

The Fortifications of al-Qāhira(Cairo) under the Ayyubids

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The Fatimid Background

The Fatimid city of al-Qāhira, founded in 358/969 and completed in 361/972, was the fourth Islamic capital of Egypt. It had been preceded by Fustāt, al-‘Askar, and al-Qaṭā’i’. By the time of the Fatimid conquest, these three cities, or their remains, had become amalgamated under the common name of al-Fustāt. Pushing successively from the area between the river bank and the Muqaṭṭam hills to the north (al-‘Askar) and the northeast (al-Qaṭā’i’), this amalgamation had reached a point slightly north of the mosque of Ibn Ṭulūn. The Fatimids also established the walled city of al-Qāhira to the north, in a sparsely populated area occupied by a convent, a small palace, the garden of the Ishshidid Kāfūr, and, on the bank of the Nile, by the village Um Dunayn (later known as al-Maqs).¹ The western enceinte of al-Qāhira overlooked the Khalīj, a seasonal Nile-fed canal emanating from Fustāt and preceeding to the north and northeast.

The original enceinte of al-Qāhira was built of mud brick, and a trench (*khandaq*) was dug on its norther side as further protection against Carmathian incursions. Within these walls, exclusive of the royal/administrative complex in the central area, the city was divided into quarters (*ḥārāt*) assigned to specific divisions of the Fatimid army. Military *ḥārāt* were established to the north and south of the city as well. According to the Persian traveler Nāṣir-i Khusraw the original walls were effectively eclipsed by 438/1046–47, as a result of extensive building both within and without.² To the west, at al-Maqs, a naval shipyard and arsenal was established early in the Fatimid period.

During the reign of al-Mustansīr, a period of internal revolt and recurrent famine (ca. 450–466/1058–1073) resulted in the appointment of the Armenian Badr al-Jamālī as wazir in 466/1073–74. Part of his reconstruction included the rebuilding and extension of the walls and gates

of al-Qāhira itself. While the relative positioning of the gates remained effectively unchanged, the walls themselves were extended. On the western side, the wall was extended toward the edge of the Khalij, enough to enclose a new north-south street, then and now known as Shāri‘ Bayn al-Sūrayn. The new eastern wall enclosed slightly more territory, particularly in the area of Ḥārat al-Bāṭaliya. The northern wall—much of which is still extant—now encompassed Ḥārat al-Rihāniya and the mosque of al-Ḥākīm, while the southern enceinte now reached the present Bāb Zuwayla. The amount of new territory enclosed is not significant. This is, perhaps, due to the amount of devastation within and the necessity for the restoration of the original area.³

Ayyubid Fortifications: The General Plan

The Ayyubid rulers of Cairo attempted to enclose the cities of al-Qāhira and al-Fuṣṭāṭ within one massive wall based on Qal‘at al-Jabal (the “citadel”). The citadel, begun by Saladin and first occupied by his nephew al-Malik al-Kāmil, was constructed on a small spur of the Muqaṭṭam. This spur was formerly the site of an Abbasid pavilion, Qubbat al-Hawā‘. During the Fatimid period the spur was the site of several mosques and tombs, all of which were removed for the citadel’s construction.⁴ The enceinte of this new “greater Cairo” was undertaken by Saladin’s deputy Baha’ al-Dīn Qarāqūsh, who also supervised the construction of the citadel and other defense works. This wall was roughly triangular in shape; on the north following the same line as that of Badr al-Jamālī but extending to al-Maqs; on the east, south from Burj al-Zafir to Bāb al-Wazir (just north of the citadel); and from the citadel southeast to Bāb al-Qanṭarah at al-Fuṣṭāṭ, just south of Qaṣr al-Sham‘. While a western wall from Bāb al-Qanṭara to Bāb al-Ḥadīd at Maqs was planned, specific construction at various intervals was never completed.⁵

While following an established pattern of successive Islamic dynasties in establishing new centers of administration and defense (viz. the citadel), Saladin also chose to surround the four earlier capitals—al-Fuṣṭāṭ, al-‘Askar, al-Qaṭā’i‘, and al-Qāhira—with a wall. This wall, while excluding some areas which were (and still remain) totally ruinous, would both protect this expanded city from further invasions and serve as a guideline for restoration within. The walled enclosure set the basic plan for the development of Cairo until well after the French occupation.

The construction of the Ayyubid fortifications of Cairo can be divided into five stages: the restoration of the wall of Badr al-Jamālī by Saladin in 566/1170-71; the construction of the enceinte encircling al-Qāhira and al-Fustāt, and concomittant with that of the citadel and the *qanāṭir* of Giza, all begun by Saladin in 572/1176-77; the excavation of trenches on the northern and eastern perimeters of al-Qāhira in 588/1192; successive attempts to complete the western al-Qāhira-al-Fustāt enceinte from 596/1199 onwards; and the construction of the citadel of al-Malik al-Ṣāliḥ on Rhodah (al Rawḍa), ca. 638-641/1240-44. For clarification, the citadel of Saladin will henceforth be referred to as the "citadel," and that of al-Malik al-Ṣāliḥ as the "citadel of Rhodah."

SALADIN'S RESTORATION OF 566

Recurrent Crusader attacks, in addition to the ever-present threat of internal revolt, prompted the restoration of the decaying enceinte of Badr al-Jamālī in 566/1170-71. Saladin, then wazīr to the Fatimid Caliph al-ʿĀḍid, apparently limited the repair work to the lines of Badr's walls, although the burnt brick enceinte of Badr al-Jamālī (with the exception of stone gates and minor adjacent areas) was replaced by cut stone.⁶ This construction was supervised by Saladin's major domo, Baha' al-Dīn Qarāqūsh. Three gates, Bāb al-Naṣr and Bāb al-Futūḥ in the north wall, and Bāb Zuwayla in the southern, together with some associated wall sections, were included from the former wall of Badr. Other gates, again probably on the same sites as those of Badr, were as follows: in the western wall (overlooking the Khalīj) north to south, Bāb al-Qanṭara, Bāb al-Khawkha, and Bāb al-Saʿāda; in the southern wall, Bāb al-Faraj (to the west of Bāb Zuwayla); and on the eastern wall, north to south, Bāb al-Jadīd and Bāb al-Barqiya.⁷

SALADIN'S PLAN OF 572/1176-77, THE AL-QĀHIRA-FUSTĀT ENCEINTE AND THE CITADEL

Al-Maqrīzī states, in describing the third wall of al-Qāhira:

The third wall. The construction was begun by the Sultan Ṣalāḥ al-Dīn Yūsuf Ibn Ayyūb in 566/1170-71, when he was vizir to al-ʿĀḍid li-Dīn Allāh. In 569/1173-74, when he assumed [complete] power over the kingdom, he entrusted the building of the wall to the eunuch Baha' al-Dīn Qarāqūsh al-Asadī, who built it in stone, as it is now. He intended to surround al-Qāhira, al-

Fuṣṭāṭ, and the citadel with one wall. He lengthened the wall of al-Qāhira from Bāb al-Qanṭāra to Bāb al-Sha'riya, and from Bāb al-Sha'riya to Bāb al-Baḥr. He built the citadel of al-Maqs, a great tower, which he placed on the Nile near Jāmi' al-Maqs. The wall stopped there. He had intended to extend the wall from al-Maqs until it rejoined the wall of Miṣr. He increased the wall of al-Qāhira [by adding] the section adjoining Bāb al-Naṣr, and which extended to Bāb al-Barqīya, Darb Baṭūṭ, and to the outside of Bāb al-Wazīr, [so that] it would join the wall of Qal'at al-Jabal (the citadel). But the construction of the wall stopped at a point near the ramp [*al-ṣawwa*] which is beneath the citadel, because of the death of Ṣalāḥ al-Dīn. Until now the remains of the walls are visible to the observer in the area between the end of the [standing] wall and the area of the citadel. Therefore, the joining of the wall of Fuṣṭāṭ with that of the citadel did not occur. The perimeter of the wall which surrounds al-Qāhira today is 29,302 cubits, as they are usually known, i.e. Hāshimī cubits, viz.: between the citadel of al-Maqs on the edge of the Nile and the tower of Kawm al-Aḥmar on the shore of Miṣr, 10,500 cubits; between the citadel of al-Maqs and the enceinte of Qal'at al-Jabal near the maṣjid of Sa'd al-Dawla 8,392 cubits; from there to the tower at Kawm al-Aḥmar 7200 cubits; finally, behind the citadel, to the front of the mosque of Sa'd al-Dawlah [i.e. the circumference of the citadel wall], 3,212 cubits. This is the length of its curve, including its towers, from Nile to Nile.⁸

Although Saladin did indeed “assume complete power over the kingdom” in 569/1173–74 (the year of Nūr al-Dīn's death), this date for the extension of the walls is almost certainly fallacious. Abū Shama, citing 'Imād al-Dīn al-Iṣfahānī, gives an almost identical account, but in his annals for 572/1176–77, Ibn Wāṣil corroborates this evidence. Paul Casanova is no doubt correct in his assertion that al-Maqrizī has confused the relative texts especially in view of al-Maqrizī's own statement in the *Sulūk* for the year 572/1176–77 that Saladin had ordered the building of the citadel and the associated walls enclosing al-Qāhira and al-Fuṣṭāṭ.⁹

THE AL-QĀHIRA-AL-FUṢṬĀṬ ENCEINTE; LATER DEVELOPMENTS

While the western wall and the section between Bāb al-Wazīr and the citadel were never completed, work continued on the al-Qāhira-al-Fuṣṭāṭ enceinte until the death of Saladin in 589/1193, and, albeit sporadically, thereafter. al-Maqrīzī states that "around the wall of al-Qāhira was a ditch. The digging of this ditch was commenced from Bāb al-Futūḥ to al-Maqs in Muḥarram 588/1192, and, likewise, on the eastern side, from Bāb al-Naṣr to Bāb al-Barqīya and beyond."¹⁰ This suggests that those sections of the enceinte from al-Maqs to Bāb al-Maḥrūq were completed by this date.¹¹

Al-Maqrīzī's *Sulūk* for the year 596/1199–1200 states that al-Afdal, as regent for al-Mālik al-Manṣūr in Egypt, ordered defensive precautions against al-ʿĀḍil's impending attack from Syria. Al-Afdal instructed Qarāqūsh:

... to put the citadel in a state of defense and to dig the foundations for the rest of the wall surrounding Miṣr and al-Qāhira. He ordered him to dig until he reached bedrock, and to carry the debris to the interior of the city on the edge of the ditch, in order to create bastions, and to use cattle in this work. [He ordered him] to execute these works in the part between the river and the citadel of al-Maqs in such a way that one could no longer enter the city except by its gates.¹²

These reinforcements, while possibly including unfinished sections of the al-Qāhira-al-Fuṣṭāṭ eastern enceinte, must have included extensive works on the combined city's undefended west flank paralleling the Nile. Although the western wall of al-Qāhira (first constructed by Badr al-Jamālī and rebuilt by Saladin in 566/1170–71, v.s.) should have offered some protection to al-Qāhira only some thirty years after its reconstruction, it is not mentioned again.

Several entries in the *History of the Patriarchs of Alexandria* note further attempts to complete the western enceinte of al-Qāhira-al-Fuṣṭāṭ. Against the impending Fifth Crusade, in 614/1217–18 al-Malik al-ʿĀḍil ordered a wall constructed at Miṣr along the river shore, beginning at Dār al-Mulk (near Bāb al-Qanṭarah, the southeastern point of al-Fuṣṭāṭ) and extending along the length of the Khalīj to al-Qāhira. Under the direction of his son, al-Kāmil Muḥammad, foundations were dug and building commenced. The inhabitants of al-Fuṣṭāṭ and al-Qāhira were levied to split stones nightly, although the residents of al-Fuṣṭāṭ appear to have been relieved of these duties earlier than those inhabitants of al-Qāhira. Later,

during the same crusade (615–618/1218–21), al-Malik al-Kāmil and his brother al-Malik al-Mu‘azzam ordered the building of a wall from Miṣr to al-Qāhira to join the two cities. While partially a repeat of the above, we find a change here both in the laborers employed and the *modus operandi*. Al-Kāmil and al-Mu‘azzam initially planned (and, no doubt, partially built) walls having stone foundations with upper works of earth. These were the labors of Berber workmen (*Maghāribā*). Al-Kāmil and al-Mu‘azzam then reversed their decision, demolished the Berber construction, and rebuilt the wall with sun-dried bricks. “Then the order came to remove the bricks of the people in al-Qāhira and Miṣr.” In 634/1236–37 al-Malik al-Kāmil ordered the foundations of the al-Qāhira-al-Fuṣṭāṭ enceinte dug along the river bank, a month’s work involving forced labor for all regardless of religion or class. During the reign of al-‘Āḍil II similar works were carried out.¹³

The western enceinte initiated by al-Malik al-‘Āḍil “extending along the length of the Khalīj to al-Qāhira” could narrowly be interpreted as leaving the Nile shoreline and following the Khalīj, itself to join the previously constructed western wall of al-Qāhira. It is more likely, however, that the wall was constructed parallel to the Khalīj, but closer to the Nile, especially considering the preexisting towers/gates at Bāb al-Qanṭārah, Bāb Miṣr, and al-Maqs. The salient point is that although the construction of the western enceinte was attempted at several points during the later Ayyubid regime—in times of political crisis, whether Crusader threats or civil wars—the wall was never completed, and the idea of its consummation lapsed into oblivion as soon as the crises passed.

THE CITADEL

THE FOUNDATION AND CONSTRUCTION OF THE CITADEL

According to al-Maqrīzī:

Here is the reason for its building. When the sultan Ṣalāḥ al-Dīn Yūsuf Ibn Ayyūb had ended the Fatimid dynasty in Egypt and had assumed [complete] power, he resided at Dār al-Wizārah in al-Qāhira. He remained, however, troubled by partisans of the Fatimid Caliphs in Egypt and al-Malik al-‘Āḍil Nūr al-Dīn Maḥmūd Ibn Zangī, sultan of Syria. Initially he protected himself from Nūr al-Dīn by sending his brother al-Malik al-Mu‘azzam Shams al-Dawlah Tūrān Shāh to the Yemen in

569/1173–74, thus securing that kingdom for him and denying it to Nūr al-Dīn. Shams al-Dawla conquered the Yemen, and God spared Ṣalāḥ al-Dīn the fear of Nūr al-Dīn, as he [Nūr al-Dīn] died in the same year. With his flank secure, [Saladin] wished to build himself a stronghold in Egypt. He had [already] divided the two Fatimid palaces among his amirs and quartered them there. It is said that the reason for his choice of the site of the citadel is that he hung meat in al-Qāhira, and it went bad after a day and a night, while he hung the meat of another animal at the site of the citadel and it did not change until after two days and two nights. Therefore he ordered the foundation of the citadel there. He entrusted its construction to Qarāqūsh. He [Qarāqūsh] began its construction, as well as the extension to the wall of al-Qāhira in 572/1176–77. He destroyed the mosques and tombs on the citadel site. He destroyed the small pyramids at Giza facing Miṣr—there were many in number—and he used the stone in the construction of the wall, the citadel, and the *qanāṭir* of Giza. He began the building of the wall surrounding al-Qāhira, the citadel, and Miṣr, but the sultan died before the wall and the citadel were completed. These works were neglected until the reign of al-Malik al-‘Āḍil who placed his son al-Malik al-Kāmil in the citadel, appointed him his deputy in Egypt, and named him his successor. He [al-Kāmil] completed the citadel, and he built within it the palace of the sultan [al-Āḍār al-Sulṭānīya]; that was in 604/1207–08. Al-Kāmil lived in it until his death, and it remained the seat of government for Egypt until our times. The sultan Ṣalāḥ al-Dīn Yūsuf Ibn Ayyūb stayed at the citadel occasionally, as did his son al-Malik al-‘Azīz during his father’s lifetime; then he moved from there to Dār al-Wizārah.¹⁴

CHOICE OF THE SITE

The spur of the Muqaṭṭam on which the citadel rests was the natural pivot point for the al-Qāhira-al-Fuṣṭāṭ enceinte. Almost equidistant from the northern wall of al-Qāhira and Bāb al-Qanṭāra at Miṣr, this promontory provided a vantage point from which to ward off attacks from the northeast, as well as a zone of security against insurrections from within the city itself. Although considerably higher, the main bulk of the Muqaṭṭam to the east

and southeast presented no significant threat, as no catapults of Saladin's day were capable of spanning the gap between the two hills.¹⁵

CONSTRUCTION DURING SALADIN'S REIGN

The citadel was divided into two distinct sections, eastern and western. The eastern section was a massive military/defensive complex while the western section, considerably less fortified, provided a residential and administrative complex for the sultanate. In time of crisis, the eastern section served as an immediate refuge for the sultan and his entourage. The work of Saladin was largely, if not strictly, limited to the eastern enceinte. A possible exception was the well of Joseph, within the western enclosure and excavated or enlarged by Qarāqūsh. The foundation inscription of the citadel, above Bāb al-Mudarraġ, is dated 579/1183-84. This is probably the terminal date for work accomplished during Saladin's reign, especially since he permanently left Egypt in the previous year. Based on Paul Casanova's historical research and K. A. C. Creswell's architectural survey, Saladin's work on the eastern enclosure consists of the following: the enceinte with the half-round towers, two postern gates, and the two major gates which remained in al-Maqrīzī's time, Bābal-Mudarraġ and Bāb al-Qarāfa. In addition, two major trenches were excavated, still largely extant, against the northern and eastern walls of the enceinte. Bāb al-Mudarraġ, on the north-western side, was the main entrance from the city, while Bāb al-Qarāfa, the inner part of which is thought to have been constructed by Saladin, faced the cemetery areas to the south and southeast and was considerably less frequented.¹⁶

Bi'r Yūsuf (Joseph's well) within the western enclosure and immediately to the south of the mosque of al-Nāṣir Muḥammad Ibn Qalāwūn, was, according to Ibn 'Abd al-Zāhir

... among the wonders of construction. At the top of the well cattle [*baqar*] move in a circle to raise the water from a reservoir located at its midpoint [in depth], where other cattle raise the water from the lowest depths of the well. It has a path to the water by which the cattle descend to its spring. All of this is cut into the rock; there is no building in it. It is said that [it is dug] to the same level as Birkat al-Fīl, and that its water is sweet. I have heard from some older men, that when the well was dug, its water was very sweet. Qarāqūsh and his assistants, wishing to augment the water supply, widened the excavation into bedrock,

and encountered a saline spring which contaminated the earlier source. The qāḍī Nāṣir al-Dīn Shāfi'ī Ibn 'Alī, in Kitāb 'Ajā'ib al-Bunyān, mentioned that he descended into this well by a staircase of about three hundred steps.¹⁷

Joseph's well, then, was constructed in two shafts, not directly above each other, which were separated at midpoint.¹⁸ Casanova makes several further observations. First, the well is located within the western enclosure outside of Saladin's enceinte. Although this might suggest that the well was excavated as part of the later residential complex, this is negated by three factors. First, Qubbat al-Hawā' and the Fatimid mosques and tombs which previously occupied the citadel site would have needed water, probably from local wells. Secondly, according to Ibn 'Abd al-Zāhir, the well was *enlarged by Qarāqūsh*. Finally, in the same passage, Ibn 'Abd al-Zāhir relates from hearsay that the well was formerly descended by a series of steps, suggesting that the present ramp existed in his time, and may well have been part of the renovations of Qarāqūsh.¹⁹

Casanova further points out that the name Yūsuf, as applied to this well, should probably be attributed to the patriarch Joseph rather than to Saladin. His argument is based on the following points: that it would be unusual to name the well Yūsuf rather than al-Ṣalāhī or al-Nāṣirī; that Ibn Khallikān states that Saladin made numerous foundations, none of which was known under his name; that the story of the Patriarch Joseph was associated with many places in the area of the citadel; and, finally that the name Yūsuf was attached to several buildings at the citadel which were constructed after the Ayyubids, such as Diwān Yūsuf built by Nāṣir Muḥammad Ibn Qalāūn. His argument, on the whole, is tenable.²⁰

Less certain, however, is Casanova's suggestion that Joseph's well was dug after Saladin's campaign of 583/1187 during the Third Crusade. A statement of Ibn 'Abd al-Zāhir (620-692/1223-93), cited by Ibn Taghribardī, maintains that Saladin employed thousands of Frankish prisoners on the building of the wall of al-Qāhira and the digging of the well at the citadel.²¹ A second statement of the same author, cited by al-Maqrizī, suggests that Qarāqūsh used fifty thousand prisoners of war on the building of the citadel. Casanova believes that such a large number of prisoners would have been unavailable before the Third Crusade; this however, is belied by Ibn Jubayr's statement in 578/1182-83:

We also looked upon the building of the citadel, an impregnable fortress adjoining Cairo which the sultan thinks to take as

his residence, extending its walls until it enfolds the two cities of Miṣr and Cairo. The forced laborers on this construction, and those executing all the skilled services and vast preparations such as sawing the marble, cutting the huge stones, and digging the fosse that girdles the walls of the fortress noted above—a fosse hollowed out with pickaxes from the rock to be a wonder among wonders of which trace may remain—were the foreign [*Rūmī*] prisoners whose numbers were beyond computation. There was no cause for any but them to labor on this construction. The sultan has constructions in progress in other places and on these too the foreigners are engaged so that those of the Muslims who might have been used in this public work are relieved of it all, no work of that nature falling on any of them.²²

Thus Frankish prisoners were employed *en masse* on Saladin's construction projects at least five years prior to the Third Crusade and certainly could have been used on the excavation and/or enlargement of Joseph's well.

The *History of the Patriarchs* states that among the construction works of Qarāqūsh were a well and cistern at the citadel of Cairo.

[Qarāqūsh] dug a well in it, using iron tools, from the top of the *jabal* to its base, reaching water at a depth estimated as two hundred cubits. In addition, he constructed [*ʿamala*] there a cistern [*ṣiḥriḥ*] to be filled from tanks [which] he had constructed outside the citadel.²³

Despite such contradictory evidence, the well probably existed in Fatimid times and, since it was not included within Saladin's eastern enceinte, it was enlarged, at some point during his reign, with the intention of serving the western or residential complex.

BUILDING MATERIALS AND CONSTRUCTION PROCESSES

Al-Maqrīzī, in his description of the pyramids, relates:

There were formerly at Giza, opposite Madīnat Miṣr, a great number of pyramids, all of them small. They were destroyed in the time of the sultan Ṣalāḥ al-Dīn Yūsuf Ibn Ayyūb, under the auspices of Qarāqūsh. With these materials he built the citadel [Qalʿat al-Jabal], the wall surrounding al-Qāhira and Miṣr, and the *qanāṭir* of Giza.²⁴

‘Abd al-Laṭīf al-Baghdādī, writing ca. 597–599/1200–02, states:

One saw formerly at Giza a large number of Pyramids, small, to be truthful, which were destroyed in the time of Ṣalāḥ al-Dīn Yūsuf Ibn Ayyūb. Their destruction was the work of Qarāqūsh, a Greek [*Rūmi*] eunuch, who was one of the amirs of the army of this prince, and a man of genius. He supervised the building projects of the capital, and it was he who erected the wall of stone which surrounds al-Fuṣṭāṭ, al-Qāhira, the land between the two cities, and the citadel built on Jabal Muqaṭṭam. It was also he who constructed this citadel and the two wells that one sees there today. [Yūsuf’s well and the accompanying cistern?]. . . . Qarāqūsh [also] used the stones from the small pyramids, which he destroyed, for the construction of the arches one presently sees at Giza One can still see today the remains of the pyramids destroyed by Qarāqūsh; I mean to say the materials, the cores, and the interiors of these edifices. As these were only the building debris and small stones which were of no use to the construction of the aforementioned arches, they were left in place.²⁵

It is unacceptable to this writer that the building stone for the three projects of the citadel, the al-Qāhira-al-Fuṣṭāṭ enceinte, and the *qanāṭir* of Giza (v.i.) was supplied solely by the destruction of the minor pyramids of Giza. Given the size of the smaller pyramids still remaining at Giza, the number of structures requisite to supply the materials for a construction project of this size would be legion and the task of transporting the stones ten to fifteen miles from Giza to the Muqaṭṭam a Herculean, although not impossible, task. We unfortunately lack pre-Ayyubid Arabic texts as to the number of small pyramids extant at Giza, and current archaeological evidence renders us no traces of the specific pyramids destroyed as noted by ‘Abd al-Laṭīf. While the *qanāṭir* of Giza were probably built from destroyed pyramids in the immediate area, it is also likely that most of the stone for the citadel was quarried in its vicinity. Ibn Jubayr, while noting the transportation of stone from dismantled structures near Abū Sīr, stresses the Frankish prisoners excavating the huge trench girdling the northern and eastern sides of the citadel, cutting and sawing the huge stones thereat.²⁶ The occasional block inscribed with hieroglyphics is observed in the north wall and its extension east to Burj al-Ṣafir,²⁷ but reused blocks are common throughout antiquity and these are not *necessarily* remnants

of the smaller pyramids. (Indeed, most of the remaining pyramids are without inscriptions.) Then, as Creswell points out, the citadel was built on a small spur of the Muqaṭṭam which was "separated from the main mass by Saladin who purposely quarried stone here."²⁸ Although he supplies no historical reference for this statement, the size of the trenches dug (cf. Ibn Jubayr), which may have included at least part of the quarried gap between the citadel and the Muqaṭṭam, and the far more practical approach of using local stone rather than hauling it from Giza, render Creswell's view highly plausible. Thus, given the testaments of 'Abd al-Laṭīf and al-Maqrīzī, while some of the stone for the building of the citadel and the al-Qāhira-al-Fuṣṭāṭ enceinte may indeed have come from the small pyramids of Giza, it is far more reasonable to assume that the lion's share of building materials was quarried in the immediate area of the Muqaṭṭam.

OCCUPATION OF THE CITADEL

Casanova, based on a series of citations from al-Maqrīzī's *Khiṭat*, and from al-Bakrī al-Ṣiddīq, draws the following conclusions: that although Saladin had intended to complete the residential portion of the citadel, this section was incomplete (or perhaps not even begun) at the time of his death, largely due to his absence from Egypt; that Saladin and his successors (al-'Aẓīz, al-Manṣūr Muḥammad and al-'Āḍil) lived at Dār al-Wizārah in al-Qāhira until the reign of al-Malik al-'Āḍil, although they occasionally sojourned at the construction site of the citadel; that the first to build residences in the palaces complex was al-Malik al-Kāmil as deputy (*na'ib*) to al-'Āḍil in Egypt; and that "al-Malik al-Kāmil was the first Ayyubid ruler who, after completing the plan of his uncle, Saladin, definitively established the royal residence at the citadel in 604/1207-08."²⁹ al-Maqrīzī further notes, in the *Sulūk*, that the remaining members of the Fatimid family were transferred to the citadel at this time (from Dār al-Muzaffar in al-Qāhira), where they were lodged "in a house which had the appearance of a prison."³⁰ The Ayyubid and Mamluk sultans, with the exception of brief period under al-Malik al-Ṣāliḥ (v.i.), resided at the citadel thereafter.

THE CITADEL—LATER AYYUBID CONSTRUCTION

As Creswell points out, Saladin's enclosure was "as complete and as strong as the time at his disposal to make it."³¹ The major square and round towers of al-Kāmil, discussed in detail by Creswell, were constructed in an architectural style similar to that of the Ayyubid citadels of Damascus

and Baṣra, and spaced at such intervals as to break the uniform spacing of the half-round towers of Saladin. Al-Kāmil's work on the eastern enclosure amounted to a strengthening, but not an enlargement, of the enceinte completed some forty years earlier by Qarāqūsh.

In Casanova's opinion, al-Kāmil's work on or near the western enclosure consisted of the following: an *iwān*; two gates, Bāb al-Sirr and Bāb al-Qullah; the royal stables; a library (Khizānat al-Kutub); a vizir's residence (Qā'at al-Ṣāhib), and a mosque.

For the remainder of the Ayyubid dynasty, the only known additional structure on the citadel is that of Qā'at al-Ṣālihiya, an audience hall constructed by al-Malik al-Ṣāliḥ. The move of al-Malik al-Ṣāliḥ to the island of Rhodah fostered, no doubt, a period of relative neglect for the citadel—until the assumption of the first Mamluk sultan, al-Mu'izz Najm al-Dīn Aybak.³² Thenceforth, with the exception of the French occupation, the citadel remained the focal point of Egyptian administration through the reign of Muḥammad 'Alī in the nineteenth century.

THE *Qanāṭir* OF GIZA

Ibn Jubayr (578/1182–83) states:

Another of the Sultan's [Saladin] benefactions, and a monument of enduring usefulness to Muslims, are the bridges [*qanāṭir*] he has begun to construct seven miles west of Miṣr at the end of a causeway that begins at high-Nile beside Miṣr [i.e. opposite, on the Giza shore]. This causeway is like a mountain stretched along the ground, over which it runs for a distance of six miles until it reaches the aforesaid bridges. These have about forty arches of the biggest type used in bridges, and reach the desert which extends from them to Alexandria. It is one of the most excellent measures taken by a prudent king in readiness against any sudden onslaught by an enemy coming through the breach of Alexandria at the time of the Nile's overflow, when the countryside is in flood and the passage of soldiers thereby prevented. He prepared this as a passageway for any time it may be needed To the Egyptians, the construction of these bridges is a warning of a coming event, for they see in it an augury that the Almohades will conquer it and the eastern regions Near to these bridges are the ancient pyramids³³

³²Abd al-Laṭīf al-Baghdādī, writing in 597/1201–02, notes,

Karakoush employa les pierres qui provinrent de la démolition des petites pyramides qu'il fit détruire, à la construction des arches que l'on voit présentement à Djizeh; on doit compter ces arches elles-mêmes parmi les édifices dignes de la plus grande admiration, et elles méritent d'être assimilées aux ouvrages des géans. Il y avait plus de quarante arches pareilles; mais, en la présente année 597 de hégire, l'intendance de ces arches se trouvant confiée à un homme ignorant et téméraire, il s'avisa de les boucher. Il se flattait que par ce moyen les eaux, retenues dans leur cours comme par une digue, se répandraient sur le territoire de Djizeh, qui participerait ainsi au bénéfice de l'inondation. Il est arrivé tout le contraire: l'effort des eaux contre ces arches en ébranlé trois qui se sont fondues et entrouvertes, sans que pour cela les terres que cet homme avait espéré faire jouir de l'inondation en aient retiré cet avantage.³⁴

Ibn al-Wardī, cited by de Sacy, states: "... at Giza are the bridges; nothing similar to this work has ever been built. There are forty arches in a single line." It is de Sacy's further belief that the causeway built by Qarāqūsh, and which extended to the arches, "... furnished, at all times, a commodious route for the transport of materials destined for the construction of the wall of Cairo and the citadel of the mountain."³⁵

Al-Maqrīzī, in his *Khiṭaṭ*, renders us the following description.

The author of *The Book of Marvels of Construction* [*kitāb 'ajā'ib al-bunyān*] said that the bridges [*qanāṭir*] existing today at Giza are among the marvels of building and [like] the works of giants. There are more than forty arches. The amir Qarāqūsh, the eunuch, built them. He supervised the building operations in the days of the sultan Ṣalāḥ al-Dīn Yūsuf Ibn Ayyūb, using the rubble from the pyramids which he had destroyed at Giza. With the stone from these pyramids, he built these bridges. He also built the wall of al-Qāhira and Miṣr and the area between them, and the citadel of the mountain In the year 599 a man took charge of these bridges who did not understand them properly, and he dammed them as a block to defer the water. The pressure of the water increased to such an extent that three of the arches collapsed and split apart. The anticipated water flow did not occur. In 708 al-Malik al-Muẓaffar Baybars al-Jāshankīr undertook their repair.

He rebuilt what was ruined and restored what was unsound in it. This [undertaking] brought major improvement. When Qarāqūsh built these bridges, he [also] built a causeway [*raṣīf*] of stone. He built it from the edge of the Nile opposite madīnat Miṣr. It resembled a mountain stretching along the ground, for a distance of six miles until it reached the bridges.³⁶

The suggested primary roles for the *qanāṭir* of Giza are the transport of troops and building materials, both of which may have been valid. A secondary and later role, irrigation, failed. The suggestion of Ibn Jubayr, that the causeway and arches were constructed for troop transport is the most valid. That the causeway and arches were largely constructed of rubble from the smaller pyramids is acceptable, largely due to proximity. That the arches were originally designed for irrigation purposes is effectively negated by ‘Abd-al-Laṭīf and al-Maqrīzī, in their almost identical descriptions of the disastrous attempt to dam the area ca. 597/1200–01.

NAVAL FACILITIES

While the Fuṣṭāṭ area was replete with commercial dockyards and, despite massive alluviation, some trading facilities still existed at al-Maqs, information on the exact locations of naval shipyards under the Ayyubids remains somewhat vague. Naval arsenals existed at both Rhodah and al-Fuṣṭāṭ during the reign of the Fatimid Caliph al-Āmir, with that of al-Fuṣṭāṭ (near Fam al-Khalīj) lasting until ca. 700/1300–01. The *History of the Patriarchs* mentions Ayyubid naval dockyards in three instances. In 614/1217–18, during the reign of al-Malik al-‘Āḍil, a boat bridge was constructed from Rhodah to Giza, beginning “in front of the new dockyard” (*al-ṣinā’a al-mustajidda*), suggesting a dockyard either at the southern tip of Rhodah or on the opposite bank at al-Fuṣṭāṭ. In 637/1239–40, as part of a campaign to the Yemen, al-Malik al-Ṣāliḥ had forty ships constructed in dockyards (*maṣānī’*) at al-Fuṣṭāṭ, thence transported to the Red Sea (in sections) by camelback. Finally, in 640/1242–43, al-Malik al-Ṣāliḥ ordered the transfer of the dockyards for both Nile ships and warships from al-Fuṣṭāṭ to Giza, as part of an attempt to isolate himself at his new citadel on Rhodah. There is no evidence that such a transfer actually took place.³⁷ It is reasonably safe to assume that naval dockyards existed at several points along the shore of al-Fuṣṭāṭ and at the southern end of Rhodah either simultaneously or at different times under the Ayyubids, with commercial dockyards sequestered during military emergencies as well.

THE CITADEL OF RHODAH

The Qal'a (citadel) of Rhodah, which encompassed the southern half of the island, was constructed by Sultan al-Malik al-Ṣāliḥ ca. 637-41/1239-44. This vast enclosure served two functions: first, as a palace/administrative complex temporarily supplanting Saladin's citadel (Qal'at al-Jabal) and, secondly, as the barracks of al-Ṣāliḥ's Baḥrī (riverine) Mamluks, the nucleus of the ensuing dynasty. While certain activity must have continued at Qal'at al-Jabal (Qā'at al-Sāliḥīyah was founded during this reign, v.s.), the focal point of administrative and military activity was definitely transferred to the river for almost a decade.

The island of Rhodah, although the site of military installations from the Umayyad through the Fatimid dynasties, was primarily a center for gardens, recreation, and pavilions, including the "*hawdaj*", a pavilion constructed by the Fatimid Caliph al-Amir on the northern end of the island.

According to Ibn al-Mutawwij, the island was purchased by al-Malik al-Muzaffar Taqī al-Dīn 'Umar Ibn Shāhānshāh Ibn Ayyūb (nephew of Saladin) in 566/1170-71. When appointed to the governorate of Ḥamā in 574/1178-79, Taqī al-Dīn endowed the entire island upon his madrasa (al-Taḡawīya) at al-Fuṣṭāṭ (v.i.). Al-Malik al-Ṣāliḥ on his assumption of the sultanate, rented the island from qādī Fakhr al-Dīn al-Shukrī, shaykh of the mentioned madrasa:

... for a period of sixty years in two payments, each payment for a part of the island. The first section [*qiṭ'a*] was from Jāmi' Ghayn [a congregational mosque built during the reign of al-Ḥākīm] north to the pavilions, and in width from shore to shore. He [also] rented the second part—the remaining land of the island—which included date palms, sycamores, and plants. When al-Malik al-Ṣāliḥ built the pavilions of Qal'at al-Jazīra the date palms were removed and their site was included in the area of the buildings.³⁸

Al-Maqrīzī continues:

Know that the royal pavilions [i.e. the *hawdaj*] and other residences, as previously mentioned, remained at Rhodah until the reign of al-Malik al-Ṣāliḥ He established the citadel of Rhodah. It was known as Qal'at al-Miqyās, Qal'at al-Rhodah, Qal'at al-Jazīrah, and Qal'at al-Ṣāliḥīyah. He began digging the foundations on Wednesday the fifth of Sha'bān and began the

construction . . . on Friday the sixteenth. On the tenth of Dhū al-Qa'da began [*waqa'a*] the destruction of the houses, palaces and mosques on the island of Rhodah. The people left their houses. He destroyed the Jacobite church near the Nilometer, and included its place within the citadel. He spent much on its building. Within the citadel he constructed houses and palaces. He built [on the citadel wall] sixty towers. He built a mosque in it. Within the citadel he planted every [kind] of tree. He removed to it granite columns from temples, as well as marble columns, and sent to it arms, tools of war, and necessities in grains, supplies and foods, fearing an attack of the Franks. They were at the time headed for Egypt. He spent such effort and expense towards its completion that it was said that he raised each stone as a dinar and brick as a dirham. The citadel became a wonder in the amount of its ornament, and the observer was bewildered by the excellence of its decorated ceilings and that of its marble. It is said that he removed a thousand palm trees from the site of the citadel . . . He destroyed the *hawdaj* and Bustān al-Mukhtār. He also destroyed thirty-three mosques built by the Caliph and nobility of Egypt.³⁹

That the wholesale destruction of mosques did not meet with universal approval is attested by the narrative of one al-Jawād Jamāl al-Dīn, an amir of al-Malik al-Ṣāliḥ. When al-Jawād asked to be excluded from the supervision of the destruction of a certain mosque, al-Ṣāliḥ deputized another in his place who removed the mosque and erected an audience hall [*qā'a*] in its stead. Al-Malik al-Ṣāliḥ never entered this *qā'a* alive but, following his death at the battle of Manṣūra, he was interred therein pending the completion of the tomb at his madrasa in Bayn al-Qaṣrayn. While the cause and effect relationship may be somewhat questionable, the antipathy towards the destruction of Islamic religious structures is certainly evident, and the point made.⁴⁰

Further on al-Maqrīzī states:

When al-Malik al-Ṣāliḥ ordered the building of the *qā'a*, the Nile was [only] on the western side between Rhodah and Giza. It did not surround Rhodah except during the flood season. [Al-Malik al-Ṣāliḥ] continuously sank ships on the western bank [of the Nile]. He dredged the sands between Rhodah and Miṣr until water returned to the shore of Miṣr and remained there.

He built a great bridge from Miṣr to Rhodah—its width was three *qaṣabāt* [about 37.5 feet]. When amirs rode to attend the sultan at Qal'at Rhodah, they dismounted and walked the length of this bridge to the *qaḥah*. Only the sultan could cross this bridge on horseback. Upon [the citadel's] completion, [al-Malik al-Ṣāliḥ] moved to it with his family and his harem, and he used it as the *Dār al-Mulk*. With him were quartered his Bahrī Mamluks; they numbered about one thousand.⁴¹

The learned 'Alī Ibn Sa'īd said in *Kitāb al-Maghrib* that Rhodah faces al-al-Fuṣṭāṭ, and is situated between it and the pavilions of Giza. The nilometer is there. It had been a promenade for the people of Miṣr. Al-Ṣāliḥ Ibn al-Kāmil chose it as the seat of the sultanate. He built there a citadel surrounded by a wall [which is] luminous in color, sturdy in construction, and high in elevation; I have seen nothing more impressive than it. On this island was the *hawdaj* which the Caliph al-Amir built for his Bedouin wife . . . , and al-Mukhtār, [which was] the garden of al-Ikshīd, and his palace [*qaṣr*].

In extended hyperbole, Ibn Sa'īd continues:

I walked several nights along the Fuṣṭāṭ shore, and the laughter of the full moon shone upon me from the Nile band before the wall of this island, glittering in color. I did not leave Egypt until the wall of this citadel had been completed. Inside were the palaces [*dūr*] of the sultan, nothing was of greater importance to him than their construction. [Al-Malik al-Ṣāliḥ] was one of the greatest builders among the sultans. I saw on this island a throne room—I had never seen its like before, and I cannot assess its cost. In it are gilt surfaces and marble—ebony, camphor, and veined—which boggle the mind, paralyze the eyesight, and even confer benefit on the blind. The enceinte encompassed a large tract of land. Part of this area was enclosed by a fence, which preserved the sultan's wild game, and beyond this were meadows leading to the Nile At high Nile the island was separated from al-Fuṣṭāṭ similar to a kidney. In the days of low Nile its bank became attached to that of al-Fuṣṭāṭ south from the area of Khalīj al-Qāhira, and boats remained in the place of the bridge [i.e. the components of the boat bridge at the

southern end of the island between it and al-Fuṣṭāṭ, remained high and dry].⁴²

Al-Maqrīzī goes on

... This citadel [Qal'at al-Rhodah] remained in use until the end of the Ayyubid dynasty. When the sultan al-Malik Mu'izz al-Dīn Aybak al-Turkmanī, first of the Turkish rulers, assumed the rule of Egypt, he ordered its destruction. From its remains he built his madrasa, al-Mu'izziyya, at Raḥbat al-Ḥunā, in Madīnat Miṣr A group of people [*jamā'a*] took from the *qaṭ'a* a number of ceilings, many windows, and other things, and magnificent woods and marbles were sold from it. When the sultan al-Malik al-Zāhir Rukn al-Dīn Baybars al-Bunduqdārī assumed the rule of Egypt, he concerned himself with the building of the citadel of Rhodah; he entrusted the amir Jamāl al-Dīn Mūsa Ibn Yagmūr with its restoration. [Jamāl al-Dīn] restored some of its destroyed areas, assigned them to the Jandarīyah, and restored it to its former esteem. He was entrusted with its towers; they were assigned to the amirs He planned that there would be [at the citadel of Rhodah] houses and stables for all the amirs and handed over the keys to them.

When al-Malik al-Manṣūr Qalāwūn became sultan and began construction of his māristān, dome, and madrasa [al-Manṣūriyya], he removed from Qal'at al-Rhodah granite and marble columns, which had already been reused from Pharaonic remains. He also took much marble and many fine lintels which were, again, reused from Pharaonic times. Then the sultan al-Malik al-Nāṣir Muḥammad Ibn Qalāwūn removed granite columns for the construction of the *iwān* known as Dār al-'Āḍil on the citadel [Qal'at al-Jabal] and Jāmi' al-Jadīd al-Nāṣirī outside of Madīnat Miṣr. He removed other materials until there was practically nothing left. There remained from the *qaṭ'a* a fine vault, popularly known as al-Qūs; it stood on the western side of the citadel. We remember its standing until about the year 820/1417-18. There also remained a number of towers; many of them were overturned, and the people built their houses above their remains, paralleling the Nile.⁴³

Ibn Duqmāq adds that the construction materials of the *qaṭ'ah* were gypsum, baked brick, mud and lime. This suggests that the actual materials

were limestone and baked brick, cemented by mud and/or lime mortar. His statement, however, that the citadel of Rhodah was constructed in 646/1248–49 and destroyed three years later by the order of al-Malik al-Mu‘izz Aybak, is unacceptable, given the testimony of Ibn Wāṣil and al-Maqrīzī.⁴⁴ In the *Sulūk* for the year 638/1240–41, al-Maqrīzī states that a son was born to al-Malik al-Šāliḥ by one of his concubines. As a fitting remembrance, al-Šāliḥ ordered the construction of the citadel of Rhodah.⁴⁵ Ibn Wāṣil notes, in his annals for the same year, that al-Malik al-Šāliḥ built the citadel as a center (*markaz*) for his mamluks and amirs, and that it was three years in construction.⁴⁶ Given the general reliability of Ibn Duqmāq’s narrative, the 646/1248–49 date is most likely an error in copy.

THE CITADEL OF RHODAH—ANALYSIS

The citadel of Rhodah was constructed as a fortress/palace/administrative complex which temporarily—indeed little longer than the reign of al-Malik al-Šāliḥ—served as the administrative seat of Egypt. Having lived at Qal‘at al-Jabal for three years prior to the new citadel’s completion, al-Malik al-Šāliḥ removed his court, family, harem, and his personal contingent of mamluks to the new citadel on the Nile. The site of numerous fortresses, arsenals, and shipyards in pre-Fatimid and Fatimid times, the island of Rhodah had served—at least periodically—as a base for military offense and defense for over five centuries prior to the Ayyubid regime. It must be remembered, however, that when Rhodah served as a *fortress*—specifically during the Byzantine and Ummayyad eras—this fortress was established primarily for the defense of Babylon and al-Fuṣṭāṭ. During the two hundred seventy years prior to the establishment of Qal‘at Rhodah, the nucleus of defense had shifted; first, under the Fatimids, to the walled city of al-Qāhira; and, secondly, under Saladin, to the citadel (Qal‘at al-Jabal), the focal point of the al-Qāhira-al-Fuṣṭāṭ enceinte. Qal‘at al-Jabal remained the seat of government until the reign of al-Malik al-Šāliḥ, and again almost immediately thereafter. As a bastion of defense it was, simply by nature of its situation, far superior to any fortress which could have been erected on the island of Rhodah. Despite fifty towers the Rhodah citadel, with its low-lying position, separated from the mainland only by a narrow channel (when it was flooded), could hardly be compared to the great bastions some two miles to the northeast on the Muqaṭṭam spur.

Why, then, the shift? That the citadel of Rhodah was built merely as a remembrance to al-Malik al-Šāliḥ’s newborn son, as al-Maqrīzī sug-

construction of the citadel and the al-Qāhira-al-Fuṣṭāṭ enceinte, while the al-Qāhira-al-Fuṣṭāṭ enceinte, supplemented by trenches, was intended to render protection to Saladin's new metropolitan entity, effectively including the four previous Islamic capitals of Egypt. Specific facilities included the citadel (Qal'at al-Jabal), the citadel of Rhodah, and, perhaps, the tower at al-Maqs, sometimes referred to as *Qaḥa*. The *qanāṭir* of Giza apparently served primarily as a means of rapid deployment of troops, especially in times of high Nile, against any threatened invasion.

The projects of the citadel and the al-Qāhira-al-Fuṣṭāṭ enceinte, both undertaken by Saladin, were not finished during his lifetime; the enceinte, indeed, was never completed. While work continued on these projects and, later, the citadel of Rhodah, throughout the Ayyubid regime, the construction was sporadic, and followed certain patterns worthy of note here. The citadel (Qal'at al-Jabal) and the al-Qāhira-al-Fuṣṭāṭ enceinte were begun by Saladin from a position of strength, and largely discontinued following his final departure to Syria. The fortress/palace complex of the citadel, as envisaged by Saladin, was completed under al-Kāmil, deputed as ruler of Egypt under his father, al-Malik al-'Aḍil, and the citadel of Rhodah was constructed by al-Malik al-Šāliḥ. In the case of the al-Qāhira-al-Fuṣṭāṭ enceinte, however, later work took place only during times of civil war or of external threat. Beyond the initial construction of the al-Qāhira-al-Fuṣṭāṭ enceinte, then, major work on the citadels would appear to have been undertaken in times of relative security, while that on the enceinte occurred during times of crisis, principally as stopgap measures on the undefended western flank of the al-Qāhira-al-Fuṣṭāṭ combined area. That the enceinte on this western flank was never completed can probably be explained by two factors; first, that as the Nile itself rendered a certain amount of protection, Qarāqūsh left the construction of the western wall until last and, second, that the death of Saladin and/or Qarāqūsh ended the impetus for its completion.

The construction of the citadels of Saladin and al-Malik al-Šāliḥ fostered a certain amount of social and economic growth in their respective areas in terms of (a) population growth, the natural clustering of nobility, bureaucrats, and military personnel within the immediate proximity of the sultans and (b) the support personnel and facilities to render goods and services to those groups. While this was a very temporary situation in the case of the citadel of Rhodah, which, as mentioned above, brought about a short respite in the ongoing decline of al-Fuṣṭāṭ, Qal'at al-Jabal, as the major center of Egyptian administration for some 650 years, engendered

the development of a new and relatively prosperous district of Cairo, Darb al-Aḥmar.

Finally, it should be remembered that despite the religious zeal which both Saladin and al-Malik al-Ṣāliḥ professed, their respective citadels were built at the cost of the wholesale destruction of the mosques and tombs which previously occupied the sites. The sanctity of religious property had, out of practical necessity, taken second place to the dictates of secular power and perceived needs for defense.

NOTES

1. P. Ravaisse, "Essai sur la topographie du Caire d'après Makrizi," *Mémoires de la Mission Archéologique Française au Caire* (Paris, 1889), 1:415-417.
2. Nāṣir-i Khusrāw, *Sefer Nameh*, Schefer transl., (Paris, 1881), 131.
3. K. A. C. Creswell, *The Muslim Architecture of Egypt* (Oxford, 1952), vol. 1, map opposite p. 19. Ravaisse, plate 2.
4. Paul Casanova, "Histoire et description de la citadelle du Caire," *Mémoires de la Mission Archéologique Française au Caire*, vol. 6, Fasc. 4-5 (1894-97), 554-562.
5. *Ibid.*, 535-551.
6. Paul Casanova. "Histoire et Description de la Citadelle du Caire," *Mémoires de la Mission Archéologique Française au Caire*, vol. 6, Fasc. 4-5 (1894-97), 554-562.
7. K. A. C. Creswell. *The Muslim Architecture of Egypt*, vol. 1, (Oxford, 1959), map opposite p. 30.
8. Ḥamad Ibn 'Alī al-Maqrīzī. *Al-Mawā'iz wa-al-i'tibār*, vol. 1, (Cairo, 1853), 379-380.
9. Casanova, "Citadelle," 535-538; al-Maqrīzī. "Sulūk" (Blochet), R. O. L., vol. 8 (1900-1901), 525.
10. Al-Maqrīzī. *Al-Mawā'iz*, 1:380.
11. Creswell. *M. A. E.*, 2:58-59.
12. Ḥamad Ibn 'Alī al-Maqrīzī. *Kitāb al-Sulūk*, Ziyādah ed. (Cairo, 1934-1942), part I, 150; Blochet transl., (*Histoire d'Égypte de Makrizi*), *Revue de L'Orient Latin*, (1902), 9:108.
13. *History of the Patriarchs of the Egyptian Church*, (Cairo, 1970-74), vol. 4, part 1, pp. 41, 56-57; vol. 4, part 2, pp. 153, 166, 174.
14. Al-Maqrīzī, *al-Mawā'iz*, 2:203.
15. Creswell, *M. A. E.*, 2:5-6.
16. *Ibid.*, 38; Casanova, "Citadelle," 569-584.
17. Al-Maqrīzī, *al-Mawā'iz*, 2:204.
18. Casanova, "Citadelle," 586.
19. *Ibid.*, 588-589.
20. *Ibid.*, 574-575.
21. *Ibid.*, 585, 588.
22. Al-Maqrīzī, *al-Mawā'iz*, 2:204; Ibn Jubayr. *The Travels of Ibn Jubayr*, Broadhurst transl. (London, 1952), 43; Ibn Jubayr. *Riḥlah*, (Beirut, 1964), 25.

23. *H. P. E. C.*, vol. 3, part 2, 150.
24. Al-Maqrīzī, *Al-Mawāʿiz*, 1:111.
25. ʿAbd al-Laṭīf al-Baghdādī, *Relation de l'Égypte*, DeSacy transl., (Paris, 1810), 171-172.
26. Ibn Jubayr (Broadhurst), 43; Ibn Jubayr. *Voyages*, Gaudefroy-Demombynes transl. (Paris, 1949), 1:63.
27. Casanova, "Citadelle", 541-542.
28. Creswell, *M. A. E.*, 2:5.
29. Casanova, "Citadelle", 571-573.
30. Al-Maqrīzī, "Sulūk" (Blochet), *R. O. L.*, 9:141.
31. Ibn Jubayr (Broadhurst), 45.
32. Casanova, "Citadelle", 602.
33. Ibn Jubayr (Broadhurst), 45.
34. ʿAbd al-Laṭīf al-Baghdādī, 172.
35. *Ibid.*, 213, footnote 6.
36. Al-Maqrīzī, *Al-Mawāʿiz*, 2:151-152.
37. *H. P. E. C.*, vol. 4, part 1, 38; vol. 4, part 2, 219, 279-280.
38. Al-Maqrīzī, *Al-Mawāʿiz*, 2:184-185.
39. *Ibid.*, 183.
40. *Ibid.*
41. *Ibid.*
42. *Ibid.*, 183-184.
43. *Ibid.*, 184.
44. Ibn Duqmāq, *Al-Intiṣār*, (Cairo, 1893), 4:110.
45. Al-Maqrīzī, *Suḥūk (Ziyādah)*, vol. 1, part 2, 301.
46. Ibn Wāṣil, *Mufarrij al-Kurūb* (Cairo, 1977), 5:278.