Migdol: A New Fortress on the Edge of the Eastern Nile Delta

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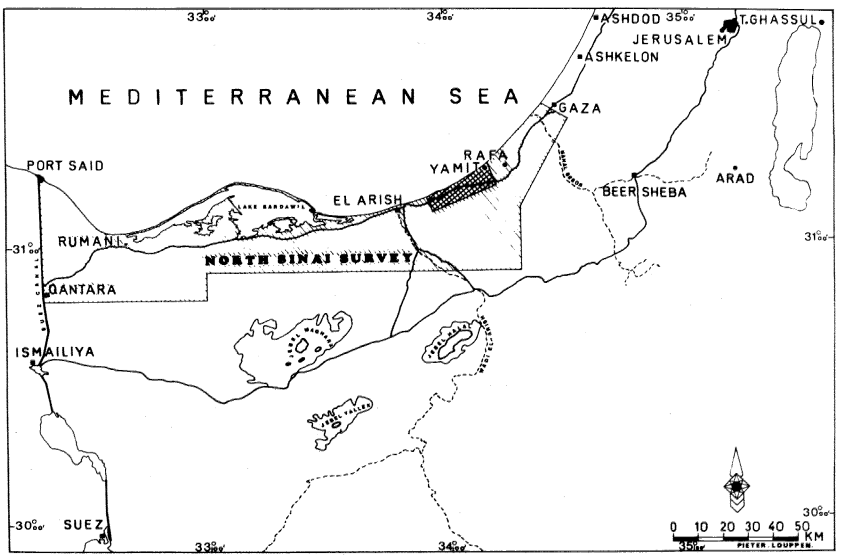


Fig. 1. Map of northern Sinai and surveyed area.

INTRODUCTION

The Mediterranean coastal strip of the Sinai Peninsula, stretching between the Suez Canal and the Gaza Strip, was by far the most important link between Egypt and Canaan from prehistoric times. The well-traveled highways of North Sinai—the Egyptian "Ways-of-Horus," the biblical "Way of the land of the Philistines," or the Classical *via maris*—facilitated the passage of countless military expeditions and trade caravans between the Nile Delta and Asia. Because of its strategic, political, and economic importance, the history of North Sinai is well documented in numerous ancient records and maps, especially of the Greco-Roman period (Abel 1939: 207–36, 530–48; 1940: 55–75, 224–39). Since the early days of modern scholarship, North Sinai has attracted travelers and explorers who searched in particular for the possible route of the Exodus (Cazelles 1955: 321–64). As a result, the literature is rich in studies of the history, topography, flora, and fauna of northern Sinai. However, despite its immense historical importance, the Mediterranean coast of Sinai has been almost entirely bypassed by archaeologists and has remained, until very recently, *terra incognita* to archaeological scholarship.[1]

Beginning in 1972, the North Sinai Expedition of the Ben-Gurion University of the Negev, under the direction of this author, has conducted a systematic archaeological survey and excavations betweeen the Suez Canal and the Gaza Strip (fig. 1).[2] The expedition has aimed to record all the ancient

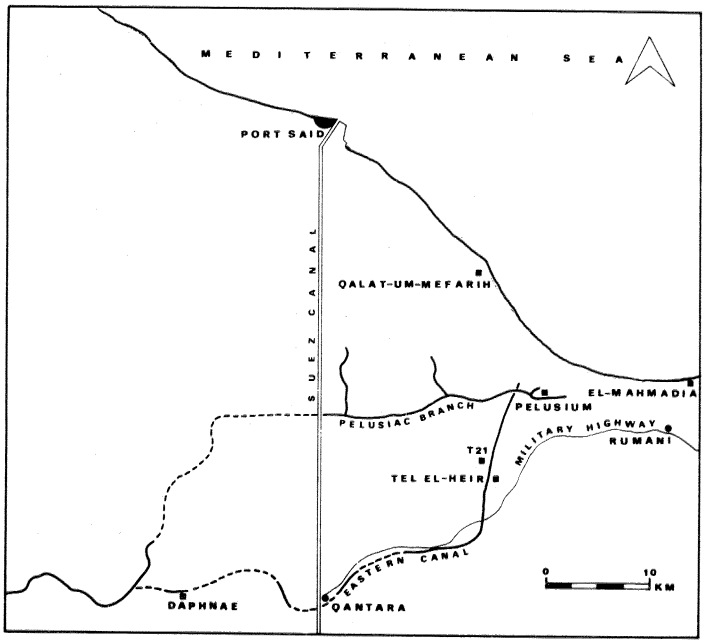


Fig. 2. Map of northwestern Sinai and ancient waterways.

sites in this area, to analyze the distribution and pattern of settlement, and to examine the vexing problem of cultural interaction between Egypt and Canaan against the background of settlement sites in northern Sinai.

By 1981 the North Sinai Expedition had explored and recorded more than 1000 sites, ranging from the Palaeolithic to the Medieval period. These included roads, ancient waterways and irrigation systems, large settlements, villages, forts, caravan stations, cemeteries, industrial complexes, and numerous seasonal campsites. A number of these sites have also been fully or partially excavated, enabling us to control the chronology of the region. The most intensive periods of settlement in North Sinai were in the Early Bronze Age I–II or the Egyptian Protodynastic period, the Late Bronze Age or Egyptian New Kingdom period, and the Persian through the Byzantine periods. The results of the explorations demonstrated categorically that, except for certain periods of decline or hiatus, the coastal strip and sand-duned region of North Sinai not only acted as a corridor between Egypt and Canaan, but also was densely populated almost throughout its history. The material culture of the successive periods of occupation in North Sinai indeed reflected the cultural intercourse between the civilizations on either end of that landbridge. At the same time, however, the sites yielded ample evidence testifying to the development of a local and indigenous material culture, resulting from the long periods of permanent settlement.

During the 1974–1976 seasons, the North Sinai Expedition investigated in detail the northwestern corner of Sinai, between the Suez Canal and the edge of the Bardawil lagoon (Classical Lake Sirbonis; fig. 2). In antiquity this region was an integral part of the fertile and densely populated plain of the eastern Nile Delta. The plain is bordered by a long stretch of dune-covered higher ground, extending southwest to northwest from the vicinity of Qantara to Tell el-Mahamediyeh, at the apex of the Tineh Embayment. Beyond this line stark desert begins. The surface of this plain, the northeastern corner of the Delta, is today characterized by extensive marshes and salt polygon sabkhas or lagoons, which are periodically flooded by sea water (usually during heavy storms). In antiquity this plain was criss-crossed by irrigation, drainage, and navigation water systems. Remains of many ancient sites, including forts and large settlements, are scattered throughout the area. They attest to the role of the eastern Delta as a commercial, industrial, and military center, particularly from the New Kingdom through the

early Islamic period. The most impressive remains are found in the large cities of Pelusium (Tell Farama), Magdolo (Tell el-Her) and Sile (Tell Abu-Seifeh). These were evidently founded in the Saite and Persian periods and played an important role as military and administrative centers of the eastern Nile Delta.

The prosperity of the eastern Delta was possible, so one gathers from Egyptian and Classical sources, because of one major factor: the availability of fresh Nile water that reached the area through navigational waterways—both natural branches of the Nile and manmade canals, which once connected the Nile to the Mediterranean (Ball 1942: 22–28, 57–60). Two such waterways, by now completely silted up and defunct, were discovered by a team of the Israel Geological Survey (Sneh and Weissbrod 1973: 59–61; Sneh, Weissbrod, and Perath 1975: 542–48). One of these was correctly identified as the lower trace of the Pelusiac arm of the Nile; the other, evidently an artificial canal, was named the "Eastern Canal." The accurate course of the Pelusiac tributary in the northeast corner of the Delta has been a subject of controversy since medieval times and was erroneously delineated, with great variations, from one map to the other. The Pelusiac branch, which was the best known of the numerous Deltaic arms that discharged into the Mediterranean, and the famous metropolis of Pelusium at its terminus, served in the Classical period as the eastern gate of Egypt for both land and maritime traffic. Judging from references in ancient sources and maps, it is evident that the easternmost extension of the Pelusiac arm took place in the Persian period, sometime in the late 6th or early 5th century B.C. The city of Pelusium, which depended entirely on this waterway, was evidently founded at about this time. This conclusion is supported by new archaeological evidence that our expedition unearthed at Pelusium and in the area along the Pelusiac river, between the Suez Canal and Tell Farama. Finally, the references by Arab geographers to populated Farama (an early Islamic and Medieval city on the site of Pelusium), which do not mention an active Pelusiac branch, make it clear that the latter became defunct in the early Islamic period, sometime during the 8th century A.D. (Bietak 1975: 47–177).

The discovery of the Eastern Canal has refuted another erroneous but almost universally accepted hypothesis: that the Pharaonic waterways, i.e., "the Waters-of-Horus," the "Waters-of-the-Sun," or biblical *Shihor*, are in fact identical with the Pelusiac arm of the Nile (Shafei 1946: 231–87; Gardiner 1920: 99–116). Fieldwork and examination of aerial photographs proved that this previously unrecognized manmade canal clearly antedated the Classical Pelusiac branch. The Eastern Canal arches along the periphery of the Nile Delta, south and east of the Pelusiac arm, and should be named rather the "Eastern Frontier Canal." This major engineering enterprise, which compares favorably with de Lessep's Suez Canal, was in all likelihood part of a much larger navigation system dug across the Isthmus of Suez to join the Nile with the Mediterranean (Sneh, Weissbrod, and Perath 1975: 544–46).

The complex network of irrigation channels still identifiable between the traces of the Pelusiac branch and the Eastern Frontier Canal indicates clearly that the latter served as a major artery for the irrigation system of the eastern Delta and that this was actually the only source of Nile water for the region. The location of the canal along the periphery of the eastern Delta and other indications would, however, strongly suggest that its primary purpose was defense. This canal, completed with a chain of garrisoned forts along its course, undoubtedly formed a substantial barrier against raiding nomads from across the desert (referred to in the Egyptian documents as *Shasu* and "Sand Crossers," or "Arabians" in later Assyrian and Greek sources) or, indeed, against invading armies who might succeed in crossing the desert along the Mediterranean coastal strip. The identification of the newly discovered canal with the waterway *Ta denit* (= "dividing waters," or simply "canal") depicted in relief on the walls of the Temple of Amon at Karnak, implies that it was certainly completed by the time of Seti I's campaign to Palestine, ca. 1300 B.C. (Gardiner 1920: 104–6). On the other hand, several references in the literature of the Middle Kingdom to a defense system along the Egyptian frontier on the east—e.g., the "Wall of the Ruler"—as well as the proposed construction of a canal that would serve as a defensive measure against the troublesome Asiatics or Bedouin in the First Intermediate period, suggest that this ambitious enterprise was already completed by the early reigns of the Middle Kingdom (Shea 1977: 31–38). An early date for the construction of the Eastern Frontier Canal is further supported by the discovery of

Middle and New Kingdom sites along its traced course.

In the course of explorations on the periphery of the eastern Delta, particularly in the vicinity of the Eastern Frontier Canal, the Ben-Gurion University's expedition encountered a number of sites dating to the Saite period, in the 7th–6th century B.C. These sites, and in particular the fortress of Migdol that is the subject of the present study, shed new light on the geographical history of this region and on the material culture of garrison forts along the border of the eastern Nile Delta.

SITE T. 21

On the edge of the east Delta plain, 1 km north of Tell el-Her and west of the Eastern Frontier Canal, the North Sinai Expedition investigated a very large site: T. 21 on the Expedition map (fig. 2).[3] The surface of this 25-acre site, presently about 1 m above sea level, is covered with a thick crust of salt over windblown sand and sea-borne shell, pumice, and tar that resulted from constant sea flooding in this strand plain. The surface is scattered with brick material, stone grinders and containers, masses of broken pottery vessels, and a great deal of copper ore and slag.

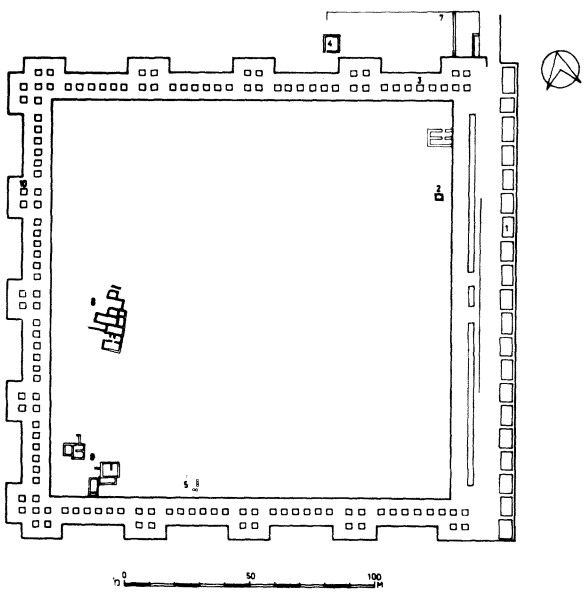


Fig. 3. *Plan of fortified structure in Site T.21.*

The center of Site T. 21 is occupied by an unusually large fortified structure (fig. 3), which was identifiable on aerial photographs prior to the excavations (figs. 4–5). The structure consisted of a massive square mudbrick enclosure 200 m on a side (40,000 m^2 or 10 acres) with buildings constructed against the enclosure wall and in the wide, open courtyard. It was not possible to ascertain the location of the main entrance of the fort, although it might have been on the northeast corner facing the canal; public buildings in Egypt usually had their front entrances oriented toward the navigable canal (Bissing 1951: 79–80). The massive enclosure wall is 15–20 m wide and built entirely, including the foundation courses, of sun-dried bricks (fig. 6) that were formed of Nile clay or mud, apparently collected from the embankment of the nearby canal. The bricks were of standard size, measuring $20 \times 40 \times 11$–12 cm. The architecture of this gigantic enclosure wall is of great interest. On three sides, small compartments, 3 m^2 each, were constructed at fixed, short intervals inside the walls; and massive buttresses, likewise with hollowed compartments, were added outside on three sides. The east wall, which was also the widest (20 m across), had rectangular compartments (fig. 7), as well as very long and narrow inner corridors. Excavations in some of the chambers and corridors showed no evidence of connecting doorways or floors, nor any signs of their use for storage or dwelling. Unfortunately, the excavated areas always became waterlogged at a depth of about 2 m. In one area (No. 3 on the site plan, fig. 3), however, when a depth of 3.20 m was reached, it was revealed that this compartment, too, was hollowed rather like a brick shaft with no evidence of a floor or connecting doorways. These compartments usually contained brick material, stones, and pottery fragments, deposited in no recognizable pattern or stratification.

Similar military architecture is known in other sites of the Saite period particularly in the Delta region. It usually consists of gigantic enclosure walls complete with hollow compartments and long corridors, although without doorways, floors, or any means of communication between them. In 1883 Edouard Naville excavated at Tell el-Maskhuta in the eastern Delta, some 50 km southwest of Site T. 21. Naville uncovered sections of a well built, massive mudbrick structure that compared favorably with the T. 21 enclosure wall as to both plan and building technique. It

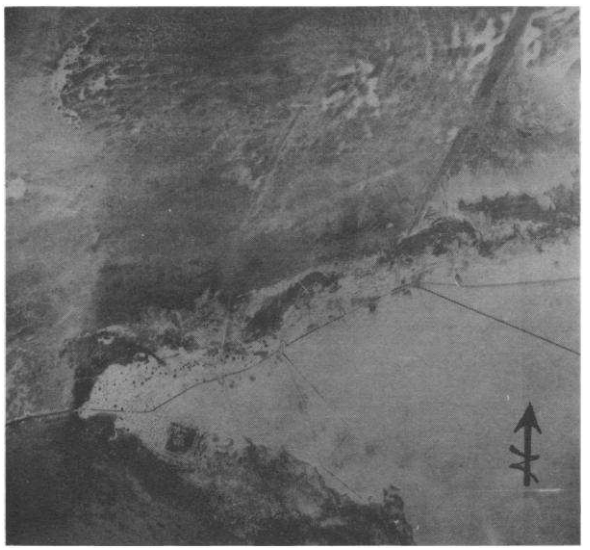


Fig. 4. Aerial photograph of the region of Site T. 21. Site is marked as black square in marshy area. Note the "Eastern Frontier Canal" and irrigation canals in right upper corner.

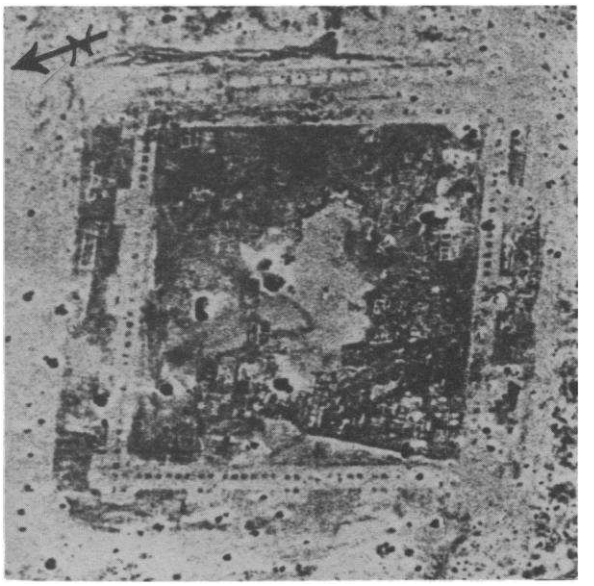


Fig. 5. Aerial photograph, close-up of the fortress. Note outline of many structures inside the walled area.

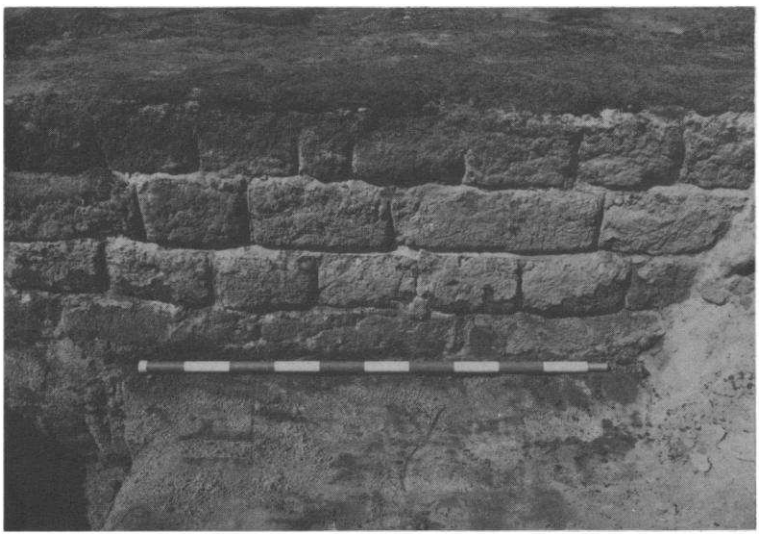


Fig. 6. Section of enclosure wall with layer of burnt deposit on top.

was 200 m^2 with walls some 15 m thick and many small chambers, likewise lacking any connecting doorways (Naville 1888: map 2). On the strength of inscriptional evidence and the occurrence of many "store rooms" Naville identified the site as the famous biblical store city Pithom, built by Ramses II in the early 13th century B.C. Recent excavations in some sectors of the site by the University of Toronto clearly demonstrated, however, that the first permanent settlement at Tell el-Maskhuta, after the brief Middle Bronze II occupation, cannot possibly have taken place earlier than the Saite period.[4] The fragmentary information published by Naville, coupled with the data now available from the recent excavations, suggests that the massive architectural remains at Maskhuta belonged rather to a military structure, perhaps of the Saite period. This structure thus represented a fort, complementary to T. 21 and further south on the eastern frontier of the Egyptian Nile Delta.

More comparable architecture came to light in two of the sites that Flinders Petrie explored in the Delta plain, i.e., the Greek trading colony of

Fig. 7. West wing of wall and compartments before excavations.

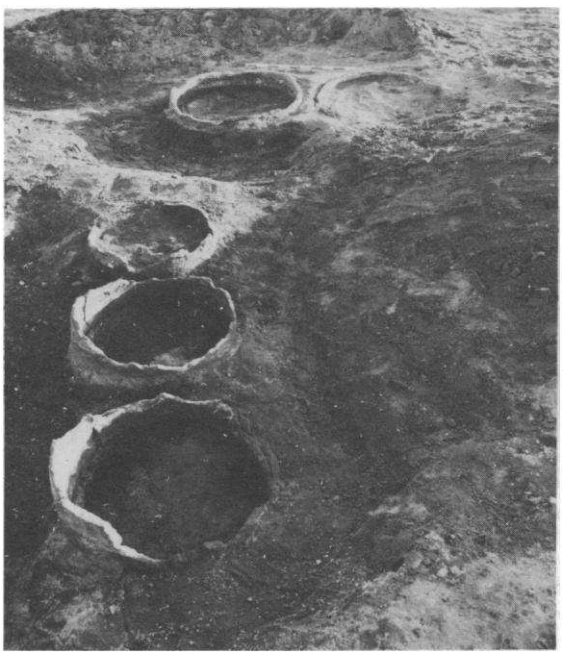


Fig. 8. Group of pottery basins. No. 5 on plan, fig. 3.

Fig. 9. Detail of pottery basin. No. 5 on plan, fig. 3.

Naukratis, on the Canopic arm of the Nile, and the Jewish–Phoenician garrison fort of Tahpanhes (Tell Defenneh, Greek Daphnae) on the eastern canal some 25 km southwest of Site T. 21. At Naukratis Petrie named the southern enclosure the "Great Temenos" and identified it with Herodotus' Hellenion (Petrie 1886: 23). It consisted, according to Petrie, of a large precinct 270 × 300 m in size, with a massive brick wall 17 m wide, and a large brick platform with many deep shaft-like chambers and corridors (Petrie 1886: pls. 40–43). Although excavations by Hogarth in 1903 raised some weighty objections against Petrie's "Temenos," (i.e., enclosure wall), there was no doubt as to the presence of a massive brick platform on that part of the site (Hogarth, Lorimer, and Edgar 1905: 105–36). Moreover, Hogarth's excavations in the northern sector of Naukratis yielded the remains of what he identified as the real Great Temenos, including a massive (enclosure?) wall, 10 m thick, and a huge brick platform, likewise with hollowed chambers and long corridors (Hogarth, Lorimer, and Edgar

1905: fig. 1). The site of Daphnae was similarly occupied by a fort, 450 × 200 m in size, with 17 m thick walls and a massively built brick platform that was completed with deep compartments and long corridors (Petrie 1888: 52, pls. 43–44). At Daphnae, as in T. 21, the brick shafts were filled with brick material, and the bricks of the structure were of the same size as those at T. 21 and Naukratis, i.e., 20 × 40 × 12 cm. At Memphis Petrie observed in the Palace of Apries of the Saite period a similar arrangement of a cellular substructure of brick shafts (Petrie and Walker 1909a: 1–2; see now Kemp 1977: 101–8).

The purpose of these structures was, according to Petrie, the custody of stores or treasuries in time of war. He suggested, accordingly, that the floors of the deep chambers or shafts (at least 5 m deep at Naukratis) and passages were made of wood. Communication between them was possible through a system of wooden scaffolding that could be removed at short notice when the fort was approached by an enemy. Thus, in Petrie's words, the besieged in the fort would "leave no point for an invader to cling on" (Petrie 1886: 25, 1888: 52). Petrie's fanciful interpretations, or indeed other similar explanations that the shaft and corridor architecture was designed for public magazines (Bissing 1951: 58–59) do not, however, account for the natural conditions in the waterlogged plain of the Delta, nor for the technical problems arising from building in such masses of brickwork. Since the water table is very high in the Delta plain, it is conceivable that the foundations of massive structures were constructed on already waterlogged sites. The shaft and corridor system was primarily designed, it seems, to counteract dampness and provide for proper drainage of brick masses. This would also explain the intentional filling of the shafts and corridors with debris. Furthermore, building gigantic walls or structures such as platforms entirely of mudbrick required hollowed compartments to relieve the tremendous pressure created by masses of brickwork. This architectural technique continued into Greco-Roman times and was recorded, for instance, at Karanis, Philadelphia, and Tell el-Mashkuta.[5] In conclusion, the gigantic width of the enclosure walls at Site T. 21, like those at Naukratis, Daphnae, and Maskhuta, must thus be considered primarily as military architecture with the shafts and corridors having an engineering purpose.[6]

The area inside the enclosure wall at T. 21 was largely occupied by buildings and various installations. Although only a few of these were actually excavated, the remains of many structures were clearly identifiable on the surface of the site. One of the excavated buildings (No. 8 on the site plan, fig. 3), actually part of a much larger complex, consisted of square and rectangular rooms with rounded corners, with the peculiar feature of inset spaces at short intervals along the inner walls of some rooms. In different parts of the courtyard, installations for storage and industry were unearthed. No. 5 on the site plan, fig. 3, for example, represents a group of six large clay basins, more than 1 m across, set with mortar on the floor and containing some burnt organic material (figs. 8–9). Often, groups of large storage jars were set in the ground with their upper parts broken off. Around these installations many stone pounders and grinders were collected, as well as copper ore and slag, suggesting that some of the installations were designed for the metallurgic industry. The entire site was covered by a thick layer of burnt brick material, charcoal, and ashes that clearly testify to a wholesale destruction by fire, followed by the subsequent abandonment of the site.

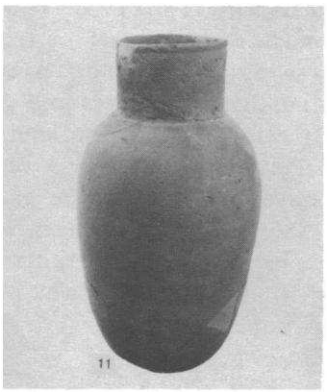
THE FINDS

Systematic surface collection and controlled excavation in Site T. 21 yielded a large store of material, including pottery and stone vessels and many small finds of stone, metal, and faience. The collection of pottery vessels falls into three distinct categories:

1. Local Egyptian pottery of the Saite period,
2. Phoenician and Palestinian late Iron Age vessels,
3. Archaic east Greek ceramics and local copies.

Local Egyptian pottery vessels are relatively easy to identify. The pots were made of levigated Nile clay with some sandy inclusions and a great deal of straw impression. The shapes are most characteristic of the Saite repertoire of the 6th century B.C. Our collection compares nicely with that from Saite sites in Upper and Lower Egypt, such as Nebesheh, Memphis, Heliopolis, San el-Hagar, Kafr Ammar, Qurneh, Saqqara, and as far afield as Sanam in Nubia.[7] The pottery ensemble

from Site T. 21 is, however, best paralleled in the Delta sites of Naukratis and Daphnae (Petrie 1886: pls. 16–17; 1888: pls. 33–36). Moreover, examination of published and still-unpublished material from neighboring Daphnae displays an almost identical inventory and grouping of pottery types. In a number of instances it might even be argued that the vessels from the two sites were manufactured in the same potter's workshop. Shapes included red-burnished globular and drop-shaped pots (figs. 10–11; 20:1–3, 12), ledge-rimmed bowls (figs. 12; 20:6–9), juglets (figs. 13; 20:23–24), cooking pots (figs. 14–15; 20:4–5), stands (figs. 16–17; 21:12–13; 24:5), and others. A group of smaller vessels—cups, bowls, Bes-vases, etc.—are made of very fine buff ware (figs. 18–19; 20:17–22). Identical types were recorded in a foundation deposit at Nebesheh, together with seals of King Amasis of the 26th Dynasty (Petrie 1888: pl. 5:26). Of the same fabric, although much harder, stone-like, baked, is a shallow, thick-walled plate with everted ledge rim and stepped underside (fig. 23:3). Identical bowls were recorded at Daphnae and Naukratis, as well as in Iron Age III (7th century B.C.) deposits at Tell Jemmeh and Tell esh-Shari'a in southern Israel (Petrie 1886: pl. 10:7; 1888: pl. 35:70; 1928: pls. 47, 65:11–23). Similar plates turned up in a 6th century context at Tarsus (Goldman 1963: 270, figs. 89, 138, Nos. 1267, 1268). To the repertoire



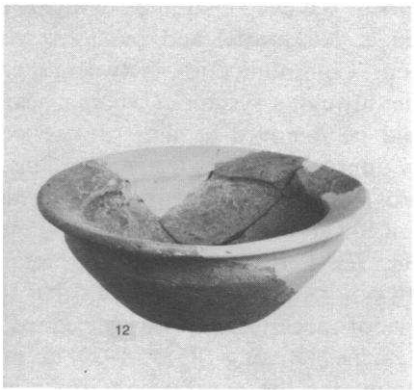


Fig. 10. Egyptian globular vase; **Fig. 11.** Egyptian drop-shaped vase; **Fig. 12.** Egyptian ledge-rimmed bowl; all Site T. 21.

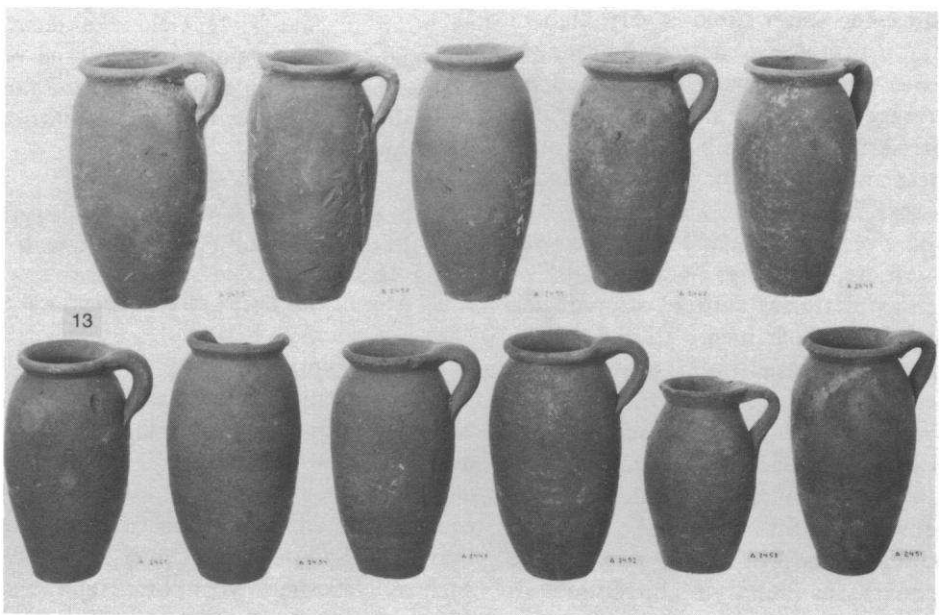
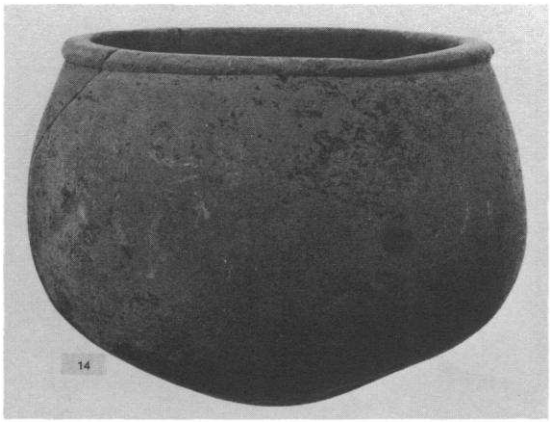
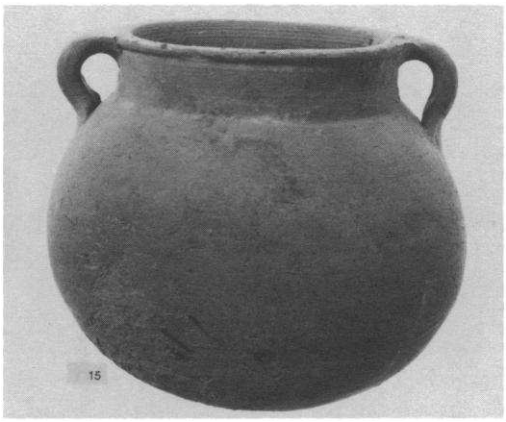
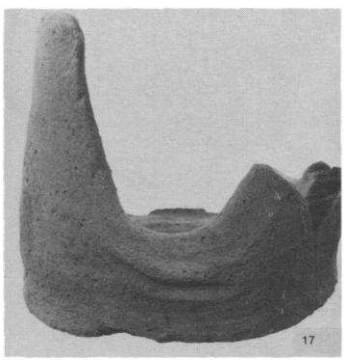


Fig. 13. Group of local Egyptian dipper juglets, Site T. 21.







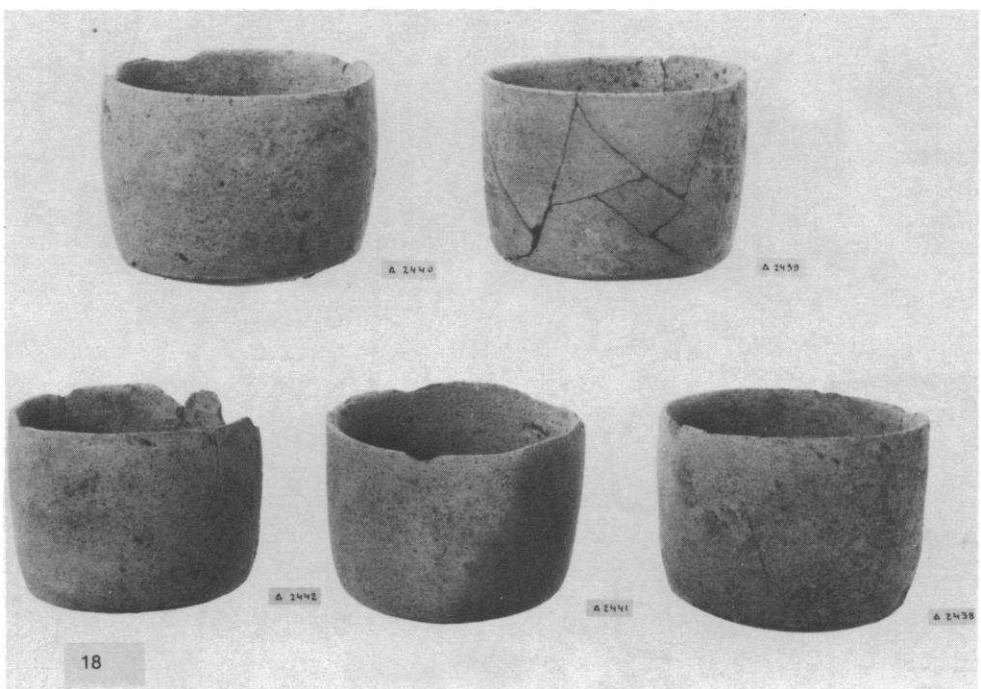


Fig. 14. Egyptian red-burnished cooking pot; **Fig. 15.** Egyptian red-burnished cooking pot; **Fig. 16.** Ring stand for jars; **Fig. 17.** Horned stand for pots; **Fig. 18.** Group of buff-ware cups; **Fig. 19.** Miniature flasks; all site T. 21.

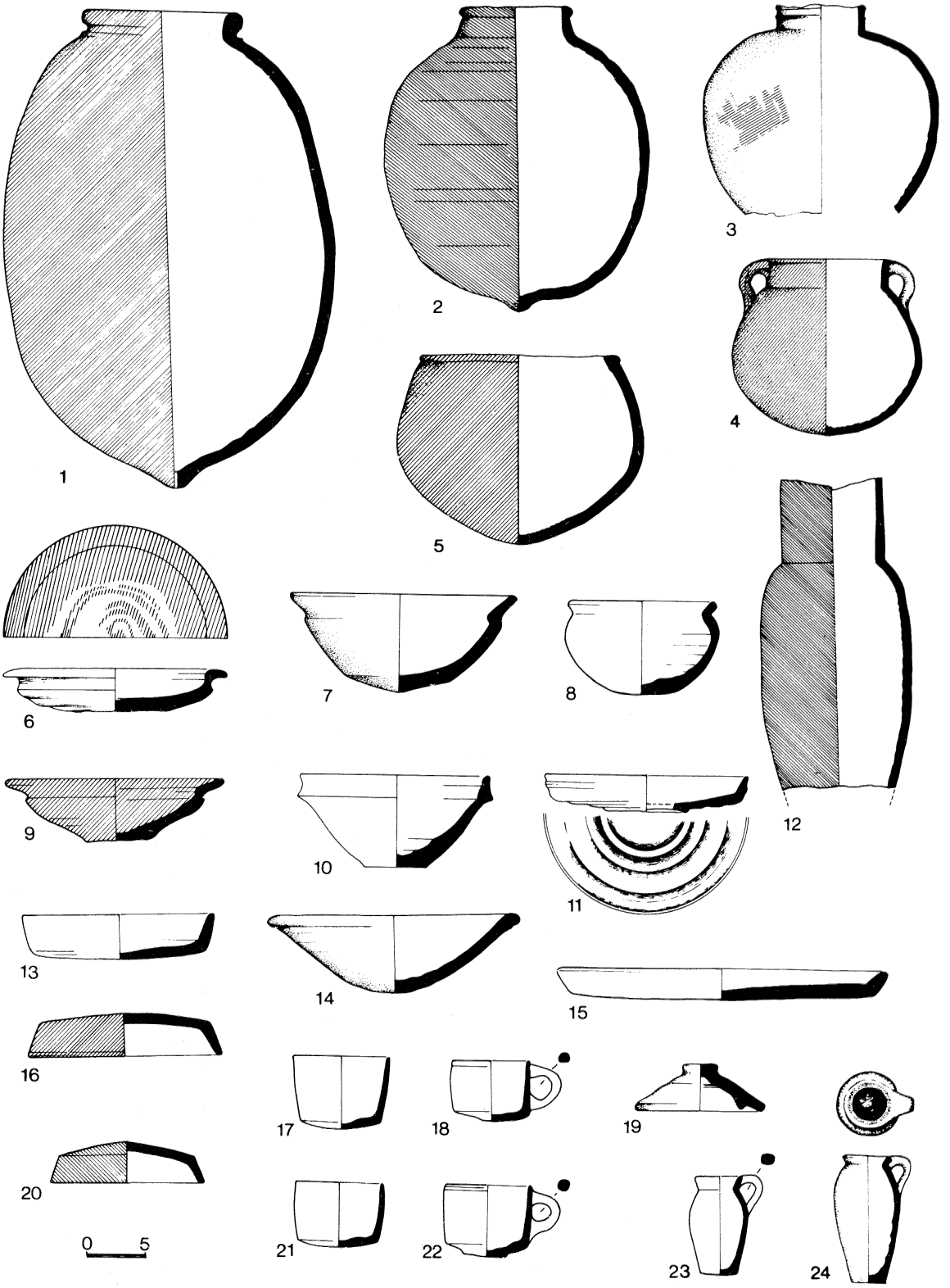


Fig. 20. Local Egyptian pottery, Site T. 21.

of local ceramics one may also add large barrel-like containers with plastic application, three-legged stands for pots, and many large hard-baked basins, trays, crucibles, and other containers that presumably belonged to various industrial activities on the site (figs. 24:2–5; 17; cf. Petrie 1888: pls. 33:9; 34:26, 38; 35:77).

The late Iron Age ceramic group of Syro-Palestinian or Phoenician origin is well represented in Site T. 21. These included a variety of torpedo-shaped jars with pointed bases and slightly twisted handles (figs. 21:7; 27–30); very large, heavy-walled basket-handled storage jars with knife-pared finish (figs. 21:1, 3, 5, 11; 28); and heavy, thick-walled bowls or mortaria on flat bases (figs. 21:9–10; 31). The assortment of torpedo jars, basket-handled jars, and mortaria was encountered in large numbers at Naukratis and Daphnae alongside imported Archaic east Greek and Cypriot vessels.[8] Some of the torpedo-shaped jars from Daphnae were inscribed with long Demotic inscriptions,[9] and the same shape was produced locally on a miniature scale (unpublished, BM 5109, 35980). Many specimens of all three types from Naukratis carry Greek inscriptions and graffiti.[10]

Identical vessels are most popular in late Iron Age deposits along the coast of Syria and Palestine, for instance, the North Sinai sites, Gaza, Ashkelon, Ashdod, Meṣad Hashavyahu, Jaffa, Shikmona, Tell Keisan, Akko, Akhziv, and Tyre.[11] Similarly, all three types were registered in large numbers in Cypriot tombs and settlement sites and were therefore included in the classification of the local Cypro-Archaic I–II (Plain White) pottery repertoire (Gjerstad 1948: figs. 44:10; 56:5, 28; 57:23). On the strength of this a Cypriot origin was argued, although Rhodian and Syrian manufacture was not altogether excluded (Gjerstad 1948: 241). The popularity of the torpedo jar, basket-handled jar, and mortarium in sites along the Syro-Palestinian coast, Cyprus, Rhodes, and North Africa suggests that these were probably the standard transport containers for grain and oil throughout the Mediterranean basin, with the mortarium serving as a measuring bowl. It is even possible that these were Phoenician transport and measuring vessels. To this group one may add the "Phoenician" or Cypro-Phoenician juglet with concentric-circled decoration on shoulder—a type most popular in Cypriot and Syro-Palestinian contexts of Cypro-Archaic I–II and Iron Age II–III periods.[12] This particular shape is classified as Black-on-Red II (IV) ware of the 7th century B.C.

FIGURE 20

1. *2601* (T. 21/2) Vase, levigated Nile clay with straw impressions, fired red-brown with grey to black core, few grits, hard baked. Remains of thick burnished red-purple slip.
2. *4769* (T. 73) Vase, levigated Nile clay with straw impressions, fired brown, hard baked. Traces of red slip (worn off).
3. *3806* (T. 21/s) Vase, levigated Nile clay with sandy inclusions, fired light brown with grey core, medium hard baked. Traces of burnished red slip.
4. *2435* (T. 21/2) Cooking pot, levigated Nile clay with sandy inclusions and straw impressions, fired red-brown with grey core, hard baked. Thin glossy red slip.
5. *2969* (T. 21/2) Cooking pot, levigated Nile clay with sandy inclusions and straw impressions, fired brown, hard baked. Smooth purple slip. Lower part sooty.
6. *15485* (T. 6) Bowl, levigated Nile clay with sandy inclusions and straw impressions, fired red, hard baked. Thin red slip.
7. *2988* (T. 21/6) Bowl, levigated Nile clay with straw impressions, fired red-brown with grey core, hard baked. Rough surface.
8. *3639* (T. 21/9) Bowl, levigated Nile clay with sandy inclusions and straw impressions, fired red-brown with black core, medium hard baked. Rough surface.
9. *3606* (T. 21/2) Bowl, levigated Nile clay with straw impressions, fired red-brown with black core, medium hard baked. Thin matte purple slip.
10. *5362* (T. 6) Bowl, levigated Nile clay with sandy inclusions and straw impressions, fired light brown with greenish-buff surfaces, hard baked.
11. *3704* (T. 21/s) Bowl, levigated Nile clay with straw impressions, fired red-brown, hard baked. Thick creamy-buff slip (worn off).
12. *3785* (T. 21/6) Vase, levigated Nile clay, fired red-brown, medium hard baked. Thick burnished red slip.
13. *3632* (T. 21/8) Bowl, levigated Nile clay, fired red-brown, hard baked. Thick matte chalky white to creamy buff slip.
14. *3787* (T. 21/s) Bowl, levigated Nile clay with straw impressions, fired red-brown, hard baked. Rough surface with black patches.
15. *3609* (T. 21/2) Plate, levigated Nile clay with sandy inclusions, fired red-brown, hard baked. Thick matte buff to cream slip.
16. *3608* (T. 21/6) Lid, levigated Nile clay with straw impressions, fired red-brown, hard baked. Thick burnished purple slip.
17. *5203* (T. 21/6) Cup, levigated clay, tempered with many minute grits, fired light brown with buff surfaces, very hard smooth surface.
18. *5204* (T. 21/6) Cup, ditto
19. *3622* (T. 21/s) Lid, levigated Nile clay with straw impressions, fired red brick with light grey core, hard baked.
20. *3793* (T. 21/6) Lid, levigated Nile clay, fired light brown, hard baked. Thick burnished purple slip.
21. *5202* (T. 21/6) Cup, levigated clay, tempered with minute grits, fired buff, very hard baked, smooth surface.
22. *5205* (T. 21/6) Cup, ditto
23. *2967* (T. 21/6) Juglet, levigated Nile clay with sandy inclusions, fired red-brown, hard baked, smooth surface.
24. *2451* (T. 21/6) Juglet, ditto

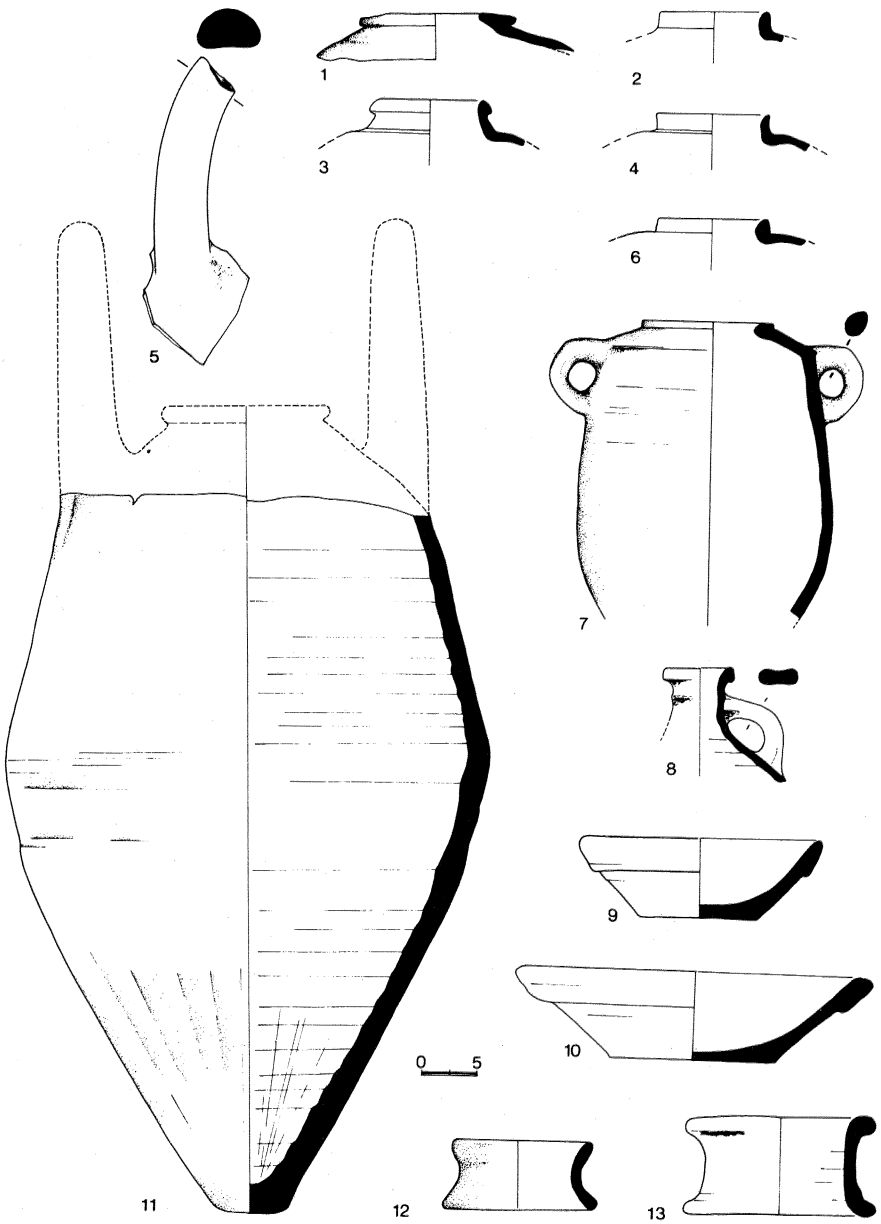


FIGURE 21

1. *3794* (T. 21/2) Jar (fragt.), levigated clay, tempered with many minute white grits, fired light brown with grey core, hard baked.
2. *15217* (T. 21/8) Jar (fragt.), levigated clay, tempered with many small white grits, fired dark brown, hard baked. Buff self slip.
3. *15547* (T. 4) Jar (fragt.), levigated clay, tempered with many grits and grog, fired greenish-buff, hard baked.
4. *15569* (BEA. 16) Jar (fragt.), levigated clay, tempered with many grits and grog, fired brown, hard baked.
5. *3805* (T. 21/2) Jar (fragt.), levigated clay, tempered with many minute white grits, fired buff, very hard baked.
6. *15560* (BEA. 10A) Jar (fragt.), levigated clay, tempered with white and black grits, fired brown with grey core, hard baked.
7. *2999* (T. 21/12) Jar, levigated clay tempered with many minute white grits and large chalky inclusions and grog, fired light brown, very hard baked, smooth surface.
8. *3707* (T. 21/N) Jug (fragt.), levigated clay, tempered with many minute chalky grits and grog, fired light brown with grey core, very hard baked, smooth surface.
9. *3613* (T. 21/4) Bowl, levigated Nile clay, tempered with black grits and mica, fired red-brown. Thick matte creamy slip.
10. *3611* (T. 21/6) Bowl, levigated clay tempered with few grits, fired brown with grey core, hard baked, smooth surface.
11. *2993* (T. 21/2) Jar, levigated clay, tempered with large white grits and grog, fired greenish-buff, very hard baked. Marks of knife paring on lower part.
12. *2972* (T. 21/7) Ring stand, levigated Nile clay, tempered with many minute white grits, fired light red with grey core, hard baked, rough surface.
13. *3809* (T. 21/6) Ring stand, levigated Nile clay, tempered with sand and minute white grits, straw impressions, fired light brown with red-brown core, hard baked, rough surface.

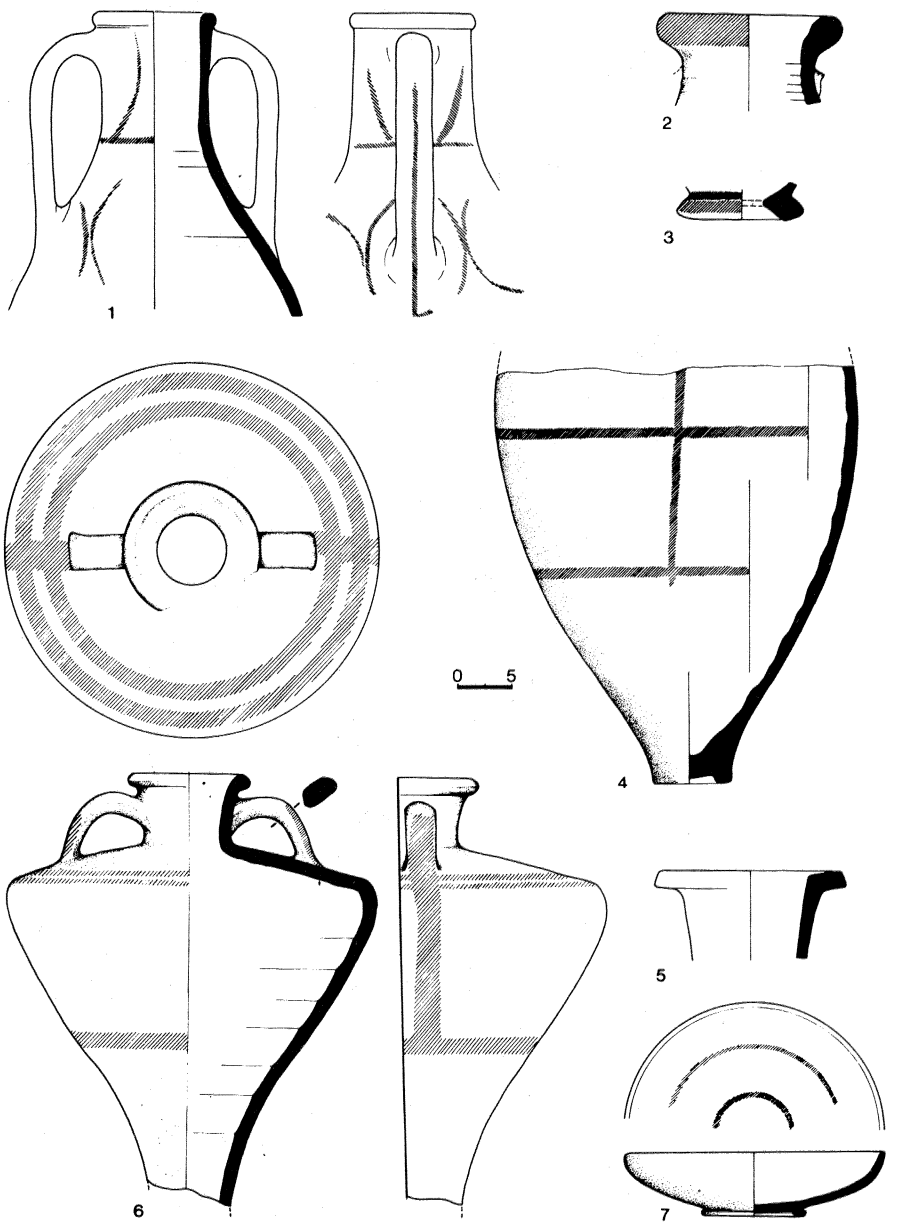


FIGURE 22

1. *7350* (T. 21/2) Amphora (fragt.), very finely levigated clay, tempered with many minute small chalky white grits, grog and mica, fired light brown with light grey core. Thick chalky white slip, orange to red-brown matte painted (flaking) bands. Chian.
2. *3800* (T. 21/2) Amphora (fragt.), very finely levigated clay, fired creamy brown, very hard baked, wet-smoothed glossy surface. Glossy orange painted rim. Attic.
3. *3703* (T. 21/8) Amphora (fragt.), ditto. Attic.
4. *2751* (T. 21/8) Amphora (fragt.), levigated clay with many small white grits, fired light brown. Chalky to creamy smooth slip. Orange to dark brown painted bands. Chian.
5. *3758* (T. 21/3) Amphora (fragt.), levigated clay, mixed with large grits and grog, fired creamy light brown with grey core, very hard baked. Corinthian.
6. *214* (T. 73) Amphora, levigated clay, tempered with grits, grog and mica, fired brown with grey core, very hard baked, wet-smoothed surface. Matte red painted bands. Samian.
7. *2990* (T. 21/6) Bowl, levigated Nile clay, tempered with white grits, fired dark brown, hard baked. Thin red-brown slip, white painted matte bands.

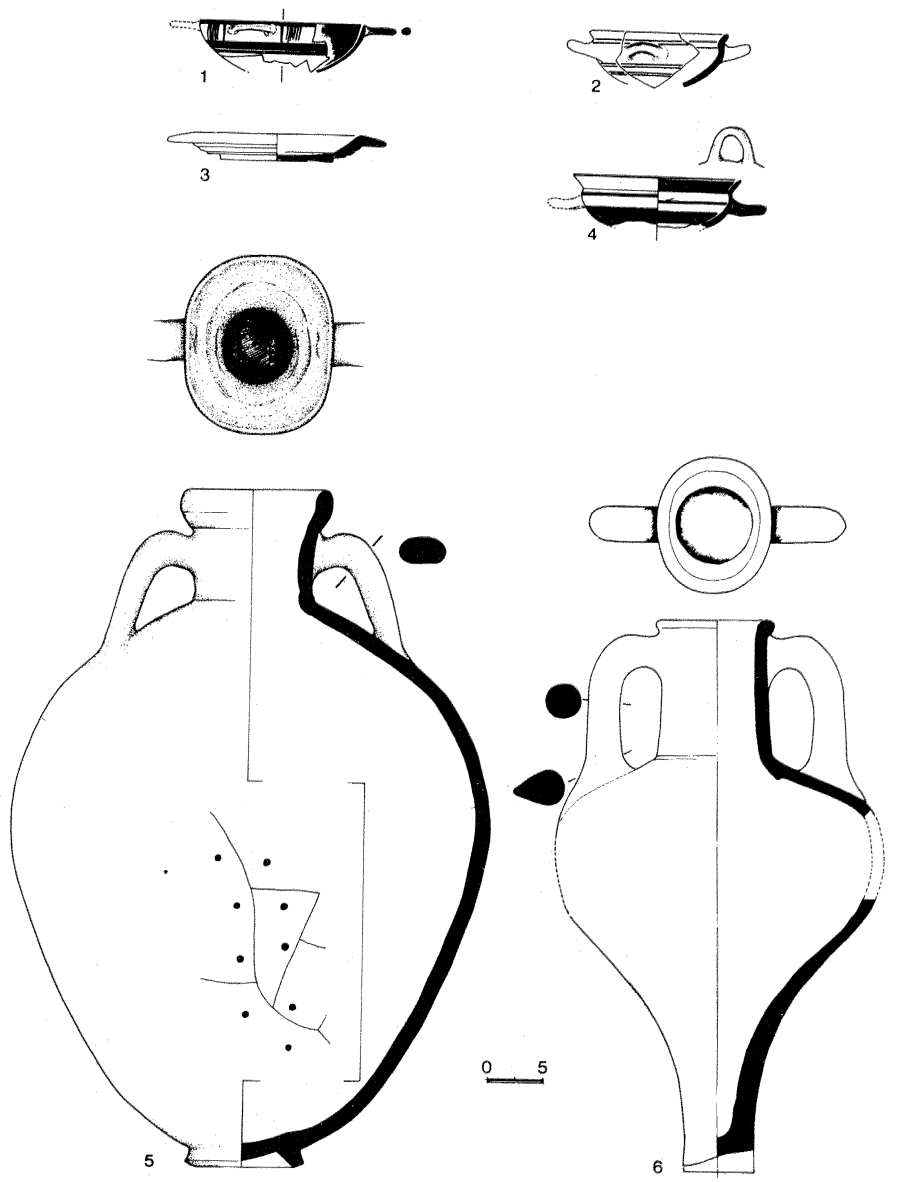


FIGURE 23

1. *7046* (T. 94) Cup (fragt.), very finely levigated clay, fired light brown, hard baked. Black to brown dull glaze with orange patches. East Greek.
2. *3788* (T. 21/N) Cup (fragt.), levigated Nile clay, tempered with minute white grits, fired dark grey with light brown core, hard baked. Painted matte buff bands.
3. *10024* (T. 21/10) Bowl, very finely levigated clay, tempered with minute white grits, fired cream, very hard baked. Thick buff slip.
4. *7047* (T. 94) Cup (fragt.), very finely levigated clay, fired light brown, very hard baked. Black to brown glaze. East Greek.
5. *2640* (T. 21/2) Amphora, levigated clay, tempered with many small white grits and mica, fired light brown, hard baked, wet-smoothed surface, mended anciently. Samian.
6. *3602* (T. 21/2) Amphora, levigated clay, tempered with many small to medium grits and mica, fired grey, very hard baked. Lesbian.

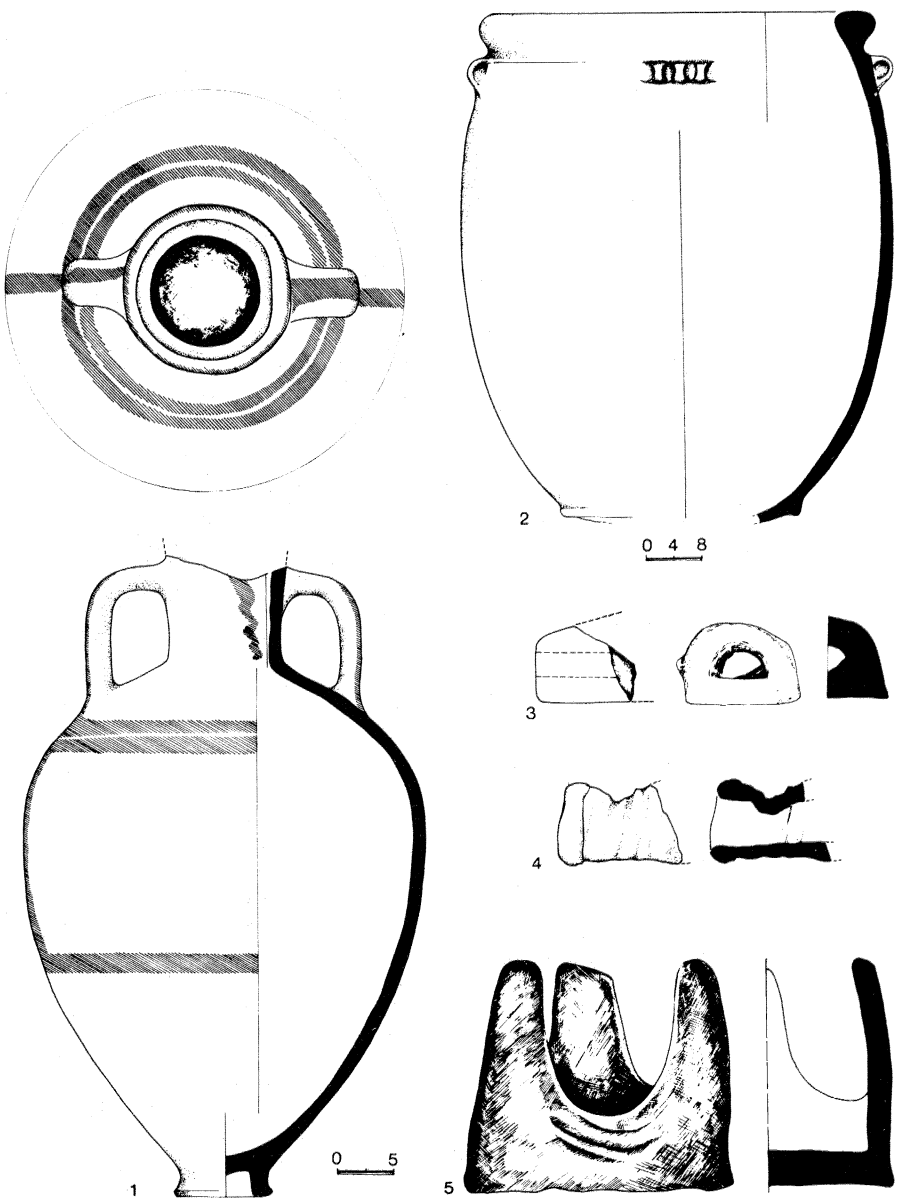


FIGURE 24

1. *2975* (T. 21/2) Amphora, levigated clay, tempered with many small and medium white grits, grog and mica, fired brown with grey core, hard baked, smooth surface. Painted matte orange to dark brown bands. Chian.
2. *10155* (T. 21/s) Barrel, levigated Nile clay with straw impressions, fired red-brown with dark grey core, medium hard baked. Handmade.
3. *3814* (T. 21/2) Pot bellow (fragt.), levigated Nile clay with sandy inclusions, white grits and straw impressions, fired reddish to light brown with black core, medium hard baked. Handmade.
4. *5390* (T. 5) Pot bellow (fragt.), ditto.
5. *2973* (T. 21/2) Pot stand, levigated Nile clay with sandy inclusions and straw impressions, fired red-brown with black core, hard baked. Handmade.

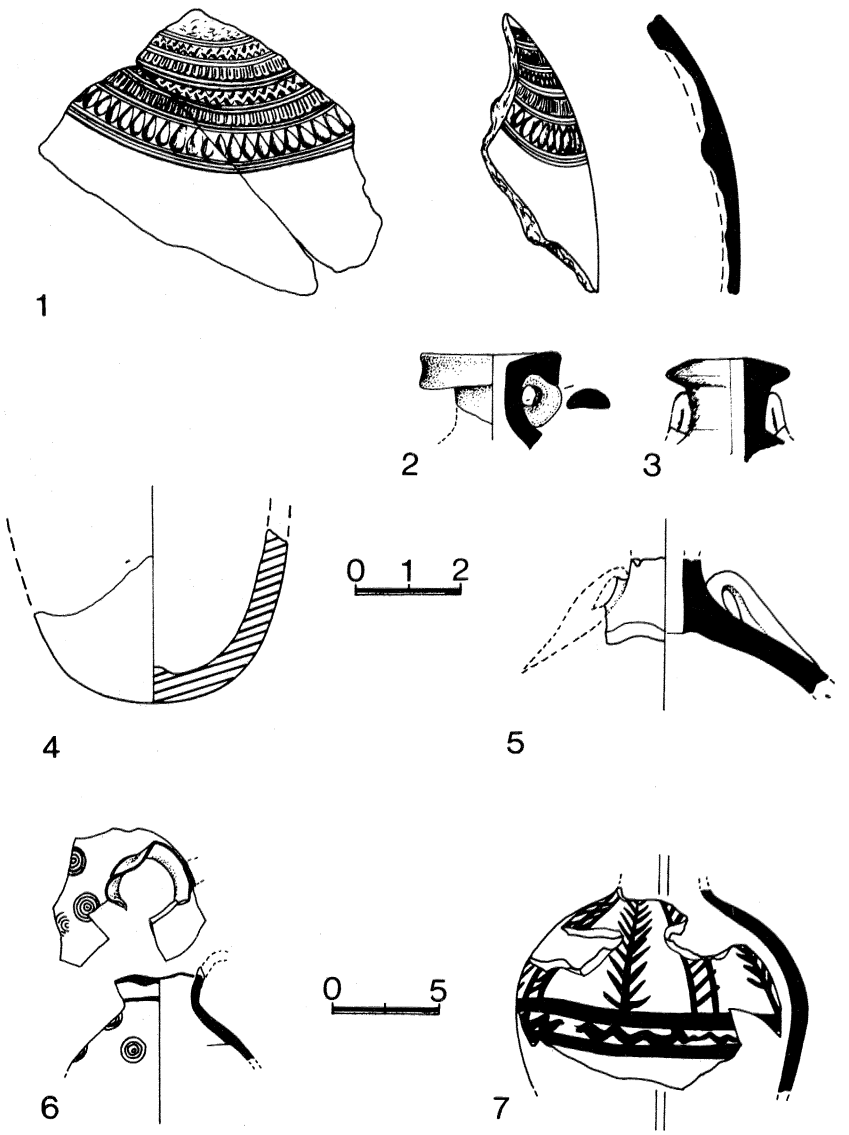


FIGURE 25

1. *6486* (T. 5) Flask (fragt.), faience.
2. *10189* (T. 91) Juglet (fragt.), very finely levigated clay, fired creamy buff, hard baked. Remains of dark grey slip.
3. *3647* (T. 21/2) Flask (fragt.), levigated clay, fired buff, hard baked, smooth surface.
4. *2986* (T. 21/s) Bottle (fragt.), alabaster.
5. *6386* (BEA. 10B) Flask (fragt.), very finely levigated clay with minute black inclusions, fired light red-brown, hard baked.
6. *5378* (T. 82) Juglet (fragt.), very finely levigated powdery clay, fired buff, hard baked, smooth surface. Painted matte dark grey.
7. *5383* (T. 94) Juglet (fragt.), very finely levigated clay with minute white inclusions, fired buff, very hard baked. Painted buff *brown to grey.*

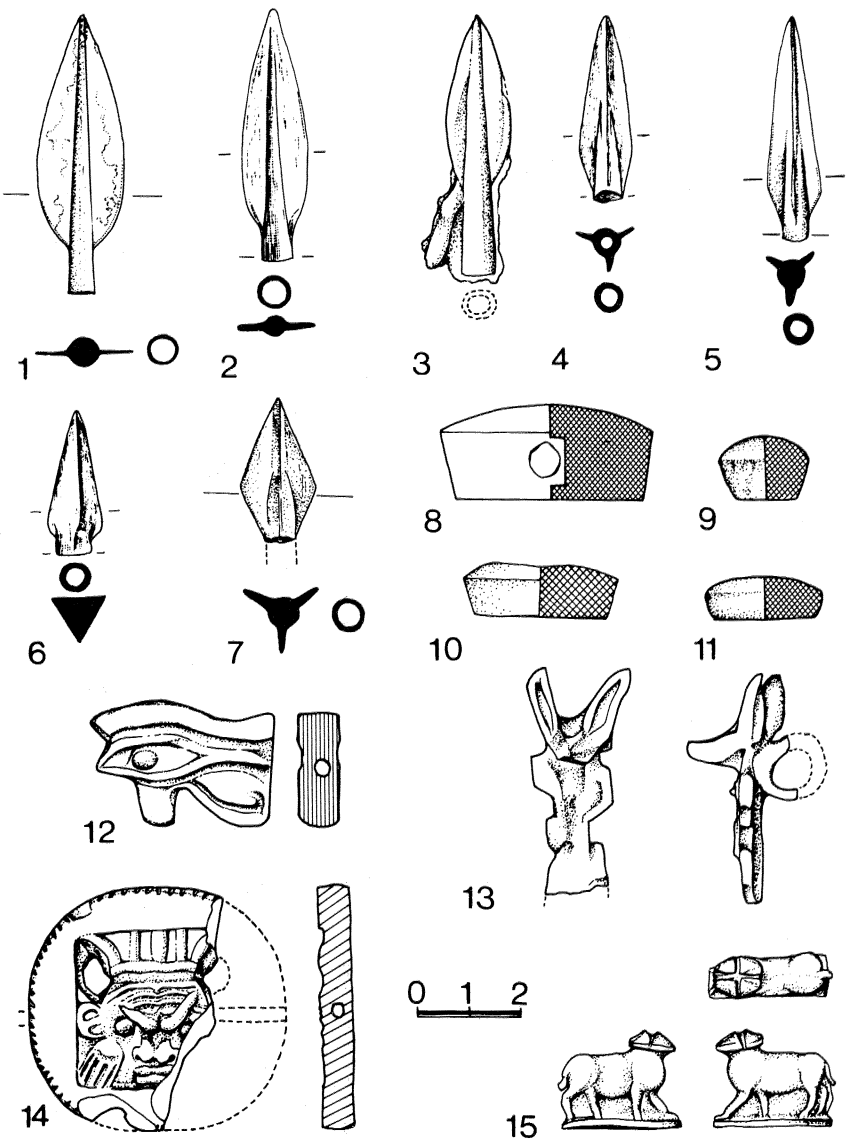
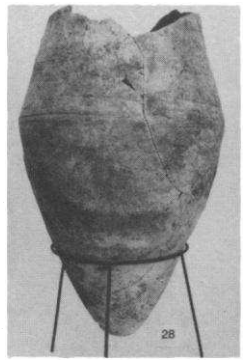
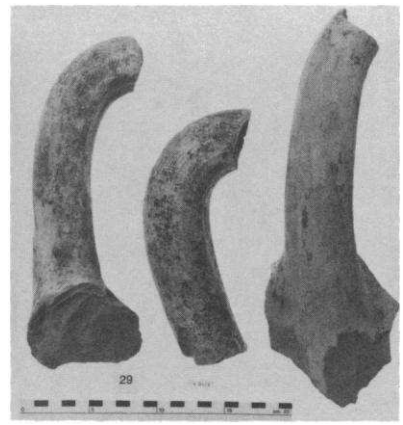


FIGURE 26

1. *3457* (T. 21/s) Arrowhead, bronze.
2. *10156* (T. 21/s) Arrowhead, bronze.
3. *10058* (T. 21/s) Arrowhead, bronze.
4. *10158* (T. 21/s) Arrowhead, bronze.
5. *10157* (T. 21/s) Arrowhead, bronze.
6. *10160* (T. 21/s) Arrowhead, bronze.
7. *10067* (T. 21/s) Arrowhead, bronze.
8. *7367* (T. 21/s) Weight, bronze.
9. *7370* (T. 21/s) Weight, bronze.
10. *7371* (T. 21/s) Weight, bronze.
11. *7368* (T. 21/s) Weight, bronze.
12. *744* (T. 21/2) Amulet, green faience.
13. *7380* (T. 21/s) Amulet, bronze.
14. *7372* (T. 21/s) Amulet, yellow and black faience.
15. *7374* (T. 21/N) Amulet, blue faience.





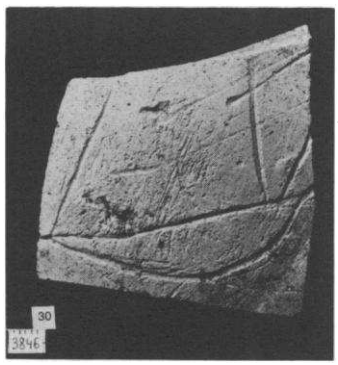


Fig. 27. Torpedo-shaped storage jar; **Fig. 28.** Basket-handled storage jar; **Fig. 29.** Handles of basket-handled jars; **Fig. 30.** Sherd of torpedo-shaped jar incised with ship, all Site T. 21.

Several other pottery types, i.e., bowls with spiral burnishing and jars with low rims and narrow bases, as well as decanters, are evidently of Palestinian origin (fig. 21:4, 6, 8; compare with Amiran 1970: pl. 82:7, 89:3, photo 219).

Excavations in different parts of the fort and in areas immediately outside yielded large quantities of complete and fragmentary Greek wine amphorae of known Chian, Samian, Lesbian, and Corinthian types, as well as a few specimens of what seem to be Athenian jars. This assemblage deserves some detailed treatment because of its chronological importance and its contribution to the understanding of the material culture in our fortress site.

The most numerous and readily recognizable pottery types in our collection are those of Chian manufacture. On the basis of shape and finish, the Chian pottery ensemble from T. 21 falls into three groups. Type A is characterized by an ovoid body curving smoothly into a tall, straight-sided neck with moderately thickened lip and short, hollow foot. The body is covered, as a rule, with thick white to creamy matt slip and is painted over with broad red to black bands and circles (figs. 22:1, 4; 32). Type B has a slightly shorter neck and somewhat splayed foot or toe. These vessels are either coated with a thin, dull slip or are unslipped altogether with a band decoration applied directly onto the smooth surface (figs. 24:1; 33–34). Amphorae of Type C are identified by a more pronounced spindle-shaped body curving almost sharply into a shorter and slightly bulging neck. The body narrows gradually into a splayed foot and with a band decoration applied to the unslipped surface (fig. 35).

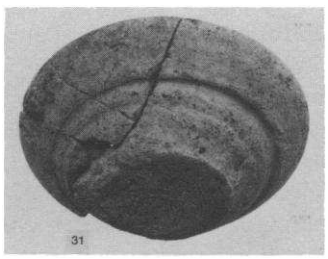
The classification of the Chian wine amphorae from T. 21 is of utmost importance for accurately dating the occupation in the fortress. Of the east Greek jars, the Chian class is perhaps best considered in the literature. Judging from the closely dated deposits where Chian amphorae were recorded, e.g., Kofina Ridge and Emporio at Chios, Corinth, the North Slope of the Acropolis and the Athenian Agora, Tigani, Thasos, Thera, Histria, Tocra, Old Smyrna, Salamis, Sukas, Mesad Hashavyahu, Naukratis, and Daphnae, the history of our group should be placed within the following framework. Type A should be assigned to the beginning of the 6th century B.C., with a possible extension into the late 7th century B.C. The early types are characterized by the ovoid body, tall straight neck, and thick, matt-slipped application. The more pronounced, spindle-shaped jar, our Type B, developed in the early 6th century. Some time in the first half of the 6th century amphorae were no longer slipped, and band decoration was applied directly onto the body. The development of the diagnostic swelling neck took place in the second half of the 6th century B.C., while toward the end of the century the pronounced bulging neck became the hallmark of the

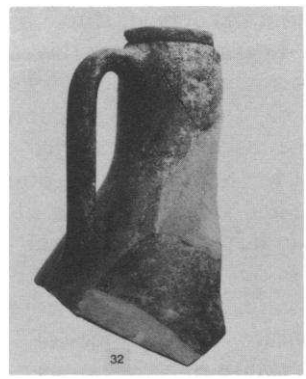
Chian amphora (Anderson, Hood, and Boardman 1954: 169; Boardman and Hayes 1966: 137; Boardman 1967: 178–79; Cook 1958–9: 137–40; Ploug 1973: 67, 71, 97). The Chian material from T. 21 can be accordingly affixed between the beginning of the 6th century, or possibly the late 7th century, and the second half of the 6th century B.C. The early type, A, is still well enough represented in our collection to allow a very early 6th century date, around 600 B.C. or slighly earlier. On the other hand, the neck of Type C bulges only slightly. Moreover, the number of specimens is too small to suggest a late 6th century date for the end of the T. 21 series. Thus the lower terminus for the Chian collection should be placed not much later than the mid-6th century B.C., possibly in the third quarter of that century at the latest.

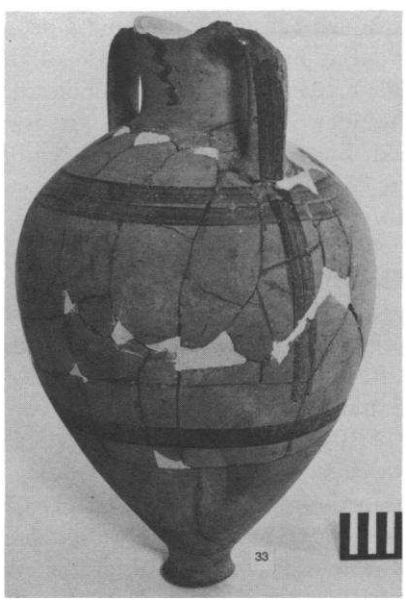
The comparable collections of Chian pottery at Naukratis and Daphnae are surprisingly similar to that of T. 21. The one major difference is the abundance of painted Chian pottery at Naukratis compared with its total absence at Daphnae and T. 21. Boardman, who studied the Naukratis collection in great detail, concluded that "pottery of the Chian type was a commonplace on the site since its beginning as a Greek settlement and down to the middle of the 6th century" (Boardman 1956: 55–62; Austin 1970: 25). Petrie's, and later Hogarth's, excavations at Naukratis produced masses of painted Chian pottery, some of which was perhaps produced on the site by Chian potters (Boardman 1980: 123–24). Stylistic considerations, coupled with a comparative study, strongly advocate a late 7th to mid-6th century B.C. date for the Chian pottery from Naukratis and a sharp falling off soon after (Cook 1937: 228; Boardman 1956: 55–62). The absence of painted Chian ceramics at T. 21 and neighboring Daphnae was perhaps because these sites served as frontier garrisons, whereas Naukratis was a Greek settlement and trading colony. Alternatively, this may have been merely a chance of discovery, as most of the Greek pottery came from only two deposits at Daphnae (Chambers 18, 29; Petrie 1888: pl. 44), and the excavations of Site T. 21 barely scratched the surface of the site. In any case, the assemblage of Chian wine amphorae from Naukratis and Daphnae compares nicely with that from T. 21.[13] One early amphora from Daphnae was reused and sealed with cartouches of King Amasis (Petrie 1888: pl. 36:5). A welcome confirmation for a mid-6th century date for Type C, turned up in Chamber 19 of the brick structural platform at Daphnae (Petrie 1888: 65 compared with Petrie 1886: pl. 16:7).

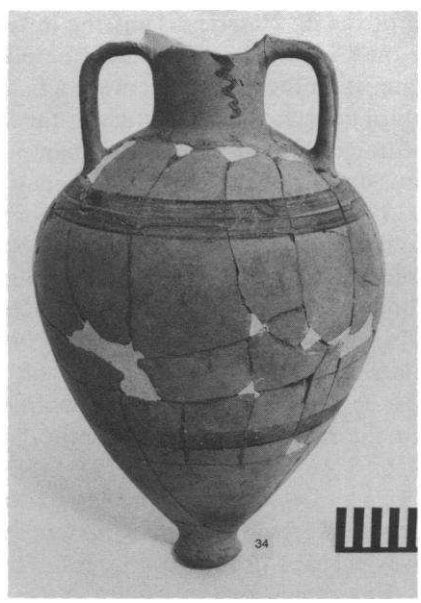
The second large group of Greek amphorae from T. 21 is of Samian manufacture. The typology and distribution of this class was studied in detail by Virginia Grace (1971: 52–95). The Samian amphora type from T. 21 is characterized by an ovoid body or, more often, by a body narrowing from a high, broad shoulder to a well developed, splayed toe. The neck is relatively short, set at a sharp angle with the shoulder, and completed with a torus or collar rim. Often the neck is grooved below the rim, and a pronounced plastic ridge is applied at the base of the neck. The handle arches out from close under the mouth to the shoulder. Jars of this class are always distinguished by a micaceous and reddish clay (figs. 22:6; 23:5; 36–38).

Our jars are paralleled in the cemetery of Tigani, Samos, where many specimens were recorded in tombs side by side with early Chian containers.[14] Well deposits in the Athenian Agora yielded similar jars that date to the early 6th century B.C.[15] Parallels from Corinth and Tarsus are assigned to early and mid-6th century B.C., respectively (Brann 1956: fig. 5:104; Goldman 1963: fig. 91:1280; 108, 150:1626). A large store of comparable jars was deposited in Cypro-Archaic I–II tombs at Marion and Salamis in Cyprus. These were classified by Gjerstad (1948: Types 6–7 of WP V Ware) as local White Plain ware and by Karageorghis (1967: 72–73) as "plain ware of Rhodian amphora." Similar amphorae were recorded at Tell Sukas in Syria together with early Chian jars and were assigned to the first half of the 6th century B.C. (Ploug 1973: 84–85, 89, Nos. 387, 391). The earliest fixed terminus in the late 7th century B.C. for the Samian amphorae from T. 21 is provided by the important garrison fort of Mesad Hashavyahu, between Ashdod and Jaffa (Naveh 1962: fig. 6:1–6). At this site Samian wine jars were associated with numerous east Greek sherds, especially of the Wild Goat class, and were firmly dated by Hebrew ostraca to the last quarter of the 7th century B.C. (Naveh 1962: 97–99). On Egyptian soil Samian amphora types were recovered in the Temple of Seti I at Qurneh-Thebes, where the place had been resettled, possibly by Greek mercenaries, during the XXVI Dynasty (Petrie and Walker 1909b: 16, pl. 54:849–850 = U.C. 16391), as well as the site of Heliopolis, which was abandoned at









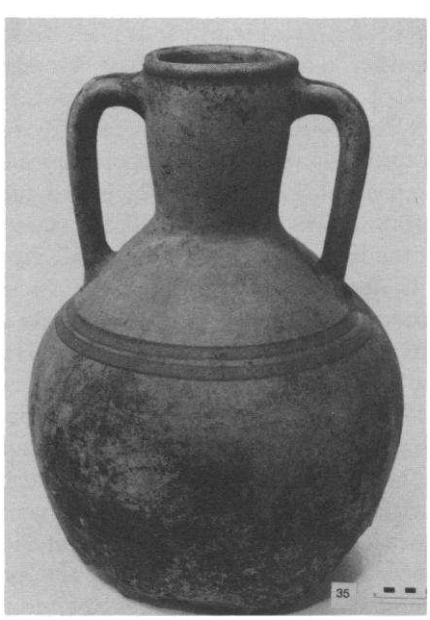


Fig. 31. Thick walled bowl; **Fig. 32.** Upper part of Chian wine amphora, Type A; **Figs. 33, 34.** Chian wine amphora, Type B; **Fig. 35.** Chian wine amphora, Type C, all Site T. 21.

the end of the dynasty (Petrie and Mackay 1915: pl. 11:44 = U.C. 19248). A few jars were registered as far afield as the cemetery of Nuri, near the fourth cataract in the Sudan, the burial place of the royal family of Kush during the 7th–6th century B.C. (Dunham 1955: 195, figs. 42, Nos. 17/1/685, 718, 352, 149, 17/1/26). Naukratis produced large quantities of painted Samian pottery and many amphorae were recorded at this site as well as at Daphnae (Petrie 1886: pl. 16:2; 1888: pls. 33:1, 10; 34:39 and many examples in the British Museum and University College, London). Daphnae also yielded a miniature copy in buff ware as well as a full size one made of Nile clay (Unpublished BM 20853, 22333).

The amphorae attributed to Lesbos are identifiable by the characteristic gray clay, as well as a hallmark—a small tail ("rat's tail") of clay hanging down the handle on the shoulder of the jar (Grace 1961: fig. 51). The examples from T. 21 have a high shoulder narrowing sharply into an almost tubular foot with a stump base. The neck is relatively narrow and long with a heavy round-sectioned handle ending with "rat tails." Some fragments belong to the variant amphora type with a short, wide neck and wider foot (figs. 23:6; 39–40). Comparative material from Corinth, the Athenian Agora, and Tocra suggests that the former type with a narrow shoulder belongs to the second half of the 6th century B.C., while the jar type with a wider and shorter neck should be assigned to the late 7th or early 6th century B.C. (Boulter 1953: 102–4; Boardman and Hayes 1966: pl. 90:1416; Brann 1961: 346, pls. 86, 89; 1962: pl. 13:229). The fortress of Mesad Hashavyahu, well placed in the late 7th century B.C., is represented by the early type only (Naveh 1962: fig. 6:4). Some half-dozen jars turned up in the storerooms of Seti I's temple at Qurneh-Thebes alongside Samian jars; other specimens came from Heliopolis, Naukratis, and Daphnae (Petrie 1886: pl. 16:6; 1888: pl. 33:12; Petrie and Walker 1909b: pl. 55:851–56; Petrie and Mackay 1915: pl. 11:43).

Only two fragments of Corinthian pottery were recorded at T. 21 (fig. 22:5). The Corinthian amphora is identified by a greenish-buff clay and a distinctively articulated, almost cylindrical, neck with flat, overhanging rim. The neck fragment from T. 21 is paralleled in a number of assemblages to which a date in the second half of the 6th century was given, e.g., Corinth, Tocra, etc. (Brann 1956: pl. 58:59; Campbell 1938: fig. 27:202; Boardman and Hayes 1966: fig. 67:1422; 1973: fig. 25:2255; Amyx and Lawrence 1975: pls. 79: An. 304; 110: An. 304). This class of jar appears not to be represented at Naukratis or Daphnae, and only one example is found in the published record of Egyptian sites, i.e., the storerooms of Seti I's temple at Qurneh-Thebes (Petrie and Walker 1909b: pl. 55:857 = U.C. 16392). A few sherds from T. 21 belong to the Attic class of amphora, though the clay is rather similar to that of east Greek manufacture (figs. 22:2–3; 41). The echinoid foot and torus neck with brown to black glazed finish are traits typical of the Attic SOS amphora of the 6th century B.C.[16] Similar shapes from sites outside Greece, e.g., Tocra in Cyrenaica, Tell Sukas in Syria, and perhaps also Salamis in Cyprus, were referred to as "eastern" or "Samian" varieties of the Attic SOS class.[17] The few examples from Naukratis and Daphnae are identical in shape and fabric to the one from T. 21.[18]

Site T. 21 yielded a number of pottery types that were, no doubt, produced locally after Greek and possibly Cypriot models. Fig. 23:2 is a small cup with horizontal handles, made of dark gray clay and finished with concentric circles in matt-buff paint inside and outside (also fig. 42). This example was modeled after the classic Ionian cup or east Greek skyphos, of which large numbers were recorded in various sites, including two sites in the neighborhood of T. 21 (see below and figs. 23:4; 43). Similar imitations of Ionian prototypes were unearthed at Tell Sukas, Salamis, Tocra, and in the Temple of Apollo at Naukratis.[19] The collection of local copies also included a cooking pot made of Nile ware after a Greek shape, as well as fragments of jars modeled locally after Lesbos and Samos amphora types (Not illustrated; see Naveh 1962: fig. 6:7–8; Young 1939: figs. 25, 136, Nos. X18, C156). Imitations in actual and miniature size of Lesbos and Samos amphorae have similarly been recorded at Daphnae (Unpublished, BM 36031, 20853, 22333). Boardman has already noted that a great number of the Naukratis painted sherds did not look Greek and that a local Greek factory that produced decorated situlae operated at Tell Defenneh (Boardman 1956: 55–56, 62; 1980: 133–34; see also Petrie 1888: 48). To this another observation may be added: the occurrence, among the unpublished materials from Daphnae and Naukratis, of locally made pottery vessels shaped after Greek types and

inscribed with Greek letters before firing in the kiln. This evidence readily suggests that Greek (Chian?) potters' workshops were established in the Delta settlements and garrison forts during the 6th century B.C.

We have noted above that the surface of Site T. 21, including the interior of the walled area of the fort, was scattered with large amounts of copper ore and slag, as well as with drops of copper and scraps. These finds, coupled with fragments of crucibles and pot bellows and large clay installations, point clearly to a local workshop producing copper and bronze tools and weapons.[20] Excavations have indeed yielded numerous bronze arrowheads, weights, amulets, etc., of types that are best paralleled at Daphnae and Naukratis (figs. 26:1–15; 44–47).[21] At the latter site Petrie uncovered conclusive evidence for an active metal (copper, bronze, and iron) industry that was conducted locally, presumably by Greek craftsmen. Materials included piles of iron and copper slag; scrap; drops of copper; large crucibles (still containing copper slag); iron bowls with melted copper, charcoal, and some yellowish powder (flux?); and hundreds of arrowheads, spearheads, armor scales, as well as a very large collection of bronze and copper weights.[22] The garrison fort of Meṣad Hashavyahu, where Greek mercenaries were stationed in the late 7th century B.C., is likewise represented by a workshop that produced iron implements (Naveh 1962: 93, 99, pl. 12:B–D). The data concerning metallurgic activity by Greek craftsmen in the Delta settlements and forts tallies nicely with the very sophisticated metal technology exhibited in Greek centers of the Archaic period, such as Samos and Olympia. Finally, excavations yielded Egyptian faience Bes and *Uzat* amulets (figs. 26:12, 14–15; 48–49), and the lower part of a clay statuette (fig. 50).

In summary, this comparative study has demonstrated the close affinities between Site T. 21 and other Egyptian sites of the Saite period in the Nile delta region, particularly Daphnae and Naukratis, where Greeks and other foreign groups are known to have settled during this period. These affinities are best manifested in the following aspects:

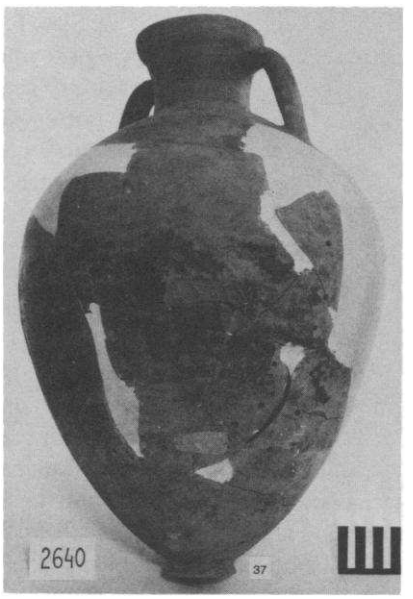
1. *Military architecture.* Here we note the building of enormous fortified enclosures on the eastern frontier of the Delta, e.g., T. 21, Daphnae, and possibly Tell Maskhuta and Naukratis on the Canopic arm of the Nile.

2. *Pottery.* The abundance of east Mediterranean or possibly Phoenician pottery reflects the free traffic to and from the Delta region undertaken by Phoenician merchants from the Levantine coast. Typological affinities with the Iron Age III (7th–6th century B.C.) ceramic inventory of southern Palestine may likewise indicate some direct contacts with Judean centers. The impressive collection of east Greek wine and oil amphorae of Chian, Samian and, to a lesser degree, Lesbian and Corinthian manufacture provides accurate dates for the occupation of the fort. In addition, the Greek materials from Site T. 21 imply that the fort was manned, at least in part, by Greek mercenaries. The similarity in typology and distribution of east Greek transport amphorae in the three sites under discussion is indeed remarkable; it points clearly to the important military and economic role the Greeks played in the Delta region.

3. *Metallurgic industry.* The three sites produced ample evidence for an active metalworking industry, presumably operated by Greek craftsmen.

4. *Date.* The assemblage of materials from T. 21, particularly the closely dated east Greek pottery and its parallels from Daphnae and Naukratis, points to a late 7th century B.C. date for the occupation of the fortress and its subsequent destruction by fire in the late 6th century B.C., apparently as a direct result of the invasion of Egypt by Cambyses in 525 B.C. The evidence from Daphnae and Naukratis points to precisely the same range for the occupation and destruction or abandonment of these sites, implying a similar chronological framework for all sites under review.

In the course of the survey, the Ben-Gurion University expedition has recorded in northern Sinai some 45 sites occupied exclusively or in part during the Saite period. Of these, about 20 were encountered in the eastern Delta, between Rumani and the Suez Canal; the remaining sites were distributed along the ancient highway, south of the Bardawil lagoon and as far as Wâdī el-Arish (the "Brook of Egypt"). The nature of the remains indicates that, with the exception of a few forts and cemeteries, the sites were temporary encampments and stations. Surface finds included remains of cooking and baking installations, stone tools and pottery vessels, alabaster, and faience and metal objects of classes similar to the ones from Site T. 21 (fig. 51 and catalogue of finds opposite figs. 20–26, Sites T. 5, T. 73, T. 82, T. 91, T. 94). Concerning the pottery collection, the proportion



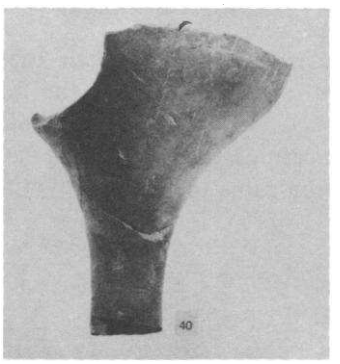


Fig. 36. Upper part of Samian wine amphora; **Fig. 37.** Samian wine amphora (note holes for ancient mending); **Fig. 38.** Samian wine amphora; **Fig. 39.** Upper part of Lesbian wine amphora; **Fig. 40.** Lower part of Lesbian wine amphora; **Fig. 41.** Neck of Attic wine amphora; **Fig. 42.** Local copy of East Greek skyphos, all Site T. 21.

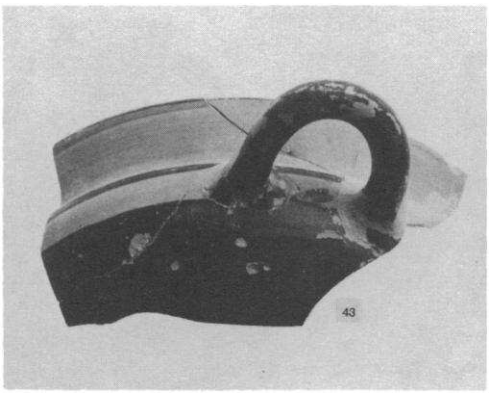


Fig. 43. East Greek skyphos, Site T. 94.

of Phoenician and Greek types is actually identical with that of T. 21, suggesting similarly a foreign element in the population of the sites in northern Sinai. The distribution of sites—forts, stations, and campsites—along the ancient Egyptian road implies that the "Ways-of-Horus" between the eastern Nile Delta and southern Palestine had been controlled by the Pharaohs of the Saite dynasty.[23]

An important piece of evidence concerning the settlement of Greeks in the eastern Delta came to light in Site T. 73 some 500 m east of T. 21. The site was thoroughly plundered in antiquity, leaving behind scattered and broken Egyptian and Greek pottery containers interspersed with burned human bones and ashes. In a few sections that escaped destruction there were recorded groups of jars set in the sand and associated with ash deposits. The cremated remains were found deposited in large Egyptian jars topped with lids and accompanied by Greek amphorae as burial gifts (figs. 52–53). This is the first time that cremation burials have been found on Egyptian soil in a clear Saite context.[24] The association of Greek pottery with cremation burials and the close proximity of the cemetery to Site T. 21 makes it most likely that the new burial custom was introduced to the eastern Delta by the Greek population that occupied the garrison fort.[25]

IDENTIFICATION OF SITE T. 21

When the above data—the location of Site T. 21, the military character of the architecture, the nature of the associated finds, and the chronological framework—are evaluated against the biblical, Egyptian, and Greek epigraphic sources, it

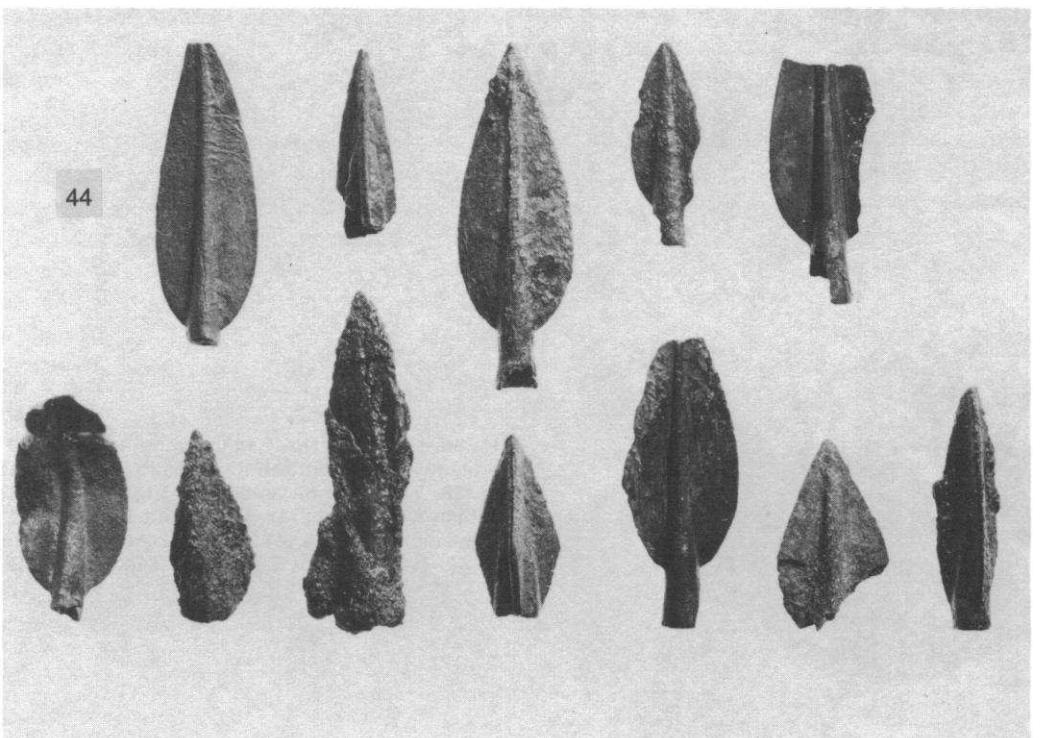
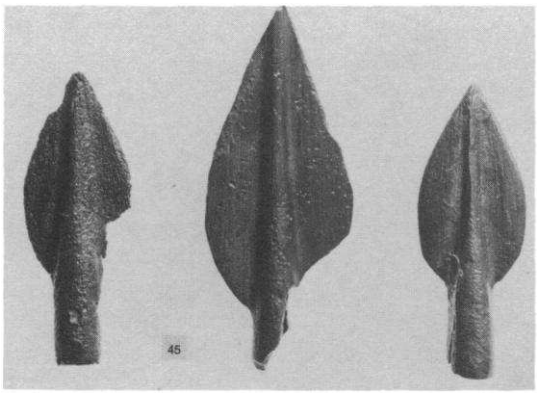


Fig. 44. Bronze arrowheads, Site T. 21.



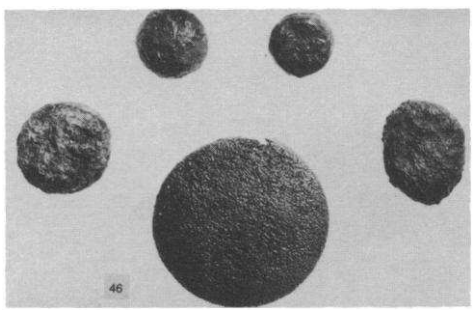


Fig. 45. Bronze arrowheads; **Fig. 46.** Bronze weights, Site T. 21.

becomes plausible that T. 21 should be identified as the garrison fort of Migdol where Jewish refugees, including mercenaries, found asylum during the Babylonian invasion of Palestine.

The name Migdol is Semitic and means literally "tower," "fortress," or even military camp. The word appears in Egyptian as a direct borrowing, both as a common noun meaning "fortress," and also as a proper name of various settlements and stations in the Nile Delta (Gardiner 1920: 107–9 for bibliography). In the ancient onomasticon of Israel the name is used in precisely the same way, i.e., *Migdol* and *Migdal-El* or *Migdal-Gad* namely: "fortress-tower" or "tower-fort" of El and Gad, respectively (Josh 15:37; 19:38). Concerning the location of Egyptian Migdol, the name appears in Egyptian documents as early as the 18th Dynasty as a place name with more than one locality. Thus, for instance, the Cairo Demotic Papyrus 31169 lists at least four places called Migdol in the Delta. Accordingly, it is doubtful that the Migdol of Seti I on the Karnak reliefs and the one in Papyrus Anastasi V:5 were in the same locality as the Migdol of the Amarna tablets (EA 234:24) or the Medinet Habu reliefs (Gardiner 1920: 107–11; Cazelles 1955: 343–50; Mallon 1921: 161–70; Albright 1924: 6).

Migdol is mentioned in the Hebrew Bible in two distinct contexts: (a) as a place name on the route of the Exodus; and (b) by the prophets Jeremiah and Ezekiel as a residence of Jewish refugees and mercenaries in the Egyptian Delta (Exod 14:2; Jer 44:1; 46:4; Ezek 29:10; 30:6; see also Lambdin 1962: 377; Groll 1962: 365–66). The question whether these two places are to be identified with one another or equated with the Migdol of the numerous Egyptian sources is relevant to the present discussion, although not altogether crucial, as the chronological horizon of T. 21 has nothing to do with the Exodus episode or with the Egyptian New Kingdom period. On the other hand, the information, however controversial, detailed by Jeremiah on the Jewish settlements in Egypt is of great importance and may unquestionably be taken as a first-hand record by an author who resided for some time in Egypt, pre-

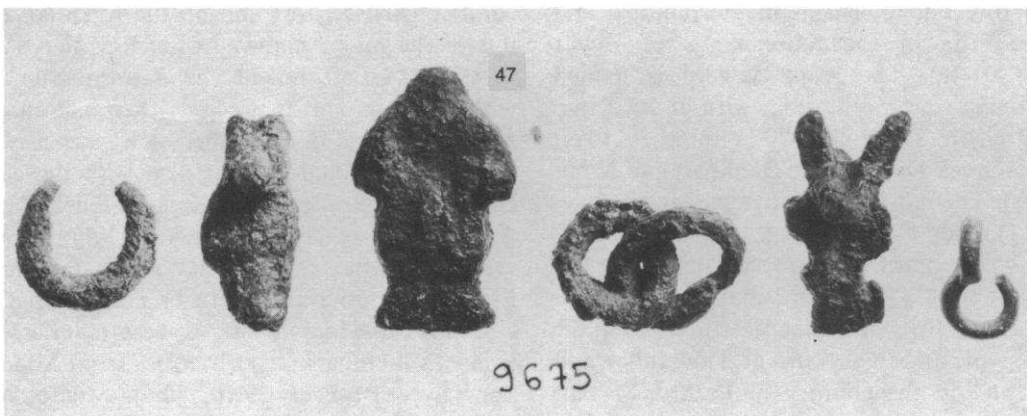
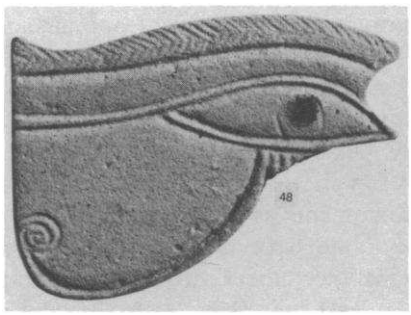
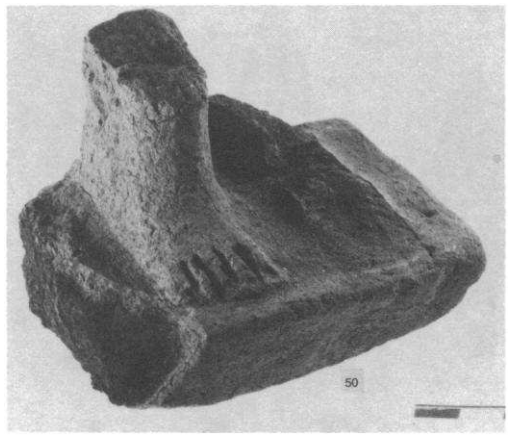


Fig. 47. Bronze rings and amulets, Site T. 21.





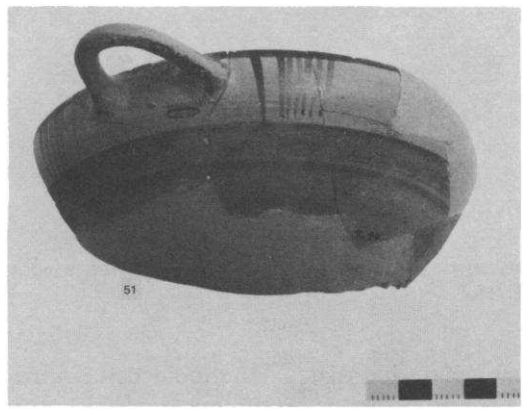


Fig. 48. Egyptian faience *Uzat* amulet; **Fig. 49.** Egyptian Bes amulet; **Fig. 50.** Lower part of Egyptian statuette, all Site T. 21. **Fig. 51.** East Greek cup, Site T. 94.

cisely during the period the fort was occupied.

Jeremiah's intimate acquaintance with the Egyptian Delta is reflected in a number of references concerning the location of Jewish garrisons and their direct involvement in the political and military affairs of the Saite kings of Egypt (Jeremiah 43–46). The place Migdol is named twice in the same breath along with at least two other garrison settlements, Tahpanhes (Tell Defenneh, Greek Daphnae or Daphnai) and Noph (Memphis). The most informative passage in Jeremiah (44:1) reads: "הדבר אשר היה אל־ירמיהו אל כל־היהודים הישבים בארץ מצרים הישבים במגדל ובתחפנחס ובנף ובארץ פתרוס" ("The word that came to Jeremiah for all the Jews (or Judeans) who dwelt in the land of Egypt, at Migdol and at Tahpanhes and at Noph and in the country of Pathros.") This passage actually enumerates the series of colonies or garrison settlements in geographical order from northeast to south, with Migdol the most easterly location, and the Land of Pathros (Nubia?) at the southernmost end of Egypt. In chapter 46 Migdol is again listed first, though only with Tahpanhes and Noph. Migdol is, accordingly, the easternmost frontier garrison fort and on the Egyptian terminus of the major highway—the Egyptian "Ways-of-Horus"—that linked the eastern Nile Delta with Canaan. This is precisely the position of the Migdol fortress in a number of Egyptian records of the New Kingdom that deal with the eastern border of Egypt, e.g., the Karnak relief, Papyrus Anastasi V, etc. The location of Migdol on the very edge of the eastern Delta, and in fact the first Egyptian frontier station to be encountered after crossing the Sinai desert, is best manifested by Ezekiel's landmark, ממגדל סונה ("from Migdol to Son [Syene]"; Ezek 29:10; 30:6). Migdol in the north (or northeast) of Egypt is contrasted with Syene (Aswan, opposite the island of Elephantine on the first cataract) in the extreme south.

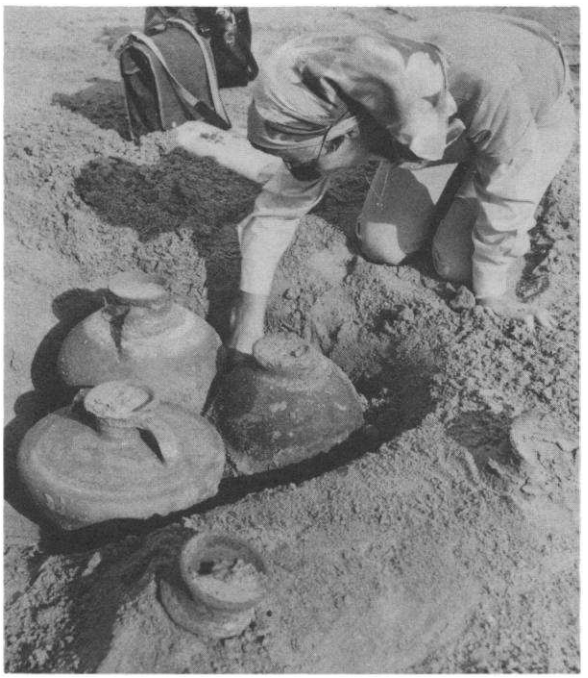


Fig. 52. Cremation burial, Site T. 73. Note two East Greek wine amphorae and Egyptian jar with burnt bones.

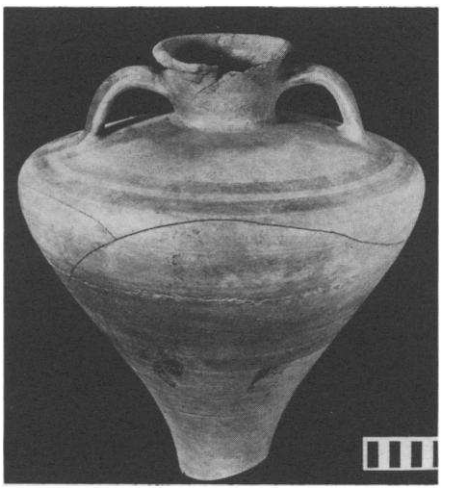


Fig. 53. Samian wine amphora from cremation burial, Site T. 73.

Another, although somewhat later, confirmation for Ezekiel's landmark is found in an Aramaic papyrus, probably from Elephantine, of the 5th century B.C. now in the Museo Civico of Padova (Bresciani 1960: 11–24; Fitzmyer 1962: 15–24; Naveh 1965: 183–97; Porten 1968: 42). The "Migdol Papyrus," as it should be named, is a letter addressed to a soldier from his father in the garrison of Migdol. From the formula of salutation, "greetings to the Temple of YHW in Elephantine," it is evident that the letter was sent directly to Elephantine to be collected there by the addressee upon arrival of his unit from a long journey between Migdol and Elephantine. The importance of Migdol as a military headquarters and as the seat of the governor or of high officials is deduced from the following passage: "since the day when you left (Lower) Egypt (Miṣrayim) salary has not been given to us. And when we lodged a complaint with the governor (*phwt*ˀ) about your salary here in Migdol we were told thus: 'About this (matter) complain to the scribe and it will be given to you'" (Translation after Porten 1968: 42). The journey of this army convoy, apparently escorting trade and supply caravans from one end of Egypt to the other, expresses most vividly Ezekiel's geographical landmark "from Migdol to Syene," i.e., to the border of Kush.

An important historical reference to Migdol, attesting to its location on the very edge of the Egyptian Delta, is recorded in Herodotus' Book II, 159. This account describes Pharaoh Necho's military campaign to Syria in 609 B.C. as part of the Egypto-Assyrian axis against the rising power of Babylon. The description of the Palestinian episode of this campaign, which resulted in the death of Josiah, king of Judah, when he attempted to block the advancing Egyptian army near Megiddo, is supplemented in some detail in the books of Kings and Chronicles (2 Kgs 23:29–30; 2 Chr 35:20–24). Pharaoh Necho, according to Herodotus, "with his land army met and defeated the Syrians at Magdolos (Μάγδωλον), taking the great Syrian city of Cadytis." Some scholars have suggested that the two accounts—that of Herodotus and the biblical one—are actually complementary to each other and have argued that the name Megiddo was corrupted by Herodotus to Magdolus and that the battlefield was at or near Megiddo. Alternatively, biblical Megiddo should read Migdol instead and be identified somewhere in southern Palestine (Binns 1917: 40; Yadin 1963: 305–6). Equating, however, Herodotus' Magdolus-Magdolos with Migdol in Egypt—the first leg of Necho's journey across the Sinai desert—places his campaign in better chronological context. Accordingly, Migdol, on the eastern frontier of Egypt, and Cadytis-Gaza, at the southern gate of Palestine, mark both ends of the age-old route between the Egyptian Delta and southern Canaan.[26]

A reference to Migdol in the Assyrian annals is perhaps to be found in Esarhaddon's chronicle on the second campaign to Egypt in 671 B.C. (Borger 1956: 112; Luckenbill 1927: para. 557–59; Oppenheim 1966: 292). According to the annalistic text, Esarhaddon arrived first at the town of Rapihu in "the region adjacent to the Brook of Egypt,"[27] and then, with the logistic assistance of the "kings of Arabia," he proceeded along the northern Sinai highway to the Egyptian Delta. The fragmentary portion of the text mentions the "town of Mag-[da]li" before the conquest of the Delta town of Ishhupri and the march into the royal city of Memphis. Here, as in the account of Necho's campaign, Magdali-Migdol marks the Egyptian terminus of the ancient highway in northern Sinai and should be identified as the border garrison on the eastern Delta.

The sources just quoted advocate the location of Migdol on the eastern frontier of the Nile Delta, serving as the easternmost outpost for control of the passage to Egypt. Because Migdol was a garrison fort of some importance located to the east of Tahpanhes (Daphnae), a large fortress between the latter and the Eastern Frontier Canal on the very edge of the eastern Delta should be sought. Systematic exploration in this region revealed that only Site T. 21 met all the requirements for the identification with Migdol of the Saite or Jeremiah's period. It was the only fortified complex of such magnitude that the expedition encountered east of Tell Defenneh and in close proximity to the Eastern Frontier Canal. Its architecture was closely paralleled by that of Daphnae, and the associated finds suggested that it was, likewise, occupied during the Saite period, between the late 7th and late 6th century B.C., by a sizeable foreign element, likely of Greek, Phoenician, and Palestinian or Judean mercenaries. Finally, the evidence for a wholesale destruction by fire implied that occupation of the fort ceased, like that of Daphnae, in the late 6th century B.C., presumably as a direct result of Cambyses' invasion into Egypt in 525 B.C.

The name Migdol appears, as noted, in the Greek form, Magdolos, in Herodotus' account of Necho's campaign to Syria, and indeed the same form is given by the LXX for Jeremiah's Migdol. There is little doubt, therefore, that the latter should be equated with Magdolo or Magdolos of the later Greek and Roman sources that deal with the east Delta region. The most informative record is the Antonine Itinerary, in which Magdolo is located roughly midway between Pelusium and Sile. Judging from the statement Μαγδωλὸς Πολις Αίγυπτον, quoted by Stephen of Byzantium from Herakleus, Magdolo was a place of some importance during the Classical period (Gardiner 1920: 107–9; Ball 1942: 139, 142, 147, 150, 172).

The equation of Magdolo, and in turn biblical Migdol, with modern Tell el-Her, some 10 km south of Tell Farama (ancient Pelusium), 15 km northeast of Tell Abu-Seifeh (Classical Sile), and one km south of Site T. 21, has become a primary datum for Egyptologists and Bible students, as a glance at almost any biblical atlas or historical map of the region will demonstrate (Gardiner 1920: 108; Aharoni 1964: 48, 123; May 1962: 135). Tell el-Her is indeed the only site between Tell Farama and Tell Abu-Seifeh where a large city of the Classical period was recorded, thus making its identification with Classical Magdolo most plausible. Detailed surface exploration and excavations by the Ben-Gurion University Expedition at Tel el-Her confirm the observations made by Stephen of Byzantium. The site is some 400 dunams (100 acres) in size, including a lower city, an acropolis with at least three superimposed forts, and extensive cemeteries; a number of small "daughter" settlements are nearby. Excavations down to virgin soil in the lower city and citadel areas demonstrated that the earliest remains date to the Persian period in the 5th century B.C. The earliest fort was constructed directly on a spacious artificial platform, some 3–4 m high, composed of layers of black clay presumably taken from the embankment of the nearby disused Eastern Frontier Canal. The nucleus settlement on Tell el-Her was evidently the citadel that replaced that of Site T. 21 as a major frontier garrison in the eastern Delta. The city and fort flourished during the Hellenistic-Roman period until it, along with Farama and Sile, was gradually abandoned in the early Islamic period when the Pelusiac arm of the Nile evidentally silted up and became defunct.

The evidence gathered at Tell el-Her seems to confirm its equation with Magdolo of the Classical geographers and Migdol of the Padova "Migdol Papyrus." Yet the absence of any pre-Persian remains on the site rules out its identification with Migdol of the Saite period, much less with Migdol of the Exodus itinerary or the Egyptian New Kingdom documents. Thus it seems that

following the destruction by Cambyses of Saite Migdol at T. 21, the name Migdol, or its Greek version Magdolo, was transferred to the new fort on the nearby site of Tell el-Her.

The exact location of the Migdol of the Exodus is entangled in insufficient, and at times conflicting, information in the biblical narrative and contemporary Egyptian sources of the New Kingdom period, i.e., the equation of biblical Migdol with that of the Karnak reliefs, the occurrence of this name in Egyptian documents in more than one locality, etc. The choice, as a result, rests with the totally vexing problem of the Exodus itinerary rather than with any single detail (Lambdin 1962: 377; Groll 1962: 365–66). This question becomes even more acute when considering the new archaeological evidence for the identification of the key Egyptian frontier station of Thel (Classical Sile). Explorations at Tell Abu-Seifeh, on the eastern outskirts of Qantara, indicated that the occupation of this site goes back to the Persian or late Saite period at the earliest, and no New Kingdom remains whatsoever were recorded in any of the three trenches where virgin soil was reached. Therefore the location of New Kingdom Thel, like that of Migdol, remains hypothetical and must await further study. Assuming, however, that the Migdol of the Exodus itinerary was located on the border of the eastern Delta, at the Egyptian terminus of the military highway—"Ways-of-Horus" or biblical "Way of the Land of the Philistines"—the choice would fall on any of the dozen or so New Kingdom sites that were discovered by the North Sinai Expedition between the Suez Canal and the edge of Lake Sirbonis. One or two of these sites, in the vicinity of Tell el-Her, were large enough to accommodate a sizeable fortress of the type discovered by the expedition along the military highway (Oren 1980a: 26–33).

ETHNIC COMPOSITION OF MIGDOL

The evidence for the ethnic composition at Migdol is in line with the overall picture obtained from archaeological and literary sources concerning the foreign community in Egyptian soil during the Saite period. The proportion of Greek, Phoenician, and perhaps also Palestinian material from Site T. 21 suggests an important foreign element in the local population. These were presumably mercenary contingents stationed there to defend the eastern frontier against the expanding Assyrian and Babylonian empires, to prevent Bedouin tribes from filtering into Egypt from across the Sinai desert, and to protect the throne against local rival dynasts. From the reign of Psammetichus I (664–610 B.C.) mercenary troops—Greeks, Phoenicians, Jews, and others—were recruited in large numbers by the Egyptian monarchs and gradually became a vital component of Egypt's standing army. These contingents were followed by their families, tradesmen, craftsmen, and the like, so that by Amasis' reign (570–526 B.C.) Egypt's economy and military capacity became largely dependent on its foreign community. This situation resulted in the establishment of trading colonies, such as Naukratis, and large garrison forts along the eastern and southern borders of Egypt. The gigantic military establishments at Migdol and Tahpanhes, and perhaps also at Tell el-Maskhuta, along the more vulnerable eastern frontier evidently received the larger share of the foreign community. At the eastern gate of Egypt where land and naval routes to Asia met, foreigners settled, giving this region its international, cosmopolitan character. The busy trading posts along the Eastern Frontier Canal (biblical Shihor) were described vividly by Isaiah: "ובמים רבים זרע שחר קציר יאור תבואתה ותהי סחר גוים" ("Your revenue was the grain of Shihor, the harvest of the Nile; you were the merchant of the nations"; 23:3). The capacity of these garrison forts must have been enormous. At Daphnae, for instance, according to Petrie's estimation some 20,000 men were accommodated—a figure not altogether exaggerated considering Herodotus' report of a mercenary army of 30,000 Carians and Ionians under king Apries (Herod. II, 103; Petrie 1888: 49). In these settlements and forts the foreigners enjoyed the right to worship in their respective sanctuaries, as did the Greeks at Naukratis and the Jews at Elephantine. They could establish their own workshops and were encouraged to take an active part in local and international trade (Kienitz 1953: 32–48).

Biblical sources, coupled with Herodotus' casual remarks, as well as the archaeological record, provide a fairly comprehensive account of the history of the Jewish and Phoenician communities in Saite Egypt (Porten 1968: 3–27). The use of Jewish and Phoenician contingents in Egypt's standing army corresponds with the widespread use of tributary forces or mercenary troops during the

period under review. It was, however, primarily the lively interest that almost all of the Saitic monarchs took in the political affairs of Syria and Palestine that brought about the establishment of large and well organized communities of Jews and Phoenicians—mercenaries, merchants and artisans—in Egypt (Sauneron and Yoyotte 1952a: 200–7; 1952b: 131–36; Greenberg 1957: 304–9). Judahite kings, prophets, army commanders and Jewish nationalists who were exiled to or sought refuge in Egypt, i.e., Jehoahaz, Uriah son of Semaiah, Elnathan son of Achbor, Coniah son of Elnathan, and Jeremiah, were accompanied by many troops and/or fellow migrants and made a considerable addition to the existing Jewish community (2 Kgs 23:34; 2 Chr 86:4; Jer 24:8; 26:20; 43:5–13; 44:15–23). The Jewish population was increased particularly during the flight to Egypt of Johanan son of Kareh and the "remnant of Judah" after the assassination of the governor Gedaliah son of Ahikam (Jeremiah 41–43). During the reign of King Zedekiah the Jewish community was already of such size that Jeremiah referred to it in the same breath with the remnant community of Jerusalem and the rest of Judah (Jer 24:8). The reference in Jeremiah to Jewish settlements or garrison posts in Migdol, Tahpanhes-Daphnae, Noph-Memphis and the Land of Pathros, as well as Ezekiel's geographical landmark "from Migdol to Syene" is indeed an eloquent testimony to the widespread settlement of Jews between the eastern Nile Delta and the first cataract (Jer 41:14; 44:1; Ezek 29:10; 30:6; also Fresdy and Redford 1970: 462–85). The available sources provide very little information on the civil, cultic, and military organizations of the foreign population in these settlements. Yet certain allusions in Jeremiah, such as the prophecy at the entrance to the "house of Pharaoh," i.e., government house, in Tahpanhes, imply a close connection between the Jews and these official quarters.[28] Also, comparable, though admittedly somewhat later, information on the military organization of the Elephantine garrison or the presence of army officers, such as Johanan son of Kareh at Tahpanhes, strongly suggests that Jews must have assumed high-ranking positions in these garrison settlements (Jer 42:19).

Concerning the Phoenician population, the sources testify to a sizeable element in Saite Egypt. Thus, for instance, the graffiti on the colossus of Ramses II at Abu Simbel also include names of Phoenician soldiers who participated with Carian, Ionian, and Rhodian mercenaries in the Nubian campaign of Psammetichus II (Bernard and Masson 1957). Similarly, a fragmentary Demotic papyrus from Elephantine, dated to the 41st year of Amasis (529 B.C.) records what seems to be a military expedition to upper Nubia and includes Phoenician and Palestinian personnel (Erichsen 1941: 56–61; Sauneron and Yoyotte 1952a: 205). The presence of Phoenicians may also be deduced from references to the worship of Baal Zephon, the patron god of ships and seafaring men, in various localities in the Delta. A Phoenician papyrus from Saqqara, assigned to the general period of Amasis, shows that Baal Zephon was worshipped by Phoenicians who were posted in the garrison fort of Tahpanhes. Judging from the formula of salutation "Baal Zephon and all the gods of Tahpanhes," it is most likely that Baal Zephon was the chief god of Tahpanhes (Aimé-Giron 1941: 433–60; Albright 1950: 1–14; Eissfeldt 1932: 15–24). Similarly, we learn from Egyptian texts that Baal Zephon was honored, by Phoenicians no doubt, at Memphis, alongside Sopdu and Baalat (Aimé-Giron 1941: 454–60). A testimony to the continuous settlement of Phoenician troops, usually on some of the temple estates, in Memphis during the Persian and Ptolemaic period is recorded in the Herodotus, Diodorus, and the Zenon Papyri (Herod. II, 112; Diodorus I, 66–67; Africa 1963: 265). Herodotus reports that in his time the Phoenicians of Tyre were stationed around the sanctuary of Hephaestus and the entire area was actually called the "Camp of the Tyrians" (Τυρίων στρατόπεδον). The name "Tyrian camp" obviously recalls the "Camps" (Στρατόπεδα) of the Ionian and Carian mercenaries in the eastern Delta, which will be discussed below (Herod. II, 154; see recently Katzenstein 1978: 161–64).

Tell el-Maskhuta is another site in the eastern Nile Delta where foreigners were garrisoned during the Persian, and evidently Saite, period. The inscriptions from Maskhuta testify to a community of Aramaic-speaking Qaderite Arabs who were posted in this key site to guard the frontier and police the canal zone (Rabinowitz 1956: 1–9). Excavations by Holladay have yielded impressive Saite remains, suggesting that the site owed its very existence (as a fort?) to the newly constructed Canal of Necho (Holladay 1979: 85–90).

The large collection of imported Greek pottery from Site T. 21 and its affinities with comparable assemblages at Daphnae and Naukratis suggest

that our garrison fort-Migdol also accommodated a large community of Greeks. The history of the Greek community in Egypt has already been treated in detail by Riis and particularly by Boardman (Riis 1970: 126–31; Boardman 1980: 111–41; Kienitz 1953). A brief outline will therefore suffice here for evaluating properly the new archaeological evidence. As early as the foundation of the Saite Dynasty, Greek troops, in ever-growing numbers, were enlisted to aid Egyptian kings to throw off the yoke of foreign conquerors (Psammetichus I), establish their position over other dynasts (Apries, Amasis), take an active part in the military campaigns to Syria (Necho) and Nubia (Psammetichus II), and participate in the struggle against the conquest of Egypt by the Persians (Amasis, Psammetichus III). King Apries, for example, led in 570 B.C. a mercenary army of as many as 30,000 Carians and Ionians against Amasis. Later, in 345 B.C., some 20,000 Greeks were embattled in Pelusium against the army of Arthaxerxes (Herod. II, 163, III, 10f.). By the early reign of Amasis (570–526 B.C.) Egypt's political, military, and economic dependence on the Greeks (and other foreign communities) became almost absolute. Greek mercenary troops, stationed in large garrison camps in the eastern Delta, first helped Amasis to defend Egypt against Babylonian invasion under Nebuchadnezzar, but were soon transferred to Memphis to protect him from his own people (Herod. II, 30, 152). Amasis, who favored the Greeks and is alleged to have even dedicated to the Heraeum at Samos (Herod. II, 182), was apparently responsible for the permanent settlement of the Greek community in Egypt. Amasis thus allowed Greek states to establish at Naukratis their own commercial headquarters, including a port with Greek officials in charge; and accorded them the privilege of building their independent sanctuaries. Archaeological excavations at Naukratis have shown conclusively that the reign of Amasis was indeed the time of greatest Greek activity in this trading colony. The temples at Naukratis were associated with masses of finely painted Greek pottery and wine jars of several types—Chian, Samian, Lesbian, Athenian, and Corinthian—that dated from late 7th to mid- or late-6th century B.C. (Cook 1937: 228; Boardman 1956: 55–62). These types actually accord with the list of states who, according to Herodotus, were active at Naukratis and who shared the Hellenion. The proportion of Greek wares indicated that Chios and Samos, with Lesbos following, had a major share in Greek trade relations with Egypt. Samian relations with Egypt are perhaps best documented by the abundant finds of Egyptian objects at the Heraeum in Samos (Herod. II, 182; Jantzen 1972), whereas evidence for an active trade with Lesbos may have been alluded to in the casual reference to Sappho's brother, Charaxos, bringing a cargo of Lesbian wine to be sold at Naukratis (Strabo 808). The occurrence of hundreds of Greek transport wine amphorae at Naukratis, Daphnae, Migdol, and elsewhere in Egypt is in full agreement with the literary sources, testifying that wine was one of the main commodities exported to Egypt by Greeks who had settled in Egypt and who still preferred wine (and olive oil) from Greece to native products (Austin 1970: 18).

When attempting to evaluate the new archaeological evidence, it should be remembered that the literary record concerning Greek settlements in the eastern Delta during the Saite period is confined, in fact, to two short statements in Herodotus (Herod. II, 30, 154). In Book II, 30 Herodotus describes the three major garrison posts established by Psammetichus I and preserved during the Persian occupation, one being at Elephantine against the Ethiopians, another at "Daphnae of Pelusium" (ἐν Δαφνησι Τῆσι Πηλουσίμσι) against the Arabs and Assyrians, and a third at Marea on the Canopic arm of the Nile against the Lybians. This list recalls, and is actually paralleled in part by, Jeremiah's list of settlements in Egypt where Jews were garrisoned (see above). In Herodotus' account the Egyptian town of Tahpanhes, where Jews were afforded asylum under Apries, is referred to by its Hellenized name Daphnai (Daphnae) of Pelusium, i.e., on the Pelusiac branch of the Nile. The alteration of the Egyptian name, through popular etymology, to Greek Daphnae may testify to the important role that Greek mercenaries played in this garrison station during the Saite period. Alternatively, this may reflect a situation during the Persian period when Herodotus visited Egypt. In any event, excavations by Petrie in the large fort at Tell Defenneh produced convincing ceramic and other evidence, including locally made Greek pottery, for a settlement of Greek mercenaries at Tahpanhes-Daphnae. Although the bulk of painted Greek wares date from the time of Amasis, the presence of earlier Greek pottery and the discovery of foundation deposits

with cartouches of Psammetichus I support a late 7th century date for the establishment of the garrison fort at Tell Defenneh (Petrie 1888: pls. 22, 36:1–3; Boardman 1980: 133–34). The archaeological record at Defenneh fails in the late 6th century B.C.; it is reasonable to connect this, as at Migdol, with the Persian invasion of Egypt. Curiously, the absence of later, particularly Persian, archaeological finds in the fort of Defenneh cannot possibly support Herodotus' statement: ". . . and still in my time the Persians hold these posts" and that "there are Persian guards at Elephantine and at Daphnae," unless it is assumed that there, as at Migdol, the garrison fort subsequently was rebuilt in a site nearby.[29]

A more informative reference in Herodotus (II, 154) details the garrisoning of Greek mercenaries in the eastern Delta:

> The Ionians and Carians who had helped him to conquer were given by Psammetichus places to dwell in called The Camps (Στρατόπεδα), opposite to each other on either side of the Nile. . . . The Ionians and Carians dwelt a long time in these places, which are near the sea, on the arm of the Nile, called the Pelusian, a little way below the town of Bubastis. Long afterwards, king Amasis removed them thence and settled them at Memphis, to be his guard against the Egyptians . . . .There still remained till my time, in the places whence the Ionians and Carians were removed, the landing engines of their ships and the ruins of their houses.

The identification of Herodotus' Stratopeda has long been debated by scholars who repeatedly collated the two passages of Herodotus (II, 30 and 154) and concluded with the equation Tell Defenneh = Daphnae = Stratopeda (Petrie 1888: 48. For discussion and bibliography see Cook 1937: 223–28). This and similar proposals, i.e., Stratopeda a suburb of, or an appendage to, Daphnae, have since been rejected on literary and archaeological grounds (Meulenaere 1951: 107; How and Wells 1964: 175; Boardman 1980: 133). It must be accordingly argued that although Stratopeda and Daphnae are situated in the same region, namely the eastern Delta, the absence of the former locality from Herodotus' list of major garrison camps (II, 30) clearly speaks against its identification with Daphnae. A close examination of the Delta map in Saite and Greco-Roman times reveals that the name *Stratopedon* or "Camp" is often given to garrison settlements that accommodated foreign mercenary troops. Thus Ionians and Carians were settled by Psammetichus I in opposite "Camps" on either side of the Pelusiac river (Herodotus II, 154), Tyrian troops in Memphis' *Stratopedon*, and, again, Greek mercenaries were garrisoned in "Camps" to the east of Pelusium (Herod. II, 112; *Castrum Chabriae*, *Castra Alexandri*, etc. see Diod. XVI, 47, 7; Pliny, *Hist. Nat.*, V:XIV, V:XII, 68; Strabo, *Geog.* XVI). This picture is surprisingly similar to the occurrence of the Semitic name *Migdol* (or Greek Magdolo) in the Egyptian Delta. As noted, Migdol, meaning "tower," "fort," or "camp," is given likewise as a common noun or proper name to various localities where foreign mercenaries were evidently posted. This obvious parallel may tentatively suggest that, in line with the overall Hellenization of place names in Egypt (e.g., On = Heliopolis, Tahpanhes = Daphnae, Yeb = Elephantine, etc.) resulting from the considerably large Greek community in Egyptian soil, Greek Stratopeda may be taken as a direct translation of the Semitic name Migdol, denoting garrison camps where foreign communities were settled. Furthermore, the location of both Herodotus' Stratopeda and Jeremiah's Migdol on the edge of the eastern Delta makes it likely that these names are interchangeable and mark, in fact, one and the same place. The latter working hypothesis is reinforced by Herodotus' silence over the garrison fort Migdol, which was evidently a key site on the eastern frontier of Egypt and served in Persian times as the seat of the governor (above).[30] In conclusion, the preceding arguments indicate that Herodotus' account of the distribution of military forts in Egypt where foreign troops were garrisoned in Saite and Persian times, i.e., Stratopeda = Migdol, Daphnae = Tahpanhes, Tyrian Stratopedon or Camp at Memphis = Noph, Elephantine = Yeb (Syene, Pathros?), is parallel and complementary to the map of garrison stations drawn by Jeremiah, Ezekiel, and the Migdol Papyrus.

NOTES

[1]For past explorations in this region see detailed bibliography in Oren 1973a: 198, n. 2; also Thompson 1975: 9–13.

[2]The survey of northern Sinai was carried out on behalf of the Ben-Gurion University of the Negev. The expedition was aided in every way by A. Eitan, Director of the Israel Department of Antiquities and Museums, and by A. Goren and B. Zaas, Archaeological Liaison Officers for Sinai. The Israel Academy for the Sciences made available a research grant for the 1974–75 seasons in Sinai. The team included M. Heiman, M. Khayon, S. Kornberg, Iris Eldar, and Rachel Fux-Feinstein. Sara Yadid served as administrator and recorder, P. Louppen as surveyor, W. Feffer and A. Fogel as photographers, and Batya Ton as artist.

I am much indebted to Barbara Adams and D. M. Dixon (University College, London), M. L. Bierbrier (British Museum, London), P. R. S. Moorey (Ashmolean Museum, Oxford), and E. Brovarski (Boston Museum of Fine Art) for their generous assistance with the study of materials from Egypt in the above collections. Special thanks are due to E. Buchner and V. M. Strocka of the Deutsches Archaologisches Institut, Berlin, for the warm hospitality accorded to me during my research at the institute and the use of library facilities. I am grateful to Martha Morrison and E. Ostroff of Brandeis University, for reading the manuscript and offering many valuable suggestions and comments. Finally, I wish to express my profound gratitude to J. Boardman of Merton College, Oxford, for his expert advice and stimulating discussions on the Greek settlements in Egypt, and to F. M. Cross of Harvard University, for his criticism and observations.

For preliminary reports see Oren in *Ḥadashot Archaeologiot* 1972–80 (Hebrew); 1973a: 198–205; 1973b: 101–3; 1975: 80–90; 1977a: 71–76; 1977b: 94–107; 1978: 81–87; 1979: 181–91; 1980a: 26–33; 1980b: 101–58; 1984.

[3]For preliminary reports on the Saite sites see Oren 1977a: 71–76; 1979: 190–91; 1984.

[4]Holladay 1979a: 85–90; 1979b, and personal communication for which the author is most grateful.

[5]Boak and Peterson 1931: plan IIIA; Bissing 1951: 56, fig. 4; Holladay 1979a: 87. The underground cellars and passages at Karanis were assumed to be granaries. These too were filled with debris.

[6]For a somewhat similar interpretation for the cellular substructure of brick shafts in the Palace of Apries at Memphis, see Kemp 1977: 101–8.

[7]For Nebesheh see Petrie 1888: pl. 5; for Heliopolis see Petrie and Mackay 1915: pls. 10–11; for San el-Hagar see Daressy 1901: 233, fig. 2:3; for Kafr Ammar see Petrie and Mackay 1915: pls. 33–34; for Qurneh see Petrie and Walker 1909b: pl. 54; for Saqqara see U.C. 30781, 30725 (unpublished).

[8]For torpedo-shaped jars see Petrie 1886: pl. 16:3; Hogarth, Lorimer and Edgar 1905: fig. 3; Petrie 1888: pl. 33:4; for basket-handled jar see Petrie 1886: pl. 17:17, 20–21; 1888: pl. 33:4; for mortarium see Petrie 1886: pl. 4:2.

[9]See Petrie 1888: pl. 33:4 now at University College, London, U.C. 19250, and unpublished specimens in the British Museum, London, BM 5109, 35980.

[10]Bernard 1970: pl. 19:1–2. Most specimens still unpublished e.g., BM 86/4/1/71–81, 88/6/1/389, 1910/2/22/1.

[11]Stern 1973: 98–101, 109–14 for discussion and bibliography of late Iron Age types.

[12]Not illustrated; see Gjerstad 1948: figs. 38:9, type 3a, 39:18, type 2 (Black-on-Red II [IV] Ware).

[13]Petrie 1886: pl. 16:4 and many unpublished specimens in the British Museum and University College, London, e.g., BM 1910/2/22/28, 23778.

[14]Grace 1971: 68–69, esp. Nos. 42–43. For parallels from Samos see Jantzen 1972: Nos. 626–629.

[15]Grace 1971: 70–71, fig. 2:2, pl. 15:2, 3; Thompson 1955: 62–66. For similar types dated to the 6th century B.C. from the North Slope of the Athenian Acropolis see Roebuck 1940: fig. 61, No. 335.

[16]Brann 1961: 338–39, pl. 80, Nos. 40–41; Sparkes and Talcott 1970: fig. 12:1510, pl. 64:1503. For the latest comprehensive study see Johnston and Jones 1978: 103–41.

[17]Boardman and Hayes 1973: fig. 25, No. 2264; Ploug 1973: pl. 17:346; Karageorghis 1970: pls. 164, 246, Nos. 13, 16. For the results of the spectrographic analysis see Johnston and Jones 1978: 122–28.

[18]Petrie 1888: pl. 24:9 and unpublished specimens in the British Museum.

[19]Ploug 1973: 89, fig. f:411, pl. 20, p. 85, n. 519 for parallels; Petrie 1886: pl. 10:4; Bernard 1970: pl. 31:3 and unpublished specimens from Naukratis, e.g., BM 86/4/1/1034.

[20]For similar pot bellows see Davey 1979: 101–11.

[21]For detailed studies on the metal technology see Peleg, Baram, and Oren 1979: 313–24; 1983: 81–98.

[22]Petrie 1886: 39, pl. 21; 1888: 59, 77–79, pls. 37, 39–46 and numerous unpublished specimens in the British Museum and University College, London. For a foundation deposit at Daphnae containing samples of lead and copper ore see Petrie 1888: pl. 22:10–11.

[23]For expeditions of Saite kings across the Sinai desert and their campaigns in Syria-Palestine see Kitchen 1973: 399–408.

[24]According to Gardner (1888: 27) one of the burials at Naukratis gave evidence for the practice of cremation but its early date is doubtful, see Bissing 1951: 52–53.

[25]See Boardman 1980: 134–35. We cannot, however, rule out the possibility that Site T. 73 with its cremation burials was after all the cemetery of the Phoenician community at Migdol.

[26]For this equation see Herodotus: 437. For the historical outline see Malamat 1973: 267–79; 1975: 83–90.

[27]For a somewhat different translation see Na'aman 1979: 73–74.

[28]Jer 43:8ff. It is of some interest that the ruins of the fort at Tell Defenneh are still called by the local villagers Qasr el-Bint el-Yehudi, "fort of the Jew's Daughter"; Petrie 1888: 47.

[29]For Ptolemaic and Roman remains see Petrie 1888: 60–61. Tahpanhes is not mentioned in Ezekiel's prophecy on Egypt, Ezek 30:7–19.

[30]The numerous discrepancies in Herodotus' testimony concerning events in Egyptian history and his conspicuous silence over the presence in Egypt of large groups of foreigners other than Greeks, i.e., Jews and Phoenicians, warrants against relying too heavily on his description of Egypt's historical geography; see Armayor 1978: 59–74; Meulenaere 1951; Africa 1963: 256; Griffiths 1955: 139–52; Lloyed 1975; Brown 1965: 60–76.

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