

**The Harbour of Naukratis, 'Mistress of Ships'
The British Museum Naukratis Project's sixth fieldwork season at Kom Ge'if, Egypt
(Beheira MSA site no.100253)
October 2018.**

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The port of Naukratis was the earliest, and for a period the only, Greek port in Egypt. Established in the late 7th century BC as a base for Greek (and Cypriot) traders and the port of the royal Pharaonic city of Sais, it was an important hub for trade and cross-cultural exchange long before the foundation of Alexandria. Previous fieldwork by Petrie and Gardner (1884–1886: Petrie 1886; Gardner 1888), Hogarth (1899–1903: Hogarth et al. 1899, 1905) and Coulson and Leonard (1977–1983: Coulson 1996, Leonard 1997, 2001) concentrated on the central areas of the town, and further research is clearly required to fully understand this very important archaeological site. The British Museum had carried out five previous seasons at the site (October 2012, April 2013, April–May 2014, April–May 2015 and May 2016), which encompassed geophysical prospection, the creation of a topographic survey map using GPS technology, surface pottery collection, excavation and geological work with a hand auger.

For the sixth season, over three weeks in October 2018, the British Museum sent field director Dr Ross Thomas, who was assisted by Dr Aurélia Masson-Berghoff (British Museum), Dr Jeffrey Spencer (formerly British Museum), Dr Astrid Lindenlauf (Bryn Mawr College), Dr Giorgos Bourogiannis (Hellenic Research Foundation and Institute of Historical Research IHR), Dr Louise Bertini (American Research Center in Egypt), and Ms Eleanor Maw (Cambridge University). This season was only possible because of the generously support by the Honor Frost Foundation. This work is part of the wider British Museum research project '[Naukratis: Greeks in Egypt](#)', which examines ancient Naukratis in the context of Greek-Egyptian relations (cf. [Villing et al. 2013–2015](#)).

We planned during the sixth season to concentrate on excavation in three areas: 1) the eastern area of the Hellenion, in the Greek sanctuary precinct in the northern part of the settlement; 2) the river front to the west of the site; and 3) the 'South Mound' in the south-western corner of sanctuary of Amun Ra ('Great Temenos'), which contains the south-western corner of a large casemate structure first uncovered by Petrie (1886) and rediscovered in parts during our 2016 season magnetometry survey within the adjacent fields. The main objectives of the sixth season concerning these three areas (from south to north) were to:

- Discover the eastern limit of the Hellenion and to reveal the construction of its eastern temenos wall, recorded by Hogarth as being 10.5m wide. Excavations in 2014 to 2016 in this northern area had provided rich evidence of Greek ritual activity during the earliest periods of the site.
- Discover the earliest river bank deposit in the western part of the settlement, next to the Hera sanctuary discovered by Petrie (1886). It was hoped this would reveal data on the founding date of Naukratis, and further information on the trading relationship between Naukratis and the Mediterranean. The investigation of harbour installations and archaeological and zooarchaeological finds from this part of the riverfront are important also for studying the maritime activities that took place in the merchant harbour of ancient Naukratis (such as working on ships), as well as providing data on the material culture and every day and ritual practices of the people of Naukratis.
- Excavate in the area of the 'South Mound' to find further evidence of the internal and external edges of the Great Temenos wall (as found in 2016), and to locate and understand the construction methods and date of the casemate structure discovered by Petrie (1886).
- Instruct MSA inspectors (Amer Saad Kamel, Ashraf Saleh Eldin Mohamed, Alaa Khairy ElEmary, Eman Ali ElShishiny and Shaban Reda El Said) in the use of the survey equipment, excavation supervising, recording and finds processing.

All trenches, structures, features, auger holes and spot finds were located on the local grid established in previous seasons (using two RTK GPS units), using a total station, provided by Penny Wilson (Durham University). This ensures that all survey data are fully geo-referenced and facilitates the incorporation of other survey methodologies into a real-world co-ordinate system. This local grid had been Archival research by the [British Museum's Naukratis project](#) was

integrated into the ArcGIS maps used onsite, allowing our selection of trench areas to be informed by the integrated stratigraphic and plan data (when recorded) of the excavations by Petrie, Gardner, Hogarth, Leonard and Coulson. In this way we were able to predict the location of structures and specific phases of occupation on the site. This season also revealed structures previously recorded by both Petrie and Hogarth, enabling us to improve the accuracy of our locating of the old excavation maps of Petrie and Hogarth and to precisely align our levels with theirs.



Figure 1. Google earth image of Kom Gei'f with all magnetometry results from 2012–2016 seasons. The location of 2018 trenches marked in red, with Trenches 16, 17 and 19 to the north, Trench 18 to the west and Trench S8 to the south.

1. Excavations in the North

Excavations in 2018 focused on a small area in the north of the dried-up lake (Figures 1–3). The objective was to complement the excavations, undertaken in 2014–16, of parts of the western side of the Hellenion and adjacent Dioskouroi sanctuaries (Trenches 1, 2, 3, 4, 5, 6, 7, 9, 10, 11, 12 and Trench 15). Three new Trenches (16, 17 and 19) were opened, running across the expected location of the eastern temenos (boundary) wall of the Hellenion; in Trench 17 excavation proceeded down to sterile soil (basal mud) at 2m below the surface.

Our primary objectives in this area were to understand the construction technique used to build the temenos wall (not well preserved in the western part of the Hellenion as uncovered in 2014–16), measure its width and find material concerning its date. It became clear that in the area we excavated there was no gate and that the wall was extant to a higher level than that encountered to the west. The eastern Trench 17 (6m x 2m) revealed a full stratigraphy for the construction sequence. The wall was built on a casemate foundation, possibly comprising a broad footing stepped out from the wall, which was clear of finds except for a single complete mid/late 4th century BC lamp (Figure 7). Above this was a late Ptolemaic (late 2nd to early 1st century BC) surface abutting against the temenos wall. Above this level a spoil heap with abundant pottery from all periods (probably from Hogarth's 1903 excavations) was encountered. Because the western limit of the temenos wall was not encountered in Trench 16 (6m x 1.5m), Trench 19 was excavated to the west (2m x 1m), which revealed the western limit of the wall. The wall was 10.9m wide, slightly larger than that described by Hogarth (who in 1905 stated it was 10.5m wide). A small number of finds were found within stratified deposits (comprising broken pottery from outside the Hellenion). From disturbed spoil heaps in the upper levels of the trenches a number of Greek (Attic and locally made) lamp and Egyptian figurine fragments were found that may refer to ritual practices within the Hellenion and adjacent houses. This sequence of deposits and structures rested directly on the virgin 'basal mud' sediments about 2 meters below the surface.



Figure 2. Trench 17. View looking north showing Hellenion temenos (eastern) wall to the left and mudbrick casemate foundation walls ahead and to the right.



Figure 3. Trench 19. View looking east showing western edge of the eastern Hellenion temenos mudbrick walls.

2. Excavations in the North-West

In the (north-) western part of the site, at the western edge of the (mostly) dried-up ‘lake’ area, Trench 18 (5m x 1m) was opened and excavated down to virgin soil. The aim was to discover the earliest phases of the river bank of Naukratis and thus to complement the work of previous seasons (2015–16: Trenches 8, 13 and 14), which had uncovered stretches of the late 6th through to 3rd century BC river bank, yielding abundant finds. By extending further to the east than the earlier trenches, Trench 18 was able to trace the stratigraphic sequence down to the end of the 7th century BC, when human activity is first apparent on the virgin soil (‘basal mud’). A sequence of muddy river banks was uncovered, covering a period of over 100 years through to c. 500BC. The original bank consisted of solid, steeply sloping basal mud (dense clay-silt), which was consolidated, perhaps intentionally, in the early 6th century BC with plaster on the outside. The bank slowly moved westwards over the next 100 years. Occasional organic deposits of flattened reeds and seeds suggest the environment was periodically overgrown. A deposit dating to c. 550BC revealed abundant Cypriot transport amphorae (accounting for 80% of the assemblage), suggesting trade with Cyprus was important throughout this period. Unlike in the later Persian period levels revealed in previous seasons, Egyptian and Phoenician material was sparse, although a single graffito may be in Phoenician characters (Figure 7). Trade amphorae from Cyprus, Chios, Klazomenae, Miletos, South Ionia, Lesbos and Corinth were found, although Cypriot (and to a lesser degree Chian and Klazomenian) amphorae dominated. Otherwise abundant fine-wares from the East Greek world, notably Ionia (Samos and Chios), were found, as well as locally-made Greek-style vessels in Egyptian clay. Unlike with the (later) Persian period levels in the area, Egyptian pottery and domestic pottery (cooking and storage vessels) were exceptionally rare. Also preliminary impressions based upon the work by Louise Bertini suggest that the character of the faunal assemblage was different to the our Persian period finds, with sheep/goat dominant in Trench 18, compared to a dominant pig assemblage in Trenches 8, 13 and 14.



Figure 4. Trench 18. View looking east towards the 6th century BC bank, littered with Cypriot basket handled amphorae sherds

3. Excavations in the South

Our previous archaeological investigations in the area of the ‘South Mound’ (the south-western corner of the ‘Great Temenos’ of Amun Ra, Figures 1, 5, 6) in 2013 (Trenches S1, S2 and S3) and 2016 (Trenches S4, S5, S6, S7), complemented by magnetometry undertaken in 2016, had revealed the nature of the surviving archaeology in this area and enabled us to pinpoint the location of the work carried out here by our predecessors Petrie, Hogarth and Coulson/Leonard. In 2018, excavations in a new Trench, S8 (13m x 9m), and two areas of cleaning were supervised in this area by Jeffrey Spencer who was assisted by Amer Saad Kamel. Cleaning revealed further areas of the 17m wide Temenos wall, previously found within Trenches S1–S7. Trench S8 revealed the south-western corner of the casemate structure first discovered by Petrie (1886), but thought to have been lost to agriculture already by the time Hogarth began working at the site in 1899. The work in Trench 18, however, uncovered clear remains of the structure, notably 7m wide external walls; the south western room of the building was excavated to 1.5m depth below the level of the extant wall. The construction technique is consistent with other Saite buildings in the Delta, particularly those of Psamtik I, under whom Naukratis is thought to have been founded. As with the Temenos wall to the south, the casemate structure was constructed from large alternating mud and sand bricks, 42x21x12cm (although larger than the 36x17x12cm bricks found in the Temenos wall), with a row of wooden beams added through the wall as a supporting feature, consistent with other casemate structures of Saite date (such as Tell Dafana and Tell el-Balamun, see Leclère and Spencer 2014, 14–15; Spencer 2009). Excavations within the rooms revealed Ptolemaic and Late Period phases, represented by few pottery sherds. The earliest material can be dated to the end of the 7th century BC or the early 6th century BC, although the bottom of the filled-in casemate room was not reached.

Despite extensive modern dumping in the area, it is clear that just 0.15 to 0.20m below the modern rubbish ancient structures can be found within the whole area. The now securely ascertained location of the temenos enclosure makes it clear that this area was once part of the sanctuary of Amun-Ra, containing, besides the main temple, a complex of magazines and priest’s houses.



Figure 5. Trench S8 marked in red exposed the south-western corner of the casemate building in the 'south mound', rediscovered during magnetometry survey undertaken in 2016. Flinders Petrie's original plan (in black) overlaid on a Google earth image of the area.



Figure 6. Trench S8, view looking south towards south-western room of the casemate building within the 'south mound'. Note mudbrick wall reinforced with wooden trunks following the Saite Egyptian construction style of the late 7th and early 6th centuries BC.

4. Pottery and small finds

Pottery and small finds were recovered from all trenches, with by far the largest proportion coming from the small river front trench (18). All indicator sherds (rims, bases, handles) were identified and quantified. All body sherds were also quantified from stratified ancient deposits before being returned to the site. Thousands of sherds were identified and quantified on site (and left there), whilst c.300 significant pieces were retained for further study, photography and drawing by the finds team (Giorgos Bourogiannis assisted by the rest of the team).

In the north the recovered material comes from three very different types of context. Firstly, the pottery from the surface included material redeposited by the activity of the *sebakhin*, early excavations by Petrie and Hogarth, as well as more recent dumps. This included some 7th to 5th century BC material, but, like last season, consisted predominantly of 4th century BC to 7th century AD objects, with some modern material also. Within the sealed archaeological deposits under these disturbed layers, a Late Ptolemaic surface was uncovered outside of the Hellenion, as was a late 4th century BC lamp. Sparse Late Period sherds were found within the construction material of the wall. No domestic or sanctuary dumps were found in situ, although within the later dumps, presumably left by Hogarth in 1903 (when he excavated this area), including some lamp fragments from Athens and local copies of Greek forms which may have come from the sanctuaries within the Hellenion.

In the western area (on the river front) a disturbed deposit of material left by the activity of the *sebakhin*, the excavations by Petrie and Hogarth, as well as more recent dumps was encountered near the surface. Under this a sequence of material dating from the late 7th century through to 500BC was revealed. The assemblage was very different to the (later) Persian period deposits encountered in previous seasons (as both Attic and Phoenician/ Levantine material is almost entirely absent, and Egyptian material is rare, when these were abundant in the later Persian period). It instead comprised abundant Cypriot, Chian, Klazomenian, and South Ionian pottery, with smaller quantities of Lesbian, North Ionian and Corinthian finds. Both East Greek grey wares as well as South and North Ionian and other East Greek table wares were found, including some East Greek black figure with incised decoration. Two pieces had inscriptions (Figure 7). Local and imported cooking pots were rare, as the material comprised almost entirely amphorae or fine wares pottery (perhaps from the nearby Hera sanctuary).

The 'South Mound' produced a limited range of Ptolemaic cooking and tableware forms, all locally produced, as well as typical Saite coarseware storage vessels including many basins. Of the over 300 catalogued pieces kept for future study, the most significant finds (stamped amphorae handles, inscribed fragments, a coin and a complete lamp) were registered with the MSA. All finds kept for further study were washed, labelled, photographed, bagged with labels and boxed for storage.

Summary

The 2018 season has produced significant new data on the layout of ancient Naukratis, its local environment, as well as important stratigraphic, dating and topographic evidence for its earliest phases. Excavations in the early levels of the Greek sanctuary complex known as the Hellenion gave valuable insights into the construction technique of the temenos wall and its original thickness (10.9m). The construction looks remarkably like that of contemporaneous Egyptian buildings. Excavations on the riverfront revealed for the first time the earliest levels of the riverbank dating to the period when Naukratis was founded. It had no man-made installations, just a simple steep muddy bank, although it was possibly consolidated with plaster early in the 6th century BC. The material found provides us with a unique insight into previously underestimated trade contacts with Cyprus in the late 7th and 6th centuries BC as well as further emphasising the importance of East Greek fine-wares in the site's early pottery assemblage. The continued study of these finds are expected to provide further crucial information on the settlement's role as the main Egyptian port for Mediterranean trade at the point of its founding. Excavations in the temenos of Amun Ra revealed the still extant south-west corner the casemate structure originally discovered by Petrie, and further clarified the extent and layout of this important Egyptian sanctuary of Amun-Ra, which flourished from the Saite until the Roman period.

The help of the proficient MSA inspectors from Beheira Inspectorate in Damanhur (Amer Saad Kamel, Ashraf Saleh Eldin Mohamed, Alaa Khairy ElEmary, Eman Ali ElShishiny and Shaban Reda El Said), the guards at the site in Kom Ge'if, and the assistance of the local people around Naukratis, contributed greatly to the success of this season. The wealth of data gathered now requires careful processing over the following months before results can be published. Reports on the fieldwork are updated regularly on the freely accessible Project webpage,

http://www.britishmuseum.org/research/research_projects/all_current_projects/naukratis_the_greeks_in_egypt.aspx).

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Figure 7. Pottery finds from the 2018 season, comprising a 6th century BC East Greek vessel base with a graffito (trader's or owner's mark) (N18,18,23,7); a 6th century BC East Greek cup base with inscribed Phoenician (?) characters (N18,18,18,1b); a complete locally-made lamp dating c. 330BC (N18,17,11,1); a Corinthian vessel sherd with black figure decoration depicting a griffin and a rosette dating to of the early part of the 6th century BC (N18,18,25,4); a fragment from an Attic black-figure lekanis by the Polos Painter depicting a siren or sphinx and a lotus-palmette cross of c. 575–560 BC (N18,18,8,9).

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