# **Architectural Planning Of Minia Mosques**

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## **Abstract**

Minia maintains twenty-four archaeological mosques adopt several models follows: the local architectural planning between the courtyard and open riwaqs, and planning with naves without courtyard.

There are four mosques take planning component of the courtyard and riwaqs ranging in date from the Fatimid age, and twenty mosques planning to take the naves and overdraft without a courtyard ranging in date from the Fatimid and Muhammad Ali ages includes one mosque with five naves, eleven mosques with four naves, five mosques of three naves and three Mosques of two naves.

The objective of this study to highlight the evolution of the architectural planning of the mosques in Minia governorate, which was one of the most important provinces in Upper Egypt, in the architectural heritage,

The variables of comparison where mosques have been established since the Arab conquest of Egypt has maintained were noted in the planning and architectural elements, while in the mosques of the renovation and reconstruction in many periods, it retained Architectural assets, which was mostly to the Fatimid age, also found that the mosque has seen the upswing in the Mamluk and Ottoman ages.

Whether the planning with open Riwaqs around the courtyard or naves without courtyard, and the development of the architectural elements which include facades and entrances, minarets and arches.

The research, in the methodology followed, based on the identification of the architectural planning stages of the development of the mosques on:

- 1. The descriptive approach through the study of architectural planning and follows this through different ages.
- 2. The analytical and comparative approach by the various characteristics of the models and patterns of architectural planning and comparative study with a number of mosques.

**Kea wards:** Minia, mosques, courtyard, riwaqs, Fatimid age.

## 1. Introduction

Minia is the capital of Minia Governorate in Upper Egypt, It is located approximately 245 km (152 Mile) south of Cairo on the western bank of the Nile River, which flows north through the city. The name of the city is derived from its Ancient Egyptian name Men'at Khufu, meaning the nursing city of Khufu, linking it to the Pharaoh Khufu or Cheops, builder of the Great Pyramid at Giza.

The name Minia may also have originated from the city's name in Sahidic Coptic Tmoone and in Bohairic Thmonē, meaning "the residence", in reference to an early monastery formerly in the area. It is the city where the Codex Tchacos was discovered. Minia is dubbed by the locals "Bride of Upper Egypt", in reference to its strategic location in Middle Egypt as a vital link between the north and the south of Egypt.

During the rule of the Abbasids, Minia's name became attached to Ibn Khasib, the appointed benevolent and almost legendary ruler of Egypt in the early 9th century. Ibn Khasib loved Minia so much that when was asked by the Caliph to name a reward for his good deeds, he chose Minia where he would retire and die few years later. Ibn Khasib is credited for expanding Minia and transferring it from a large village to a robust Medieval city. Since Ibn Khasib years, Minia has been referred to as Munyat ibn Khasib (Ibn Khasib's Minia).

During the rule of the Fatimid Caliphate in the 10th and 11th centuries, Minia continued to expand and it included large mosques, schools, a bazar, and public baths. It was during this period that two landmarks of Minia, the EL-Lamaty and EL-Amrawy mosques, Ibn Battuta, the famous medieval travellar, visited Minia and was impressed by what he saw there.

Minia was noted and regarded with high praise in Ibn Battuta's account of his travels called the Rihla because of the school it used to have when he visited the city. Ibn Battuta's described Minia as a town that "excels all the other towns of Upper Egypt, (Robert, & other, 1996. Grimal, 1997. Kathryn & other, 1999. Meinardus, 1999. Abu Salih, 2001. Gawdat, ed. 2001. Capuani, 2002. Ibn Battuta, 2009. Shiha, 1988. Butler, 1993. Ramzi, 1994. Al-bakhshawangi, 1995. Qadus, 2000. Samuel, 2002. Darwish, 2005).

# 2. Architectural planning for Minia Mosques

## 1. 2 The mosques with riwags and courtyard

Represents the first schematic designed on the basis of the mosques in Islamic architecture, consisting of a square or rectangular area is divided into the riwaqs by number of arcades consisting of rows of columns or pillars topped by arches.

There are four mosques take planning component of the courtyard and riwaqs: Amrawi (Successive for renovation work since the Fatimid age, in the Mamluk age, there is an marble decree of the Sultan Jaqmaq dated (843/1439) above the northern entrance, and in the Ottoman age by Prince Mustafa Kashif, his text of a constitutional dated (1149/1736) on the western entrance), (fig.1-2) in Minia, Al-Hassan bin Saleh, (fig.3) in Bahnasa, Established in the Abbasid age and attributed to Al-Hassan Bin Saleh bin Zayn El Abidine who died in (323/935), (conservation de L'Art Arabe, 1896. Maher, 1966). It was built in the Fatimid age (6/12), and demolished in (1264/1874), where reconstruction has been in (1267/1877).

A recent study attributed it to Al-Hassan bin Saleh Ali Zayn al-Abidine Ben Al Hussein, and based on some of the sources pointed out that had submitted to the mosque, said Ali Zayn El Abidine died in (94/712), among the written text to Al-Hassan died in (323/935), (Abdul Qawi).

That is not logical, as it is not unreasonable to be the difference between the father's death and the death of the son 229 years only, and the truth that Al-Hassan bin Saleh is not Al-Hassan bin Zayn El Abidine

certainly the mosque was built by Ali bin Zayn El Abidine when he was submitted to the Bahnasa with his brothers in the wake of the defeat suffered by Marwan bin Mohammed last Umayyad caliph and the state of the Abbasid state in 132 (749). And unlikely to be planning the mosque unrepresentative of the current planning due to the Fatimid era, especially after the 500 (1106) has been working minber as the Fatimid minber of Khalif Al-Amir in the mosque of Sinai, (*conservation de L'Art Arabe*, 1896. Abdel-Wahab, 1957. Maher, 1966. Mubarak, 1994).

Yousufi (fig.4) in Mallawi, Due to the Fatimid age and had been reconstructed in (1025/1615), attributed to Yousuf bey Al-Qaytas according to the text was based upon the history of the mosque, and had been renovated in (1286/1869). Yousuf bey Alqaytas was a Mamluk ruler who govern Gerga (1027-1037/1627-1617), and the text of the Minber dated (1027 H/1617), (Abdul Rauf, 1994). The text for the reconstruction and not for construction above the north-eastern entrance there is a lintel dated in (1286/1869), (Mubarak, 1994. Maher, 1966).

Lamati, Due to the Fatimid age (549/1154), it is built by Al Salih Tale'e bin Ruzayk the Armenian before his Ministry, the renovation work in the age of Sultan Jaqmaq in (578/1182), In the age of Sultan Jaqmaq where supreme decree of marble on the northern entrance, although it is undated, it can be dated the same date of El-Amrawi decree (843/1439), and had been renovated in the Ottoman age, (Garçin, 1977).

A text of the mass of carved stone was brought from a building due to the Roman age used as another lintel, the text read: "Manufacture Murtafe' bin Mejalli bin Sultan the Egyptian, God ruthless the reader, his parents called him and mercy", (Bullitin, 1899. 1900. 1940. Mayer, 1963), (fig.5-6).

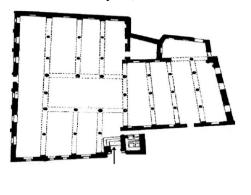


Fig. 1. Amrawi mosque

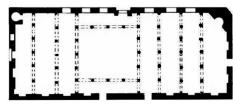


Fig. 3. Hassan bin Saleh mosque



Fig. 5. Lamati mosque (From Garçin)

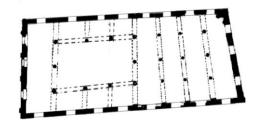


Fig. 2. Amrawi mosque (fatimid)



Fig. 4. Yousufi mosque



Fig. 6. Lamati mosque (fatimid)

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## 2. 2 The mosques with riwags without courtyard

There are twenty mosques planning to take the naves and overdraft without a courtyard ranging in date from the Fatimid age and Muhammad Ali (13/19) include:

Odha Basha (fig.7), Was established in Mamluk age and been **2. 2 A mosque with five naves:** renovated in (1162/1749) by Alhaji Obois Oda Bashi, Above the door, a wooden board in four rounds and dated in (1162/1749).

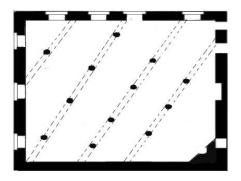


Fig. 7. OdhaBasha mosque

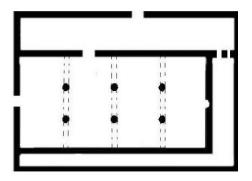


Fig. 8. Habaita mosque

## 2. 2. 2 Eleven mosques with four naves are:

- Habaita in Berdanoha, Was established in the Fatimid age (509/1115) and the founding text of the highest on behalf of the north-eastern entrance by Yousuf Bin Saroukh Al-Afdhali, (Bullitin, 27. Mohamed, 1978), (fig.8), Prince Ziyad, (fig.9-10), Attributed to Ziyad bin Al Mugheera Al Atki died in (191/807), was established in the Fatimid age (517/1123) and rebuilt by the Mamluk Sultan Qaytbay (872-901/1467-1496). Now, elements of the mosque lost except the northern part of the wall built of stone with tie beams and the brick dome, (Al-maqrizi, 1998. Maher, 1966. Mohamed, 1978). There are pillars of the writings dated (517 H/1123). The Hanging (fig.11) in Bahnasa (Relics), Due to the Mamluk age and attributed to Mustafa Horeab, who has built (1092/1708), as well as reconstruction was again in the (1194/1780). The latest over the mihrab, dated the same year.

The text of another column in the Qibla riwaq read "this new mosque by Al-Ganab higher Alhaji Mustapha.", (Bullitin, 1896), Zine El-Abidine (fig.12) in Bahnasa (Relics), Attributed to Abdul Hai Zayn El Abidine who died in (1181/1766), the mosque had been renovated in (1181/1766). Asaqalani (fig.13-14) in Mallawi, (Al-jabarti, 1880. Abdel Moneim, 1978), Qayati (fig.15) in Qayat, Was established in Mamluk age, been renovated in (1258/1842) and attributed to Abdul Latif Al-Qayati, (Mubarak, 1994. Ramzi, 1994), Sholqami (fig.16-17) in Aba, Established in the Mamluk and later attributed to Ibrahim bin Abdullah Al-Shulqami imam of mysticism and the deceased in Minia (1233/1817). It was renovated in (1262/1845) by Ahmad bin Hajji Hussein Agha. And turned into a mosque with two wings in the north-east and south-west consists of two naves with a row of columns and two arches (Mubarak, 1994).

Jamal Al-Din Akosh (Damarisi) (fig.18), Was established in Mamluk age (687/1288), and the text above the north-eastern entrance of the mosque had been built by Jamal al-Din Akosh, who was assuming the war in Ashmonin and Tahawia, reportedly, he died in 702 (1303), which indicates that given the mandate of the Bahnasa a later date on the mosque, (Al-mqrizi, 1998). Renovated in (1286/1869) by Khedive Ismail, A

text of the marble above the south-western entrance, due to the Khedive Ismail (1286/1869). A mistake attributed to Sheikh Mohammed Damarisi imam of the mosque which belongs to the village of Damaris north of Minia, (Ramzi, 1994).

Omar Effendi (fig.19), Established in Mamluk age and been renovated in (1292/1875), there is the text of 1292 (1875) called the Khedive Ismail on the north-eastern entrance; the mosque has been attributed to Omar Effendi, a senior staff during his time. Sultan Pasha in marine (fig.20) of angle Sultan, established in Mamluk been renovated by Sultan Pasha Director of the directorate of Minia (1278-1287/1861-1870), (Yusuf, 1995). and Shady (fig.21) in Minia, Established in (1319/1900) by Mohamed Ahmed Shady the director of the directorate of Minia has been named the text above the door of minber.

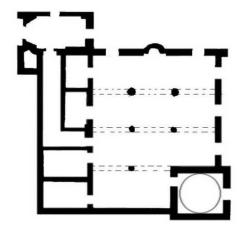


Fig. 9. Prince Ziyad mosque

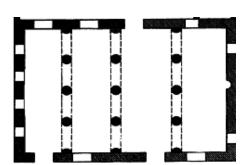


Fig. 11. The Hanging mosque (Relics

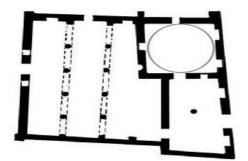


Fig. 13. Asqalani mosque

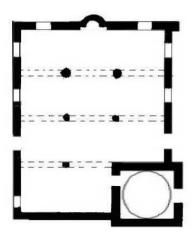


Fig. 10. Prince Ziyad mosque (fatimid)

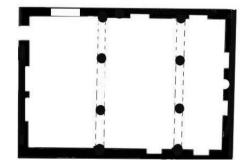


Fig. 12. Zine El Abidine mosque (Relics)

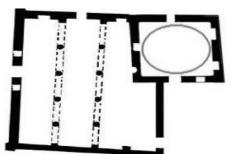


Fig. 14. Asqalani mosque (fatimid)

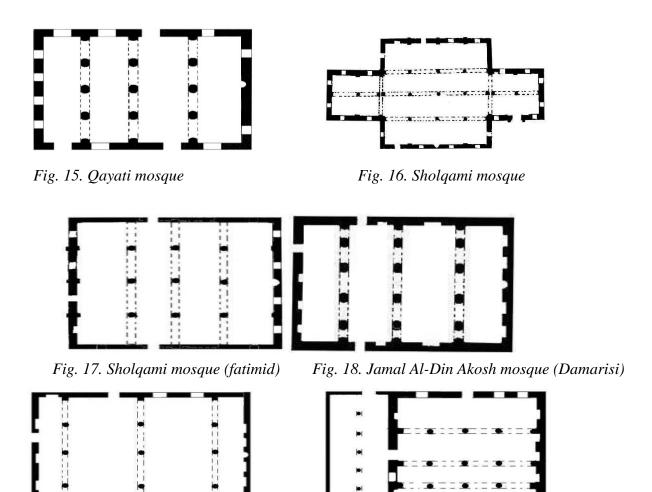


Fig. 19. Omar Effendi mosque

Fig. 20. Sultan Pasha the marine mosque

**3. 2. 2 Five mosques of three naves are:** Sultan Pasha (fig.22) in Minia (1278-1287/1861-1870), Sheikh Abada, Established in the Mamluk age and attributed to Abada bin Al Samit, and was renovated in (1277/1860), there is an inscription on marble panel above the south western entrance, due to Khedive Ismail, (fig.23-24), Sultan Pasha the tribal (fig.25) in angle Sultan (1278-1287/1861-1870), Hassan Hussein Attia (fig.26) in Minia (1298/1881) and Kashif (fig.27) in Minia (13/19). There is an inscription on marble panel refers to "set up by Hassan Kashif".

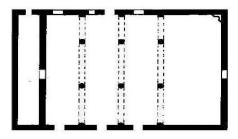


Fig. 21. Shady mosque

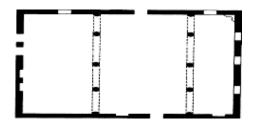
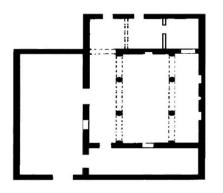


Fig. 22. Sultan Pasha mosque



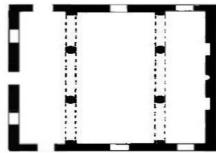
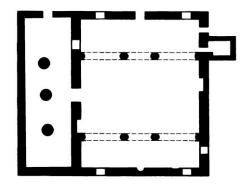


Fig. 23. Sheikh Abada mosque

Fig. 24. Sheikh Abada mosque (fatimid)



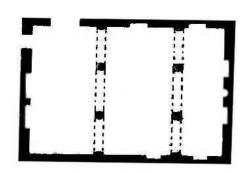
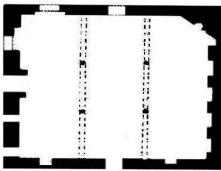


Fig. 25. Sultan Pasha the tribal mosque

Fig. 26. Hassan Hussein Attia mosque

**4. 2. 2 Three Mosques of two naves are:** Ready (fig.28) in Minia, Established in Mamluk age and been renovated in (1249/1833) suggest inscription on marble panel higher the northern entrance to the mosque founder, Sheikh Ahmed Hamid al Ready. Qushiri (fig.29) in Minia, Established in Mamluk age, and had been reported that Mohamed Ahmed Al Qushiri established in (1321/1902), one of the descendants of Sheikh Mohammed bin Ahmed bin Sadruddin Al Qushiri who died in (708/1208).and Sit Numaila (fig.30) in Minia. Established in Mamluk age and was built in (1317/1899), There is inscription on marble panel refers to the name of Mohamed Ragheb, (Abdel Salam, 1997).



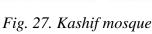
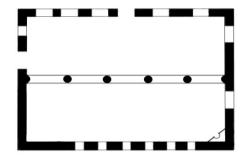
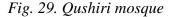




Fig. 28. Ready mosque





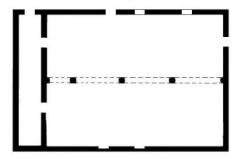


Fig. 30. Sit Numaila mosque

# 3. The architectural planning stages:

**1. 3 Planning component of the middle courtyard surrounded by four riwaqs**, the largest riwaq of Qibla each composed of arcades from vaulted arches contracts on columns of the portable limestone, granite, marble and moving parallel to the southern wall in Amrawi, Al-Hassan bin Saleh and Lamati, and the south-eastern wall in Yousufi.

The main riwaq was composed of four naves separated by four arcades in Amrawi, four aisles of six arches in Al-Hassan bin Saleh, four aisles of nine arches in Yousufi and three of aisles of seven arches in Lamati, the middle arch is the most widely and vast in Al-Hassan bin Saleh and Lamati.

The planning of Lamati mosque (Al-Hamawi, 1906. Garçin, 1977), was Like in the vanguard Salih Talaee mosque in Cairo (519/1125), (Abdel-Wahab, 1946. Kreswell, 2004), which established by Al-Salih Talae'e the Armenian, (Ibn Khilikan, 1977. Ibn Al-Ghawzi, 1939. 16. Al-Hamawi, 1906. Al-Zahabi, 1948. Ibn Kathir. Ibn Taghri Bardy. Al-Maqrizi, 1998. Al-Damashqi, 1988. Ibn Hammad, 1981. Al-Zahabi, 1983. Shibani, 1995. Abu Salih the Armenian, 2001. El hawary, 1935. Creswell, 1952), and Al Emary mosque in Qus,(Creswell, 1952. Garçan, 1970), where two rooms on both sides and two windows on the vestibule and the two parties overlapped in two rooms of foreign affairs to determine highlight vestibule on both sides, and Qibla riwaq of three aisles most widely the Qibla nave, and takes courtyard four arcades of five arches in the Qibla riwaq and the northern west and six in the south-western and north-eastern riwaqs, (Abdel-Wahab, 1946).

We find each of the mihrabs in Amrawi, Al-Hassan bin Saleh and Lamati set in the south-eastern corner, where this mosque were not built on the direction of Mecca, and above the mihrab, the dome bound to assist the four squenches and four rectangular windows have been deployed in the Fatimid and Ayyubid ages, emerged in Yousufi, and there are three penthouse and dome in the south nave of the Qibla riwaq, (Appeared in the French fees, it was currently replaced by ciborio), (Al-Shayeb, 1991). in Amrawi like Lamati and the dome set above four squenches to assist is the case of Yousufi.

The north-western riwaq consisted of one aisle of four arches and oversees of the courtyard by two arches in Amrawi, or three aisles separated by two arcades each consisting of five columns with six arches in Al-Hassan Bin Saleh, or two aisles and two arcades of nine arches and two parties, two rooms the east words from a minaret in Yousufi, the north-western riwaq in Lamati was composed of one arcade and six rooms each vestibule of entrance and the last room is highlight on both sides of the interface to determine with

portico on one arcade of five pointed arches.

The two side riwaqs consist of one aisle, each oversees to the courtyard by three arches in Amrawi and four arches in Al-Hassan Bin Saleh and Lamati, or four aisles parallel to the Qibla wall in Yousufi, riwaqs has been overseeing the courtyard by four arcades two of them with two arches of the Qibla riwaq and the north-western riwaq and three of the two side riwaqs in Amrawi, or four arcades supervised of the courtyard by four arches on each sides of Al-Hassan Bin Saleh, or four arcades with five pointed arches in the Qibla riwaq and the north-western riwaq and four of the two side riwaqs in Yousufi and Lamati. Above the capitals there are carved decorations on wood floral designs includes triple foils like other examples of contemporary Al-Hassan Bin Saleh mosque, as Al-Salih Talae'e and Qos mosques, (Bullitin. VII, 1890. XVI, 1897. XVI, 1899. XVII, 1900. XXXIII, 1922. XXXVII, 1933. XXXVII, 1934. Wiet, 1936. Garcan, 1970, 1977).

There are four arcades around the courtyard of Lamati; its arches are five in the side Riwaqs and four in the south-east and north-west. And above the capitals there are carved decorations on wood floral designs includes triple foils like other examples of contemporary Al-Hassan Bin Saleh. A wooden screen with vaulted door is separated from the courtyard toward the Qibla Riwaq and the side Riwaqs.

In the Mamluk age Amrawi witnessed the expansion, where a main entrance, which is mediating the western facade with lime stone, the western entrance of Amrawi and the eastern entrance of Al-Hassan bin Saleh and the north-east of Yousufi, northern and western exit of Lamati that both of them is a prominent of held recess and convening of trefoiled arch above the door, was retained heading the other consisting of recess contract with pointed arch, has followed the entrances of mosques Mamluk style as in the Qaytbay district (877/1472) and his school in Mamluk graveyard (879/1474), and spread in the Ottoman mosques as Mahmudiya (979/1568) and Osman Katkhoda (1147/1724) was also Yousufi, Asaqalani, Qayati and Shulqami.

There was an amendment in Amrawi, with increase the area to the side riwaqs to three aisles, in addition Maqsurah in the south-eastern side of the Qibla riwaq to maintain uniformity arcade consisted of two arches above a marble column. The mosque, similar in terms of Iwan planning consists of one Iwan and a rectangular area, led and include eastern, western and northern riwaqs and courtyard, the Iwan overlooking with arcade from four arches, and the northern riwaq is one aisle and parallel to the wall and Qibla riwaq of seven semi-circular arches and overlooking the courtyard by arcade composed of two arches, and there are similarities between Yousufi, Tunbogha Al-Mardini (740/1340) and Ashraf Bersbai (841/1437).

In Minia mosques, wooden fence with arched door separate Qibla riwaq, side riwaqs and the courtyard as is the case of Tunbogha Al-Mardini (740/1340) is the oldest fence inside Egyptian mosques or second fence before Malak Jawkendar and Qaytbay fence in Azhar, and had a wooden fence in Aqmar separating the Qibla riwaq and courtyard. We find that the planning of Minia mosques has found in Bersbai mosque (841/1437), Zainuddin Yahya mosque from the age of Sultan Jaqmaq (853/1449), Osman Katkhoda (1147/1734) closest to the mosque in Minia, and there are similarities between Yousefi and Tunboga Al-Mardani (740/1340), and we find that the minaret is to the right of the northern entrance as in the western in Al-Hassan Bin Saleh, Yousufi and Lamati, there are three entrances in eastern, western and northern

riwaqs and recess of the entrance leading heading trefoiled arch and a straight lintel above the door, there are recesses with stalactites preoccupied with windows, (Abdel-Wahab, 1946).

In the Ottoman age, renewed Amrawi (1149/1439), and Al-Hassan bin Saleh (1267/1877), Yousufi (1025/1615) and (1286/1869), as well as Lamati without a change in architectural planning, building facades have been restored according to the Mamluk assets of the and retain with elements of the Fatimid entrances with pointed arches and Mamluk entrances with trefoiled arches and the elements of the facades, and the amendment to the windows of a mosques, which is marked with the front and do not in recess as in the case of pre-Ottoman architecture, this phenomenon has spread in Minia mosques of restoration work in the Ottoman age, and is also of Malika Safia, (Najeab, 1970).

The windows have been crowned in recess with rows of stalactites, and we find that in Qayati. The eastern riwaq of the Amrawi mosque was extended to east into three aisles parallel to the Qibla wall each consisting an arcade from three arches in the western riwaq has been arcades composed of aisles, added room in the confined space between the riwaq and the Maqsurah.

Adjustments have been made in the northern side as Lamati was demolished rooms and vestibule, the northern riwaq into two aisles with arcade of seven pointed arches, the middle of them is most widely and oversees the courtyard to five arches, has been modified the portico, where two side rooms were destroyed into portico than seven arches, and it seems that when the portico is destroyed were rebuilt the mosque without taking into account the evidence that the battlements culminating in the northern front had been established without into account the existence of the portico roof over the assumed level the roof of the mosque.

Minaret in Lamati mosque has been adjacent to the western wall of the portico, such as the Ottoman-style mosques, (Abdel Salam, 1997), in Sareya (953/1529), Yousuf Agha Al-Heen (1035/1625) and Osman Katkhoda (1147/1734).

# 2. 3 Planning of the mosques with riwags without courtyard

This planning is the second schematic system designed on the basis of the mosques in Islamic architecture and other types of buildings of other religious and non-religious, (Al-Haddad, 2006), since the early side by side with traditional embroidery. Such planning stems from the planning of mosques known to the riwaqs of planning without courtyard, which is known in the mosque of Amr bin Al-Aas (21/641), there are examples due to the late centuries (1-2/7-8) including the mosque in Khan Al-Zabeeb and Umm Al-Walead in Jordan, (Creswell, 1952).

It is used in the tank in Ramla (172/788), Ribat Sousa mosque (206/821), and there are two models of mosques in Toledo, the first of Mardoum mosque (390/999), which was built according to the oriental influences from Syria during the Umayyad period, and the second is the Mudéjar mosque (6/12). The oldest examples of such planning in Egypt Al Tabataba scene in Cairo, (334/945), seventy seven scenes in Aswan (extinct), (Al-Haddad, 2006, 2004, 2006).

In the Fatimid mosque has emerged in St. Catherine Monastery, (Rabino, 1936. Fikri, 1965. Silitotti, 1994), the elephant's mosque in Antar Stable (extinct) in ancient Cairo (478/1085), (Al-Haddad, 2006). Such planning has spread considerably in the planning of churches in the Fatimid age. The existence of

this new planning since the early period reveals an important point to the fact that traditional planning was not the only planning through the centuries has become the first private planning mosques without a courtyard (5/11), the mosque of St. Catherine Monastery is the oldest model for this planning and the widespread planning in the Mamluk and Ottoman mosques. These mosques consist of four types:

- **1. 2. 3 Planning of five naves and four arcades** in Oda Pasha (1162/1749). The planning with five naves and four arcades and seven arches appeared in Abul Makarim in Fowa, five arches in Chinese mosque in Jerja, (Al-Haddad, 1997), and Friday in Breegy, four arches in Hassan Nasrullah in Fowa (1115/1701) three arches in Ibrahim Terbana (1097/1685) and Abdul Baqi Gorbajy in Alexandria (1171/1758), Sheikh Ibrahim Pasha (1240/1824) and Nazear Agha (1272/1855), and three arches in Aladdin in Nishid, (Hillinbrand, 1994).
- **2. 2. 3 Planning consisting of four naves and three arcades** of five arches in Damarisi (687/1288) and Asaqalani, which was amended planning consisting of three naves, including two arcades than five arches, and it showed in Qasr of Al-Waleed mosque known as the palace of Minia consists of the area divided into rectangular of four naves by three arcades parallel to the Qibla wall, the Grand Mosque in Bursa and the Grand Mosque in Bitlis, (Hillinbrand, 1994), or four arches in the Hanging mosque in Bahnas, (Abdul Qawi), (1092/1708), and (1194/1780), and Qayati, Omar Effendi, and Shulqami was planning to add its amendment consists of two wings with two riwaqs and arcade with two arches, or three arches in Sultan Pasha marine, Habaita (509/1115), Prince Ziyad (517/1123) and Shady.

the Hanging mosque in Bahnasa, one of the studies Reached to the scenario plan of the mosque records of the Commission for the Conservation of Arab antiquities that the mosque consists of (16) in arcades; and assumed that the word arcade mean distance between any two columns vertical slab on the wall of Qibla, and concluded that "the Qibla riwaq consisted of Four aisles above three arcades of five pillars each containing of six distances and ideals of the north-western aisle, which brings the total (12) distance", and assumed the existence of two distances in the east and west each for a total (16) arcades. Although it was a plan consists of four riwaqs and the Qibla riwaq and the north western riwaq of three arcades based on six arches, the south western and north eastern riwaqs of one aisle from four arches, around the courtyard than four arches of each side, and assumed that the distance between columns (2m.) to conclude that the total area of the mosque was (20×12m) the equivalent of (10×6 distances ×2m), although it omitted columns and the size of columns makes the distance between the columns did not exceed (1.60m), said based on the image of an old photograph as the entrance was flanked by three windows, although the windows have drawn away from the entrance.

Such planning has spread in the mosque of Al-Waleed bin Abdullah Palace (Minia palace), (86-96/705-715), (Creswell,1984), Tamour in Yemen (430/1038), (Al-Haddad, 2006). Muharram Effendi mosque known as the Kurdish (1136/1723), Sheikh Irian in sea door (1171-1173/1757-1759), Sonqur bey in Anatolia, the Grand Mosque in Devregi, (Hillinbrand, 1994). It is from five arches in Eryan in Cairo (1173/1759), Orabi in Rasheed (994/1585), and four arches in Ahmed Abi Attuqa in Rashid (1139-1143/1726-1730) and Sae'di (1133/1720), Abdel Aziz Abu Issa (1176/1763) and Numairi in Fowa, and three arches in Abu Sha'ra in Fowa and Ali bey Gonaina in Alexandria (1270/1853), (Al-Haddad, 1997).

**3. 2. 3 Planning of the three naves and two arcades** with three arches in Zayn El Abidine in Bahnasa,

Sultan Pasha in Minia, Sheikh Ababa, Hussein Hassan Attia, Sultan Pasha tribal angle Sultan, Kashif. This planning in Qasr El-Hallabat mosque in Jordan (96-105/715-723), (Creswell, 1984). Bab Almrdom mosque in Toledo, Bu Fatata in Sosa (223-226/838-841), Mohammed bin Khiron Almaefiri known mosque of three gates in Kairawan in Tunisia (252/866) (Hillinbrand, 1994), and Sayeda in manestair, Balkh (3/9), (Al-Haddad, 1997). Sultan in Tarfodh in central Asia, Alhaji Piada in Balkh in central Asia, the Ulu Mosque in Aski in Turkey, Teitd in Yemen (early 7/13) Barsima in Sivas (974/1566), Sari Ali in Qaysaria in Anatolia, Mahmudiya in Cairo (975/1567), Murad Pasha in Cairo (976-979/1568-1571), Maseah Pasha (973/1577), Abdul Rahman Katkhoda known as Sheikh Motahar (1158/1745), Abdel-Rahman Katkhoda known as strange (1168/1754), Abdul Rahman Katkhoda known as Sheikh Ramadan (1175/1761), Joseph Gorbajy (1177/1763), Bayoumi (1180/1766), Araby (before 1183/1769), Mahmoud Muharram (1207/1792), Junbolatt (1212/1797), Abu Dir'e (1218/1803), Hassan Taher Pasha (1224/1809), Gawhar Almueini (1229/1814), Gawhary (1261-1265/1845-1848), Alty Bermaq before (1033/1623), Domagsis (1114/1702), Al-Samitt before (1147/1734), Abbasy (12/18), Abu Mandour in Rasheed, seven Sadat (1144/1731), Sheikh Sha'ban before (1149/1736), Da'y Addar before (1149/1736), Beheiry Before (1149/1736), Mousa in Fowa before (1150/1737) and Ali Al-Masry in Alexandria (1275/1858), (Al-Haddad (1997, 2006, 2000).

**4. 2. 3 Planning of two naves and one arcade** of five arches in Reedy, Qushiri and Sit Numaila. This was planned mosque near the palace of Mount Cisse in Damascus (86-96/705-715), and found in the mosque of St. Catherine Monastery (5/11) which is the oldest models for the planning, as evidenced in the Ottoman age in Oqba bin Amer mosque (1066/1755) and Zolfaqqar Bay (1079/1680), Abd al-Rahman Katkhoda known Shawazlia (1168/1754), and Abu Ali in Alexandria, (Al-Haddad, 2000).

Despite the diversity in trends between the arcades parallel contract to Qibla wall with the wooden flat ceiling or vertical and cross-bearing roof primarily with domes, we find that Minia mosques takes one model where arcades go toward along the wall or the south wall.

The mosque with naves without courtyard in Fatimid mosques as Habaita (509/1115) and Prince Ziyad (517/1123), and the planning both arcades all four of them three arches on six pillars, its income is the mihrab, middle of the north-western front entrance to the center of the mihrab, cladding and mediate the north-western and south-eastern central entries, and make each open arena.

In the Mamluk age, mosque has been reconstructed as Habaita and Amir Ziyad shrine during the Mamluk Sultan Qaytbay (872-901/1467-1496) The entrance is unique vestibule consists of a corridor leading to the door in the north-eastern wall. This is the entrance into the age of Qaytbay which is similar in its relation to the entrance of two Qaytbay castles in Rasheed and Alexandria.

Planning of mosques was divided into five naves in Oda Bashi mosque, including four arcades go along with the mihrab, cross with axes of the mosque and the first arcade consists of four arches, the second and third consists of five arches and fourth consists of two arches, that architect has resorted to a architectural solution against the irregular arches with the widening holes resorted to the use of pointed and a half-circular arches.

The planning with four naves, including five arches on four pillars of Damarisi and Asqalani, four arches in the Hanging Mosque, Shulqami, Omar Effendi, Sultan marine and Qayati, two arcades including three

naves each of the four columns carrying five arches in Asqalani, two arcades with five arches in Qushiri, three arches in Reedy and Sit Numaila.

Four naves and three arcades with three arches in Shady, three naves and two arcades with four arches in Sultan Pasha, three naves and two arcades with three arches in Sultan Pasha tribal mosque, which is similar to slaves of Mahmudiyah, Sheikh Abada, Hussein Hassan Attiya and Kashif.

The planning of mosques, as was the case in the Fatimid age, without amendments, the Hanging mosque in Bahnasa consists of a rectangular aria with four naves of three arcades than four arches and three columns and wooden tie beams, confirmed by the presence of three arcades to the right entrance was mediating the north-eastern front, the advantage of the mosque is the existence of two mihrabs, this phenomenon have emerged in the Fatimid era, there is a scene of Sayida Roqaya and the mosque of St. Catherine Monastery.

Two wings has been added to the north-east and south-west of Shulqami mosque, where each took a square mediating the interface and divided from the inside two arcades to their column and two arches. This is an extension of the central arcade, stone entrance have been implemented in the south-eastern of the north-eastern increase, building wings in this way due to a minaret on the northeast corner and the ablution place. In the western corner and the shrine is located in the south eastern corner.

Therefore, we can not call this plan as the planning of Iwans but planning of wings or central planning or cross (cross-axial mosque), a derivative of the planning of madrasas and belongs to the planning of Iwans and represents one on the mihrab and another in return. Dome was built in the middle of the nave rather than the central dome, there is no Durqa'a also in planning of Iwans where the sanctuary is deeper and more extensive and is not required to be Iwan was vaulted and overlooking the Durqa'a by one arch and not more.

There is important note, how to set the two columns of the central arcade of wings and extended to the south-west and the north-east, that the two wings are due the Mamluk age.

This planning was spread in three Iwans in Orkhan mosque in Aznik (725/1325), Orkhan bay in Borsa (740/1339), Green mosque in Borsa (828/1424), Yakhsha bay in Teara (850/1446) and Hamza in Borsa (9/15), Ishak Pasha in Aina Cole (887/1482), the Blue Mosque in Tabriz (870/1470), was also in Saria in Cairo (935/1528) and Darghuth in Tripoli, Libya (971/1563) (Al-Haddad, 2006).

Mediating the ceiling a square ciborio in Asqalani, Qayati. There is penthouse in the ceiling of the Qibla riwaq. The hole appeared in the roof of Oda Bashi mosque and above the mihrab aisle such as Amrawi, Asqalani, Qayati and Shulqami.

The ciborio appeared in courtyard of judge Yahya Zainal Abidin madrasa in Azhar (848/1444) and the courtyard of Qaytbay madrasa in Mamluk necropolis.

Some mosques are involved in raising additional areas for prayer or for the establishment of some facilities that serve the mosque, and these areas were added outside the walls of the mosque surrounded by fences and is attached to an external courtyards, and open these increases were placed in the account when planning to use the mosque for prayers in terms of non-coverage and non-needed as in Habaita mosque and Amir Ziyad, where the north-eastern facade make space arena, and the areas covered by each used as ciborio have emerged above an arcade of five arches in Sultan Pasha marine, three arches in

Sultan Pasha tribal, the ciborio in Shady and Sit Numaila back injury slab in the north of the northern aisle and the following ciborio front south eastern facade of Asqalani and the roof on a column. No such increases have been established for the transformation of the noise of the markets outside the mosques, and the arrival Into mosques in the prayer time in accordance with Islamic law, (Osman, 1988).

# 4. Architectural elements

#### 4.1 Facades and entrances:

In the Fatimid age, there were three entrances to all prominent mosques, mediating each of recess with pointed arch above the door, which blamed a straight lintel and two windows, the main entrance leading to the north-western riwaq, the other two entrances leading to the southern square of the south-western and north-eastern riwaqs.

Battlements crowned surfaces of Amrawi like those of Al-Hassan bin Saleh, Lamati, Yousufi and Asaqalani.

Lamati mosque was characterized by the existence of a portico consisting of five pointed arches, faced by advancing North-West, as is the case of the portico of Al-Salih Talae'e Mosque advancing front of the mosque in the north western side, has been associated with the presence of the portico in all cases, elements and units that fall behind and it was noted that it includes major and involved main iwans and rooms located on each side or other elements of planning and imposed recess and corridors or other, which reveals the essential link between the units as the iwan and the portico advancing it, and that the portico has been associated with the architectural planning of unit, which it involved the main iwans which overlooks the courtyard, which was often surrounded by two units It is a trefoil plan corresponding the triple arched facade of the arches overlooking the courtyard, and reflected on the planning front the triple arched facade on other overlooking facades.

The Portico with a pattern of three-division front has found in the homes, which were revealed in Askar and due to Tolunid age, as well as a similar examples in Samarra as in the general section Jawsaq Alkhaqani palace and the verses also found in South-east and west at home to Ukhaydir palace, which reveals that the planning of its assets in the Abbasid architecture and Iraq and it often received from Iraq to Egypt in the Tolunid age, (Osman, 1988. Darwish, 2008).

The facade of the portico consists of five keel arches mounted on four pillars of the marble with high rules; there are wooden tie beams above its capitals related links with two pilasters of construction prominent on both sides of the portico. There is significant room all part of the facade on both sides of the portico and shallow recess with window, the front of the portico is decorated with pointed arched recesses by the sector lower, (Hautecoeur et Wiet, 1932).

There are two pilasters both on east and west walls were a contact extension of the rooms with them, the portico is based on four columns and two rooms on each side.

The frequency of the triple arched facade which overlooking the courtyard and the wider arch held two sides in the Fatimid buildings, in the front of the sanctuary in Joyoushi scene(Fikri, 1965. Osman, 1988), Aqmar, Ruqaya scene, (Al-mqrizi, 1998. Fikri, 1965), and Yahya Al-Shabeeh scene, also found in

Fatimid churches in Fakhouri monastery, Kabbania, the martyrs monastery, St. Simeon Monastery, Church of the Virgin in Harat Zuwaila, Syrian monastery, Anba Beshoy in Nitrie, the Virgin in Baramous and the monastery of the short.

The middle arch is that the wider arch and higher, as found in some towers of monasteries in Muharraq (Built by Al-Hafiz, (Abu Salih, 2001). and the church located on the top floor of the tower in St. Anthony Monastery (Osman, 1988), and Abrim palace.

Planning of the two sides of the portico, (Al-mqrizi, 1998. Fikri, 1965, Osman, 1988), that the majority of the porticos was bounded by two walls on both sides and the evolution of the form to the recess on each side or opening the door leading to the room, we find that a number of Coptic churches characterized by the existence of the western facade to portico in the Virgin church, (Bullitin, 1897. Shiha, 1988). (Mu'allaqa) in Old Cairo (10 BM), (Meinardus, 2002). These examples reveal the prevalence of the architectural composition of the triple arched facades in the Fatimid buildings.

The front of Al-Salih Talae'e mosque as another front south of Fakhouri, (Abu Salih, 2001. Shiha, 1988. Meinardus, 2002), which we find five-deep recesses crowned by keel arches built of hollow bricks, and the similarity of the two cladding manifestation of the deployment of the architectural composition in each of the Fatimid Muslim and Christian buildings, which was established in this age.

Based on the foregoing, the portico which stood on the outside on five keel arches, there are three rooms on each side to define the north-east and south-west had been along the portico (15m) and supply (6m), The first two rooms were area each  $(4.50\times2.60m)$  wide, including the entrance (2.30m) lead to rectangular vestibule  $(5\times3m)$ . The rooms are terminals in each side with an area of overlapping  $(4.50\times3.85m)$ .

We can make some comments on the plan of Garçan, (Were found four columns on the north side of the mosque were demolished in the 1974), in his assumption of the form of the portico; however, has moved from the truth at several points:

- 1. Making a door in the eastern section of the ground floor of the minaret, which does not exist, as the door is in the first floor level, where the door of the minaret, is to enter from the roof of the mosque, and the ground floor is a solid base.
- 2. Making three columns and three arches of the portico based on the image before the demolition of it (1974). The fee contrary to the reality in terms of its arches equivalent of the arches within the mosque, as the arch is assumed that the middle east equivalent of the central arches to the central southern and northern riwaqs, as well as the two column of the arch which corresponds to the main entrance is supposed to be the focus of similar columns in northern and southern riwaqs and the third column of portico is supposed to be the focus of the northern and southern riwaqs.
- 3. The portico was one of seven arches despite the presence of remnants of walls in the north western angle beside the minaret, which was part of the western room of the portico.

Trefoiled arch, One of the studies have confused the contract between the trefoiled arch with triangular segments (Madaini) and the triple arched entrance, which stated that the Taq Kisra in Madain and the door of the General in Jawsaq Al-khaqani in Samara (221/836) by triple arched entrance, and this is contrary to reality, (Abdel Salam, 1997). The entrance with trefoiled arch with triangular segments is

different from the triple arched entrance. The trefoiled arch with triangular lobes is commonly used in the coronation recesses of entrances especially in the Circassian Mamluk and Ottoman ages consists of three cloves of which is the upper crown and the top and the capital of the arch, a hat with pointed arch often the two lower lobes collateral underlying the upper lobe, (Nageab, 1974), is appeared Lamati, Yousufi, Amrawi, Oda Pasha, Asqalani, Qayati, Shulqami, Al-Hassan bin Salih, Already, Hussein Atiya, Sit Numaila, Shady and Qushiri. Trefoiled arches were appeared in the entrance of Hakim mosque, (Fikri,1965. Lame'I, 1984. Center for the Study. 1990), the Qaytbay district (877/1472), Qaytbay in Mamluk graveyard (879/1474), Mahmudiya (979/1568) and Osman Katkhoda (1147/1724).

There are four windows on both sides of the western entrance in Amrawi mounted by two pointed arched windows with column and skylight, in southern entrance to the Qibla riwaq and three on the western riwaq, and on both sides of the eastern entrance in Al-Hassan Bin Saleh three recesses in each side, and on both sides of the north-eastern entrance in Yousufi with four windows on each side topped with two pointed arched windows with column and skylight, And on both sides of the south-western entrance in Lamati two windows are mounted by recesses with two pointed arched windows with column and skylight, and find it from the inside of the recesses with three trefoiled arches topped with two pointed arched windows with column and skylight, a row of stalactites above recess.

There are recesses in the southern façade, contains five windows in Amrawi mosque to two in Maqsurah and three in sanctuary, and two windows in Al-Hassan bin Saleh, four in Yousufi and five in Lamati, all windows were topped with two pointed arched windows with column and skylight.

The minaret of Amrawi mosque, Was believed to be a multi-heads, (Abdel-Wahab, 1946), which were adjacent by the stone beside the western entrance is similar to the minaret of Mohammed bin Nasser Qalawun mosque (735/1335), Sultan Hassan (757/1355), hospice of Faraj bin Barquq (803-811/1400-1411) and Bersbai mosque (841/1437), (Abdel-Wahab, 1946). Which is based on a square base topped with stalactites and balcony with four windows of keel arches.

The minaret of Al-Hassan Bin Saleh in the north-eastern corner is like a number of Mamluk minarets as Al-Mardani, Aqbugha (740/1339), Sarghatmach (757/1355), the minaret of Yousufi in the north Eastern facade, and set up adjacent to the western wall of the portico of Lamati mosque, and found in another minarets in Bahnasa as the hanging mosque, (Bullitin, 1896), and Zayn Al-Abidin, (Abdul Qawi)

A variety of entrances of the mosques with riwaqs without a courtyard between the entrance superjacent with wooden lintel in Habaita, the rectangular entrance with lintel and segmental arch in Kashif, and a reagent, the entrance with a mass held and half circular in the northern entrance in Prince Ziyad and Sultan Pasha, Or significant mass of trefoiled and arched recess in Damarisi, Omar Effendi, and eastern in Sultan Pasha marine, Sultan Pasha in Minia, Sheikh Abada, Hussein Hassan Attiya, Ready and Sit Numaila, or recess crowned by trefoiled arches with ribs in Oda Basha, Asqalani and Shady, or rectangular recess in the north western facade in Shulqami, or prominent mass with trefoiled arched recesses based on a stalactites in Shulqami, and Sultan Pasha tribal, even though trefoiled arched mass dispersed crowned by five rows of stalactites topped with radiation with ribs in Qayati, or entrance which is leading the mass with trefoiled arch based on two rows of ribbed stalactites in Qushiri.

Above the door in Shulqami, there is a lintel with joggled vousoirs based on two rows of stalactites and

discharging arch above and prominent cornice and stalactites crowned the facades.

There are recesses of windows with joggled vousoirs and discharging arch in the facades of Qayati and Qushiri, and topped by two pointed arched windows with column and skylight, the recess crowned by three rows of stalactites, and a window with stalactites above the lintel of Reedy.

Eminent trefoiled outstanding entrances appeared in Egypt in the Fatimid age in Hakim, (Fikri, 1965), the trefoiled arch appeared in Al-Amrawi and Lamati, Al-Hassan bin Salih, Yousufi, Asqalani, Shulqami, Qayati, Hussein Atiya, Qushiri, Reedy and Sit Numaila, and trefoiled arches crowned the recesses in Amrawi.

And a lintel of joggled vousoirs above the entrance of Qayati, and above the entrance of Shulqami discharging arch of joggled vousoirs, is the oldest models of joggled vousoirs in Al-Heir Palace and Cairo Fatimid fortifications from the era of Badr Al-Gamali, (Fikri, 1965 Shaf'I, 1994).

The lintel of the entrance of Shulqami, Shady, Qayati and northern entrance of Qushiri and Sit Numaila above a stone bracket (Abdel-Wahab, 1956), above two rows of stalactites.

The discharging arch and tympanum above the entrance of Shulqami, Qayati, Shady, and Sit Numaila. The entrance with pointed and trefoiled arches in the entrance of Amrawi, Hassan bin Saleh, Oda, Shulqami, Qayati, Shady and Qushiri, or semicircle sector in Lamati, Yousufi, Sit Numaila, Hussein Attiya and Reedy.

The trefoiled arches entrance appeared in south-western entrance Al-Hakim, Qaytbay district (877/1472), Qaytbay Madrasa in Mamluk cemetery (879/1474), Mahmudiya (979/1568) and Osman Ktkhadda (1147/1724)...

#### 4.2 Minarets:

Mamluk minarets characterized by the highest bases at the roof of the mosque, multi-floors and the summit as a water jug, (Lame'I, 1984), in Amrawi and Al-Hassan bin Salih, Yousufi, Asqalani and Qushiri, minarets square bases in Amrawi, Hassan bin Saleh and Al-Asqalani, rectangular in Qushiri, standard interfaces in Yousufi, Asqalani or higher in Amrawi, Al-Hassan bin Saleh and Qushiri, And recesses in of the minarets with flat or trefoiled arches in Amrawi or inverted triangles in Al-Hassan bin Saleh, Yousufi, Asqalani and Qushiri. Or level square in corners, one floor of a square and another of an octagon in Sultan Pasha marine, Omar Effendi, Reedy and Sit Numaila.

Amrawi minaret like the minarets of Al-Nasser Mohammed bin Qalawun in the citadel (735/1335), Sultan Hassan Madrasa (757/1355) and Faraj bin Barqouq hospice (803-811/1400-1411) and Al-Ashraf Bersbai (841/1437), which is based on square with stalactites and balcony with four arched windows.

The minaret of Al-Hassan bin Saleh likes a number of Mamluk minarets as Mardani, Aqbugha (740/1339) and Sarghatmash (757/1355), other minarets in Bahnasa as the Hanging Mosque and Zayn El Abidine, the minaret of Yousufi have been built in the northern of the north-eastern facade, next of the western wall of Lamati portico. behind the mihrab of Kashef, Oda Bashi, Shady, Sheikh Abada, Qayati, consisting of square floor with level corners for transfer to octagon, the first floor is octagon and all involved recess tapered rectangular with pointed arch with two windows and the octagonal balcony of the first floor based on wooden blocks.

The first floor directly above the base in Lamati, which is octagon with eight recesses, Kashif, Oda Bashi, Sheikh Abada, Qayati worship, Reedy and Sit Numaila, the cylinder in Shulqami, Qushiri and Shady, with a rectangular recesses in Amrawi, Al-Hassan bin Saleh and Yousufi, and straight lintels in Lamati, and culminating in a semi-circular arches in Ready, and the stone bay windows on the first floor in Shulqami standing above two rows of stalactites, the stone bay windows has emerged at Mardani (1339-1340), Qaytbay in the desert (Lame'I, 1984), (1472-1474). The first floor ends with conically in Lamati, and the emergence bear a parapet in Ready and Sit Numaila, ends by five tiers of stalactites bear the parapet in Shulqami and three in Shady, ends of wood blocks bear the parapet in Yousufi.

The second floor is cylinder in Al-Hassan bin Saleh, Qushiri, Shulqami, Reedy and Sit Numaila and Shady. Octagon in Asqalani. or monolithic arches topped by small recesses in Shulqami, and the rest of minarets takes the form of octagon as the second floor in Yousufi and Qushiri, with recesses of the small rectangular doors and trefoiled arches windows of the top in Al-Amrawi, the second floor ends of the obelisk in Ready and Sit Numaila, or by four heads in Amrawi which was emerged with four water jars above the heads, (Al-Shayeb, 1991). The minarets with heads emerged in the Circassian Mamluk age, (Maher,1966), as the minaret in Al-Ghoury mosque.

The third floor as a pavilion from eight columns and a shallow dome and in Yousufi and Qushiri, and cylinder in Al-Hassan bin Saleh, and ends at the tip by water jar in Yousufi and Qushiri, and shallow done in Lamati, Al-Hassan bin Saleh, Shady. The Ottoman minarets are cylindrical as the pencil in Lamati, Shulqami, Reedy, Sit Numaila and Shady, and solid cylinder end by conical dome in Shulqami.

The minaret in Zein El Abidine which was located northern corner of the mosque is square solid floor was supported by wooden blocks and beveled angles, the Octagon has eight recesses with pointed arches of above on the tripartite columns and four windows and four bay windows, and the balcony above stalactites and circular cylindrical body above it, and the pavilion from eight columns based the top as incense burner. This minaret witch is built in the Ottoman age tradition goes on in terms of the Mamluk pavilion with small dome and drawn up like Qaytbay minaret, It will be recalled that the minaret had two external flights, (Abdel-Wahab, 1056. Abdel-Qawi).

### 4 Arches:

Had appeared in Lamati and based on wooden socles with decorations of floral designs, tie beams between them in Amrawi and Al-Hassan bin Salih, Yousufi, Asaqalani, Shulqami, Qayati Reedy, Atiya and Shady. The half circled arch in Lamati, the northern entrance from joggled with windows, the second floor in Yousufi, the recesses of mihrabs in Qayati, Reedy, Amrawi and Hussein Atiya, and half circular arches in Qayati and Qushiri, the horse shoe arches with stalactites had appeared in Oda Bashi.

The segmental arches had appeared above the main entrance and windows of Shulqami, Qayati, above the entrance of the mosque to the arena in Hussein Atiya, above the main entrance of Sit Numaila and Shady.

The flat arch in the western entrance of Yousufi, the recess of the minaret in Amrawi, Hassan bin Salih, one recess in the northern façade of Qushiri. The segmental arch in the first level windows of Shulqami, Shady, the entrance from joggled vousoirs in Hussein Atiya, the side entrance of Sit Numaila.

#### 4 Windows:

Emerged in rectangular recesses in Amrawi, Al-Hassan bin Saleh, Yousufi, Oda Bashi, Shulqami, Qayati, Shady and Qushiri. Without recesses in the Eastern façade of Lamati and south eastern of Asqalani.

The window is crowned by a stone or wooden lintel, or segmental arches with joggled vousoirs in Shulqami, Shady and Qushiri. And two pointed arched windows with column and skylight in the second level in Lamati, Hassan bin Saleh, Yousufi, Oda Bashi, Shulqami, Qayati, Shady, Hussein Atiya, and Qushiri.

The arches of the two pointed arched windows with column and skylight based on pilasters in the center and the sides with the exception of Al-Hassan bin Saleh, Shulqami, Qayati witch based on cylindrical columns with rules and square capitals, some windows crowned by semi-circular arches in Lamati and pointed in Amrawi.

The windows in vertical recesses in Amrawi, Al-Hassan bin Saleh, Yousufi, and western in Oda Bashi, Qayati, Shulqami, and eastern in Shady, Qushiri. The vertical recesses had appeared in the Fatimid and Ayyubid and Mamluk ages as Qalawun complex, (Emara, 1988. Lam'I, 1984), and ending with tiers of stalactites in Qayati, Shulqami and Qushiri as Aqmar, Emara, T. (1988). And crowned by semi-circular arches in the north facade and two half-columns in Oda Bashi and trefoiled arches in Al-Hassan bin Saleh.

## **Conclusion**

The research limited twenty-four archaeological mosques adopt several models follow the local architectural planning between local planning component of the courtyard and open riwaqs, and planning with naves without courtyard.

The research was based on the identification of the architectural planning stages of the development of the mosques on the descriptive approach through the study of architectural planning and follows this through different ages. The analytical and comparative approach by drawing the various characteristics of the models and patterns of architectural planning and comparative study with a number of mosques.

The planning of Al-Hassan bin Saleh mosque in Bahnasa due to the Abbasid age and was built in the Fatimid age, the planning of Amrawi, Yousufi, Lamati due to the Fatimid age, and was followed by the renovation work and the Ottoman Mamluk era and Muhammad Ali. The planning of the Hanging mosque in Bahnasa to Mamluk age, and the reconstruction in Ottoman age.

Because of the Habaita and Prince Ziyad due to the Fatimid age, the mosques of Oda Bashi, Zayn El Abidine in Bahnasa, Asqalani, Qayati, Shulqami, Jamal al-Din Akosh (Damarisi), Omar Effendi, Sultan Pasha marine in angle Sultan, Sheikh Abada, Reedy, Qushiri and Sit Numaila due to the Mamluk age, while the Sultan Pasha mosque in Minia, Sultan Pasha tribal in angle Sultan, Kashif, Hassan Hussein Atiya and Shady due to the age of Mohamed Ali, the latter mosque was established in (1319/1900) most recently.

In the Fatimid age, there were three entrances in each mosque, every entrance mediating block, with a prominent pointed arched recess and straight lintel and two windows above the door, the main entrance

leads to the north western riwaq, the other two doors leads to the southern square of the north eastern and south western riwaqs, The central windows topped by two pointed arched windows with column and skylight.

Lamati mosque was planning similar the planning of Salih Talaee mosque in Cairo, where two rooms on both sides of vestibule with two windows on the portico and the two parties overlapped in two rooms of foreign Affairs to determine highlight portico on both sides, and Qibla riwaq of three aisles, the mihrab aisle is the most widely, and takes four arcades from five arches In the Qibla riwaq and six in the north eastern and south western riwaqs.

Lamati mosque was characterized by the existence portico advance and the north western faced consists of five arches, as is the case of Salih Talaee mosque, and the facade of the portico from five keel arches mounted on four columns of marble and wooden tie beams above the capitals related construction on both sides of the portico, and there were two rooms in every section of the front sections of the portico,

There is significant room in each of the front sections with shallow recess, including the basement window.

The interface of the portico is decorated by keel arched recesses. There are two pilasters on both eastern and western walls; they are an extension of the rooms contact with them.

Planning of the two sides of the portico reveals that the majority of the porticos was bounded on both sides by two walls and the evolution to the work of recess on each side or opening the door leading to the room, and we find that a number of Coptic churches characterized by the existence of the portico to the western facade. These examples reveal the prevalence of the architectural composition of the triple arched facades in the Fatimid buildings.

The portico was overlooking with five arches abroad as there are six rooms which highlight on both sides of the portico to define the eastern and western walls, the length of the portico is (15m) and supply (6m.), The first four rooms were each area  $(4.50\times2.60m)$ , Including the entrance of large (2.30m) lead to rectangular vestibule  $(5\times3m)$ . The rooms are terminals in each bedroom each with an area of overlapping  $(4.50\times3.85m)$ .

In Mamluk age, the expansion of the Amrawi, the main entrance of stone in the western facade, it is the leading bloc with trefoiled arched recess thought opening the door, and the establishment of the eastern entrance of Al-Hassan bin Saleh and the north-east of Yousufi, which is held in recess, with a trefoiled arch opening the door,

the entrance of the western facade in Lamati a significant bloc with recess dispersed thought of a trefoiled arch, the other consisting of recess with tapered hole section headed, has followed the entrances of mosques was retained heading Mamluk and Ottoman style, and also spread in Yousufi, Asqalani, Qayati and Shulqami.

In the Ottoman age, Amrawi, Al-Hassan bin Saleh, Yousufi and Lamati were renovated without a change in architectural planning, where building facades have been restored according the Mamluk assets and retain elements of the entrances of Fatimid and Mamluk with trefoiled arches and the elements of the facades, the amendment of the windows which is marked with the front and do not in recesses as in the case of pre-Ottoman architecture.

This phenomenon has spread in the mosques that took place in Minia restoration work in the Ottoman age, has been expanded the eastern of Amrawi, now composed of three isles parallel to the Qibla wall each consisting of three arches, and in the western riwaq composed of two aisles, added room in the area confined between this riwaq and the Maqsura.

On the north side of Lamati, adjustments have been made since been demolished rooms and Durqa'a, the northern riwaq consists of two aisles of with seven pointed arches, the middle most widely and oversees the courtyard with five arches, the portico had been modified, where two rooms, was expanded for consisting of seven arches, and it seems that when the portico is demolished, they rebuilt the mosque without taking into account the evidence that battlements witch culminating in the northern facade had been established without into account the existence of the portico which over the assumed level of the roof of the mosque.

Habaita and Prince Ziyad from the Fatimid era, are two of the mosques with riwaqs without courtyard, but in the Mamluk age mosque has been rebuilt, Prince Ziyad shrine during the Mamluk Sultan Qaytbay, this mosque advantage of unique entrance with vestibule consists of a corridor leading to the door end refracted the mosque in the north-eastern wall.

The wings are added in the north-east and south-west in Shulqami, where each took a square mediating the interface and divided from the inside two naves to their column and two arcades. This arcade is an extension of the central in the mosque; they built an entrance of stone in the south-eastern wall of the increase.

Therefore, we can not call about this plan the name of Iwan planning, but the planning with wing or central planning or a cross derivative of the planning of madrasas and belongs to the Iwani represents one towards the Qibla Iwan in return, instead of covering the middle area were dome in the center.

There is vestibule also in the Iwan planning where the Qibla riwaq is deeper and more extensive and is not required to be vaulted and overlooking the Durqa'a with one arch, and there is important note is how to mark the end of the two columns witch ends the Central arcade in the Durqa'a and extended to southwestern and north-eastern, the two riwaqs are added in the Mamluk age.

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