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ORIENTALIA LOVANIENSIA
ANALECTA
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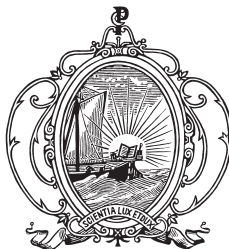
PROCEEDINGS OF THE
TENTH INTERNATIONAL
CONGRESS OF EGYPTOLOGISTS

University of the Aegean, Rhodes
22-29 May 2008

Volume I

edited by

P. KOUSOULIS and N. LAZARIDIS



PEETERS
LEUVEN – PARIS – BRISTOL, CT
2015

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A LATE MIDDLE KINGDOM SETTLEMENT AT TELL EL-DAB'Ā AND ITS POTENTIAL

Bettina BADER*

(University of Cambridge & SciEM 2000, Vienna)

Introduction

The site of Tell el-Dab'ā (Avaris) located in the north eastern Nile Delta is most renowned as the homeland of the Hyksos¹ and as the only place in Egypt where Minoan wall paintings have been found². In addition, temples³, tombs⁴ and palaces⁵

* The research project of the author was made possible through the generous support of a Marie Curie Actions programme initiated by the European Commission (Intra European Fellowship) hosted by the McDonald Institute for Archaeological Research, Cambridge University. Previous research was funded by the Austrian National Bank, SCIEM2000, and the Austrian Archaeological Institute under M. Bietak. The author would also like to thank D.A. Aston, J. Bourriau and M. Ownby for correcting the English of this paper. Current research is supported by the Elise Richter Programme of the Austrian Science Fund (Nr. V147-G21).

¹ M. BIETAK, *Avaris – The Capital of the Hyksos, and Residence of the early 18th Dynasty, Recent Excavations* (London, 1996), for a comprehensive overview.

² M. BIETAK, N. MARINATOS and C. PALYVOU, *Taureador Scenes in Tell el-Dab'ā (Avaris) and Knossos*, UZK 27 (Vienna, 2007).

³ M. BIETAK, 'Kleine ägyptische Tempel und Wohnhäuser des späten Mittleren Reiches. Zur Genese eines beliebten Raumkonzeptes von Tempeln des Neuen Reiches', in: C. BERGER, G. CLERC and N. GRIMAL (eds.), *Hommages à Jean Leclant* (Cairo, 1994), 413-35; M. BIETAK, 'Götterwohnung und Menschenwohnung, Die Entstehung eines Tempeltyps des Mittleren Reiches aus der zeitgenössischen Wohnarchitektur', *Hildesheimer Ägyptologische Beiträge* 37 (1994), 13-22. S. ADAM, 'Report on the Excavations of the Department of Antiquities at Ezbet Rushdi', *Annales du Service des Antiquités de l'Égypte* 56 (1959), 207-26.

⁴ M. BIETAK, *Tell el-Dab'ā V. Ein Friedhof der Mittleren Bronzezeitkultur mit Totentempel und Siedlungsschichten*, Teil I, UZK 8 (Vienna, 1991); M. BIETAK, 'Der Friedhof in einem Palastgarten aus der Zeit des späten Mittleren Reiches und andere Forschungsergebnisse aus dem östlichen Nildelta (Tell el-Dab'ā 1984-1987)', *Egypt and the Levant* 2 (1991), 47-75; I. FORSTNER-MÜLLER, *Tell el-Dab'ā XVI. Die Gräber des Areals A/II von Tell el-Dab'ā*, UZK 28 (Vienna, 2008); R. SCHIESTL, *Tell el-Dab'ā XVIII. Die Palastnekropole von Tell el-Dab'ā. Die Gräber des Areals F/II der Straten d/2 und d/1*, UZK 30 (Vienna, 2009); K. KOPETZKY, *Datierung der Gräber der Grabungsfläche F/II von Tell el-Dab'ā anhand der Keramik*, unpublished M.phil. thesis (Vienna, 1993).

⁵ M. BIETAK, *Eine Palastanlage aus der Zeit des späten Mittleren Reiches und andere Forschungsergebnisse aus dem östlichen Nildelta (Tell el-Dab'ā 1979-84)*, *Abhandlungen der philosophisch-historischen Klasse der österr. Akademie der Wissenschaften* 121 (Wien, 1984), 312-49; M. BIETAK, 'Neue Paläste aus der 18. Dynastie', in: P. JANOSI (ed.), *Structure and Significance; Thoughts on Ancient Egyptian Architecture*, UZK 25 (Vienna, 2005), 131-68; D. EIGNER, 'A Palace of the Thirteenth Dynasty at Tell el-Dab'ā', in: M. BIETAK (ed.), *Haus und Palast im Alten Ägypten, Internationales Symposium 8. bis 11. April 1992 in Kairo* (Vienna, 1996), 73-80; M. BIETAK, J. DORNER and P. JÁNOSI, 'Ausgrabungen im Palastbezirk von Avaris, Vorbericht Tell el-Dab'ā/Ezbet Helmi 1993-2000', *Egypt and the Levant* 11

ranging in date from the early Middle Kingdom to the Late Period have been found during more than 40 years of investigation conducted by Manfred Bietak as director of the Austrian Archaeological Institute and his team. Recently at least two harbours have been located through analysis of sediments recovered by auger drillings⁶.

Through these excavations considerable exposures of settlement structures were brought to light in Areas A/II⁷, A/IV⁸, A/V⁹, F/I,¹⁰ and R/I¹¹ of Ancient Avaris¹², which vary in date from the early Middle Kingdom to the Hyksos period. The date range of the large settlement area south of the palaces in 'Ezbet Helmi visible in the magnetometry survey cannot be ascertained, because they have not yet been excavated. The same holds true for what looks like a settlement at 'Ezbet Rushdi¹³. This paper presents a preliminary comparison of the settlement of the early Thirteenth Dynasty (Phase G/3-1) in Area A/II with others in the Nile valley in order to get a clearer idea whether apparent differences might be rooted in regional, socio-economic or cultural causes and try to highlight questions concerning the reasons behind "planned" versus "naturally grown" settlements. This is particularly true of Tell el-Dab'a since the presence of immigrants from the Levant might have had an impact on the appearance of the settlement. Tombs dating to the late Twelfth and early Thirteenth Dynasties (Phases H=d/2; G/4=d/1) show that the burial goods consist of an amalgamation of Egyptian as well as Levantine traditions¹⁴, whilst anthropological evidence suggests that the people buried were

(2001), 27-119; M. BIETAK and I. FORSTNER-MÜLLER, 'Eine palatiale Anlage der frühen Hyksoszeit (Areal F/II): vorläufige Ergebnisse der Grabungskampagne 2006 in Tell el-Dab'a Ägypten', *Egypt and the Levant* 16 (2006), 63-78.

⁶ H. TRONCHERE, F. SALOMON, Y. CALLOT, J.P. GOIRAN, L. SCHMITT, I. FORSTNER-MÜLLER and M. BIETAK, 'Geoarchaeology of Avaris, First Results', *Egypt and the Levant* 18 (2008), 327-39.

⁷ M. BIETAK, 'Ausgrabungen in Tell el-Dab'a', *Archiv für Orientforschung* 25 (1977), 314-7; BIETAK, *Tell el-Dab'a V*, 27-34; I. FORSTNER-MÜLLER, 'Vorbericht der Grabung im Areal A/II von Tell el-Dab'a', *Egypt and the Levant* 11 (2001), 197-220.

⁸ I. HEIN, 'Two Excavation Areas from Tell el-Dab'a', *Atti di Sesto Congresso Internazionale di Egittologia*, Vol. 1 (Turin, 1992), 249-53.

⁹ I. HEIN and P. JÁNOSI, *Tell el-Dab'a XI. Areal A/V – Siedlungsrelikte der Späten 2. Zwischenzeit*, UZK 21 (Vienna, 2004).

¹⁰ E. CZERNY, *Tell el-Dab'a IX. Eine Plansiedlung des frühen Mittleren Reiches*, UZK 15 (Vienna, 1999); E. CZERNY, 'Zur Keramik von 'Ezbet Rushdi (Stand Mai 1997)', *Egypt and the Levant* 8 (1998), 41-6.

¹¹ M. BIETAK and J. DORNER, 'Der Tempel und die Siedlung des Mittleren Reiches bei 'Ezbet Rushdi: Grabungsvorbericht 1996', *Egypt and the Levant* 8 (1998), 9-49. Settlement and temple of the Middle Kingdom at 'Ezbet Rushdi are currently being analysed by E. Czerny.

¹² E. CZERNY, 'Ein früher Beleg für *ḥwt w'rt* auf einem Siegelabdruck aus Tell el-Dab'a', *Egypt and the Levant* 11 (2001), 13-26.

¹³ I. FORSTNER-MÜLLER, W. MÜLLER, C. SCHWEITZER and M. WEISL, 'Preliminary Report on the Geophysical Survey at Ezbet Rushdi/Tell el-Dab'a in spring 2004', *Egypt and the Levant* 14 (2004), 101-9; I. FORSTNER-MÜLLER and W. MÜLLER, 'Neueste Ergebnisse des Magnetometersurveys während der Frühjahrskampagne 2006 in Tell el-Dab'a/Qantir', *Egypt and the Levant* 16 (2006), 79-81.

¹⁴ R. SCHIESTL, *Tell el-Dab'a XVIII*, passim.

Levantine¹⁵. Additionally, the study of the distribution of finds in a selected compound in Area A/II will provide a valuable addition relating to socio-economic, environmental, organisational, and cultural issues as well as to trade connections within and outside Egypt.

Several excavated settlements of the late Middle Kingdom namely Memphis/Kom Rabi'a¹⁶, Kahun¹⁷, Dahshur¹⁸, Lisht North¹⁹, Qasr el-Sagha²⁰, Abydos²¹, Thebes²², Elephantine²³ and the Nubian forts²⁴ are available for comparison, but to date completed

¹⁵ E.M. WINKLER and H. WILFING, *Tell el-Dab'a VI, Anthropologische Untersuchungen an den Skelettresten der Kampagnen 1966-69, 1975-80, 1985*, UZK 9 (Vienna, 1991), 120, 'mediterranean'. Unfortunately the sample size for phase H-G/4-1 is very small and the methodology considered problematic. M. BIETAK, 'Egypt and the Levant', in: T. WILKINSON (ed.), *The Egyptian World* (London, 2007), passim; S.T. SMITH, 'Ethnicity and Culture', in: WILKINSON (ed.), *Egyptian World*, 218-41.

¹⁶ D.G. JEFFREYS and L.L. GIDDY, 'Memphis 1988', *Journal of Egyptian Archaeology* 75 (1989), 1-12; L.L. GIDDY and D.G. JEFFREYS, 'Memphis 1990', *Journal of Egyptian Archaeology* 77 (1991), 1-6.

¹⁷ W.M.F. PETRIE, *Kahun, Gurob and Hawara* (London, 1890); W.M.F. PETRIE, *Illahun, Kahun and Gurob* (London, 1891); F. ARNOLD, 'Baukonstruktion in der Stadt Kahun: zu den Aufzeichnungen Ludwig Borchardts', in: P. JANOSI (ed.), *Structure and Significance*, 77-104.

¹⁸ D. ARNOLD, *Der Pyramidenbezirk des Königs Amenemhet III. in Dahschur*, vol. 1, *Die Pyramide, Archäologische Veröffentlichungen* 53 (Mainz, 1987); D. ARNOLD, 'Keramikkbearbeitung in Dahschur 1976-1981', *Mitteilungen des Deutschen Archäologischen Instituts, Abteilung Kairo* 38 (1982), 25-65.

¹⁹ F. ARNOLD, 'A Study of Egyptian Domestic Buildings', *Varia Aegyptiaca* 5 (1989), 75-93; F. ARNOLD, 'Settlement Remains at Lisht', in: M. BIETAK (ed.), *Haus und Palast im alten Ägypten* (Vienna, 1996), 13-21. For references to earlier work by the Metropolitan Museum of Art in New York see ARNOLD, in: BIETAK (ed.), *Haus und Palast*, n. 4.

²⁰ A. DAGNAN-GINTER *et al.*, 'Excavations in the Region of Qasr el-Sagha, 1981: Contribution to the Neolithic Period, Middle Kingdom Settlement and Chronological Sequences in the Northern Fayum Desert', *Mitteilungen des Deutschen Archäologischen Instituts, Abteilung Kairo* 40 (1984), 33-102; J. SLIWA, 'Die Siedlung des Mittleren Reiches bei Qasr el-Sagha: Grabungsbericht 1983 und 1985', *Mitteilungen des Deutschen Archäologischen Instituts, Abteilung Kairo* 42 (1986), 167-79; J. SLIWA, 'Die Siedlung des Mittleren Reiches bei Qasr el-Sagha: Grabungsbericht 1987 und 1988', *Mitteilungen des Deutschen Archäologischen Instituts, Abteilung Kairo* 48 (1992), 177-91; J. SLIWA, 'Studies on the Middle Kingdom and the Second Intermediate Period Settlements in 1979-1985, Qasr el-Sagha', *Fontes Archaeologici Posnanienses* 36 (1987/1988), 189-216.

²¹ J. WEGNER, 'Excavations at the Town Enduring-are-the-Places-of-Khakaure-Maa-Kheru-in-Abydos. A Preliminary Report on the 1994 and 1997 Seasons', *Journal of the American Research Center in Egypt* 35 (1998), 1-44; J. WEGNER, 'The Town of Wah-sut at South Abydos: 1999 Excavations', *Mitteilungen des Deutschen Archäologischen Instituts, Abteilung Kairo* 57 (2001), 281-308. Cf. literature for earlier excavations there.

²² J. LAUFFRAY, R. SAAD and S. SAUNERON, *Rapport sur les travaux de Karnak*, Cahier de Karnak V (Cairo, 1975), 29; J. LAUFFRAY and F. DEBONO, *Fouille à l'Est du Lac Sacré*, Cahier de Karnak VI (Cairo, 1980), 44-52; F. DEBONO, *Rapport préliminaire sur les résultats de l'étude des objets de la fouille des installations du Moyen Empire et "Hyksos" à l'Est du Lac Sacré de Karnak*, Cahier de Karnak VII (Cairo, 1982), 377-84; Cf. B. KEMP, *Ancient Egypt, Anatomy of a Civilization*, 2nd edition (New York and London, 2006), 225-7, plan fig. 83.

²³ C. VON PILGRIM, *Elephantine XVIII, Untersuchungen in der Stadt des Mittleren Reiches und der Zweiten Zwischenzeit*, Archäologische Veröffentlichungen 91 (Mainz, 1996); T. RZEUSKA, 'Zur Keramik des Mittleren Reiches, Stadt und Tempel von Elephantine 25./26./27. Grabungsbericht', *Mitteilungen des Deutschen Archäologischen Instituts, Abteilung Kairo* 55 (1999), 195-204.

²⁴ S.T. SMITH, *Askut in Nubia* (London, New York, 1995), to name but one that was re-analysed recently. Cf. KEMP, *Ancient Egypt*, 236-41.

analyses of such a valuable archaeological source are not yet available, probably because the preliminary analytical work essential for such a task is a long term commitment. Most of the settlements just listed show planned organisation implying particular reasons for their creation.

This holds true for the planned settlements of Kahun and Qasr el-Sagha as well as for the Nubian forts. Others were constructed for priests belonging to mortuary cults as, for example, at Dahshur and perhaps Lisht North. The latter was connected with a cemetery and this, unfortunately, results in difficulties assigning finds to the domestic or mortuary sphere due to the site's complicated depositional history. The planned settlement of Kahun, which would have been an ideal model for comparative analysis with finds from large and small dwellings, was excavated at the end of the nineteenth century and albeit exemplary for its period most of the information relating to the provenance of the finds has been lost²⁵. This situation limits the inferences that can be drawn from these important finds²⁶. The settlement at Abydos, excavated early last century and now again, provides insights into another planned orthogonal settlement. So far a residence of a notable official of the town of *Wah-sut*, which thus can be considered an elite household, has been excavated. Other areas of the town are still under investigation. A detailed study of the distribution pattern of broken seals within some areas promises interesting results once all find groups are analysed²⁷. Part of the settlement of Thebes and the material culture found there is currently under study²⁸, but since it underlies the temple of Karnak the area for excavation was restricted. Nevertheless it seems that the town plan was mainly orthogonal. The lay-out of the Middle Kingdom settlement on Elephantine was largely dictated by the shape of the island, but it seems to be more or less orthogonal, with streets or alleys meeting roughly perpendicularly to one another. However, there are some irregularities²⁹. The analysis of the settlement of Tell el-Dab'a will also be a major contribution and point of reference in the settlement archaeology of Middle Kingdom Egypt.

An important addition to late Middle Kingdom settlements is that of Memphis/Kom Rabi'a, the final publication of which will fill some important gaps in our knowledge³⁰.

²⁵ C. GALLORINI, 'A Reconstruction of Petrie's Excavation at the Middle Kingdom Settlement of Kahun', in S. QUIRKE (ed.), *Lahun Studies* (London, 1998), 42-59.

²⁶ Many of them are kept in the Petrie Museum, and the Manchester Museum. Cf. website <http://www.cornucopia.org.uk>

²⁷ WEGNER, *Journal of the American Research Center in Egypt* 35 (1998), 1-44; Also Elephantine, cf. VON PILGRIM, *Elephantine XVIII*, 231-84.

²⁸ M. MILLET, *Architecture civile antérieure au Nouvel Empire: rapport préliminaire des fouilles archéologiques à l'est du lac Sacré, 2001-2003*, Cahier de Karnak 12 (Cairo, 2007), 681-743.

²⁹ VON PILGRIM, *Elephantine XVIII*, fig. 1, 109 and 110.

³⁰ J. BOURRIAU and C. GALLORINI, 'Pottery from Memphis, Kom Rabi'a', in: A. SEILER, R. SCHIESTL (eds.), *Handbook of the Pottery of the Egyptian Middle Kingdom. Volume II: The Regional Volume* (Vienna, 2012), 107-30; J. BOURRIAU, C. GALLORINI, *The Middle Kingdom and Second Intermediate Period Pottery*,

Despite the fact that excavations there exposed a relatively small area of the site at the Middle Kingdom Level, Kom Rabi'a provides the only unbroken sequence of settlement layers and finds from the late Middle Kingdom to the Third Intermediate Period in the Memphis-Fayum region and thus, the only available insight into the history of habitation of the ancient capital Memphis. Moreover, the inhabitants were of similar social standing (non-elite) to those of Tell el-Dab'a, with which this paper is concerned³¹.

Description of the Settlement in Area A/II at Tell el-Dab'a (fig. 1)

The settlement of Area A/II, excavated in 1966-1969 and 1975-1982, represents the south eastern part of ancient Avaris, and lies a considerable distance from the contemporary and central parts of the town, Areas A/IV and F/I³². The current study covers Phases H, G/4 and G/3-1 (ca. 1800 to 1700 B.C. equivalent to the late Twelfth and early Thirteenth Dynasties)³³. Whilst the overall exposure of Phase G/3-1 amounts to about 3800 m², it was not possible to reach the older phases H and G/4 everywhere, due to the high level of the groundwater table. Some plans of parts of the settlement have been published, in particular the north-western part³⁴ and one compound in squares m-n/14-15 (figs. 1 and 2)³⁵.

It seems that the general lay-out of the houses in Phase G/3- 1 largely follows the same plan as that of Phase G/4. Phase H (late Twelfth Dynasty) shows a different ground plan with even simpler house units. They often consist of only a single room with thin walls laid one or half a brick wide. Irregular precincts were defined by means of flimsy walls of one to half a brick's width. Several round silos are included in the lay-out of those settlement structures. The future analysis of the finds will provide further evidence for the interpretation of the buildings of Phase H.

In comparing the lay-out of Avaris (fig. 1) with the other sites mentioned above³⁶, it becomes apparent that the settlement does not show orthogonal features, that is to say it suggests natural growth rather than pre-planned building activity prompted by defined purposes. At the same time the houses and other installations are quite densely

Survey of Memphis Series, Egypt Exploration Society, forthcoming; L.L. GIDDY, *Kom Rabi'a: The Late Middle Kingdom Phases (Levels VI-VIII)*, The Survey of Memphis series, forthcoming.

³¹ B. BADER, *Tell el-Dab'a XIX. Avaris und Memphis im Mittleren Reich und in der Hyksoszeit. Vergleichsanalyse der materiellen Kultur*, UZK 31 (Vienna, 2009).

³² Cf. M. BIETAK, 'Relative and Absolute Chronology of the Middle Bronze Age: Comments on the Present State of Research', in: M. BIETAK (ed.), *The Middle Bronze Age in the Levant, Proceedings of an International Conference on MB IIA Ceramic Material, Vienna 24th-26th January 2001*, Contributions to the Chronology of the Eastern Mediterranean 3 (Vienna, 2002), fig. 1.

³³ Cf. the stratigraphic chart of the site: BIETAK, DORNER and JÁNOSI, *Egypt and the Levant* 11 (2001), fig. 2.

³⁴ BIETAK, *Tell el-Dab'a V*, plan 2.

³⁵ M. BIETAK, 'Ausgrabungen in Tell ed-Dab'a', *Archiv für Orientforschung* 25 (1977), 314-7.

³⁶ For convenience see maps in KEMP, *Ancient Egypt*, 222-42.

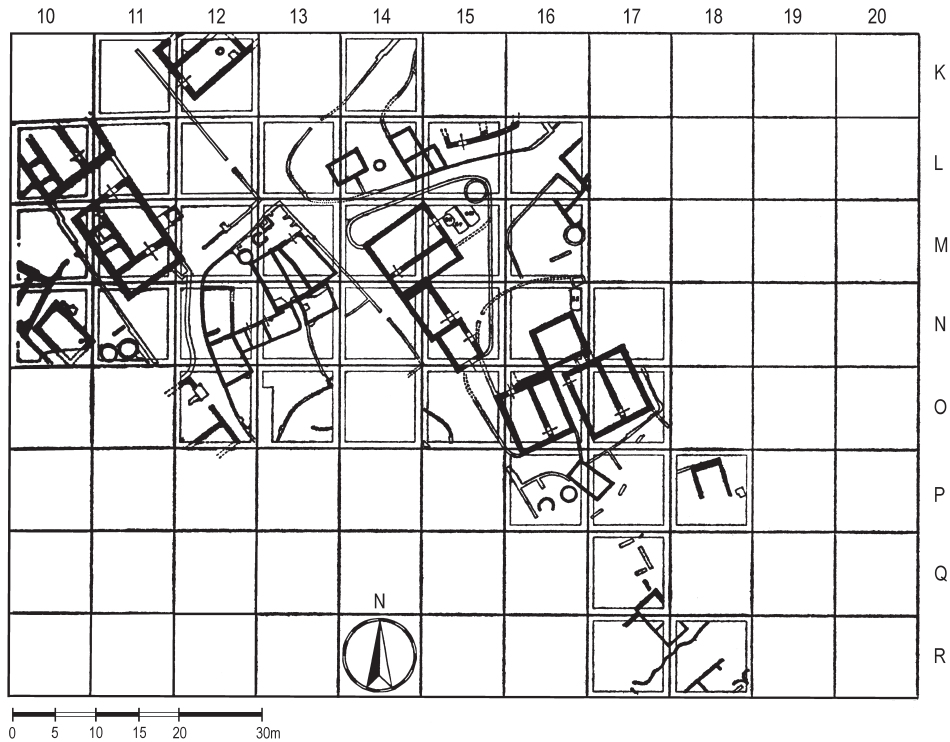


Fig. 1. Preliminary plan of area A/II in Phase G/3-1 after M. BIETAK, *Avaris and Piramesse* (Oxford, 1979), fig. 2.

distributed leaving only restricted space for winding alleyways rather than streets. Another hint for natural growth is, perhaps, the lack of a surrounding town wall, which would have shaped the structure of the settlement considerably. The erection of a town wall implies, as a necessary pre-requisite, a notion of how many inhabitants the settlement was intended to house³⁷.

Preliminary comparison to other settlements

In comparison to the earlier orthogonal settlement in Area F/I (Phase N, early Twelfth Dynasty) the house units in Area A/II are more spacious. The expanse of floor space for the early Middle Kingdom unit being ca. 27 m²,³⁸ whilst in the early Thirteenth

³⁷ Cf. *ibid.*, 194-7.

³⁸ CZERNY, *Tell el-Dab'a IX*, fig. 2 and 20-1.

Dynasty (Phase G/3-1) the average house floor space was about 70 to 80 m². In the north western part of the settlement two even larger house units can be isolated. It remains unclear, whether this increase in space reflects a natural development by the local Egyptian population³⁹ or if it was influenced by incoming immigrants, who may have (co-)inhabited the later houses in Area A/II. More likely it may be a combination of both⁴⁰. The spatial use, i.e. the irregular lay-out, of Egyptian house types⁴¹ might be the result of other influences, although this need not be the sole reason. For example, this might be dictated by geological grounds such as the formation of turtlebacks typical of the Delta. Another explanation for this feature may be a weakening of the central power/administration, at least in the early Thirteenth Dynasty (Phases G/4, G/3-1). This is a period when the Egyptian pharaohs began to change often and rather rapidly⁴².

The settlement at Lisht North began to exist in the early Thirteenth Dynasty and contains more elaborate and larger house units and workshops, some of which show the core unit of the “snail house” (two adjoining rooms connected by a doorway in the far end of the separating wall, cf. fig. 1, square o/16-17)⁴³. It is not laid out orthogonally. The plan appears even more conglomerated with even narrower alleyways than in Tell el-Dab'a in Phase G/3-1.

Of comparable size, but different in plan are the single units of the western ranks at Kahun, although the small scale of the published plan prevents a more detailed discussion of these houses. The units seem to have been laid out back to back. Thus, it could be assumed that more than one unit belonged together⁴⁴. This is not unusual as it has been noted that housing originally planned very rigidly grows naturally and irregularly as people use it to live in⁴⁵. The large mansions at Kahun situated in the northern part of the settlement⁴⁶ serve to emphasise the fact that the dwellings of Area A/II in Tell el-Dab'a belonged to people of humbler standing, even if they did not have to endure

³⁹ Ibid., 129-30 and 133-4.

⁴⁰ For the possible origin of the immigrants from Byblos, cf. BIETAK, ‘Egypt and the Levant’, 417-48, esp. 422.

⁴¹ M. BIETAK, ‘Zum Raumprogramm ägyptischer Wohnhäuser des Mittleren und des Neuen Reiches’, in: M. BIETAK (ed.), *Haus und Palast im Alten Ägypten*, 23-43.

⁴² Cf. T. SCHNEIDER, ‘The Relative Chronology of the Middle Kingdom and the Hyksos Period (Dyns. 12-17)’, in: E. HORNING, R. KRAUSS and D.A. WARBURTON (eds.), *Ancient Egyptian Chronology*, *Handbuch der Orientalistik, The Near and Middle East*, Vol. 83 (Leiden, Boston, 2006), 168-96. Cf. there for further references.

⁴³ ARNOLD, ‘Settlement Remains’, fig. 1 and 13-5.

⁴⁴ Cf. KEMP, *Ancient Egypt*, 217.

⁴⁵ Cf. KEMP, *Ancient Egypt*, 208-10, fig. 74-5. In the planned settlement at Tell el-Dab'a, CZERNY, *Tell el-Dab'a IX*, 19-22; K. SPENCE, ‘The Three-Dimensional Form of the Amarna House’, *Journal of Egyptian Archaeology* 90 (2004), 137-9.

⁴⁶ KEMP, *Ancient Egypt*, 213, ca 42 × 60 m affording about 2520 m²; BIETAK, ‘Zum Raumprogramm’, 23-43.

such crowded living conditions as in Phase N, unless more people were assigned to a single unit⁴⁷. The houses from Area A/II are also smaller than the “villas” in the later Thirteenth Dynasty at Tell el-Dab’a (Area F/I, Phases E/3=b/2 and E/2=b/1)⁴⁸, which cover about 200 m² of space. Taken together this might be evidence for the existence of a “modest middle class”⁴⁹ at Tell el-Dab’a in the late Middle Kingdom.

At Elephantine similar sized or slightly larger houses with more elaborate ground plans are available for comparison. Often they show a tripartite plan similar to (New Kingdom) Amarna houses with columns or pillars in the middle room and numerous installations like round silos, ovens or square compartments. Larger dwellings belong to the courtyard type sometimes showing the “snail house” as a nucleus⁵⁰.

To summarise there are on the one hand fundamental differences in the size of the house units at Tell el-Dab’a, which relate most probably to social status, and, on the other hand differences in the internal lay-out of the units compared to Elephantine, Kahun, Lisht, which might be due to regional, socio-economic or even cultural grounds.

The Compound in A/II-m-n/14-15

Figure 2 shows the preliminary plan of a compound of Phase G/3-1 selected for analysis. The house type consists of one core building in squares m/14-15 comprising two rooms (Room 1a and 1b) in line with the “snail house” design⁵¹. An extended type with three rooms alongside each other was encountered once in Area A/II, in the very north west of the excavated area (see fig. 1) and at least once in Area F/I⁵².

South of the core unit, two rooms were attached (Room 2 and 3) each with a separate entrance from the courtyard. The section of the walls shows that Room 2 was added at a later stage to the original two room building. Interestingly, Room 3, which was probably erected at the same time as Room 2, was also accessible from outside the compound as proved by excavation of the baulk between n/15 and o/15. The excavation of the baulk also revealed a fireplace in the south western corner of Room 3 protected by a few bricks.

⁴⁷ For an estimate of the number of inhabitants of one house unit at Kahun see KEMP, *Ancient Egypt*, 217.

⁴⁸ BIETAK, *Avaris*, 49-54.

⁴⁹ Cf. J. RICHARDS, *Society and Death in Ancient Egypt: Mortuary Landscapes of the Middle Kingdom* (Cambridge, 2005), *passim*.

⁵⁰ VON PILGRIM, *Elephantine XVIII*, fig. 109, 110 for an overview of the building development in the late Twelfth and Thirteenth Dynasties and 189-204.

⁵¹ Cf. BIETAK, in: M. BIETAK (ed.), *Haus und Palast*, fig. 3; ‘Schneckenhausgrundriß’; ARNOLD, in: M. BIETAK (ed.), *Haus und Palast*, 15.

⁵² Cf. M. BIETAK, ‘Houses, Palaces and Development of Social Structure in Avaris’, in: M. BIETAK, E. CZERNY, I. FORSTNER-MÜLLER (eds.), *Cities and Urbanism in Ancient Egypt*, UZK 35 (Vienna, 2010), fig. 13 for contemporary stratum F.



Fig. 2. Plan of compound in squares m-n/14-15 in Phase G/3-1, after M. BIETAK, *Ausgrabungen*, fig. 1.

The irregular courtyard contained three tombs, which are contemporary with the compound and show the same orientation (fig. 2), albeit sunk into the ground later than the erection of the house. Three burials were found in a brick-built vaulted chamber tomb and another was in a pit grave⁵³. Interestingly, pit grave m/15-11 is located in front of the entrance to the main room, but below floor level. It contained a young woman orientated NNW-SSE, with the head in the south⁵⁴. Tomb 9 contained an adult man, a young woman and a child⁵⁵, whilst tomb 10 was found destroyed⁵⁶. The vaults were beneath the floor level of the courtyard, and no other superstructure seems to have existed⁵⁷.

North of the tombs a round silo was situated running into the baulk, probably built after the construction of the tombs. South of this silo a few bricks in square m/15 suggest a second one. North of Room 1a a narrow courtyard or extra room was cordoned off by means of a one and a half brick wide wall, to which no entrance could be identified. Thus, it might have constituted an extra room accessible from a narrow space north of the north eastern corner of Room 1a. A large patch of ashy layers to the east of Room 2 indicates an activity area (e.g. cooking). There was no obvious entrance in the surrounding wall although most of the baulks were removed.

Finds in compound A/II-m-n/14-15

Only selected finds from the compound will be mentioned here as a complete list would go well beyond the scope of this paper. Room 1a contained ashy layers and the lower part of a large Marl C storage vessel (diameter of 26.0 cm), reused as a small fire installation in the south east corner, whilst a second fire installation was built from bricks in the north eastern corner of the same room discovered in the baulk of m/14-15. The finds from this room comprised principally pottery, including fragments of hemispherical cups; beer bottles; large plates; Marl C storage jars; corrugated neck jars; imported transport amphorae; a copy of a carinated bowl (Middle Bronze Age shape, see figs. 4, 6-7)⁵⁸. A complete example of a “fish dish” was pieced together from fragments found inside the building and in the forecourt (fig. 3)⁵⁹. Other finds included

⁵³ FORSTNER-MÜLLER, *Tell el-Dab'a XVI*, 129-7, fig. 71a for the tombs m/15 no. 9 and 11.

⁵⁴ *Ibid.*, 135.

⁵⁵ *Ibid.*, 129, 131.

⁵⁶ *Ibid.*, 133-4.

⁵⁷ *Ibid.*, 121.

⁵⁸ See fig. 9 for fabric classification of the pottery types, which follows the Vienna System. H.Å. NORDSTRÖM, J. BOURRIAU, ‘Ceramic Technology: Clays and Fabrics’, in: D. ARNOLD and J. BOURRIAU (eds.), *An Introduction to Ancient Egyptian Pottery*, Sonderschriften des Deutschen Archäologischen Instituts, Abteilung Kairo 17 (Mainz, 1993), Fascicle 2, 168-82.

⁵⁹ B. BADER, *Tell el-Dab'a XIII. Typologie und Chronologie der Mergel C-Ton Keramik, Materialien zum Binnenhandel des Mittleren Reiches und der Zweiten Zwischenzeit*, UZK 19 (Vienna, 2001), 79-98.

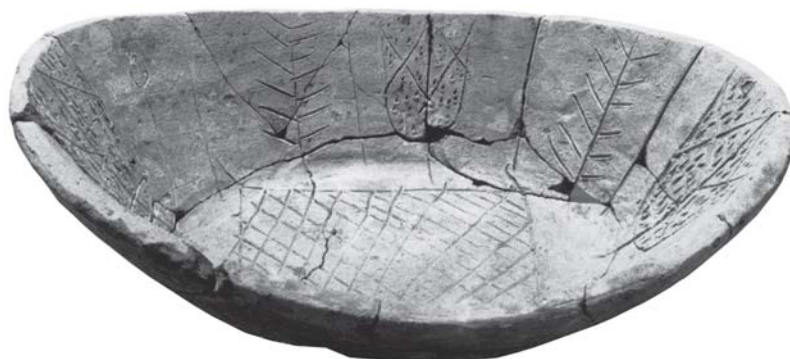


Fig. 3. Fish dish, reg.no. 2529.



Fig. 4. Beer bottle, reg.no. 2530.

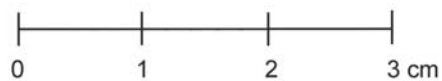
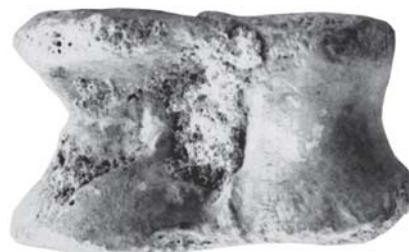


Fig. 5. Sheep bone, reg.no. 3069.

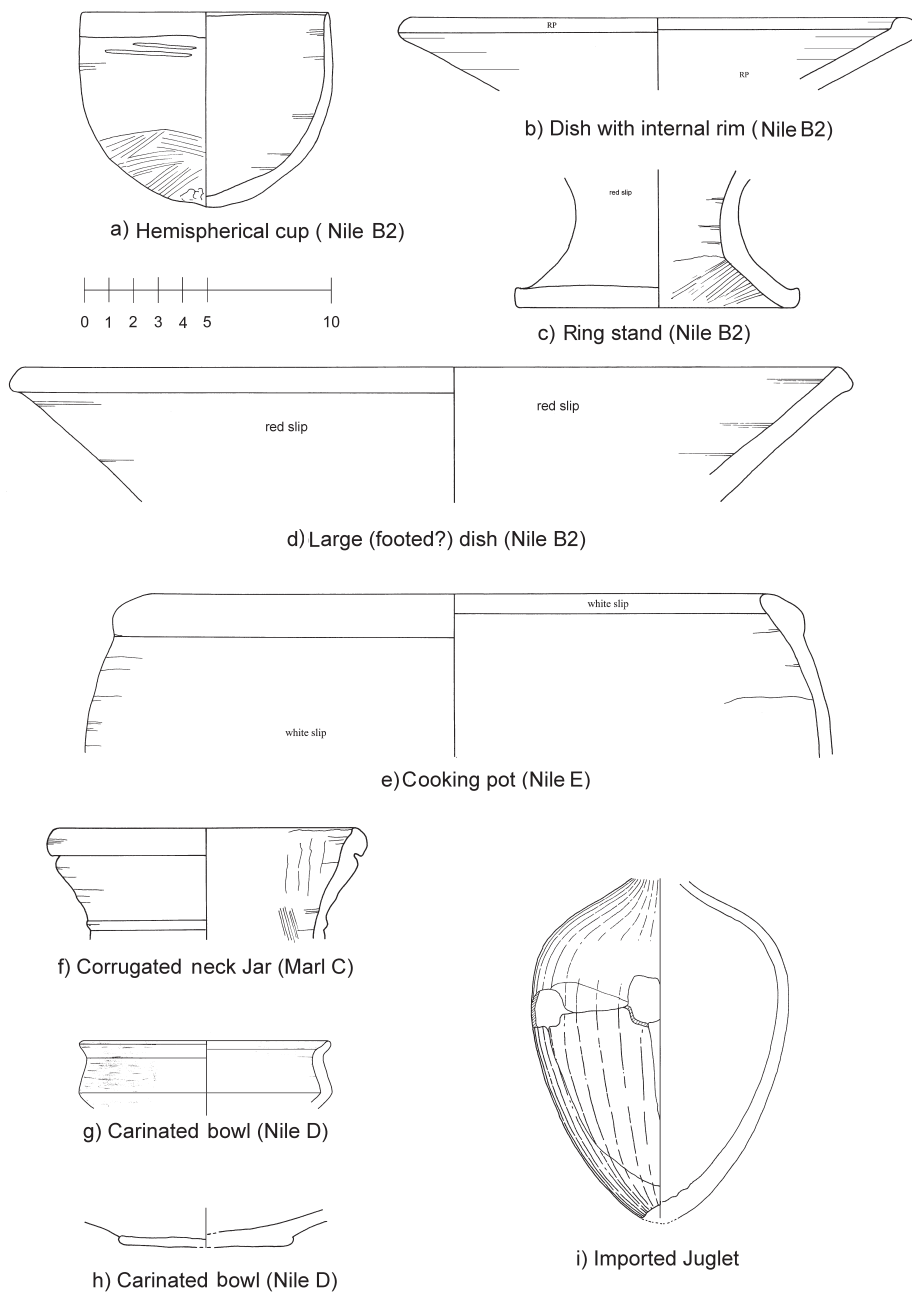
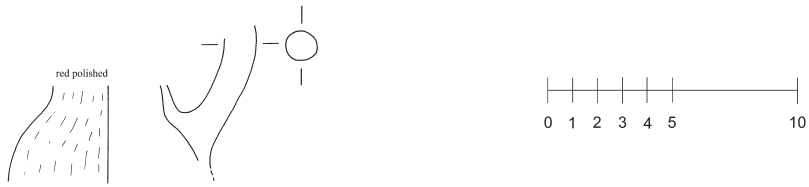
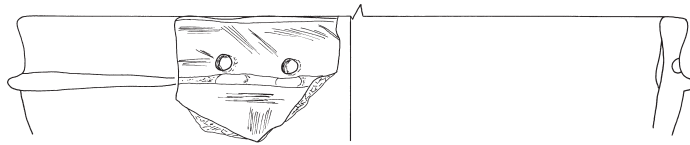


Fig. 6. Pottery from the Compound.

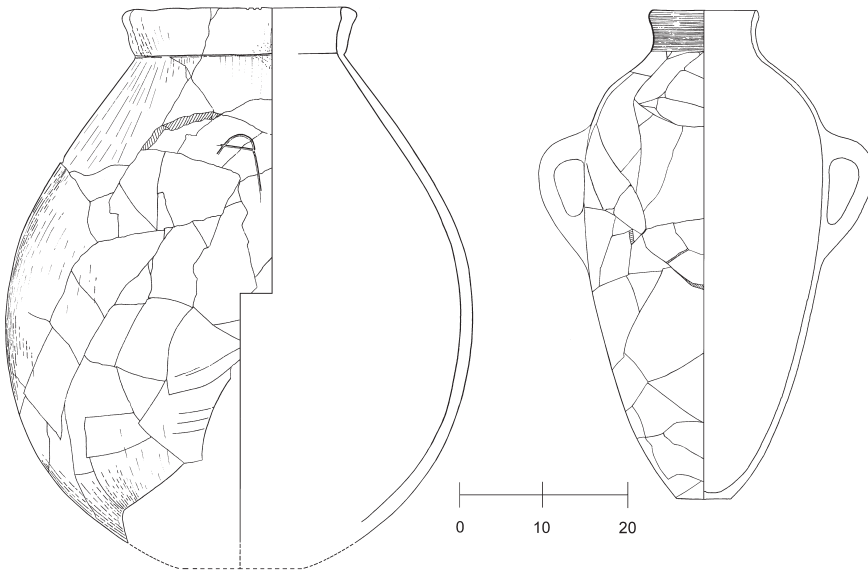
a) reg.no. 2531a; b) reg.no. 2530f; c) K730 (19025); d) K472 (10663); e) K480 (10781);
f) K556 (13840); g) K605 (16211); h) K469 (10654); i) reg.no. 2859.



a) Imported Dipper Jug



b) Straight-sided cooking pot (Nile E3)



c) Large Storage Jar (Marl C)

d) Imported Transport Amphora

Fig. 7. Pottery from the Compound.

a) reg.no. 2530d; b) reg.no. 2543c; c) reg.no. 3959a; d) reg.no. 2532g.

a grinding stone of quartzite, fish and cattle bones⁶⁰, at least one gaming piece made from a sheep/goat bone (fig. 5) and a flint tool (part of a sickle, cf. fig. 8). A fragment of an imported brown polished Tell el-Yahudieh jug was discovered in the courtyard just east of Room 1a.

The smaller Room 1b yielded the lower part of a footed bowl, fragments of cooking pots, storage jars and amphorae, as well as hemispherical drinking cups, ringstands and dishes with internal lips. A small amount of material compared with the other rooms. Two fragments of cosmetic palettes of “green slate” are noteworthy.

Room 2 contained material connected to storage and food production, but also some items that suggest consumption of food and/or drink. The finds comprised a mortar and a quern as well as several grinding stones (cf. fig. 8). The ceramic corpus included hemispherical cups, large beer bottles, large Marl C storage vessels, jars with corrugated necks, a few cooking pots and several Canaanite transport amphorae (cf. fig. 4, 6-7). A remarkable find is the neck of a juglet with red and black band decoration⁶¹.

In Room 3 the largest number of finds was discovered. Amongst them there are a flint tool belonging to a sickle, stone mortars, querns and several grinding stones (cf. fig. 8). The ceramic material belonged to the following types: hemispherical cups, dishes with internal lips, beer/wine jars, large dishes, supports, and tubular stands, cooking pots, small and medium jars, corrugated neck jars, and large Marl C storage jars. The imported material included a biconical burnished jug with a three stranded handle and brown surface colour⁶², dipper juglets, and transport amphorae (cf. fig. 6-7). Whilst the composition of the find groups is very similar to the ones already described, the quantity of pottery types varies. The frequency distribution of the different ceramic types (fig. 9), is based on rims⁶³, and showed ca. 62% of closed vessels (beer bottles, jars, corrugated neck jars, Marl C-storage jars, transport amphorae) used for storage. Open vessels (dishes of various kinds, hemispherical cups) are represented by ca 31%. Minor amounts are accounted for by stands (2%), jugs and juglets (1%), beakers (1%), and cooking pots (3%).

⁶⁰ J. BOESSNECK and A. VON DEN DRIESCH, *Tell el-Dab'a VII, Tiere und Historische Umwelt im Nordost-Delta im 2. Jt. v. Chr. anhand der Knochenfunden der Ausgrabungen 1975-1986*, UZK 10 (Vienna, 1992), 25-6, 42-3, table 81.

⁶¹ B. BADER, ‘Traces of Foreign Settlers in Tell el-Dab’a’, in K. DUISTERMAAT and I. REGULSKI (eds.), *Intercultural Contacts in the Ancient Mediterranean*, Orientalia Lovaniensia Analecta 202 (Leuven, Paris, Walpole, 2011), fig. 4.b.

⁶² BIETAK, *Ausgrabungen*, Abb. 5; D.A. ASTON, *Tell el-Dab'a XII. A Corpus of Late Middle Kingdom and Second Intermediate Period Pottery* (Vienna, 2004), 124, Cat. Nr. 349, pl. 107.

⁶³ C. ORTON, P. TYRES and A. VINCE, *Pottery in Archaeology*, Cambridge Manuals in Archaeology (Cambridge, 1993), 171-3; BADER, *Tell el-Dab'a XIX*, 61-3; B. BADER, ‘Processing and Analysis of Ceramic Finds at the Egyptian Site of Tell el-Dab’a’, in: B. HOREJS, R. JUNG and P. PÁVUK (eds.), *Pottery Analysis*, *Studia Archaeologia et Medievalia* (Bratislava, 2010), 209-33.

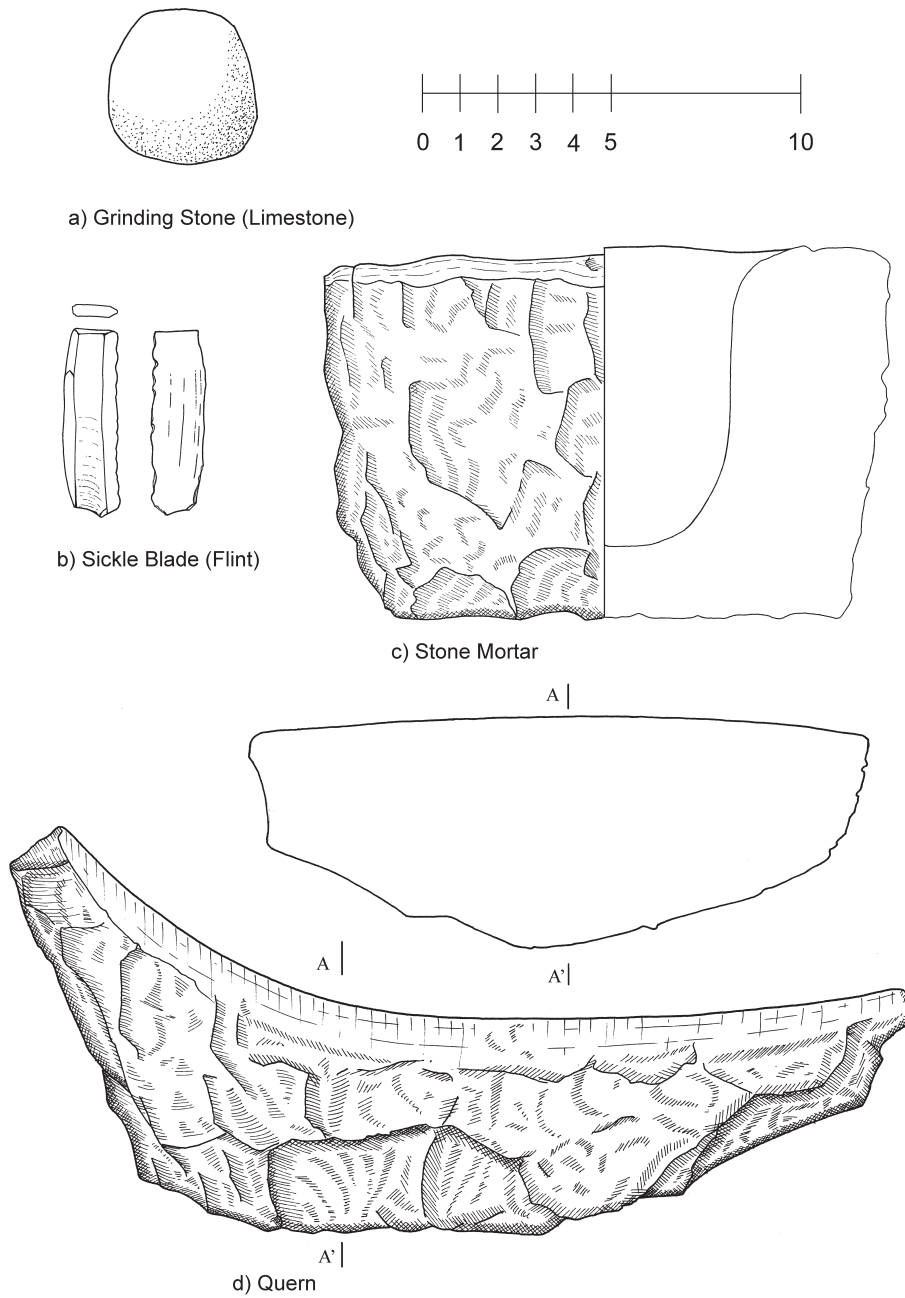


Fig. 8. Objects from Compound. a) K551; b) reg.no. 2509; c) reg.no. 2659; d) reg.no. 2660.

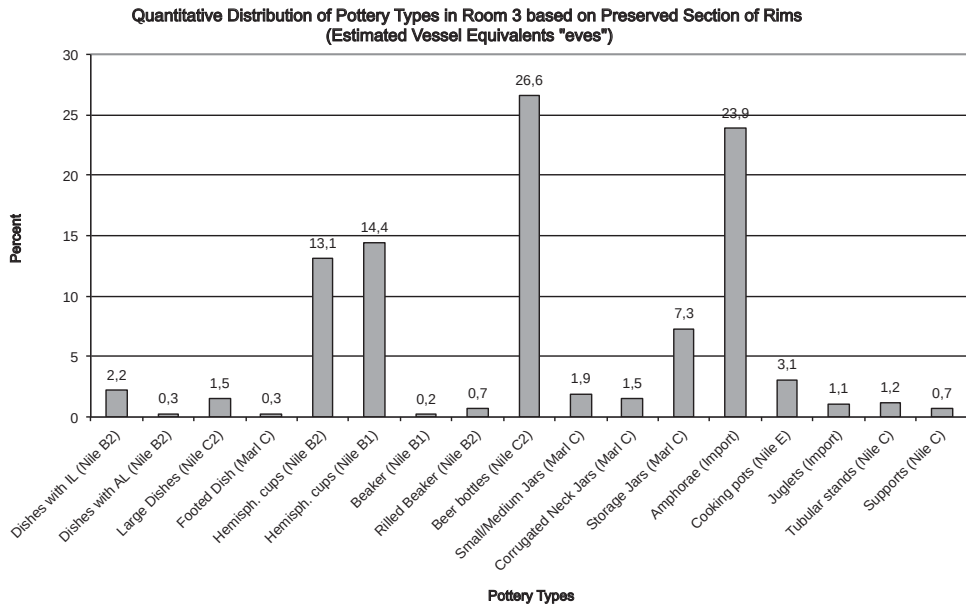


Fig. 9. Quantitative Distribution of Pottery Types in Room 3.

Several more gaming pieces made from sheep/goat bones (astraguli) were recorded in squares m/14 and m/15 (cf. fig. 5), which gives us a tiny glimpse of the more leisurely occupations of the inhabitants.

Interpretation of the building

From this array of data it seems safe to assume that the main function of Room 3 was definitely one of storage, whilst the mortars, querns and grinding stones suggest food processing as does the small fire place in the south western corner. It is possible however, that the activity of grinding staple foods such as grain happened in the more spacious courtyard, rather than in the confined space of Room 3, which had about eight square metres of floor space. The fact that three querns were found in it makes it less likely that they would all have been operated within Room 3 simultaneously. Therefore, the implements were probably simply stored in Room 3. The same reasoning would apply to Room 2, which contained a similar range of finds although in smaller quantities. Rooms 1a and 1b seem to have been used for multiple purposes, since the finds include at least two hearths one made from a base of a Marl C-storage jar, and this suggests domestic rather than industrial use. The other hearth was built from mud

bricks. There was also a flint sickle blade and a range of domestic pottery with no clear preference for one type rather than another.

The complete “fish dish” since it is one of the few decorated pottery types, stands out. Its function could have been either domestic and/or decorative. The existing traces of use in the centre of the dish (cf. fig. 3) do not suggest extensive rubbing or grinding, of grain or fish, especially because the incisions seem to be spaced too far apart and too shallow to be effective for such an activity. Other possibilities for their use might be a serving platter for special foodstuffs or a token of unknown domestic cultic activity. Similar examples from Kahun parallel this find but give no further hints for their use as little is known about their find circumstances.

Other multipurpose areas can be expected in the southern part of the courtyard of the compound and in the forecourt, because no finds were made there suggesting any specific use of the area. The two brick installations or platforms near the south eastern corner of Room 1b might have been supports for the building, as they seem to be too high in relation to the ground level of the courtyard to be used as emplacements for querns.

The courtyard contains an ashy layer immediately to the east of Room 2, as would be expected in a domestic environment for use of small fires for cooking purposes. This is corroborated by the find of two straight sided cooking pots (cf. fig. 7b). The circular feature in the north east corner of the compound and perhaps the few bricks south of it can be interpreted as a storage facility for staple foods most probably grain, since this is a common element in all settlements⁶⁴.

The vaults of tombs 9, 10 and 11 did not reach beyond the floor level of the courtyard and this implies a lack of superstructures⁶⁵, otherwise the silo/s, whose life span could have been very short, would not have been accessible. As the tombs contained two young women, one young man and a child, they could have belonged to a family at one time associated with the compound. Whilst this gives us a glimpse of ancient social structure, it also raises more questions: Were the couple in the chamber tomb the head of the household and his wife? Was the female buried in the pit in front of the chamber tombs also a relative⁶⁶? From the grave goods, which include various weapons⁶⁷, it seems that the male person had a non-Egyptian cultural background. However, that does not necessarily reflect on the female population of the site. There is also no evidence to rule out that more people could have lived within this household than those found in the tombs.

⁶⁴ Cf. ARNOLD, in: P. JANOSI (ed.), *Structure and Significance*, 96-7.

⁶⁵ FORSTNER-MÜLLER, *Tell el-Dab'a XVI*, 121.

⁶⁶ She was probably not a servant, cf. M. BIETAK, ‘Servant Burials in the Middle Bronze Age Culture of the Eastern Nile Delta’, *Eretz Israel* 20 (1989), 30-43; FORSTNER-MÜLLER, *Tell el-Dab'a XVI*, 44-5.

⁶⁷ FORSTNER-MÜLLER, *Tell el-Dab'a XVI*, 47-52.

The reconstruction of the daily routine concerning the inhabitants and their regard for the deceased people in those tombs is quite impossible to understand since no direct traces of cult activities could be found. They might have been revered and included in daily meals by means of offerings, and the space on top of these tombs was perhaps considered sacred, but there were no finds to indicate either of these possibilities. On top of the tombs there was a sizeable ashy layer, containing no additional finds to the usual settlement refuse. How long the tombs and the deceased would be remembered can be roughly estimated as another tomb cuts into the group from the next level (Phase F), thus it seems to have not exceeded one phase, which is currently thought to last about a generation⁶⁸.

Preliminary Conclusions and Future Prospects

The preliminary conclusions can be summarised as follows:

- The available space for each housing unit increased considerably from the early to the late Middle Kingdom at the site of Tell el-Dab'a. It remains unclear if another planned settlement was located elsewhere at the site in Phase G/3-1 (perhaps at 'Ezbet Rushdi).
- The lay-out of the settlement does not show a pre-planned concept.
- A boundary wall indicating such a concept is missing.
- The most comparable site in terms of general lay-out is that of Lisht North⁶⁹.
- The basic house ground plan ("snail house") seems comparatively rare in Egypt in the late Middle Kingdom, although it can be found as basic unit.
- The juxtaposition of pre-planned (orthogonal) and naturally grown settlement sites might be due to the chance of excavation (e.g. not close to the Nile), regional, socio-economic or cultural reasons.
- The inhabitants of Tell el-Dab'a in the early Thirteenth Dynasty were sufficiently Egyptianised to live in houses based on an Egyptian plan with the bulk of the equipment derived from Egyptian tradition, but burial practices and some of the household pottery (fig. 6g-i, 7a-b) indicate a highly Egyptianised Levantine (Middle Bronze Age culture) background.
- The distribution of the finds in the complex (fig. 2, m-n/14-15) shows that the identification of activity can be helped considerably by quantitative analysis of ceramics since they are the most abundant find category.

⁶⁸ Cf. stratigraphic chart by BIETAK, DORNER and JÁNOSI, *Egypt and the Levant* 11 (2001), fig. 2; FORSTNER-MÜLLER, *Tell el-Dab'a XVI*, 121.

⁶⁹ ARNOLD, in: M. BIETAK (ed.), *Haus und Palast*, fig. 1 and passim.

- Because of the size of the housing unit in conjunction with the range of finds and the equipment of the corresponding tombs, the status of the inhabitants could be described as of “modest middle class”; it is difficult to decide which of the artisan – peasant – craftsman – pastoralist categories should be applied as there is only evidence for food processing and storage with a very minor appearance of agricultural tools (sickle blades). This could possibly mean that the grain to be processed at the site came from a “central administration” as provision perhaps for labour connected with harbour activities.

In the course of future study further comparison with material of different kinds will allow more insight into the use and function of the settlement at Tell el-Dab'ā. The comparison of the ceramic repertoire with contemporary tombs, which have shown burial customs reminiscent of a Middle Bronze Age cultural background⁷⁰, should indicate whether they were still true immigrants or their descendants and, if the latter, the degree of their acculturation. The closer comparison with other settlements in layout and content might give some more clues to the reasons why the structure of the settlement in Tell el-Dab'ā seems to be unplanned. Whilst the elements used seem Egyptian the overall plan is not very well comparable to other excavated late Middle Kingdom settlements from the Nile valley or contemporary settlements in the Levant. But if that originates in chance of excavation or cultural, economic or regional reasons must remain subject of further study.

⁷⁰ FORSTNER-MÜLLER, *Tell el-Dab'ā XVI*, 129-40.