

MORTIMER WHEELER ARCHAEOLOGICAL LECTURE

AVARIS AND PIRAMESSE
ARCHAEOLOGICAL EXPLORATION IN THE
EASTERN NILE DELTA¹

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I *Introduction*

MANY events important in the history of Egypt took place in the eastern Nile Delta. This region received an irregular but nonetheless continuous flow of Asiatic immigrants, who contributed a distinctly Asiatic element to the life and customs of the local population.² It also saw the passing of armies on their way to quell disturbances across its eastern border and occasionally it benefited from commercial exchange with western Asia and the Mediterranean world.

More than once in Egypt's history the seat of government lay in this area: first, during the Hyksos Period, when Egypt was ruled by kings of Asiatic origin (c.1650–1542 BC), then during the time of the 19th and 20th dynasties (c.1300–1080 BC) and, to some extent, during the following Libyan Period.

It is indeed strange that this, from an historical point of view, most important region has remained largely unexplored by archaeologists, apart from limited excavations at a few main sites. Archaeological work is difficult in the Delta for it demands a more sophisticated excavation technique than that used at the easily accessible desert sites along the edge of the cultivation in Upper Egypt with its tombs and temples and its imposing remains of stone architecture, which provide material suitable for collections.

¹ The printed version includes details, which were not mentioned in the lecture but were evident from the slides. I am very grateful to the British Academy for publishing this extended version and to Dr I. E. S. Edwards for his kind assistance in the editing of my English text.

² R. Giveon, *Les bédouins Shosou des documents Égyptiens* (Leiden 1971), pp. 237–69; id., *Asiaten*, LÄ I, pp. 461–71. For more modern immigration trends see 'A. M. 'Ammar, *The People of Sharqiya* (Cairo 1944).

Town-sites and cemeteries in the Nile Delta were constructed of mud-brick. They are now embedded in debris, which is largely composed of mud-brick, and are partly submerged in subsoil water. At first sight they seem to offer little to attract the archaeologist.

The topography of this flat country offers even less visual encouragement. In the course of time it has undergone important changes and its ancient waterways are now difficult to recognize. The survey, excavation, and interpretation of Delta sites are, therefore, not easy matters. Nevertheless, the eastern Delta has attracted the increasing interest of archaeologists in recent years.

II *Tell el-Dab'a, its environment and previous investigations*

The main focus of the investigations carried out by the University of Vienna and the Austrian Archaeological Institute since 1966 has been Tell el-Dab'a¹ in the Sharqiya province, 7 km north of Faqûs, along the road to Tanis. Today a mound, the diameter of which is approximately 500 m, represents the remains of this once vast town-site. At the end of the last century the site spread more than 1 km westwards,² as far as the villages of Khata'na and Ezbet Helmy on the east bank of the Bahr Faqûs, which follows here the bed of the old Pelusiac branch of the Nile.³

The tell developed on a turtleback, rising above the level of the annual inundation. For two months during the summer of 1882, Edouard Naville conducted an excavation there, discovering a large temple enclosure-wall and within it the remains of columns and a sphinx of Queen Sebeknefru (c. 1789–1785 BC). In graves he found juglets of a ware later known as Tell el-Yahudiya ware.⁴ Some 150 m south-west of the tell, the Egyptian archaeologist Labib Habachi discovered a number of statues of the same queen and of a king of the 13th dynasty by

¹ Geographical coordinates: 31° 49' 20" east of Greenwich and 30° 47' 15" northern latitude.

² E. Naville, *The Shrine of Saft el-Henneh and the Land of Goshen* (London 1887), pp. 21–3, who conducted excavations at Tell el-Dab'a, described the mound as continuous as far as Khata'na.

³ A. Shafei, *BSGE* 21 (1946), p. 234; M. Bietak, *Tell el-Dab'a II* (Vienna 1975), p. 80, figs. 8, 9, pl. IV.

⁴ E. Naville, op. cit.; F. Ll. Griffith, *The Antiquities of Tell el-Yahudiyeh, EEF Mem.* 7 (London 1890), pp. 56, 57, pl. XIX.

the name of Qemau Sehernejherjotef.¹ These were probably in the sanctuary of a small temple devoted to their cult. As we shall see presently, the cults of other sovereigns of the Middle Kingdom had been established earlier in this area.

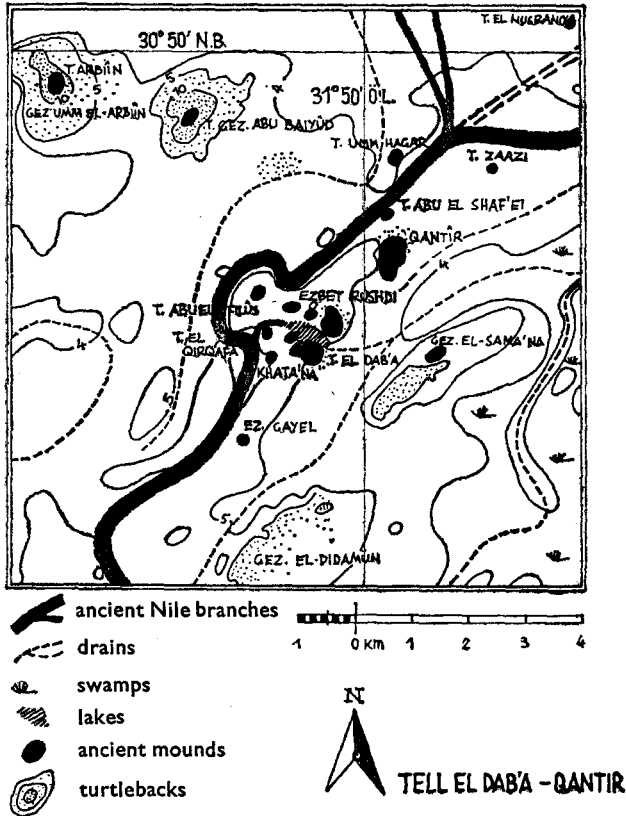


FIG. 1. The Position of Tell el-Dab'a and Qantir in relation to the reconstructed Pelusiac branch of the Nile.

North of the mound there is a natural lake basin, which at the beginning of this century extended 1 km in an east-west direction and 500 m north.² Consequently, the older name of Tell el-Dab'a was Tell el-Birka, 'the mound of the lake'.

Old survey maps, partly confirmed by a ground survey, show a feeder-channel, still recognizable, coming from the direction of the former Pelusiac branch of the Nile and issuing into the lake; also, a drain-channel flowing from the lake towards the large Bahr el-Baqar drainage system.

¹ L. Habachi, *ASAE* 52 (1954), pp. 458-70, pls. VI-IX.

² According to the 1 : 50 000 map of the *Survey of Egypt*, Sh. IV-IV and V NE (Cairo 1912).

This means that in ancient times it was possible to control the level of the lake, which offered, in connection with the Pelusiac branch, ideal inland harbour facilities.

North of the lake, at Ezbet Rushdi, another Egyptian archaeologist, Shehata Adam,¹ working for the Department of Antiquities, uncovered a larger group of houses of the Middle Kingdom and the Second Intermediate Period and a remarkably large temple, constructed by Ammenemes I and rebuilt by Sesostris III. A stela from this excavation mentions the 'Temple of Ammenemes in (at) the water of the town', providing literary support for the reconstruction of the physical environment.² The temple, in the sanctuary of which the lower part of a royal statue was found, was probably devoted to the cult of the King Ammenemes I (the 'Temple of Ammenemes').³

One kilometre to the east, at Ezbet Helmy, Edouard Naville and later Zaki Sous, working for the Department of Antiquities, excavated an imposing granite portal of a so-called *Djdw*, a hall with unknown function,⁴ constructed under the same kings as the temple (Pl. IIa).

At the beginning of this century another group of tells still existed, 800 m to the north, one being Tell Abu el-Felous, situated on the inner bank of a large bend in the Nile. Here the levee had grown very broad, offering favourable ground for settlement above the level of the annual inundation.⁵

It is probable that the entire area between Tell el-Dab'a, Khata'na, and Tell Abu el-Felous was settled in ancient times. Recent ground surveys on agricultural areas between these sites revealed a vast settlement from the time of the Middle Kingdom onwards, covering an area of 1.5 if not 2 sq. km. Nearly a hundred years ago F. Ll. Griffith described the region as virtually one huge tell.⁶

The settlement probably began as an outpost constructed by Heracleopolitan kings of the First Intermediate Period in order to check the Asiatic infiltration of that time.⁷ The

¹ Shehata Adam, *ASAE* 56 (1959), pp. 207-26.

² *Op. cit.*, pp. 216 f., pl. IX.

³ H. Kees, *MDIK* 18 (1962), pp. 1 ff., suggests a *ka*-house of this king.

⁴ E. Naville, *op. cit.*, p. 22, pl. 9/A 1-3; G. Maspero, *ZAS* 23 (1885), pp. 11-13; L. Habachi, *op. cit.*, pp. 448-58, pls. 2-4.

⁵ E. Naville, *loc. cit.*

⁶ In: W. M. F. Petrie, *Tanis, part ii, Nebesheh ('Am) and Defenneh (Tahpanhes)*, *EEF, Mem.* 4 (London 1888), p. 45.

⁷ A. Scharff, *Der historische Abschnitt der Lehre des Merikarê. Bayerische Ak. d. Wiss., Sph.* 136/8 (Munich 1936), pp. 39-45.

stela of the 'Temple of Ammenemes' also mentions a 'Temple of Kheti',¹ which may have been built by one of the Heracleopolitan kings.² Sherds of that period have been found by the survey of the Austrian expedition.

Another large settlement stands at Qantir, 2 km north of Tell el-Dab'a. In 1929, working for the Department of Antiquities, Mahmud Hamza discovered the remains of a large palace of Seti I, Ramesses II, and their successors³ at the southern edge of this village. It was impossible to recognize its architectural plan in the muddy fields, but thousands of faïence tiles, inlaid with alabaster and coloured glass were collected for the Cairo Museum. Many tiles also found their way to the Metropolitan Museum⁴ where a window at which the king appeared was reconstructed; also ornamental steps leading, perhaps, to a throne. There is a beautiful doorway of Seti I, cased with tiles,⁵ in the Louvre; and, in Munich, there is a representative collection of tiles⁶ from Qantir.

The Austrian expedition was able to locate the remains of the substructure of this palace, preserved in the narrow embankments of three small irrigation channels. Each embankment consisted of a platform of mud-bricks with the lower courses projecting as spurs into the sandy ground at regular intervals of about 3 m. These courses created something like a domed support for the platform upon which the structure proper was erected of mud-brick. In this area in the early forties, Labib Habachi found rooms with thick walls, floors paved with stone, and a small basin, which was approached by stairs leading from all sides to its centre. This may have been a bath and, if so, it showed that the occupants did not neglect their basic comforts.⁷

While the walls of the palace were built of brick, cased with tiles, the door-frames and columns were made of limestone. From time to time, elegant octagonal columns have been found in the fields and collected by members of our Institute

¹ Shehata Adam, loc. cit.

² H. Kees, op. cit., p. 9.

³ M. Hamza, *ASAE* 30 (1930), p. 20.

⁴ W. C. Hayes, *Glazed Tiles from a Palace of Ramesses II at Qantir* (New York 1937).

⁵ C. H. Boreux, Musée du Louvre, Département des Antiquités Égyptiennes, *Guide-catalogue sommaire ii* (Paris 1932), p. 410.

⁶ H. W. Müller, *Die ägyptische Sammlung des Bayerischen Staates, Ausstellung* (Munich 1966), No. 62; id., *Werke altägyptischer und koptischer Kunst, Die Sammlung Wilhelm Esch, Duisburg* (Munich 1961), pp. 20-4, pls. I-III.

⁷ L. Habachi, *Tell el-Dab'a I and Qantir* (forthcoming).

(Pl. IIIa). We hope to start excavations there soon in collaboration with the Pelizaeus Museum of Hildesheim.

Apart from the royal palace, there is evidence of houses of high Ramesside officials in the area. When the Didamun (or Sama'na-) channel, passing to the west of Tell el-Dab'a and Qantir, was enlarged more than twenty doorways (Pl. IIb) were unearthed and many stelae,¹ possibly fixed to the front walls of houses. It seems that the enlargement cut into the façades of a series of houses, which belonged to high officials and royal princes. The living quarters were situated in the most favourable position, along the eastern bank of the Pelusiac branch of the river. We are able to reconstruct the setting, since the Didamun channel was dug on the eastern levee of the branch.

At Sama'na, a sandy turtleback 3 km east of Tell el-Dab'a and Qantir, a lintel of a house belonging to the famous Vizier Paser was found,² and a well of Ramesses II is still *in situ* there. Besides high officials and princes, the above-mentioned stelae report the accommodation of large numbers of military personnel in Ramesside times.

North of Qantir, at Tell Abu el-Shafei, the base of a colossal statue of Ramesses II with an estimated height of about 10 m³ was unearthed by Shehata Adam in 1955. Most probably it was situated together with a second statue in front of a temple pylon. To the east of the statue base Shehata Adam found the remains of a large mud-brick foundation, possibly belonging to a pylon or a temenos wall. In the course of illicit land-levelling in the same neighbourhood over the last five years, remains of other large statues and bases of columns have been discovered (Pl. IIIb, c). Unfortunately, the tell has now been destroyed.

Mahmud Hamza⁴ had already concluded from the evidence of the royal palace that Qantir was the site of the famous Delta residence of the 19th dynasty—*Piramesse*, identified by the majority as the town Ramesse (Raamses) in the Old Testament. This view was shared by W. C. Hayes⁵ and given added support by Labib Habachi, who further suggested that

¹ L. Habachi, *ASAE* 52 (1954), pp. 479–544; Habachi also showed that the so-called Horbeit stelae probably came from Qantir.

² *Ibid.*, p. 480, pl. XX.

³ Shehata Adam, *ASAE* 55 (1958), pp. 306, 318–24, pls. 27, 28.

⁴ *Op. cit.*

⁵ W. C. Hayes, *op. cit.*, and *The Scepter of Egypt II* (Cambridge, Mass. 1959), p. 329. See also B. Couroyer, *RB* 53 (1946), pp. 75–98.

the capital of the Hyksos, Avaris, lay in this region, most probably towards the south at Khata'na-Tell el-Dab'a. There he made soundings and found structures dating from the Middle Kingdom. Habachi's position was supported by J. van Seters in a more exhaustive exposé.¹

The majority of scholars, however, continued to believe that Piramesse should be identified with Tanis, 25 km further north, where Pierre Montet's excavations had uncovered hundreds of stone monuments, including stelae, obelisks, and statues of the Ramesside period, all of which seemed to prove that it was the capital of the 19th dynasty.² A. Alt, H. Kees, and J. von Beckerath suggested a compromise solution:³ Tanis was the capital, while the royal residence was situated outside the city at Qantir, a view opposed by Labib Habachi, J. van Seters, and others, but approved by the majority at the time.

This compromise solution offered no explanation for the location of Avaris, the capital of the Hyksos, which Habachi and van Seters maintained lay at Tell el-Dab'a; however, the available evidence—namely the Tell el-Yahudiya juglets found by Naville in 1882—was scanty. There was no positive evidence that the tell contained this large Asiatic town. Egyptologists in general and scholars of other disciplines believed that Avaris was situated either at Tanis⁴ or somewhere on the eastern fringe of the delta,⁵ and this opinion was still held when the Institute of Egyptology of the University of Vienna started its excavations at Tell el-Dab'a in July 1966. The excavations continued until 1969, sometimes with two seasons a year. Following an interruption caused by the Six-day War and its aftermath, they were resumed in 1975 under the newly established Austrian Archaeological Institute in Cairo,⁶ and are still in progress.

¹ J. van Seters, *The Hyksos, A New Investigation* (New Haven and London 1966), pp. 127–51. For the identification of Piramesse with Qantir see E. P. Uphill, *JNES* 27 (1968), pp. 291–316; *JNES* 28 (1969), pp. 15–39.

² Lit. of P. Montet assembled by F. Le Corsu on *RdE* 19 (1967), pp. 15–17. See also A. H. Gardiner, *JEA* 19 (1933), pp. 122–8.

³ A. Alt, *Die Deltaresidenz der Ramessiden* (Berlin 1954), pp. 1–13; H. Kees, *Das alte Ägypten, Eine kleine Landeskunde* (Berlin 1955), p. 112; J. von Beckerath, *Untersuchungen zur politischen Geschichte der Zweiten Zwischenzeit in Ägypten* (Glückstadt 1964), pp. 157–67.

⁴ R. North, *Archaeo-Biblical Egypt* (Rome 1967), pp. 76–123.

⁵ J. von Beckerath, op. cit., 157; R. Stadelmann, *Avaris, LÄ* I, pp. 552–3.

⁶ See literature reference at the end.

III *Excavations at Tell el-Dab'a 1966-1978**Stratigraphy and chronology*

The ten excavation campaigns so far have opened up relatively small areas of the main tell—enough, however, to reveal the vital evidence which was previously missing, namely the presence of an extensive town-site belonging largely to an Asiatic (Canaanite)¹ population with their own distinctive Syro-Palestinian Middle Bronze Age Culture II A and B. The occupation series begins with the Middle Kingdom and continues, with several strata, throughout the whole of the Second Intermediate Period.

Following a break, which extended through most of the 18th dynasty, occupation seems to have started again during the reign of King Horemhab (c.1332-1305 BC), at the latest, and to have continued throughout the 19th and 20th dynasties and, perhaps, part of the 21st dynasty. After a second break settlement was resumed, to a limited extent, during the early Ptolemaic Period.

The Middle Bronze Age Culture was of the same origin as that in the neighbouring countries of Palestine and Syria, but in Egypt it progressed along different lines due to the different cultural environment and to its isolation. For this reason a special relative chronological nomenclature, based on W. F. Albright's terminology, will be used in this paper.² The dates given here for this Middle Bronze Culture in Egypt can at present only be considered as tentative. Discussion on this matter has been extensive and the results are not yet final,³ but there is general agreement that MB II B was more or less contemporaneous with the Hyksos Period and that MB II A should be placed earlier. Differences in dating can be explained by referring to the different chronological schemes adopted by

¹ For ethnic terminology see K. M. Kenyon, *Amorites and Canaanites. The Schweich Lectures of the British Academy* 1963 (London 1966).

² W. F. Albright, 'Some Remarks on the Archaeological Chronology of Palestine before about 1500 B.C.', in *Chronologies in Old World Archaeology*, ed. by R. W. Ehrich (Chicago 1965), pp. 47-60; id., *AASOR* xiii (1933), pp. 55-127; *AASOR* xvii (1938).

³ For the different chronological theories see W. A. Ward, *Egypt and the Eastern Mediterranean World 2200-1900 B.C.* (Beirut 1971), pp. 11 ff., and B. Williams, *Archaeology and Historical Problems of the Second Intermediate Period*, Thesis T 25834 (Chicago 1975); E. F. Campbell Jr., 'The Ancient Near East: Chronological Bibliography and Charts', in *The Bible and the Ancient Near East* (New York 1961), pp. 214 ff.; B. Mazar, *IEJ* 18 (1968), p. 84.

different archaeologists. In accordance with more recent chronological opinion,¹ the Hyksos rule in Egypt is considered here as having begun in approximately 1650 BC (and not in 1720 BC). Before that date some time must be allowed for the Asiatics, who later established the Hyksos rule, to settle in Egypt. It was a time of weakness and of lack of frontier control by the Egyptians of the 13th dynasty. As satisfactory evidence for an absolute chronology has not yet emerged from the excavations at Tell el-Dab'a,² we have adopted for the beginning of our sequence in stratum G what seems to be the most reasonable scheme now available, namely that proposed by Albright for dating the Byblos royal tombs.³ According to inscribed Egyptian objects, tomb I dates from the time of Ammenemes III (1842-1798 BC) and tomb II from Ammenemes IV (1798-1789 BC). A synchronism is believed to exist between Prince Yantin (tomb IV) and Neferhotep (\pm 1740-1730 BC) and Zimri Lim of Mari.⁴ On the evidence of these dates the tombs belong approximately to the eighteenth century BC. As they contain MB II A pottery⁵ and material older than Tell el-Dab'a,⁶

¹ J. von Beckerath, *op. cit.*, pp. 218-24; W. Helck, *Die Beziehungen Ägyptens zu Vorderasien im 3. und 2. Jahrtausend v. Chr.*, *AA* 5 (Wiesbaden 1962), pp. 97-102; E. Hornung, *Untersuchungen zur Chronologie und Geschichte des Neuen Reiches*, *AA* 11 (Wiesbaden 1964), pp. 50-2, 108, brings evidence in favour of the low chronology in the time of the New Kingdom (accession of Ahmose most likely in the year 1552/1 BC, overthrowing of the Hyksos after the tenth regnal year). More recent proposals by M. L. Bierbrier and R. Krauß would lower the chronology of the New Kingdom by a further eleven years.

² No reliable links with the absolute Egyptian chronology have been obtained yet. There is a single radiocarbon reading for the late str. G between 1870 and 1720 BC. A series of further carbon samples is in process of being obtained at the British Museum. For the problem of radiocarbon dates in relation to the astronomical chronology see: J. Mellart, *Antiquity* lii, no. 207 (1979), pp. 15-18. In a tomb of str. E/3 a scarab of King Sebekhotep was found and some deliberately destroyed bronze plates of Neferhotep I (\pm 1741-1730 BC) in a str. D/3 context. These objects could have been deposited there long after their production. This must have been the case with the bronze plates because they were found three strata above the scarab although they were all produced at about the same time.

³ W. F. Albright, *BASOR* 99 (1945), pp. 9-18; *BASOR* 179 (1965), pp. 38-43; and in Ehrich (ed.), *op. cit.* (Chicago 1965), pp. 54-7.

⁴ *Id.* *BASOR* 176 (1964), pp. 38-46; cf. also W. Helck, *op. cit.*, pp. 64-7, 98.

⁵ P. Montet, *Byblos et l'Égypte* (Paris 1928, 1929), pls. CXVI-CXIX, CXXIV; W. F. Albright, in Ehrich (ed.), *op. cit.* (Chicago 1965); O. Tufnell, *Berytus* 18 (1969), pp. 5-33.

⁶ B. Williams, *op. cit.*, p. 2045.

our series must start later or, at least, at the time the series of royal tombs of Byblos was nearly completed; therefore, $\pm 1750-1720$ BC would mark approximately the beginning of stratum G. According to the latest evidence, MB II A had a long period of development and 'should be accorded a maximum period of time'.¹

What appears to be a most interesting chronological scheme for Tell el-Dab'a is one devised by Bruce Williams of Chicago, who showed that graves in the Kerma Tumulus X contained imported Tell el-Yahudiya material² of the same kind as that at Tell el-Dab'a str. E/3 and 2, while in the earlier Tumulus III (in the subsidiary grave K 334) a stone jar with the name of Sebeknakht I or II was found³. Sebeknakht I is known to have had the mayoralty of El-Kab in year 1 of King Nebiryerawet I (17th dynasty, ± 1625 BC). This evidence would make the date for Tell el-Dab'a, str. E/3-2 (MB II B 1-2) rather later than expected, implying that MB II B 1-2 shapes were still in use after 1625 BC.

Since this alabaster jar of Sebeknakht from Tumulus III and the Tell el-Yahudiya juglets from Tumulus X were found in subsidiary graves, their chronological relationship is debatable, but it would be difficult to reverse the relative chronology and argue that the subsidiary graves of the later Tumulus X might be much older than the subsidiary graves of the earlier Tumulus III.

Another suggestion may be put forward. In Tumulus X a statuette of Sebekhotep II (± 1750 BC) was found and was attributed to the main burial.⁴ As it is now considered likely that the royal statues in Kerma were acquired by the seizure of the MK strongholds in Lower Nubia, the *terminus post quem* for the main grave could be lowered from ± 1750 to ± 1650 BC while the date for the subsidiary graves would be placed soon afterwards. Such a chronological reconstruction would lead us

¹ P. Beck, *Tel Aviv* 2 (1975), pp. 45-85 (83), shows three major phases of MB II A at Tel Aphek; see also M. Kochavi, *IEJ* 22 (1972), pp. 238-9; *IEJ* 23 (1973), pp. 245-6.

² G. A. Reisner, *Excavations at Kerma IV-V* (Cambridge, Mass. 1923), fig. 264/23, 25, graves K 1042, 1084, type XII/1, 3.

³ *Op. cit.*, p. 524, fig. 344, and B. Williams, *op. cit.*, p. 2043, table 74, p. 2045, table 75.

⁴ G. A. Reisner, *op. cit.*, p. 516, fig. 343, no. 33.

to a date of $\pm 1650-1625$ BC for material from str. E/3 (MB II B1). This unexpectedly late date to Palestinian archaeologists is supported by the Cypriot chronology with material corresponding with str. E 3-2 in very late MC III contexts ($\pm 1650-1625$ BC).¹

There are also data from Palestine, which suggest lowering the transition from MB II A to B from ± 1750 BC² to the first half of the seventeenth century BC. Olga Tufnell³ recognized a group of scarabs with a lotus decoration on the back as belonging to the time of Neferhotep I and Sebekhotep IV ($\pm 1740-1720$ BC), but this type is also attested until the beginning of the Hyksos Period (± 1650 BC).⁴ Previously such scarabs had been found in late MB II A graves at Tell Ajjul and in Jericho.⁵ A scarab with a lotus design as a seal-motif was found in a late MB II A grave (str. G) at Tell el-Dab'a. As far as the present evidence goes, we could roughly date late MB II A to the time between 1750 and 1650 BC.

In the light of these discoveries it is clear that caution is necessary. Moreover, we have also found a series of scarabs with the *rdi-Rc*-motif which was formerly only attested in the time of the 15th and 17th dynasties.⁶ A scarab of that kind was found in tomb 303 B in Tell Ajjul in a late MB II A transition to B grave.⁷ This evidence, presented by J. M. Weinstein, would speak in favour of a date for the transition from MB II A to B near the beginning of the Hyksos rule in Egypt rather than in 1750 BC.⁸ However, graves from Tell el-Yahudiya, corresponding with those in Tell el-Dab'a str. E/1 and D/3 (MB II B 3) have been dated by Olga Tufnell to roughly prior to 'Awoserre' Apophis and contemporaneous

¹ R. Merrillees, *Trade and Transcendence in the Bronze Age Levant*, SIMA xxxix (Göteborg 1974), p. 48, fig. 31/14-16; p. 55, figs. 38, 39; p. 56, fig. 40. The three quoted juglets are parallels of types from strata F, E/3, and E/2 at Tell el-Dab'a. See also E. Vermeule, *Toumba tou Skourou*, The Harvard Univ. Cyprus Archaeological Expedition and the Museum of Fine Arts, Boston 1971-4, fig. 17 A-B, tomb V (corresponding to str. E/2-1 in Tell el-Dab'a).

² Y. Yadin, *Hazor. The Schweich Lectures of the British Academy 1970* (London 1972), p. 108.

³ O. Tufnell, *Levant 2* (1970), pp. 95-9.

⁴ J. Garstang, *El Arabah* (London 1901), p. 10, with the Hyksos name Sheshi.

⁵ J. M. Weinstein, *BASOR* 217 (1975), p. 10.

⁶ D. O'Connor, *World Archaeology* 6 (1974), fig. 13: Q; J. M. Weinstein, loc. cit., mentions this type also of occurring rarely during the 13th dyn., quoting D. O'Connor, who presents this type, however, as purely Hyksos.

⁷ O. Tufnell, *Bull. of the Univ. of London, Inst. of Archaeology*, iii (1962), pl. 4/115.

⁸ J. M. Weinstein. loc. cit.

with Khayan ($\pm 1614-1594$ BC),¹ which would accord well as a chronological continuation of str. E/3-2.

Nevertheless, caution is still advisable in estimating absolute dates for the MB-chronology. We have tried to place our fine-strata sequence in such a way as to reconcile the conflicting data and their interpretation with the various historical possibilities. Within this paper two possibilities of dating and historical interpretation² are considered, which, being about 30 years apart in their inception, represent also the maximum chronological gap within which we can operate. Favour is given to the lower chronological interpretation because of the chronological data presented. Here each stratum of the Second Intermediate Period starting with F (MB II A/B) at 1680 BC is allotted ± 20 years of duration while the higher chronological scheme would start at ± 1715 BC with F which would be more acceptable to Palestinian archaeologists, though still ± 35 years lower than the supposed transition date of ± 1750 BC for MB II A/B. This second scheme poses, however, certain difficulties with the str. E/3-2 Kerma links³ and the Cypriot chronology⁴ already mentioned. Still, the chronological pattern of the second scheme is within the range of possibility and may gain support in future.

The stratigraphy of Tell el-Dab'a can be presented for the time being as follows:⁵

- Str. A:* Early Ptolemaic settlement, 3rd century BC, limited area.
hiatus
- Str. B:* Settlement, large temple, stores, fortifications (?) from the end of the 18th dynasty to the 20th dynasty ($\pm 1310-1080$ BC) and scanty evidence of the 21st dynasty.
hiatus
- Str. D/1:* Massive filling-wall across the tell, early 18th dynasty (?) (± 1540 BC).
- Str. D/2:* Dense occupation, late Hyksos Period, Middle Bronze Age Culture (MB) II C (± 1570 to 1540 BC).

¹ O. Tufnell, in *Archaeology in the Levant, Essays for K. Kenyon* (Warminster 1978), pp. 76-101. For dates see J. von Beckerath, *op. cit.*, p. 223.

² See below, p. 254-6.

³ If this theory is correct, the royal statues in Kerma must have been placed in the tumuli at about the time they were produced and not after the breakdown of the Egyptian occupation in Lower Nubia (± 1650 BC). The Sebeknakht vessel in Tumulus III would even increase the problem.

⁴ See p. 235 n. 1.

⁵ Corrections and additions may come during future field-work.

- Str. D/3:* Increased density in occupation, only minor cemeteries, tombs in or beneath houses, MB II B 3 ($\pm 1600/1590$ to 1570 BC).
- Str. E/1:* Houses began to be built in the cemeteries surrounding the large sacred area, MB II B 3 ($\pm 1630/1610-1600/1590$ BC).
- Str. E/2:* Cemeteries with mortuary temples surrounding a large sacred area in the midst of a huge settlement, covering 2 sq. km, spacious distribution of lots, MB II B 2 ($\pm 1660/1630-1630/1610$ BC).
- Str. E/3:* Very scattered occupation, large sacred area surrounded by houses within large plots, sand-bricks, end of the 13th dynasty, beginning of Hyksos Period, MB II B 1 ($\pm 1690/1660-1660/1630$ BC).
- Str. F:* New occupation of the tell, new distribution of land-plots, very scattered buildings of mud-brick, small cemeteries with relatively numerous tombs, MB II A 3 and B 1, late Middle Kingdom or beginning of Hyksos Period ($\pm 1715/1680-1690/1660$ BC).
- Str. G/1-4:* Densely developed settlement of sand-brick, family graves within land-plots close to houses, MB II A 3 and Egyptian culture of Middle Kingdom, 13th dynasty ($\pm 1750/1720-1715/1680$ BC).
- Str. H:* Open settlement, many enclosure walls, developed to Str. G but separated partly by large ash-layers, MB II A 3 and Egyptian culture of MK, early 13th dynasty (before $\pm 1750/1720$ BC).

In displaced positions, artefacts of the early first dynasty were found. Graves or even large living quarters of this period may be expected to come to light one day under subsoil water during excavations.

The following summary shows the development of the site in chronological order from stratum to stratum.

Stratum H

On the sandy turtleback (*gezira*), enclosure walls of sand-brick are recognizable in all the areas excavated at Tell el-Dab'a. Their outline is somewhat irregular. Living quarters consisted of huts, built of sand-bricks. We gain the impression of a rural settlement in the process of development. Perhaps Tell el-Dab'a preserves only the fringe of the Middle Kingdom settlement, the centre of which was situated more at the north-western shore of the lake, mentioned above, in the area extending from Ezbet Rushdi (temple of Sesostris III) to the

Djadu-hall at Ezbet Helmy.¹ No strata corresponding with H and G were found at Khata'na further south.

Stratum G

After perhaps a short interval, marked in some areas by a conflagration layer of charcoal, which Shehata Adam also noticed north of the lake at Ezbet Rushdi el-saghira, settlement was continued by the same people within approximately the same plot-outlines, but in a much more compact and solid fashion. Houses were normally rectangular constructions of sand-brick with two rooms. The layout resembles the hieroglyphic sign \square and seems to be of Egyptian origin. The entrance led to a large room with a fireplace in the middle or near the door. Another door, located in the partition-wall at the back of the room, gave access to a second room (Pls. IV, V). Such a building normally had later additions and was surrounded, at least partly, by a sand-brick fence, often round in shape, enclosing a court (Pl. IV). In front of the houses we usually found round silos, also constructed of brick.

Besides this so-called 'snail-house type' we found other kinds of buildings, some, as in stratum H, being simple rectangular huts, while others were more solid, and larger structures with several rooms. Each building was attached to another large building with thick walls and a paved floor on which still stood the plinths of columns. We also found small structures with a wide opening towards the narrow streets. These must have been shops. Such shops had many Syro-Palestinian amphoras, besides other kinds of pottery, suggesting that they were something like wine stores.

The ceramic corpus of this period consisted of several wares. Among the finds which must be mentioned is an interesting type of hand-made large oval bowl of marly clay with aquatic flowers carved on the sides and an imitation of a net incised on the bottom. Sometimes a fish design is found on the net. This type was obviously a fish-offering bowl.

One superb piece was a large jug with a black-polished surface and a white incised design with geometrical and figured motifs, such as jumping fish, providing, to some extent, a link to the so-called Lisht juglet (Fig. 3, Pl. VII).² Here we have, without doubt, a ceremonial jug; it was found within one of the larger houses attached to a building with columns, which may

¹ See p. 228 nn. 1 and 4.

² M. Bietak, *MDIK* 26 (1970), pl. XIX/c.

have been a temple. This is obviously a forerunner of the later Tell el-Yahudiya ware.

In addition to such elaborate pieces and the amphoras, which may all have been imports, we found MB house-ware, such as large globular pots of a rough sand-clay,¹ and rough hand-made cooking pots of straw-tempered clay (ware Ic or Vc)

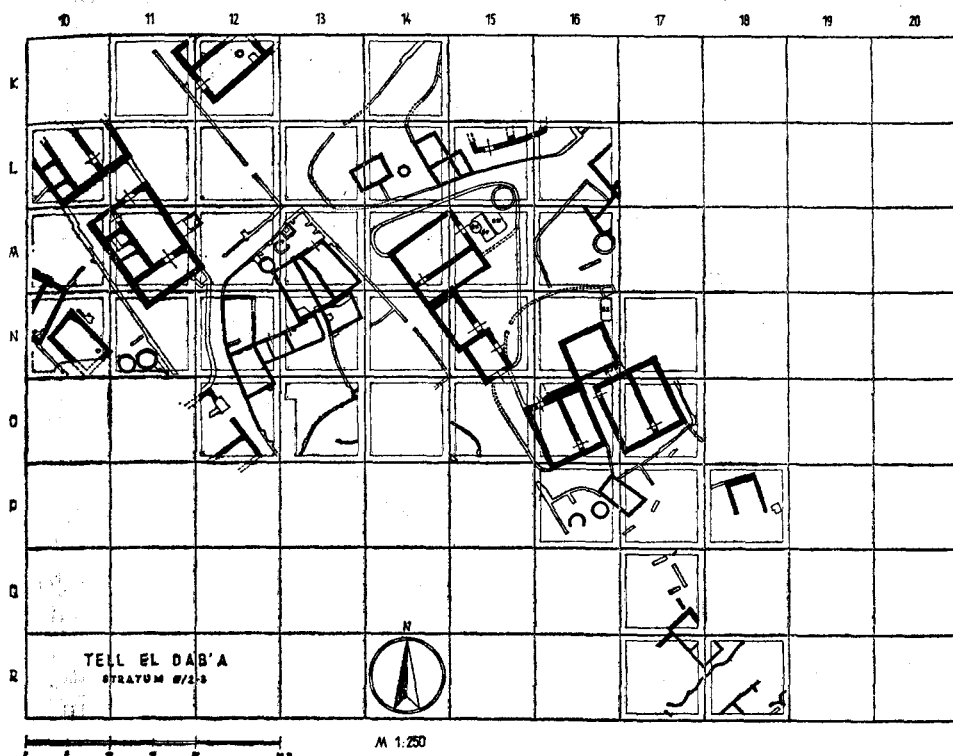


FIG. 2. Tell el-Dab'a, stratum G, late Middle Kingdom settlement

with finger imprints under the lip. They have indeed a pre-historic look and occur more frequently in stratum H than in G.²

While the layout of the houses looks rather Egyptian, the burial customs and equipment, apart from the pottery, reveal the kind of people who lived there in the time of the Late Middle Kingdom. The graves were dug within the house-complex, and were generally situated beside the houses. This is

¹ Cf. P. Beck, *op. cit.*, fig. 2/7, fig. 4/18-19, fig. 6/15-16, fig. 16/2-5, but fabricated obviously of a different clay there.

² *Ibid.*, fig. 1/2, fig. 2/15-16, fig. 5/1-2, fig. 6/18, fig. 8/19. Those cooking pots do not seem to have been used in the post-palace phase at Tel Aphek, which is obviously parallel to our late str. G and F.

indeed strange for Egypt, but we have very little knowledge of the Delta's cultural development.

In some of the complexes the burials were Egyptian in character: mere pits in which the body lay supine on its back—although in one instance the body had been placed in a plain limestone coffin (Pl. VI). The only objects associated with such burials were very simple things like beads or a *koḥl*-pot.

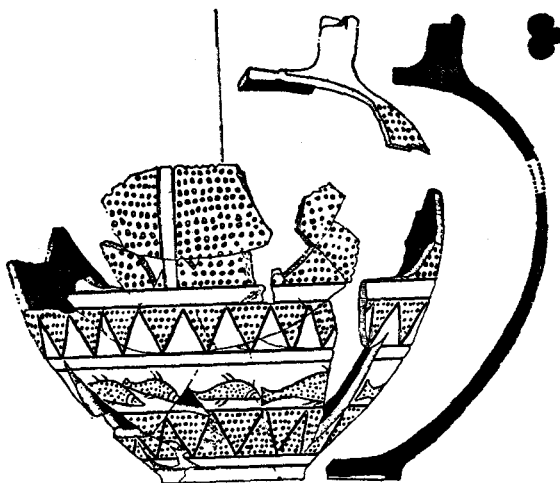


FIG 3. Large Tell el-Yahudiya jug from str. G with incised decoration

In other complexes, however, the graves were more richly furnished and the burials presented a distinctly Syro-Palestinian appearance. Especially notable were three tombs in pits in front of the doors of a house (Pl. IV).

Two of these tombs had vaulted chambers constructed of brick and were designed for family burials. One undisturbed chamber contained an adult male in a semi-contracted position with an ornamented broad belt made of copper¹ and a broad triangular dagger (Fig. 4). Beneath him was another burial, that of an infant between 6 and 12 years of age. Near the entrance of the chamber was a pile of offerings consisting of a large pottery plate (ware I c) with two drinking cups, a ring-stand of copper, a grey polished jug of Syro-Palestinian type, (MB II A 3) and a sheep cut up into several pieces, such as the back, the ribs, the mandible, and the legs. This kind of grave is typical of the later occupation of the tell, and, in its context,

¹ Cf. K. M. Kenyon, *Excavations at Jericho I* (Jerusalem 1960), fig. 117, Tomb J/3 (transition of MB II A/B).

it shows that Egyptian or Egyptianized and Canaanite populations lived side by side during the 13th dynasty, just as happens today in the eastern Delta, where the Egyptian fellaheen and the Arabs (i.e. settled Bedouin) live together.

The location of the graves within the community reveals a sympathetic background, showing strong family ties. The dead members of the family were thought to participate in the daily

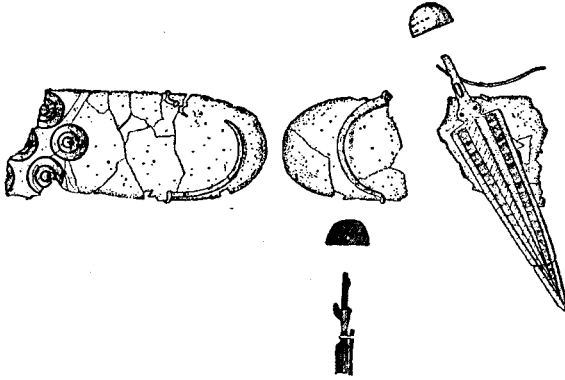


FIG. 4. Bronze belt with dagger from tomb m/15 no. 9, str. G

life of the living. Daily meals were consumed either behind the threshold (at the fireplace) or even in front of the door, in close proximity to the occupants of the tombs. Perhaps the deceased participated ideally in the meals through libations. The fish offering bowls, found near the graves, may have been used in this connection.

Stratum F

A complete change is visible in this stratum. While dwellings were built close together in str. G, few and widely separated houses can be observed in the following stratum F. It seems that to some extent the ruins of stratum G and small new buildings of mud-brick were used as living quarters. A new distribution of plots was beginning to develop. Inevitably this was influenced by what had survived of stratum G, but it was markedly different, and the outlines of those new plots were maintained, with only minor adjustments, throughout the whole series of strata covering the Second Intermediate Period. It looks as if small family or clan cemeteries began to cluster around a centre, which was very probably already composed of the large Canaanite temples to be discussed below in connection with stratum E/3. As F tombs have not been found anywhere

under the temple strata, it would seem that the temples date back to that period. At a greater distance from this centre we also found tombs in the direct vicinity of domestic buildings, which may date from this period.

The tombs were now purely Canaanite (MB II A 3/B 1) and showed little Egyptian influence. Only one burial was found in a limestone coffin, but it was in a contracted position (Pl. Xa). It was equipped with a narrow parallel-sided battle-axe with square section and a triangular ribbed dagger (MB II A). The owner had a scarab with the title of an *idnw mr sḏwt ʿmw*, i.e. *the deputy treasurer* (with the name) *ʿAm = the Asiatic*.¹

No truly Egyptian type of burial was found in stratum F. The tombs were normally richly furnished. Especially notable was a chamber-grave with two females (Pls. XI, XII). One of the two had a simple golden diadem, and an elaborate double necklace with golden pendants, carnelian, and faïence beads of a type and quality known only from princesses' graves of the Middle Kingdom, such as those in Dahshur, Lisht, and el-Lahun² (Pl. XIII). The key piece proved to be a golden lion amulet. A kohl-pot for black eyepaint was made of haematite with a black metallic look (Pl. XII). There were also alabaster vases. The pottery, which was largely of Syro-Palestinian design, was of superb quality. Offerings were generally contained in black-grey-polished, brown-polished, or red-polished pottery, the last with a metallic gloss. A few incised juglets were found, showing that they were already in use. Some of the pots were distinctly of foreign manufacture while the majority were produced locally.

Objects from a similar, even richer, tomb are now in the Metropolitan Museum in New York, with the supposed provenience of Salhiya, 10 km south-east of Tell el-Dab'a; they were obviously once the property of a royal person.³ They

¹ M. Bietak, *MDIK* 23 (1968), p. 93, pl. XXXII/c.

² J. de Morgan, *Fouilles à Dahchour* (Vienna 1895), pl. XXIII/10, pl. XVI/7; H. E. Winlock, *The Treasure of Lahun* (New York 1934), pl. XII/A, pl. XIII/A/1, 2; id., *The Tomb of Senebtisi at Lisht* (New York 1916), pls. XXII, XXIII. For 18th dynasty jewellery, similar to the Tell el-Dab'a jewellery, see H. E. Winlock, *The Treasure of Three Egyptian Princesses* (New York 1948), pl. XII/A, B (shell pendants of gold), pl. XX (seed-shaped beads).

³ H. G. Fischer, *BMMMA* 28 (Oct. 1969), pp. 69–70. It is, however, possible that this treasure came from Tell el-Ahmar, 10 km east of Tell el-Dab'a. Cf. also H. E. Winlock, op. cit., 1948, pl. VII (diadem of two stripes with gazelle protomes).

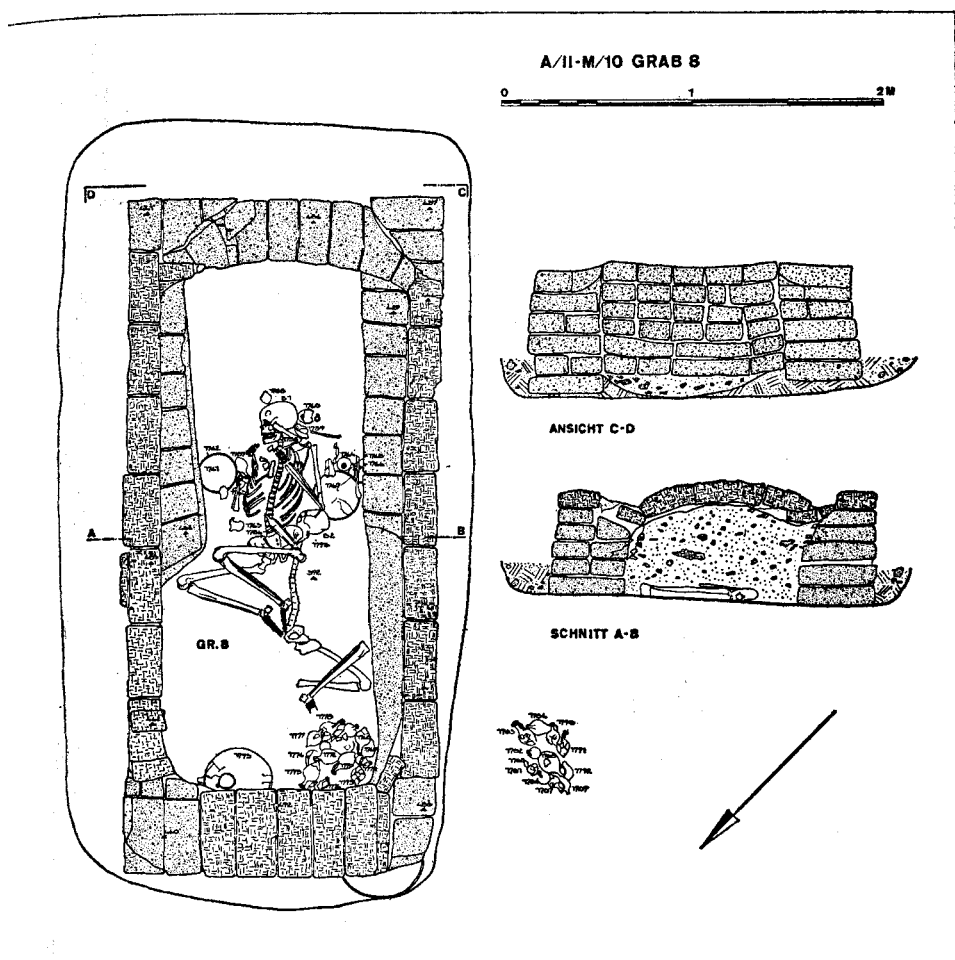


FIG. 5. Tomb m/10 no. 8, str. F or E/3

include a diadem consisting of an electrum band to which are affixed five hollow animal heads (gazelles and a stag). This so-called Salhiya Treasure may very well come from Tell el-Dab'a, where, according to evidence published by W. K. Simpson,¹ members of the royal family of the Hyksos dynasty had left their monuments.

One question which must be asked is whether the rich Egyptian jewellery (besides the Asiatic jewellery) could have been obtained from plundering a royal Middle Kingdom necropolis or palaces near Memphis. The tomb of Tell el-Dab'a certainly did not belong to a princess, but to a rich woman. Part of her

¹ W. K. Simpson, *CdE* 34 (1959), pp. 233-9.

outfit was indeed surprising and it may well have been made in the first instance for someone else.

Stratum F marks a new beginning in the settlement of purely Asiatic (Canaanite) people, who had strong cultural ties with the previous settlers of stratum G. The inhabitants of the site were now fewer, but richer, than in the time of stratum G.

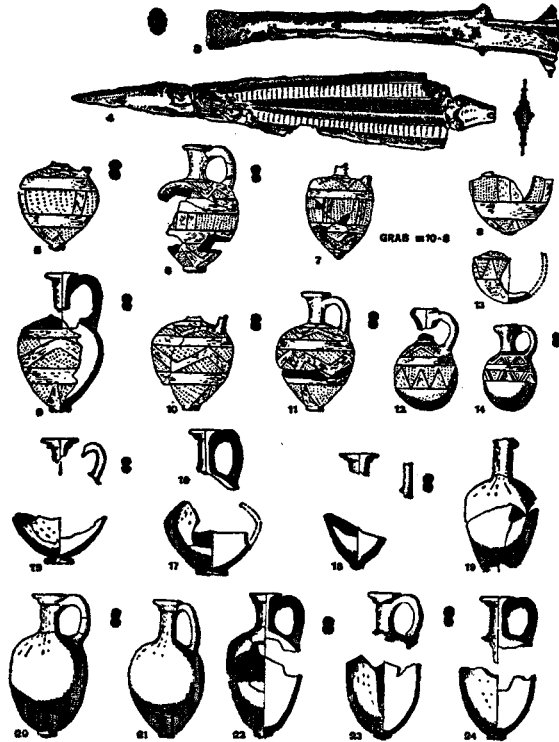


FIG. 6A. Offerings from tomb m/10 no. 8, str. F or E/3

The housing installations on the other hand looked rather rudimentary, so that the conclusion may be drawn that the inhabitants were complete newcomers. The inhabitants of stratum G seem to have left the site before the arrival of another wave of Asiatic immigrants, who settled and remained there until the beginning of the New Kingdom. Most probably they were responsible for the establishment of the Hyksos rule in Egypt. Male burials with weapons show a warrior strain in the newcomers (Pl. X). Especially at the beginning, they possess very original features; some of them, indeed, look rather barbarous.

Stratum F also yielded at least two tombs of servants, who seem to have been intended to accompany their masters to the

next world. Very remarkable was the burial of a servant, perhaps 20–25 years of age, whose body lay across the entrance of the tomb-chamber (Pl. XIV). Anthropologists have not yet been able to determine the sex.¹ No accompanying offerings were found. The face was turned in the direction of the chamber as if the servant were waiting for instructions. The head and

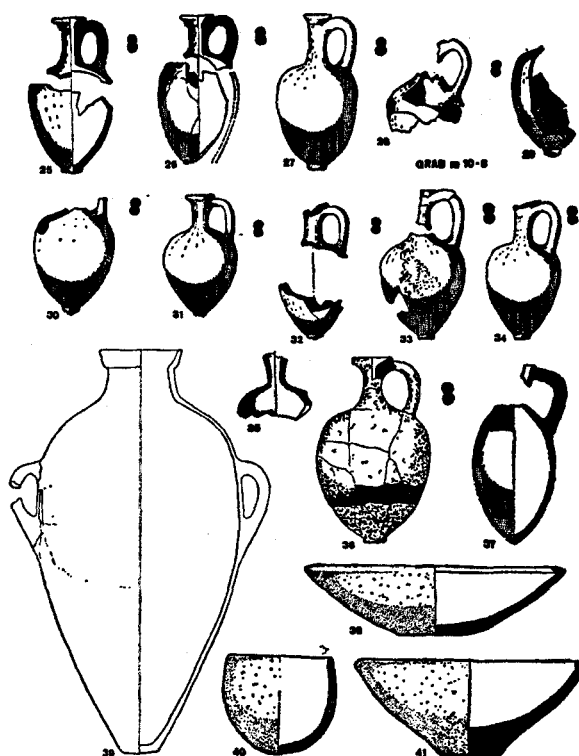


FIG. 6B. Offerings from tomb m/10 no. 8, str. F or E/3

upper body were covered by bricks. The pit of the grave fitted the body so closely it seems very unlikely that this was a secondary burial, because, were that the case, the original outline of the pit would have shown signs of damage.²

Another distinctive custom of the Canaanites who settled at the edge of the eastern Delta was the burial of donkeys, normally in pairs, in front of the tomb-door. They seem to represent teams, perhaps used for pulling a carriage for the funeral.

¹ Investigations are being carried out by E. Strouhal.

² Servant burials as in Tell el-Dab'a, str. F, are not yet known from Palestine, as far as I know, but similar graves occur within a settlement in the Diyala region. Cf. P. Delougaz, H. D. Hill, and S. Lloyd, *Private Houses and*

One team of donkeys was even provided with an offering, namely a drinking cup. They were buried contrary to rule, separate from any tomb within a round pit (Pl. XVa). The tomb which yielded a scarab of a deputy of the treasury, mentioned above, had five donkey burials¹ deposited in front of the

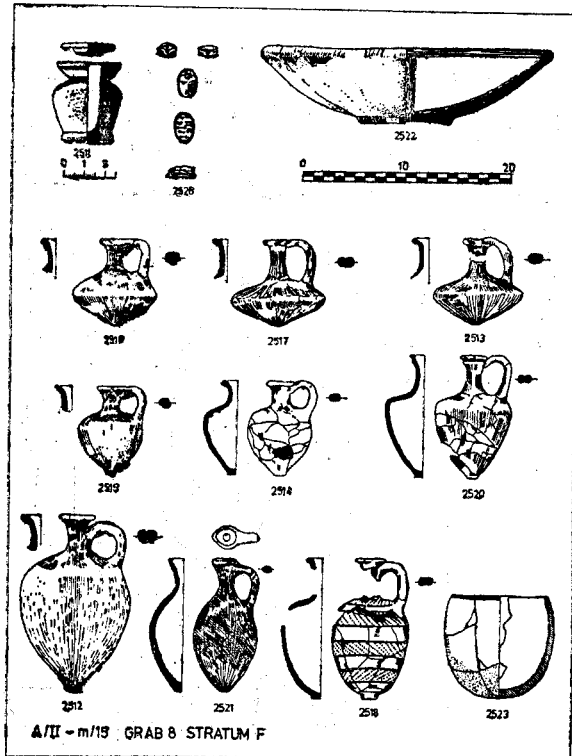


FIG. 7. Offerings from tomb m/15 no. 8, str. F

chamber's entrance and, above the animals, two human burials were found; unfortunately they were not in their original position. Donkey burials have been found at other MB sites in Egypt (Inshas, Tell el-Farasha, Tell el-Maskhuta)² and also at Tell el-Ajjul, in Palestine near Gaza, and at Jericho.³

Graves in the Diyala region, OIP 88 (Chicago 1967), pl. 9, houses 5, gr. 96/98, gr. 101/105; pl. 10, gr. 112/114.

¹ M. Bietak, *MDIK* 23 (1968), pp. 90-3; J. Boessneck, *Tell el-Dab'a III* (Vienna 1976), pp. 21-5, pl. 7-9.

² *BSFE* 1 (June 1949), p. 12. Some MB II A/B tombs with donkey burials were found 1978 by the Univ. of Toronto under J. Holladay Jr. in Tell Maskhuta (personal communication).

³ W. M. F. Petrie, *Ancient Gaza I* (London 1931), p. 4, pls. VIII, IX; A. Grosvenor Ellis, in K. M. Kenyon, *op. cit.*, 535-6.

It should also be mentioned that we found evidence that horses were kept at Tell el-Dab'a from the Early Hyksos Period. Two isolated equine molars, both from str. E/2, were identified by Professor Boessneck.¹

Stratum E 3

This stratum shows a consolidation of the newcomers of stratum F. Now the building of walls offered a distinct demarcation of plot boundaries. The most conspicuous feature was a large sacred area (Fig. 8) around two major temples, one of which was constructed, or at least projected, during the time of stratum F. The whole complex is indeed one of the largest Canaanite temple areas, if not the largest. At present it is not evident whether what has been excavated represents half or less than half of the sacred precinct; but it has already become clear from the size and layout of this complex that the Canaanite community in the Eastern Delta can be identified not only by its material culture and burial customs, but by its distinctive architecture and, especially, its religious architecture.

The main feature of the complex was a temple (33.75×21.50 m)² constructed of sandy mud-brick (Fig. 9, Pls. XVb, XVI). The orientation of the building followed the general layout of the whole area since the Middle Kingdom (NNW-SSE) and it is in line with the ritual orientation of Canaanite temples.³ The main hall and the sanctuary-recess were surrounded by double walls, which formed, with the filling between them, very massive walls, 4 m in thickness, while behind the sanctuary the thickness exceeded 5 m. Unfortunately the entire building is in a very poor state of preservation, because deep *sebakh*-pits⁴ have been sunk down to the subsoil water-level, and the mound is very much eroded at this point. Obviously, the *sebbakhin* knew very well where it would be rewarding to dig for antiquities. Therefore, parts of the layout have to be reconstructed, but the most important features are still preserved.

The sanctuary-recess, perhaps 8 m wide, protruded a little into the broad cella (Pl. XVa). Perhaps this recess was fronted

¹ J. Boessneck, *op. cit.*, p. 25.

² This is the biggest temple of the MB-culture; compare the list of temples assembled by W. G. Dever, *BASOR* 216 (1974), p. 45, tab. II.

³ Y. Yadin, *op. cit.*, 104.

⁴ I.e. pits, excavated in order to gain material for brick production or as fertilizer. Such digging also leads to the discovery of antiquities for sale.

with a door like a shrine.¹ A narrow corridor-like pro-cella, only 4 m deep, separated the cella from the entrance-hall. Probably there were two doors situated along the main axis of the pro-cella. Besides separating the sanctuary from the entrance-hall, the function of the pro-cella was to provide a connection, through a side-door in the east wall, with another

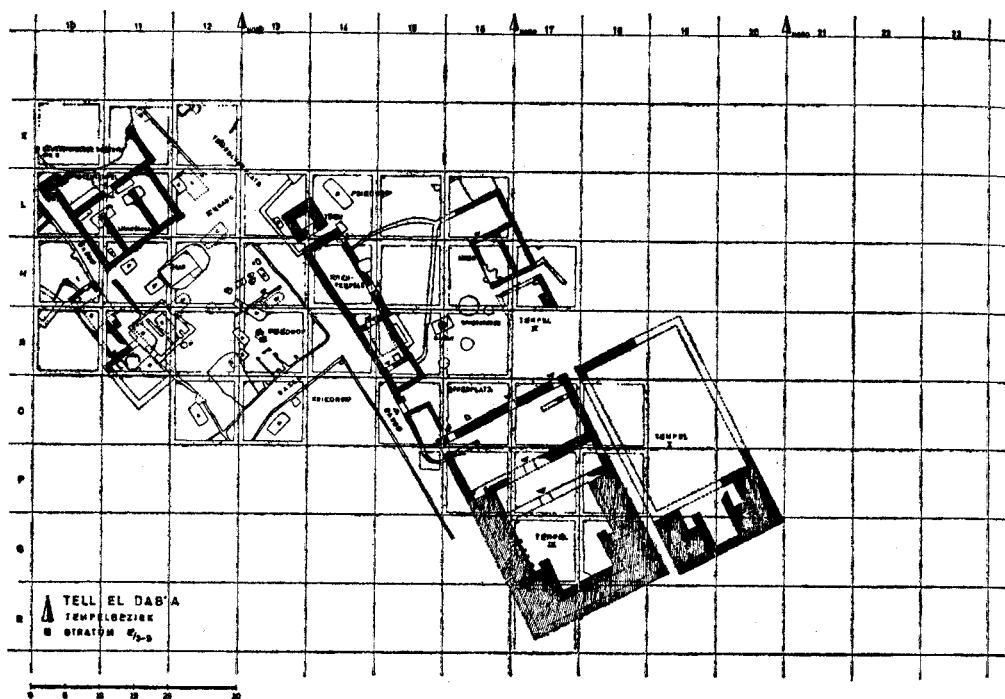


FIG. 8. Tell el-Dab'a, sacred precinct, str. E/3-2

building, which is now being excavated. Most probably it was another separate temple (no. V). Possibly a threshold of limestone, found in a nearby pit, belonged originally to this door.

In front of the corridor, in the first building, was an entrance-hall extending along the whole width of the temple. It too was 4 m deep, and was clearly an addition, so that the original length of the temple amounted to only 29 m. At that stage the temple was finished with a whitewashed mud-coating, and outside we found many fragments of azure-blue paint, so possibly the temple was painted either outside or inside in blue.

Later, the entrance-hall was enlarged, and a new front wall

¹ See room 8192 of the big double temple at Hazor: Y. Yadin, *op. cit.*, p. 97, fig. 23.

built 3 m towards the north with three narrow doors, one near each corner and one east of the main axis. This is strange indeed, but can perhaps be explained by the presence of some cult object in the middle of the front of the temple. Perhaps it was a painting or a column or a statue, which was afterwards removed. Another entrance was found in the west wall, near the north-western corner of the building, giving direct access from the street. Later this entrance was closed by a curved wall, linking the entrance with a small rectangular building at the north-western corner of the temple, perhaps a guardian's house.¹

The four doors suggest that the entrance-hall was to be accessible to many people; so part of the temple, at least, was open to the public while the remainder was reserved, most probably, for priests only. The entrances, at least three of them, were hidden from the entrance-hall by screen-walls which, together with what has survived of the sand-brick pavement,² suggest that the room was covered with a roof. The original breadth of 4 m, like that of the pro-cella, would allow a roofing of wooden beams, while, for roofing the enlarged hall, columns were necessary. Also, the roof of the broad cella (13 × 8 m) needed similar support, but the floors of both rooms, where the bases of columns must have been situated, have been destroyed by *sebbakhin*.

A limestone base of a column was, in fact, found, but not in its original position. It was turned upside down and set in front of the temple in order to mark a special place. Two sides of the base were parallel to the front of the temple: Places of such a kind, distinguished by a column base or by stone pebbles, are also known from Megiddo and Hazor.³

No exact parallel to the Tell el-Dab'a temple is yet known, but the general features are typical of Canaanite temples: in particular the recess-like sanctuary, a cella in front of it, and a pro-cella which may be a broad or a narrow corridor-like feature. We also may find in front of the pro-cella an entrance-hall.⁴ The casemate-like mud-brick filling wall may

¹ Buildings attached at the front corner of the temple can also be observed at other sites, e.g. Hazor, area H, str. 2, and Alalakh, cf. Sir Leonard Woolley, *Alalakh* (Oxford 1955), fig. 35.

² Only behind the entrances did we find pavements of mud-brick, which were more water-resistant than the sandy material.

³ G. Loud, *Megiddo II, Seasons of 1935-39, OIP 62* (Chicago 1948), figs. 255, 259; Y. Yadin, op. cit., 81; id. et al., *Hazor III and IV*, pl. CXII/3.

⁴ The basic elements, such as a rectangular niche, a broad cella, and a double pro-cella were found at Alalakh, str. VII (L. Woolley, op. cit., fig. 30);

be considered a substitute for the broad massive stone walls in Palestine, but parallels for such a filling have also been found, e.g. in the double temple of Hazor,¹ together with something like an entrance-hall constructed only of simple walls.

Even the size of the Tell el-Dab'a temple is remarkable, and is matched only by the Hazor double temple.

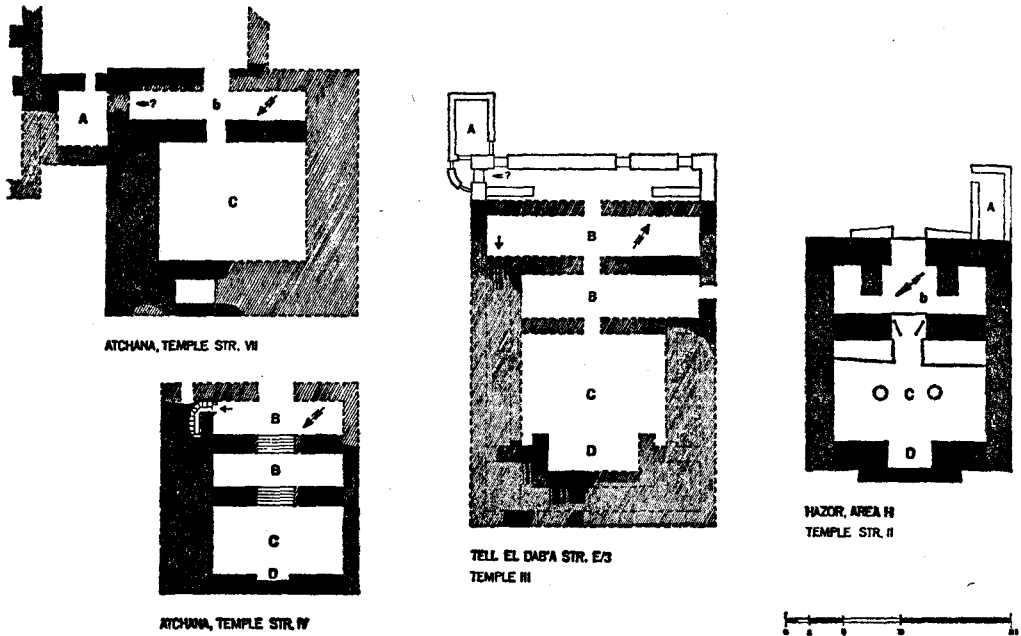


FIG. 9. Tell el-Dab'a, temple III, original plan and later changes, comparison with other Canaanite temples

In front of the temple is a large area, bounded on the west by the above-mentioned guardian's room and a long narrow temple, a mortuary temple, as we shall see shortly. Between them and upon a huge threshold of limestone stood an entrance to the sacred area from the street. It was the doorway to the area.

In line with the axis of the main temple, at a distance of about fifteen metres, remains of two layers of a rectangular altar, a *bamah* (c. 3 × 2 m), constructed of mud-brick, were found. It was covered, or rather filled, with ashes and charred bones. In its direct vicinity were deep pits, filled with more with a single pro-cella compare Hazor, area H, str. 2 and 3; Y. Yadin, *op. cit.*, p. 76, fig. 19.

¹ Y. Yadin, *op. cit.*, fig. 23.

charred bones, mainly of cattle and a few of sheep, but not a single pig bone was found,¹ although there is much evidence of the pig in the food-offerings of the tombs. It looks as if, for offerings to the gods, pigs were already considered as taboo.

Apart from bones, the pits were filled with large amounts of pottery, of the kind used for offerings in front of the temple. The pottery consisted mainly of drinking cups and drinking vases, bowls and plates made of Nile clay (ware Ia, b), but there were also Syro-Palestinian dipper-juglets (ware IV) and other ceremonial pottery (Pl. XIX).

Towards the east, the offering court was bounded by a house, consisting of two rooms, similar to the buildings of stratum G, but with an antechamber, which was accessible from the court. It is not improbable that this was the priest's house. Inside the building a large four-handled crater was found, sunk into a shallow pit (Pl. XVIIIb). South of the building, separated from it only by a narrow passage, was another building with a stone-paved floor and a niche in the eastern wall. It looks as if this too was a small temple with a pair of niches towards the east and an open entrance from the court.²

The offering-court was separated from the area of the above-mentioned mortuary temple at the eastern edge of the sacred area by an enclosure wall, which may have been, to judge from its thickness, taller than a man. This temple was long and narrow (25.5 × 5–7 m) and it had a tower of thick brickwork (4.5 × 5 m) on the northern side (Pl. XVIIb).

The mortuary temple consisted of a long narrow hall (12.80 × 4.30 m). Its walls were overlaid with a coating of mud-plaster painted blue and decorated with figures. Unfortunately, only small fragments of the coating have survived, so that the details of its paintings can no longer be recognized.

Two entrances lead into this hall, one from the area in the north-eastern corner of the sacred precinct, the main feature of which is the tower. This part of the sacred precinct is a cemetery with several well-furnished tombs with mud-brick chambers (Pl. XX), one containing a donkey-team burial in front of the entrance. The second entrance opens into a triangular court, separated from the offering court of the main temple (III) by the above-mentioned enclosure wall. The triangular court, therefore, clearly belongs to the mortuary temple. Also,

¹ According to a still unpublished examination by J. Boessneck and A. von den Driesch, 1977.

² Cf. A. Moortgat, *Tell Chuera IV* (Wiesbaden 1961), pl. VI.

within this area, which was already a small cemetery during the time of the preceding stratum F, graves were found, and it may well be that the temple included in its functions the service of the older stratum F tombs. The development of cemeteries around the whole area clearly began in the time of stratum F.

It looks as if access to the triangular enclosure was only possible by entering the temple through the northern door, from the near-by cemetery in the north-west, and egress by the southern door of the temple.

To the left of the entrance of the mortuary temple, two other rooms were added, the first of which had a rectangular construction with a brick wall—perhaps a pedestal for a statue—attached to its back wall. Below this, a copper harpoon—perhaps a votive gift—had been placed. Within the wall a whole red-polished pot (ware IV) was found. Behind this room was another one with a pot sunk to its neck under the floor.

The layout and size of this building resemble a reflected image, like the early dynastic Abu Temple at Tell Asmar.¹ Even the second court, accessible only through the temple, has a parallel there.

It is because of the relationship to the two cemeteries, the outer and the inner, that we identify this building as a mortuary temple. It seems to me that this long narrow building could be compared with the so-called palace of Tell el-Ajjul, especially palace III, consisting of a long narrow building with a similar arrangement of rooms and even with a tower in front of it. This may have been a part of a major sacred complex.² The cemetery in the court, however, the so-called courtyard cemetery, is earlier.

Still to be mentioned are the remains of another building, most probably also a temple, with the same length as the large temple, with filled-in walls between (Pl. XVIIa); it seems to have three sanctuaries, a feature taken over perhaps from Egyptian temples (see below, str. E/2). Unfortunately the interior of this construction has been largely destroyed. No

¹ H. Frankfort, *Iraq Excavations 1932-33*, Oriental Institute Communications 17, fig. 36.

² W. M. F. Petrie, *Ancient Gaza II and III* (London 1932-33); W. F. Albright, *ASJL* 55 (1938), pp. 337-59; O. Tufnell, op. cit., pp. 1-37; J. R. Stewart, ed. by H. E. Kassis, *Tell el Ajjul, The Middle Bronze Age Remains*, *SIMA* 38 (Göteborg 1974). Another 'courtyard temple' with separate tower is known from Shechem, cf. G. E. Wright, *Shechem* (London 1965), fig. 70.

stratum was added to this temple during the Second Intermediate Period and, obviously, not on top of the other major temple. Therefore, it would seem that the two shrines were kept intact throughout the entire Hyksos Period, or, at least, that the place remained sacred during that time while the tell rose around it; consequently there was a depression in the area of the two temples. It was not before the Ramesside Period that new constructions were started on top of the temple ruins.

The function of the two temples is not yet clear. The surviving traces of objects connected with the cult in front of the major temple with the altar (*bamah*) and the remains of sacrifices in the pits are typical of Canaanite rituals. Unfortunately, so far no votive offerings have been found because large areas within the temples have been destroyed by *sebbakhin*. The two temples were placed in direct relationship to each other as is recognizable from the above-mentioned side-door of the main shrine. Possibly, they served to house a divine couple such as Ba'al and Astarte¹ because in temples of such a size we have to expect major deities of the Canaanite pantheon.

What was new and unexpected, however, was the encroachment of cemeteries and mortuary temples on the main sacred area, although not a single grave was found in direct proximity with the chief temple III. Therefore we do not believe that the main temple served purposes connected with the mortuary cult. There may have been an increasing desire for the dead to participate in the cult celebrations and feasts, or, to put it simply, to be near the god after death.

To the north, the sacred area and its cemeteries were bounded by a sandy brick wall. While three sides of the sacred compound were surrounded by narrow streets, we found a very broad street (11 m), north of the area, which may have been a place where worshippers assembled before entering the area.

Around the sacred area large, nearly empty compounds developed. At present it is not clear whether the two areas west of the sacred complex were spacious plots around small houses, which had been constructed there with a few graves in the compound, far from the house, rather like those in stratum G, or, if they were already intended as family cemeteries, clustered around the holy area. The house in the north-western

¹ The cults of Seth in Ba'al-like shape are to be expected of Avaris and are well attested at Piramesse; cf. R. Stadelmann, *Syrisch-palästinensische Gottheiten in Ägypten* (Leiden 1967), pp. 32-47; J. von Beckerath, *op. cit.*, p. 160. But Astarte too had a temple in Piramesse (*Pap. Anastasi* iv, 6. 4-5).

compound could perhaps be considered as a kind of mortuary temple, but the two circular silos argue against this interpretation. The idea of creating such a cemetery, which developed during the following stratum E/2, may already have been in mind because real settlements started in the second row of compounds towards the west, and, also, directly north of the sacred area.¹

The tombs are principally of the same construction as those in stratum F and, partly, in stratum G. They consist of sand- or mud-brick chambers with a barrel vault, constructed of nearly vertical courses, leaning against the back wall. The chambers were built in pits, which were later filled up. Within the chambers, the bodies were normally laid in a semi-contracted position with the heads near the entrance (Pl. XXIII). Usually, beneath the head, heaps of red- and black-polished juglets were deposited. Near the entrance there were sheep-offerings, cut up and partly placed on big plates. As a rule, we find one to three burials in the chambers. Children were normally buried within the domestic areas in two-handled amphoras of Syro-Palestinian origin. Among the pottery, especially notable is the frequent appearance of the so-called Tell el-Yahudiya ware, i.e. black- or grey-polished, white incised small juglets, often with bipartite handles with a design of upright and pendent triangles filled with a dotted decoration. The bodies often had a toggle-pin of copper on their left shoulder and a scarab, mounted originally on a silver ring (which had usually corroded completely) on the left hand.

In one of the graves of compound I (n/13 no. 8) we found a scarab of King Sebekhotep, perhaps the most important monarch of the 13th dynasty, with the name Khaneferre, i.e. Sebekhotep IV (± 1720 BC). The question arises, how long was this scarab in use before it was buried? It only marks a *terminus a quo*. Scarabs of Sebekhotep were in use during the whole Second Intermediate Period. A second question is: who was responsible for the construction of this largest of Canaanite sacred complexes in the Near East? We think the most likely explanation is to connect this development with the consolidation of the MB city state in the Eastern Delta, headed by a local Asiatic king, who succeeded in gaining suzerainty over nearly the whole country. This was perhaps Salitis (*Šlk*) in ± 1650 BC.²

¹ Later in the time of str. E/2 this settling area gave way to an open place.

² J. von Beckerath, *op. cit.*, p. 269, xv. 1; cf. also Berlin, no. 23673.

There is, however, another possibility worthy of mention. The setting up of an important cult of a major Canaanite god where Avaris was destined to be situated, and where a *terminus a quo* was provided by Sebekhotep, King of the 13th dynasty, may be accounted for by the establishment of a local dynasty at Avaris towards the end of the Middle Kingdom. The name of the first king of this local dynasty is unknown, but his son Nehesy (± 1715 BC) is known from several monuments as the first king with the title: *beloved of Seth, lord of Avaris*.¹ This Seth later became the principal god of the Hyksos, but he was already established in Avaris by this local dynasty before the rise of the Hyksos rule.² So perhaps the foundation of our large temples dates back 65 years prior to the Hyksos rule.

Rather surprisingly we found a fragment of an inscribed limestone block, possibly from a door-jamb or lintel with what seems to be part of the name of Nehesy (Pl. XVIIIa). It was buried in the area near the front of the main temples within a Ramesside tree-pit, i.e. not in its original position. Another fragment of a door-jamb with a part of a male figure bringing offerings was found on top of the wall of the temple in a *sebakh*-pit. It is extremely tempting to bring this major temple into connection with the foundation of a new dynasty in Avaris under the father of Nehesy; and it would fit very well into the absolute chronological scheme generally accepted in Palestinian archaeology,³ and also with the first radiocarbon date for Tell el-Dab'a, str. G.⁴ This would mean pushing back the beginning of str. F to at least ± 1715 BC, but this would not tally very well with the above-mentioned chronological link with Kerma and the Cypriot chronology or with historical expectations in Egypt. It would also make Nehesy a direct ancestor of the Hyksos whereas his name points rather to the south, to Nubia.

¹ Ibid., p. 262, xiv. 2. Another parallel epitheton: '*beloved of Seth, the Lord of R-*sh*t*' = '*The entrance into the fertile land*', perhaps another earlier name for Avaris. A similar name *R-wtj* is attested from the MK-period for the settlement and temple of Ezbet Rushdi, cf. Sh. Adam, *ASAE* 56 (1959), pp. 216-17, pl. IX.

² J. von Beckerath, *op. cit.*, p. 161.

³ A date of 1750 BC for the transition from MB II A to MB II B is accepted at the time being by the majority: cf. E. Oren, *ZDPV* 87 (1971), pp. 135-9; Y. Yadin, *op. cit.*, pp. 107-8; J. M. Weinstein, *loc. cit.* According to Albright, *The Archaeology of Palestine* (Harmondsworth 1960), p. 84, the shift took place in the second half of the 18th century, and later (*op. cit.*, Chicago, 1965, p. 57) he brought the transition forward to about 1700 BC.

⁴ See p. 233 n. 2.

The second major Canaanite incursion would have happened shortly before his reign.

In various places beneath the main temple chips of limestone were found, some of them inscribed, and it looks as if a major Egyptian monument had stood in its vicinity before the establishment of the Canaanite temples of str. F and E/3. Such a building could more suitably be brought into connection with the stratum G settlement, discussed above and dated from ± 1725 BC onwards.¹ This is also the most probable position for a temple under the reign of Nehesy from the archaeological viewpoint. Further remains of such an Egyptian temple should eventually appear during excavations.

Stratum E 2

Now, in the immediate vicinity of the large sacred area, new family cemeteries were laid out, while settlements can only be found in the second row of plots, west of the sacred complex. One of the cemeteries, complex no. I, 46×22 m, has been almost entirely excavated. This cemetery also had, on its northern boundary, its own mortuary temple, which reveals some Egyptian influence, possibly drawn from the nearby Ezbet Rushdi temple of the 12th dynasty (Fig. 10, Pl. XXI). The broad pro-cella with an asymmetric extension towards the left, as in the Ezbet Rushdi temple, leads axially into the tripartite cella. In spite of these signs of Egyptian influence, the design of the temple proved, on closer inspection, to be mainly Canaanite. Along the wall, separating the cellas from the pro-cella, were benches of mud-brick;² the division into three was obviously a purely formal reproduction of the plan of an Egyptian temple without having the same functional significance (see below). In a cavity in the floor of the western cella was a child's burial, and against a niche in the partition wall, between the pro-cella and the eastern cella, a big-footed bowl and tubular libation pipes were found (Fig. 11); they served, perhaps, as supports for plates of offerings. Below this assembly was a grave (I/II no. 1), which belonged to a group of older graves in stratum F and possibly E/3 (I/II no. 1-3).

¹ See above, pp. 234, 236. A baboon statue of limestone was found in the entrance hall of the big temple III, but within a sebakh pit. Another baboon statue of limestone (reg. 2498) was found already destroyed under a wall of str. E/3 or F date. This would suggest very strongly to date the Egyptian limestone statues and inscribed blocks into the period prior to str. F/E/3 and the large Canaanite sacred district.

² See p. 257 n. 2.

These graves may have belonged, however, to people whose descendants had continued to bring offerings, since the interval between the burials and the erection of the temple was no more than 25-30 years; and this family cemetery clearly originated in the older stratum F-cemetery.¹

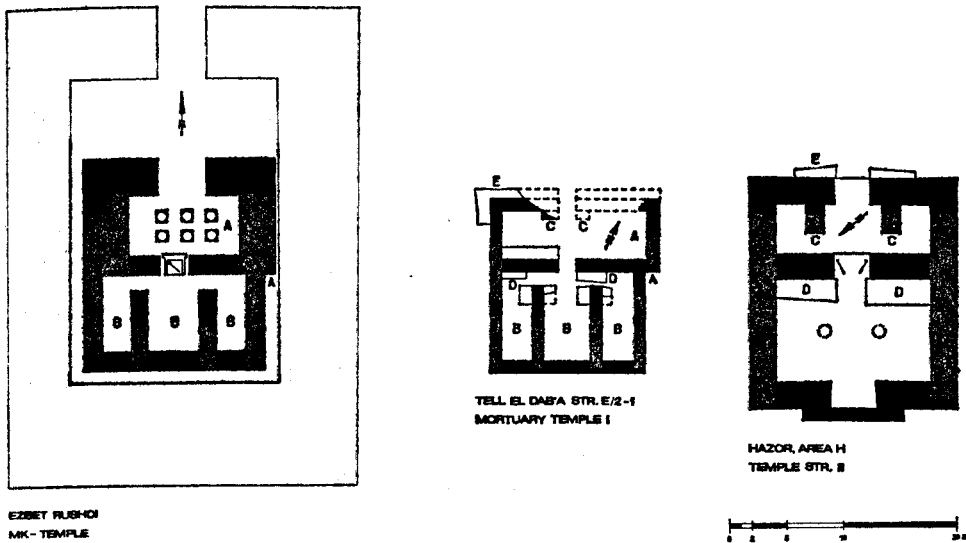


FIG. 10. Tell el-Dab'a mortuary temple I and comparison with MK-temple of Ezbet Rushdi and temple, str. 2, area H in Hazor

The pro-cella shows again a division into three elements, an architectural feature which our mortuary temple, together with the benches attached to the partition wall, has in common with the MB II C and LB I temple of area H in Hazor, but its size is more modest.²

In the western part of the pro-cella ashes and charred animal bones (cattle, sheep, pig) were found, and in the eastern part two large black-polished juglets, one bearing the white incised design of pendent and upright triangles of a type current in stratum E/1. Without doubt, this is a ceremonial type of pottery, much larger than the parallel pottery found in tombs. On the floor, ringstands of several sizes were uncovered as well as a smashed marly-clay vessel (most likely a water *zir*). Within the pro-cella and outside the temple votive pottery, consisting of small bottles, plates, and also standard pottery, such as ringstands and round-bottomed drinking cups, were found buried in groups.

¹ See above, p. 241.

² Y. Yadin, op. cit., pp. 75-9, figs. 18, 19.

This temple was open towards the north-north-west, and within the enclosure (str. E/3) behind its sanctuaries in the south lay a cemetery. It looks as if the three sanctuaries were, in some way, related to three major graves south of the temple. The main tomb (m/12 no. 9), situated behind the middle sanctuary, had a large chamber, 4.95×2.75 m, constructed

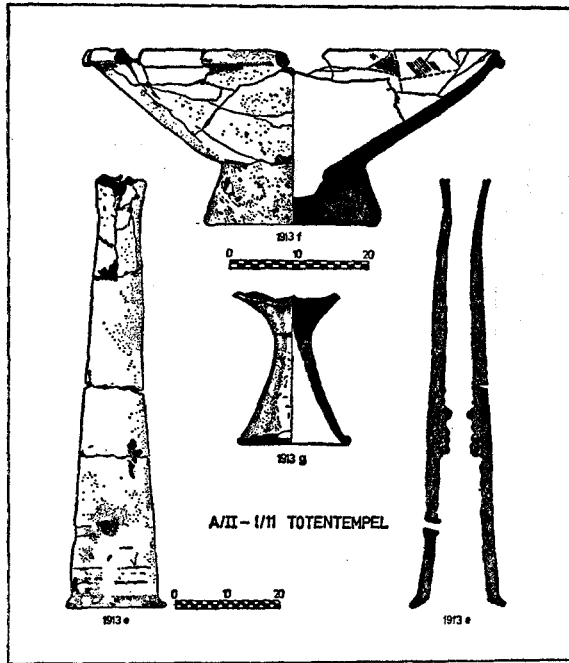


FIG. 11. Mortuary temple I, libation pipes and pottery from an offering niche

of mud-brick and a separate chamber for meat-offerings. Outside the entrance lay the skeletons of a pair of donkeys.¹

According to the evidence of the section walls the vault was broken and the tomb plundered in the period of stratum E/2 (Pl. XXIIa). Not very long afterwards the two neighbouring tombs were plundered. This throws some light on the security and morality of the time. We have similar evidence from other tombs belonging to strata F to D/2.

The chamber of the major tomb contained the remains of an adult woman and two infants of $1\frac{1}{2}$ -2 and 6-7 years of age. The superb quality and workmanship of the surviving pottery explains why this tomb was worth plundering. Especially notable are two grey-polished juglets with incised lotus designs,

¹ M. Bietak, *MDIK* 26 (1970), pl. XIV/a; J. Boessneck, *op. cit.*, pl. 5/b.

one with birds hovering between lotus stems (Fig. 12). The technological quality of those juglets, which continue the tradition of the Lisht ware, was already superior to the standard products of the time.



FIG. 12. Two juglets from tomb m/12 no. 9, str. E/2 with lotus and bird design

Within the cemetery some sub-grouping may be discerned in an internal dividing wall, which separated the older part (str. E/3) from the new graves. At this time another cemetery seems to have been added towards the south-west.

Two huts within the cemetery complex No. I may have been used by the ineffective guards. To the west the cemetery and mortuary temple were separated from a residential complex by a narrow street. Facing a small structure with a very wide door, most likely a shop, the street seemed to have been roofed in a similar way as in villages of the present day in the oases. The houses had still larger courts attached to them. Burials were no longer to be found within the residential areas but in family

cemeteries inside the settlement near the sacred area. The settlement expanded to an enormous size during this time, reaching as far as Khata'na, 1 km further west, where recent excavations (February 1979) have revealed a compact settlement pattern.¹

Stratum E/1

The two major temples in the sacred area remained intact during this period of occupation as we may deduce from the direct superimposition of Ramesside remains over the eastern shrine; the surface above the other shrine is completely denuded. That no tombs were sunk or cut into the large temples from a period prior to the Ramessides allows us to assume that the temples were in continuous use. In front of the large temple III there rose a flat-topped artificial mound lined with mud-bricks and covering the area of the former offering court. It was built of earth and a ramp led to its surface from the north. It is not clear at present whether this ramp was a temporary builders' ramp used for renovating the temple or a permanent approach to the top of the mound, which may have served as an offering-place.

The long, narrow mortuary temple (no. II) of stratum E/3-2 along the western edge of the sacred area gave way to a smaller rectangular mud-brick building, which was perhaps now a more simple mortuary temple. The tower at the north-western edge of the sacred area had collapsed in the meantime and was rebuilt further north.² In the immediate vicinity, a series of tombs shows the continuity of the north-western cemetery (II), and beyond, in the northern sector of the sacred complex, we may observe larger and smaller rectangular buildings. In two cases these structures were erected on top of double graves and clearly may be regarded as tomb superstructures or chapels. Round brick structures suggest, on the other hand, silos and a kind of occupation which started in this cemetery area. Traces of small huts were also observed during the excavations.

The so-called 'priesthouse' of stratum E/3-2 had been replaced by a mud-brick house attached to the mound and ramp mentioned above. Within and outside this building two children's burials were found. Some adult burials near by may belong to the stratum D/3 above.

Additional tombs were sunk within the two cemeteries west

¹ This campaign was directed by J. Dorner.

² Because of a pit underneath.

of the sacred complex. The mortuary temple I, described above, together with str. E/2 remained intact, although the east wall had to be renewed, due to a crack in the old wall, when the vault of a stratum F tomb below collapsed under the weight of an accumulation of earth.

The building material was now generally mud-brick, which proved to be much more water-resistant than the sand-bricks of the previous strata. It had been used before for the construction of tombs, and especially for the vaults.

The builders of the new tombs clearly avoided areas occupied by older tombs, which were obviously kept under some kind of surveillance, but now a new development occurred, namely the use of the necropolis as a place of habitation.

Small houses and huts were erected in the cemetery areas. They were simple rectangular buildings with only one or two rooms. Within the larger buildings we find child-burials beneath the doors, a custom which still exists among the fellaheen in the belief that it will prevent the deaths of other children.

The enclosure wall of cemetery I was not renewed, and the boundaries of the settlement area are now extended towards the west. While during stratum E/2 we find no graves in the precincts of the dwellings, they appear again here, normally in pits sunk in the courts or even under the floors of houses.

Besides the normal rectangular mud-brick chamber (2.5-4.5 m length) covered by a vault, we find less sophisticated graves in oval or round pits. We still have the tombs of warriors, carrying battle-axes and daggers; also, the burial of two donkeys before the entrance to the tomb (I/12 no. 2). The normal mode of burial is in the semi-contracted position, but we also have burials with bodies nearly extended, lying either on their backs or on their sides (Pl. XXIIb). Orientations continue to vary.

In the pottery of this stratum, new shapes appear (Figs. 13, 14), especially in the black-polished and white incised Tell el-Yahudiya ware. Bipartite handles became rare, and the rims of vessels became simple. The standard decoration consists of three or four sector-zones filled by a comb-pricked pattern set in a zigzag fashion. This occurs on fairly slim juglets with button bases (Pl. XXXc). There are also small distended globular juglets which have a band of decoration above and below their widest diameter; some juglets of this type are distinctly double conical (Pl. XXXa). The same shapes appear also in the plain black- or red-polished wares.

Everything now is made of local clay. The decoration and



FIG. 13. Offerings from tomb m/11 no. 7, str. E/1

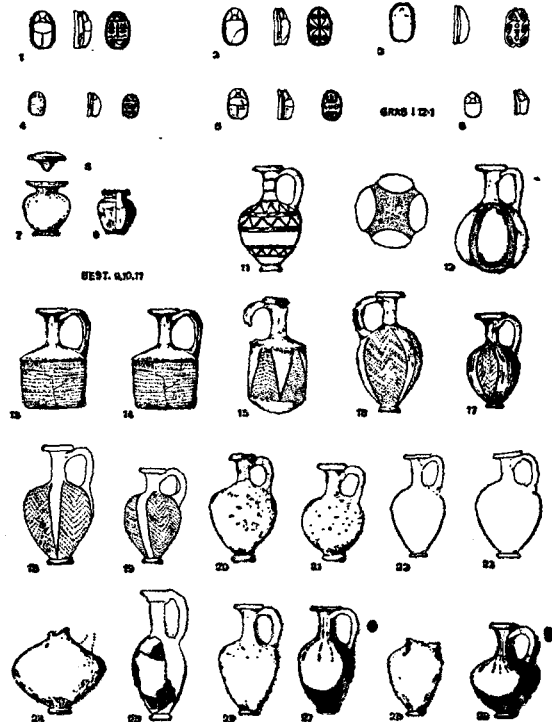


FIG. 14. Offerings from tomb 1/12 no. 1, str. E/1-D/3

types seem to be typical of the MB II B (3) Culture of the Delta. The culture had started to develop along its own line and distinct from Syria and Palestine. Cultural consolidation and isolation had occurred.

During the time of stratum E/1, obviously, trade relations with Cyprus had increased. We have in graves of this stratum Cypriot juglets of the 'white painted pendent line ware' (Pl. XXXIII b),¹ while tombs in Cyprus have yielded Tell el-Yahudiya ware

¹ M. Bietak, *MDIK* 23 (1968), pl. XXXI/a; *MDIK* 26 (1970), pl. XXII/b.

of Egyptian manufacture of the above-mentioned types of stratum E/1 and D/3.¹

Stratum D/3

The tendency to build houses on land previously reserved for cemeteries continues, even within the sacred area. As far as can now be seen the northern area of the sacred complex was occupied by a building with massive walls (Fig. 15). The size of this building and its foundations are unusual, but interior fireplaces suggest it was a residential edifice. Graves were uncovered beneath the floors of most rooms. Some of them (K/14 no. 1) were richly furnished and had golden jewellery.

South and south-west of this building, which may very well have been an extension of a palace, a part of the north-western cemetery continued to expand, now more to the south into the originally secluded area before the mortuary temple II, str. E/3-2. The building, which replaced this mortuary temple, was still in existence in str. D/3 and was possibly even enlarged.

Especially noteworthy is a large vaulted chamber of mud-brick (n/15 no. 1) at the western rim of the sacred area, beside the enclosure wall, which had been renewed in mud-brick. This tomb had similar dimensions to the major tomb of cemetery I behind the mortuary temple I (see above, str. E/2) 4.60 × 2.50 m, and it was constructed with strong walls. The vault had collapsed and the chamber had been plundered, but still preserved were the remains of three warriors in a supine position, with knives, battle-axes, and daggers clearly recognizable. Upon the heads of two warriors parts of golden diadems were found. The last burial inside the entrance was found intact. Two golden diadem-bands had been placed upon the skull, and the handle of a battle-axe was wrapped in an ornamented silver sheet. Behind the head of the warrior was an alabaster ointment jar and beside his right shoulder were found two pear-shaped marly-clay vessels and a drinking-cup. The warriors wore scarabs on their fingers and on their necks and a few wore scarabs on both hands. Unlike the usual practice of leaving the entrance open across the breadth of the chamber, this door had especially bonded jambs of mud-bricks. Outside

¹ P. Aström, *Three Tell el Jahudiyeh Juglets in the Thera Museum. Acta of the 1st International Scientific Congress on the Volcano of Thera, 15-23 September 1969* (Athens 1971), pp. 415-21; Lit. about Tell el-Yahudiya ware in Cyprus: *ibid.*, p. 420.

there was also a small chamber which contained animal bones (meat offerings).

This was a tomb of privileged persons, buried very near the main temple, which had probably remained intact. They were well armed, and their offerings and the style of burial

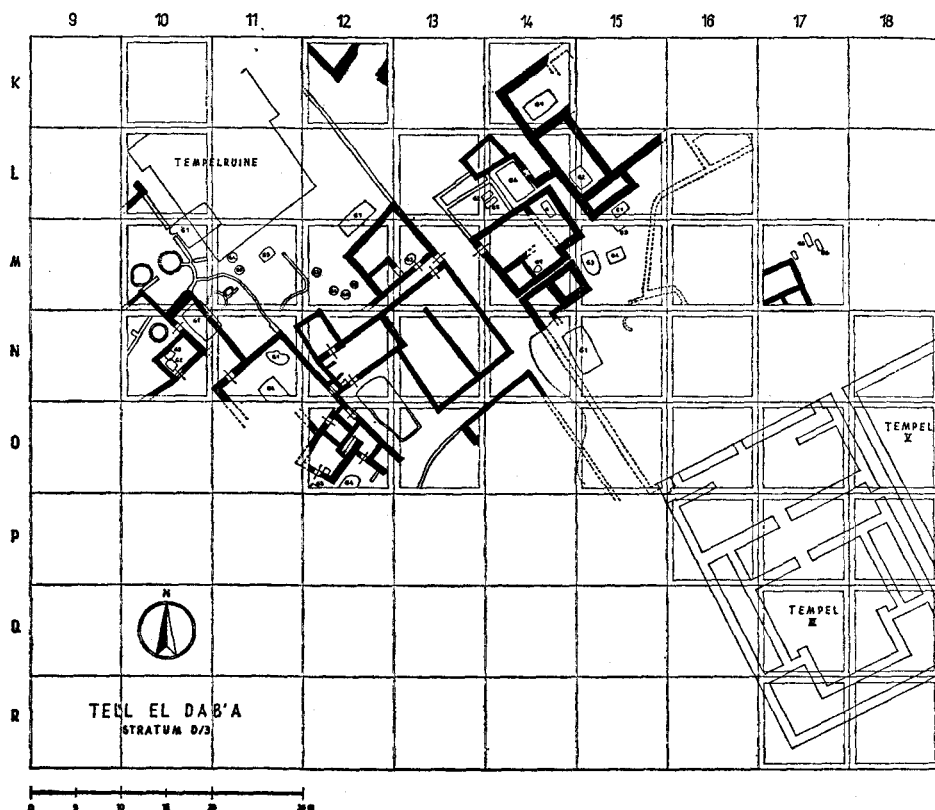


FIG. 15. Tell el-Dab'a, settlement of the advanced Hyksos period, str. D/3

already show a stronger Egyptian influence. Beside the two original burials were placed two wine amphoras, each containing red-polished dipper juglets.

The cemetery areas west of the sacred precinct were now almost exclusively used for residential purposes. The mortuary temple was probably already in ruins and out of use. Unfortunately this area was completely truncated by the deep foundations of a Ramesside temple enclosure wall. Only in the immediate neighbourhood south of this temple did we find a few tombs. One beside another, houses covered the rest of the area, only small tracts remaining open. The outlines of the

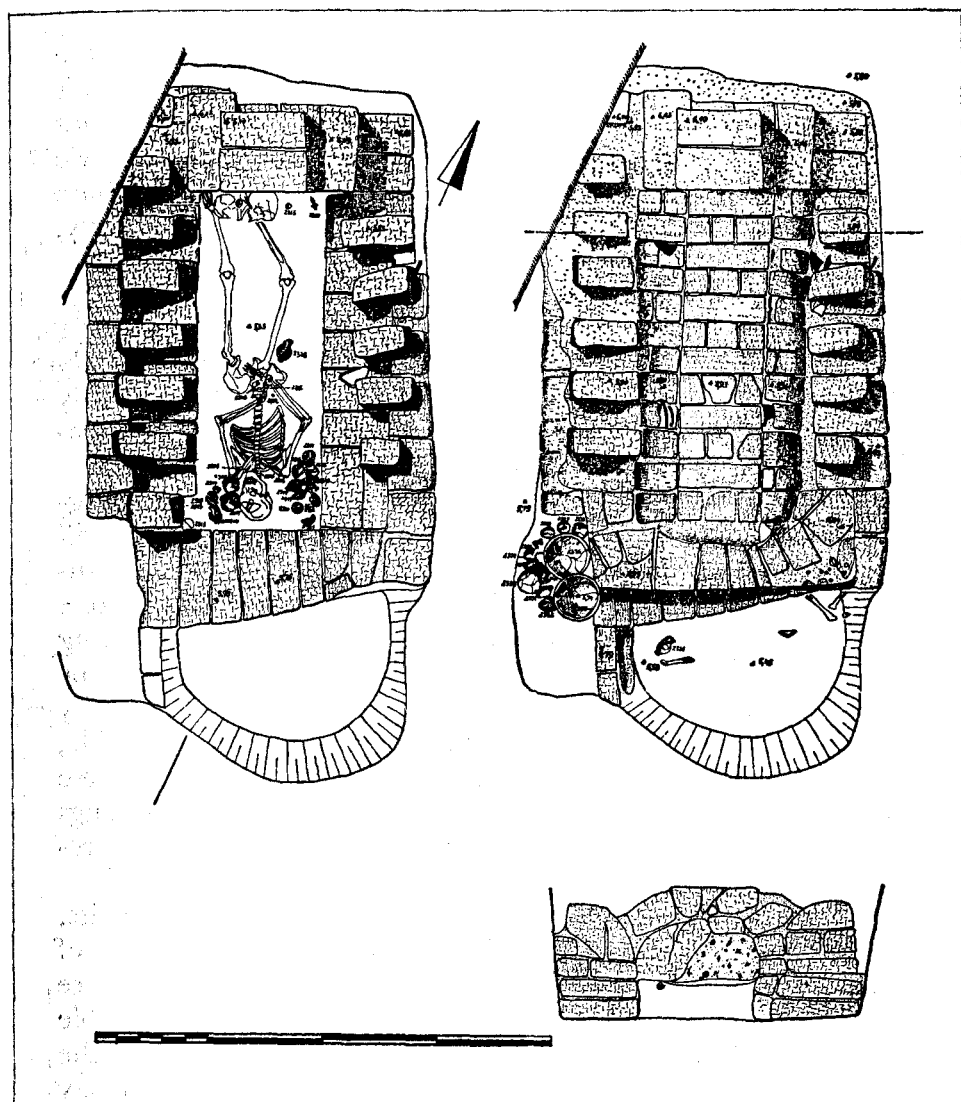


FIG. 16. Tomb m/15 no. 3, str. D/3

original plots of strata F and E/3 were not altered; internally, however, they had undergone much partitioning to satisfy the needs of the increasing number of occupants.

The layout of houses is fairly simple. We have rectangular one-room buildings, then houses with a separate inner room covering one quarter of the total area. We also have two-room houses to which were added minor rooms. Mainly children's graves were found within these newly acquired

residential areas, with the exception of two larger tombs (n/11 no. 4, o/12 no. 4). It seems that in the immediate vicinity of the sacred area adults were buried in cramped cemeteries. But this custom, as excavations in other areas have shown, was not necessarily the rule throughout the town. In other areas we have found tombs either within the houses or in the immediate vicinity and in the same building plot, a feature which, generally, became the fashion during stratum D/2.

Stratum D/2

As far as we may assume from the present excavations, only limited areas have remained intact in this stratum, partly because of *sebakh*-digging and partly because of the deep foundations of buildings which date from the Ramesside period.

Within the sacred complex no major changes may be recognized. The large building in the northern part of the area still remained intact but the rectangular building in the north-west was replaced by other buildings of unknown purpose. Still, we have evidence of tombs and also of the continuing use of the two major temples, though the latter may only be deduced from the fact that the temples were not covered by any new building until the Ramesside period. It is possible, however, that from the time of stratum D/3 and onwards these temples were superseded as places of worship by other buildings elsewhere in the town and that the older buildings were retained for reasons of sanctity.

In stratum D/2 family chamber-tombs, sometimes in pairs, were integrated into the architecture of the ground floor of houses (Fig. 17, Pl. XXXVIIb). For the first time shafts were found leading to the underground chambers and accessible from a special room or from an open court. The room above the vault seems to have been, at least in one case, completely closed. In spite of the greater protection thus afforded, this new style of construction made access to the chamber easier; and all tombs of str. D/2 hitherto excavated were plundered. The offerings seem to have been completely Egyptian. We found no evidence of Tell el-Yahudiya ware.

While some buildings were divided into several rooms and seemed to have more than one storey, others were small and sometimes irregularly rectangular. We also found some very small houses with massive foundations, which suggest that they supported tower-like constructions, and this clearly indicates a lack of space. Even narrow roads were blocked by small

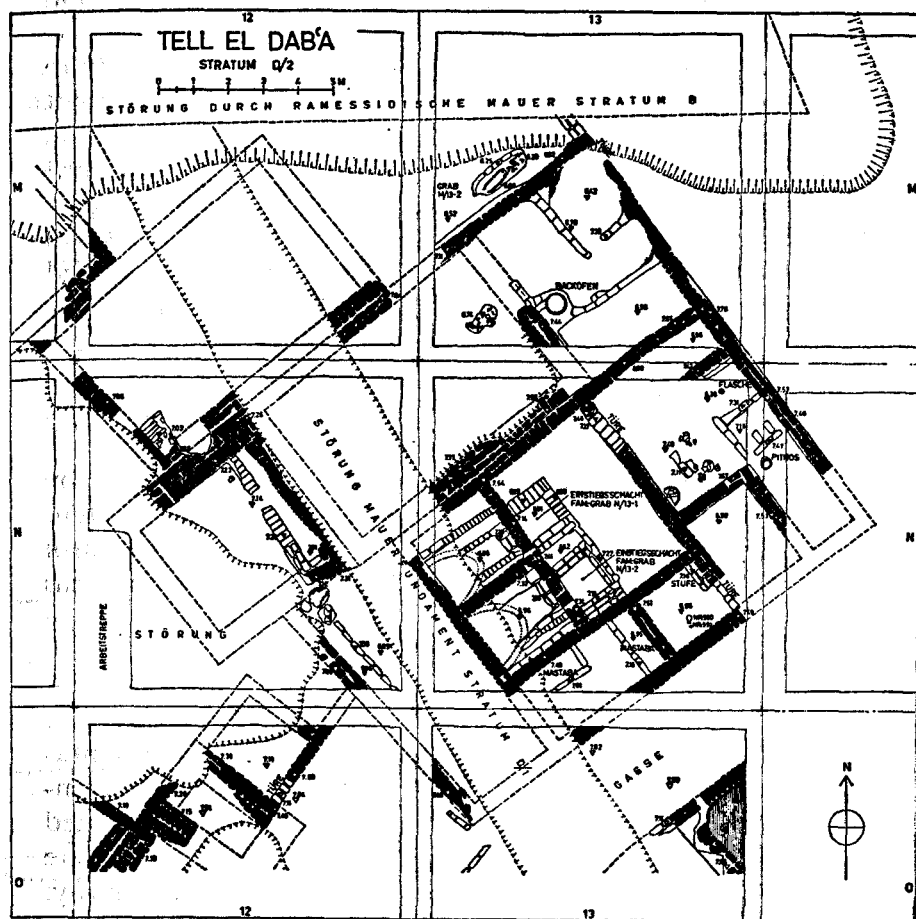


FIG. 17. Houses of the late Hyksos period, str. D/2, with tombs inside the buildings

houses and it seems that, occasionally, the only access to such houses was by way of another building. As in strata D/3, E/2, and G we once again have evidence of shops consisting of one room with a single wide entrance from the street.

This lack of space explains why cemeteries had nearly disappeared and why tombs were constructed within or under the houses. This situation reminds us of conditions in Tell el-Ajjul, Megiddo, and especially in Ras Shamra,¹ where we also

¹ See W. M. F. Petrie, *Ancient Gaza I* (London 1931), pl. LIV; *Gaza III*, pls. LXI, LXII. For Megiddo see K. M. Kenyon, *Eretz-Israel V* (1958), p. 59; for Ras Shamra see C. F. A. Schaeffer, *Syria* 16 (1935), p. 175, pl. XXXVI; *Syria* 19 (1938), pp. 197-255, figs. 2 ff.; for Mesopotamia see P. Delougaz *et al.*, loc. cit.

have family chamber-tombs in houses or at least in connection with buildings when settlement became congested behind the town walls. Perhaps this same explanation could also apply to Tell el-Dab'a in the late Hyksos period. Although we have not yet excavated any town walls, they are expected to be found on or near the shore of the lake, now under the subsoil water.¹ The other sides of the tell have been levelled for agriculture.

It seems to us that stratum D/2 may have been the latest stratum of the Syro-Palestinian MB-Culture in our series, and it had already become largely Egyptianized. Settlement was obviously abandoned abruptly, and this may be connected with the fall of the Hyksos rule in Egypt. All the graves were plundered, and this is unlikely to have happened while the buildings were inhabited.

As this stratum was largely destroyed by *sebakh*-digging and by Ramesside foundations, it is difficult to see to what extent destruction had been caused by warfare and by the occupation of the town by Egyptian forces. No truly indicative evidence has hitherto been discovered.

Stratum D/1 and hiatus in occupation

Stratum D/1 consists only of a deep 3 m strong filling wall cut deeply into the debris of D/2. It has roughly the same orientation as D/2 and exactly the same as the following temple complex of stratum B, further in the north-west. It can only be dated to the 18th dynasty by rough vessels for mortar, but the site was largely abandoned during the time of the 18th dynasty. This was completely in accord with our expectations. A site occupied by Asiatics, who were responsible for the Hyksos rule in Egypt, is likely to have been abandoned after their expulsion.

Stratum B

Towards the end of the 18th dynasty the site was occupied again and remained so until the end of the 20th dynasty (c.1310–1080 BC). All areas of the tell sufficiently preserved to be inspected through excavation were covered by houses and large walls with north-south and east-west orientations. In some areas it seems that a single planning body was responsible for the construction of the town. It was clearly a new foundation of gigantic dimensions, covering the area from

¹ At the natural edge of the tell the strata are situated on a lower level than those inside the mound.

Tell el-Dab'a in the south and extending to Qantir, 2.5 km in the north, an area of perhaps 4-5 sq. km.

A large temple area, which occupied the highest preserved section of the tell, had an orientation different from the general

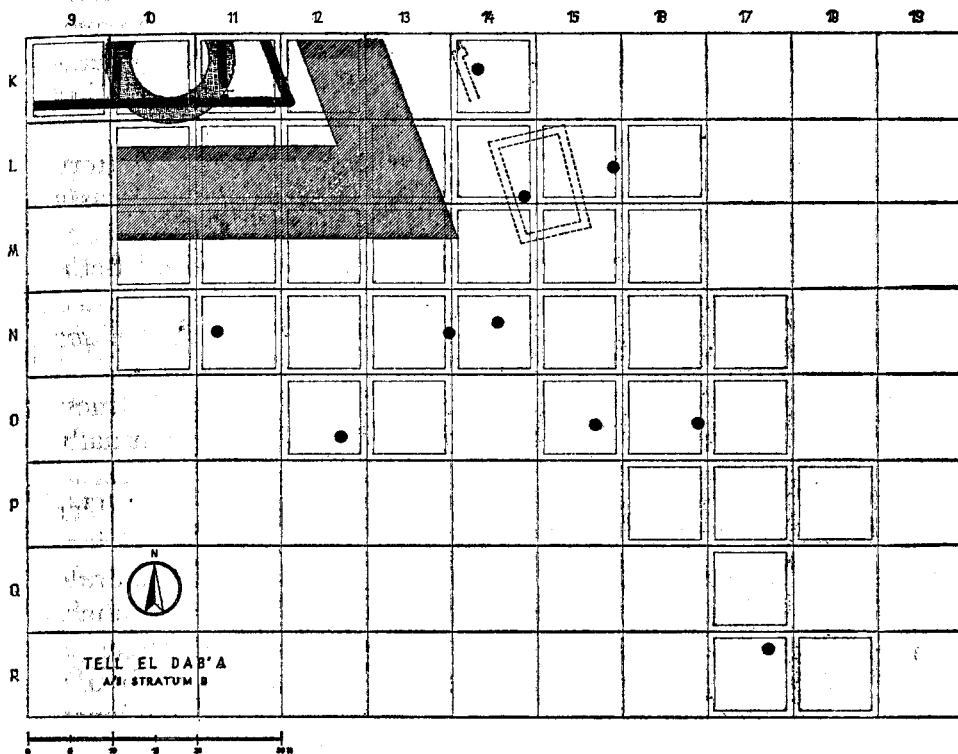


FIG. 18. Temple of Sutekh from the time of Horemheb and the 19th dynasty, surrounded by tree-pits, str. B

pattern. Edouard Naville excavated the enclosure wall and the inside of this area, reporting the discovery of column bases and also older remains such as the above-mentioned sphinx statue of Queen Sobeknofru.¹ In the meantime, the local farmers had removed most of the massive walls, which had a thickness of 20 cubits (10.50 m), and the highest part of the tell was now separated from the rest by a ditch.

The southern enclosure wall is orientated exactly east-west, while the eastern wall is parallel to the temple's axis, which seems to follow an older tradition going back to the Hyksos period (Fig. 18). For this very reason we assumed that, at one

¹ See p. 226 n. 4.

time, a Canaanite main temple must have stood in the north-western area of the tell, and its cult was perhaps revived late in the 18th dynasty.

To whom did this temple belong? We are now in the process of uncovering the southern section of the enclosed area. There is a limestone pavement, a large round well, and on the pavement we found a lintel (Pl. XXXVIIIa) of a sanctuary dedicated to 'Sutekh, great of might', and bearing the names of King Horemheb (c.1332-1305 BC).¹ Apart from yielding this inscription, the stratum was also dated by blue-painted pottery (XXXVIIIb) and Mycenaean ware to the late 18th dynasty and early 19th dynasty.

Indeed, it seems that a shrine, dedicated to the god Seth, who was the chief god of the Hyksos in this place, had been built within this enclosure. This reminds us of the *stela of 400 years*, found at Tanis, which obviously celebrates a festival commemorating the establishment of the cult of Seth, most likely at the site of Avaris, by a vizier Sethi. He is usually identified with the father of Ramesses II, Sethi I, who seems to have acted as vizier during the reign of Horemheb.² This new find at Tell el-Dab'a indeed corroborates the original interpretation of the *stela of 400 years*. It would commemorate an event which occurred 400 years before the time of Horemheb, i.e. in 1720-1705 BC. This is within the supposed reigns of King Nehesy's father and Nehesy himself, who, most probably, founded the cult of Seth at Avaris. Previously, we mentioned the possibility of linking our two large Canaanite temples of strata F-E/3-2 onwards with the foundation of this cult,³ but there may have been another major temple under the area of the late 18th-dynasty temple which remained in existence throughout the Ramesside period.

We should also mention that this huge temple area, dating from the end of the 18th and 19th dynasty and dedicated perhaps to Seth, was surrounded within and without the temenos-wall by an immense number of trees so laid out in a formal pattern that they conformed with the orientation of the temenos-wall (Fig. 18). The tree-pits reached deep down into

¹ M. Bietak, *AfO* 23 (1970), p. 203, fig. 32.

² K. Sethe, *ZÄS* 65 (1930), pp. 85-9; J. von Beckerath, *Tanis und Theben* (Glückstadt-Hamburg-New York 1952), pp. 38-41; W. Helck, *CdE* 41 (1966), pp. 234-41. See, however, R. Stadelmann, *CdE* 40 (1965), pp. 46-60; H. Goedicke, *CdE* 41 (1966), pp. 23-39; L. Habachi, *Tell el-Dab'a I* (in preparation).

³ See above, p. 255 f.

the subsoil. From the type of pits we may conclude that the trees were palm-trees but we have also found the remains of perhaps the largest sacred grove¹ ever found in an excavation. In Ramesside times the trees outside the temenos walls were replaced by the town site mentioned above, which was consciously planned and enormous. Therefore, the temple referred to above was the first construction on the new town site after the Hyksos period and was followed by the construction of other settlement buildings.

At the northern edge of the main temple, on the shore of the lake, we found, apart from holes perhaps used for mooring-posts, a huge system of walls, which we are now in the process of excavating. They may very well have been fortification walls, erected some time after the foundation of the settlement for defence against the raiding sea peoples, whose ships entered the mouths of the Nile, especially during the reign of King Ramesses III.

Habitation continued, however, and those walls were eventually topped with houses, which may date from the time of the 21st dynasty. We know that at this period the town was still in existence, because inscribed stones of Siamun² and Psusennes II³ have been found there, but afterwards it was abandoned for several hundred years.

Stratum A

Finally, in the 3rd century BC, the site was again occupied and an unimportant settlement spread over the entire tell, but it is preserved only on some of the highest parts of the mound. Its existence is, however, sufficiently attested by the evidence found in other areas of potsherds left on the surface by the *sebakh* diggers.

IV. *The reconstruction of the historical geography in the environment of the site and its identification with Avaris and Piramesse*

To summarize briefly, apart from the later remains there is evidence, extending through a series of strata, of a huge town site of an Asiatic (Canaanite) community of the Syro-Palestinian Middle Bronze Age Culture II A and B in the north-eastern

¹ Tree-pits have been found as far as 65 m distant from the temenos-wall.

² E. Naville, *The Shrine of Saft el-Henneh and the Land of Goshen*, *EEF*, Mem. 5 (London 1887), pl. 9/E.

³ A limestone fragment with the name of Psusennes II was recently found by a farmer in the land west of Tell el-Dab'a.

Nile Delta from the time of the 13th dynasty until the beginning of the 18th dynasty. Although several other sites of this culture have been discovered and identified since the beginning of our excavations,¹ Tell el-Dab'a is the largest and most impressive of all the sites, and, by its fine stratigraphic series and abundant excavated material, the most representative.

This offspring of the Middle Bronze Age Culture in the eastern Nile Delta had the same origin as the culture in Palestine and Syria, represented in the phases MB II A and even MB II B1. Pottery from those early phases, especially the juglets, shows very distinct links with coastal Syria. Later, as a result of different, especially prosperous, environmental influences this culture at the eastern edge of the Nile Delta acquired its own special characteristics. Many of those characteristics may be observed in southern Palestine as far as Gaza (Tell el-Ajjul). The rest of Palestine followed a different course of cultural development, differing in many respects from that of coastal Syria; but the influence of the highly developed MB-Culture of the Nile Delta extended to the borders of Palestine.

The topographical differences in the Syro-Palestinian Middle Bronze Age Culture have not yet been defined exactly, but they have been observed.² All three areas have, of course, very much in common. They also have individual features, which should be investigated more closely because they may lead to important historical conclusions. In an appendix (see below, pp. 283-8) we shall present a sketch of a cultural pattern, valid for the region from the eastern Delta to Gaza, which was very probably under Hyksos rule, but our list of items will also include some pre-Hyksos features.

The Canaanite community at the eastern edge of the Delta was naturally influenced more and more by Egyptian culture, but it continued to have its own characteristic features such as burials in front of house-doors, cemeteries within the settlement and eventually graves under the house-floors, contracted burials, servant-burials, roasted joints of mutton and pork placed as offerings in the graves, burials of sacrificed donkeys, a wide range of Syro-Palestinian pottery shapes and distinctive bronzes. Male burials with weapons show the warrior nature of the inhabitants.

The community had trade relations with the Eastern Mediterranean, especially with Cyprus, and also with Upper Egypt.

¹ Cf. M. Bietak, *Tell el-Dab'a II*, fig. 35.

² K. M. Kenyon, *CAH*².

Perhaps they profited from trade with those two regions. There is even a possibility that the establishment of the MB II A/B-Culture in the eastern Nile Delta was caused by close trade relations between Egypt and Byblos during the late 12th and 13th dynasties (str. G). The temples of str. E/3-2 are Canaanite, and the size of the main sacred area excavated thus far shows that we have here, at the beginning of the Second Intermediate Period, the most important city-state of the Syro-Palestinian Middle Bronze Age Culture in the eastern Nile Delta. It is not difficult to deduce, therefore, that this Asiatic community, after it had had time to establish itself in the eastern Nile Delta, must have been responsible for the Hyksos rule in Egypt. It showed scant regard for Egyptian tradition; indeed, in some respects its attitude was hostile to it. Two small offering tables of bronze, both of King Neferhotep I ($\pm 1741-1730$ BC) of the 13th dynasty, were intentionally mutilated (Pl. XXXVb); the images of the king, the protective uraei, and the names of the king were mutilated by nails. A head of a fine Middle Kingdom private statue, probably placed originally within a temple area, was used as a grindstone (Pl. XXXVa).¹ In some respects these acts of vandalism bear out the remarks of Queen Hatshepsut in the Speos Artemidos (*Urk.* IV. 390) that she had restored what had been neglected since the Asiatics were in Avaris.

After a break in occupation we have evidence of a huge pre-planned town of the Ramesside Period covering 4-5 sq. km. All the evidence taken together—the cultural and the stratigraphic—would fit well the identification of the site on the one hand with the capital of the Hyksos, Avaris, and on the other hand with the Delta residence of the Ramessides, Piramesse, as already maintained by M. Hamza, W. C. Hayes, L. Habachi, and John van Seters.² But this conclusion has necessarily involved us in the long-standing controversy about the localization of those old capitals of Egypt.

When we started our archaeological operations at Tell el-Dab'a, Egyptologists in general accepted the opinion of Pierre Montet, who identified Tanis with Avaris and Piramesse, or, at

¹ M. Bietak, *MDIK* 23 (1968), pl. XXX/a; *MDIK* 26 (1970), pl. XVIII/c, d; J. M. Weinstein, *BASOR* 213 (1974), pp. 49-57, and *BASOR* 217 (1975), pp. 1-16, presented reasons for supposing that Middle Kingdom statues and goods came to Palestine by plundering of Egyptian cemeteries during the Hyksos period.

² Cf. p. 229 ns. 3, 4, 7, p. 231 n. 1.

least they attempted to find a compromise solution, identifying Piramesse with the sacred area at Tanis and locating the royal residence at Qantir. Enormous quantities of stone monuments of the 19th dynasty and even some of the Hyksos time at Tanis seemed to prove by their inscriptions the identity of that site with Avaris and Piramesse; at Tell el-Dab'a-Qantir, however, inscriptional material is almost completely lacking.¹ The reasoning of Labib Habachi and John van Seters² that the stone monuments at Tanis had been transferred there from the area of Tell el-Dab'a-Qantir did not convince scholars at the time.

It seemed to us that the problem could only be solved by further excavations at those sites and by a scientific study of the ancient geography of the Nile Delta, not only to settle the specific question whether monuments had been transferred to Tanis from Tell el-Dab'a-Qantir, but also to check whether Piramesse and Avaris could possibly have been situated somewhere else.

We found immediately that the combining of archaeology with the study of ancient geography and geomorphology led us into a fascinating field of study where little work had previously been done and everything was still to be discovered.

The first problem we tried to settle was the reconstruction of the geographical environment of the sites in question during the second millennium BC. Geographical conditions have changed considerably since then.

Our first aim was to reconstruct the plan of the ancient water-courses and drainage systems, which provided the main routes for traffic and the sources of irrigation as well as setting the natural boundaries of the various provinces within the area. But how were we to find the ancient water-branches again?

River branches left quantities of sediment along their banks and on their beds, thereby forming levees along the banks and finally sedimentation ridges, diminishing in height the further they extended inland from the river. It follows, therefore, that the ancient Nile branches, at least those of some size, should be detectable on a contour map in the successive tongue-like contour lines.

¹ At the end of the nineteenth century numerous limestone blocks were excavated and burnt by natives in this region in order to produce lime; cf. F. Ll. Griffith in: W. M. F. Petrie, *Nebeshah Am and Defenneh (Tahpanhes)*, *EEF, Mem.* 4 (London 1888), p. 45, and E. Naville, loc. cit.

² See p. 230 n. 1, p. 231 n. 1.

In working through the Survey of Egypt contour maps of the Nile Delta, 1 : 100,000 or 1 : 25,000, it is indeed possible to trace most of the major waterways from their elevations and also to plot the main drainage systems and overflow lakes.

Very often contours of ancient shore lines, preserved in the inshore lakes along the Delta coast, show the sedimentation action of ancient river branches very well, as, for instance, a certain variation of the later-known Tanitic branch, which can be easily traced in islands of the Manzala lake. Those old shorelines belonged to stages of regression of the Mediterranean when its level sank, and this happened most probably in predynastic and early dynastic times.¹ An old variation of the Pelusiatic branch of the Nile can also be recognized in this way.

Not all the watercourses, detectable in the contour maps and topographical maps or with the help of satellite photography,² were active at the same period, of course. We were, therefore, compelled to find a method of dating the activity of the various branches and watercourses, which changed in Antiquity, in order to trace the topography of the Delta during different historical periods. Literary sources before the time of Herodotus give only very limited assistance in identifying the Pharaonic names of Nile branches. They consist mainly of onomastica or place-names in sacred temple lists. The most satisfactory approach is to date the historical Nile branches from the archaeological remains of the settlements and cemeteries along their banks.

It is reasonable to assume that if there is a concentration of settlements of a given period along the banks (levees) of a certain watercourse, that watercourse was active at the same period.

It was possible through this study to gain many very interesting details of the ancient historical geography of the Nile Delta. A few results with a bearing on the identification of our own site may be mentioned.

Our reconstruction of the upper course of the Pelusiatic branch of the Nile agrees, in general, with the results already obtained by Ali Shafei and Omar Toussoun³, but we were able to provide more details. Furthermore, we could trace the

¹ M. Bietak, *Tell el-Dab'a II* (Vienna 1975), p. 68, fig. 6; pp. 85 f., 99 f.

² *Ibid.*, pp. 47-112; K. W. Butzer, *Early Hydraulic Civilization* (Chicago 1976), p. 24, fig. 4; Rushdi Said (in preparation).

³ A. Shafei, *BSGE* 21 (1946), pp. 235, 239, figs. 1, 2; O. Toussoun, *Mémoire sur les anciennes branches du Nil* (Cairo 1922).

branch which linked ancient Heliopolis with the course of the Nile. The direction of this branch is completely in line with the axis of the temple of Heliopolis. We have even found on the contour map the point at which the Heliopolis channel joins the Pelusiatic branch.

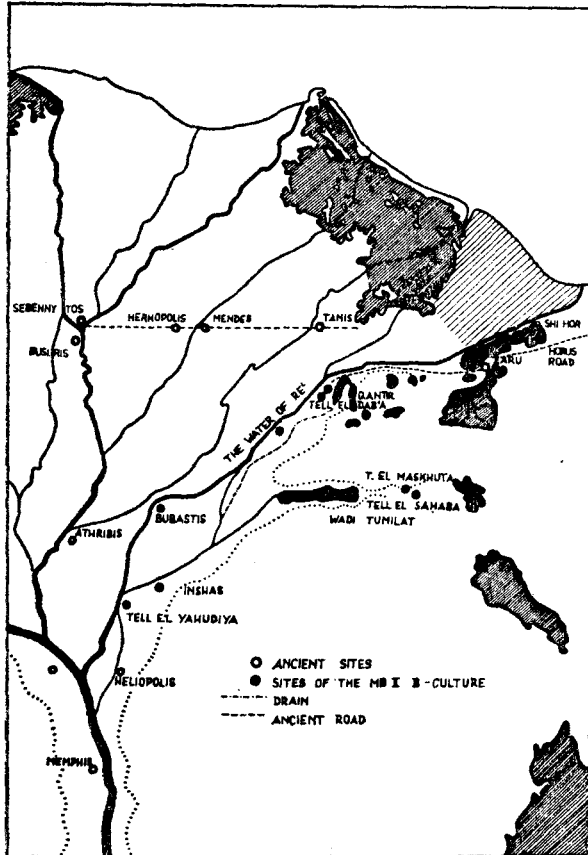


FIG. 19. The Eastern Delta, ancient sites and watercourses

One of the most interesting results concerns the neighbourhood of the old city of Bubastis (Fig. 19). Contour maps clearly show that the ancient Pelusiatic branch did not follow the same course as the modern Bahr Abu el-Akhdar, as A. Shafei suggested,¹ but was once either united with the Tanitic branch or at least flowed in its immediate vicinity and parallel to it, leaving Bubastis on its eastern bank. This corresponds closely with the very accurate details of the position of the towns in relation

¹ A. Shafei, *op. cit.*, p. 234, pl. I; cf. also O. Toussoun, *op. cit.*, 14, pl. VI.

to ancient watercourses given by Ptolemy, and also with other evidence from Pharaonic Egypt.¹

Another interesting discovery was that the western part of the Wadi Tumilat, with three closed metre-contour lines, had once been an ancient overflow lake, taking the surplus from the drains which issued into it. Along the shorelines of this lake there are several archaeological sites. We do not know exactly when the lake became dry in Antiquity, but we do know that it continued to exist, though divided into several lakes, at least until Ramesside times, because the Papyrus Anastasi VI mentions the passing of some Edomite tribes to the lakes of Pithom.² It now becomes clear why, at least from the time of the Middle Kingdom onwards, the Wadi Tumilat region was identified with the Eastern Harpoon nome, which is only understandable if the waters there were plentiful enough for fishing.³ Few Egyptologists have hitherto understood why the Wadi Tumilat at that time was called the Eastern Harpoon nome. We now know the reason.

As mentioned above, it may be observed that the Pelusiac branch joined the same huge sedimentation ridge as the Tanitic branch north of Bubastis, and this could explain another problem concerning Egyptian history and historical geography. Our investigations suggest that during certain periods the Pelusiac branch flowed into the Tanitic branch, while at other times the Tanitic branch joined the Pelusiac branch. In this connection it is significant that the sites of the Second Intermediate Period and of the Ramesside period⁴ are numerous along the Pelusiac branch, including its lower reaches, but sites of those periods have not yet been found along the Tanitic branch, with the exception of the much-disputed evidence at Tanis. On the other hand, sites of the 22nd to 25th dynasties, which have not been found along the northern course of the Pelusiac branch, are to be found along the Tanitic branch. By that time the Pelusiac branch had split near its mouth at the Mediterranean. This process happened most probably during the New Kingdom (site evidence, Tell el-Makhzan). In consequence we find artificial mounds many kilometres in length, showing that an enormous effort was made to dredge the branch and to keep it open for navigation.⁵ This may lead us to the conclusion that from the 20th

¹ M. Bietak, *op. cit.*, pp. 125-39, 146.

² *Ibid.*, p. 90.

³ *Ibid.*, pp. 89 f., 163.

⁴ *Ibid.*, pp. 102-3, 108, 167 (fig. 35), 216.

⁵ *Ibid.*, p. 216.

dynasty onwards the Pelusiac branch was silted up and the main stream flowed along the Tanitic branch at Bubastis. This situation seems to have continued until the 26th dynasty, the Saïte period.

These changes in the course of the river provide an explanation for the absence of Third Intermediate Period sites along the lower part of the Pelusiac branch and they also throw some light on the distribution of political units during the late Libyan period: the kings of the 22nd dynasty held the territories of Renefer (Tanis) and Bubastis as well as the territory around Athribis, while the chieftains of the Ma at Pisopdu occupied the territory along the eastern arm of the Pelusiac branch, the modern Bahr el-Shibini and its continuation to the north, which provided an excellent natural boundary between Bubastis and Pisopdu.¹ It is very interesting to note that a channel, which once linked the Pelusiac branch at Qantir with the Tanitic branch at Tanis, can be dated, according to three sites along its banks, to the time of the 22nd dynasty. Most probably this channel brought also the waters of the eastern arm of the Pelusiac branch of the Nile to the Tanitic mouth.

In such conditions it is understandable that it was most probably the silting up of the Pelusiac branch and the loss of the natural protection afforded by the huge Bahr el-Baqar drainage system in the east that caused the transfer of the capital of Egypt, from Tell el-Dab'a-Piramesse to Tanis, the only suitable harbour remaining at this time. The stones and monuments of the city of Piramesse were transported by the kings of the 21st and 22nd dynasty to their new residences, not only to Tanis, but also to Bubastis. Parts of the same monuments were transferred to both sites, as Labib Habachi has shown in the case of some statues and columns with palm-leaf capitals.²

No single monument of the Ramesside period has, however, been found at Tanis *in situ*. Each had been removed from their original site and transferred there, in some instances after being broken from their bases. Such a procedure may explain why Professor J. Yoyotte³ found at Tanis a statue which had been provided with toes of lime-coated mud; the original feet

¹ M. Bietak, *op. cit.*, p. 168, fig. 36.

² L. Habachi, *Tell el-Dab'a I* (in preparation). The columns in question are of Old Kingdom origin and were reused during the time of the 19th dynasty for a temple and the second time during the reign of the 22nd dynasty, but then distributed in two places in order to be reused for major temples in Tanis and Bubastis.

³ Personal communication.

and the base had been left most likely behind somewhere at Qantir. No matching joints have yet been found between broken monuments at Qantir and Tanis, because only a few pieces of sculpture seem to have survived at Qantir, but the archaeological evidence is clear enough even without such proof. Furthermore, excavations at Tanis over many years have not produced evidence of a single stratum dating from before the 21st dynasty. Besides Bubastis, it seems that other ancient sites, like Tanis, also profited from the destruction of monuments at Piramesse.¹

What was not understood until now is the fact that, by the transfer of the Ramesside monuments, the cults of the gods of Ramesses at Piramesse, very special cults indeed, were also transferred to the new capitals of the 22nd dynasty. Many hundred years later, in the fourth century BC, when the memory of the original location of Piramesse had been forgotten, secondary cults of the gods of Ramesses of Piramesse existed in Tanis, according to the evidence of two statues of generals found there, and we also know that cults of a similar kind existed at Bubastis.² This evidence suggests that in the late period some Egyptians identified Piramesse with Tanis while others believed it was located in the neighbourhood of Bubastis. This fact, not only reasonably but also chronologically, explains very well the difficulties encountered by post-exilic Jewish scholars from the third century BC onwards in locating the site 'Raamses' of the Exodus (i.e. Piramesse) and their identification of it with Tanis or with some place in the vicinity of Bubastis.

According to the Septuagint³ the Exodus took place via the Wadi Tumilat, in the neighbourhood of Bubastis, but according to Psalm 78 the city 'Raamses' is very clearly connected with Tanis.⁴ These two interpretations can now be explained as resulting from the fact that secondary cults of the gods of Piramesse were conducted concurrently and independently from the 4th century BC onwards, at both Tanis and Bubastis.

Piramesse, however, was situated between those two places at Tell el-Dab'a-Qantir. It was undoubtedly the place of

¹ e.g. Tell el-Muqdam (L. Habachi, *op. cit.*).

² L. Borchardt, *Cat. Gen. Nos. 1-1294*, vol. iii (Cairo 1930), pp. 32-4 (no. 689), pp. 41-3 (no. 700); J. Yoyotte, *Ann. de l'École Pratique des Hautes Études* 79 (1971-72), pp. 172 f.; E. Naville, *Bubastis, EEF, Mem. 8* (London 1891), pl. 46/B, C.

³ Gen. 46. 28-9 clearly has Ramesse in the vicinity of Wadi Tumilat (Heroonpolis) in mind.

⁴ M. Bietak, *op. cit.*, p. 218.

origin of the stone-blocks, whose inscriptions eventually led to the development of the two cults in later times.

Further work on the tracing of ancient Nile branches led us to realize that the Pelusiatic branch had undergone substantial changes in its lower course. A very deep channel, which can be seen on recent survey maps across the Suez Canal area, marks the course of the classical Pelusiatic branch.¹ It was formed by a phase of vertical erosion, due to the deep level of the Mediterranean at that time.

We have already mentioned an old course of the Pelusiatic branch, which can be connected with some ancient shorelines in the Manzala lake and also a channel, which was most probably open during the time from the Middle Kingdom and until the end of the 20th dynasty. Its existence is traceable by the enormously long mounds of dumps along its southern bank. This latter course alone provided a connection with a big lake, north of the Isthmus of Qantara, along the Horus road, and we know from administrative papyri of the Ramesside period that it was possible to reach Piramesse along the waterway from Sile, the frontier fortress and the first fortress on the Horus road to Palestine.² Most probably this elongated lake can be identified with the *Shi-Hor* (the Lake of Horus) well known from Egyptian texts, and it is also mentioned in the Old Testament as marking the frontier of Egypt.

South of the Isthmus of Qantara we have the Ballah lakes, which can very probably be identified with *P3-twfy*, mentioned in Ramesside texts parallel to the *Shi-Hor*.³ Its name, being in part homonymous with *Yam-suph*, the Sea of the Reeds of the Old Testament, suggests a later association of the two by the compilers of the Exodus.

A channel through the Isthmus of Qantara was first noticed by the French expedition under Napoleon Bonaparte; it was called the 'separating water', *T3-dnyt*, and it is represented on the northern outer wall of the hypostyle hall of the temple of Karnak. This was exactly the place where the boundary fortress of Sile was to be expected.⁴ Furthermore, the long

¹ M. Bietak, pp. 84-6; A. Sneh and T. Weissbrod, *Science* 180 (6.4.1973), pp. 59-61, and *American Scientist*, vol. 63, no. 5 (Sept.-Oct. 1975), pp. 245-8.

² *Pap. Anastasi v*, 24. 3-7 (transport of stelae from the residence to Sile and *T3-t-Rc-mssw-mry-Imn*, cf. A. H. Gardiner, *JEA* 6, 1919, pp. 106 f.).

³ See p. 282 n. 2.

⁴ A. H. Gardiner, op. cit., pl. XI. Sile (Zaru) is therefore most probably not identical with Tell Abu el-Seifa, which was perhaps Mesen.

narrow mound dumped south of the Pelusiatic branch, which should probably be dated to the New Kingdom, was cut through by a channel (as can be seen on contour maps) in order to allow ships to enter the lake which we identify with *Shi-Hor*, and thence to reach the border fortresses east of Sile.

In connection with the reconstruction of the ancient geography of the Nile Delta, mention should also be made of the position of the Butic River, said by Ptolemy and, indirectly, also by Flavius Josephus to link in Roman times all seven Delta branches of the Nile from east to west.¹ It was a canal and its mounds of dumps are still visible in some places, especially between Mendes and Tanis.² It was the geographer John Ball who first recognized that those mounds of dumps must mark the course of the ancient Butic canal. Along this east-west line we find many of the most important towns of the Nile Delta (Fig. 19), as, for instance, Heracleopolis Parva, Tanis, Mendes, Baqliya, Sebennytos, and further to the west Sais, although there the canal follows a more northerly course in order to avoid becoming a sedimentation trap. Most of these towns had been capitals of nomes and we may conclude that the Butic canal only replaced an earlier road which crossed the Nile Delta. The main branches of the river must have been crossed by boat.

The geographical evidence pointing to the location of Avaris and Piramesse at Tell el-Dab'a-Qantir is in complete agreement with the evidence provided by administrative and literary texts and by tradition. These sources furnish many descriptive details of Avaris and Piramesse, of which the following are among the most instructive. According to the Manethonian tradition, Avaris was situated in the nome of Sethroë, east of the Bubastic river.³ An ostrakon published by Sir Alan Gardiner⁴ mentions, as the easternmost branch of the Nile called '*The Waters of Avaris*', a branch otherwise generally known by its traditional name of the '*Water of Rec*'. From the inception of the nome system of organization

¹ J. Ball, *Egypt in the Classical Geographers* (Cairo 1942), p. 129.

² Ibid. and M. Bietak, op. cit., plan IV.

³ Africanus and Eusebius version (Syncellus, pp. 113, 114) and Armenian version (*Chronica* i. 99), which would correspond roughly to the 14th Lower Egyptian nome. Concerning the situation east of the Bubastic River, cf. Josephus, *Contra Apionem* i. 14. 78. The Bubastic River was the easternmost branch and issued according to Ptolemy at Pelusium into the Mediterranean Sea.

⁴ A. H. Gardiner, *JEA* 10 (1924), p. 92.

in the Nile Delta this branch was administered by the nome of Heliopolis.¹

Piramesse, according to statements in Ramesside letters, was connected by water with Sile, with *Shi-Hor*, and with *P3-twfy*, all of which were situated on the eastern border of Egypt.² Piramesse was also situated near the eastern frontier, and Gardiner produced evidence to show that it lay east of the 'Waters of *Rer*'.³

This evidence alone would be enough to remove Tanis from contention, but the direct evidence pointing to Tell el-Dab'a-Qantir is even more precise. Jean Yoyotte found in the Pushkin Museum in Moscow,⁴ an inscription on a shrine dating from the 20th dynasty which mentioned a 'temple of Amun of Ramesses, great of victories, at the harbour of Avaris'. The epithet 'great of victories' belonged to Piramesse and its gods. This inscription, which has hitherto received little attention, indicates that the name of Avaris was still in use in Ramesside times, specifying that part of Piramesse which lay near its harbour.

In the 19th and 20th dynasties Tell el-Dab'a was part of a large town site which extended from Qantir, in the north, to Tell el-Dab'a, in the south. It was already occupied during the Middle Kingdom and the Second Intermediate Period by an Asiatic population who lived around a lake fed by a channel from the Pelusiac branch of the Nile. A drain issued into the extensive Baħr el-Baqar drainage system in antiquity. This lake offered ideal harbour facilities and eventually it provided Piramesse with its harbour.

According to the Papyrus Anastasi IV the boundaries of Piramesse were marked by some of its main temples, 'the House of Sutekh being in the south'. The southern extremity of the whole Ramesside complex is marked by Tell el-Dab'a, and it was there that we found a huge temenos wall surrounded by groves. Within an enclosed area of 150 × 100 m we found, at the beginning of our excavations, a lintel dedicated to the god Sutekh⁵ and bearing the names of King Horemheb. This evidence agrees exactly with the location given in the papyrus.

Viewing the evidence as a whole, we can say that Tell

¹ M. Bietak, *op. cit.*, p. 162.

² *Pap. Anastasi* iii, 2. 8-9, 2. 12, *Pap. Anastasi* v, 24. 3-7.

³ M. Hamza, *ASAE* 30 (1930), pp. 43-5; M. Bietak, *op. cit.*, 200.

⁴ Moscow I, 1a-4867 (J. Yoyotte, *op. cit.*, 172). ⁵ See p. 270 n. 1.

el-Dab'a-Qantir fulfils nearly all the known requirements of Avaris and Piramesse. There are the royal palace and the living quarters of the high Ramesside functionaries which were excavated by M. Hamza and Labib Habachi at Qantir,¹ a large harbour, which was occupied during the Middle Kingdom and Hyksos times, and a temple of the god Sutekh in the south. Furthermore, the unique strategic position of the site, on the Pelusiac branch of the Nile is certainly significant. Protection on the east was provided by the huge overflow lakes of the Bahr el-Baqar, leaving only a small opening in the north between the Pelusiac branch and the Bahr el-Baqar system, through which invaders could enter the Delta. This opening was guarded by Tell el-Dab'a-Qantir. The site also had ideal inland harbour facilities for shipping, as well as waterways to connect it with the south, with the Mediterranean and with the frontier fortresses, including Sile and the first fortress on the Horus road.

All this evidence taken together—archaeological, epigraphical, and geographical—seems to me to make it certain that Avaris and Piramesse were situated at Tell el-Dab'a and Qantir. No other site in the eastern Delta bears comparison with it topographically or satisfies so many of the other desiderata.

The old splendour of the two cities has vanished completely because of quarrying, plundering, and later land-reclamation. Nevertheless, archaeology, by using modern methods, is able to reconstruct, at least in outline, the chief features of the two old cities which played such an important role in the history of the Near East.

APPENDIX: SUMMARY OF THE CHARACTERISTICS OF THE MIDDLE BRONZE AGE CULTURE IN THE EASTERN NILE DELTA

Only a general summary of the whole body of material associated with the Middle Bronze Age Culture in the eastern Nile Delta can be presented here, because it is impossible to include the whole corpus of material culture. We must realize, however, that special architectural features were bound to evolve in a different local environment where

¹ M. Hamza, *op. cit.*; L. Habachi, *ASAE* 52 (1954), pp. 489-559.

stones were lacking; consequently it is clear that buildings which were constructed in stone in Palestine and Syria would be made of mud-brick in the Egyptian Delta. Also tomb-chambers could not be hewn in bed rock, but had to be built within a pit, using mud-brick as building material. Any future comparative cultural analysis must take such local factors into consideration.

We shall divide our survey into three sections, describing separately the chief characteristics of which the first two are especially significant from a cultural point of view: (1) sacred, (2) funerary, (3) domestic. Many of the features to be mentioned are found in Palestine and Syria, while some seem to be peculiar to the eastern Delta. Some of these latter features are surely of Egyptian origin. Lastly we should append a corpus of the material culture, which, however, can only be summarized here.

1. *Characteristics of Sacred Elements*

- 1.1 Large central sacred precinct consisting of different kinds of temples (Fig. 8).
- 1.2 Main temple with massive walls, broad cella ('Breitraum') and rectangular apsidial niche, axial system¹ (Fig. 9).
- 1.3 1.2 with a narrow corridor-like pro-cella, followed by second pro-cella or assembly hall.²
- 1.4 Use of double walls with filling as constructional elements for sacred buildings.³
- 1.5 Door leading from the pro-cella or the cella to the left, either to the outside or into an adjoining room.⁴
- 1.6 Forecourt in front of the entrance to the temple surrounded by other buildings.

Some similarities have to be mentioned between the buildings east and west of the forecourt at Tell el-Dab'a, str. E/3 and Megiddo, as reconstructed by C. Epstein.⁵ There, as at Tell el-Dab'a also, the buildings lining the east of the court bound a narrow passage. The buildings west of the forecourt have in both temple complexes a very long casemate-like appearance. At Tell el-Dab'a, the western side is occupied by a mortuary temple.

¹ Cf. Alalakh VII; Hazor, area H, str. 2 and 3; cf. p. 249 n. 4.

² Alalakh VII; to some extent Hazor, area H, str. 1 (LB).

³ Hazor, area F, 'double temple', cf. p. 250 n. 1.

⁴ At Tell el-Dab'a the main temple III has a door leading to the left towards the adjoining temple V. The mortuary temple II has two rooms attached to the left, Cf. G. Loud, *Megiddo II*, OIP 62 (Chicago 1948), figs. 180, 394. Other temples in Palestine show also rooms attached to the right of the temple's axis.

⁵ *IEJ* 15 (1965) 211, fig. 1. See other reconstructions of the sacred precinct of Megiddo by I. Dunayevsky and A. Kempinski, *Eretz Israel* 11 (1973), pp. 8-29.

- 1.7 Rectangular alter (*bamah*) covered with ashes, in front of the temple.¹
- 1.8 Offering pits in the vicinity of the *bamah*, in front of the temple, filled with offering pottery and burnt animal bones.²
- 1.9 A special small room, attached to the front corner of the temple.³
- 1.10 Place at the front of the temple, especially marked by, e.g., a column base, used secondarily there.⁴
- 1.11 Long narrow (mortuary) temple facing a court, with two entrances leading into a narrow broad hall. A door on the left side leads through the wall into one or two adjoining smaller rooms.⁵
- 1.12 Near the temples, especially beside 1.11, a free-standing tower.⁶
- 1.13 Mortuary temple with tripartite sanctuary and a pro-cella extending asymmetrically towards the left of the axis.⁷ Pro-cella divided from entrance area by two tongue-like walls.⁸
- 1.14 Benches constructed of mud-brick within the temple, in the cella and pro-cella, attached to the dividing wall between both rooms.⁹
- 1.15 Offering places (niches) within the temple, with libation pipes and footed bowls for offerings. They are situated above tombs.
- 1.16 Foundation trenches and site of temple burnt (purified by burning) before construction starts.
- 1.17 Pits containing small votive pottery (bottles and plates) on a sand bed. Similar pits were found in residential areas, in cemeteries and near the mortuary temples.

2. Funerary Characteristics

- 2.1 Tombs beside a house, within the enclosed area of the building (str. G, F, E/3, E/1, D/3).
- 2.2 Tombs in family cemeteries within a settlement, near a sacred

¹ Hazor, area H, str. 2, loc. 2534 and 2554 (Y. Yadin, *Hazor, Schweich Lectures 1970*, London 1972, p. 71); Shechem (G. E. Wright, *Shechem*, New York 1964, fig. 56); Nahariya (M. Dothan, *IEJ* 6, 1956, fig. 1).

² O. Tufnell, *Lachish II* (London 1940), pp. 43-4; Y. Yadin, op. cit., p. 103.

³ Hazor, area H, str. 2; Alalakh IV.

⁴ See above, p. 249 n. 3.

⁵ Cf. p. 252 n. 1.

⁶ Similar towers were found at Tell el-Ajjul and Shechem (cf. p. 252 n. 2).

⁷ This is to be considered as a sign of Egyptian influence, cf. the nearby temple of the 12th dynasty at Ezbet Rushdi (fig. 10).

⁸ Hazor, area H, str. 2 and 3.

⁹ Ibid.

area (str. F-E/1, D/3).¹ Some cemeteries with their own mortuary temples.

- 2.3 In strata of cramped settlements tombs under houses or even connected with the house structure (D/3-2).²
- 2.4 Vaulted tomb-chambers, constructed of mud-brick within a pit and built with nearly vertical courses. Normally every second course of the vault rests on half a brick, projecting from the vault's base (G-D/3). This kind of chamber may be very small and simple, only half a brick thick or large, with walls of one and a half bricks in thickness.
- 2.5 Vaulted chamber with a brick-built shaft leading down to the entrance. The vault is normally high and steep. The floor of the tomb pit is normally covered by a layer of gravel or coarse sand. The filling of the shaft outside the chamber also consists of sand (str. D/2). This method of construction can be considered as being Egyptian.
- 2.6 Double chambers appear frequently in nearly all strata with tombs, but this feature is also found in MK-necropoleis.
- 2.7 Only the upper part of the body is protected by a rudimentary brick vault (str. E/1, F).
- 2.8 One to three burials in a chamber.
- 2.9 Burials in contracted position with the head normally placed near the entrance. The upper part rests as a rule on the back, the heels are normally placed under the pelvis, while the thighs are generally at an angle of 90°, or at least a wide angle, in relation to the upper part of the body, str. G-D/3.
- 2.10 Burial in nearly extended position and legs only slightly flexed (F-D/3).
- 2.11 Burial on back, legs slightly contracted with knees upwards (G, F).
- 2.12 Warrior burials: usually adult males, equipped with battle-axes and daggers in a leather or copper belt. Sometimes a lance head is found (G-D/3).
- 2.13 Children's burials in amphoras. The neck and shoulder of the vessel were smashed in order to create a bigger opening, which was often covered with a plate.
- 2.14 Children's graves in roofed mud-brick chambers. The lining of the walls is half a brick in thickness and the pointed roof consists of six or eight courses of bricks laid in pairs.

¹ The context of the 'courtyard cemetery' should be reconsidered in this matter.

² P. Lapp, *BASOR* 195 (1969), p. 28; W. H. Stiebing, *JNES* 30 (1971), pp. 113-14.

- 2.15 Servant-burials in front of the tomb entrance.¹
- 2.16 Sacrificed donkeys, deposited as a whole, normally in pairs, within the tomb's pit in front of the entrance to the chamber; in two cases they were buried in separate round pits.²
- 2.17 Toggle pin of bronze on the left shoulder of the burial to hold together the garment.
- 2.18 Scarab, either mounted on a copper or silver ring or without mounting, held in the left hand.
- 2.19 Golden diadem bands (single or double) around the heads of both males and females (str. F, D/3).
- 2.20 Meat-offerings (mainly from sheep and pig), often placed on plates near the entrance or near the head of the deceased.
- 2.21 Pottery piled up in heaps beside the skull and juglets, normally piriform.
- 2.22 Secondary offerings in shallow separate pits, cut near the entrance side of the tomb.

3. *Settlement Characteristics*

Our lack of knowledge about Egyptian settlement features, especially in the Nile Delta, makes it difficult to isolate settlement characteristics which are peculiar to the MB-Culture of the Delta. Inevitably the characteristics to be mentioned will include some which are purely Egyptian in origin. We also lack, except in str. G, large excavated residential areas.

- 3.1 From the evidence at Tell el-Yahudiya we should expect to find an enclosure with a stucco sloping glacis and possibly a ditch at other sites of the MB-Culture in the Nile Delta. It is very likely that most of them have been levelled by agricultural activity.
- 3.2 Irregular settlement pattern, but with a common orientation of buildings.
- 3.3 Compounds consisting of the house, additions, silos, and an enclosure wall. Round outlines of this wall are typical of str. F and G; more rectangular outlines appear in str. E/3 and onwards.
- 3.4 Compounds of attached houses.
- 3.5 Rectangular buildings divided into a larger and a smaller room (snail-house-type). Fireplaces were constructed near the door or in the centre of the first room. A door in the rear wall gave access

¹ Cf. p. 245 n. 2.

² In Egypt similar evidence was found at Tell Farasha, Tell el-Maskhuta (Canadian Expedition); in Palestine at Tell el-Ajjul, Lachish and at Jericho. The sacrifice of a donkey seems to have been a specially binding act among western Semites (cf. W. H. Stiebing, *op. cit.*, pp. 115-16).

- to the second room (str. G and E/3). This kind of house was usually found in connection with 3.2.
- 3.6 Houses consisting of several small rooms laid out in the shape of an L or an U and surrounding a (major) room or a court (str. G, F).
 - 3.7 Rectangular single buildings with separate inner rooms, covering a quarter of the ground area.
 - 3.8 Domestic buildings usually with their foundations in pits, not in trenches. Only sacred buildings normally had foundation trenches.

4. *Corpus of Material Culture*

There is a large corpus of types of objects, many of which seem to be very characteristic for this MB-Culture; the types, however, cannot be listed here in detail. Bronzes are significant, from a cultural point of view, and among them are toggle-pins, daggers, knives, axes, javelin-heads, and broad belts. At different periods changes in types can be observed. Very significant also is the pottery, most of which was produced locally by the Canaanite settlers.¹ The red-, brown-, or black-polished ware and the black-polished incised juglets (Tell el-Yahudiya ware) were only found in tombs or in mortuary temples and, with a single exception, not in residential areas, apart from some scattered sherds, which may have been brought to the surface by the destruction of older tombs. On the other hand, big Egyptian marly-clay vessels (*Zirs*) were never found in the tombs, where liquids were generally stored in Syro-Palestinian amphoras. The domestic pottery consisted mainly of Egyptian fabrications such as drinking-cups, vases, plates, marly-clay water-vessels and bottles. Nevertheless, we also found examples of amphoras and red-polished dipper-juglets and red-polished pots. Some distinct MB-shapes could also be recognized among the pottery in the offering pits near the altar in front of the temple, as for example bowls with a vessel mounted in the centre.

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Abbreviations in the footnotes

AASOR Annual of the American Schools of Oriental Research (New Haven, Connecticut); *ÄA* Ägyptologische Abhandlungen, ed. by Wolfgang Helck and Eberhard Otto (Wiesbaden); *AfO* Archiv für Orientforschung (Berlin/Graz); *ASAE* Annales du Service des Antiquités de l'Égypte (Cairo); *ASJL* American Journal of Semitic Languages and Literatures (Chicago); *BASOR* Bulletin of the American Schools of Oriental Research (New Haven, Connecticut); *BMMA* Bulletin of the Metropolitan Museum of Art (New York); *BSFE* Bulletin (trimestriel) de la Société française d'Égyptologie (Paris);

¹ According to separate investigations with neutron activation by Mrs Michal Artzy and Mrs Maureen Kaplan (personal communication).

BSGE Bulletin de la Société de Géographie d'Égypte (Cairo); *CAH*² The Cambridge Ancient History, 2nd edition (Cambridge); *Cat. Gen.* Catalogue général des antiquités Égyptiennes du Musée du Caire (Cairo); *CdE* Chronique d'Égypte (Brussels); *EEF, Mem.* Memoir of the Egypt Exploration Fund (London); *Eretz-Israel* Annual of the Israel Exploration Society (Jerusalem); *IEJ* Israel Exploration Journal (Jerusalem); *JEA* Journal of Egyptian Archaeology (EES) (London); *JNES* Journal of Near Eastern Studies (Chicago); *LÄ* Lexikon der Ägyptologie, ed. by Wolfgang Helck and Eberhard Otto (Wiesbaden); *MDIK* Mitteilungen des Deutschen Archäologischen Instituts, Abteilung Kairo (Augsburg/Berlin/Wiesbaden); *OIP* Oriental Institute Publications (Chicago); *RdE* Revue d'Égyptologie, ed. by Société française d'Égyptologie (Paris); *RB* Revue Biblique (Paris); *ZÄS* Zeitschrift für ägyptische Sprache und Altertumskunde (Leipzig/Berlin).

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POSTSCRIPT

In 1979 and 1980 excavations were begun in the agricultural area c.400 m. west of Tell el-Dab'a (area F), revealing an earlier range of stratigraphy of utmost importance, starting with a large planned orthogonal settlement of the First Intermediate Period (str. e), which gave evidence of the colonization of the eastern Delta by the Heracleopolitan kings to check Asiatic infiltration. This settlement was covered by a 12th dynasty settlement and a 12th dynasty palace (str. d/2 and d/1) of imposing size (c.150 × 100 m). Most probably it was the royal summer residence. The climate in the Delta is much more agreeable during summer than in Upper Egypt.

Among the finds from the palace, Kamares ware and a cylinder seal of northern Syrian origin have to be mentioned. After repairs and a change in the layout of the palace, which became necessary because of wall cracks caused by a shrinking process in the filling of an older brick pit, the palace was not used again. Several vessels with paint (ochre) and builders' tools remained behind in a huge court lined by columns.

Soon afterwards the ruins of the palace were occupied by a first wave of Canaanite settlers, who showed already some degree of Egyptianization (str. c, corresponding to str. G/4 at the main tell). Numerous moulds, crucibles, and jets of clay showed that a copper industry was flourishing at that place during the 18th century BC. Soon afterwards better houses and even villas of Egyptian type were built (str. b). Burials were placed in pits inside the buildings. The burial attitude was either the extended position on the back or the semi-contracted position.

Later strata of the second Canaanite incursion were preserved only at the main tell (str. F-D/2), no more in the agricultural area. Numerous tombs and waste pits cutting into the older sequence of the site F show that the whole area was occupied also during the Hyksos period.

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PLATE I



I. View of the southern part of the area taken from a water tower, looking south-east. In the foreground Ezbet Rushdi, behind remains of the old lake. Tell el-Dab'a with the village on top in the background (S)

PLATE II



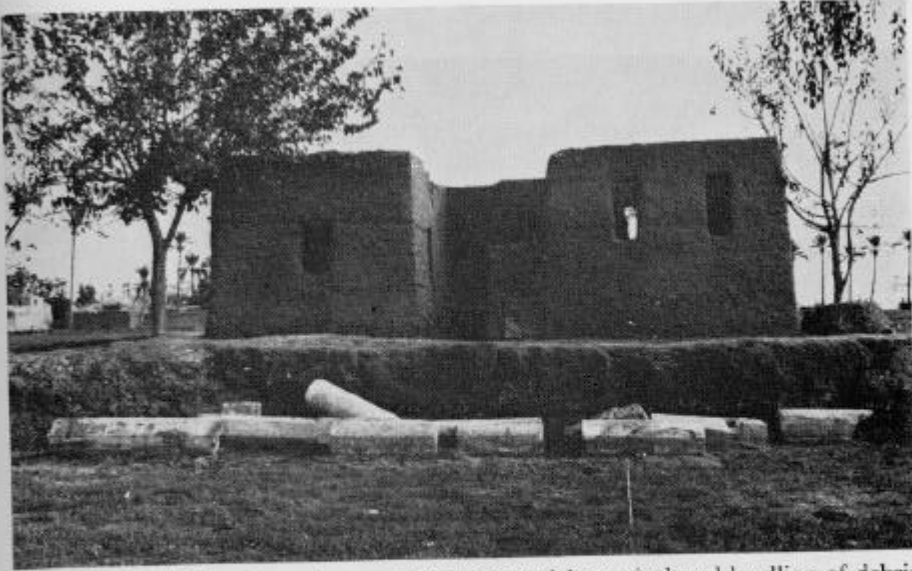
a



b

IIa. Lintel of an administrative building of the 12th dynasty (Sesostris III) at Tell el-Qirgafa (S).

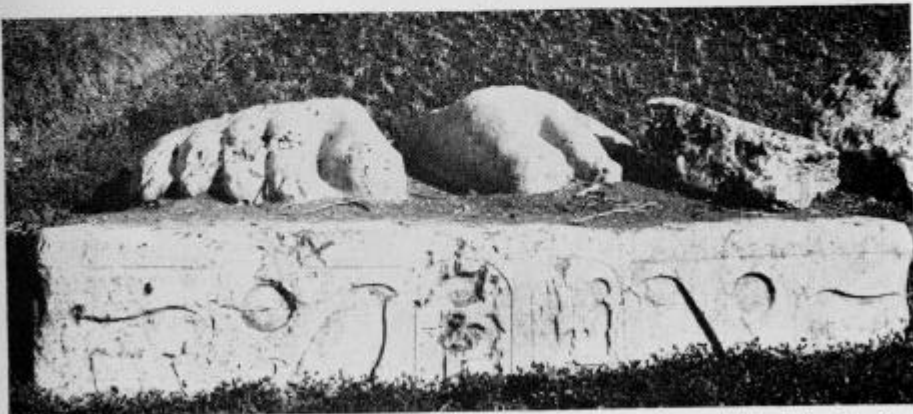
IIb. Jamb fragment of a private house of a high Ramesside official during the reign of Merenptah, found at Qantir



IIIa. Octagonal limestone columns which appeared by agricultural levelling of debris and the substructure (behind) of a palace of the 19th dynasty at Qantir South, Tell el-Asfar (W)



IIIb. Limestone column with the names of Ramesses II at Tell Abu el-Shafei in Qantir North (S)



IIIc. Base of a colossal statue, excavated by Shehata Adam 1954, behind the levelled area of Tell Abu el-Shafei (S)

PLATE IV



IV. Tell el-Dab'a, stratum G, building compound of the late 13th dynasty inhabited by Canaanites. Main building with two rooms and a tomb in front of the entrance. Two subsequently attached rooms with numerous amphorae

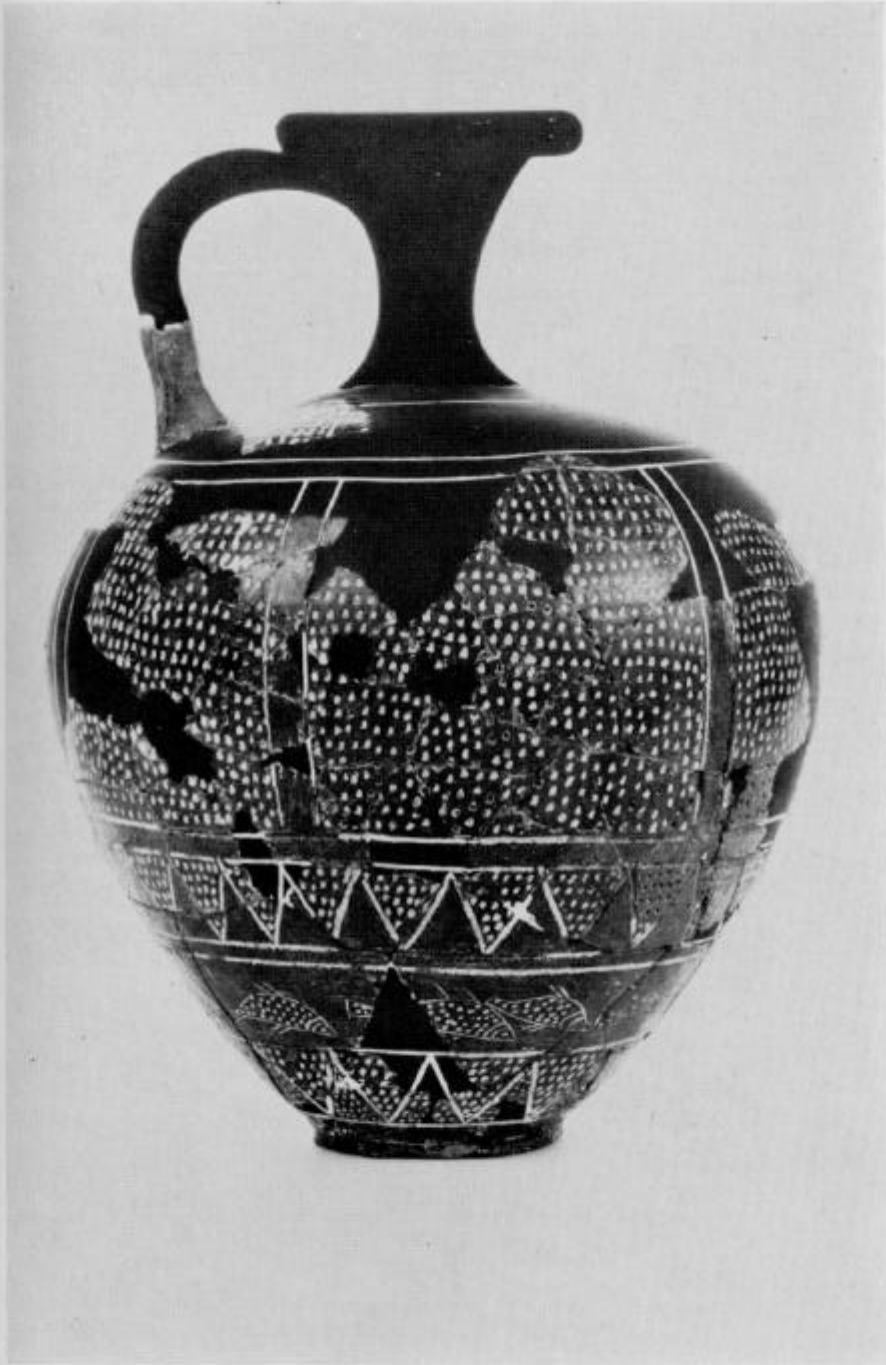


V. Two other double room buildings (A/II-o/16-17), resembling the hieroglyph □ (of str. G, late MK)

PLATE VI

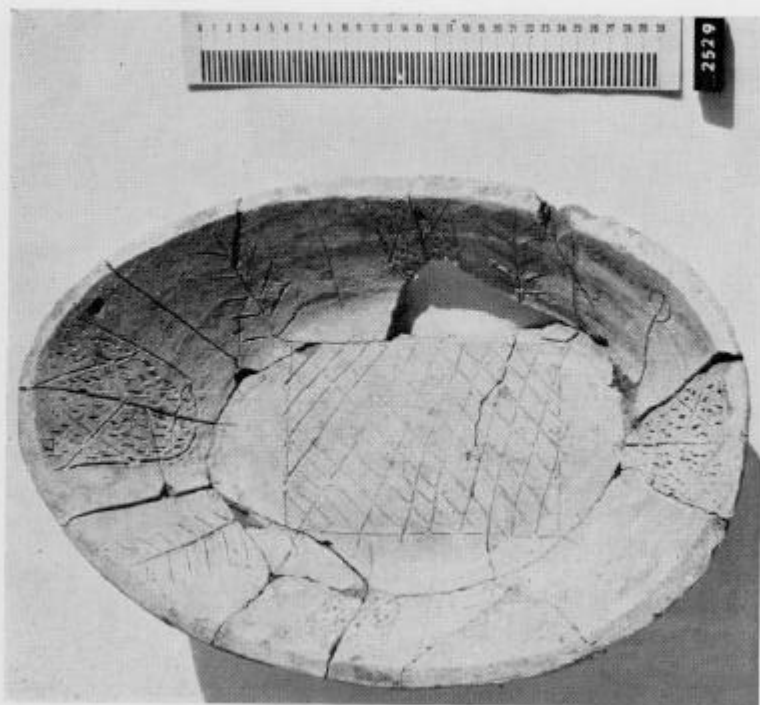


VI. Grave (A/II-n/12, no. 4) of Egyptian type within a building compound of str. G with limestone coffin, late MK

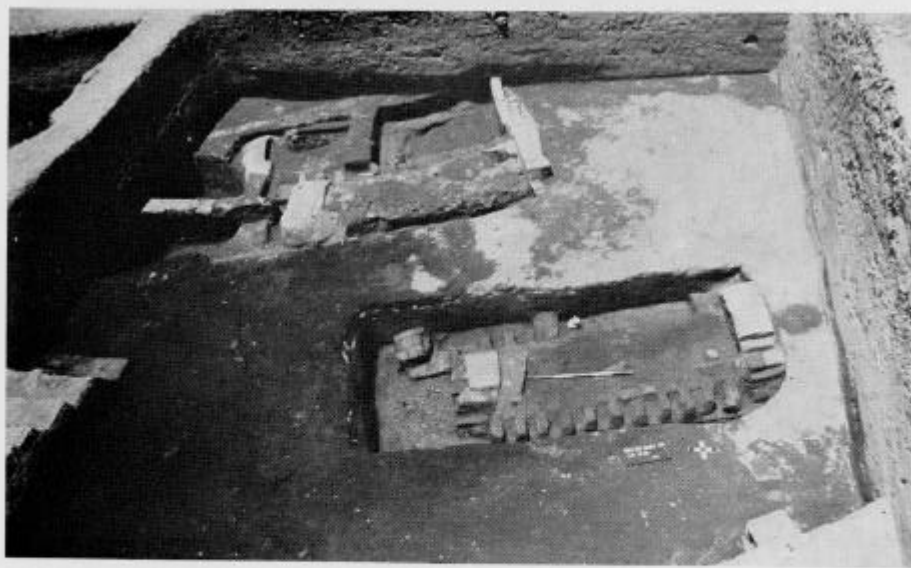


VII. Large jug with incised design from a building of str. G (h. \pm 32 cm, reg. 1734, Kunsthist. Mus. Vienna no. A 1691) (K)

PLATE VIII



VIIIa. Fish offering bowl of marly clay, Upper Egyptian production, from compound pl. IV (W)

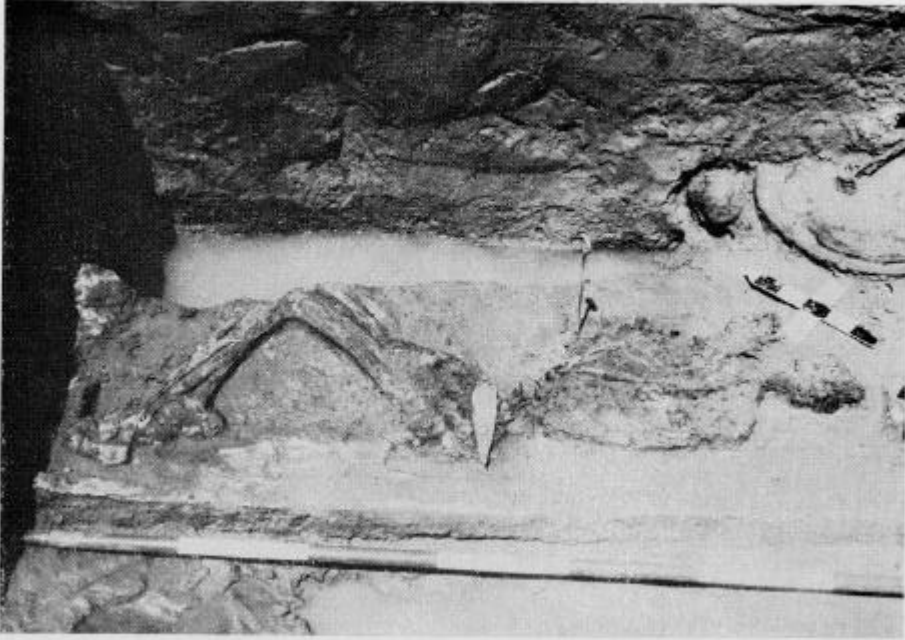


VIIIb. Canaanite tombs of str. F (m/16, nos. 2-4) cutting into a charcoal layer

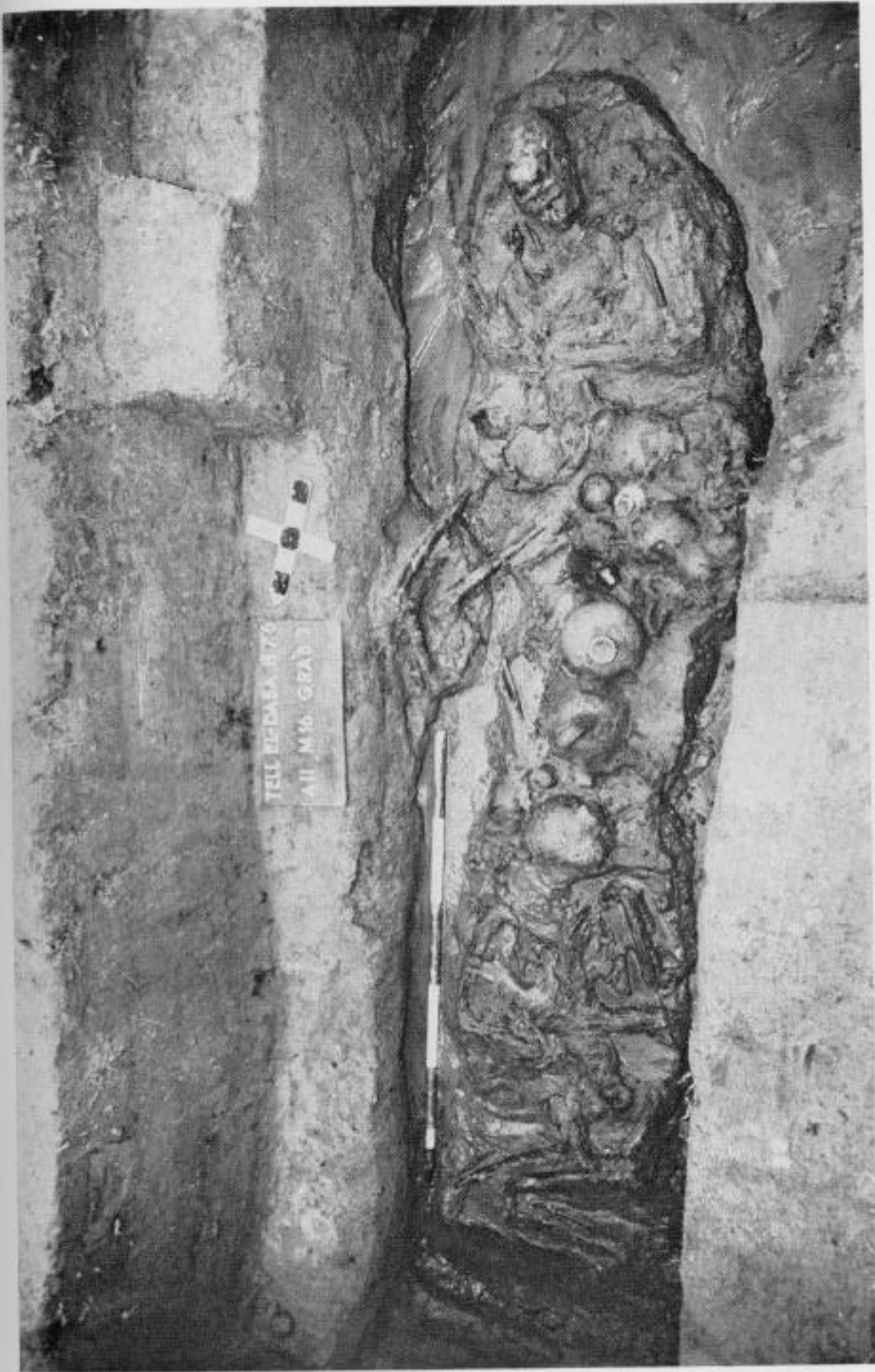


IX. Mudbrick chamber tomb with a female burial after removal of the vault. Above her head plate with bone remains of an offered roasted mutton piece (W)

PLATE X

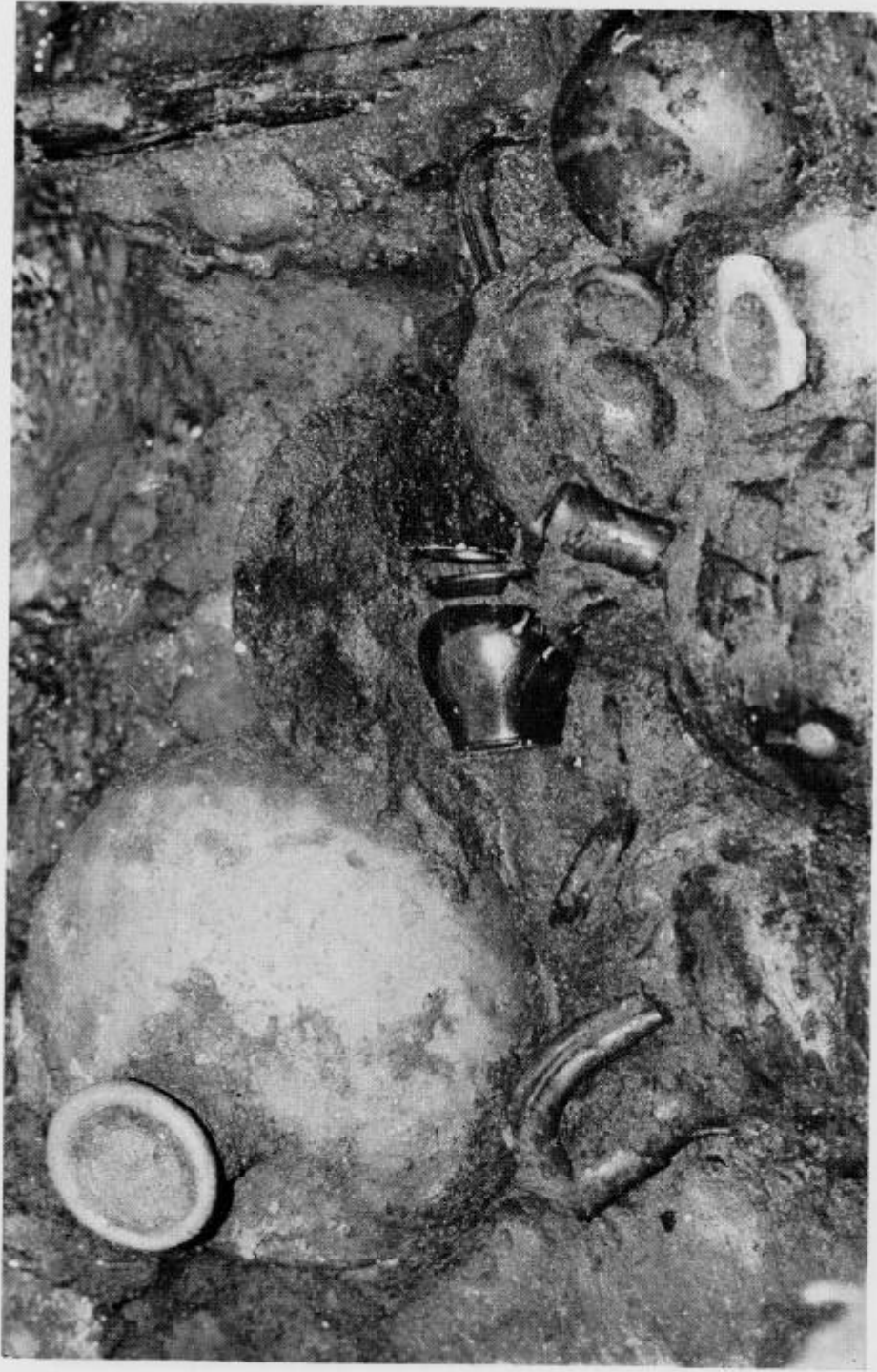


X. Burials of two warriors with bronze dagger and battle axe each, str. F, and further offerings; above A/II-1/12, tomb 5

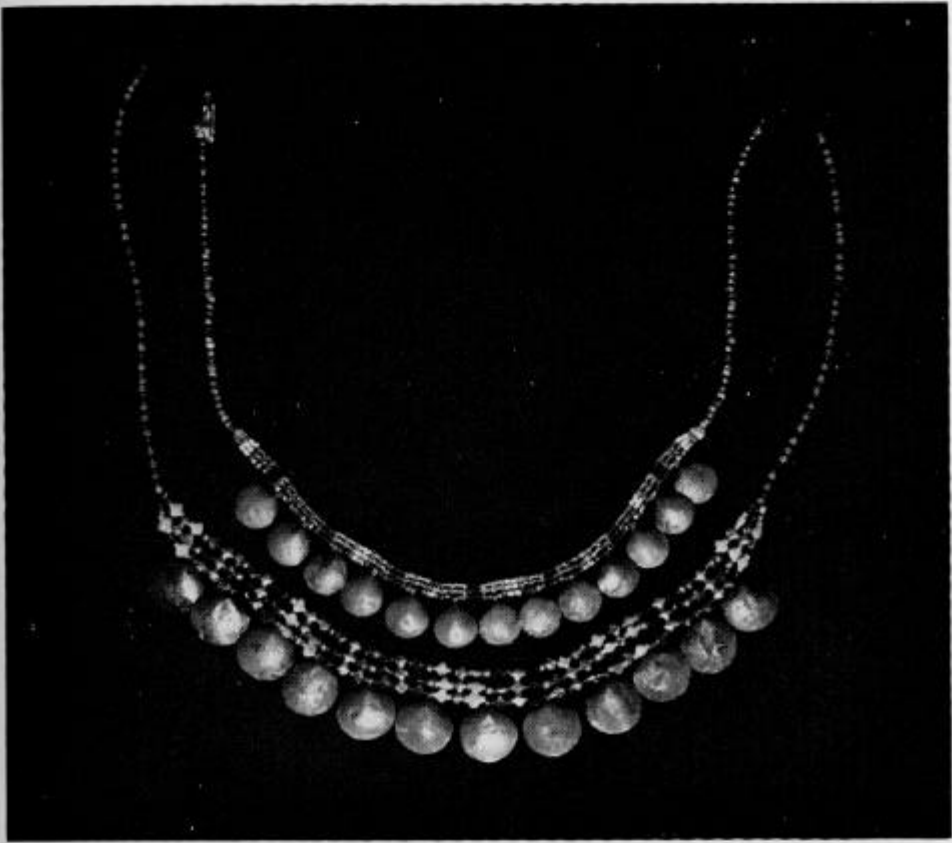


XI. View into a tomb chamber of mudbrick, str. F, containing two female burials with offerings, ca. 60 cm. under subsoil (W)

PLATE XII



XII. Detail of previous with kohl-pot of haematite for eye-paint, copper mirror, and Syro-palestinian pottery



XIII. Double necklace of gold, carnelian, and glaze from the same tomb, Egyptian workmanship of the time of the Middle Kingdom (W)



XIV. Servant burial laid across the entrance of a chamber tomb of str. F, constructed of mudbrick (W)



XVa. Burial of a pair of donkeys with a drinking cup as offering, str. G or F (W)



XVb. A Canaanite main temple (no. III), looking north, str. F and E/3. Sanctuary niche in foreground (10 m squares)

PLATE XVI



XVIa. Canaanite main temple (no. III), str. F and E/3, looking east. The building remains were damaged by deep sebakh pits



XVIb. Front wall of this temple with three entrances looking west. Stone slab in front of the temple in the background



XVIIa. Remains of Canaanite temple V, next to temple III, looking south. Filling wall in foreground

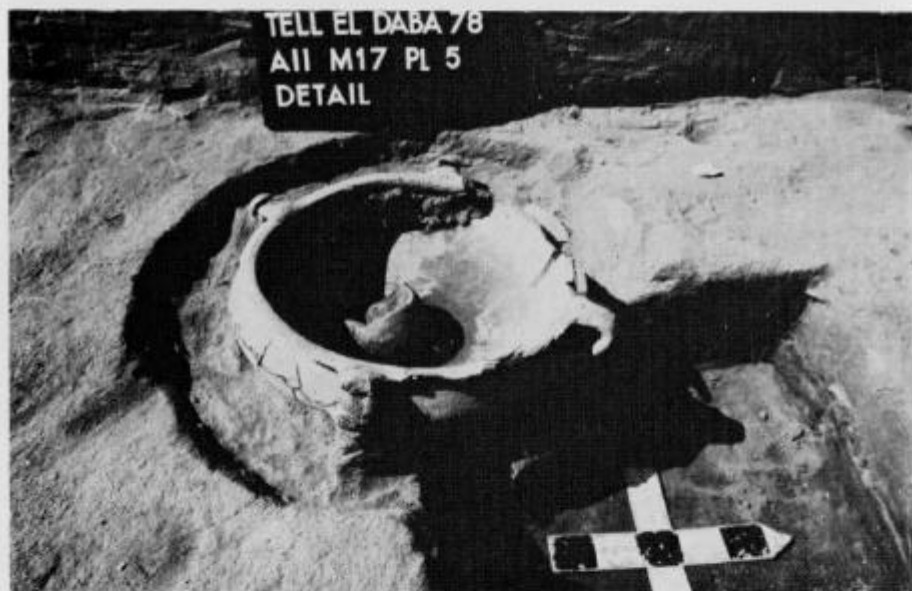


XVIIb. Mortuary temple (no. II), north of the main temple III, limiting the sacred precinct in the west. Str. E/3, looking north

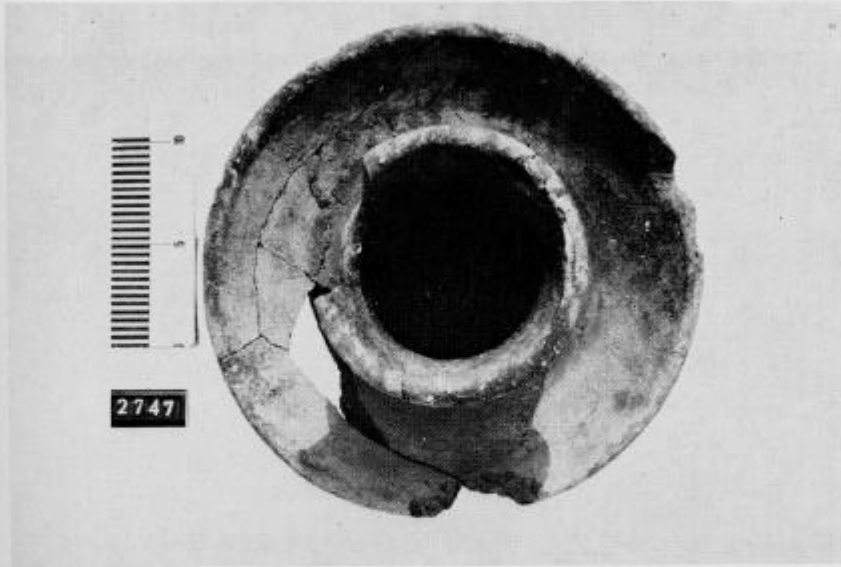
PLATE XVIII



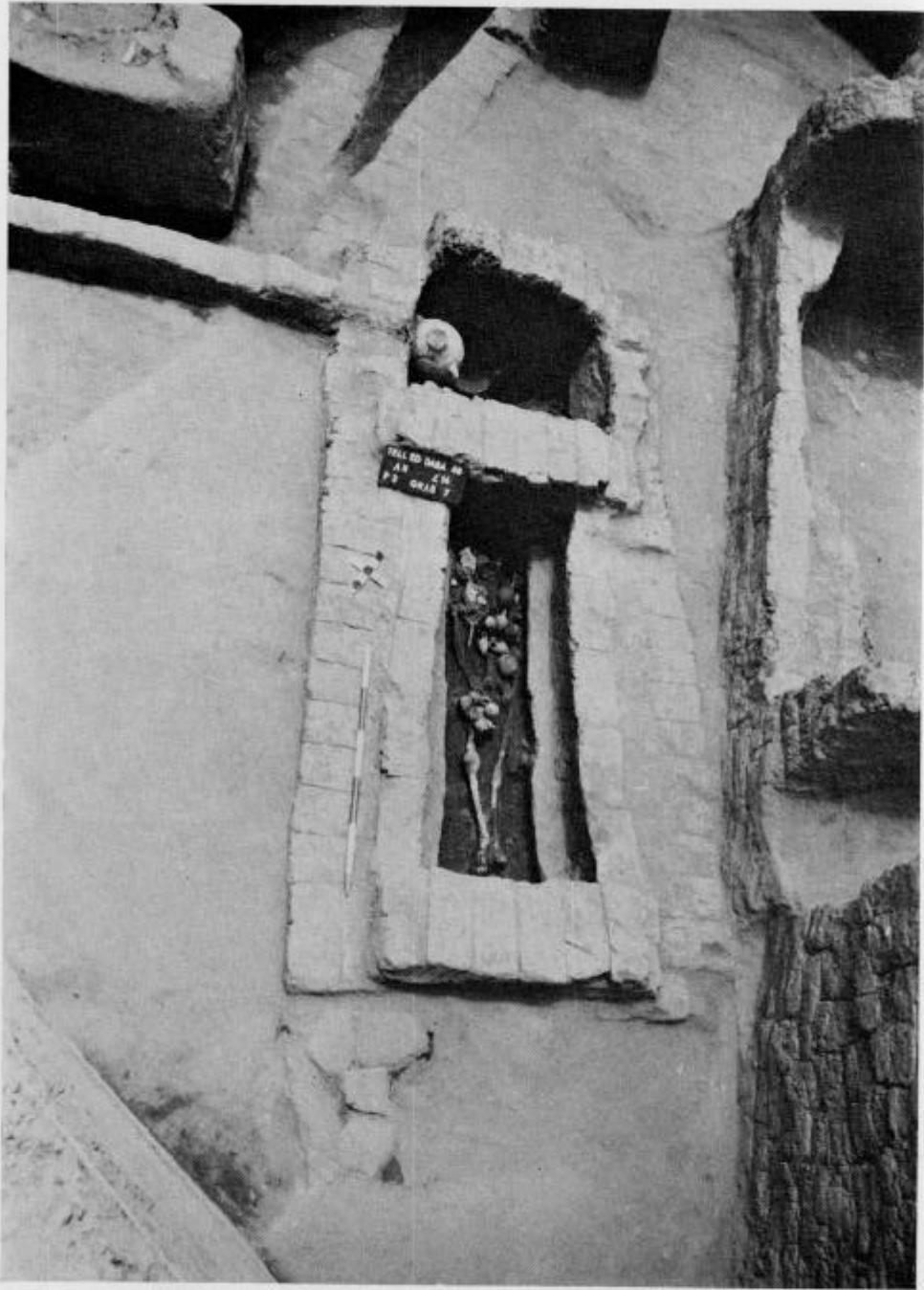
XVIIIa. Limestone fragment with name of King Nehesy (14th dynasty), one of the first kings known to have resided at Avaris (± 1720 BC) (A)



XVIIIb. Red polished pottery krater with dipper cup still inside. From floor of the 'priest-house', str. E/3-2



XIX. Pottery from the offering pits near the altar, in front of the temple (A)



XX. Tomb from a cemetery, str. E/3, belonging to mortuary temple II



XXIa. Mortuary temple I, str. E/2, during excavation, looking north-east

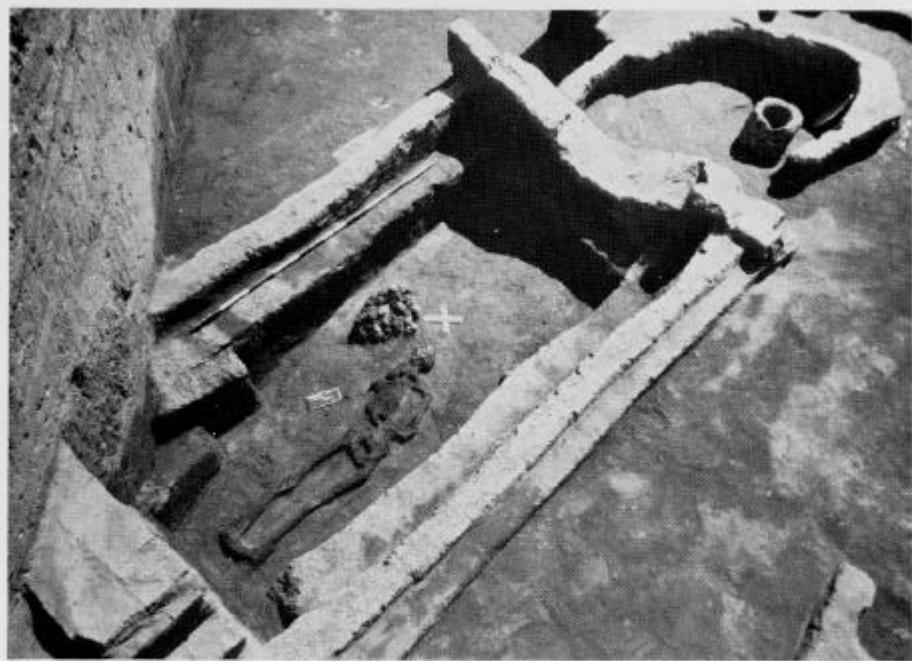


XXIb. The same after restoration, looking south

PLATE XXII



XXIIa. Tomb robbers—pit, cutting through a tomb vault soon after the construction, str. E/2



XXIIb. A/II-1/12—tomb 2, str. E/1. Male burial with heaps of juglets near his head. Beside the femur shadows of a reed bundle, used for wrapping up the body



XXIII. Sandbrick chamber of tomb A/II-N/13—no. 8 after removal of vault, str. E/3

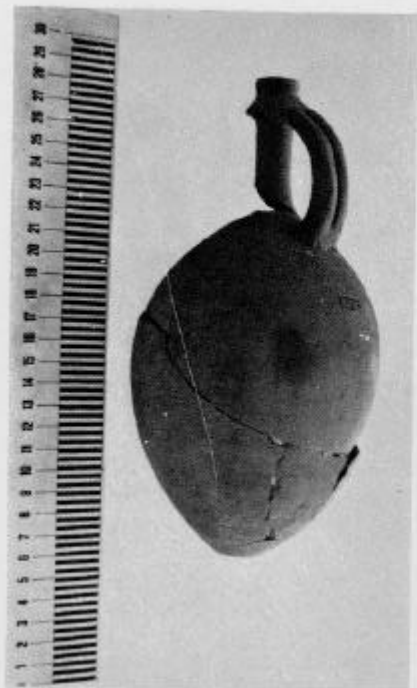


XXIV. Intact tomb of str. D/3 before opening. Mudbrick construction



XXV. The same after removal of vault. See also the outer offerings within the pit, which is more spacious in front of the entrance

PLATE XXVI



a



b



c



d

XXVIa, b. MB II A shaped jugs, red polished, from strata G and F
XXVIc, d. Red polished juglets (reg. 2512 and 301) from tombs of str. F and E/3 (K)

1782



a

1676



b

1839



c

1833

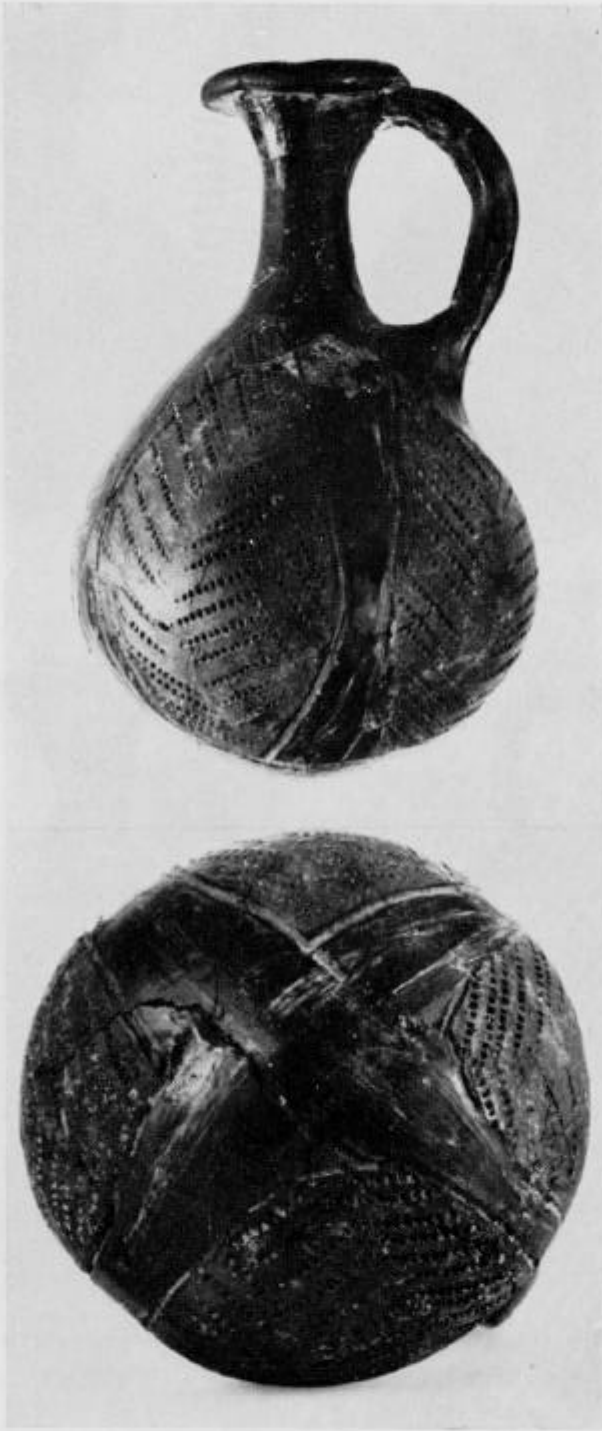


d

XXVIIa-d. Black polished incised juglets from tombs of strata F and E/3



XXVIII. Juglet (reg. 1675) of tomb 1/14, no. 7, str. E/3 (K)



XXIX. Black polished incised juglet (reg. 884) from m/11,
tomb 7, str. E/1 (K)

PLATE XXX



a



b

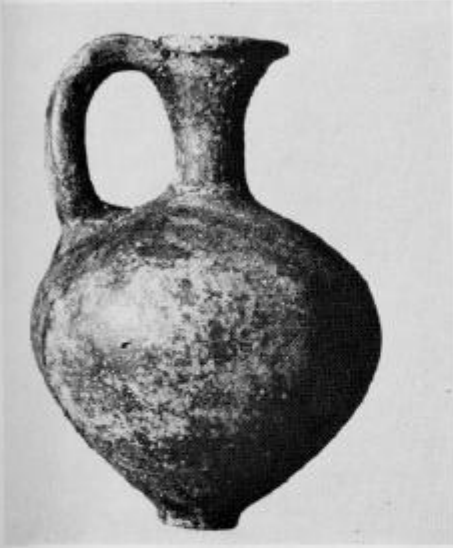


c



d

XXXa-d. Black polished incised juglets, str. E/1 and D/3 (K and A)



a



b



c



d

XXXIa-d Red polished juglets of str. G (reg. 2664), D/3 (reg. 2701), E/1 (reg. 209, 1408)

PLATE XXXII



a

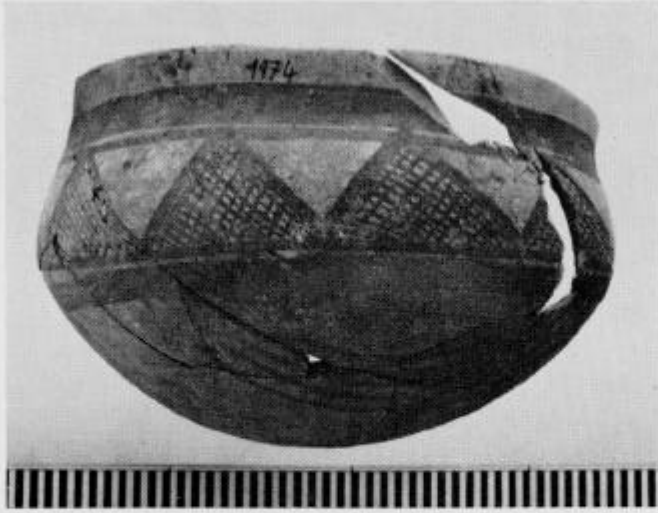


b



c

XXXIIa-c. Red polished bowls of str. E/2, E/1 and E/1, the second one incised by an rank sign (K)

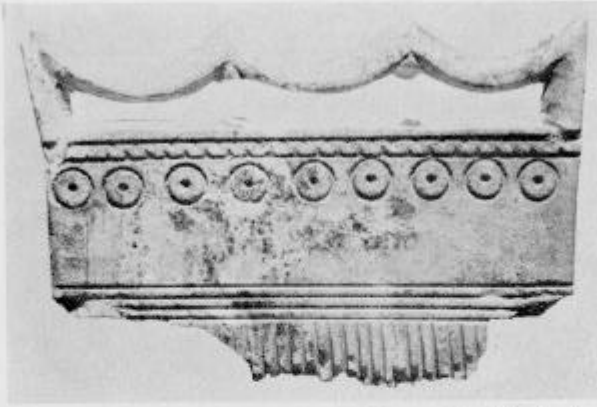


XXXIIIa. Cypriote white painted V-bowl from a child's tomb
(m/11, no. 1), str. D/2

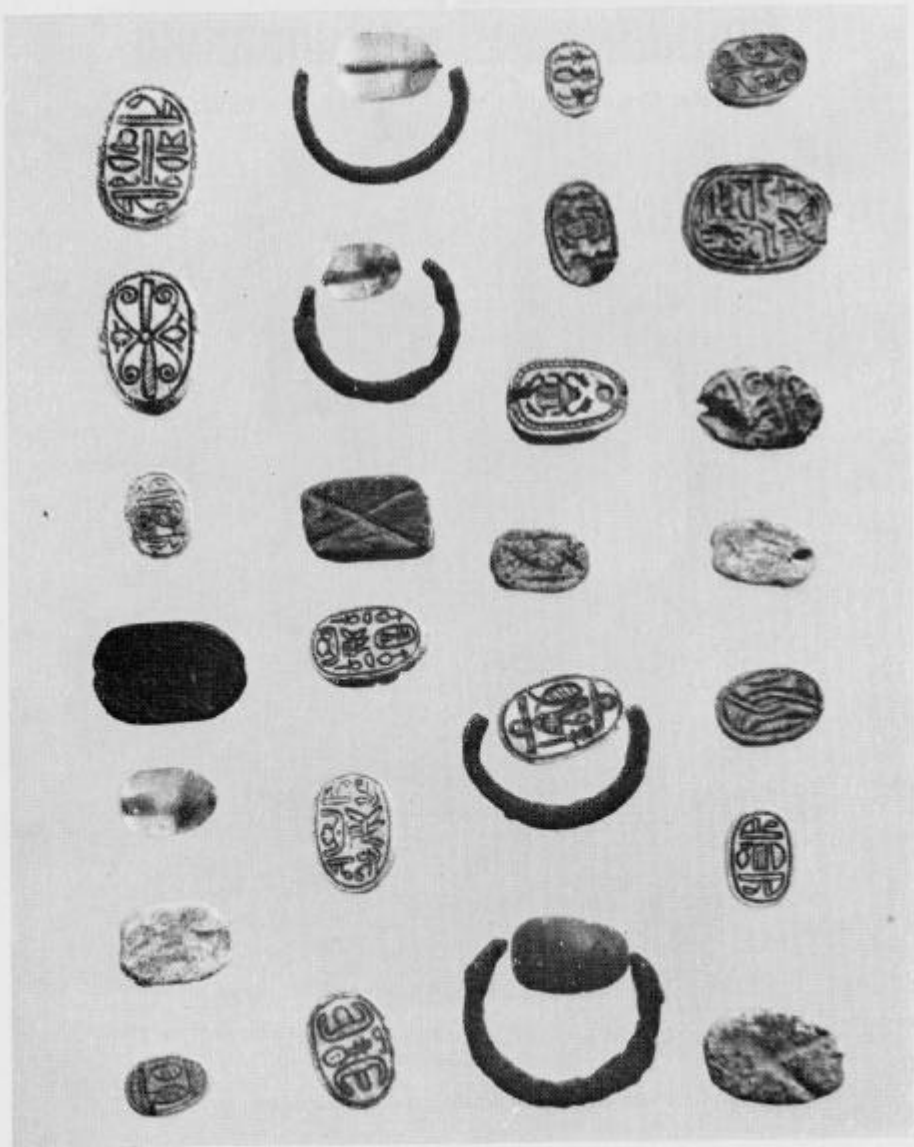


XXXIIIb. Cypriote jug of the white pendent line ware, str. E/1 (K)

PLATE XXXIV



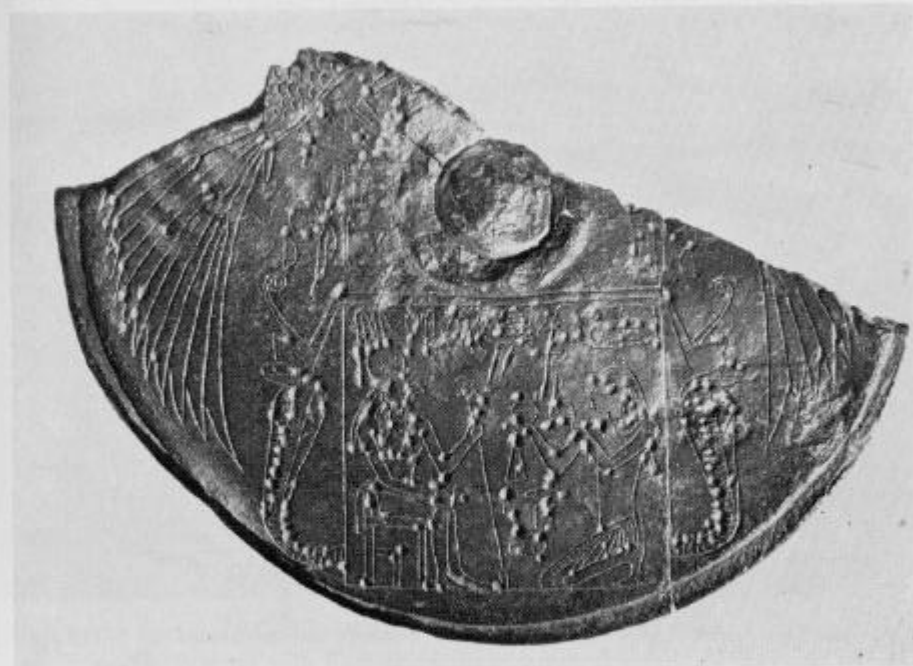
XXXIVa. Ivory comb from tomb, str. F, (A/II-1/11, no. 2), reg. 566 (K)



XXXIVb. Various scarabs from Tell el-Dab'a

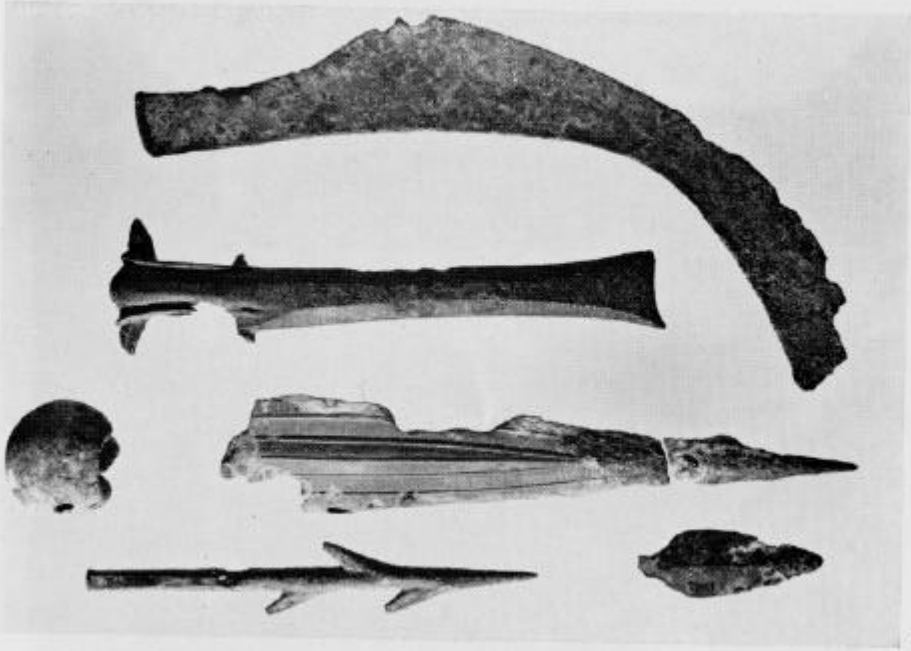


XXXV*a*. Head of a Middle Kingdom private statue, used as grinding-stone during the Hyksos Period, str. D/3 (K)

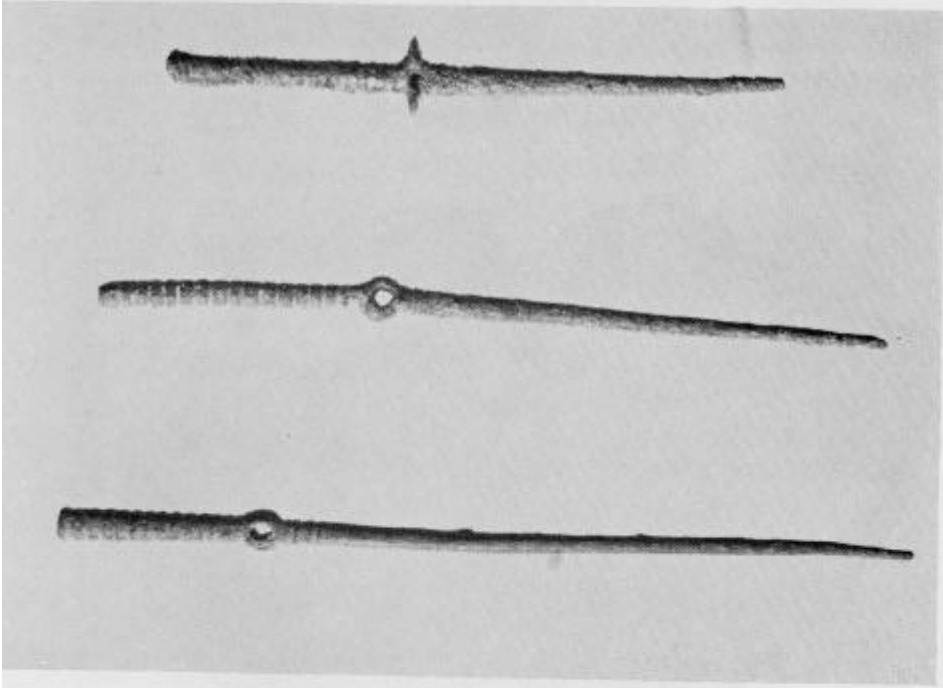


XXXV*b*. Fragment of a cultic plate of bronze with an image of King Neferhotep of the late 13th dynasty, intentionally destroyed by series of nail imprints and hammer blows, str. D/3 (K)

PLATE XXXVI

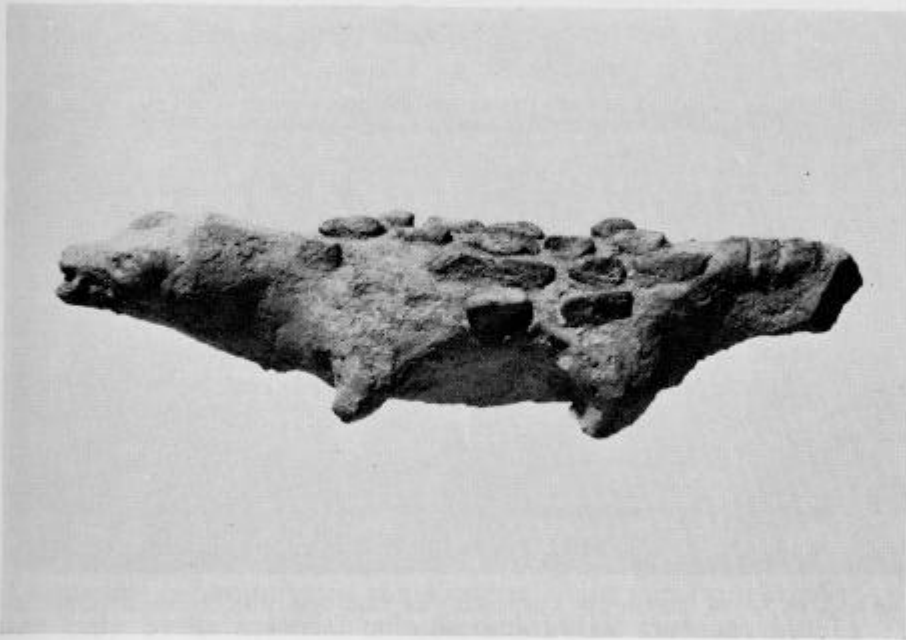


b



a

XXXVI*a*. Toggle pins from graves of the Second Intermediate Period (K)
XXXVI*b*. Bronze weapons from strata F to D/3 (K)



XXXVIIa. Crocodile figurine of clay, found near the shore of the ancient lake, reg. 563, Ramesside? (K)



XXXVIIb. Settlement of late Second Intermediate Period, looking west, str. D/2 (A/II-n/13, 12) with tomb chambers constructed within the building

PLATE XXXVIII



XXXVIIIa. Lintel fragment of a sanctuary for God Seth with the royal names of Haremhab, str. B



XXXVIIIb. Blue painted pottery (reg. 1600) from the temple complex of str. B (end of 18th and early 19th dynasty) (K)