

■ EGYPT

The Fortifications of Cairo: the Wall of Gawhar, Egypt, Mission Report 2012

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Introduction

The mission took place between the 5th and the 31st of December, 2012. The excavation was financed by the French Institute of Oriental Archaeology (*IFAO*) and the French Ministry of Foreign Affairs (*MAEE*), with institutional and administrative support being provided by the Supreme Council of Egyptian Antiquities Service (*SCA*). The team comprised: Stéphane Pradines (team leader, *IFAO*), Ashraf Fahmi (chief inspector, *SCA*), Laila Ataya Mohamed Nagem (inspector *SCA*), Rehab Ibrahim (archaeologist), Ahmed Shoky (archaeologist), Osama Talaat (archaeologist), and Hamed Youssef (site foreman). There were approximately 30 workers on site for the duration of the excavation. Report translated by Hazel Le Goff.

Burg al-Zafar

In 2011, our excavation of the Burg al-Zafar enabled us to uncover an adobe wall that was parallel to the mud-brick town wall of Badr al-Gamali and which it pre-dated. This wall remains a mystery: we had suggested the possibility that it may have been the Gawhar al-Siqilli town wall, the very first Cairo fortification. If so, it would have dated between AD 969-971. If this theory was to be

proved correct, it would have raised more questions than answers. In fact, the adobe wall is located in front of the Badr al-Gamali town wall and behind the Salah ed-Din city wall, equidistant between the two walls, one dating from the end of the 11th century AD and the other from the end of the 12th century AD. This leads to the question of why Badr al-Gamali may have chosen to build his intramural wall, behind that of Gawhar? This archaeological discovery seriously would throw into question the received wisdom about the very first Fatimid town wall and, in particular, its location. However, there is very little known or even written about this wall (Fouad Sayyid 1998: 146-151). The 2012 excavations have provided partial responses to our questions.

Presentation of the Site Extending from the al-Utuf Street to the al-Bakri Mosque (Northwestern Town Walls)

Our research focused on the walls between Bab al-Nasr, al-Utuf Street and the al-Bakri Mosque (Figure 1). For many years, we have been requesting authorisation to carry out work in this area and now, finally, the *SCA* have rewarded us for our perseverance. The excavation of this area is necessary in order to gain an understanding of the Cairo city walls and to have a complete chronology of them.

Excavation of these remains took place between 2006 and 2007 and by The Association for the Protection of Fatimid Cairo, The Ministry of Housing and Aswan Company, a private firm (Pradines 2011/2012; Pradines et al. 2009; Pradines and Den Heijer 2008; Pradines and Talaat 2007). The remains of an ancient wall appeared during a dig under some ancient houses that were built up against the city wall of Salah ed-Din to the north of al-Utuf Street. Unfortunately, these digs did not form part of any archaeological research and, as a result, not only has all the stratigraphic evidence been destroyed, but a section of the town walls was also destroyed by the pickaxes of unsupervised

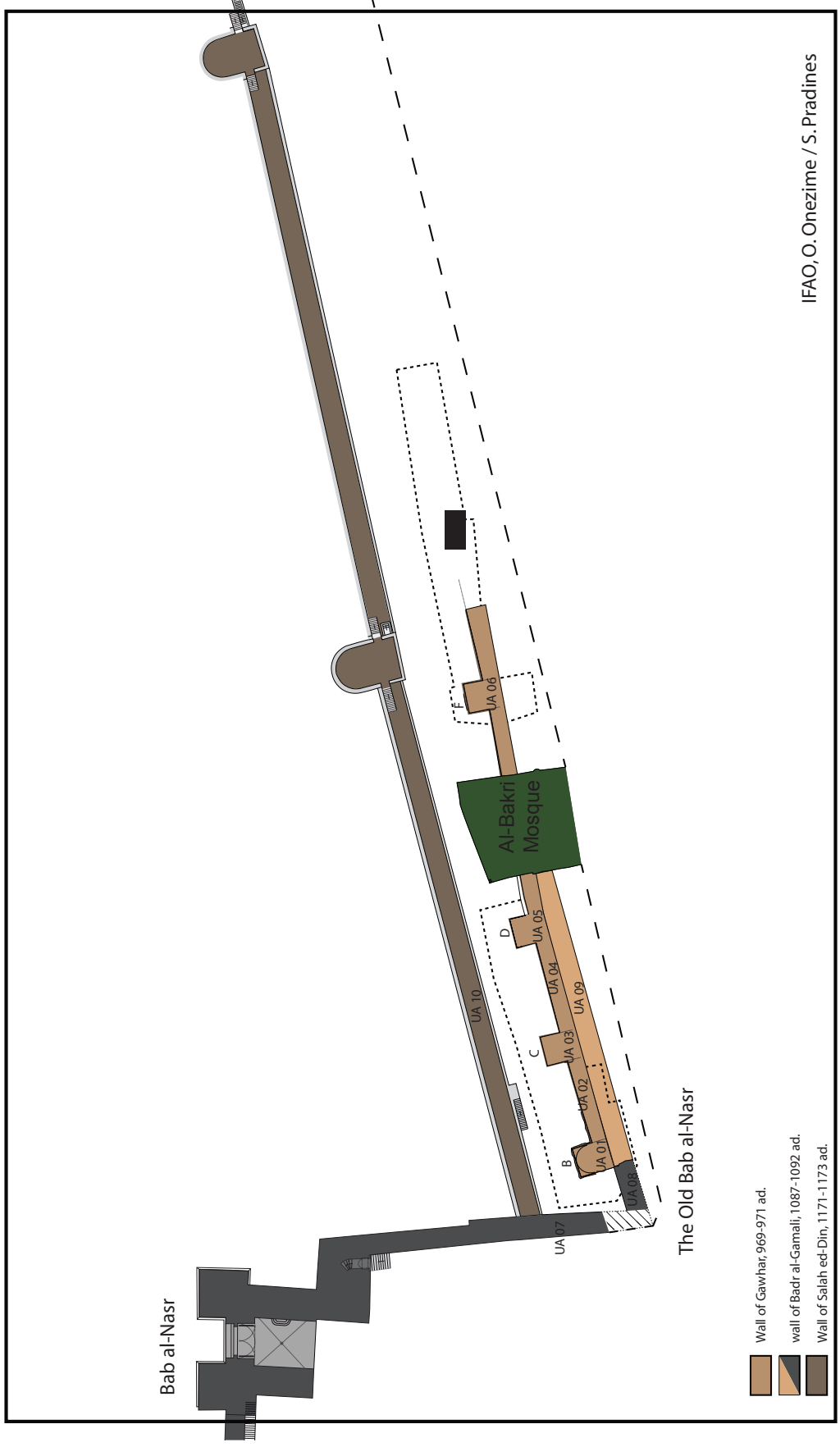


Fig.1: General Map of the site of Bab al-Nasr, al-Utuf street (2012)

Figure 1: Map of the site.

workers.

Since this work, the whole of this area has become a vast no-man’s-land that is left unguarded: inhabited by goats and used as a huge garbage dump by the local residents. Despite all these problems, which are very common in Cairo, there was a positive side to the unsupervised work in that it revealed what was lying under the dwellings in this area. These dwellings are modern but they were built on foundations dating back to the Mamluk era.

Finally, we must give a special mention to Mr. Ashraf Fahmi, the Chief Inspector of this area of Fatimid Cairo. It was he who carried out the crucial work of protecting the site by encircling it with a wall. This action is worthy of mention and should be supported and praised. At a time when Egypt was gripped by a serious economic and political cri-

sis, Mr. Ashraf Fahmi knew how to mobilize all the resources of the Antiquities Service of Gamaleyya (*Tatfich*) in order to protect an extremely important archaeological site. He displayed great competence and leadership in both his management of the monuments for which he was responsible, and also with regard to the French mission. Let us hereby convey to him our heartfelt gratitude.

Results of the Excavation Behind the Bab al-Nasr

The concession covered an area of land measuring 330m long, 15m wide to the west and 35m wide to the east. This area is surrounded to the north by the Salah ed-Din city wall, to the south by the Haret al-Utuf Street, to the west by the Bab al-



Figure 2: General view of the site.

Nasr Gateway and to the east by the Bahaa el-Din Street (Figure 2).

The clearance process on the al-Utuf Street site began on the 5th of December and continued until the 31st of December 2012. Our work consisted of removing the rubbish and plastic bags that had accumulated on top of this wall during the course of the preceding six years. Workers cleared the area by hand as it was impossible to manoeuvre a machine down to the base of the wall. A small machine was, however, used at the end of the mission to clean some exterior paths. We collected some spot height measurements using the level of the current al-Utuf Street as our zero level. The Architectural Units (labelled 'UA') are numbered 1 to 10 and the Stratigraphic Units (labelled 'US') from 1000 to 1005.

There are several walls on this site that have been neither dated nor studied. First of all, a wall going from north to south that adjoins the Bab al-Nasr Gateway dates from the Badr al-Gamali era. There is an Ayyubid wall which backs onto the north-south wall of Badr al-Gamali. We also have a wall made up of large slabs identical to those of the Badr al-Gamali fortification. This wall seems to be connected to a mud-brick wall with both structures lying on the east-west axis and parallel to the Salah ed-Din wall on the intramural side. These remains are mainly situated to the west and the east of the al-Bakri Mosque, about 55m from the wall to the west and 15m to the east. The mosque covers 20m of inaccessible wall, therefore in total we have a stone wall, hitherto undiscovered, measuring a total length of 90m. We were convinced that this was a Fatimid town wall since the Salah ed-Din city wall is located in front of it. This fortification could be that of the Gawhar al-Siqilli wall or that of the extension towards the east of the Badr al-Gamali town wall.

The wall is flanked by towers, which are interspersed at 15m intervals. Four towers are visible on the site, three to the west of the al-Bakri Mosque and one to the east. If the towers are set out at regular intervals, there is no doubt that there is a tower

underneath the mosque. The towers are catalogued from west to east under the labels B, C, D, E (underneath the mosque) and F. All the towers measure 4.8m wide and all, except the one on the far west of the site, are quadrangular in shape. These towers are very close together, which is not a characteristic that we have ever seen on either the Badr al-Gamali or the Salah ed-Din town walls (Figure 3).

Another unprecedented characteristic of this wall is the very small size of the facing slabs on the external façade. In fact, the curtain wall, the quadrangular walls and the upper level of the semi-circular tower are made of tiles and header bonds measuring 40cm and 18cm wide respectively and which form 20cm-high courses. The square base blocks of the semi-circular tower are slightly larger, with 28cm-high courses and blocks of 20cm to 35cm wide on average.

The curtain wall measures 2.2m thick (labelled UA 02 and 04). It appears between the two towers B and C at a depth of 130cm. The highest point of the curtain wall is 13cm above street level, which is not at all surprising considering the fact that there were Mamluk and Ottoman dwellings to be found on the very site of our excavation. The curtain wall foundations start at a depth of 310cm. We did not uncover the base of the foundations. Three arrow-slit embrasures were identified conclusively on the curtain wall between B and C towers. There were possibly five arrow-slits in the beginning, but because sections of the wall near to the towers are in such a bad state and are not high enough, this assertion cannot be proved. The original width of the three embrasures was not apparent simply because the arrow-slits were re-used during the Mamluk era. The openings of these arrow-slits were re-used as latrine overflows in Mamluk houses, which were built on top of the wall. Some large limestone lintels, which are characteristic of Mamluk latrines of the 14th to 15th centuries, were evident here. The upper level of Tower C is at 44cm and its foundations at -327cm, which means that there is an elevation of more than 3.5m of the Fatimid fortification at this point. The Fatimid wall was thus an integral part of medieval dwellings which no doubt engulfed the

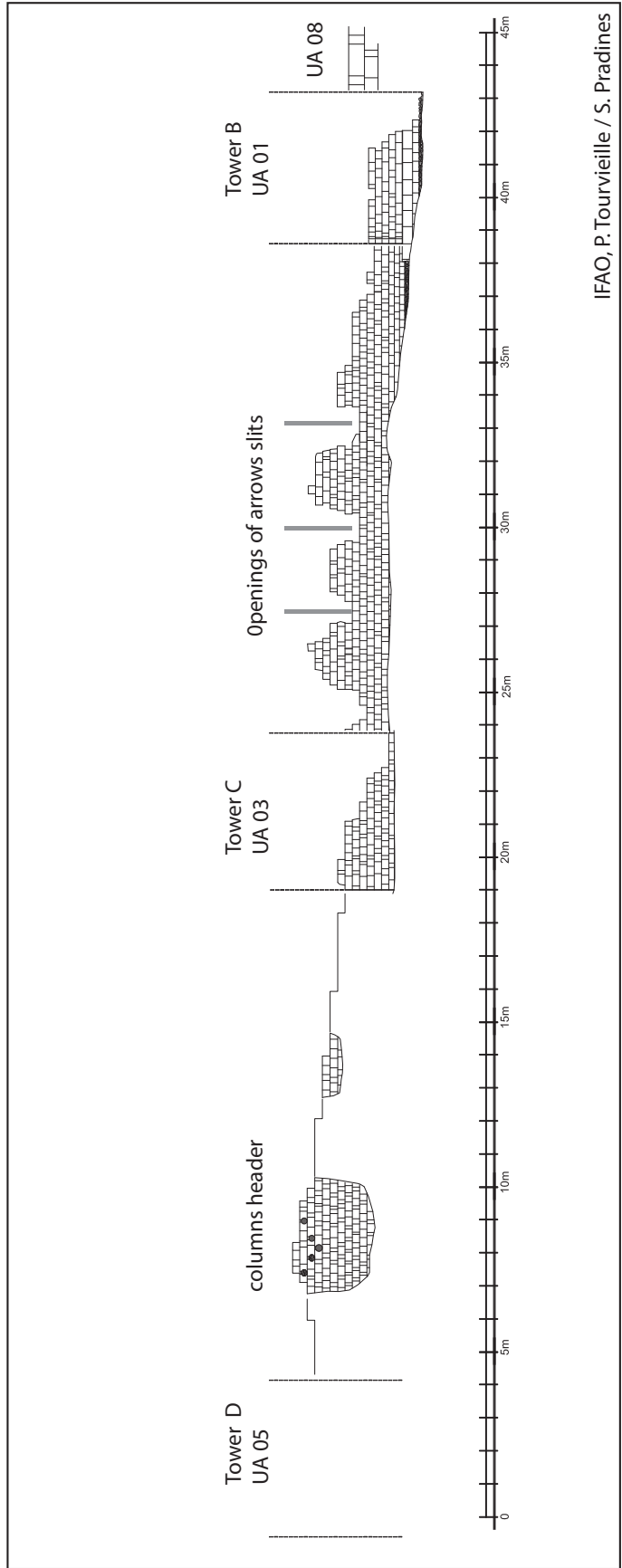


Fig.3: Elevation of the facade of the Fatimid wall

Figure 3: Elevation of the Wall of Gawhar (969-971 AD).

town wall, as we had seen on the Darassa car park site.

Finally, the facing of the curtain wall is decorated with a magnificent large V-shaped heringbone motif consisting of small header columns on the facing (Figure 4). This motif is situated between Towers C and D. There are five white marble columns in all, the lowest being located 3m above the level of the walkway (where the wall foundations start.). Two are circular-section columns that measure 16cm and 19cm in diameter. The other three are octagonal-section columns, one measuring 18cm from the side and the two others 17cm. This decorative motif on the façade is the only one found on the Cairo town walls and has probably never been seen before in the medieval Near-East. Of course, this use of header columns is reminiscent of the Badr al-Gamali walls and its gateways, or to the corner towers of Zafar and Mahriq built by Salah ed-Din. However, in the cases cited, it only concerns the columns that are arranged equidistant-

ly and on the same course.

We are familiar with these architectural elements, with the small-scale, almost buttress-like, flanking quadrangular towers. For, isn't the Fatimid town wall of Badr al-Gamali also flanked by quadrangular towers, whether at the corners of the city as is the case at Burg al-Zafar or at the gateways such as Bab al-Nasr and Bab al-Tawfiq? Only the gateways of Bab al-Futuh (AD 1087) and Bab Zuwayla (AD 1092) that do not follow this rule and are flanked by semi-circular oblong-shaped twin towers on a rectangular base and with a moulded façade. This is why Tower B immediately captured our attention. This Tower, semi-circular in shape, rests on a square base and has a moulded salient on its eastern side, identical to that of the Bab al-Futuh Gateway. The highest point of the semi-circular B Tower is at -166cm. The upper level of the square base of Tower B is at -269cm (this is our secondary starting point for the deep levels). The foundations of the semi-circular tower are deeper and



Figure 4: Column headers.

differ from those of the curtain wall, to which it is connected. Moreover, we notice a vertical crack at 50cm to the east of the tower but which cannot be found on all of the preserved elevation. On the first three courses above the foundations, the slabs are slightly smaller than on the remainder of the elevation. These elements show with certainty that the tower was built before the curtain wall, as is often the case in military architecture.

The similarity between Tower B and the mighty Fatimid gateways leads us to believe that this tower is in fact linked to a gateway. This is the same principal used for the twin towers that encircle the entrance, which dominates the Bab al-Qantara Gateway. Although this has now disappeared, it

was included in the works of Creswell published in 1952 (Volume 1: 25). Added to this is the fact that the passageway from the probable door is blocked by a totally different wall with a huge facing, identical to that found on the Badr al-Gamali town wall (Figure 5). The courses of this wall measure 50cm high and alternate on average from tiles of 70cm and headers of 25cm wide. The highest point of the wall with the huge facing, known as Badr al-Gamali is located at -108cm. The foundations of this wall start at -361cm. For reasons of security, we did not uncover the base of the foundations as we carried out a small pilot study in the corner of the huge wall and Tower B. We noticed that the foundations of the AD 1087-1092 wall were much deeper than those of the tower. However, it is in



Figure 5: The first Bab al-Nasr blocked in 1087-1092 AD.

fact the huge wall that post-dates the tower, as revealed in the study of the actual building. The facing of the large wall is carved in such a way that it backs onto and interlocks with the facing of Tower B. The foundations of the huge wall are deeper because they no doubt follow the construction level of the Badr al-Gamali curtain wall that adjoins the Bab al-Nasr Gateway.

The final architectural element discovered this year was a mud-brick wall measuring 2.9m wide. This is a preliminary measurement as this area has only been partly excavated. The measurement was taken in a section where this wall can be clearly seen, but it may not be conclusive. Let us remember that the area has been severely affected by the Mamluk and Ottoman dwellings. The mud-brick wall is located right on the axis of the huge facing wall and the back of the curtain wall is made of stone and incorporates B, C and D towers. The thickness of the mortar joints and the size of the bricks resemble those of the Fatimid wall that we dug up at Burg al-Zafar, Darassa and at Bab al-Tawfiq. The architectural similarity between this wall and the town wall of Badr al-Gamali is worrying. Moreover, this wall seems to be a continuation of the wall with big dressed stones (*UA08*). However, we can date the *UA08* wall as being from the same period as the north-south wall *UA07*, namely the time that the wall of Badr al-Gamali was built between 1087 and 1092.

Conclusion

This area seems to be very promising and will enable us to provide a provisional conclusion and to answer many questions on both the history of the town walls and that of the city of Cairo itself. The results of this Mission seem to indicate three distinct defensive networks. First of all, the city wall of Salah ed-Din, built later than the Burg al-Zafar Tower (dated from AD 1169 to 1171), but which possesses unusual and archaic characteristics which likely date from AD 1171 to 1173 and which

indicates that this section of the wall post-dates the eastern wall of Salah ed-Din, from Bab al-Gedid up to the Burg al-Mahruq (AD 1173/74 to 1177/78). Secondly, the Badr al-Gamali town wall and the Gateway of Bab al-Nasr date from AD 1087. This wall starts at Bab al-Nasr towards the south and makes a sharp bend towards the east and seems to block a more ancient gateway. The composition of the Badr al-Gamali town wall switches from large stonework bond to a small mud-brick work bond. This wall backs onto a much older wall and is twice as thick as that one. This older fortification comprises quadrangular towers. These are positioned very close together and have small facing and header columns, which create a geometrical motif and one single semi-circular tower. This semi-circular tower appears to be linked to an entrance that may have been cut and blocked by the Badr al-Gamali wall.

Our observations enable us to explain why the Badr al-Gamali town wall heads towards the south from Bab al-Nasr. Creswell had already put forward this theory, and understood very well that the famous Vizier's engineers had wanted their fortification to follow a pre-existing layout.

Our current theory is that the wall we have studied this year would be the third wall, namely the fortifications of Gawhar and would be dated from AD 969 to 971. The semi-circular tower would be the twin tower of the original Bab al-Nasr. In order to confirm or refute our preliminary findings, we will carry out excavations on the western side of the al-Utuf site. The latest stratigraphic evidence, the verge of the north-south wall of Badr al-Gamali, will enable us to answer many questions, in particular whether this wall has or does not have a semi-circular twin tower underneath it.

Our findings will, undoubtedly, have a major impact on our understanding of Fatimid Cairo and its boundaries. If our theories prove to be correct, that would mean that the al-Hakim Mosque was built over both sides of the Gawhar town wall. In fact, even if this wall was at a south-west angle,

the mosque must have sat right on top of the north-east section of the wall. Finally, we will continue our work on the adobe wall that we discovered at Burg al-Zafar in order to establish whether it is in fact a continuation of the Gawhar wall.

Bibliography

Creswell, K.

1952 *Muslim Architecture of Egypt*, Volumes I and II, Oxford: Clarendon Press.

Pradines, S.

2011-2012 Les fortifications fatimides, Xe-XIIe siècle (Ifriqiyya, Misr et Bilâd al-Šam). In *Historiographie de la guerre dans le Proche-Orient médiéval (x^e-xv^e siècle)*. Co-édition Ifao-Ifpo, Le Caire / Damas, 2011-2012.

Pradines, S., D. Laville, M. Matkowski, J. Monchamp, N. O’Hora, M. Sulayman and T. Zurrud

2009 Excavations of the archaeological triangle.

10 years of archaeological excavations in Fatimid Cairo (2000-2009). *Mishkah* 4: 177-219.

Pradines, S., and J. Den Heijer

2008 Bâb al-Tawfiq : une porte du Caire fatimide oubliée par l’histoire. *Le Muséon* 121. Peeters, Louvain, pp. 143-170.

Pradines, S., and O. Talaat

2007 Les fortifications fatimides du Caire : Bâb al-Tawfiq et l’enceinte en briques crues de Badr al-Gamâlî. *Annales Islamologiques* 41. Le Caire: IFAO, pp. 229-275.

Sayyid, Ayman Fouad

1998 *La capitale de l’Egypte jusqu’à l’époque fatimide, al-Qâhira et al-Fustât. Essai de reconstitution topographique*. Beyrouth: Franz Steiner.