



## Study of Monumental Heritage Traditional Moroccan for a Valorization and Conservation of Collective Memory and for Socio-Eco- Tourism Sustainable Development-case *Kasbah Chellah*, Rabat

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**CHELLAH**

**Sala**

### I-Introduction:

Since immemorial time, and to ensure its survival, the man was trying to feed, to clothe and to shelter, seen these necessities he was forced to develop multi-practices and traditional technics for transport, cultural, fishing, hunting and housing while remaining in harmony with what gave him the nature.

In fact the technics, practices and modern inventions are only the continuation of what was once, and that's why he sees imperative to revive this heritage and treasure, or at least keep it against the effects of time that alienates, corrupts, distorts, damages, uses, transforms everything that they affect.

In the present work that pours in this direction, we will first *show the heritage value of the site* in question "*Kasbah Chella*" then we will highlight the different types of *damages* that occur on the site and finally we try to *show the importance of the conservation and rehabilitation* of the Kasbah.

### II-Location:

Chellah site or Kasbah the Chellah is an historical monument located in the city of Rabat, the capital of Morocco country that lies north of the African continent. Exactly in the province of Rabat-Sale-zemmour-zaer. It is located on the Bouregreg Valley which empties into the Atlantic Ocean, approximately 200 m from the Almohad ramparts, 2 km from the city center, and 4 km from the Atlantic coast.

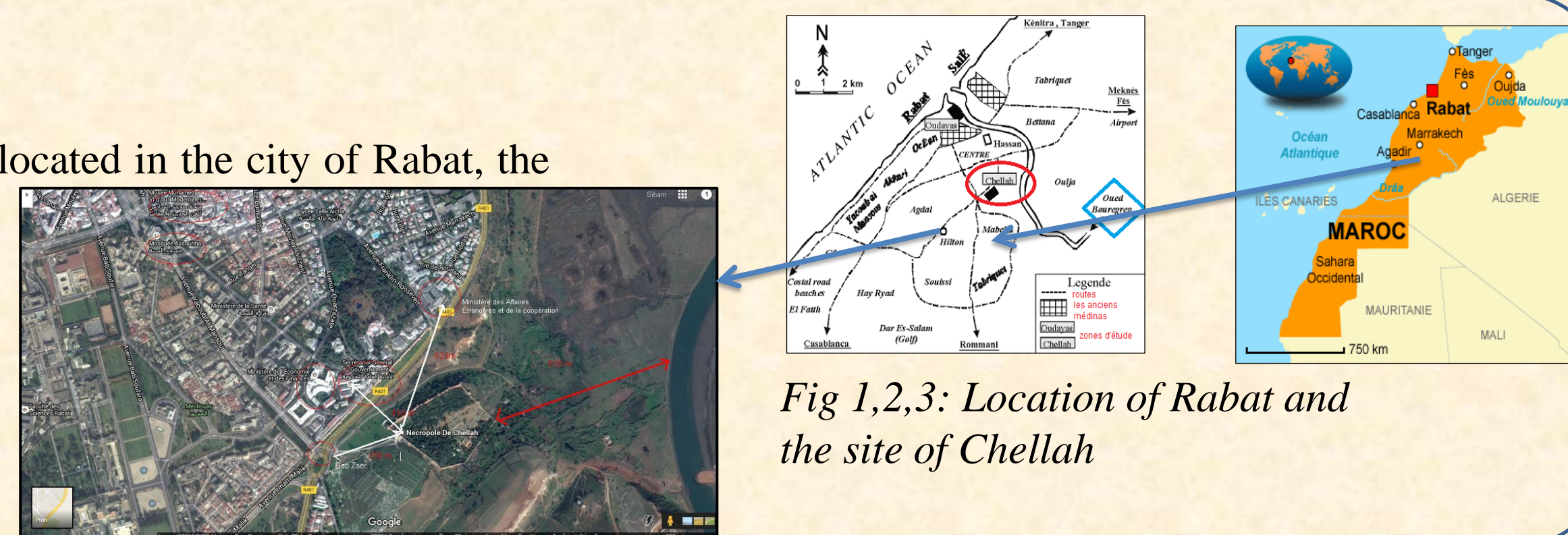


Fig 1,2,3: Location of Rabat and the site of Chellah

### III-Site's history :

#### 1-Sala:Origins in Roman municipality

Sala's historical origins dating back to VII-VI B.C. During the Phoenician era this site would likely have played the role of seaport on the Atlantic route between Lixus and Mogador. In the Mauritanian era sala appears as a Prosperous city and opened to the Mediterranean trade. Under the kings Juba II (25 BC 23 AD) and his son Ptolemy (AD 23-40), Chellah has many public buildings with a Hellenistic and Roman influence, Chellah as well acquires its autonomy and even issued money coins to his name. after the Roman annexation of Mauritania Tingitane in 40 AD, the city has undergone from the end of I.e. and the early second century a new development plan. While some Mauritanian buildings are preserved others disappeared and public buildings having an difference orientation from the previous ones were built as The official Capitol, Temple, forum or public square, the basilica, the curia, meeting room of the Senate of the city, the orthogonal Nymphée ... under Emperor Antoninus the city were surrounded by 144 of an enclosure mentioned in the inscription Marcus Sulpicius Felix. The city remained under Roman rule until the late fourth or early fifth century at least, while southern Tangitane was abandoned around 285 AD by the Roman army and administration. the importance of the city is due both at its location as active port on the Atlantic coast and its strategic role in relation to the rest of the province.

Indeed to protect the city from the incursions of the tribe of Autololes and elephants' attacks which are respectively on Pliny the Elder and the decree of surloicius Felix, a defensive system composed of a moat and a wall has been set up. It stretched from the Atlantic coast to the river Akrach and was connected to the watchtowers and at least two camps. One is located on the southwest of Chellah, the other Kheddis located in the Oulja of Salé.

#### 2-Chellah: Necropolis ribat of the Marinid dynasty

if one believes the descriptions given by Arab authors, the city seems to have been abandoned since antiquity. In the tenth century, Chellah became a vast Ribat where the faithful gather to fight against heretical tribe Barghouata. On thirteenth-fourteenth century, the city was reborn: Merinids raised on it a dynastic necropolis. Before being buried there, The sultan Abu Yusuf Yacoub (1258-1286) built there in 1284 a mosque and a funeral cupola, where was buried his wife Umm al-Izz. The Sultan Abu Al-Hassan (1331-1351) expanded the necropolis and protected it in 1339 by a large enclosure. His son Abou Inan (1348-1358) completed the plan by building a madrasa, a Hammam and a hotel and erected ornate cupolas on the graves of his ancestors. But when they decided to found the necropolis of al-Qulla in Fez, the Merinides condemned the Chellah. The site was abandoned and its "treasures" were looted in the early fifteenth century, leaving only memories of a multiple holiness millennium "in the margins" of the town of Ribat al Fath.



Fig4:keeled cuts in ceramic red Phoenician slip (VIIe-VIe s.B.C) Chellah



Fig 5: statue of the last king of Mauritania, Ptolemy, Juba's II son. Archaeological museum of Rabat



Fig6: Municipal Decree of 144 A.D dedicated to Marcus Sulpicius Felix. Archaeological museum of Rabat

### IV- Problematic :

Like any historical monument in Rabat and around the world, the archaeological site of Chellah known chemical and physical degradation caused to natural known agents: rainwater, runoff, temperature, humidity, ground movement, bacteria and air pollution. To remedy these degradations several actions were taken by the authorities concerned, but these actions were traditional, superficial and temporary and therefore they don't bring remedy to such degradations. So first we will try to record the various problems that knows the site following a multidisciplinary approach in order to reach a better sustainable recovery solution

### IV- Description:

#### 1-The different monuments of Chellah's site :

##### a- the antique site:

Its boundaries remain uncertain, we have identified an area of 4 hectares from 23 hectares. the main public monuments of the antique district are:

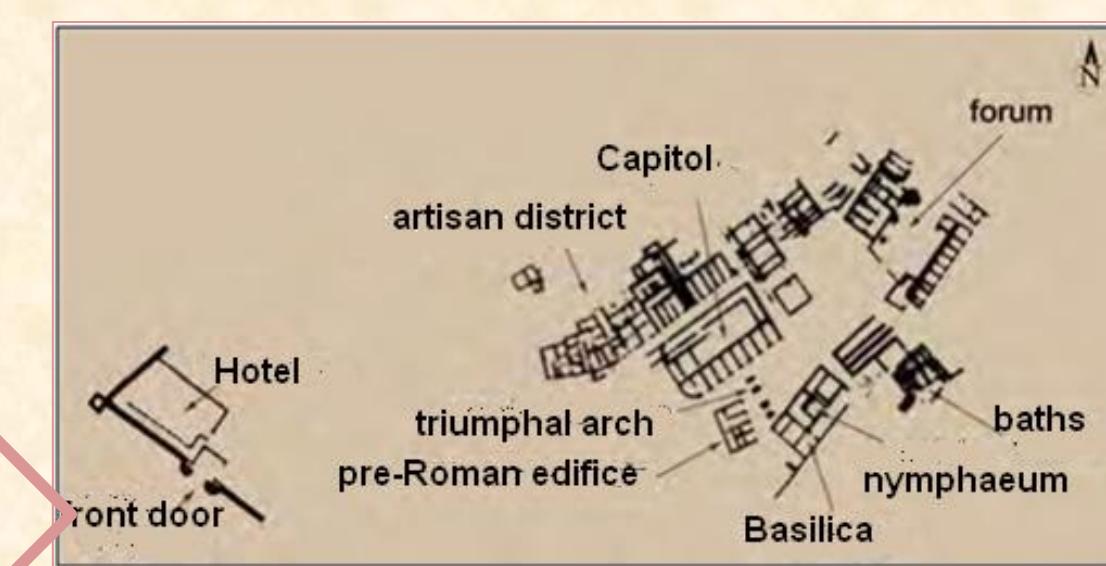


Fig8:monumental district of the Roman city



Fig 9: The Capitol seen from the west

Fig10 : Le capitol vu du sud

##### i-The Capitol:

In the northwest of the monumental area rises Capitol official temple of the Capitoline Triad: Jupiter, Juno and Minerva. Released between 1961 and 1969, the building is built on two terraces,superimposed above the area of the triumphal arch; it fits on a long rectangle of 46 m wide and 26 m, an area of 1196 m2 it rank among the temples of the great Roman cities.

##### ii- The forum:

Decumanus maximus is closed at its eastern end by the forum are placed the basics of honorific inscriptions dedicated to emperors and great magistrates of the city. Trapezoidal, it is covered with large slabs blue limestone preserved to 20.60 m the podium. built upon the work done during the reign of Emperor Trajan, the public square was closed by two monumental gates, which still remain powerful foundations. On the lower level, six shops, served by a secondary route, supported the upper floor. This limited in the west by a portico extends to 2m below the Mauretanien temple, where were discovered the royal statues, and which was reached by two side stairs (Boube 1966: 28).

##### iii- Basilica :

The basilica is based on pre-Roman monuments of different orientation, and above the nymphaeum, with a beautiful architecture. Preserved facade is decorated with engaged columns in gray limestone.

##### b- Merinid's site:

The necropolis Marinids is built on the ruins of the ancient city of Sala in the late thirteenth century. It was fortified by two enclosures. Inside, three distinct but complementary complexes testify to the richness and greatness of the Merinid building art : the pentagonal enclosure, steam room and khalwa, a term used by residents for saying dynastic necropolis.

##### 2)-The funeral complex or Khalwa:

The Khalwa occupies the lower part of the site. A large rectangular enclosure of 54m and 35m deep and pierced with two doors, one on the southwest side and one on the northwest side, a circumscribed funeral complex consists of an oratory, funeral and cupolas a madrasa.



Fig 14: Front door's Chellah

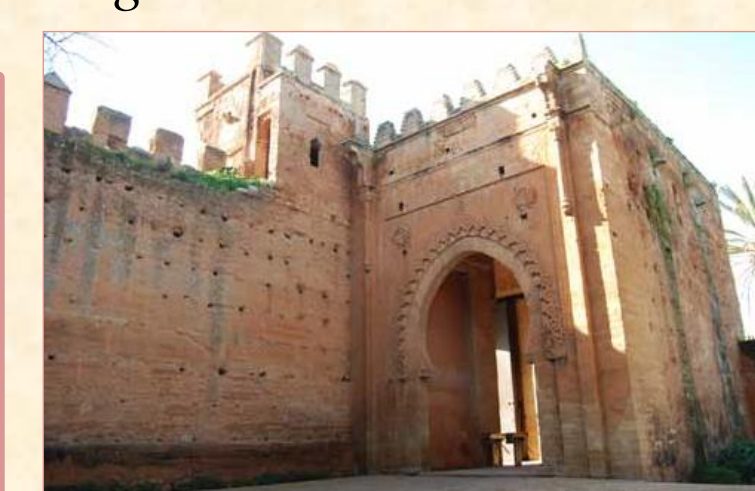


Fig 16: the large door inner facade



Fig 18:Khalwa design



Fig 19,20:Abou al-Hassan's cupola

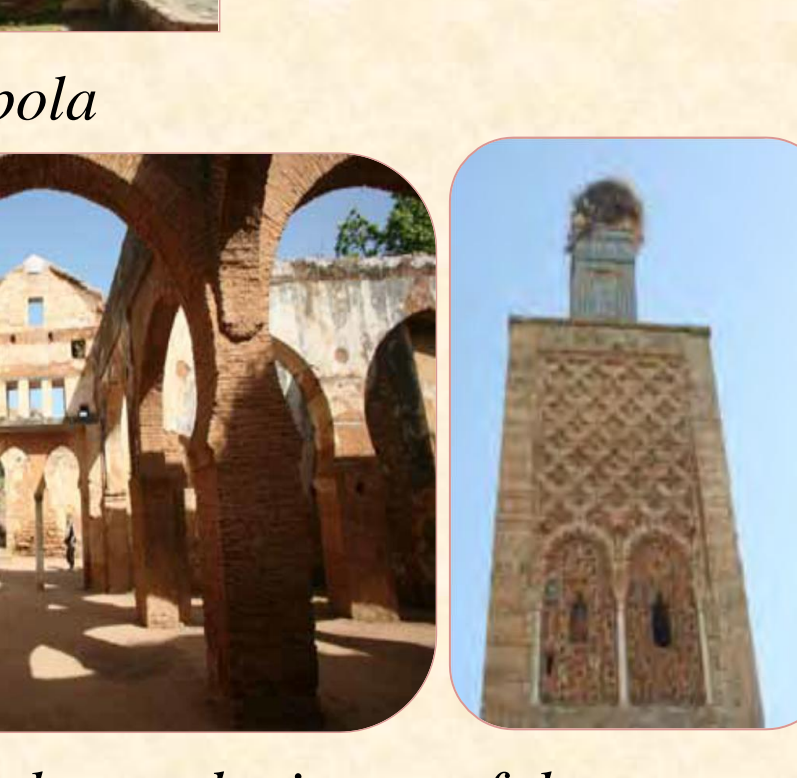


Fig21,22: arches and minaret of the mosque



Fig 21:Funeral air

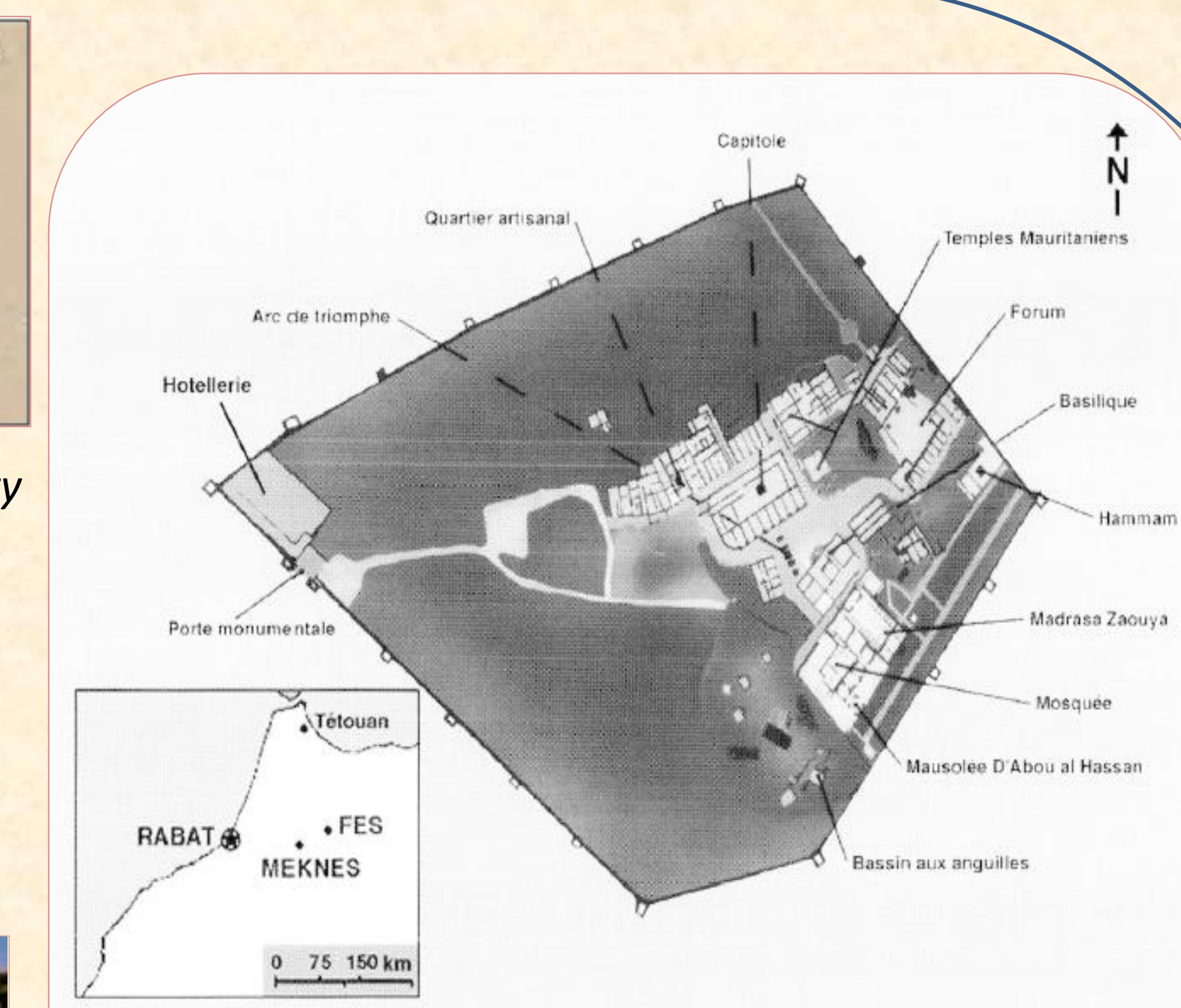


Fig7: inventory of the various historic buildings in Chellah

##### iiii-The Nymphaeum:

It is an octagonal building with niches that were probably harboring statues of nymphs. The building, cutting a primitive castle is actually another water tower fed by an aqueduct. It is, next to another water tank adjacent to the west side and fountains bordering the South side, a true hydraulic complex.



Fig 13: The nymphaeum or shrine dating from the early decades of the second century. (Boube, the Chellah: The source nymphaeum or shrine dating from the early decades of the second century (Boube, cemeteries, p 17) necropolis, p. 17...).

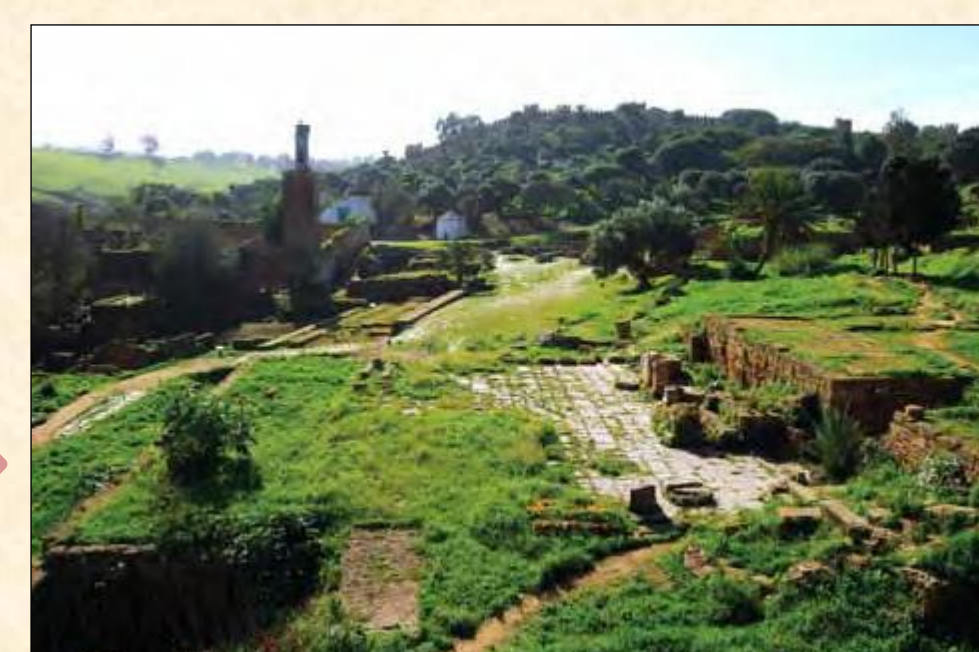


Fig 11:The east view of the Forum



Fig12: Basilica facade

##### 1)-The enclosure pentagonal: :

A primitive core of the necropolis was founded in **685 H / 1285** by Sultan Marinid Abu Youssef Ya'aqoub (**1258-1286**). Sultan Abou El Hassan (**1331-1351**) expanded the necropolis and surrounds in **739 H / 1339** of a second enclosure. Pentagonal, this enclosure, walled oblong towers, follows the topography of the site. It circumscribes an area of **7 hectares** and surrounds the primary core. The wall built of adobe is high 6 to 7m and 1.60m thick. Above, a short walkway that protects parapet **merlons** pyramid of **0.65m**. **Quadrangular towers**, wide and **5m** deep of **3.50 m to 3.90** in reinforcing the curtain and give it a military look that recalls the contemporary fortifications of Taza or Mansuriyya of Tlemcen (Algeria).



Figure 15: View of the wall of Chellah

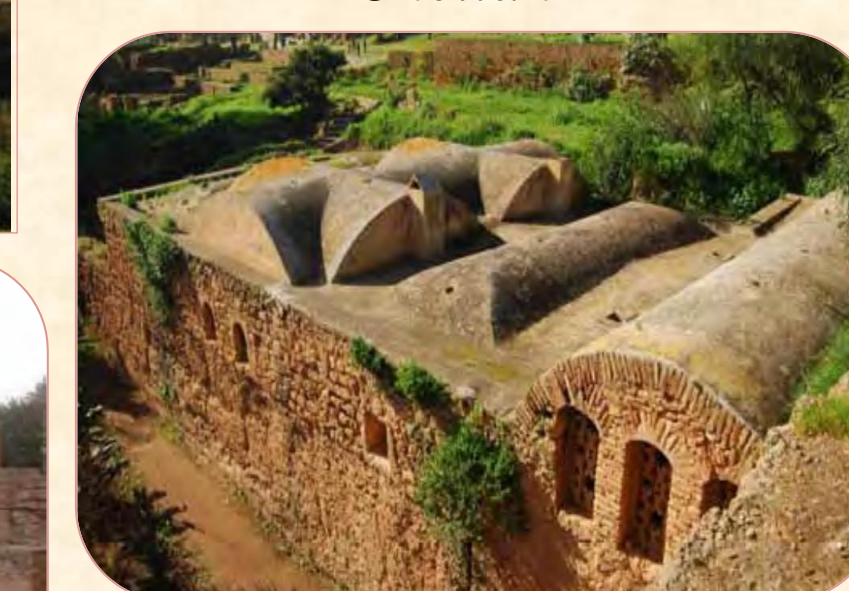


Fig 23: Hammam



Fig23:Medrasa

Fig24: Basin of eels

### V- effects and causes of deterioration :

Despite its universal heritage value, the site of Chellah known physical and chemical significant degradation due to both natural and human causes.

#### -The Climate causes:

The sub-humid climate of the city of Rabat, characterized by an average rainfall of 550 mm / year and high humidity rich ocean salts, is the first physical degradation factor of the monument via the hydrolysis of construction materials and by following the decrease of their internal cohesion.

#### -The dynamic causes:

These are due to ground motion seismic activity, landslides, vibration and movement of machines and also to the infrastructure development neglecting instability of Chellah monument reveals cracks on the facades and incurred to falling blocks and parts of the monument Chellah.

#### -The Biological causes:

These are due to the development of lichens that release oxalic acid in turn causes physical and chemical damage on the northern facade of the monument. And the presence of plants and nearby storks increases the mechanical degradation, chemical and aesthetic of the archaeological site.

#### -The Human causes:

- \* Air pollution and especially of oil is responsible for the appearance of a black crust on the facades of the monument.
- \* Watering lawns walls is responsible for the capillary rise of water that affect the cohesion of the site construction materials.
- \* The existence of structures in the vicinity with the inadequate sewage system
- \* Use cement to seal cracks appearing in parts of the monument Chellah.



Fig25:Physical degradation



Fig 26:cracks and falling blocks



Fig 27:wasp effect



Fig 28:storks effect

### VI- Local development :

The Chellah site is a common destination for local and foreign tourists from all social classes and all ages and gender. It can help improve the city as it will enhance:

- the cultural tourism embodied by a rich architectural and archaeological heritage and varied
  - Beach tourism illustrated by the presence of beaches in and near the metropolis.
  - The business and congress tourism, incurred to the position of capital of Rabat.
- Thereby leading us to certify that the main cause degradation of inherited wealth lies in its use and not in action outside the normal course of the story .

### VI- Conclusion

The historic monument Chellah with its value heritage is experiencing intense and continuous deterioration in the time. To remedy the loss of this collective treasure more studies have been done and several actions and decisions have been taken, but since these interventions remained superficial, the monument could not resist the various players degradation and aggression that were mentioned previously.

**In this atmosphere of resistance to oblivion Chellah, present of a universal past claiming to have suffered the effects of time in silence.**