoid getting lost. This architectural feature had a specific purpose: to make it difficult for intruders to penetrate the ksar during an enemy invasion. Along with traps and low roofs in the corridors that required individuals to lower their heads while passing through, the darkness inside was one of the ksar's key defensive measures. Together, these elements formed strategic components of the ksar's defensive plans. (Bouanini & Touhami, 2017.p36)

4.2. Houses

Housing sizes varied depending on family size and wealth. The ksar contained a variety of building sizes and shapes, but most structures followed a rectangular or square design.

The connection between the houses and the passageways was by means of wooden doors. The upper floor enjoyed sunlight throughout the day, while the lower floor usually remained dark. To allow sunlight to reach the lower floor, small openings were sometimes made in the roofs.

Rooms for storage or shelter were located on the lower floor. There was a small courtyard for gathering and drying grain on the upper floor. The walls were about one meter high and surrounded by rooms with entrances but no doors or windows. These were the rooms where the family lived. (Bouanini & Touhami, 2017.p37)

4.3. The Roof and the Floor

Sturdy beams made from palm or sidra tree trunks were used to construct the roofs of the buildings. Palm leaves and reeds were then placed on top of these beams. To protect against the elements, the entire structure was then covered with compressed clay. The flooring was usually made of shell, creating a smooth and durable surface (see Figures 04& 05). (Bouanini & Touhami, 2017.p37)

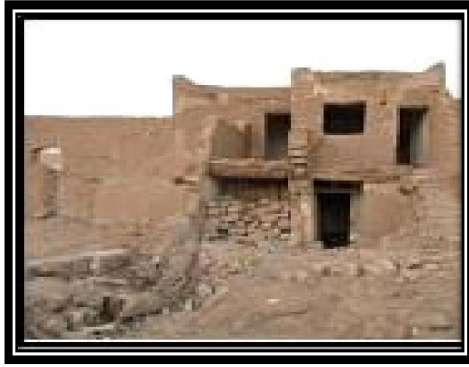


Figure 04



Figure 05

Two floors and roof house (El Eid Bouanini & Touhami Hajer. *Strategies for the Conservation and Valorization of Cultural Heritage in the Beni Abbas Region*. Bechar: TAHRI Mohammed University, 2017.p61)

4.4. El Masria

The ancient ksar contained a central public square known as El Masria which was strategically located at the main entrances to the ksar. It covered an area of approximately 174.1 square meters and included the entrance to the Quranic School on the right.

El Masria served as a hub for various social activities, including gatherings, conflict resolution, and economic transactions such as the buying and selling of goods. Captain Berenger's 1905 report indicates that the square once had an economic function. It served as a restricted "souq" or market, where Jewish jewelers operated their businesses on both sides of the ksar door. This suggests that the square was a bustling center of artisanal and commercial activity during this period. It also had religious significance, as it was a site for the celebration of religious events such as El Mawlid Annabawi. This spacious square is adorned with benches arranged under a large awning, with the central focus on Hajret El Baroud, the gunpowder manufacturing area. (Bouanini & Touhami, 2017.p36)

4.5. Eddukkana or Mastabba

The Arabic term "mastaba" is used in archaeology to refer to a structure resembling a bench built during the Mamluk period (see Figure 06). These benches served as seating areas, resting places, and platforms for displaying goods and were characterized by their width and height of approximately one meter. The people of the Old Ksar of Beni Abbas were often associated with these benches. They used them as gathering places near places of worship after their daily work. In the alleys of religious institutions and in certain streets, benches were provided for people to sit and wait for prayer times. They were also used to discuss palace matters, such as scheduling watering times or resolving social issues. Located near public squares, these meeting places were known as "jama'a".(Bouanini & Touhami, 2017.p39)



Figure 06: Dukkana (El Eid Bouanini & Touhami Hajer. *Strategies for the Conservation and Valorization of Cultural Heritage in the Beni Abbas Region*. Bechar: TAHRI Mohammed University, 2017.p61)

4.6. The Mosque

In the northern corner of the ksar, next to the main entrance, was the mosque. It was surrounded by houses, a "zaouia", a school, and a designated room for religious worship.

The mosque has remained unchanged. It is a large room without minaret. It has three entrances: one is located next to the main entrance of the ksar, and the other two are located on the other sides. Two of these doors lead to the prayer room. The third door leads to the stairs and the well of the mosque.

The floor of the mosque is covered with shells, while the walls and pillars are painted with lime. Like the roofs of other houses, the roof of the mosque was constructed with a wooden frame and covered with clay. (Bouanini & Touhami, 2017.p39)

4.7. The Quranic School

The Quranic School was located in the old ksar, adjacent to El Masria, with its main entrance facing it. It was divided into two parts: a covered part and an open part.

The uncovered part served as a Quran classroom during the summer and as a resting place during the rest of the year. One of its walls had a large hole for the organization of the students' belongings.

The covered part of the school consisted of a room with an entrance from the "Zaouia" where the tutor (Ettaleb) entered. The roof and the floor of the school were similar to other buildings, with a shell on the floor and a wooden frame covered with mud on the roof. (Bouanini & Touhami, 2017.p41)

4.8. El «Zaouia»

The guesthouse, known to the locals as the "Zaouia", was a special building used to accommodate guests, including travelers, foreign students, and merchants. The food and lodging provided in the "Zaouia" were made possible by contributions from local residents.

The "Zaouia" consisted of a stable for camels, horses and cattle. Inside the stable, there were two rooms for storing feed and a yard for the animals. Adjacent to the stable, there were five rooms, four of which on the lower floor were reserved for guests, while the fifth room on the upper floor was reserved for the sheikh of the "Zaouia". (Bouanini & Touhami, 2017.p43)

5. Security Infrastructure

In order to fortify the ksar and protect it from foreign attacks, the "Ababssa" employed various methods that were known and utilized by ancient civilizations. Some of these methods included:

5.1. The Moat

To safeguard the ksar from external threats, the Ababssa employed various defensive strategies used by ancient civilizations. One such method was the construction of a deep and wide moat surrounding the walls of the ksar, designed to impede and deter potential attackers. In the local dialect, the moat was referred to as "Ahfir," a term believed to originate from the Berber language spoken by some of the ksar's inhabitants.

The moat exceeded a depth of five meters and was filled with water. Its water level would rise significantly during winter, while in the summer, it would recede. The moat sourced its water from the Saoura valley, which maintained a constant flow throughout the year.

The ksar's moat served two primary purposes. Firstly, it functioned as a military obstacle, slowing down foreign attacks from other tribes. Secondly, it served as a drainage system, effectively channeling rainwater away from the ksar's ramparts to ensure their structural integrity and safety.

5.2. The Rampart

A rampart refers to a tall, thick wall made of stone or dirt that surrounds a castle, town, or similar structure to provide protection against attacks. The rampart of the old ksar was constructed using clay bricks, while its foundation was built with rocks. This defense strategy was ancient, reminiscent of structures like the Great Wall of China. Unlike separate fortifications, the rampart of the ksar was integrated with the houses, as the walls of the houses formed part of the rampart. Consequently, there was no passage between the rampart and the houses. During external invasions, the inhabitants would climb on top of their houses to take defensive actions. (Bouanini & Touhami, 2017.p44)

5.3. The Towers

Within the Beni Abbes ksar, there are four towers positioned at the corners. However, currently, only one tower remains in the ksar, situated on the eastern side. This tower has a height of approximately 5.6 meters and features an irregular rectangular shape with a balcony at the top. The tower comprises three rooms, a wooden staircase, and seven embrasures.

5.4. The Evacuation of the Old Ksar

During the events of September 1957, an evacuation took place in the old ksar of Beni Abbes. It was triggered by the arrival of paratroopers during a military operation by the French forces. The discovery of militant activities in Beni Abbes and the Saoura region prompted the French administration to take decisive action. As a result, the inhabitants of the old ksar were filled with fear and anxiety about the potential brutality of the colonial forces. This led them to make the difficult decision to leave their homes and seek refuge elsewhere to ensure their safety and well-being. The evacuation of the old ksar became a momentous event, marking a profound disruption in the lives of its inhabitants and the history of the community.

6. Conclusion

The architecture of the Old Ksar of Beni Abbes embodies a harmonious blend of practicality and defense. Its design features, such as terraces, courtyards, arcades, and corridors, were strategically incorporated to create a formidable defense against potential invaders. The intelligent use of local materials such as adobe bricks, palm trunks, and shells further enhanced the strength and functionality of the structures. These architectural elements not only served a defensive purpose, but also contributed to the overall aesthetic appeal of the Ksar.

Furthermore, the architecture of the Old Ksar was closely linked to the social life of its inhabitants. The presence of El Masria provided a meeting place for various social

activities, fostering a sense of community and cohesion among the inhabitants. In addition, religious buildings such as the mosque, the "zaouia" (a sanctuary or religious retreat), and the Quranic school were integral parts of the ksar's architectural ensemble, reflecting the deep religious and cultural values of the region. Taken together, the architecture of the Old Ksar of Beni Abbes demonstrates a remarkable blend of defensive ingenuity, functional design, and cultural significance that symbolizes the rich heritage of the region.

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