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

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The Fatimid Background

The Fatimid city of al-Qāhirah, founded in 358/969 and completed in 361/972, was the fourth Islamic capital of Egypt. It had been preceded by Fustāt, al-'Aškar, and al-Qāṣār.1 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 Muṣṭāṣam hills to the north (al-'Aškar) and the north-east (al-Qāṣār), this amalgamation had reached a point slightly north of the mosque of Ibn Ṭūrān. The Fatimids also established the walled city of al-Qāhirah to the north, in a sparsely populated area occupied by a convent, a small palace, the garden of the Ikhshidīd Khāfir, and, on the bank of the Nile, by the village Um Dimayn (later known as al-Maqṣū). The western enceinte of al-Qāhirah overlooked the Khalīj, a seasonal Nile-fed canal emanating from Fustāt and proceeding to the north and northeast.

The original enceinte of al-Qāhirah was built of mud brick, and a trench (khanday) was dug on its northern side as further protection against Cauca
donian incursions. Within these walls, exclusive of the royal/administra
tive complex in the central area, the city was divided into quarters (kawāl) assigned to specific divisions of the Fatimid army. Military bādū were established to the north and south of the city as well. According to the Persian traveler Nāṣir-ī Khwarazmī the original walls were effectively eclipsed by 428/1036–47, as a result of extensive building both within and without.2 To the west, at al-Maṣū, a naval shipyard and arsenal was established early in the Fatimid period.

During the reign of al-Mustasim, a period of internal revolt and re
current famine (ca. 450/1058–1073) resulted in the appointment of the Armenian Bdr al-Jamlī as waṣār in 466/1073–74. Part of his re
construction included the rebuilding and extension of the walls and gates.
of al-Qahira 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 Khāli, enough to enclose a new north-south street, then and now known as Sharī‘ Bayn al-Sūrayn. The new eastern wall enclosed slightly more territory, particularly in the area of Harāt al-Balājīya. The northern wall—much of which is still extant—now encompassed Harāt al-Rihāniyya and the mosque of al-Hakim, while the southern encircling 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.\(^5\)

Ayyubid Fortifications: The General Plan

The Ayyubid rulers of Cairo attempted to enclose the city of al-Qahira and al-Fustāṭ, within one massive wall based on Qa‘bah al-Iblīs (the “citadel”). The citadel, begun by Saladin and first occupied by his nephew al-Malik al-Kamil, was constructed on a small spur of the Muqattam. This spur was formerly the site of an Abbasid pavilion, Qa‘bah al-Hawī. During the Fatimid period the spur was the site of several mosques and tombs, all of which were removed for the citadel’s construction.\(^6\) The encirclement of this now “greater Cairo” was undertaken by Saladin’s deputy Baha‘ al-Din Qarqish, who 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 Bāb al-Jumāl but extending to al-Ma‘ṣār on the east, south from Burj al-Safar to Bāb al-Wazir (just north of the citadel); and from the citadel southeast to Bāb al-Qantarāh at al-Fustāṭ, just south of Qasr al-Sham‘. While a western wall from Bāb al-Qantara to Bāb al-Hadid at Maqī was planned, specific construction at various intervals was never completed.\(^7\)

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-Fustāṭ, al-Ankār, al-Qādisīyah, and al-Qahira—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 Barb al-Jamâli by Saladin in 566/1170-71; the construction of the encircling al-Qâhiyya and al-Fustâb, and concomitant with that of the citadel and the qasîdir of Qâh, all begun by Saladin in 572/1176-77; the excavation of trenches on the northern and eastern perimeters of al-Qâhiyya in 588/1192; successive attempts to complete the western al-Qâhiyya-al-Fustâb enceinte from 596/1199 onwards; and the construction of the citadel of al-Malik al-Sâlih on Rhodod (al Rawda), ca. 638-641/1240-45. For clarification, the citadel of Saladin will henceforth be referred to as the “citadel,” and that of al-Malik al-Sâlih as the “citadel of Rhodod.”

Saladin’s Restoration of 566

Recurrent Crusader attacks, in addition to the ever-present threat of internal revolt, prompted the restoration of the decaying encircling of Barb al-Jamâli in 566/1170-71. Saladin, then waizar to the Fatimid Caliph al-‘Adid, apparently limited the repair work to the line of Barb’s walls, although the burnt brick enceinte of Barb al-Jamâli (with the exception of stone gates and minor adjacent areas) was replaced by cut stone. The construction was supervised by Saladin’s major dawla, Babâ al-Din Qarqâsiy. Three gates, Bab al-Nag and Bab al-Fustâb in the north wall, and Bab Zawâfiq in the southern, together with some associated wall sections, were included from the former wall of Barb. Other gates, again probably on the same sites as those of Barb, were as follows: in the western wall (overlooking the Khusrij) north to south, Bab al-Qanita, Bab al-Khawâki, and Bab al-Sâ’dâ in the southern wall, Bab al-Faraj (to the west of Bab Zawâfiq); and on the eastern wall, north to south, Bab al-Jadid and Bab al-Barqiya.

Saladin’s Plan of 572/1176-77, The al-Qâhiyya-Fustâb Enceinte and the Citadel

Al-Maqrizi states, in describing the third wall of al-Qâhiyya:

The third wall. The construction was begun by the Sultan Salâh al-Din Yusuf bîn Ayyubîn in 566/1170-71, when he was waizar to al-‘Adid li-Din Allâh. In 569/1173-74, when he assumed [complete] power over the kingdom, he entrusted the building of the wall to the eunuch Babâ al-Din Qarqâsiy al-Assâdi, who built it in stone, as it is now. He intended to surround al-Qâhiyya, al-
Fustat, and the citadel with one wall. He heightened the wall of al-Qahira from Bab al-Qantara to Bab al-Sha'riya, and from Bab al-Sha'riya to Bab al-Bahr. He built the citadel of al-Maqs, a great tower, which he placed on the Nile near Jamal al-Maqs. The wall stopped there. He had intended to extend the wall from al-Maqs until it rejoined the wall of Misr. He increased the wall of al-Qahira [by adding] the section adjoining Bab al-Naqr, and which extended to Bab al-Barqiya, Darb Baitit, and to the outside of Bab al-Wazir, [so that] it would join the wall of Qafat al-Jabal (the citadel). But the construction of the wall stopped at a point near the ramp [al-zawa] which is beneath the citadel, because of the death of Salih al-Din. Until now the remains of the wall 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 Fustat with that of the citadel did not occur. The perimeter of the wall which surrounds al-Qahira today is 29,302 cubits, as they are usually known, i.e. Hashimi cubits, viz. between the citadel of al-Maqs on the edge of the Nile and the tower of Kawn al-Ahmur on the shore of Misr, 10,500 cubits; between the citadel of al-Maqs and the enceinte of Qafat al-Jabal near the mosque of Sa'id al-Dawla 8,902 cubits; from there to the tower at Kawn al-Ahmur 7200 cubits; finally, behind the citadel, to the front of the mosque of Sa'id al-Dawla [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.4

Although Saladin did indeed "assume complete power over the kingdom" in 569/1173-74 (the year of Nur al-Din's death), this date for the extension of the walls is almost certainly fallacious. Abū Shama, citing 'Abd al-Din al-Ishakī, gives an almost identical account, but in his annals for 572/1176-77, Ibn Wasi confirms this evidence. Paul Casanova is no doubt correct in his assertion that al-Maqrīzī has confused the relative texts especially in view of al-Maqrīzī's own statement in the Salah for the year 572/1176-77 that Saladin had ordered the building of the citadel and the associated walls enclosing al-Qahira and al-Fustat.5
The al-Qahirah-al-Fustat Enceinte; Later Developments

While the western wall and the section between Bāb al-Wāsit and the citadel were never completed, work continued on the al-Qahirah-al-Fustat enceinte until the death of Saladin in 599/1199, and, albeit sporadically, thereafter. al-Maqrizi states that “around the wall of al-Qahirah was a ditch. The digging of this ditch was commenced from Bāb al-Futūh to al-Maqṣṣ in Muharram 588/1192, and, likewise, on the eastern side, from Bāb al-Naqṣ to Bāb al-Bargyā and beyond.” This suggests that those sections of the enceinte from al-Maqṣṣ to Bāb al-Mahṣūf were completed by this date.

Al-Maqrizi’s Salūk for the year 599/1199-1200 states that al-Afḍal, as regent for al-Malik al-Manṣūr in Egypt, ordered defensive precautions against al-ʿAdil’s impending attack from Syria. Al-Afḍal instructed Qarāqish:

> ... to put the citadel in a state of defense and to dig the foundations for the rest of the wall surrounding Mīr and al-Qahirah. 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-Maqṣṣ in such a way that one could no longer enter the city except by its gates.

These reinforcements, while possibly including unfinished sections of the al-Qahirah-al-Fustat eastern enceinte, must have included extensive works on the combined city’s undefended west flank paralleling the Nile. Although the western wall of al-Qahirah (first constructed by Badr al-Jamāl and rebuilt by Saladin in 595/1170-71, v.s.) should have offered some protection to al-Qahirah 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-Qahirah-al-Fustat. Against the impending Fifth Crusade, in 614/1217-18 al-Malik al-ʿAdil ordered a wall constructed at Mīr along the river shore, beginning at Dīr al-Mulk (near Bāb al-Qanṣarāb, the southeastern point of al-Fustat) and extending along the length of the Khalīj to al-Qahirah. Under the direction of his son, al-Kāmil Muhammad, foundations were dug and building commenced. The inhabitants of al-Fustat and al-Qahirah were levied to split stones nightly, although the residents of al-Fustat appear to have been relieved of these duties earlier than those inhabitants of al-Qahirah. Later,
during the same crusade (615/1218-21), al-Malik al-Kāmil and his brother al-Malik al-Mu'aṣṣam ordered the building of a wall from Misr to al-Qāhirah to join the two cities. While partially a repeat of the above, we find a change here both in the laborers employed and the media employed. Al-Kāmil and al-Mu'aṣṣam initially planted (and, no doubt, partly built) walls having stone foundations with upper works of earth. These were the laborers of Berber workmen (ażqāzāri). Al-Kāmil and al-Mu'aṣṣam then reversed their decision, demolished the Berber construction, and rebuilt the wall with mee-dried bricks. "Then the order came to remove the bricks of the people in al-Qāhirah and Misr." In 624/1226-27 al-Malik al-Kāmil ordered the foundations of the al-Qāhirah-al-Fustat 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-'Aḍil II similar works were carried out.  

The western enceinte initiated by al-Malik al-'Aḍil "extending along the length of the Khabjīj to al-Qāhirah" could narrowly be interpreted as leaving the Nile shoreline and following the Khabjīj, itself to join the previously constructed western wall of al-Qāhirah. It is more likely, however, that the wall was constructed parallel to the Khabjīj, but closer to the Nile, especially considering the preexisting towers/gates at Bsh al-Qantārīn, Bsh Misr, and al-Masq. 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 war—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 Sāliḥ al-Dīn Yūnuf Ibn Ayyūb had ended the Fatimid dynasty in Egypt and had assumed [complete] power, he resided at Dīr al-Wizārah in al-Qāhirah. He remained, however, troubled by partisans of the Fatimids Caliphate in Egypt and al-Malik al-‘Aḍil Nūr al-Dīn Mahmūd Ibn Zangi, sultan of Syria. Initially he was protected from Nūr al-Dīn by sending his brother al-Malik al-Mu'aṣṣam Shams al-Dawlah Tūrūn 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 Sālāḥ 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 anira 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-Qāhirah, 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 Qarqāshīn. He [Qarqāshīn] began its construction, as well as the extension to the wall of al-Qāhirah in 575/1176-77. He destroyed the mosques and tombs on the citadel site. He destroyed the small pyramids at Gīza facing Miṣr—there were many in number—and he used the stone in the construction of the wall, the citadel, and the qasāfīr of Gīza. He began the building of the wall surrounding al-Qāhirah, 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-'Aṣālī 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 sultans [al-Ādār al-Sulṭāniyyah]; that was in 601/1207-08. Al-Kāmil lived in it until his death, and it remained the seat of government for Egypt until our times. The sultan Sālāḥ al-Dīn Yūsuf ibn Ayyūb stayed at the citadel occasionally, as did his son al-Malik al-ʿĀzīz during his father’s lifetime; then he moved from there to Dūr al-Wirshah.14

**Choice of the Site**

The spur of the Muqṭātām on which the citadel rests was the natural pivot point for the al-Qāhirah-al-Fustāt enclaves. Almost equidistant from the northern wall of al-Qāhirah and Bīb al-Qantāra 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 Muqṭātām 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. 13

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 Qarqash. The foundation inscription of the citadel, above Bab al-Mudarrâj, 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 Cazelles'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-Masrijn's time, Bab-ul-Mudarrâj and Bab-ul-Qasîf. In addition, two major trenches were excavated, still largely intact, against the northern and eastern walls of the enceinte. Bab-ul-Mudarrâj, on the northwestern side, was the main entrance from the city, while Bab-ul-Qasîf, the inner part of which is thought to have been constructed by Saladin, faced the cemetery area to the south and southeast and was considerably less frequented. 14

There was a reservoir located at its midpoint (in depth), where other cisterns raise the water from the lowest depths of the well. It has a path to the water by which the cascades descend to its spring. All of this is cut into the rock; there is no building in it. It is said that [its] dug to the same level as Birikat al-Fil, and that its water is sweet. I have seen some older men, that when the well was dug, its water was very sweet. Qarqash 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 qibla Nair al-Din Shafii Ibn ‘Ali, in Kitab ‘Alqibat al-Bunyan, 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 Canova 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-Bawâl 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-Zahir, the well was enlarged by Qutarqish. Finally, in the same passage, Ibn ‘Abd al-Zahir 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 Qutarqish. 19

Canova further points out that the name Yunus, 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 Yunus rather than al-Salatib or al-Na’iri; that Ibn Kathîr 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 Yunus was attached to several buildings at the citadel which were constructed after the Ayyubids, such as Dhwaas Yunus built by Najar Muhammed Ibn Qutam. His argument, on the whole, is tenable. 20

Less certain, however, is Canova’s suggestion that Joseph’s well was dug after Saladin’s campaign of 1253/1187 during the Third Crusade. A statement of Ibn ‘Abd al-Zahir (690–692/1293–95), cited by Ibn Taghib-ardî, maintains that Saladin employed thousands of Franks in prisoners on the building of the wall of al-Qahirah and the digging of the well at the citadel. 21 A second statement of the same author, cited by al-Mâqrîzi, suggests that Qutarqish used fifty thousand prisoners of war on the building of the citadel. Canova holds, however, 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 Misr 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 [Rumi] 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 Qarqish were a well and cistern at the citadel of Cairo.

[Qarqish] dug a well in it, using iron tools, from the top of the jebel to its base, reaching water at a depth estimated as two hundred cubits. In addition, he constructed [some] there a cistern [nahr] 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 encircling, 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-Maqrizi, in his description of the pyramids, relates:

There were formerly at Giza, opposite Madinat Misr, a great number of pyramids, all of them small. They were destroyed in the time of the sultans Salih al-Din Yusuf Ibn Ayyub, under the auspices of Qarqish. With these materials he built the citadel [Qal’at al-Jabal], the wall surrounding al-Qahirah and Misr, and the kasbah of Giza.24
It is unacceptable to this writer that the building stone for the three projects of the citadel, the al-Qahira-al-Fustat enceinte, and the qaṣārī 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 Muqtaṣar 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-Latif. While the qaṣārī 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 Sir, stresses the Frankish prisoners excavating the huge trench girding the northern and eastern sides of the citadel, cutting and sawing the huge stones thereat. The occasional block inscribed with hieroglyphics is observed in the north wall and its extension east to Bujr al-Zafrī 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 Cresswell points out, the citadel was built on a small spur of the Muqattam which was "separated from the main mass by Saladin who purposely quarried stone here." Although he supplies no historical reference for this statement, the site of the trenches dug (cf. Ibn Jibyari), which may have included at least part of the quarried gap between the citadel and the Muqattam, and the far more practical approach of using local stone rather than hauling it from Qila, render Cresswell's view highly plausible. Thus, given the testaments of Abū al-İ-wāf and al-Maqrizi, while some of the stone for the building of the citadel and the al-Qāhirah-al-Fustāt necropolis may indeed have come from the small pyramids of Qila, it is far more reasonable to assume that the lion's share of building materials was quarried in the immediate area of the Muqattam.

**Occumation of the Citadel**

Cassova, based on a series of citations from al-Maqrizi's il-tāf, and from al-Bakri al-Shidīqī, 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-İ-ri, al-Maqrīzī Muhammad b. al-İ-İdīb) lived at Dir al-Wisṭāh in al-Qāhirah until the reign of al-Malik al-İ-dīb, although they occasionally resided at the construction site of the citadel; that the first to build residences in the palace complex was al-Malik al-Kāmil as deputy (wā'īd) to al-İ-dīb 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 604/1207-8.23 al-Maqrīzī further notes, is the Sālihī, that the remaining members of the Fatimid family were transferred to the citadel at this time (from Dir al-Maqrīzī al-Qāhirah), where they were lodged in "a house which had the appearance of a prison."20 The Ayyubid and Mamluk sultans, with the exception of brief period under al-Malik al-Sālih (v.), resided at the citadel thereafter.

**The Citadel---Later Ayyubid Construction**

As Cresswell points out, Saladin's enclosure was "as complete and as strong as the time at his disposal to make it.21" The major square and round towers of al-Kāmil, discussed in detail by Cresswell, 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 encirclé completed some forty years earlier by Qarajih.

In his view, al-Kāmil’s work on or near the western enclosure consisted of the following: an inner gate, Bab al-Sirr and Bab al-Qubbah; the royal stable, a library (Khūṣqat al-Kutub); a visitor’s residence (Qaṣ‘at al-Sihhah); and a mosque.

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

The Qas‘at of Giza
Ibn Jubayr (578/1182-91) states:

Another of the Sultan’s [Saladin] benefactions, and a monument of enduring usefulness to Muslims, are the bridges [qas‘at] he has begun to construct seven miles west of Mīsr at the end of a causeway that begins at high-Nile beside Mīsr [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 pyramids ... [Ibn Jubayr, Gesta, 69-70; al-Maqrizi, Al-Maqrizī, quoted in Mackenzie, 83-4].

"Abd al-Latif al-Baghdādī, writing in 597/1201-02, notes,
Karakosh employs the pierres qui provinrent de la démolition des petits pyramides qu'il fit détruire, à la construction des arches que l'on voit prétentieux à Djizieh; on doit compter ces arches elles-mêmes parmi les édifices dignes de la plus grande admiration, et elles n'ont pas été assimilées aux ouvrages des gisants. Il y avait plus de quatre-vingt arches pareilles; mais, en la présente année 1597 de l'hégire, l'intendance de ces arches se trouvant confiée a un homme ignorant et démesuré, il s'avisa de les hacher. Il se flattait que par ce moyen les eaux, retenues dans leur cours comme par une digue, se répandraient sur le territoire de Djizieh, qui participerait ainsi au bénéfice de l'inondation. Il est arrivé tout le contraire: l'effort des eaux contre ces arches en cracha trois qui se sont fondues et enterrées, sans que pour cela les terres que cet homme avait espéré faire jorer de l'inondation en aient reçu cet avantage.86

Ibn al-Wardi, 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." L-et de Sacy's further belief that the causeway built by Qaraqish, 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."87

Al-Maqrizi, in his Kitab al-Raub, renders in the following description.

The author of The Book of Marvels of Construction [kitab 'aqidi al-rayyan] said that the bridges [qurait] existing today at Giza are among the marvels of building and [like] the works of giants. There are more than forty arches. The scribe Qaraqish, the scribe, built them. He supervised the building operations in the days of His Highness Saljuq al-Din Yiaaf Ibn Ayub, 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-Qahira and Mawar and the area between them, and the Citadel of the mountain.88

In the year 589 he took charge of these bridges who did not understand them properly, and he demurred them as a block to deflect 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-Mu'azzam Baybars al-Jashankir undertook their repair.
He rebuilt what was ruined and restored what was unsound in it. This [undertaking] brought major improvement. When Qarqish built these bridges, he [also] built a causeway [reft] of stone. He built it from the edge of the Nile opposite madinat Misr. It resembled a mountain stretching along the ground, for a distance of six miles until it reached the bridges.36

The suggested primary role for the qaṣāfiyya 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 Jazbay, 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 proximiy. That the arches were originally designed for irrigation purposes is effectively negated by ‘Abd-El-Latif and al-Maqārit, in their almost identical descriptions of the fissarious attempt to dam the area ca. 597/1200-01.

**NAVAL FACILITIES**

While the Fustat area was replete with commercial dockyards and, despite massive alluviation, some trading facilities still existed at al-Maqār, information on the exact locations of naval shipyards under the Ayyubids remains somewhat vague. Naval arsenals existed at both Rhodah and al-Fustat during the reign of the Fatimid Caliph al-Āmir, with that of al-Fustat (near Fam al-khalīl) lasting until ca. 700/1300-01. The History of the Fatimids mentions Ayyubid naval dockyards in three instances. In 614/1217-18, during the reign of al-Malik al-Aḍil, a boat bridge was constructed from Rhodah to Giza, beginning "in front of the new dockyard" (al-naṣī’a al-muṣtaqīdā), suggesting a dockyard either at the southern tip of Rhodah or on the opposite bank at al-Fustat. In 637/1239-40, as part of a campaign to the Yemen, al-Malik al-Sāliḥ had forty ships constructed in dockyards (maṣāfīr) at al-Fustat, thence transported to the Red Sea (in sections) by camelback. Finally, in 640/1242-43, al-Malik al-Sāliḥ ordered the transfer of the dockyards for both Nile ships and warships from al-Fustat 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-Fustat 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-Salih ca. 637-41/1239-44. This vast enclosure served two functions: first, as a palatial/administrative complex temporarily supplanting Saladin's citadel (Qal'at al-Jabal) and, secondly, as the barracks of al-Salih's Bahri (riverine) Marinids, the nucleus of the ensuing dynasty. While certain activity must have continued at Qal'at al-Jabal (Qal'at al-Sililiyyah) 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 "kareedaj", a pavilion constructed by the Fatimid Caliph al-Amir on the northern end of the island. According to Ibn al-Mutawakkil, the island was purchased by al-Malik al-Musta'fiz Taqi al-Din 'Umar bin Shihazshah Ibn Ayyub (sephew of Saladin) in 566/1170-71. When appointed to the governorate of Bani in 574/1181-82, Taqi al-Din endowed the entire island upon his madrasa (al-Taqawwia) at al-Fusat (v.s.). Al-Malik al-Salih on his assumption of the sultanate, rented the island from qadi Fakhri al-Din al-Shakiri, 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 [qafif] was from Jami' Gkayn [a congregational mosque built during the reign of al-Malik] 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-Salih built the pavilions of Qal'at al-Ja'fris the date palms were removed and their site was included in the area of the buildings 36.

Al-Masqini continues:

Know that the royal pavilions [i.e., the kareedaj] and other residences, as previously mentioned, remained at Rhodah until the reign of al-Malik al-Salih. He established the citadel of Rhodah. It was known as Qal'at al-Miyaze, Qal'at al-Rhodah, Qal'at al-Ja'frs, and Qal'at al-Sililiyyah. He began digging the foundations on Wednesday the fifth of Shaw'bas and began the
construction... on Friday the sixteenth. On the tenth of Dhū al-Qa‘dah began [wazara] the destruction of the houses, palaces and mosques on the island of Rhodes. The people left their houses. He destroyed the Jacobite church near the Nikomehr, 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 plastered every [kind of] tree. He removed to it granite columns from temples, as well as marble columns, and sent to it areas, 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 Ayyubid and Bulak al-Makhītār. 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-Salih. When al-Jawād asked to be excluded from the supervision of the destruction of a certain mosque, al-Salih deputed another in his place who removed the mosque and erected an audience hall [qā‘a] in its stead. Al-Malik al-Salih never entered this qā‘a alive but, following his death at the battle of Māṣṣuqah, he was interred therein pending the completion of the tomb of his madrasa in Bayn al-Qaṣrān. 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-Maqritī states:

When al-Malik al-Salih ordered the building of the qā‘a, the Nile war [only] on the western side between Rhodes and Gien. It did not surround Rhodes except during the flood season. [Al-Malik al-Salih] continuously sank ships on the western bank [of the Nile]. He dredged the sands between Rhodes and Misr until water returned to the shore of Misr and remained there.
He built a great bridge from Misr to Rhodah—its width was three yards (about 37.5 feet). When amirs rode to attend the sultan at Qa'ilat Rhodah, they dismounted and walked the length of this bridge to the qa'il. Only the sultan could cross this bridge on horseback. Upon the citadel's completion, [al-Malik al-Salih] moved to it with his family and his haem, and he used it as the Dar al-Malik. With him were quartered his Bahri Mamluks; they numbered about one thousand. 41

The learned 'All Ibn Sa'id said in Kitab al-Maghrib that Rhodah faces al-Fustat, and is situated between it and the pavilions of Giza. The kilometre is there. It had been a promenade for the people of Misr. Al-Salih Ibn al-Kamil chose it as the seat of the sultanate. He built there a citadel surrounded by a wall [which is] luminous in color, strong in construction, and high in elevation; I have seen nothing more impressive than it. On this island was the Arshiyah where the Caliph al-Amir built for his Bedouin wife . . . and al-Mukhtabar, [which was] the garden of al-Ikhshid, and his palace [i.e.]

In extended hyperbole, Ibn Sa'id continues:

I walked several nights along the Fustat 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 [dar] of the sultan, nothing was of greater importance to him than their construction. [Al-Malik al-Salih] 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. It is gift surfaces and marble—ebony, camphor, and veined—which boggle the mind, paralyze the eyesight, and even confer benefit on the blind. The ensemble 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-Fustat similar to a kidney. In the days of low Nile its bank became attached to that of al-Fustat south from the area of Khalij al-Qahira, 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-Fustat, remained high and dry."

Al-Maqriti goes on:

... This citadel [Qal'a al-Rhodah] remained in use until the end of the Ayyubid dynasty. When the sultan al-Malik Mu'izz al-Din Aybak al-Turkmání, first of the Turkish rulers, assumed the rule of Egypt, he ordered its destruction. From its remains he built his madrasa, al-Mu'iziyya, at Rabah al-Bunûk, in Madinat Misr ... A group of people [jama'a] took from the qa'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-Zahir Buq al-Din Baybars al-Bunduqdarî assumed the rule of Egypt, he concerned himself with the building of the citadel of Rhodah; he entrusted the amir 'Jamal al-Din Mu'in ibn Yaqmur with its restoration. 'Jamal al-Din] restored some of its destroyed areas, assigned them to the Jundarîyah, 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 Qalâwîn became sultan and began construction of his ma'ṣrūt, dome, and madrasas [al-Manṣūrīyya], he removed from Qal'a al-Rhodah granite and marble columns, which had already been reused from Pharosic remains. He also took much marble and many fine lintels which were, again, reused from Pharosic times. Then the sultan al-Malik al-Nāṣir Muḥammad Ibn Qalâwîn removed granite columns for the construction of the mosque known as Dar al-'Aṣâr on the citadel [Qal'a al-Jabal] and 'Jamš al-Jadîf al-Nâṣirî outside of Madinat Misr. He removed other materials until there was practically nothing left. There remained from the qa'ā a fine vault, popularly known as al-Qit; 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.

Ibn Dupmîq adds that the construction materials of the qa'ā 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. Ibn's statement, however, that the citadel of Rhodes 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 Wâsîl and al-Maqrizî. In the year 638/1240-41, al-Maqrizî states that a son was born to al-Malik al-Sâlih by one of his concubines. As a fitting remembrance, al-Sâlih ordered the construction of the citadel of Rhodes. Ibn Wâsîl notes, in his annals for the same year, that al-Malik al-Sâlih built the citadel as a cenotaph (mârâkaz) for his manumits and amirs, and that it was three years in construction. Given the general reliability of Ibn Dhuqânak's narrative, the 646/1248-49 date is most likely an error in copy.

The Citadel of Rhodes—Analysis

The citadel of Rhodes was constructed as a fortress/palace/administrative complex which temporarily—and indeed little longer than the reign of al-Malik al-Sâlih—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-Sâlih removed his court, family, harem, and his personal contingent of manumits to the new citadel on the Nile. The site of numerous fortresses, arsenals, and shipyards in pre-Fatimid and Fatimid times, the island of Rhodes had served—albeit 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 Rhodes served as a fortress—specifically during the Byzantine and Umayyad eras—this fortress was established primarily for the defense of Babylon and Fatimid Egypt. During the two hundred seventy years prior to the establishment of Qal'at Rhodes, the nucleus of defense had shifted; first, under the Fatimids, to the walled city of al-Qahira; and, secondly, under Saladin, to the citadel (Qal'at al-Jabal), the focal point of the al-Qahira al-Fustat encomium. Qal'at al-Jabal remained the seat of government until the reign of al-Malik al-Sâlih, 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 Rhodes. Despite fifty towers the Rhodian 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 Mozattaum spur.

Why, then, the shift? That the citadel of Rhodes was built merely as a remembrance to al-Malik al-Sâlih's newborn son, as al-Maqrizî sug-
construction of the citadel and the al-Qāhirah-al-Fustah enceinte, while the al-Qāhirah-al-Fustah enceinte, supplemented by trench, was intended to rendezvous protection to Saladin’s new metropolitan entity, effectively including the four previous Islamic capitals of Egypt. Special facilities included the citadel (Qal‘at al-Jubbas), the citadel of Rhodah, and, perhaps, the tower at al-Masp, sometimes referred to as Qa‘a. The qanatir 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-Qāhirah-al-Fustah 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-Jubbas) and the al-Qāhirah-al-Fustah enceinte were begun by Saladin from a position of strength, and largely discontinued following his final departure to Syria. The fortiess/palace complex of the citadel, as envisaged by Saladin, was completed under al-Kamil, deputised as ruler of Egypt under his father, al-Malik al-‘Adil, and the citadel of Rhodah was constructed by al-Malik al-Salih. In the case of the al-Qāhirah-al-Fustah enceinte, however, later work took place only during times of civil war or of external threat. Beyond the initial construction of the al-Qāhirah-al-Fustah 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-Qāhirah-al-Fustah combined area.

The enceinte on this western flank was never completed and probably can only be explained by two factors: first, that as the Nile itself rendered a certain amount of protection, Qarqish left the construction of the western wall until last and, second, that the death of Saladin and/or Qarqish ended the impetus for its completion.

The construction of the citadels of Saladin and al-Malik al-Salih 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-Fustah, Qal‘at al-Jubbas, 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-Ahmar.

Finally, it should be remembered that despite the religious zeal which both Saladin and al-Malik al-Salih 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 religions property had, out of practical necessity, taken second place to the dictates of secular power and perceived needs for defense.

NOTES

5. Ibid., 555-551.
19. Ibid., 388-390.
20. Ibid., 374-375.
21. Ibid., 383, 388.
The Fortifications of al-Qāhirah(Cairo)


31. Ibn Jāhish (Broadhurst), 45.
33. Ibn Jāhish (Broadhurst), 64.
35. Ibid., 213, footnote 6.
39. Ibid., 183.
40. Ibid.
41. Ibid.
42. Ibid., 183, 184.
43. Ibid., 184.
44. Ibn Daqīq, Al-Idārī, (Cairo, 1903), 4:110.
45. Al-Maqtī, Sabk (Kishāib), vol. 1, part 2, 301.