

Avaris, its harbours and the Perunefer problem

Ancient Avaris is well known as the capital city of the Hyksos and the location of the later city of Piramesse, but was it also the site of the Eighteenth Dynasty harbour of Perunefer?

Irene Forstner-Müller adds new evidence from the latest Austrian excavations.

The ancient city of Avaris (modern Tell el-Daba and its surrounding area) was, like all important historic towns in Egypt, situated on a major branch of the Nile – in this case the Pelusiac branch. This was the easternmost branch in antiquity, forming the eastern limit of the fertile Delta during the second millennium BC. By this time Avaris was not only the capital of the Hyksos rulers of Egypt but also one of the largest and most important cities in Egypt and the ancient Near East. It covered an area of c.260 hectares and had an estimated population of between 29,000 and 34,500. Its strategic position on the route out of Egypt to the east served as a link and a gateway between the Nile valley proper, the Mediterranean and the neighbouring countries of the Near East.

From the late Twelfth Dynasty onwards Avaris had been an important harbour town for both Nile and seagoing shipping and thus for international trade, and in the Ramesside Period the harbour of the capital Piramesse was at Avaris, which then formed the southern part of the town. The discovery of an Eighteenth Dynasty palace



Tomasz Herbich carrying out the vertical electrical sounding survey

decorated with Minoan frescoes led to the hypothesis that Avaris might also be identified as the port of Perunefer, attested in texts and representations. For this discussion see: Bietak, *EA* 26, pp.13-17; Jeffreys, *EA* 28, pp.36-37; and Bietak, *EA* 34, pp.15-17.

Recent research at Tell el-Daba by the Cairo Branch of the Austrian Archaeological Institute has focused on the possible locations of ancient harbours and mooring places. This is based on more than 800 auger drillings, an extensive geomagnetic survey (Forstner-Müller, *EA* 34, pp.10-13) and, most recently, a VES (vertical electrical sounding) survey (Herbich, *EA* 41, p.12) undertaken to gain a better knowledge of the fluvial system and Nile branches.

In 2013 a large research project was launched at the site of the supposed main harbour of Avaris, its location suggested by OSL (optically stimulated luminescence) and archaeological evidence obtained from boreholes. It lies in an area which is still visible in the modern landscape as a large, seasonally-inundated depression north-west of the excavation house and close to a modern Islamic cemetery, and



Excavations in progress in area R-IV

a large basin (natural or artificial) is visible here in the geomagnetic image. It was situated in the middle of the ancient town and was connected to the Pelusiatic Nile branch by one, or possibly two, feeder canals.

Archaeological excavations in this assumed main harbour area began in spring 2013. Almost in the middle of the central harbour basin, a 2m-square trench (area A-VI) was excavated down to 4.5m below ground level until the underlying sandy *gezira* was reached, in order to investigate the sediments within the basin. A massive layer, 2m thick, of very rich dark clay with organic matter and archaeological material in the upper part indicates a quiet environment typical of harbour deposits.

The main focus of archaeological research, however, was on the edge of the basin, where the aim was to try to investigate how the harbour was organised, in which periods it was in use and if any harbour installations might

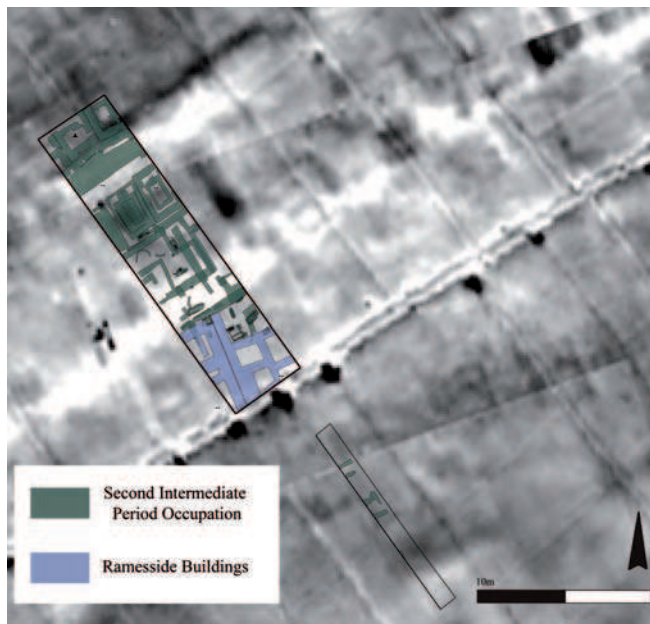
be present. Across the northern edge of the basin a trench of 10m x 4m was dug (area R-IV) which reached from the settlement structures to the supposed northern edge of the basin, as visible on the geomagnetic image. However, it soon became evident that the clear line seen there was not the harbour edge.

Both natural causes (soil accretion) and human activity gradually extended the settled area of the town into the harbour basin. As a result the area of the basin became smaller over time. This same phenomenon can be observed in modern Egypt, especially in the river channels of the Nile Delta. To reach the actual edge of the harbour basin, at least during its last phase of use, it was necessary to enlarge the trench to the south by 30m.

Two main phases could be discerned as a result of the first season of work. During Phase 1, from the Thirteenth Dynasty until the end of the Second Intermediate Period,



Reconstruction of the urban landscape of Avaris with the excavation areas R-IV and A-VI marked in red



Plan of the excavation in the harbour, area R-IV, overlaid on the geophysical scan, showing the two phases

the excavated area was used intensively as both a domestic and funerary area, some structures having attached tombs and associated burials. At this time a massive wall – at least 500m long and c.2m wide – ran along the northern edge of the basin. This may be a quay wall and it is visible in the geomagnetic image. It is built from yellow sandy



The large wall, made of sandy bricks, dating from the Second Intermediate Period

bricks and persisted as a landmark until at least the end of the Second Intermediate Period.

Along this wall, to its south, ran a street with many layers of fine fill. South of the street two large mud-brick chamber tombs from the first half of the Fifteenth Dynasty were found. They consist of subterranean rectangular chambers made of dark grey mud-bricks, covered by single and double mud-brick vaults of the same material. The tombs were accessible from the street. The larger of the two fully excavated tombs was entered through a rectangular burial shaft, and the smaller through the enlarged grave pit in front of the entrance. Both entrances had been closed with mud-brick walls.

These tombs had been thoroughly plundered, and almost all the offerings had been removed, though skeletal remains were found scattered in the vicinity. Ramesside pottery fragments found in the robbers' pits would suggest that these tombs were looted (at least in part) during that period.

In Phase 2, after the end of the Fifteenth Dynasty, this town quarter was abandoned and while other parts of the town, such as Ezbet Helmy, were settled in the earlier New Kingdom there is no settlement activity of that date here. This area was resettled only when Avaris became the southern part of Piramesse and the location of its harbour. Massive buildings of dark mud-bricks were then erected here; the remains were excavated in 2013.

These archaeological results fit very well with the historical tradition of the development of the site. Avaris is well known as having been both an important trade centre in the late Middle Kingdom and the Second Intermediate Period, and the harbour of the city of Piramesse in the Ramesside Period. However, there is no archaeological evidence in the harbour area from the earlier New Kingdom, when Perunefer, the naval base of the Eighteenth Dynasty, appears in the written sources.



A tomb of the late Second Intermediate Period. L347, situation 4

These surprising results lead us to the continuing debate as to whether Perunefer was in Memphis or at Tell el-Daba in the Delta. A major reason put forward for identifying Tell el-Daba with Perunefer is that a harbour for large seagoing vessels needs access for shipping throughout the year. Since the seasonal flooding in Egypt allows navigation in Upper Egypt only during the months of the inundation, it has been proposed that a harbour which functioned all year round must have been located in the Delta rather than to the south at Memphis. But is this a valid argument? Is the concept of a permanently active harbour relevant here, or is it perhaps a modern concept imposed on ancient Egypt? Is it not more likely that major trade and military expeditions were undertaken only under ideal climate conditions, at times of the high flood, as is known in the nineteenth century AD before the regulation of the Nile (see Cooper, *EA* 41, p.26), and at times when the wind conditions in the Mediterranean were favourable to navigation?

If so, it is possible that Perunefer could have been situated south of the Nile Delta, and associated with Memphis, the Eighteenth Dynasty royal residence. This would seem to be a more logical choice for Perunefer, the naval base and starting point for the famous military campaigns of the earlier New Kingdom. It is hoped that future research on the harbour area at Tell el-Daba will be able to shed more light on this controversial subject.

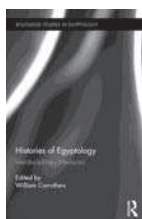


Massive buildings of the Ramesside Period

□ Irene Forstner-Müller is Director of the Cairo Branch of the Austrian Archaeological Institute and Director of the Institute's fieldwork at Tell el-Daba. The Harbour Project is in cooperation with Tomasz Herbich (Institute for Archaeology, University of Warsaw and Polish Academy of Sciences), Jean-Philippe Goiran (University of Lyon 2, UMR 5133 Archéorient and CNRS) and Laurent Schmitt (University of Strasbourg). The project is funded by the Austrian Archaeological Institute and the Austrian Science Fund (P-25804-G19). Illustrations © Austrian Archaeological Institute.

ROUTLEDGE

Now available...



Histories of Egyptology

Interdisciplinary Measures

Edited by William Carruthers

Histories of Egyptology are increasingly of interest to Egyptologists, archaeologists, historians, and others. Yet, particularly as Egypt undergoes a contested process of political redefinition, how do we write these histories, and what (or who) are they for? This volume addresses a variety of important themes, the historical involvement of Egyptology with the political sphere, the manner in which the discipline stakes out its professional territory, the ways in which practitioners represent Egyptological knowledge, and the relationship of this knowledge to the public sphere. *Histories of Egyptology* provides the basis to understand how Egyptologists constructed their discipline. Yet the volume also demonstrates how they construct ancient Egypt, and how that construction interacts with much wider concerns: of society, and of the making of the modern world.

2014 | Routledge | HB: 978-0-415-84369-0

Learn more at: www.routledge.com/9780415843690

Ankh Antiquarian Books

Est. 1989



Australia's leading bookseller for new and second-hand Egyptology and Ancient History publications.

We also stock a wide range of gifts, cards and magazines including *Egyptian Archaeology*, *KMT* and *Minerva* and have an eBay store:

<http://stores.ebay.com.au/Ankh-Antiquarian-Books>



Ankh Antiquarian Books has been pleased to be associated with the Egypt Exploration Society since 1990 and is the Society's authorised bookseller in Australia and New Zealand. We stock many EES publications and promote the Society.

Proprietor: Jennifer A Jaeger, BA

Ankh Antiquarian Books

PO Box 133 Darling

Victoria 3145, Australia

Phone: 61 398881990. Mobile: 0419395782

E-mail: jennifer@ankhantiquarianbooks.com.au



www.ankhantiquarianbooks.com.au

