

## Public Hammams In Algeria During The Ottoman Period

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### Abstract:

The current study includes three main chapters. The first one tackles an inventory of baths in the most important Algerian cities during Ottoman period referring to historical sources and modern studies, either the destroyed ones or those which are still exist nowadays. Besides, the second chapter treats the archaeological study by providing an archaeological description of some samples referring to the historical background and geographical location of each bath. Moreover, the third chapter is devoted to the analytical study of plans and architectural elements of baths which have been studied as a sample and others, through presenting the various planning styles, features and architectural characteristics of Algerian baths during the Ottoman period.

**keywords:** Hammam, the Ottoman period, Algerian cities, Franks, bathing Hammam

### Introduction:

The Hammams are among the most important facilities in the Islamic city that got the rulers and citizens' interest. In this regard, they were built for their necessary role and the Islam's call for hygiene. Besides, they were a source of big revenues for their owners because many people used them. Thus, the states established them and made sure of the water provision and the sewage system. In addition, they had specific urban locations, such as near the commercial centers, the mosques, or the neighborhoods.

The importance of this study lies within inventorying the main Hammams in Algeria during the Ottoman era.

Besides, it studies some models to show the main architectural characteristics. Based on what was said, our problematic revolves around the spread of, planning, and architectural divisions of the Hammams in Algeria during the Ottoman Age?

To cover this problematic, we used the historical method for focusing on the historical studies that inventoried the Hammams in the main Algerian cities. Moreover, we relied on the descriptive method to make a field study and describe the architecture of some Hammams.

In so doing, the study aims at providing a primary inventory about the main Hammams mentioned in the historical sources and showing their architectural pattern compared to the other Hammams in other cities.

### **1. The historical study:**

Algeria still holds many Hammams that date back to the Medieval Age, such as the Hammam of the Rustamid Tahart (144-296 H/ 761-909 AD) (Dahdouh, 2007, pp. 625-626), the Hammam of Qalaat Bani Hammd (398-547 H/ 1008-1152 AD) (Moussaoui, 1991, pp. 80-81; Beylie, 1965, p. 62), the Hammams of the Zayyanid Telemcen (633-949 H/ 1236/1543 AD), the Hammams of the Marinid Telemcen (656-869 H/ 1257-1465 AD) such as the Hammam of Aghadir (Moussaoui, 1991, p. 96), the Hammam next to the Mosque of Sidi Senouci, the Hammam of Darb Bab Zayr, the Hammam of Sidi al Jaber (Laaredj, 2007, p. 46), the Hammam of Sidi Boumedien (Laaredj, 1999, pp. 451-456; Moussaoui, 1991, pp. 89-96), the Hammam of al Alia, Sabbaghine, and al Tbol (Ben Mostefa, 2007, p. 160).

As for the Ottoman Age (920-1245 H/ 1514-1830 AD), the construction of Hammams in Algeria went on. It is the period that shows various examples in different cities like Algiers, Constantine, Blida, Annaba, Telemcen, Medea, Mascara, Oran, Mostaghanem, etc. Some of these examples are still standing so far while others vanished. Besides, the historical books and archeological researches about this topic are scarce and it is not easy to make an exact inventory at the national level. However, we can present what we could cover with the examination of the literature that focused on Algiers, Constantine, and Blida.

As for Algiers, Mr. Nacer Eddine Saaïdouni states that the number of Hammams was 74 (Saaïdouni, 2008, p. 381; Chalier, n.d., p. 111). On the other hand, Spencer points to the

existence of about 60 Hammams in the era of Heidou (Spencer, 2006, p. 114). Moreover, in his memoranda, William Chaler, referred to the Hammams in Algiers without mentioning their number (Chaler, n.d., p. 99). Furthermore, the study of Defolx is one of the main references about the Hammams in Algeria because it mentioned 30 Hammams with details, as follows:

- Hammam Bab el Oued: it is on the left of the city entrance. Documents show that it was reconstructed by Mostefa Ben Ilyes, the leader of Bona and was deconstructed in 1097 H/ 1685-1686 AD (Ben Hammouche, 2007, pp. 126-127).

- Hammam Baharat al Jenan near Bab el Oued next to the bakery of Qobtan Mohamed Chelbi in the Dark Street (Zenkata al Dalam): it was mentioned in a document that dates back to 1068H/1657-1658 AD. It was founded by Sliman al Rais Ben Sayed, known as El Chouihed. It was meant to be a Wakf. Then, it was destroyed in 1830 (Ben Hammouche, 2007, p. 130).

- Hammam Yatou: it was situated in De Marci street next to Ali Betchine mosque and was, then, destroyed (Ben Hammouche, 2007, pp. 128-137).

- Hammam Seck: It was destroyed and substituted with toilets. Then, they were substituted with the warehouse of El Beylek. Its location was neighboring an unknown castle (Ben Hammouche, 2007, p. 127).

- Hammam Sidi Ramadan: it was situated in Sidi Ramadan Street (Ben Hammouche, 2007, p. 132).

- Hammam al Hemir: it was situated in Hider Street and was almost destroyed in 1830. Then, it was restored during the French era (Ben Hammouche, 2007, p. 137).

- Hammam al Qasbah al Jedida: it was in al Qasbah Street (Ben Hammouche, 2007, p. 137).

- Hammam al Jenina (Saaidouni, 2008, p. 381) or Hammam Khadr Bacha. It was in al Jenina Street. It was mentioned by Heidou that it was built by al Bacha the son of al Bacha Barbarous (Ben Hammouche, 2007, p. 139).

- Hammam Sidna: it dates back to the 10<sup>th</sup> H/ 16<sup>th</sup> AD century. It was also known as Bab al Souk or Hammam al Dey. It was restored by Hassan Bacha in 1206 H/ 1791 AD (Ben Hammouche, 2007, p. 139; Moussaoui, 1991, p. 13).

- Hammam Ali Betchine: it was built by Chelbi the son of Ali Betchine and kept its name until 1164 H (1750-1751 AD). Then, in the last third of the 12<sup>th</sup> H century, its name changed to Hammam Ben Jawer Ali (Ben Hammouche, 2007, pp. 145-146).
- Hammam of El Gaid Moussa: it kept its name until the 11<sup>th</sup> century (Ben Hammouche, 2007, p 150).
- Hammam al Haj Ali Jeklah or al Qasbah: it was next to the new Qasbah walls. Then, it was destroyed in 1830 AD (Ben Hammouche, 2007, p. 153)
- Hammam al Azaar: it was in the top of Ain Chah Houcine in the region of Harat al Kilaa (Ben Hammouche, 2007, pp. 165-166).
- Hammams of Ben Achir: one of them disappeared in 1085 H (1664-1665 AD). Besides, the name Ben Achir disappeared since the 12<sup>th</sup> Hijri century. The name of the two Hammams remained related to the Houma until the coming of the French colonizer, when one of them got the name of al Azzar. However, it was destroyed in the beginning of the 13<sup>th</sup>/19 AD century (Ben Hammouche, 2007, p. 166).
- Hammam Sidi Mohamed el Cherif (Ben Hammouche, 2007, p. 127): it was mentioned by Saaïdoui as Hammam Sidi Boukaddour, next to Mohamed el Cherif (Saaïdouni, 2008, p. 381).
- Hammam al Sbouaa or al Osoud (Saaïdouni, 2008, p. 381): it was situated in Sekka Mesdouda near the Street of al Khaddarine (Ben Hammouche, 2007, pp. 168-169).
- Hammam al Kaa or al Orsa (Ben Hammouche, 2007, p. 169).
- Hammam Fouita or al Maabadi: it was located in the Street of Douichen (Ben Hammouche, 2007, p. 171).
- Hammam Abd Bacha (Ben Hammouche, 2007, p. 381).
- Hammam Tagtag or Qaa al Sour (11<sup>th</sup> H/ 17<sup>th</sup> AD century): it was situated in the region of al Saffarine towards Bab Azzoune (Ben Hammouche, 2007, p. 184).
- Hammam Ketchaoua: it was located in the upper side of Ketchaoua Mosque (Ben Hammouche, 2007, p. 195).
- Hammam al Khaddarine: it was near the fig office and al Qsar. It was owned by Hassan a Bacha who transformed it later into a school and a mosque (Ben Hammouche, 2007, p. 195).

- Hammam Serkaji (Ben Hammouche, 2007, p. 197).
- Hammam al Kibach or al Qoroun: it was in La Coronne Street (Ben Hammouche, 2007, p. 198).
- Hammam Kouchat al Nsara: it was in Mahoune Street. It dates back to 1089 H (1678-1679 AD) (Ben Hammouche, 2007, p. 127).
- Hammam al Saghir (Saaidouni, 2008, p. 381): it was in La Marine Street and dates back to 926 H (1519-1520 AD). It was called also Hammam Hakoura and Hammam Sidi Abd Al Rahman al Thaalibi (Ben Hammouche, 2007, p. 215).
- Hammam Bab al Jazira: It was in the Street of De Rompar (Saaidouni, 2008, p. 381).
- Hammam al Maleh: it was in the intersection point between Doria and Jean Parte Streets. It was mentioned in a contract in 993 H/ 1589 AD, and another contract in 1031 H (1621-1622 AD) (Ben Hammouche, 2007, pp. 224-225).

Among the Hammams that are still standing and studied now, we find Hammam Sidna in the Street of Ahmed and Mohamed Mechri, Hammam Sidi Boukaddour (12<sup>th</sup> H/ 18<sup>th</sup> AD century) near the mosque of Sidi Mohamed al Cherif, Hammam al Jaich in al Qalaa, Hammam Bab al Jdid, Hammam Sidi Abdel Kader in the Straight of Sidi Abdellah, Hammam Sidi Abd al Rahman in La Marine and al Mithak Streets, Hammam Serkaji, and Hammam Fouita (Ben Hammouche, 2007; Moussaoui, 2007, p. 112).

In addition, Constantine included many Hammams despite the difficulty of water transportation from the valley that is down the city (Ibn al Mubark, 1952, p. 09; al Wazen, 2005, p. 59; Marmoul, 1989, pp. 11-13; al Fekoun, 1987, p. 177; al Wertilani, 1394/1974, p. 686). In this context, the documents show 14 Hammams in Constantine, as follows:

- Hammam Ben Naamane: it was in al Sayda Hafsa and was mentioned in the book of Constantine Waqfs (Dahdouh, 2015, p. 49) and Mercier list (Mercier, 1878, pp. 72-73).
- Hammam Dakouj: it was in the Street of Mellah Slimane in Tatache Belkacem neighborhood, known as "Al Charia". It was mentioned in the book of Constantine Waqfs (Dahdouh, 2015, p. 49) and Mercier list (Mercier, 1878, pp.).

- Hammam al Hawa (the Archives of the Wilaya of Constantine, p. 30): it was below Dar Qellal. It was mentioned in the book of Constantine Waqfs (Dahdouh, 2015, p. 49) and Mercier list (Mercier, 1878, pp. 72-73). It has other names such as Hammam Thlatha Sordi, Hammam al Chat, and Hammam al Drouj.
- Hammam al Soltan: it was near the house of Saleh Bey. It was mentioned in the book of Constantine Waqfs (Dahdouh, 2015, p. 49) and Mercier list (Mercier, 1878, p. 77; the archives of the Wilaya of Constantine, p. 36).
- Hammam al Seghir: it was near al Jamaa al Kebir. It was mentioned in the book of Constantine Waqfs (Dahdouh, 2015, p. 49) and Mercier list (Mercier, 1878, pp. 72-73).
- Hammam Beb al Oued or Mesjed al Beb: it was next to Zawyat Ben Mennad near Beb al Oued (Dahdouh, 2015, pp. 49-340).
- Hammam al Jedid (Dahdouh, 2015, p. 49)
- Hammam al Hatachine (Dahdouh, 2015, p. 49).
- Hammam Houmet Akwas Ben Nejda (the records of the legitimate court of Constantine, pp. 182-186).
- Hammam Souk al Ghazl: It was near the mosque of Soul al Ghazl and was mentioned in the list of Mercier (Mercier, 1878, pp. 72-73), the records of the legitimate court (the records of the legitimate court of Constantine, p. 384), and the deaths record (the archives of the Wilaya of Constantine, p. 44).
- Hammam Abi Baaya (Mercier, 1878, pp. 72-73)
- Hammam Kaa al Attarine: it was in Souk al Attarine (Mercier, 1878, pp. 72-73)
- Hammam Ben Cherif: it was below Rahbat al Jimel. It was later known as Hammam Ben Toubal (Mercier, 1878, pp. 72-73)
- Hammam Ben Jelloul: it was in ex Tabya district, Guitoni district now (Mercier, 1878, pp. 72-73).

In addition to this list, we add Hammam Ben al Bejaoui that is in Sidi Bouannaba. It is still standing and maintains its ancient architecture.

As for the city of Blida, studies show 14 Hammams (Ben Chama, 2008-2009, p. 215; Hadri, 2009, pp. 60-61). They are:

- Hammam Zehar Aissa in Etienne Dene Street.
- Hammam Denane Mohamed in Blondo Street.
- Hammam Laaouadj Abd al Karim in Le Moine Street.
- Hammam Laaouadj Abd al Karim in Jenmet Street.
- Hammam Vielle Mekki; it is believed to be the same as Hammam al Barak in Qaid Daira Street.
- Hammam Makhbat Jelloul in al Arayche Street.
- Hammam Rabeh al Jiar, or Hammam al Muslimine.
- Hammam Sidi Abdellah.
- Hammam Boualam Bach Agha.

In addition, the city of Mascara witnessed many Hammams. However, very few are known, namely Hammam al Bali or al Baraka, Hammam al Qorchali, Hammam al Bey, and Hammam al Adham (Qarman, 2015, pp. 211-215). Moreover, the city of Mostaghanem has Hammam al Mour that maintains its artistic and architectural touch since the Ottoman Era (Beljouzi, 2005, 2006, p. 206). In addition, the city of Cherchel still includes many Hammams, such as Hammam Sidi Younes, Hammam Sidi Mohamed al Cherif, and Hammam al Bali (Boutaba, 2008, Saliha, 2017-2018, p. 118). Furthermore, we find other Hammams in Annaba, such as Hammam al Gaid, al Baraka, Chekliba, Ben Salem, al Saha, and al Ayouné (Rezki, 2016/2017, p. 115).

## **2-The descriptive study:**

### **- Hammam Fouita in Algiers:**

It is situated in the Street of Ladjal Mostafa in the lower Qasbah near the Garrison of Yeki Eski and the mosque of Ketchaoua in Algiers. It is also known as Hammam al Maabadi (Ben Hammouche, 2007, p. 171). Its construction dates back to the mid-17<sup>th</sup> century (Cherif, 2009, p. 164). Then, it underwent many restorations and renovations in the following periods. However, it still maintains its original plan (Plan 01). Its surface is square and has a broken door in the Western side that opens to a rectangle shed equipped with a bench all along the right and left walls. Together, they shape arcades based on dual pillars and make 03 seats in each side. In the middle of the side that faces the entrance, there is a door that opens to a broken passage that leads to the reception room (al Mahras). It is a big

rectangular room made up of a corridor from 04 sides based on 14 ceramic pillars. In the top, we find broken rib vaults followed by a roof. The room is equipped with a high stage on the three sides of the corridor and a mezzanine for the customer's relaxation. Beside, some rooms open on this mezzanine. The Southern side of the room has a ladder to go to the mezzanine with a long passage on the right side that leads to 04 toilets and a basin for the cold water in the end. In addition, there is a door at the left side in the end of the passage that leads to a small room without seats or basin covered with a crossed vault. From there, we get into the hot room that has a square shape covered with a circular dome based on flat corners on the walls without pillars. On the right of the person who gets in, there are two small rooms for the brides "Beit al Aroussa" that have a barrel vault in the top. In the Western Eastern side of the room, there is a hole attached to a hot basin with a pot in the middle and a water tank in the right. In the Northern side, we find al Fernak entrance that opens on the side corridor of the Hammam. It is in the middle of the shed and the hot room. Stairs must be used to reach it.

#### **- Hammam el Bey in Oran:**

It is 20m far from the mosque of Mohamed Ben Othman in Sidi el Houari district. It is attributed to the Bey Mostafa Ben Youcef al Mesrati, known as Bouchelaghem (1119-1145H/ 1708-1732 AD) based on a writing in two tables that indicates that it was built between 1123-1145 H/ 1712-1732 AD (Plan 02). It has an irregular rectangular shape (plan 03). To get to the Hammam, you must pass by the main entrance (currently closed) that is in the Eastern Southern side. It opens on a rectangular shed with two stone seats. The shed is made with a barrel vault. From there, we go to the cold room from a door in the Northern side. It is a quasi-square room with a square hall (6.30m<sup>2</sup>) surrounded by a corridor from 03 sides. It is made up of cylindrical stone, half-circled rib vaults in the top, and a ceiling of a polygonal dome surrounded by intersected and barrel vault.

We get to the warm room from the door of the cold room. It is a small rectangular room covered with a barrel vault. From there, we reach the hot room that is a square room with a hall in the middle surrounded by a corridor from the 04 sides made up of wall pillars and rib vaults in the top that support a side central dome. The corridor opens to 04 iwans covered by semi-barrel vaults. The Fernak is in the Western side behind the hot room. It has an entrance with down stairs that lead to



a rectangular room (11X3m) whose roof is semi-barrel. In its Northern wall, we find a sunken apse that makes the fireplace; it is a hole in the wall of the Fernak down the pot.

**- Hammam Souk El Ghazl in Constantine:**

It is located in 24 April Boulevard down the mosque of Souk al Ghazl. It dates back to the Ottoman Era. We get into it through a main entrance that opens on a quasi-broken shed, under which we find seats. From this shed, we go to the Mahras, which is a big square room that makes a waiting and reception room where the customers put on and off their clothes. In one of its corners, we find the cashier. In another corner, we find a place for tea making. In the middle of this room, we find a square hall surrounded by a corridor from the 04 sides. It has a mezzanine in the top where rugs and carpets are put for relaxation in the day and sleeping in the night. Above this mezzanine, we find a ceiling with a polygonal dome (plan 03).

From the Mahras, we get into the cold room that is rectangular with a barrel vault that has small windows. The room has two basins for cold water and a door that leads to the warm room in the right of the basins. The warm room is the smallest and is covered with a barrel vault and two seats all along the walls down the Eastern and Southern sides. It has no basins. There, we find a door that leads to the hot room that has a rectangular shape and three panels separated by two arcades. Each arcade has 03 semi-circular rib vaults supported by ceramic pillars. Each panel is covered by a barrel vault that has whole for lighting. As for the floor, it is covered with ceramic panels.

In the center of the room, we find "al Surra". It is a rectangular stage that is relatively higher than the floor. It is covered with ceramic panels. In the Northern side of the room, we find a hole linked to the tank of the cold water. On its left, we find a hot basin built by bricks with a metal pot in the middle. In the Southern side, we find two iwans that open to the room. They are meant for the brides "Beit al Aroussa". The Fernak is behind the hot root. It is made up of a square space for storing the wood. In the Southern side of the space, we find a door followed by down stairs that go to a rectangular room. In the top of its Northern side, we find a hole to bring in the wood and take out ashes. In the top of the Eastern wall, we find a hole linked to the water tank, from which a metal pipe goes through to allow the water to flow in the heating pot and, then,

to the hot room. Below it, we find the hole of the fireplace from which canals go down the hot room to heat the floor and allow the smoke to go to the chimney that is in the side next to the Fernak.

**- Hammam al Baraka in Mascara:**

It is also known as al Hammam al Bali. It is situated in the city of Mascara next to Jemaa al Kebir in the intersection of Boukasri al Tahar Street and Mahour Idriss Street. It dates back to 1753 according to some sources and to the era of Bey Mohamed Ben Othman al Kebir, according to some others (1192-1213H/ 1778-1779 AD) (Plan 04). According to the original plan of the Hammam, set by Larond in 1953, the Hammam's shape is a rectangle with unequal sides whose lengths are between 2.50m and 14m. It has a door in the Western side that leads directly to the Mahras; which is rectangular with a door in the Eastern side that leads to the cold room. The latter is a rectangular room with a space for the manager of the Hammam in the right and a door that leads to the prayer room. In the Northern side, we find a space for the customer's relaxation. In the middle of the wall of the Eastern side, we find another door that leads to the warm room; which is the smallest with a semi-barrel roof.

We reach the hot room through a door that links it to the warm room. It is made up of a square hall in the middle covered by big-polygonal dome. The hall opens to 03 iwans with substrate rib vaults supported by pillars integrated in the walls. It is roofed by semi-barrel vault. In the middle of the central hall of the room, we find a square stage (Surra). As for the basins, they are in the 04 sides of the room. The Fernak is in the Northern Western side next to the hot room in a level that is lower than the Hammam. It is made up of an oven, the wood store, and the water tank in the Southern side behind the hot room. Then, the Hammam witnessed changes on the internal divisions but kept its main plan (Karman, 2015, pp. 2011-2015).

**- Hammam Sidi Abdellah in Blida:**

It is attributed to the righteous saint that is in the same neighborhood. It is in El Bey Street near Beb al Djazair in Blida. Its construction dates back to 1818-1828 according to the oral sources. It appears in the geological survey made by the colonizer for the city in 1866 (Ben Chama, 2008-2009, pp. 217-225; Hadri, 2009, pp. 60-61) (Plan 05). The Hammam has a

quasi-rectangular shape. We enter it through the main entrance in the Eastern Southern side. It opens on a rectangular shed with wall seats for waiting. The shed opens to a wider room that takes the form L and has the manager seat at the left faced by a stage. Besides, it opens on another wider cold room to change clothes and another room that leads to the Fernak and the warm room in the Western Northern side. The latter room has a rectangular shape with a stonewall for relaxation, a water tank, and a toilet covered with intersected vault. We reach the hot room from the Western side of the warm room through a small door. The hot room has a square shape and is made up of a corridor supported by pillars. Moreover, it has a polygonal dome in the top and small basins in the sides of the walls. In addition, a small side room opens to a room known as “Khulwat al Aroussa”.

**- Hammam Sliman in Telemcen:**

It is located in Derb Sidi Hamed that opens on Ben Chagra Street in Telemcen downtown (Plan 06). It is made up of a rectangular shed that leads to a square room (Mahras) that has a square hall in the middle surrounded by 04 pillars that take rib vaults that support a polygonal dome with 04 holes for lighting and aeration. In the center of the hall, we find a fountain surrounded by a corridor on the 04 sides. In this context, we find 03 stages on 03 sides of the corridor. At the left side, we find a small basin and 03 rectangular rooms in the Northern side covered with cylindrical vault for clothes changing.

We get into the warm room through a door in the cold room. It is rectangular room covered with a semi-barrel Vault. At the right side, we find two modern toilets and a water basin next to them. In the left wall, we find an entrance that leads to the hot room that is an irregular rectangular room divided into two corridors by 06 pillars that take rib vaults and a semi-barrel vault that makes the roof. It opens on 06 small rectangular rooms and contains two water basins; one is cold and the other is hot. The land is covered with stone panels. The Hammam has a Fernak in the left side of the main entrance. Its level is below that of the Hammam and is attached to the hot room and has the wood warehouse and water tank in its side (Hammou, 2016).

**- Hammam Sidi Younes in Cherchel:**

It is located in al Qsiba in Mohamed Gherrar Street next to Jamaa al Kebir. It takes the name of the righteous saint Sidi Younes who lived in the late Ottoman Age. It was mentioned in a document about the Waqfs. Its architecture confirms that it dates back to the Ottoman Age (Saliha, 2017-2018, p. 118). It has a rectangular shape (Plan 07). We can get to it through the main entrance that is in the Southern Western side. It opens on a rectangular room that opens on a rectangular shed that has wall seats and 09 cylindrical pillars that take semi-circular rib vaults.

From the shed, we get into the cold room. It is rectangular with a hall in the middle surrounded by a corridor from 03 sides. The Western side is made up of an arcade with cylindrical calcareous pillars that take semi-circular rib vaults and a large rib vault under a flat roof. The room has a stage in the Northern and Eastern corridors for relaxation. In addition, it has a door in the Western wall that leads to the warm room that is rectangular. At the right side of the room, we find wall seats all along the wall and a toilet at the Northern side. The room is covered with a barrel vault.

The hot room is square with a square hall surrounded by 04 substrate rib vaults taken by 04 pillars. It has a square stage (Surra) in the middle. The basins are in the 04 sides of the room. The central part of the room is covered with a roof that has a polygonal dome. As for the 04 corners, they are covered with intersected vaults while the corridors are covered with cylindrical vaults. The Fernak is behind the hot room. We get there through the door of the shed. It has a door at its side that leads to the water heating room. Moreover, it has a ladder that leads to the terrace (Boutabba, 2008, pp. 107-110).

#### **- Hammam al Gaid in Annaba:**

It is located in the intersection of al Kaid Khaled and Mahmoud Kach Streets in Annaba downtown. Some studies say it dates back to the Zyrid Age (4<sup>th</sup> H/ 10<sup>th</sup> AD century). However, it was reconstructed during the Ottoman Era by one of the city leaders. We get into it through a broken door in the Eastern Northern side. It opens on a rectangular shed. In the side next the entrance, we find a door that leads to a passage to the Mahras. It is a big quasi-square room surrounded by a corridor on the 04 sides with semi-circular rib vaults taken by pillars that take, also, a semi-spherical dome. The room has a relatively high stage. At the left side of the shed, we find up

stairs that lead to a Mezzanine that takes the Eastern side of the room; it is meant for the customers' relaxation.

In the Eastern side of the room, we find an entrance that leads to the warm room. It is a square room that has a circular dome in the top taken by semi-circular apse. The Southern side has a seat. We use a passage that has a barrel roof to reach the hot room that is in the Eastern Northern side of the Hammam. It is rectangular and covered by a barrel vault. It has many basins between its walls.

## **2. The analytical study:**

The architecture of the Islamic Hammams shows 04 rooms in each Hammam. One room is for taking off clothes, one is cold, one is warm, and one is hot. In addition to these rooms, we find a fireplace (Sourdel, 1986, p.3 4317: Sourdel, 1975). The Islamic Hammams used this tradition since their first beginnings in the 1<sup>st</sup> H/ 7<sup>th</sup> AD century, such as Hammam Kassir Amra and Hammam al Sarkh (Ziyada, 2008, pp. 17-20; Hassanine; 1983, pp. 1-4). The same tradition was adopted by the Hammams in Algeria during the Ottoman Era. In this regard, the Hammam in Algeria has a reception room, Al Mahras room (Saadaouia, 1997, p. 195), a cold room, a warm room, a hot room, and the Fernak (the oven).

These units were known in many Hammams throughout history. However, their names change from one place to another and from one period to another. For instance, the Romans called the cold room "Frigidarium", the warm room "Tepidarium", and the hot room "Caldarium" (Chafai, 1970). In the Islamic Age, these rooms got different names. For instance, in Damascus, the reception room is called "al Mechlah", the cold room "Wastani Barani", the warm room "Wastani Jowani or Wastani Thani", the hot room "Jowani Har", and the oven "Beit al Nar or al Qamime" (Ziyada, 2008, pp. 13-214; Kiyal, 1964, p. 153; Echocard & Le Coeur, 1985, pp. 21-29; Echochar & Le Coeur, 1942, pp. 17-25).

In Egypt, the cold room was known as "al Maslakh", the warm room "Beit Awal", the hot room "Beit al Harara", and the oven "Beit al Harara" (Hassanine, 1983, pp. 126-135; Mohamed, 2002, pp. 255-259). As for the planning of these units, al Mahras in the Algerian Hammams represents the reception room according to most of the studied models. It has corridors that have a flat roof in the top or a dome surrounded by vaults. It resembles the planning of al Maslakh in Egypt and

al Machlah or al Barrani in Damascus regarding the space, the stages for the customers' relaxation, and the roofing system. However, they differ regarding the shape because most of the Hammams of Damascus and Cairo are divided into iwans that have a Fesqia "basin" and fountain in the middle (Ziyada, 2008, pp. 215-218; Hassanine, 1983, pp. 211-213). As for the Algerian planning, it is based on the corridors that surround a middle space that has no Fesqia; except the Hammam of Sidna in Algiers and Hammam Sliman in Telemcen that have fountains.

In addition, this room is covered by a dome in the Tunisian Hammams (Saadaouia, 1997, p. 2372), in Damascus (Ziyada, 2008, p. 215; Ecochard & Le Coeur, 1985, p. 24; Ecochard & Le Coeur, 1942, p. 20), and in Turkey (Hassanine, 1983, p. 216). On the other hand, the wooden roof is used in the Hammams of Cairo (Hassanine, 1983, pp. 273-274) and in some Hammams of Damascus such as Hammam Sheikh Reslane (912H/ 1506 AD) (Ziyada, 2008, p. 264). In addition, the plans of many Algerian Hammams have common features in al Mahras, such as a space for the manager of al Hammam, a place for tea and coffee making (Ecochard & Le Coeur, 1985, p. 24), and a mezzanine for relaxation and sleeping. Besides, we find a space for prayer such as in Hammam al Jazira in Algiers. In addition, we find entrances for the shoes in the benches.

**The cold room:** It is a rectangular or square room with an irregular shape. It may take the shape of a passage covered by a barrel vault. It may not be found in some Hammams, where the customer goes directly from the reception room or al Mahras to the warm room. Even if it is found, it is equipped with one or more basins for cold water and has a place for towel to be put on by the customer when he leaves the warm room. These traditions are found in many Hammams in the Islamic cities, such as in Hammam al Touizi (848H/ 1444 AD) (Ecochard & Le Coeur, 1985, p. 28).

**The warm room:** It is like the cold room. It is a small rectangular or square room with an irregular shape. It may sometimes take the form of a passage. It is covered with one or more vaults and rarely has a dome. It has side chairs in the form of a bench. It may have, or not have, a small basin. Its planning resembles those in Damascus and Egypt. It was generally made up of one or two rooms and opens on iwans. It is covered with a vault or a dome and has basins and seats or chairs next to them (Ziyada, 2008, p. 218; Hassanine, 1983, pp. 213-214).

**The hot room:** Its planning differs from one Hammam to another. However, its general pattern takes the form of a square room that has a stage called "Surra" in the middle. It opens on one or more rooms known as "Khulwa or Beit al Aroussa" for the brides. These rooms take the shape of iwans, have doors, and are covered with small domes or vaults. Besides, the hot room is generally covered with a big dome and sometimes with a vault that has holes covered with glass for lighting. The dome or vault is taken by pillars in the center of the room, or on the walls sometimes.

The architecture of this room that is covered with a dome or vaults is found in many Hammams, such as Hammam Saheb al Tabaa in Tunisia (Saadaouia, 1997, p. 276). Besides, all the Hammams in Egypt had hot rooms covered with shallow domes. It is the same system used in covering the hot room in Hammam Kessir Amra and Hammam al Sarkh (Hassanine, 1983, pp. 275-276; Sameh, 1950, p. 5). As for those covered with vaults, we find them in Hammam al Kachachine in Tunisia (Saadaouia, 1997), Hammam al Zine (900-920H/ 1494-1516AD), and Hammam Feteihi al Daftardar (1158H-1745AD) in Damascus (Ziyada, 2008, pp. 224-225).

Besides, the hot room in many Hammams of Damascus and Egypt has small toilets (Ziyada, 2008, pp. 241-242; Hassanine, 1983, p. 220) like in Algeria, where we find a ceramic stage in the middle of the hot room known as al Surra. It is the hottest place inside the room. The customer sits there for some time until he sweats and, then, he continues his bathing. It is seen in many Hammams in Tunisia (Saadaouia, 1997, p. 276). Generally, the Hammams have many of these elements, mainly the cold and hot basins. However, the Hammams in Algeria lack al Maghatis, which have been found in Egypt and Damascus throughout history (Ziyada, 2008, p. 27; Ecochard & Le Coeur, 1985, p. 29; Hassanine, 1983, pp. 213-214).

The Hammams in Algeria during the Ottoman Era resemble the other Islamic Hammams regarding the Fernak. The latter is far from the reception room and is next to the hot room. It has an external door and is generally a room with a barrel roof, and rarely a dome. Its floor is lower than the floor of the hot room. It has a store for woods and a water tank. As for the fireplace, it takes the form of a hollow embrasure in the lower part of the Fernak wall. It has a pot directly above it that is made up of copper most of the time. It is used for heating water. Then, the water flows through wall and floor canals to

the warm and hot rooms. These traditions are found in the Hammams of the Islamic world, such as the Hammams of Damascus (Ziyada, 2008, pp. 304-305; Ecochard & Le Coeur, 1985, pp. 29-32).

Besides, the common characteristics of the Algerian Hammams include lower canals under the hot room through which the hot steam and smoke go to the chimney. These canals are clearly seen in Hammam al Jaych in Qalaa in Algiers. As for the chimney, it is generally rectangular or square and is made with bricks. It goes vertically to the top of the building that neighbors the Hammam so as not to disturb the neighbors. The same method was used in the rest of the Islamic Hammams in Tunisia (Saadaouia, 1997, p. 276) and Damascus (Ecochard & Le Coeur, 1985, pp. 31-32; Ecochard & Le Coeur, 1942, pp. 25-27).

The water tank is generally near the Fernak and is higher than the floor of the Hammam to allow the water to flow in ceramic canals covered with lime inside the Hammam. It is directly linked to the heating pot and has other metal pipelines that link it to the cold basins. Most of the Hammams in Algeria have the broken entrance. Its planning in some Hammams shows a shed with wall seats, or the form of a passage with no seats that ends up with a door that leads to another broken passage leading to the Mahras. Besides, the door may directly open on the Mahras in the corner of the shed or the 1<sup>st</sup> passage, but with a broken shape and not in the same axis of the main entrance of the Hammam. The use of the broken entrances in the Hammams was common in the Islamic architecture, as it is found in many examples in the Orient and Maghreb, such as in the Hammams of Tunisia (Saadaouia, 1997, p. 272), the Hammams of Damascus, and most of the Hammams of Cairo. The aim of this planning was hiding the person who bathes inside the Hammam and banning the cold airflows (Ziyada, 2008, p. 218; Hassanine, 1983, pp. 213-214).

### **Conclusion:**

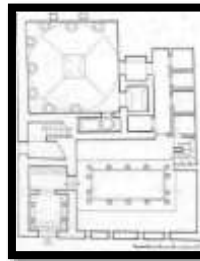
Upon the historical and archaeological presentation of the Hammams in Algeria during the Ottoman Era, we found out that building the Hammams was very common in the Algerian cities, with the biggest number in Algiers. In this regard, the historical data are still scarce and give little information about the topic, the number of Hammams, and their distribution over the cities. As for the archeological aspect, most of the Hammams vanished and only few are still standing keeping their artistic and architectural authenticity.



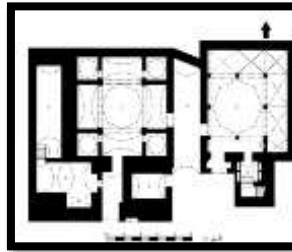
The Hammams we studied in Algeria have common architectural planning that is made up of a main entrance, followed by a shed or a broken passage that opens on a wide room called al Mahras. The latter was a reception and relaxation room in the day, and sleeping in the night. It is followed by a cold room or a warm room that ends with a door that leads to the hot room that is generally big. Behind the hot room, we find the Fernak that has a door. In the end, all the Hammams have almost the same planning, with small artistic and architectural differences.

#### Appendix:

**Plan 01:**  
**Hamam**  
**Fouita**



**Plan 02: Hamam el**  
**Bey**



**Plan 03:**  
**Hamam Souk**  
**al Ghazl**



(Cherif, 2009, p. 165; Boutchicha, 2022, p. 92; Dahdouh, 2010, p. 842)

**Plan 04: Hamam Sidi**  
**Abdellah**



**Plan 05: Hamam al Baraka**



(Hadri, 2009, p. 138)

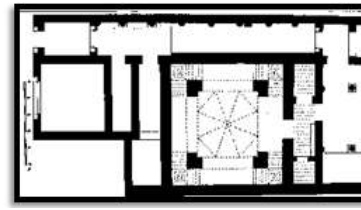
(Karmane, 2015, p. 380)

**Plan 06: Hamam Slimane**

**Plan 07: Hamam Sidi**  
**Younes**



(Amara, 2018, p. 65)



(Boutabba, 2008, p. 190)

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