



Kom el-Dahab interpreted

The lakes along Egypt's northern coast contain a number of ancient sites which were once on dry land but are now islands. **Gregory Marouard** has been studying satellite images of Kom el-Dahab.

With an approach similar to François Leclere's 2007 article on the large temple complex at Tell Dafana (*EA* 30, pp.14-17), by using only satellite images from 2011 it has been possible to re-evaluate the archaeological potential of a small site located in the south-western part of Lake Menzaleh in Daqahliya governorate. Kom el-Dahab is one of the most northerly ancient sites in Egypt, situated 12km south of the coastal city of Damietta. Already inventoried many years ago by the Antiquities Service (their site No.050105) and listed by the EES survey (No.321), the site has so far been neither explored nor excavated and remains a *terra incognita* in the eastern Delta. Georges Foucart mentioned the site in the 1890s (*RT* 20 (1898), p.167; *ASAE* 2 (1901), p.64) but he never actually visited it.

Kom el-Dahab lies on a small island covering about forty hectares. Around 1926 (its first appearance on a map) it was still located 4km from the nearest (western) shoreline of the lake. As shown below by the comparison of Corona satellite photographs (1969) and the more recent images (2011), since the construction of the Aswan High Dam Lake Menzaleh has been gradually drying up and Kom el-Dahab is now located less than 2km from the shore. Surrounded by water and a thick barrier of reeds, the site can be reached only by boat.

The maximum extent of the site is c.800m (south-east to north-west). At the north end, a triangular extension is

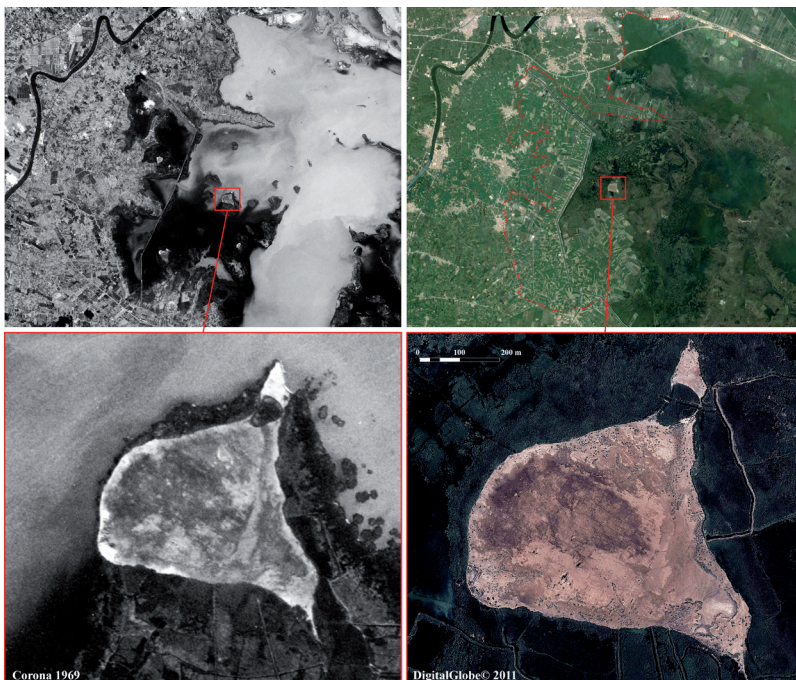


Map of Lower Egypt showing the location of Kom el-Dahab

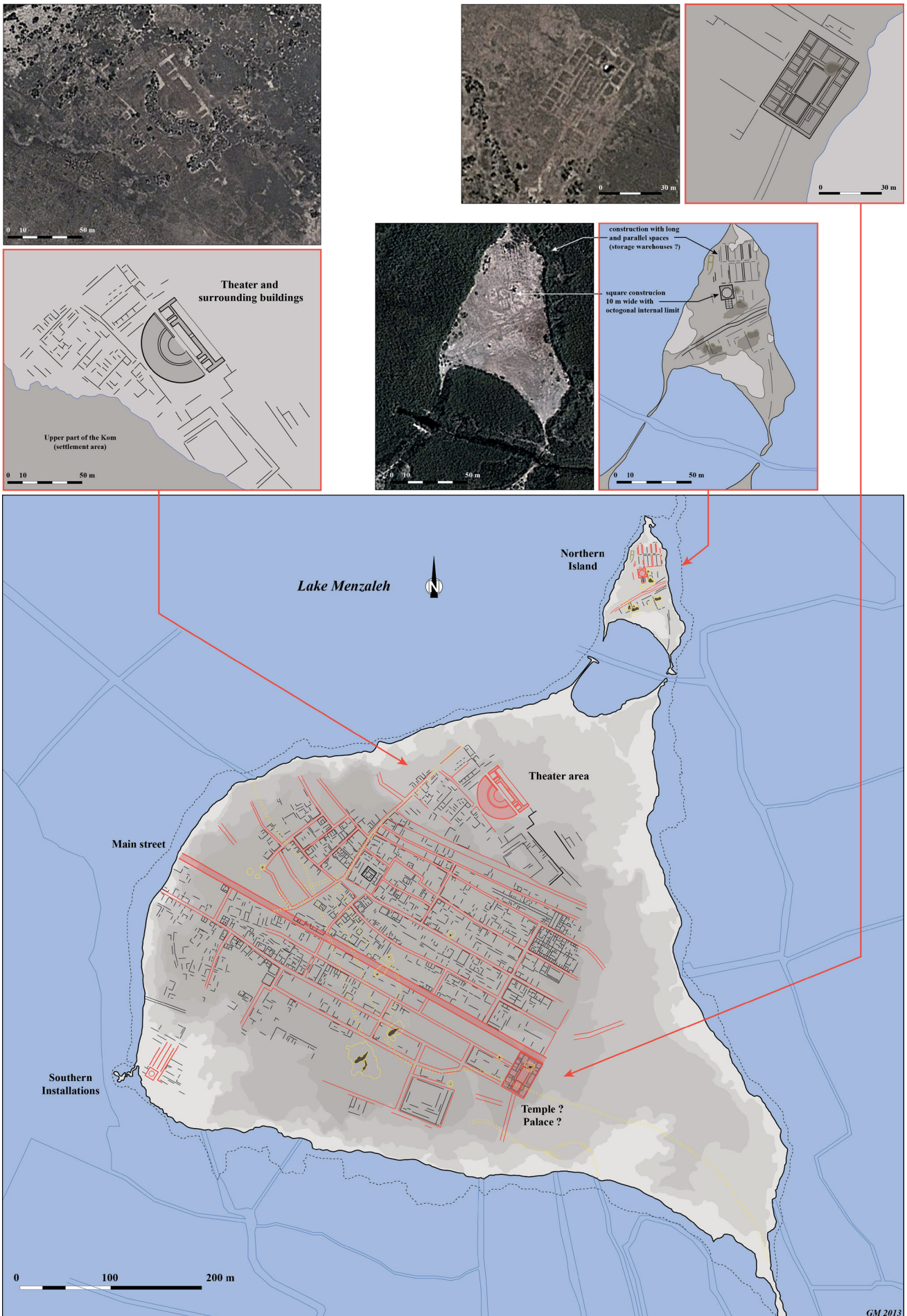
separated from the main island by a flooded area c.120m long and 80m wide. Except for evidence of recent pillaging, the site seems to be largely intact but the surface has been badly affected by both rainwater and a probable increase in the lake level, which has apparently caused a very even levelling of the archaeological remains.

The most densely urbanised part of the site covers an area of approximately 16 hectares, from c.350m north-south to c. 450m east-west. The eastern half of the plan shows a regular and strictly orthogonal form inspired by the Hippodamian rectangular grid from the Hellenistic era – a rare example for the eastern Delta. The urban grid was not orientated according to the cardinal points but along the lengthwise direction of the site, in order to make best use of the higher parts. In the lower, western, part of the site, the grid becomes less regular with some streets progressively moving away from each other. The later occupants had apparently settled the space in a less dense and more loose manner, without observing the original grid layout.

At the centre of the urban area a wide street dominates the plan and extends without interruption over 470m. It leads at its eastern end to a large building which measures more than 42m in length and 29m in width. Its plan is very symmetrical and shows two rows of peripheral rooms arranged each side of an empty central space 9m wide. This large building covers an area of about 1200m² and must have dominated the urban landscape. It is probably a



Kom el-Dahab on satellite images from 1969 (Corona) and 2011 (Digital Globe) showing how Lake Menzaleh has been reduced in extent over the past 50 years



The main buildings visible at Kom el-Dahab (preliminary reconstruction by the author)



large palace or temple. If the latter, it shows none of the architectural features of an Egyptian-style temple, but has a more Classical form.

To the north, and outside the urban settlement, is a small lower-lying area in which the most significant element is a theatre, which is clearly visible on the satellite images. It measures 58m to 60m in length and had a maximum width of 44m. The *orchestra* must have had an original diameter of 12m. The semicircular *cavea*, with a diameter of 58m, is divided into two distinct seating areas, which are visible on account of a major concentration of vegetation here. The *frons scaenae*, rectangular in plan, measures c.58m long and 14m wide. It includes an axial opening that led to the *proscenium* from the large open area behind the *scene*. This theatre is one of the few identified so far in Egypt – other comparable theatres of similar date and shape being at Pelusium (Tell el-Farama and Tell el-Kanais), Antinoopolis and Oxyrhynchus. The plan is clearly modelled on the imperial pattern and in the tradition of the Antonine Period (second century AD). This remarkable structure indicates the importance of the urban site of Kom el-Dahab and also underlines the probable strong Romanisation of the local population and its close contact with the Mediterranean world.

In the northern extension of the site, the satellite images reveal other unusual installations, which have been partially damaged by illegal digging. There is a building with two sets of five or six long parallel rooms, which are reminiscent of the layout of large storage magazines, or a kind of dockyard. Directly to the south is another unusual construction – a massive building with a square plan at least 10m to 11m along each side with an octagonal feature 6m wide in its centre. On the southern side a rectangular addition can be seen which might have functioned as an entrance area to this building. Obviously the purpose of this later structure cannot be determined without a field survey, but its position at the northern end of Kom el-Dahab, in an area that was at this time probably widely open onto the lagoon of Lake Menzaleh, and the strong similarities and dimensions close to those of the ‘funerary replica’ of a lighthouse at Taposiris Magna, cannot be ignored.

The precise extent of the western end of the ancient Lake Menzaleh and the nature of its landscape are both still relatively uncertain, and in contrast with areas further east (Tell Tinnis and Pelusium) it has not been extensively investigated in order to clarify the changes at the mouth of the Damietta branch whose current configuration seems to have evolved quite late (after the fifth–sixth centuries AD?). Located far outside the current regime of Nile waters, it is possible that the site at Kom el-Dahab was originally located at the mouth of a secondary branch that was connected at that point to the ancient course of the Damietta branch, which corresponds to the Bucolic (or Phatmetic) branch, mentioned in ancient texts.



Ancient lake levels in the north-east Delta (preliminary reconstruction by the author)

The presence of such a site clearly illustrates that in Roman times Lake Menzaleh was still easily navigable and accessible from the Mediterranean Sea. The colony at Kom el-Dahab, with its position in the southernmost part of the lake, would have overseen and expedited the entry of ships to the central Delta region, as well as functioning as a stopping place for the unloading of goods. The northern part of the site would have had good access to the sea, particularly for vessels going to/from the Levant and Cyprus, while the southern part was connected to the inland network of waterways, which the larger sea-going ships could not navigate. Kom el-Dahab must have functioned as an *emporion* (trading place) with a strategic location and a similar function to those of larger sites such as Pelusium or Heraklion, respectively situated on the Pelusiatic and Canopic branches of the Nile.

The settlement at Kom el-Dahab was abandoned in the early centuries AD and numerous factors could have contributed to this. The deep crisis caused by the revolt of the *boukoloï* (outlawed herdsmen) that affected the north-east Delta in the second half of the second century AD may have had an impact on security in the area, or the site could have been affected by the devastating hydrological and seismic phenomena in the region at the end of the fourth century AD, reported in his *Conference VII*, 26 by the monk John Cassian.

This preliminary investigation shows how much information can be learned about ancient isolated sites by studying high-definition satellite images, but archaeological research on the ground will be necessary to find out more. An extensive approach with a magnetometric survey would augment the good results that have already been obtained simply from space.

□ Gregory Marouard is a Research Associate in Egyptian Archaeology at The Oriental Institute of the University of Chicago. He is Co-Director of the Tell Edfu Project and, since 2010, has been Director of the Edfu Pyramid Project. He has also worked at many other sites in Egypt, including Buto, Dendara and Wadi el-Jarf. He wishes to thank the Camel Lab at the Oriental Institute for providing maps and satellite images and Katherine Bloin (University of Toronto) for her constructive advice.