Architectural And Morphological Evolution Of The Casbah Of Annaba-Algeria- From The 13th To The 19th Century

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Abstract

At all times, fortifications have shaped the collective imagination of human societies. Located in the city center, the casbah of Annaba is one of the town's most emblematic monuments. Built in the medieval period, it was listed as a historic monument in 1978. However today, the monument is ignored and remains enigmatic and understudied. In fact, the architecture of this monument seems contemporary, while the remains of the medieval period seem to have completely disappeared.

Consequently, this paper sets out to retrace the historical development of this monument and its architectural and morphological evolution, and also to reconstruct its initial configuration during the medieval and modern periods, using archive documents and historical sources. The study revealed that the spatial and functional configuration was completely different in the modern and medieval periods.

The aim of this research is to facilitate the opening of archaeological excavations in advance of any enhancement and restoration work on this cultural monument.

Keywords: Casbah; Annaba; Military Fortification; Defensive Architecture; Military Heritage

1-Introduction

In addition to civil architecture, military architecture plays an important part in human creativity and achievement. Like other countries that have experienced diverse civilizations, and occupy a strategic position at the confluence of human cultures, Algeria has a rich and diverse military heritage that has been enriched and diversified over the centuries. Among this rich military heritage are the casbahs. A veritable city in the city, the closest term in the Occident is citadelle, from the Italian Citadella, meaning small town (Copans, 2011). In the Muslim Orient, the term Casbah is replaced by the word Qal'at. The latter is used to designate this type of military architecture only in the Muslim Occident, North Africa and the Iberian Peninsula (Elisseff, 2017). As for the etymology of the word casbah, many hypotheses have been put forward, but the most probable in our view is that it derives from the Latin word Castelium, which refers to Roman fortresses. It is also from this Latin word that we get the name Castle in English. The Casbah was the center of military and political power in the Islamic city, and also served as a last resort for the population when the city was attacked (Benyoucef, 2010). As a result, the casbah is not only a military building but also the center of local and regional political power. It is also important to distinguish between the casbah and the medina (the city), as from the end of the 19th century the term casbah was extended to encompass the entire Muslim city (Oulebsir, 2007). This analogy continues to the current day and leads to confusion because, as we have seen, the casbah is only one part of the medina and is often included within its interior boundaries.

The city of Annaba is located in the extreme north-east of Algeria, not far from the Tunisian frontier. It is both a terrestrial and a maritime frontier town between the northern and southern Mediterranean coastlines, a factor that resulted in the creation of one of the largest kasbahs in Algeria. In Annaba, the distinction between the medina and the casbah is easier to interpret, as the casbah of Annaba, which was built during the medieval period (Maitrot, 1912), is located outside the medina, as the configuration of the site and its topography forced the builders of the time to construct the casbah outside the medina. Nowadays, the architecture of the casbah of Annaba is exclusively contemporary, most of the buildings were constructed in the 19th and 20th century, so what was the initial configuration of the casbah in medieval and modern periods?

It is clear that the interior spaces have been transformed and rebuilt, according to the needs of successive occupants, and the continual evolution of siege techniques and military technology. Our aim in this paper is to reconstruct the initial composition of the casbah before the 19th century, to understand the architectural and morphological composition of the buildings, and their location and typology within the casbah. Also, to provide scientific and documentary support for future archaeological excavations and restoration work on this building, which has been classified as a national cultural monument since 1978 (Official Journal of the Algerian Republic, 1978).

2-Materials and methods

In this paper, we will explore our research through a historical and documentary approach, explaining the different phases in the development of the casbah and the main historical events relating to the history of the site. This will be based on a series of maps, existing plans and old illustrations, as well as on existing reports from the overseas archives in Aix-en-Provence and the military archives of Vincennes located twice in French. We will also use historical accounts to try and reconstruct the original composition and morphology of the casbah. The objective is to determine the precise location of the old military buildings inside the casbah by superimposing old maps of the casbah with the current situation and recording the GPS coordinates of each building, in order to facilitate the initiation of archaeological excavations and uncover the old structures.



Figure 1: Exterior and interior photography of the casbah. Source: Author, 2020

2-1- Presentation of the case study:

Annaba, a coastal city in northeastern Algeria (figure 1), surrounded by the mountains of Edough with a coastline of 8 km. More precisely, it is located at 36°54'00,00" of North latitude and 7°46', 00,00" of longitude East, at a minimum altitude of 03 meters (Bachtarzi, et al. 2023).

It's also the ancient city of Hippone and home to the famous bishop Saint Augustine, is one of Algeria's oldest cities, whose existence is attested to by classical historians from the 12th century BC (Marec, 1950). In fact, its strategic position, natural port and numerous natural resources made it a prime location for human settlement and the foundation of a rich and prosperous town (figure 2).



Figure 2: Geographical location of Annaba city. Source: Google maps

The town was inhabited continuously throughout its history, and its territory was strewn with fortifications and defensive installations that the various civilizations established to defend the land. The most important of these fortifications is the casbah of Annaba, a veritable command post whose position dominates the port, the town and its surroundings. Situated at an altitude of 109 m right in the city center of town on the Djebel Abed, it is 350 m from the medina, 48 m above it and covers an area of 1.3 hectares. This situation distinguishes it from the other Algerian casbahs that are directly included in the medina, such as those in Algiers, Constantine and Tlemcen (Figure 3).



Figure 3: Situation of the Casbah of Annaba. Source: Google Earth, modified by author, 2023

2-2- Literary and historical review:

Despite the importance of the casbah in the urban landscape of the city of Annaba and its historical and architectural value. We note that there is a lack of research and publication entirely dedicated to the Casbah of Annaba. Only a brief passage or description in a general book on the city of Annaba mentions it. The earliest possible writings come from the medieval period, notably from Ibn Khaldun in his book "History of the Berbers and Arabs in North Africa", published in the 14th century, which mentions the presence of the Kasr (palace) of the Hafsid governor of the town. However, he gives no other indication of the location and it is highly unlikely that this is the present-day Casbah, in which case he would have used the term Casbah rather than Kasr. The first to mention the Casbah of Annaba in any significant way was Admiral Piri Reys in his book "Kitab i Bahriyye", published in 1525. It is mentioned under the name of Bilad El Annab fortress. The Ottoman admiral use the word Qalat (Fortress) and not casbah according to the Muslim Middle Est uses. It is also important to note that during this period the casbah was a part of the medina's ramparts, as the map drawn up and published in his work mentioned above clearly shows (figure 4).

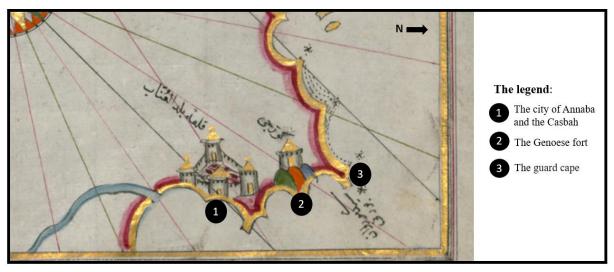


Figure 4: Annaba's casbah's location in relation to the city during the beginning of the 16th century. Source: Kitab i Bahriyye, Piri Reis in BnF (French national library, Paris)

This was followed a few years later by an even more explicit description, this time by the famous 16th century geographer Hassen El Wezan, also known as Leon the African of Medicis, who in his book "General Description of Africa", published in 1550, describes a casbah with robust, solid walls built by the Hafsid dynasty, established in Tunis. Following the occupation of the town by the Spanish between 1535 and 1540, Elie de la Primaudaie, in his book "unpublished document on the Spanish occupation of Algeria" published in 1875. Took up the correspondence between King Charles V and the commander of the town of Annaba, giving us the first detailed description of the Casbah during the Hafsid period in the 16th century. In the 17th century, following the Tuscan raid on the town in 1607, two works were published; "The royal embraces published in 1608" and, "Happy success and victory of the Christians and army of the great lord of Toscana gains the Turks." Published in October 1607. These two books giving us a detailed description of the casbah and a general map of the town, as well as a series of mural frescoes now installed in the Palacio Piti in Florence. In the 18th century, there were many plans and drawings of the Casbah and the city of Annaba, that we find at the national library of France in Paris, as well as many descriptions of the casbah, notably by Thomas Shaw and J.A Peyssonnel. However, the descriptions only mention the Casbah from the outside and briefly describe it. This is mainly due to the fact that they were unable to gain access to the inside of the casbah. From the 19th century onwards, accounts of the casbah became more frequent and more detailed. First of all, there were the military reports and the architectural surveys carried out by the military engineers, and then there were many authors such as René Bouyak in his "History of Bône, published in 1891", who took up the descriptions made by the Spanish in the 16th century. Maitrot in his book "Military Bône" published in 1912, goes into even more detail in this book and gives us the historical events linked to the casbah, in particular a very detailed analysis of the typographical panel at the entrance to the casbah. In the book entitled "Bône its history its stories", published in 1959 Luis Arnaud also mentions it briefly. It was also through these authors that the two date of the casbah's foundation in 1300 and 1535 was suggested, although none of them gave us a reference.

In the second part of the 20th century and after the Independence of the country, we have the writer Hssen Derdour in his book Annaba 25 centuries, 1982, which mentions it several times and attempts to retrace the history of the monument. Said Dahmani also mentions it in his book: "From Hippone-Buna to Annaba, the story of the founding of a metropolis" published in 2014, which gives a detailed account of its historical development, and provides a detailed analysis of the casbah, based on the descriptions and plans drawn up by the Tuscans in 1607.

2-3- Historical development:

As we have seen in the previous section, there is no exact date for the foundation of the casbah. Even though many authors and historians have put forward a date of 1300 (Maitrot, 1912), (Derdour, 1982), (Dahmani, 2014). This is at most a simple hypothesis, or an approximate deduction. Other authors have gone beyond the descriptions given by the various authors to attribute the construction to Charles V the king of Spain, notably for ideological reasons with a colonial focus (Bouyak, 1837), (Arnaud, 1959), (Budin, 2020). But as mentioned earlier, when the Spanish took the city in 1535, they had already found the casbah well built. Therefore, Charles V could not have been the builder and founder of the casbah.

The reports of the attack on Valencia and Majorca in 1399 are also a good source of information (Moll, 1996). The attack, which ended in failure, mentions the city's fortifications and emphasizes the solidity of its ramparts and fortifications. It also mentions the presence of a small fortress close to the town, which the attackers had to evacuate as a matter of urgency once they had conquered it. Still in the same report, the author gives us an important detail about this small fortress, which is situated to the south of the town, next to a large river, probably the Seybousse, but this configuration cannot be applied to the casbah because it is situated to the north of the town and far from any watercourse. Therefore, during all the 14th and 15th century, the many geographers and historians who visited the town made no mention of it, as did El Abdari, and El-Umari. This is probably because at this time the Casbah was still an integral part of the medina and enclosed within its interior limits. From the 16th century onwards, sources, both written and cartographic, became more explicit. The Ottoman admiral Peri Reis, in his book "Kitab Elbahria", tells us about the fortress of Bilad El Annab. Leon the African, in his book "Description of Africa", published in Venice at 1550, also mentions the fortress of the Casbah and gives us a crucial detail, which is the identity of the person who commissioned it. He reports that the kings of Tunis sultan of the Hafsid dynasty built the casbah. Except that the latter specifies neither the century or the date of construction of the casbah. The first detailed description of the casbah came a few years later, when the city was taken by the Spanish between 1535 and 1540. The first detailed description of the casbah and its interior configuration can be found in the correspondence and written reports between the Spanish king, Charles V, and the commander of the Spanish garrison in the casbah. A plan was even drawn up by the architect of the fortifications, Messer Benedicto de Ravena, but unfortunately this plan was lost. It is also important to qualify this description by the Spanish, as it comes just after the evacuation of the Ottomans from the casbah, who deliberately weakened the defences of the casbah in order to make them unusable by the Spanish. These records are important because they are the only available of the primitive casbah. After having been pushed out of the city and the casbah, the

Spanish, during their retreats, methodically set about demolishing the casbah and the city's fortifications (Elie de la Primaudaie, 1875). Once the city was fully reconquered by the Ottomans in 1543 (Julien C.A, 1994), they found both the city fortifications and the casbah completely demolished. They had to rebuild them from top to bottom. The work was completed between 1554 and 1556, as indicated by the marble plaque above the main entrance to the casbah.



Figure 5: The marble plaque at the entrance of the Casbah. Source: Author, 2023

A second Spanish expedition followed in 1575, but it failed and gave us no information about the casbah (Amara, 2018). It was not until the 17th century and the Tuscan attack of 1607 that we had a detailed description of the interior of the casbah as well as a general plan of the town and the casbah (the royal embraces, 1608). In 1624, a new French attack conducted by the Duke of Narbonne failed to take the kasbah (Amara, 2018). Throughout the 18th century, the casbah was mentioned by the various travelers who visited the town, such as Peyssonnel and Dr Shaw, although they did not give us a detailed description of the casbah, as they were probably unable to gain access to it from the inside. A tombstone discovered in 1911 mentions the martyred death of a certain Mohamed Ben Hacine, who was killed in 1766 while defending the casbah, probably during an attack on the town by European pirates ("Bulletin of the Academy of Hippone", 1913).

There is no detailed description of the casbah until the 19th century and the definitive occupation of the town and the casbah by the French in 1832. During this period, there were two main phases in the historical development of the casbah: the first was from 1832 to 1837, when the casbah retained its original configuration, and the second was from 1837 to 1962, when the casbah was completely remodeled following the explosion of the gunpowder magazine and transformed into a barracks for the army and, above all, an enormous penitentiary which served as a place of detention for the many resistance fighters during the war of national liberation. Today, the casbah retains most of its configuration inherited from the French period.

Table 1: The main historical events about the Casbah. Source: Author, 2023

Date	Event
13 th to 16 th century	Foundation of the casbah
1399	The Attack of the city by the city of Valence and Majorca
1535	Capture of the casbah by the Spanish
1540	Destruction of the casbah by the Spanish
1543	Final capture of the city by the Turks
1554-1556	Reconstruction of the casbah by the Turks
1575	Second Attack by the Spanish
1607	Tuscan attack
1624	French attack
1766	Attack by European pirates
1832	Capture of the casbah by the French
1837	Explosion of the gunpowder store
1843	Reconstruction of the casbah by the French

Results

If we are to proceed with the architectural restitution of the casbah of Annaba, we can distinguish three essential periods:

- -The medieval period, which includes the Hafsid and Spanish periods
- -The modern period which includes the Ottoman periods 1543 1832
- -The contemporary period which includes the French periods 1832 -1962

1- The medieval period:

For this period, we do not have any sources or historical information that would allow us to learn about the architectural aspect or the spatial configuration of the Casbah in detail. Only two pieces of correspondence written by the Spanish give us a fairly brief description of the Casbah, its composition and in particular, its interior layout (Elie de la Primaudaie, 1875). There were small barracks used as accommodation for the garrison, some of which were equipped with small cisterns, and cells for guarding prisoners and Christian captives, as well as for storing food and gunpowder. There were 50 cells. There was also a large cistern outside.

The description also refers to the casbah's ramparts, which were designed according to old medieval defense techniques and are hardly adapted to withstand new siege arms and modern artillery. Its maximum thickness is 3 feet (0.9 meter), and there is also mention of the advanced state of deterioration of the outside wall of the casbah, which is falling into ruin, as well as the impassable rampart walk. This state of affairs is probably due to the voluntary destruction carried out by the Ottomans before they evacuated the casbah, in order to make it impracticable for the Spanish.

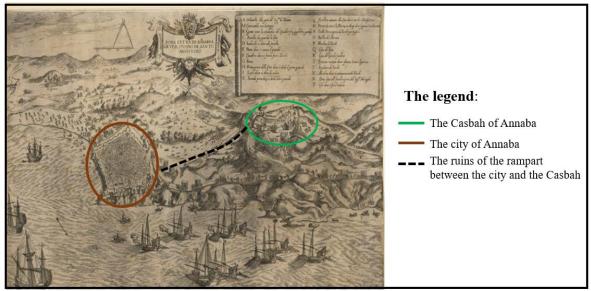


Figure 6: The ruins of the wall between the casbah and the city of Annaba during the modern period. Source: https://militarymaps.rct.uk/

In addition, a partially ruined wall extended from the casbah to the town, which confirms that the casbah was included within the limits of the town of Annaba (figure 6). From this description, it emerges that the casbah at the Hafsid period was essentially made up of barracks for soldiers and cells for prisoners, and that its function was essentially penitentiary, with the absence of the facilities that would later be found during the Ottoman presence, such as mosques and palaces. After 5 years of occupation and a long siege, the Spanish were forced to evacuate the casbah. It was following this military defeat that the Spanish began a methodical demolition of the casbah, both its military fortifications and the buildings inside the casbah. The aim was to deprive the city and its inhabitants of first-rate military equipment and, more importantly, to facilitate their return and future occupation of the city.

2-The modern Ottoman period:

After the city was conquered by the Ottomans, the casbah was a vast field of ruins. Both the buildings and the fortifications were completely demolished. It was during this period that the casbah was entirely rebuilt by Salah Rais Beylerbey of Algiers between 1554 and 1556. It was at this era that the casbah adopted its current morphology, as well as the interior composition that the French would take on board at the start of their occupation of the town three centuries later. It was also during this period that the casbah occupied the entire summit of Djabel Abed because, as we shall see later, during the Tuscan attack in 1607, the Tuscan attackers, who were familiar with the plans drawn up by Messer Benedicto in 1535, did not expect to find such a vast and well-armed fortification (the royal embraces, 1608). Among the achievements of the Ottomans were the reconstruction of the walls of the casbah using the modern techniques available at these times and adaptation of the fortifications to the new siege arms in order to make them resistant to modern artillery. As a result, the ramparts of the Casbah were encircled by walls 1,200 m long and around 3.89 m wide. The ramparts were equipped with well-built, earth worked towers, topped with machicolations projecting out from the ramparts. The distance between each tower

was 15 to 20 paces (10.8 m), and each was equipped with three to five pieces of cast-iron cannon (the royal embraces, 1608).

The ramparts of the casbah were pierced by a single gate, located on the south side overlooking the town. It was an overlapping gateway with a chicane entrance consisting of a vast S-shaped corridor narrowing at the end, due to the fact that there was a janissary post there with four small cannons (the royal embraces, 1608).

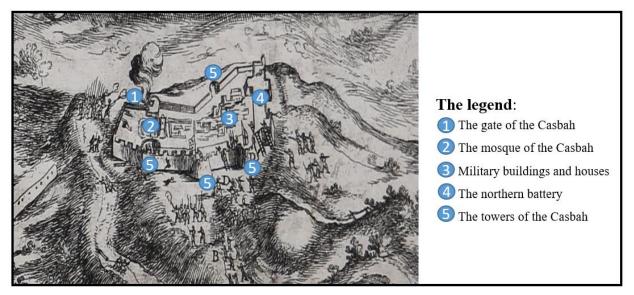


Figure 7: The casbah of Annaba during the ottoman period in 1607. Source: https://militarymaps.rct.uk/

Interior composition:

Following the plan drawn up by the Tuscans and the reports produced in 1607, we can trace the morphological evolution of the casbah and its interior composition. To make it easier to read the plan of the casbah during this period, it can be divided into three distinct parts:

- 1- The southern part: there was the gate of the casbah the only access on it, it was also the house of the Agha, the military commander and the mosque.
- 2- The central part: there was the main barracks and the war square as well as a small mosque.
- 3- The northern part: the soldiers' barracks and a few housings units.

The casbah was pierced by streets that linked the various buildings together, giving us an idea of the dense layout of the space. The casbah could accommodate a regular garrison of up to 350 people: 150 soldiers, 200 people made up of the soldiers' families and many prisoners (the royal embraces 1608).

This configuration was to remain largely unchanged throughout the 18th and 19th centuries, as evidenced by the plans drawn up by the French military engineers in 1830 (figure 8). In fact, the plans drawn up by the military engineers two centuries later are much more precise and detailed than those drawn up 2 centuries earlier by the Tuscans. The founding principles of the 17th

century casbah are still there. An important detail is the presence of a defensive retreat in the northern part of the kasbah, which includes two cannon batteries and the accommodation of the kasbah commander.

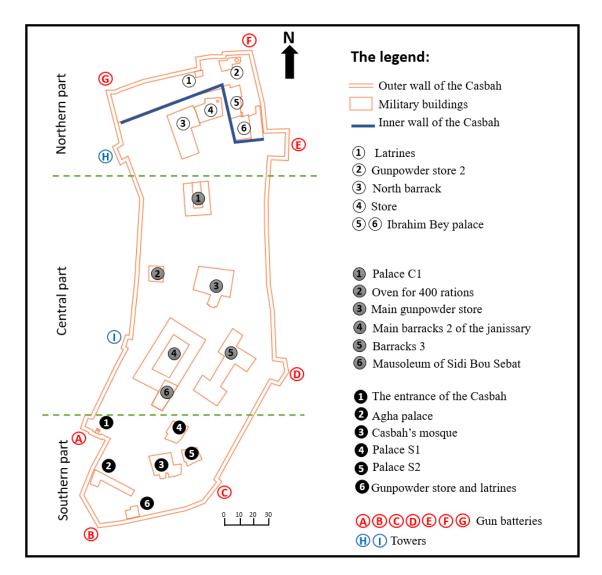


Figure 8: The interior composition of the casbah during the Ottoman period. Source: Vincennes Military Archive treated by author, 2023

3-The contemporary period:

After the French took the casbah and the town of Annaba in 1832. Their first work was to consolidate the entrance gate to the casbah, as well as maintaining and restoring the outer ramparts. Some of the interior buildings were also demolished to make way for wooden barracks to lodge the growing number of soldiers and prisoners. During this period, many projects for the construction of new military buildings were proposed by the French military engineers (figure 8), particularly on the northern front of the casbah, which was considered to be the most vulnerable part of the fortifications. In fact, it was through this part that the Tuscans had managed to take the

casbah's garrison by surprise two centuries earlier, in 1607. However, all these projects were adjourned and rejected either for lack of funds or because the casbah's existing fortifications were more than sufficient to contain the attacks of the resistance fighters and the local population.

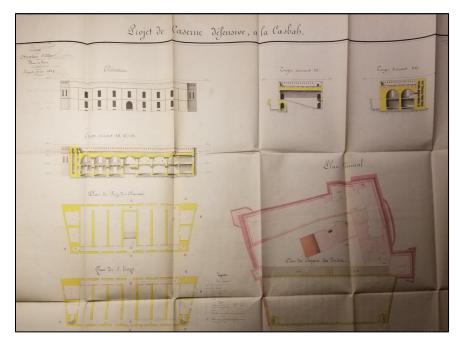


Figure 9: Proposed defensive barracks in 1834. Source: Vincennes Military Archive

As a result, the casbah generally retained its original configuration until 1837, when the explosion of the gunpowder magazine kick-started a vast architectural renovation program that was completed in 1843. (Vincennes Military Archive). The powder shop in question had a capacity of 30,000 kg of powder, and the funnel resulting from the explosion of the shop made a crater 26 m in diameter and 2.25 m deep. The debris was thrown more than 900 m from the casbah. This weakened and destroyed many of the buildings in the casbah, and also caused considerable damage to the casbah walls. It was from this date onwards that the transformation of the casbah into a prison and a military barracks center was established. It was subsequently converted into a penitentiary center for those sentenced to imprisonment in irons and thus became the first overseas penal colony outside mainland France (figure 10), where many republican political deportees and exiles stayed in 1848 (Émerit, 2018).

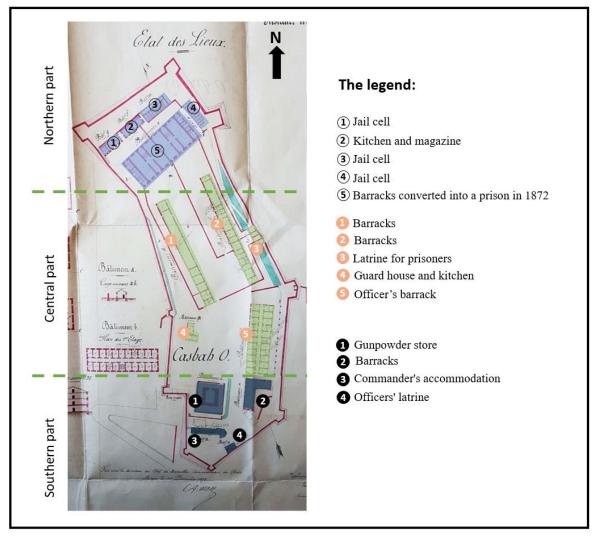


Figure 10: The state of the casbah in 1872. Source: Vincennes Military Archive treated by author, 2023

Discussions

The state of the Ottoman casbah in 1832:

It was during this period that we were going to reconstruct the state of the existing military buildings inside the casbah with the help of archive plans, and rediscover the actual state of the casbah and its interior composition before the explosion of the gunpowder store (figure 11). To do this, we were going to study all the architectural components of the Ottoman casbah.

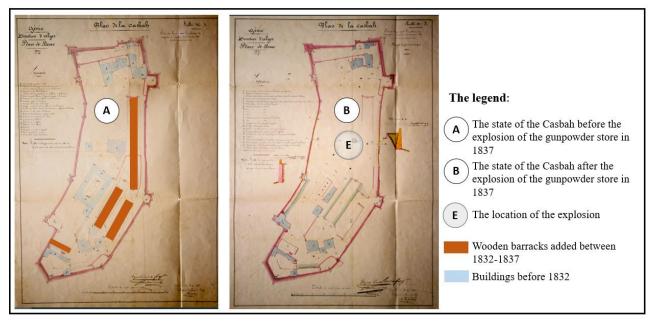


Figure 11: The state of the Casbah before and after the explosion in 1837. Source: Vincennes Military Archive treated by author, 2023

Composition of the Ottoman Casbah:

1-The enclosure:

The fort of the casbah contained 55 cannonballs, the longest dimension is approximately 300 m, it is irregular and in its general shape resembles a long square to which a very obtuse salient would have been added on the west side. The walls of the enclosure vary in height from 7 to 9 meters, and can be as high as 10 m. The casbah had its own defensive retreat located in the northern part, which was the highest part of the casbah and was separated from it by a very solid wall and an interior door. The measurements of the casbah enclosure, according to the 1830 plan, give for the east facade: 208.75m, for the north facade: 76.25m, for the west facade: 186.25m, the south facade gives the following measurements: the two west sides measure 30m and 18.75; the east side measures 55m; the entrance facade measures 15 meters. This gives it a perimeter of around 590 meters, with the surface area of the casbah covering around 13,263 square meters.

2-The gate:

After the explosion of 1837, the only gate in the southern part of the casbah was completely demolished and rebuilt during the French period. With the exception of the marble plaque that adorned the original doorway. This last was published in 1902 by G. Mercier and in 1912 by Captain Maitrot.

The original portal was much narrower than the current portal, measuring 2 m wide, whereas the current portal is 3.50 m wide. The current portal is a direct-access portal, whereas the original portal was an overlapping portal with a staggered entrance. Access was via a doorway with a semi-circular arch topped by a brace to ensure vertical flanking. On the terrace level was a

guardhouse topped by a dome crowning the wall, which was crenellated and fitted with a number of murder loopholes (Vincennes Military Archive).

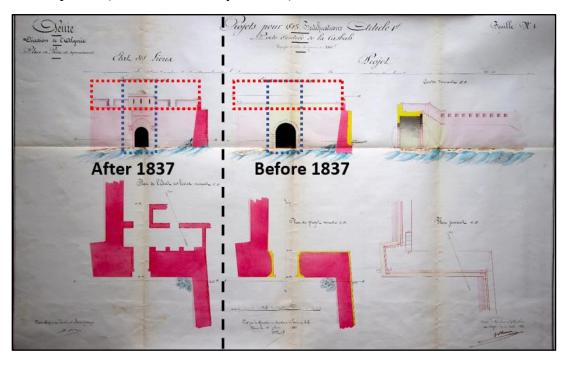


Figure 12: plan and elevation of the casbah before and after its reconstruction. Source: Vincennes Military Archive treated by author, 2023

3-The palaces:

There were 8 palaces on the casbah, the main and the older was in the southern part which was the home of the agha commanding the casbah, and the second was situated in the northern defensive area of the casbah, also known as The Ibrahim Bey Palace in reference to the late Ottoman bey of Annaba. This palace or divan could be considered to be the citadel's small area, as it was higher than the rest of the terreplein, and was separated from it by a very strong wall that could be well defended; it could only be accessed via a fairly long vault, closed off by a thick, crenellated door (Armandy, 1830). The other six palaces are smaller in size and were probably used by the senior officers of the casbah

4- The Casbah Mosque:

Located in the southern part of the casbah. The mosque served as a place of prayer for the casbah garrison, but the minaret also served as an observation tower and defensive dungeon, and it was here that the garrison took refuge until the ammunition ran out during the 1607 attack. The minaret was built on a square base, probably in accordance with North African custom, and the upper part of the minaret was destroyed in 1837 when the gunpowder shop exploded (Vincennes Military Archive).

5-Mausoleum of Sidi Bou Sebat:

Smaller than the casbah mosque. The mausoleum housed the burial place of the patron saint of the city, where Sidi Bou Sebat was buried. Located in the central part of the casbah, it is actually an addition that was made to the janissary barracks. (Ferraud, 1873)

6-The barracks:

There were three main barracks, the smallest was situated to the north and was equipped with a storage area for supplies. The other two were located in the central area, but the most important were the janissary barracks that was the main barracks, in the form of a large square with a patio in the center equipped with a cistern.

7-The gunpowder store:

The casbah was equipped with three gunpowder magazines, the first which was the largest it was situated in the middle of the casbah. It consisted of 2 enclosures measuring 10 m in length and 7.76 m in width, closed by a wall 1 m thick and covered by 3 rows of groin vaults, built of rubble stone and covered by Moorish-style terraces. This first enclosure was surrounded by a vaulted gallery 1.50 m wide and 2.25 m wide, including the right foot wall closing the magazine wall. The entrance to the gallery was preceded by a vestibule jutting out from the building. From the vestibule to the gallery, one descended 3 steps and climbed a wooden ramp approximately 1 m high to communicate from the gallery to the interior of the shop (Vincennes Military Archive). The other two gunpowder stores were much smaller, one to the north of the casbah and the other to the south.

8-The cisterns:

The pre-1837 plan shows 7 cisterns of different shapes and sizes. Later, in 1843, cisterns were built with a capacity of 1,900 m3 to supply a garrison of 571 soldiers; the capacity of the 7 existing cisterns is 730 m3 (Vincennes Military Archive).

In addition, there is an oven for cooking 400 rations of bread and biscuits in the central part, a shop for storing supplies in the northern part and several independent laterine in the northern and southern parts.

Table 2: The state of the buildings in the casbah after the explosion of the gunpowder store. Source: Vincennes Military Archive treated by author, 2023

N°	Building designation	Surface (m ²)	Conservation status	Capacity	Description of deterioration
01	Guardhouse	-	Demolished	-	_
02	Lodging for the concierge	-	Ruined	-	-
03	Djamaa el casbah Mosque	173.6	Degraded	It provided accommodation for 24 coastguard gunners.	The terraces were destroyed and the doors torn off by the explosion, part of the walls were knocked down and another cracked and what remains will have to be demolished.
04	Janissary barracks	977.23	Degraded	The barracks were occupied by 87 officers	Destruction of the northern part of the barracks
05	Sidi Bousabat mausoleum	118.16	Degraded	The small mosque 40 gunners coast guard	The vaults of the mosque cracked
06	-Barracks North -Barracks North -Storage area for supplies	153.56 330.6 377	-Demolished -Demolished -Degraded	Barracks north housed 55 soldiers And one commissioned officer	The buildings, like all those in the casbah, had only one RDC
07	Central gunpowder store	335	Demolished	-	-
08	-Agha palace south -Ibrahim palace north	112.65 143.30	-Degraded -Degraded	-	-

Table 3: The building locations in the Casbah. Source: Author, 2023

Localization	Localization Designation		Longitude
South part Agha Palace		36° 54'18.89 N	7° 45'55.33" E
	South gunpowder store	36° 54'17.63 N	7° 45'55.29" E
and latrine			
	The entrance	36° 54'17.79 N	7° 45'55.93" E
	Casbah Mosque	36° 54'18.54 N	7° 45'56.03" E
	S 1 Palace	36° 54'18.61N	7° 45'56.71" E

	S 2 Palace	36° 54'19.63 N	7° 45'56.65" E
Central part	Mausoleum	36° 54'19.65 N	7° 45'56.13" E
_	Main barracks	36° 54'20.57 N	7° 45'56.27" E
	Palace C1	36° 54'20.48 N	7° 45'57.64" E
	Oven	36° 54'21.52 N	7° 45'56.09" E
	Main gunpowder store	36° 54'21.44 N	7° 45'57.42" E
	Barracks	36° 54'20.07 N	7° 45'57.55"E
North part	North palace	36° 54'22.60 N	7° 45'56.84" E
_	Ibrahim palace	36° 54'24.55 N	7° 45'57.87" E
	North Barrack	36° 54'24.08 N	7° 45'57.06" E
	Gunpowder store	36° 54'24.98 N	7° 45'57.56" E
	Latrine	36° 54'24.96 N	7° 45'57.07" E

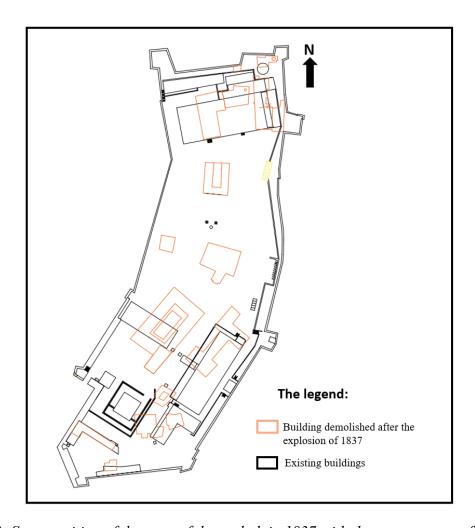


Figure 13: Superposition of the state of the casbah in 1837 with the current state of the casbah. Source: Vincennes Military Archive treated by author, 2023

Conclusion

This article discusses the historical and architectural aspects of the casbah, in particular through its historical development and the different phases of its morphological and typological evolution. The main point to emerge from this research is that, despite what has been reported by many authors, it is not possible to date the construction of the casbah with any degree of accuracy. As a result, the date of construction put forward in 1300 and that of 1535 are not based on historical sources. This is due in particular to the fact that during the medieval period the city limits were probably different from those of today and that during this period the casbah was included within the city limits. The distinction between the medina and the casbah was not made until after the city was taken by the Spanish and the many demolition operations carried out on the ramparts and neighbourhoods, between the medina and the casbah, in order to create a sort of no man's land around the casbah to ensure their security and facilitate the defence of the casbah. Only the discovery of new written sources dating from this period or the launch of archaeological excavations will enable us to accurately determine the date of construction of the casbah. To do this, we will simply follow the account given by Leon the African, who attributes the construction of the casbah to the Hafsid dynasty, meaning between the 13th and 16th centuries.

The historical analysis has enabled us to retrace the long and tumultuous history of the casbah, noting two significant events that contributed to the modification and morphological transformation of the casbah. The first took place in 1540 with the withdrawal of the Spanish troops, whose retreat destroyed the casbah and its fortifications from top to bottom, the second took place in 1837 with the explosion of the gunpowder magazine, which destroyed and weakened a large section of the casbah's buildings and kick-started a major program of demolition and reconstruction. As far as the medieval period is concerned, the lack of written sources and the absence of graphic sources do not allow us to reconstruct the state of the casbah during the medieval period. Only excavations and archaeological surveys will allow us to gain a better understanding of the casbah during this period. For the casbah of the modern period, both written and graphic sources are more numerous and more precise, notably due to the measurements carried out by the military engineers between 1830 and 1837. These give us a faithful and accurate reconstruction of the state of the casbah, its buildings and above all its interior layout. As a result, the study and analysis of plans and reports archived in the military archives at Vincennes and the overseas archives at Aix-en-Provence have enabled us to pinpoint the location of the buildings that disappeared in 1837, with their GPS coordinates (table 3) and (figure 13), and to determine their dimensions and surface areas, but above all to superimpose them on the current state of the casbah. It emerges that only one building in the southern part, the Agha palace; which served as accommodation for the casbah commander, seems to have survived to the present day, along with a few cisterns. All the other buildings have either been demolished or buried under new constructions. It is also clear that the occupation of the interior of the casbah was much denser during the Ottoman period than during the French period, with 18 buildings for military, religious, funeral, civil, storage, subsistence and sanitary purposes, whereas during the French period this number was reduced to 12 buildings for military and prison purposes only.

Nowadays, the casbah is still a monument that has not yet revealed all its secrets, and this is why the aim of this work is to make it easier to read and understand this monument, as well as to facilitate the opening of archaeological excavations, which are a prerequisite for any restoration and enhancement of this national cultural monument.

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