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Excavations at 'Aqaba Castle started in 2000 as a joint Belgian-British project organised by the Division du Patrimoine du Ministère de la Région Wallonne at Namur and the University of Cardiff <sup>2</sup>. In 2007 the Unité Mixte de Recherche of the CNRS (Lyon II) joined the project, which was placed under the aegis of the Council for British Research in the Levant (CBRL). The team developed into an international collaboration with researchers from several countries<sup>3</sup>. We whish to thank the representatives for the Department of Antiquities (DoA), Manal Bisyouni (2000 and 2006), Sawsan al-Fakhri (2001, 2007 and 2008), Saté Massadeh (2003), Moussa Malkewi (2005) for their contribution to the excavations and, especially Sawsan al-Fakhri ('Aqaba DoA office) for her continuous scientific and logistical support since the start of the project.

One must one recall that today the castle of 'Aqaba gets its celebrity mainly from its capture by the Arab army under Laurence of Arabia on sixth of July 1917, probably the most significant military action of the Arab revolt against the Turks. Eight centuries earlier, in the winter of 1117, 'Aqaba had

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been occupied by another armed expedition, led by the Crusader king of Jerusalem, Baldwin I. Permanent Frankish military presence at Ayla was probably not established until the 1160s, because in 1154 al-Idrisi referred to the small town of Ayla as being populated by Arabs and under their control.

However, analysis of historical documents by Denis Pringle (Pringle 2005) has clearly shown that the location of the Crusader castle that Saladin captured in 1170 was on the island of Jazīrat Far'un, actually Egyptian territory, but controlling — at least in clear weather — the town of 'Aqaba 15km to the north.

Despite excavations that were carried out on the island during the Israeli military occupation of Sinai, no definitive evidence has so far been exposed of the Frankish occupation. The earliest archaeological finds associated with the castle appear to date from the Ayyubid occupation in the late 12th and 13th centuries. The visible standing remains, despite being largely rebuilt today, also appear to date from after Saladin's capture of Ayla in 1170 when it became the principal Ayyubid stronghold in the region.

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In 1181, Ayla had been briefly held by Reynald of Châtillon, lord of Karak. According to al-Maqrizi, Reynald arrived in Ayla in November 1181. A raid on Karak, however, led by Saladin's nephew forced Reynald to withdraw. He also adds that following Reynald's visit, the rain at Ayla was so heavy that its fortress collapsed. It is not clear whether the fortress that collapsed in 1181 was located on the shore or on Jazīrat Far'un. It seems more likely that de Châtillon stayed in a stronghold on the shore as it seems improbable that he would have captured the Jazīrat Far'un castle and immediately withdrawn, without the texts being more explicit about it, as there is detailed account of the events of the following year when Reynald raided Muslim shipping in the Red Sea, blocking the principal Ayyubid fortress on Jazīrat Far'un.

The most ambitious Frankish raid was aimed at attacking the Muslim Holy Places and took place towards the end of 1182 when Reynald took five prefabricated ships to Ayla. As it had been under Saladin's control since 1171, he must have taken Ayla. Saladin's troops still occupied the castle at JJazīrat Far'un so Reynald sent two ships to blockade the island. The other ships were send down the Red Sea and to 'Aydhab. Reynald did not join these ships and must have stayed at Ayla (Facey 2005: 93; Mallett 2008: 148, 151-152). Again, it seems unlikely that the Crusaders did not use a stronghold on the shore, at least in order to provide support for their expedition against the castle on Jazirat Fara'un and for their other ships in the Red Sea.

The battle at the Horns of Ḥiṭṭin put an end to this southward expansion. With the end of Frankish control of Transjordan and southern Palestine in 1189, the need for an Islamic fort on the Gulf of 'Aqaba to protect overland traffic between Cairo and Damascus receded. In Sinai, Saladin constructed another fortress — the castle of Sadr or Qal'at al-Gindi — to protect communications between Egypt and Syria.

The Crusader attack and occupation of Ayla was probably the final straw for the early Islamic town (Witcomb 1997: 359). Subsequently, in Mamluk times, a settlement called al-'Aqaba (or 'Aqabat-Ayla) developed in the vicinity of the present castle, suggesting that an earlier fortification may have been located there.

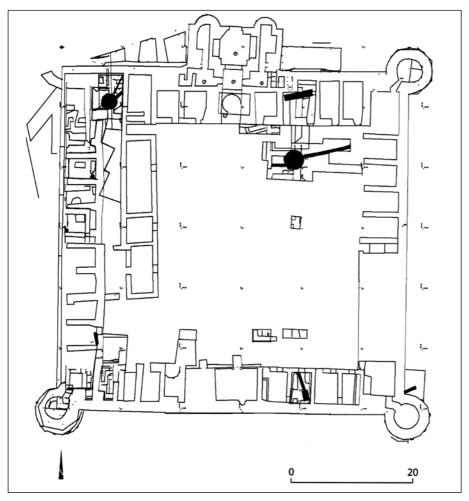
The aims of our research were, first, to define the Crusader presence in the area of the Gulf of 'Aqaba and, second, to establish when and possibly why the Islamic city of Ayla was shifted more than 1000m to the south, to the site of the current castle of 'Aqaba.

The present standing structure of 'Aqaba castle is of late Mamluk date, but excavations have demonstrated that earlier structures underlie the castle. This might, for example, have been the fortification to which — according to Abu al-Fida — the Mamluk governor of Ayla transferred his residence around 1320 when the castle at Jazīrat Far'un was finally abandoned, although documentary proof is lacking. As the written sources remain silent, only archaeology can shed light on this problem. One fact must, however, be taken into consideration: even if the main Crusader and Ayyubid / Mamluk stronghold was located on Jazīrat Far'un, effective control of the mainland routes and of 'Aqaba itself seems impossible without at least a bridgehead on the mainland.

After the 2008 season, the structural phasing of the site may could be summarised in seven principal phases:

*Phase 1: Pre-Khān Phase (eighth – 12th centuries)* (FIG. 1)

During the 2008 season, it became clear that the site was occupied, probably for more than agriculture and gardening, prior to the construction of the first fortification, regardless of whether this was a Khān or not. We had uncovered several features, including walls of buildings, terrace walls, other walls that may have been associated with irrigation canals, wells and floors, that indicate an occupation orientated NW-SE / SW-NE. This is different from the N-S / E-W orientation of the later khāns and is indicative of planned organisation of the area. The water wells, which range in size from small to huge, suggest agricultural activity. Gardening is still carried out behind the castle, sustained by irrigation with fresh water from nearby wells. The small wells have one or two stones built into the interior, probably to filter the water. One of the wells contained only Umayyad pottery FIG. 2. Another yielded charcoal that was C<sup>14</sup> dated to 1075-1160 (3%) and 1160-1290 (95%). A well 2m wide was partially excavated under the west part of the north wing of the castle. It had a stone step that would have facilitated the drawing of water and a canal leads off it in a north-easterly direction. A similar well, almost 3m. wide, was excavated in the central courtyard. A thin wall leads off it in a north-easter-



1. Pre-khān structures.

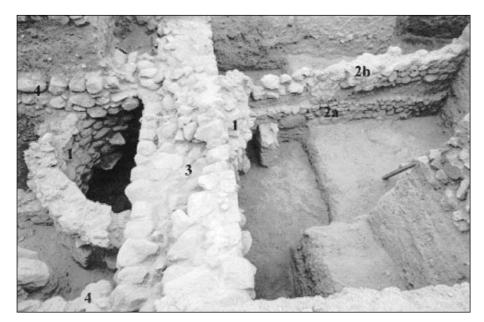


2. Small pre-khān well.

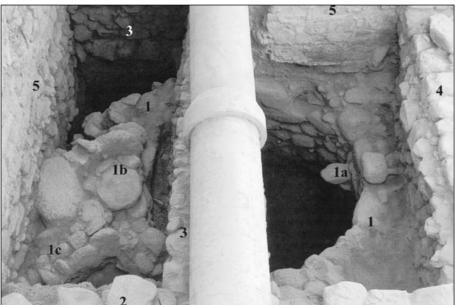
ly direction. After it was abandoned and covered with sand a new, similar wall was built on top of it, following the same axis and direction; the well shaft was raised at the same time. A similar wall led off towards the west. Although we do not have a definitive interpretation for these walls, it seems

unlikely that they would represent anything other than an aqueduct bringing irrigation water from the well to fields located to the east and west (FIGS. 3, 4, 5, 6, 7).

Some layers related to the first occupation contained traces of hearths and even the remains of a



3. Well (1) and canal supporting walls (2a and 2b) from the pre- khān phase; east wall of the first khān (3); north and south walls (4) of the cells of the east wing of the first Khān.



4. Pre- khān well (1) with step stones (1a/1b) and canal (1c); north wall of first Khān (2); rebuilt cell walls of the north wing (3); foundation of inner west wing wall (4) and other walls of the standing Mamluk castle (5).

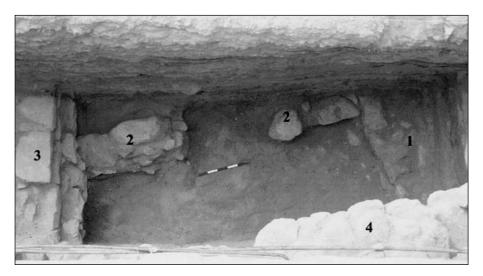
*ṭābūn* or bread oven. One structure, defined by two circular column bases enclosing two tiles, is linked to a Fatimid glazed sherd recovered from directly underneath one of the tiles. A sherd from an Abbasid jar, which doubtless came from a nearby area, was built into one of the walls of the first Khān. We may therefore assume that the first occupation of the site started in the Umayyad period, but developed mostly from the Abbasid period onwards. The site was may have been associated in some way with the main site of early Islamic Ayla, ca. 1km. to the north. Probably the same type of activities continued on the site until the first constructions were built in the 12th / 13th centuries.

Phase 2: First 'Khān' (late 12th to early 13th century)

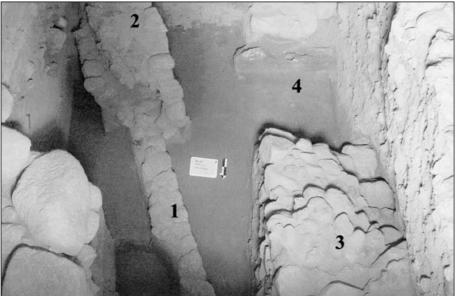
*Phase 2a:* The presumed presence of an Ayyubid or Crusader fortification as a bridgehead on the shore, with the main castle sited on Jazīrat Far'un, could not be confirmed archaeologically.

The first Khān constructed on the site consisted of a rectangular enclosure wall, measuring 56m. by 40m. Against the west wall, a series of rooms, approximately 2.8m. square, were constructed to form the west wing of the Khān. The corner rooms were rectangular and had a length of 4m. The west and south walls lay on the same line as the current castle. Its four corners have now been investigated

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5. Pre-khān building (1 and 2) covered by the courtyard wall of the east wing of the first Khān (phase 2b); "en sous-oeuvre" repair of the south wall of the north wing of the standing castle (4).



6. Excavations in the south wing: canal supporting wall (?) (1); terrace wall (2); east wall of the first Khān interrupted by a tomb (4).



7. North part of the west wing: first Khān cell walls (2/2b); rebuilding of the west wing (phase 3a) and reconstruction of the east wall (phase 3b); late Mamluk castle (4/5); 19th century officers quarter wall (6); 20th century reconstructions (7).

and do not show any trace of corner towers (FIGS. 8, 9). Perhaps the larger corner rooms fulfilled that function.

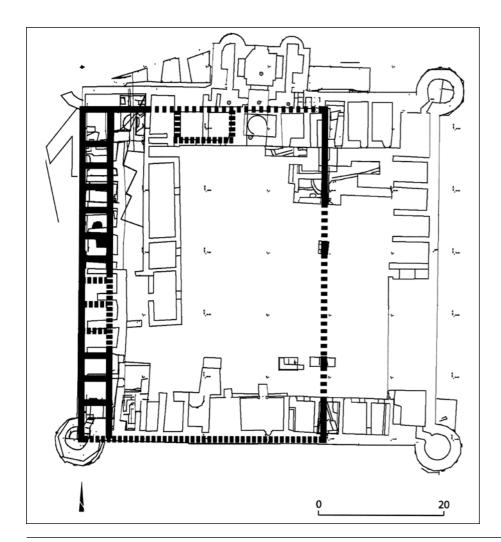
Although not yet excavated, it would be no surprise to find the entrance in the north wall projecting out into the courtyard, as the position of some later rooms in the central part of the north wing, which may use older walls as foundations, suggests.

For the moment we do not know if the first Khān had a mosque. However, it is not at all unlikely that the reorientation of the building was in some way linked to the position of the *qibla* (outer south) wall of any potential mosque <sup>4</sup>, but excavations of that building have yet to confirm this theory.

Later destruction and rebuilding make it impossible to know if, in its earliest stage, the enclosure

stood empty of any additional buildings and if the row of square cells against the western wall were built at a later stage.

Finds associated with these structures and associated C<sup>14</sup> dates <sup>5</sup> are consistent with a date in the late 12th or early 13th century for the construction of the enclosure wall and the first cells of the west wing. *Phase 2b:* In the north half of the west wing, we have clear indications that a number of rooms were reconstructed — perhaps after an earthquake — on more or less the same lines, as some of the preserved pavements and a latrine pit are overlain by the new cell walls. Possibly at the same time, cells were built against the east wall, by which stage the building would have started to look like and function as a Khān (FIG. 10).

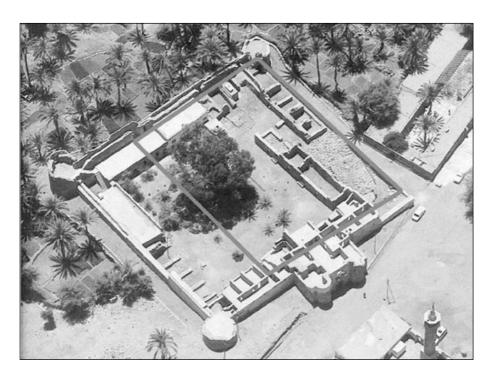


8. first Khān (dotted lines: supposed/ not excavated walls).

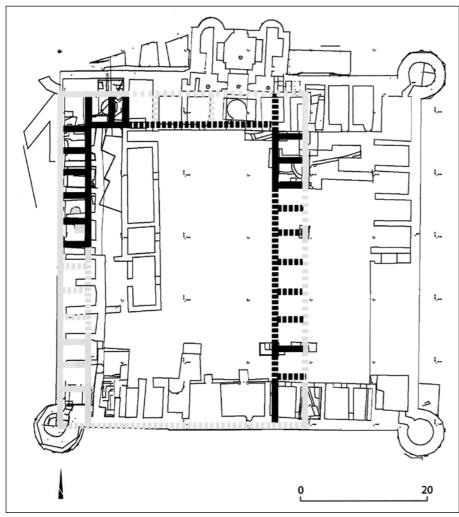
<sup>&</sup>lt;sup>4</sup> The Mamluks were able to define the more or less exact direction of Mecca: excavations of a late Mamluk rural mosque in *Lahūn* showed that the *qibla/miḥrāb* orientation differed less than 4 degrees (De Meulemeester 2008); maybe their Ayyubid predeces-

sors had already the necessary knowledge too.

<sup>&</sup>lt;sup>5</sup> For the moment the results of a series of C14 analysis's on charcoal samples date the enclosure to the late 12th or early 13th century most probably between 1165 and 1220.



9. Location of the first Khān under the actual late Mamluk castle.



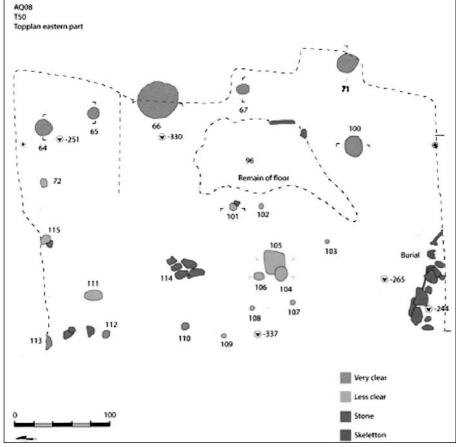
10. 13th century reorganisation of the first Khān.

Outside the extant castle wall and entrance, and inside the castle at the transition from the north to the west wing, a significant number of postholes were excavated (FIGS. 11, 12). For the time being, we can only interpret these as being for tent posts. On the de Laborde watercolour we can see how

tents were put up in front of the castle as late as the 19th century. The deposits linked to the postholes all date to the Mamluk period. We therefore suspect that the tents stood in front of the first Khān. As for the postholes inside the Khān, they could have been associated with tents erected in the courtyard.



11. Postholes outside the castle wall (east of the entrance).



12. Postholes outside the castle wall (west of the entrance).

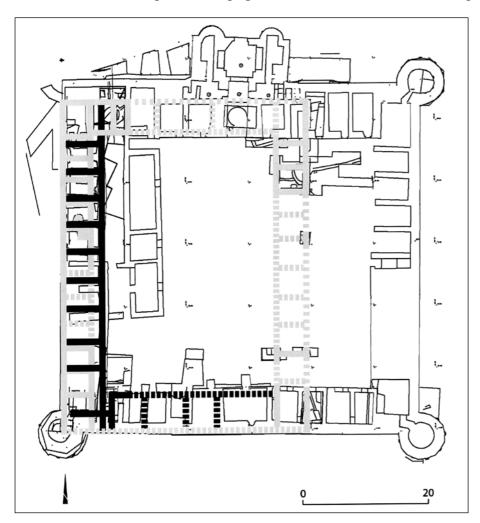
From a historical point of view, it is difficult to attribute the building of the enclosure / Khān to a specific person, but based on the C<sup>14</sup> results this first Khān can be dated to the Ayyubid period. In that sense, it might initially have been a simple enclosure with the cells being built against the western outer wall as a later addition. Although the interior is different, this first enclosure / Khān can be compared with an other Ayyubid khāns: e.g. Khan al-'Arūs situated north of Damascus, which is a rectangular construction measuring 41m. by 47m., without corner towers and with a gate house that does not protrude. According to an inscription that was originally placed above the entrance, it was built in 1181 / 82 by Saladin (Sauvaget 1939: 49-55, fig. 19). Reynald de Châtillon's actions in the Red Sea may have somehow dishonoured Saladin in Muslim eyes, in the sense that he was not able to protect pilgrims to the Holy Cities. Could the construction of the enclosure be a manifestation of Saladin's desire to protect the pilgrims and take

control of the 'Aqaba shore?

Within the C<sup>14</sup> dating range, there is also the possibility that the Khān was built, or at least modified with the addition of new cells in the west wing and against the east wall — thereby giving the structure the function of a real Khān — by Al-Mu'azzam 'Isa in 1213 (Milwright 2008: 76). Alternatively, the construction of the new cells might be attributed to the Mamluk Sultan Baybars or his immediate successors. As a result of Mamluk involvement in providing protection and support to the annual Egyptian pilgrimage to the Holy Cities, 'Aqaba may have needed a fortification to accommodate the pilgrims. From 1266 onwards, the Egyptian pilgrimage to Mecca and Medina came under official Mamluk sponsorship.

Phase 3: Reorganisation of the First 'Khān' (14th century)

Phase 3a: In the 14th century the interior of the Khān was reorganised (FIGS.13). The cells of the



13. 14th century reorganisation of the first Khān.

west wing disappeared and new rooms were built with a larger, more rectangular shape of ca. 3.5m. by 4.5m., with the whole having a similar general outline to the present castle. This time cells ware also built against the south wall; the inside of the north wall has not yet been excavated.

In the south-west corner, the castle's defences was strengthened with a tower that was circular inside; we have no idea about its outer shape as later tower building activities destroyed the structure<sup>6</sup>.

At about this time, the castle at Jazirat Fara'un was destroyed by an earthquake. The suggestion that the governor may have abandoned the island after its castle had been damaged by the earthquakes of 1303 or 1312, especially the latter — which caused considerable destruction to St. Catherine's monastery — is plausible. The Mamluk governor abandoned the castle around 1320 in favour of a fortress on the shore, and it is probable that he occupied the existing Khān. Although the texts are not explicit, it is clear that a fortified Khān existed on the 'Aqaba shoreline during the early years of the 14th century and that no new construction work is mentioned or known to have been carried out. Some authors attribute the origins of 'Aqaba castle to Sultan Nasir Muhammad. We favour the idea that the existing Khān was reorganised during the first quarter of the 14th century with the arrival of the Mamluk garrison from Jazirat Fara'un around 1320, rather than the suggestion of a newly constructed building. It would not be surprising if destruction on the island coincided with destruction on the shore. This would explain the replacement of the cells of the first Khān and the completion of the other wings at this time. The construction of more spacious rooms and the increase in their number is suggestive of additional functions for the complex. Further research is required to determine whether the reorganisation was limited to the building of similar cells along the west wing, or whether more residential structures were constructed against the north and south wings. By this stage, the castle would have functioned as the governor's residence and a garrison fort, rather than as a real Khān, but for how long? Phase 3b: Once more, at least some of the rooms — again in the west wing — were rebuilt after an earthquake; for example: a pavement belonging to a room of this period runs under new walls built with less care. Do these reconstructions in the aftermath of an earthquake mark another shift in the building's function, whereby it reverted to a real Khān again? (FIG.14)

# Phase 4: The Second Khān or 'Castle' (ca. 1515 – 17th / 18th century)

It is clear from the excavations that the Khān was abandoned, ruined and disappeared under the sand for a long period before it was rebuilt in the early 16th century. For example, tombs were dug into the east wall. It is probable that yet again an



14. Kitchen cesspool (4) in a Phase 3b cell of the west wing; the cesspool consists of a Mamluk pot put upside down and contained a rich collection of small fish bones; reconstruction of first cell wall or phase 2b (1); phase 3a cell wall (2); phase 3b cell wall (3).

castle, and was replaced by the actual tower in the late 16th century (cfr infra).

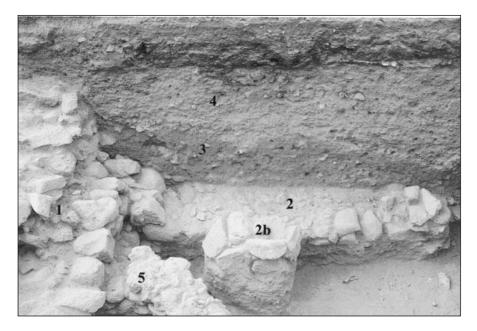
<sup>&</sup>lt;sup>6</sup> As stratigraphy is not quite clear in this area, it is not impossible that this construction belongs to the next phase, the late Mamluk

earthquake was the cause of the destruction and abandonment. In 1515, the last Mamluk sultan started to build a new Khān on the site. The site was levelled prior to the commencement of this Phase 4 building work. A second Khān, the present castle, was then constructed on a larger scale (FIGS.15,16).

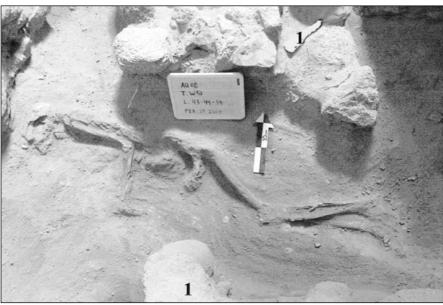
In plan, the new Khān / castle takes the form of a rectangular enclosure, measuring 56.5m. by 58m., with corner towers. All of the corner towers seem, at least initially, to have been polygonal externally and rounded internally. Later, the north-east and south-east towers were partially reconstructed with a rounded external form, and later still the upper

floors and vaults of the towers were rebuilt for the installation of cannon.

Excavations of the south-east corner, including the tower, suggest that the building of the Khān was interrupted. Perhaps the death of al-Gawhri and the take-over of the Mamluk Empire by the Ottomans was responsible for the interruption. It is probable that the Ottoman Sultan Murad III restarted / completed the work in the 1587 / 8. There seems to have been a lengthy period between the abandonment / destruction of the first Khān and the start of the work on the second Khān. For example, we know that there was a long period during which the pilgrims passing through 'Aqaba lacked a func-



15. Excavation in courtyard: east wall of first Khān (1); cell wall of phase 2b (2) and fireplace (2b); sand blown against the ruined outer wall of the Khān; leveling of the site before the construction of the standing castle (4); pre-Khān well (5).



16. Tomb cutting trough the east wall of the first Khān.

tioning Khān. Later building work, including that of 1588 — also dated by inscriptions — which is associated with the Ottoman Sultan Murad III, was initially thought to represent little more than renovations. A careful excavation of the still polygonal south-west tower makes it clear that it must have been rebuilt after the construction of the early 16th century Khān, as its foundations cut through the wall built by the Mamluk sultan. Most likely this rebuilding was associated with the activities of Sultan Murad III.

The most impressive feature of the second, new Khān is the gatehouse, which projects from the middle of the north wall. Its design is curiously skewed towards the north-east, whilst the westernmost of the two rounded turrets that enclose the gate is larger than the other. The reason for this design feature appears to have been to create a false perspective, making the gatehouse appear symmetrical when seen from the principal direction of approach from the north-east.

#### Phase 5: Rebuilding (17th – 18th centuries)

Investigation of the internal parts of the standing structures suggests a complicated sequence of construction and reconstruction, extending over the centuries during which the building served both as a fortress and as a Khān used by Egyptian pilgrims travelling to and from Mecca. The rebuilding work not only included the ranges of cells for Muslim pilgrims and, at certain times, troops, which line the inside face of the walls, but also to the mosque in the south range which, although Mamluk in origin, appears to have undergone at least three phases of rebuilding during which its floor level was raised by more than a metre.

Various structural alterations were made to the castle in the 17th and 18th centuries. These included the rebuilding of the south face of the north range and alterations to the west range. Similarly, latrines were built, altered, repaired and rebuilt. The result was the castle as we see it in the illustrations of Léon de Laborde, who drew a plan and front view ca. 1827, and those of David Roberts made ca. 1843. The de Laborde plan shows a regular Khān with cells around a central courtyard. Thus, when de Laborde passed through 'Aqaba, the building might still have been fulfilling its original function as a Khān for pilgrims, although his watercolour does shows a cannon protruding from the northeast polygonal tower.

Phase 6: Rebuilding After ca. 1830

Between 1831 and 1840, Egypt occupied Palestine and Syria. In 1841 the borders of Mohammad Ali's Egypt were finally delineated at the Convention of London after what is known as 'The 'Aqaba Incident'. Egypt was left in possession of the Sinai peninsula and a number of Red Sea garrison towns, including 'Aqaba, in order to protect the Egyptian pilgrim route to Mecca. It seems that it was during this Egyptian occupation that the reconstruction of the stronghold in its present form was carried out, losing some of the cells of the Khān in favour of a place adapted to the needs of a military garrison. Some time after de Laborde's visit, a number of changes were made to the castle, including the partial rebuilding of the north-east and south-east towers, with rounded as opposed to polygonal exteriors, and the demolition of the northern part of the west range to create an enclosed yard with a gate on the east. This reorganisation left a very different west range, with buildings, as we know them today after the various reconstructions of the 20th century. Under the Egyptian occupation, the Khān became the military fort that would eventually be destroyed in the wars of the early 20th century.

#### Phase 7: First World War Destruction and 20th-Century Use

During the Italo-Turkish war (1911-2) and the First World War (1915-17), the castle was bombarded from the sea. Much of the west wall and west range was destroyed and the remains of the latter were filled with earth and rubble to create an elevated platform, probably on which to mount artillery. After the conquest of the fort by the Arab army, the courtyard was cleared and a rectangular building, most likely a stable, was constructed in its eastern half (FIG.17). After the war, the castle was largely rebuilt. Since 1980, reconstruction of the castle has been undertaken by the Department of Antiquities.

#### **Conclusion**

For the time being, archaeological excavations at 'Aqaba Castle have yielded no evidence for a Crusader presence at the site. Activities that were most probably associated with the presence of the Islamic town ca. 1km. to the north mark the first occupation of the site. Possibly during the Ayyubid period, but certainly by the 13th century when the Mamluks became responsible for the safety of pilgrims

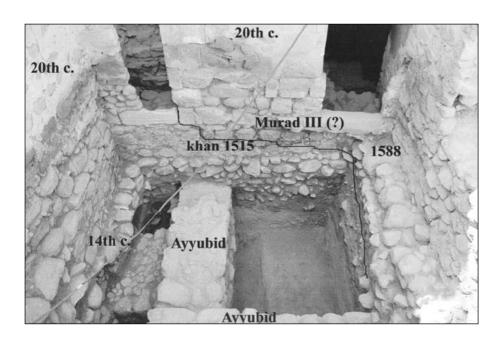


17. Northeast corner of 20th century barrack in the central courtyard known from post-WWI photographs.

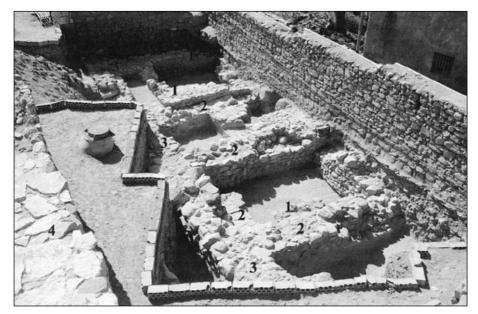
travelling to Mecca, the first Khān was constructed. This was replaced by the current building, which was mainly constructed ca. 1515 (FIGS 18-21).

As for the Crusader presence in the area, analysis of historical records clearly demonstrates that the main castle to exert control over the Gulf of 'Aqaba was sited on Jazirat Fara'un. It is unclear whether the buildings there had predecessors of Byzantine origin or not, although that would certainly not be unfeasible. The island was certainly occupied during the Fatimid period, as demonstrated by the ruined walls of a 10th century mosque. Only new excavations can shed further light on the matter. If there was a

Crusader garrison post on the shore at any time, it does not appear to have been at the site of the present Castle of 'Aqaba, as building work there started only after the conquest of the area by Saladin. On the other hand, if we had to rely on archaeology alone, there would be no evidence for a Crusader presence on Jazirat Fara'un either. As a working hypothesis we consider the possibility that the Crusaders used the walls of Islamic Ayla to give them some protection and defensive positions. In England, Wales and Flanders they used old Late Roman "Saxon shore" forts in this way during the same period, building their castles within the Roman fortifications.



18. Southwest corner of the Mamluk castle.



19. Middle part of the west wing: Phase 2/2a (1); Phase 3 (2); Phase 3b (3).



# 20. Excavations in the west wing: rebuilt cells cutting trough (2b) or covering (2a) floor (1) of the first cells.

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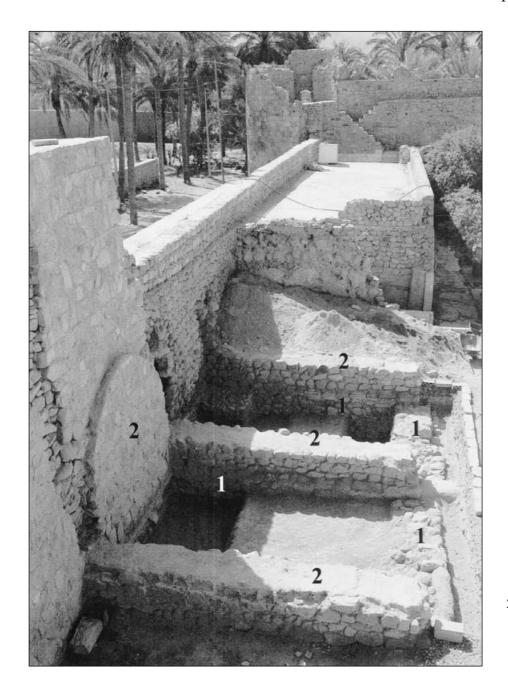
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21 Excavations in the east wing revealed only structures from the standing castle: cell walls of the second Khān (1); 20th century reconstructions (2).