Naukratis: Greeks in Egypt

Alexandra Villing, Marianne Bergeron, Giorgos Bourogiannis, Alan Johnston, François Leclère, Aurélia Masson and Ross Thomas

With Daniel von Recklinghausen, Jeffrey Spencer, Valerie Smallwood, Virginia Webb and Susan Woodford

http://www.britishmuseum.org/naukratis

The site of Naukratis: topography, buildings and landscape

Alexandra Villing with Ross Thomas
A note on this chapter

The reassessment of the early excavations at Naukratis has changed the way we view ancient Naukratis and its history; together with results of new fieldwork conducted by the British Museum’s Naukratis Project, it sheds new light on the town’s cityscape, harbours and its setting in the landscape.

Three fieldwork seasons have been completed since 2012 and are now being assessed. The present chapter on the topography of Naukratis takes into account these new results but does not cover them in detail, which is reserved for more specialist publications (see below). Its aim is to provide the topographical background against which the site’s material culture and historical development needs to be viewed, and to refer the reader to recent publications (many of them online) in which further information and in-depth discussion can be found.

1. Changing perspectives: fieldwork old and new

As is discussed in more detail in the chapter on the Discovery and excavation of Naukratis, the remains of ancient Naukratis were rediscovered by the pioneering Egyptologist W.M. Flinders Petrie in 1884 and excavated in four fieldwork seasons over the following two decades. The first two seasons, in 1884/5 and 1885/6, were conducted by Flinders Petrie and his collaborators F.Ll. Griffith and E.A. Gardner on behalf of the Egypt Exploration Fund, and the final two, in 1899 and 1903, by David Hogarth under the auspices of the British School at Athens (Petrie 1886a; Gardner 1888; Hogarth et al. 1903, 1905).

Their discoveries in many aspects confirmed, but also amended and added to what had already been known of Naukratis from ancient authors, notably Herodotus, highlighting in particular the existence of several Greek temples but also of a large Egyptian sanctuary at the site. The site was revisited between 1977 and 1983 by an American expedition under William D. Coulson and Albert Leonard Jr, who conducted a field survey and limited excavations (Coulson 1996; Leonard 1997, 2001). Over the past ten years, a number of sondages and rescue excavations were conducted at the site by archaeologists from the Egyptian Ministry of State for Antiquities (MSA), notably Sabri Ali Choukri and Mohamed Aly Hakim. Outside fieldwork, locals, visiting scholars or laymen recovered objects from the site, ranging from a handful of sherds picked up during a walk over the Tell to major finds.1

Since 2012, the British Museum’s Naukratis Project has been conducting its own new fieldwork at the site in close collaboration with the Damanhur

---

1 Including a version of the text of the Rosetta Stone, discovered before Petrie began work at the site in 1884 (Egyptian Museum, Cairo, JE22264); the ‘Naukratis stela’ (Egyptian Museum, Cairo, JE34002), found in between Hogarth’s two seasons; the monumental statue of Horemheb, priest of Min (Egyptian Museum, Cairo, CG1230); and various other finds (Leclère 2008, 119, 132–4; Bernand 1970, 625, 635–6; Scholl 1997; Hawass 1993)
office of the Egyptian Ministry of State for Antiquities. Combining a
topographical survey using RTK-GPS, geophysical prospection
(magnetometry) of large parts of the site, a geological auger drill survey,
electronic resistance tomography (ERT) and archaeological excavations in
several parts of the site, this recent fieldwork offers a new perspective on
the site’s extent and layout and its wider setting in the landscape, notably
in relation to the river. The work has succeeded in locating the ancient
Canopic branch of the Nile along the western side of the site, tracing the
site’s extent well beyond the area of the early excavations and identifying
numerous new archaeological structures both in the areas of the earlier
excavations and beyond. As is clear now, the ancient site extended well
beyond the areas excavated 130 years ago and many structures still lie
untouched in layers below excavated areas or under surrounding fields.

Final publications of the results are still in preparation, but several studies
and preliminary reports are already available: a report on the first season
that sets out the fieldwork’s aims and methods as well as reassesses
longstanding questions concerning the site’s topography (Thomas and
Villing 2013); an analysis of the site and its setting especially during its
later history (Thomas 2014b); short overviews of each of the three seasons
(2012, 2013 and 2014); and two reports on the season of 2014 overall and
the geophysical and ERT surveys (Strutt and Thomas 2014) conducted in
its course. A number of further articles are in press (Thomas forthcoming a;
Thomas and Villing forthcoming; Pennington and Thomas forthcoming).

Included in the present chapter are two maps of the site that summarize
the current state of research. The first (Fig. 1) is a town plan that combines
the different maps drawn and published by Petrie, Gardner and Hogarth,
aligning the various structures which they excavated in a ‘best possible fit’,
as far as the available data allows (the process is set out in detail in
Thomas and Villing 2013). The largest known extent of the town area,
based on our own magnetometry and geological work, is also indicated.

The second map (Fig. 2) sets the excavated structures into the physical
landscape as it presents itself today. As the satellite image shows, much of
the central part of the site excavated by Petrie and Hogarth is now a
depression that was long filled with water but has recently been drained.
The map includes the results of the magnetometry survey so far and
indicates the location of the Canopic Nile branch, based on magnetometry,
geological auger and ERT data. It must be noted that the width of the river
branch as indicated does not distinguish between different phases of the
Nile’s migration but represents the total maximum extent over the past
3,000 years (for further details, see Pennington and Thomas forthcoming).

2. Naukratis: topography of an ancient
port city

As the recent fieldwork shows, the area uncovered by the 19th and early
20th century fieldwork is just one part of an originally far larger picture.
Naukratis must have been a substantial settlement in antiquity, covering
over 60 hectares at its peak and providing space for over 13,000 people
Villing with Thomas, Topography

(Figs 1 and 2; Thomas and Villing forthcoming). Its organic, irregular layout with densely packed houses alternating with areas for industrial and public use and large sanctuary precincts would have resembled other Egyptian Delta sites (Thomas forthcoming a). To the west, the Canopic Nile branch skirted the city. On the riverbank, in the south, lay the sacred quay for the Egyptian temple and the town’s main harbour with its facilities and magazines must have been further north. This is how the site would have been reached by Greeks and other Mediterranean visitors: the river at this point was broad and deep enough to accommodate seagoing vessels from the Mediterranean all year round, enabling Naukratis to operate as an international port (Pennington and Thomas forthcoming).

2.1 The Greek sanctuaries

Earlier fieldwork had been concentrated on what we can now recognize as the central and western area of the site, in particular the Greek sanctuaries that were located here (Fig. 3). All of them once would have contained temples, altars and numerous offerings, but only very few remains of these were recovered. Large parts of the sanctuary precincts had suffered much destruction prior to excavation from antiquity to modern times, making it difficult to understand their layout and historical development, especially their later history (for more information see the summaries in Möller 2000a, 94–108 and Bowden 1996, with further literature).

In the south amid streets and houses was located the relatively small but early and important sanctuary of Aphrodite, not mentioned by Herodotus, but referred to by Athenaios (15.675–676c, quoting Polycharmos; Petrie 1886a, 16; Gardner 1888, 33–59). It contained a small temple (Gardner distinguished three phases) and a stepped altar, both built from stuccoed mudbrick. Extremely rich layers of Archaic pottery, Ionian sanctuary lamps, the largest assemblage of Cypriot votive figurines from the site and many other finds were excavated here. The numerous votive inscriptions on pottery (with nearly 300 inscriptions Aphrodite is the second most appealed to deity at Naukratis; see the chapter on Ceramic inscriptions), many of them special commissions, indicate that the sanctuary attracted worshippers from different parts of the Greek world particularly in the earliest days of the site.

The sanctuary of Hera lay in the central part of the site (Petrie 1886a, 16–17; Gardner 1888, 60–1). Its close link with its ‘mother’ sanctuary, the Heraion on Samos, is clear from finds of special sanctuary pottery with the goddess’s name painted on, which was produced on Samos specifically for the cult of Hera and may have reached Naukratis as part of a filiation ritual for the sanctuary (Schlotzhauer 2006a, 311–13; Schlotzhauer 2012, 154–7). The long north–south oriented structure excavated here by Gardner is commonly taken to be the sanctuary’s temple (Möller 2000a, 101), but not least given its orientation (highly unusual for a Greek temple) may in fact be a subsidiary building, by analogy with the Samian Heraion, where the main temple (oriented east–west) is flanked by subsidiary buildings oriented north-south. A ‘piece of egg moulding in limestone’ noted by Gardner (Gardner 1888, 61) may have belonged to the temple or to another structure in the sanctuary. Extant finds do not allow us to date Hera’s cult at Naukratis as early as that of Aphrodite or Apollo, but as only

Figure 3 Plan of the excavated remains of the central and northern part of Naukratis, based on the plans of Petrie, Gardner and Hogarth: the Greek sanctuaries. Map © Naukratis Project, British Museum.
few can be securely associated with the sanctuary we lack sufficient data for a well-founded assessment of this question. A dedicatory inscription to Aphrodite by a certain Rhoikos on a multiple eye bowl from Naukratis (British Museum, 1888,0601.392) has given rise to speculation about the involvement of the Samian Heraion’s architect Rhoikos in the construction of the Naukratite Hera temple (Möller 2000a, 97). The find of a (Late Archaic to Early Classical) stele to Zeus Apotropaios might suggest the existence of a subsidiary cult in the sanctuary of Hera (British Museum, 2012,5021.3; see Gardner 1888, 13, 61).

The sanctuary of Apollo adjoined the Heraion to the north, occupying this area since c.620–600BC (Petrie 1886a, 11–16). Architectural finds suggest that two successive Ionic temples of moderate size were built here, both probably built from stuccoed mudbrick with columns and details added in stone: an early temple with limestone features erected around 560–550 BC, and a later one with details in (Ephesian) marble, probably dating to 530–520/10 BC (the evidence is discussed in detail in Koenigs 2007, 313–44). Rich traces of original paint in blue and red are preserved on several of the architectural fragments. Other finds from the sanctuary area show that Apollo’s cult went back to the late 7th century BC; they include numerous South Ionian cups that confirm the cult’s close association with Miletos (Schlotzhauer 2012, 48), the city that according to Herodotus had founded the sanctuary. The 450 or more votive inscriptions to Apollo — the largest number of extant dedications to a single god from Naukratis — include ones to Apollo Milesios, as well as, once, Didy[m]enus (see the chapter on Ceramic inscriptions, § 9.2 and 10). As in the sanctuary of Aphrodite, among the early votive offerings there are a good number of Cypriot figurines; also noteworthy is an exceptional group of dedicated pottery grinding bowls (Villing 2006) and Late Archaic marble perirrhanteria (Petrie 1886a, 11–12, 14). A layer of calcite drill cores suggests the existence of an Archaic stone alabastron workshop nearby.

Immediately to the north of the Apollo sanctuary was the sanctuary of the Dioskouroi, important from early on in the site’s history, but not mentioned by Herodotus (Petrie 1886a, 16; Gardner 1888, 30–1). In the very northwest corner of the enclosure identified by Petrie as the temenos, Gardner excavated what appears to have been the sanctuary’s temple built from stuccoed mudbrick, a small chamber with a pronaos with two rectangular pillars in antis and two further pillars adjoining the antae. Although no architectural elements in stone were found, Gardner noted elaborate decoration in blue, red and possibly yellow paint on the fine white stucco, including a meander pattern with stars framed by squares. Pottery finds, including pieces with votive dedications, suggest that the cult dates back to the early days of Naukratis.

The large conglomerate, multi-chambered structure to the east of the sanctuary of the Dioskouroi, seemingly surrounded by a massive mudbrick wall, is probably to be identified as the Hellenion, the ‘largest, best known

---

2 Significant quantities of stone and terracotta votive figures were found in the town area adjacent to the sanctuaries of Hera and Apollo, possibly re-deposited there in the course of later disturbances.

3 For the date of the fragments of the first temple, see Dirschedl 2013, 172; Koenigs (2007, 327 and 346–1) is more cautious in his dating and suggests a wider span. See also the chapter on Material culture.
and most used' (Herodotus 2.178) sanctuary of Naukratis; it was excavated by Hogarth in 1899 and 1903 (Hogarth et al. 1898–9; Hogarth et al. 1905). Votive inscriptions attest the worship of several gods here, including Herakles, Aphrodite Pandemos, Zeus and apparently again Apollo and the Dioskouroi (unless these are displaced strays), but especially the 'gods of the Hellenes', an early expression of a common Hellenic identity by the diverse group of Greeks assembled here (Höckmann and Möller 2006; Demetriou 2012, 144–6; cf. Polinskaya 2010 for a more sceptical view). Herodotus highlights the Hellenion as being central for the administration of the port during his time, and the structure thus identified by Hogarth certainly seems to have flourished in the 5th century BC when many female terracotta protomes in particular were dedicated here. Perhaps it was here also that the Prytaneion of Naukratis and the cult of Apollo (Pythios) Komaioi were located (Höckmann and Möller 2006; cf. Herda 2008, 47).

Hogarth’s Hellenion (Fig. 4) remains enigmatic both in terms of its unusual architecture and as regards to its foundation, development and use. Recent fieldwork, however, has now begun to shed more light on the structure (see the preliminary report for 2014; Thomas and Villing forthcoming). Magnetometry in fields in the northern part of the site reveals a large rectangular compound flanked by a thick mudbrick wall and containing a row of rooms that follows precisely the alignment of the structures excavated by Hogarth in 1899 and 1903 (see above Fig. 2). If this is indeed the northern extension of the Hellenion, as seems likely, then this was not only larger than previously thought, but in parts is also still well preserved. Excavations conducted in 2014 around the southern part of the western section of the massive mudbrick wall identified by Hogarth as part of the Hellenion’s enclosure wall brought to light further information. To the west (i.e. in the direction of the sanctuary of the Dioskouroi) the wall was found to be abutted by a sequence of archaeological deposits containing material of 6th century BC date, with the lowest level containing pottery dating back to perhaps as early as 600 BC or just before, supporting Hogarth’s assessment of the early construction of the wall (Thomas and Villing forthcoming). More research is needed to investigate further and interpret the structures in this part of Naukratis.

2.2 The Egyptian sanctuary

The dominant feature of the whole town was undoubtedly the large Egyptian temple complex in the southern part of the site (Fig. 5), today
called the ‘Great Temenos’, dedicated to Amun-Ra Baded (Baded being another Egyptian name for Naukratis) and associated Egyptian deities, which probably fulfilled a range of economic, administrative and protective functions for the town and port.

Petrie (1886a, 23–34, pl. 42) mapped the Great Temenos as a precinct measuring 296m by 259m, covering nearly 8 hectares and surrounded by a massive mudbrick enclosure wall outside. The monumental limestone-faced gate building (pylon) set into its western wall measures 107m by 24m and is one of the largest such gates known in Egypt; foundation deposits excavated by Petrie indicate that it was built during the reign of Ptolemy II Philopator. The gate would have been approached from a sacred quay on the Nile via a processional road, probably once flanked by sculptures of rams and sphinxes (Petrie 1886a, vi; Gardner 1888, 13–14). Inside the temenos, Petrie’s excavations uncovered a large 59m by 64m storage building on a casemate foundation (Fig. 6 Petrie 1886a, pl. 43), but no traces of the main temple to Amun-Ra Baded itself, which must have stood in the gateway’s axis. However, several fragments of decorated reliefs from a temple built under Ptolemy I were discovered outside the excavations; they are discussed in detail in the chapter on the Decoration of the temple of Amun. There must also have been subsidiary temples for associated deities such as Amun-Ra’s consort Mut/Sekhmet and their son Khonsu/Tot.

During his fieldwork at Naukratis Hogarth attempted in vain to trace any of the Great Temenos’s structures mapped by Petrie. Indeed, until recently, much about the ‘Great Temenos’, its location, alignment, date and even its very existence, remained a source of debate. The reasons for this lie in the incomplete and potentially confusing information published by Petrie and in the fact that Petrie’s plan of the enclosure wall, partly based on local oral history, probably conflates different phases of what must have been a far more complex archaeological picture, thus making it difficult to reconcile Petrie’s plan with the evidence on the ground (Spencer 2011; Thomas and Villing 2013; Thomas and Villing forthcoming). A review of the archaeological and epigraphic evidence, however, clearly shows that there can be no doubt that this was indeed an Egyptian sanctuary; moreover, a predecessor to the Ptolemaic buildings must have existed by 577 BC at the latest, the date the cult of Amun-Ra Baded is first mentioned in an inscription (Thomas and Villing 2013; Thomas forthcoming a; Leclère 2008, 118, 120, 128–38; Yoyotte 1982–3; cf. Muhs 1994).

The recent geophysical work now confirms that substantial traces of the Great Temenos still remain in situ (Fig. 2). Parts of walls possibly belonging to an earlier, smaller phase of the enclosure as well as several buildings could be identified, including likely traces of the main temple of Amun-Ra in the centre of the enclosure and one or two small buildings on casemate foundations in the south. Substantial remains of mudbrick walling from the southern part of the enclosure wall and related buildings are also still extant in the ‘south mound’ or could be traced in excavations beside the mound. It is clear that the ‘Great Temenos’ was a busy,
complex and multi-period structure that experienced some considerable changes in its long history from the Late Period onwards, being heavily modified under Ptolemy I and II and subsequently encroached on by Ptolemaic and Roman houses (Thomas and Villing 2013; Thomas 2014b; Thomas and Villing forthcoming).

2.3. The town: houses, warehouses and workshops

Beyond the sanctuary gates, the town of Naukratis was densely occupied with houses, storage buildings and workshops. Combining information from Petrie’s maps and recent magnetometry, we see that the townscape was dominated by traditional Egyptian tall tower houses (Fig. 7) and irregular terraced buildings that provided space for a significant population of over 13,000 inhabitants (Thomas forthcoming a; Thomas and Villing forthcoming). Magazines and workshops were interspersed with dwellings, with a variety of workshops already excavated or deduced by Petrie and other excavators: a ‘faience workshop’ adjoining the sanctuary of Aphrodite, where hundreds of moulds attest a flourishing production of small faience scarabs in the early 6th century BC; a 6th century BC (and probably later) workshop for calcite alabastra and other stone vessels probably not far from the Apollo sanctuary; workshops for the production of pottery and (Ptolemaic) terracotta figures especially at the north-eastern end of town (Thomas forthcoming b); and copper, iron and ‘silver’ smithies in its east part (Petrie 1886a, pl. 41).

Amongst the houses and structures excavated by Petrie and others in the ‘town’ area are some buildings that present notable features suggesting uses beyond those as average dwellings: in one house not far from the Great Temenos, a large bronze cache was found (Petrie 1886a, 41–2; Masson forthcoming a); another house yielded an Aramaic stamp seal alongside a Bronze Age Syrian cylinder seal (Petrie 1886a, 41); while some areas or wells were surprisingly rich in finds of a character otherwise more commonly associated with sanctuaries.

2.4. The cemetery

Parts of a cemetery were excavated by Gardner (1888, 21–9) to the north of the town; it is marked on the town plan shown here (Fig. 1) only approximately, as its location was not mapped by the excavators and can only be reconstructed imprecisely from the excavators’ vague notes. The tombs span the Archaic to Roman periods, with few being earlier in date than the 5th and especially 4th century BC, and many dating to ca. 330–200 BC. Receptacles for the deceased and tomb offerings appear to be largely Greek or Ptolemaic in character; wooden as well as terracotta coffins, rarely of anthropoid shape, as well as pottery amphorae are all attested; terracotta attachments for wooden coffins of c. 330–250 BC are the most frequently preserved finds. Egyptian-style burials seem to be rare but there is evidence for at least one wooden Egyptian-style anthropomorphoid sarcophagus. Tomb offerings range from pottery vessels to terracotta figurines, alabastra, bronze strigils, bells, amulets, a medical probe and a fisherman’s netting needle. One tomb monument in particular, the ‘false door’ stele of Apollo (Figure 8) found outside the excavations, combines Greek, Anatolian and Egyptian elements and thus

![Figure 7 Limestone model of Egyptian tower house from Naukratis, showing two windows and courses of brick, 7th–5th century BC. British Museum, EA68816.](image)

![Figure 8 Grave stele of Apollo, late 6th century BC. Cairo, Egyptian Museum JE27753. Photograph © Egyptian Museum, Cairo.](image)
attests a mixing of Greek and Egyptian elements similar to what can be observed on Carian grave stelae in the necropoleis of Memphis (cf. Höckmann 2001b).

### 2.5. The river, quays and harbours

The location of the Nile in relation to Naukratis had long been controversially debated on the basis of written sources (Petrie 1886a, 2–4, 10; Bernand 1970, 618–23; Möller 2000a, 115–16). More recently, geological auger cores drilled as part of the American fieldwork conducted by Coulson and Leonard had been interpreted to suggest that the ancient channel flowed directly through the middle of the settlement during its heyday (Villas 1996), a hypothesis that is, to say the least, difficult to reconcile with any of the archaeological evidence.

As part of the British Museum’s fieldwork at Naukratis, the question was addressed once more through geological sedimentary analysis of new auger cores, the re-interpretation of old cores, ERT sections and magnetometry (Pennington and Thomas forthcoming; see also the preliminary report for the season of 2014). Results indicate that Villas’s and Coulson’s hypothesis was based on a misinterpretation of the evidence. The Canopic branch of the Nile river can now be securely situated between the western flank of the site and the modern Abu-Diab canal (Fig. 2) where a large sand body is located that is consistent with a river bed that is wide and deep enough to have been navigable all year round for sea-going ships. Far from static, the Canopic Nile arm at Naukratis migrated east–west and eventually silted up, with the present-day Abu-Diab canal its final remnant.

With the town stretched out along the river’s eastern edge, its long riverfront is likely to have functioned as the town’s main harbour. Magnetometry results on the river front suggests the presence of man-made terraced retaining walls as well as long magazine-like structures aligned with the river course (Thomas and Villing 2013), similar to structures already excavated and planned by Petrie (1886a, pl. 41, labelled ‘Ptolemaic houses’). The central and northern parts of the riverfront probably functioned as a merchant harbour. Further to the south lay the sacred harbour, which was connected with the temple of Amun-Ra by a processional way. Rescue excavation undertaken here by Sabri Ali Choukri for the MSA revealed a substantial limestone structure that probably functioned as a sacred quay during part of the site’s history. This quay probably continued to the south, as dense deposits of limestone rubble were collected in auger cores directly to the south of this discovery (Pennington and Thomas forthcoming).

### 2.6. Unlocated structures

Among the yet unlocated features of the town of Naukratis are the Aiginetan temple of Zeus mentioned by Herodotus, the sanctuary of Athena suggested by a reference in a 2nd-century BC inscription (Bernand 1970, 751 no. 15) and the 4th-century BC palaistra, dedicated to Apollo (Bernand 1970, 755–6 no. 20). We might also expect structures associated with the cults of Athena, Demeter, Hermes and Dionysos and the festivals
of Apollo Komaios and Hestia Prytanitis that are mostly attested from Hellenistic times.

Plans


Plan 3: Gardner’s plan of the central-northern area of the excavated site, 1885–6. After E.A. Gardner, Naukratis. Part II (Sixth Memoir of the Egypt Exploration Fund), London 1888, pl. IV.
Plan 4: Gardner’s plan of the sanctuary of Aphrodite, 1885-6. After E.A. Gardner, Naukratis. Part II (Sixth Memoir of the Egypt Exploration Fund), London 1888, pl. I.

Plan 5: Gardner’s plan of the different phases of the temple and altar of Aphrodite, 1885-6. After E.A. Gardner, Naukratis. Part II (Sixth Memoir of the Egypt Exploration Fund), London 1888, pl. II.
Plan 6: Gardner's diagram of the sections through the sanctuary of Aphrodite, 1885-6. After E.A. Gardner, Naukratis. Part II (Sixth Memoir of the Egypt Exploration Fund), London 1888, pl. III.

Plan 7: Petrie’s diagram of the strata in the sanctuary of Apollo, 1884-5. After W.M.F. Petrie, Naukratis. Part I, 1884–5 (Third Memoir of the Egypt Exploration Fund), London 1886, pl. XLIV.
Plan 8: Petrie’s plan of the Great Temenos, the Egyptian sanctuary of Amun Ra, 1884-5. After W.M.F. Petrie, Naukratis. Part I, 1884–5 (Third Memoir of the Egypt Exploration Fund), London 1886, pl. XLII.

Plan 10: Hogarth's plan of the site of Naukratis, 1899. After D.G. Hogarth, C.C. Edgar and C. Gutch, 'Excavations at Naukratis', The Annual of the British School at Athens, 5, 1898–9, pl. II.