Neapolis Scythica – Simferopol – Test Excavations 1993

Wolf Rudolph & Michalis Fotiadis

Prefatory Note

For various reasons this publication was delayed. Meanwhile, though, archaeological work in the Black Sea area has continued, and that with increased vigour[1]. To mention only a few bench-marks: in the wake of the deep-rooted changes in the Eastern-Block system, at the end of the 20th century and during the first years of this millennium alone three dedicated research-centres were founded, one German, one American, and one Danish. These are the ›Zentrum für Archäologie und Kulturgeschichte des Schwarzmeerraumes‹ (ZAKS) at the University of Halle-Wittenberg in 2000, the ›Centre for Black Sea Studies‹ at Aarhus University in 2002 and in 2004 the ›American Research Centre in Sofia‹ (ARCS). Among state-funded institutions, the Eurasian department of the DAI of 1995 has an extraordinary scope which sweeps over all of Asia.

A thorough summary of archaeological activities around the Pontos Euxinos has been published in ›Archaeology in the Black Sea Region in Classical Antiquity 1993 – 2007 co-authored by Pia Guldager Bilde († 2013), Birgitte Bøgh, Søren Handberg, Jakob Munch Højte, Jens Nieling, Tatiana Smekalova and Vladimir Stolba‹[2]. This long essay, originally an Archaeological Report of the BSA, fairly detailed lists the major research initiatives and illustrates how, upon the dissolution of the Soviet bloc, there followed an upsurge of initiatives and a number of co-operations between Western institutions and partners around the Black Sea. Out of all the work, some very useful tools have come. Thus the Aarhus Centre's Black Sea Studies series (BSS)[3] and their extensive annual reports have set high standards in every respect, including an enviable timeliness in reporting. In addition, all materials were produced for ›open access‹[4].

1 The popularity of the subject also seems to be reflected by the more than 2000 ›followers‹ listed under ›Academia.edu‹, ›Black Sea Archaeology‹ (Spring 2016).

2 Available on ›Academia.edu‹. Originally published as Archaeological Report 2007 – 2008 by the British School in Athens. https://www.academia.edu/358292/Archaeology_in_the_Black_Sea_Region_in_Classical_Antiquity_1993-2007_Archaeological_Report_54_2008_115-173.

3 See http://www.pontos.dk/publications/books. To date, 16 volumes have appeared.

4 See: http://www.pontos.dk/. Pontos: The Danish National Research Foundation's Centre for Black Sea Studies, with a detailed overview of the centre's programme.

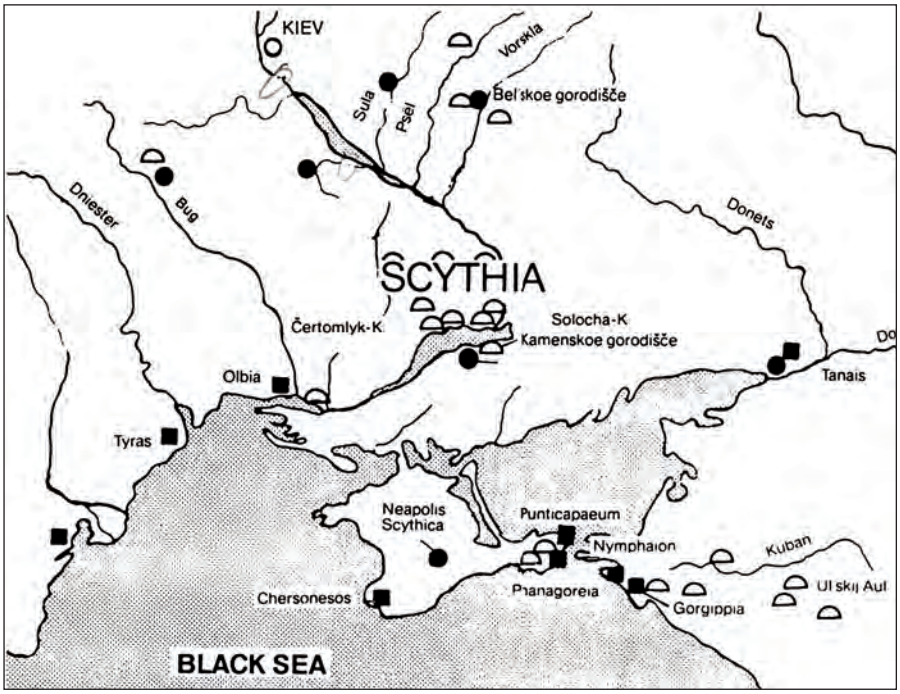


Fig. 1:
Simferopol / Neapolis Scythica on Crimea.

The increased activities on the Crimea since the early 1990ies also included more archaeological work at ›Scythian Neapolis‹[5], the site the following report concentrates upon. The report is the outcome of an attempt to bring about longer term collaboration, involving an American university and the Crimean Archaeological Institute. Now, as we are composing this prefatory note, the Crimea once again has undergone another turn in her turbulent political history and the future of archaeological work in the region on a steady keel seems far from assured at the time of this writing.

After the work in 1993 in ›Scythian Neapolis‹ more campaigns followed, with the reports on these undertakings written in Russian and Ukrainian[6]. The existing language barrier was first lowered in 2001 in a paper the principal excavator presented at Aarhus emphasizing the changing interpretation and chronology of Scythian – ending late 4th century BCE versus the Late Scythian culture beginning ca. 200 BCE[7]. Understanding the status quo was made easier in 2004 when Y. Zaytzev[8] published an English summary of research in Neapolis Scythica in which he also included a reference to the trench IUTRIAL[9]. The book contains a detailed presentation of the various levels which the local excavators identified[10]. A year later the same author published a summary on the ›Absolute and Relative Chronology of Scythian Neapolis in the 2nd century BCE‹[11]. As far as the site itself is concerned, it has received a special status as historical and archaeological reserve ›Scythian Neapolis‹.

5 The ancient name of the site comes in various forms. Zaytzev 2004 entitles his book ›The Scythian Neapolis‹. ›Neapolis Scythica‹ reads the lemma in the Princeton Encyclopaedia (Princeton NJ 1976) 615. We have decided to follow the nomenclature used by Zaytzev to avoid unnecessary confusion. This does not imply, though, that we consider this to be the final word on the actual name of this Hellenistic-Roman settlement.

6 Zaytsev 2004, 44.

7 Zaytsev 2001 passim on the historic background.

8 A different spelling of the name: Zajcev is in print. Here the one on the title of Zaytsev 2004 has been selected.

9 Zaytsev 2004, 4 fig. 10 no. 1.

10 Zaytsev 2004, 8, chapter 3 passim.

11 Zaytsev 2001, passim; Rotroff 2005.

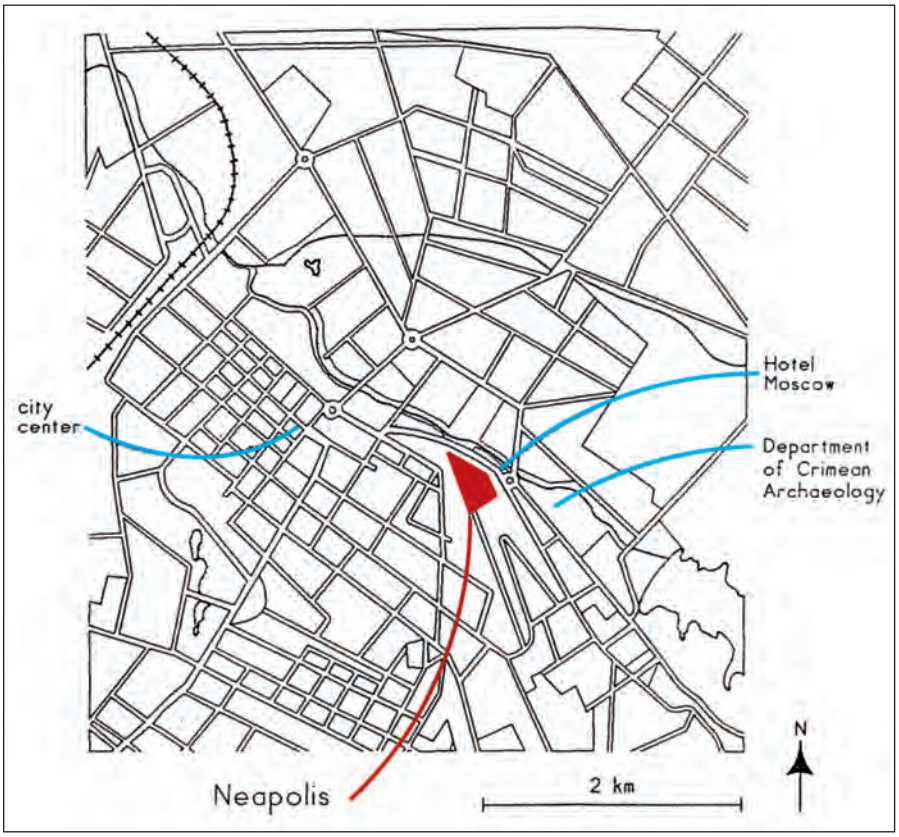


Fig. 2:
The site of Neapolis Scythica within the city of Simferopol.

Excavations

Small scale excavations took place on the Acropolis plateau above the modern city of Simferopol (**fig. 1**) during the first two weeks of August 1993[12]. The goal was to familiarize the team with stratigraphical issues of this site, and to lay the groundwork for a possible future excavation project at this site which has long been recognized as a major settlement occupied during the Hellenistic and Roman Imperial periods, in size equal to or even larger than other well-known settlements along the northern coast of the Pontic Sea[13].

The Site and its Post-Ancient History

The remains of the ancient settlement on top of the mesa-like rock in the middle of modern Simferopol (**fig. 2**) have been identified as those of Neapolis Scythica, the capital of the Scythian state in the Crimea. This identification goes back to the investigations of Blaramberg in 1831 which were triggered by the find of a stone relief of a horseman, and of three Greek

12 The excavations were sponsored by the Prinz von Sachsen-Altenburg-Foundation of Dallas, Texas and Lufthansa Airlines. The team came from Indiana University, Bloomington, under the direction of W. Rudolph. M. Fotiadis served as field director, N. Alexander assisted in the find preparation and tested various computer applications for their feasibility towards these particular circumstances. We are most grateful for their support to our Simferopol colleagues from the Crimean Branch of the Archaeological Institute of the Ukrainian Academy of Sciences in Kiev. We express our thanks especially to Dr. Victor L. Myts, Director of the Simferopol Institute, Dr. Vadim Kutaizov, Head of the Department of Classical Antiquities, Sergei Lanzov, Yurij M. Zaytzev. – W. Rudolph expresses further his gratitude to Dr. S. von Schnurbein, Director of the Römisch-Germanische Kommission, Frankfurt/Main, and his staff, especially Ms. Beck and Dr. Schultze who were most helpful during work in the library of this institution. Alexander Naymark, now Hoffstra University, provided invaluable help with the translation of Russian texts and through sharing his own excavator's expertise with the authors.

13 For a recent survey of activities in the Classical period in this region see Treister – Vinogradov 1993.

inscriptions. In the course of his probe he also came upon the nowadays well known relief depicting an older and a younger Scythian[14]. Basing his argument upon a quote in Strabo[15] he then identified the site as Scythica, the capital of the Scythians' state on the Crimea. This identification has been accepted and traditionally is being used to the present day.

A dissenting opinion has been voiced by D. Raevskii[16]. This author follows O. Dashevskaia[17], in that the available evidence supports the name of Palakium rather than Neapolis for the capital of the Scythian kingdom on the Crimea. In the end, irrefutable evidence for one or the other is currently lacking, and for reasons of tradition alone the name Neapolis appears the preferred one and it therefore used here.

During the century and a half since the first systematic research at Simferopol's Kermenchik plateau, excavations have been conducted at varying intervals[18]. Some of the work was conducted in the interest of public welfare. Thus, the plateau now holds the city of Simferopol's major water-deposit, and several huge pipelines cross the terrain in different directions[19] (**fig. 3**).

Fig. 3: Older excavations with water manes.

As a result of these research activities it has become clear that the site contained an important, large community with outlying cemeteries[20], and probably a dense settlement on the mesa-top at one time or another. The site has a history which goes back to at least the 6th / 5th centuries BCE, although its floruit began probably only in the 3rd century BCE when it became the major city for the Scythians. Its end as an active settlement falls in the 3rd century CE. From then on it seems to have lain unused safe for grazing activities or as a point of retreat and/or defence during times of war.

The site has received little attention in western literature[21]. The work done over the years by Russian and Ukrainian archaeologists on the site has been summed up first in a monograph however, in 1979, written by T. N. Vysotskaja. The author, who was involved in work at the site for many years, gives a comprehensive account from her point of view, describing the successive phases and linking them with the relevant materials[22]. Now, the 2004 monograph of Zaytsev has made the materials more widely accessible.

14 See Schulz 1946.

15 *Strab. geogr. 312*. »Besides the places listed in the Chersonesus there were also the forts built by Scilurus and his sons—the forts which they used as bases of operations against the generals of Mithridates — Palacium, Chabum, and Neapolis.«

16 Rayevsky 1976.

17 Dashevskaya 1958, 2 passim.

18 For a listing see now Zaytzev 2004, ch. 1.

19 Gajdukevic 1971, 306, note 3, reports erroneously that on the Kermentschik a man-made lake was built in 1926. The German word ›Stausee‹ (dammed up lake) can describe only the water distribution installation which was erected on top of the plateau to benefit from the pressure its elevated height provided. A man-made lake does, indeed, exist, south of the city on the road to Alushta, where the river has been dammed.

20 Zaytzev 2004, map: fig. 2, nos. 6–8 and views: fig. 3.

21 *RE* 16.2 s.v. ›Neapolis‹ (A. Hermann) merely mentions the Strabo reference, but none of the archaeological work pertaining to the site. A short, more substantive article has appeared in R. Stillwell – M. MacAllister (eds.), The Princeton Encyclopedia of Classical Sites (Princeton, NJ 1976) 615–616 (M. L. Bernhard – Z. Sztetyllo).

22 Vysotskaja 1979, passim.

The Geography of Neapolis

The site is located on a limestone spur overlooking the well-watered valley of the Salgir river. The spur rises steeply up to 45 m. (ca. 310 masl) above the valley floor. Its eastern side is bounded by a continuous cliff (bare limestone), 5–15 m. high (**fig. 4**). The narrow northern end is precipitous as well, while on its western side the spur is flanked by a ravine, which becomes progressively deeper to the North. Finally, to the South, the spur is continuous with a complex of terraces that extends to the foot of the Crimean mountains ca. 12 km away.

Fig. 4.

Fig. 5.

The central, main part of the spur is a plateau, rising progressively from N–NW to S–SE. Within what was the inhabited and presumably, intra-mural area of the ancient city, gradients vary significantly from one quarter to the next, although they do not normally exceed 10 %. Extensive areas in the southern part of the plateau are in fact nearly level, while in the northern part gradients with 6–8 % dominate. Such gradients would suffice to induce severe sheet erosion. Today, however, the surface is covered by a dense, virtually continuous turf and appears to be stable (**fig. 5**). Erosion is limited along trails (many of which run across the site), and to the shoulders of the spur, especially along the rim in the eastern side. It is likely that, through slope wash and weathering / collapse of the limestone face, the rim has retreated somewhat since ancient times; the foot of the cliff is buried in voluminous talus deposits. The extent of that retreat, and possible damage to, or loss of, ancient buildings, cannot be determined without excavation at several points along the rim. It is worth adding that the turf effectively reduces ground visibility throughout the Neapolis plateau to a minimum. An intensive surface survey would be impracticable: the frequency of ancient artefacts on the surface is extremely low (estimated to one item or less per 100 m^2).

The entire plateau bears considerable micro-relief of pits, ditches, ridges, and small mounds. The largest of the mounds, up to 3 m. high and covering several hundred square meters each, are said to be ancient features (»ash mounds;« Yuri Zaytsev, pers. communication). Some of the ridges, up to 0.5 m. high, may conceal parts of ancient walls or debris (cf. below). The remainder of the micro-relief is the result of diverse activities from various periods, such as stone robbing from ancient buildings, modern waterworks, or dumping the dirt from archaeological excavations. Today, the largest part of the plateau is a protected archaeological site, and it is used for recreation, for grazing small flocks of sheep and goats, and as a corridor for people living in the vicinity of the site. The periphery of the site, on the other hand, is occupied by buildings, residential, commercial, and a city water tank-and-pump.

Most points on the spur afford long range views – toward the hills across the Salgir valley (to the east and north), toward the coastal lowland (toward the Northwest and West), and across the terraces to the Crimean mountains (to the South). At least one other ancient settlement, ca. 5 km to the Northwest, is visible from Neapolis. Arable land is in no short supply in the valley bottom and in the plain further North and West; the valley, in particular, provides light,

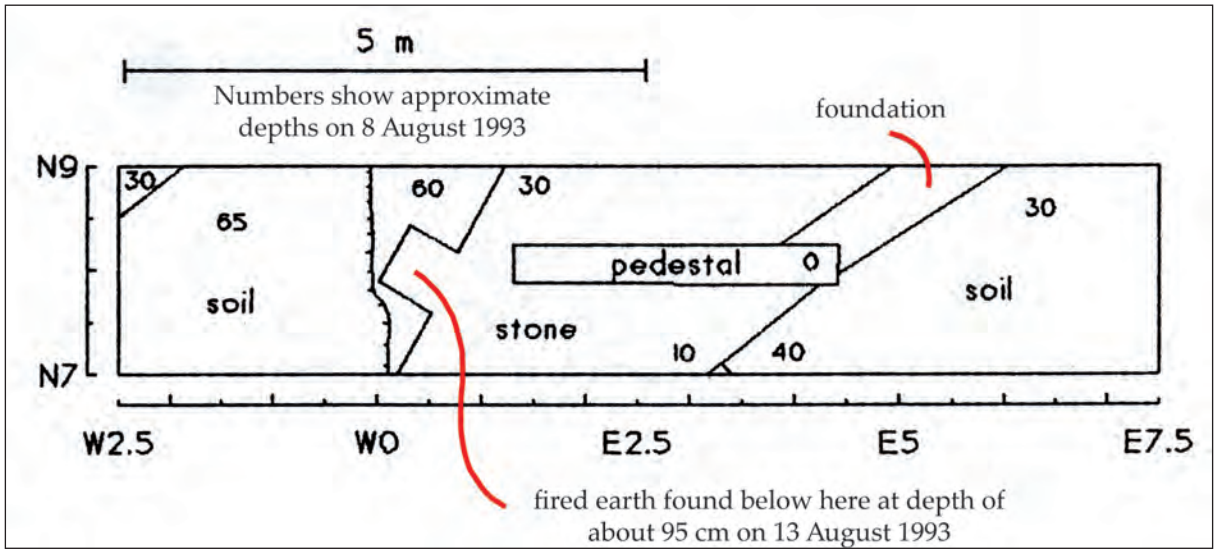


Fig. 6.

well drained alluvium, and it would be easily irrigable. A copious spring is located midway up the cliff in the spur's eastern side. The plateau, between the cliff and the ravine bordering the site on the West, provides more than ten hectares of usable space. All those elements – proximity of good farmland and water, a spacious, elevated area, protected by cliffs and steep gradients on three sides, and long range visibility –make Neapolis a privileged location for a sizeable ancient settlement. It should also be noted that the Salgir river valley is the natural route from the southern coast of Crimea to the peninsula's central and northern territories. Simferopol (the name may well be interpreted as ›city where people convene‹ or ›bring things together‹) no doubt owes some of its growth to its strategic location with regard to that route. The possibility should not be discounted that the route was also important in antiquity, and that ancient Neapolis – as well as other ancient towns along the Salgir valley –benefited from their location on that route. We will return to this issue below.

The Excavation

A trench of 2 x 10 metres was laid out and excavated in the NW part of the site, ca. 50 meters from its northern edge. The objective was to test the sediments for archaeological remains and stratigraphy in an area where no excavations had previously been conducted. When laying out the trench care was taken to avoid pits and ditches of the modern age, as well as underground pipelines. The specific location of the trench (provisionally named IUTRIAL) was chosen after intensive geophysical survey, conducted over an area 10 x 10 m. by T. Smekalova and B. Bevan. Magnetometry in that area identified a small (ca. 1 m^2) yet highly distinct source of anomaly, and a second, equally small but less distinct one, ca. 3 metres to the E of the first (**fig. 6**). The trench was laid out so as to encompass both sources of anomaly. As in most parts of the plateau, virtually no ancient artefacts could be found on the surface of IUTRIAL and its vicinity (cf. above).

The ground in the area of IUTRIAL rises from W–NW to E–SE (gradient 6.5 %), with the western end – Sectors A–B – of the trench being 0.60–0.70 m. lower than the eastern (**fig. 7**). A low ridge (ca. 0.25 m. high) ran diagonally across IUTRIAL. The excavation showed that the ridge marked the location of an ancient wall in ruined condition (see below).

A temporary datum point was established 9.90 m. to the north of IUTRIAL. All elevations within IUTRIAL were measured in cm. above or below this datum point by means of a simple surveyor's plane, constructed at the site with three iron rods and a string. The trench was

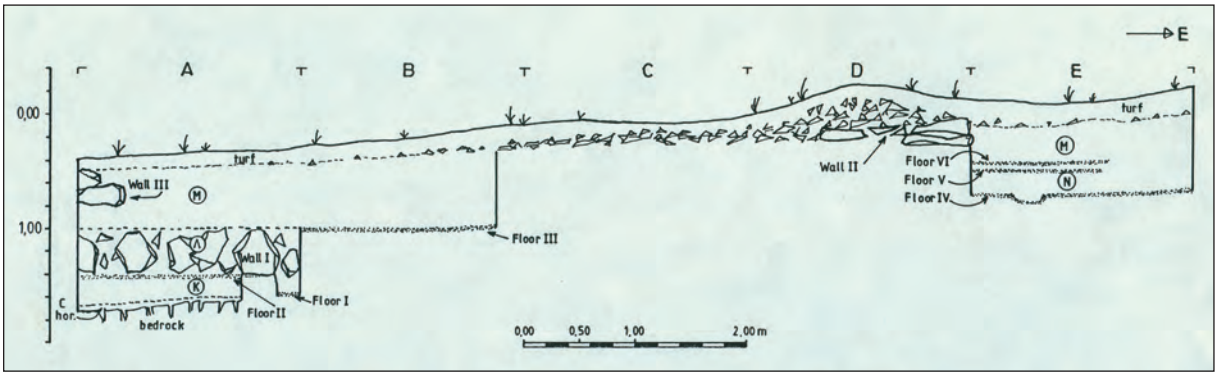
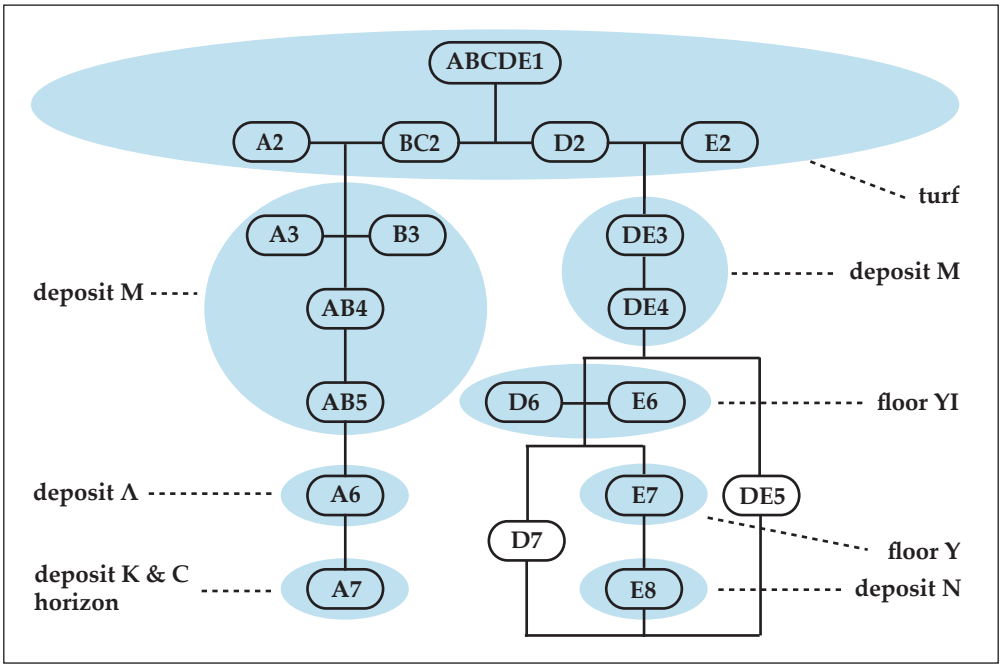


Fig. 7: Scarp.

notionally divided into five 2.00 m. x 2.00 m. segments, A through E. Excavation units were of variable depth (depending on stratigraphic circumstances) and of variable horizontal extent (most often limited to a single segment); they were named after the segment(s) in which they were dug and they were numbered in sequence (e.g., E6, BC2). Their stratigraphic sequence is shown in **fig. 7** and in the matrix-diagram (**graph 1**). Digging proceeded with few tools (spades, shovels, trowels and knives), and was carried out by a work force of two to four people. A small portion of the sediment removed was dry-sieved.

The excavation of IUTRIAL revealed a series of superimposed earthen floors and stone walls with some additional features, separated by fairly thick deposits, up to 0.35 m. of construction debris and refuse. As much as five centuries may separate the oldest from the most recent of the features (approximately from the 3rd century BCE to the 3rd century CE; see Chronology, below). All essential features are shown in the section (**fig. 7**) and in the two plans (**figs. 8–9**), and photographs (**figs. 10–12**). They are described below, beginning with the lower part of sequence in segments A and B, then taking up the lower part of the sequence in segments D and E. Segment C was excavated to a minimal depth; features encountered in it will be described last, along with the uppermost deposits in all segments of IUTRIAL.

Graph 1: Matrix - Diagram



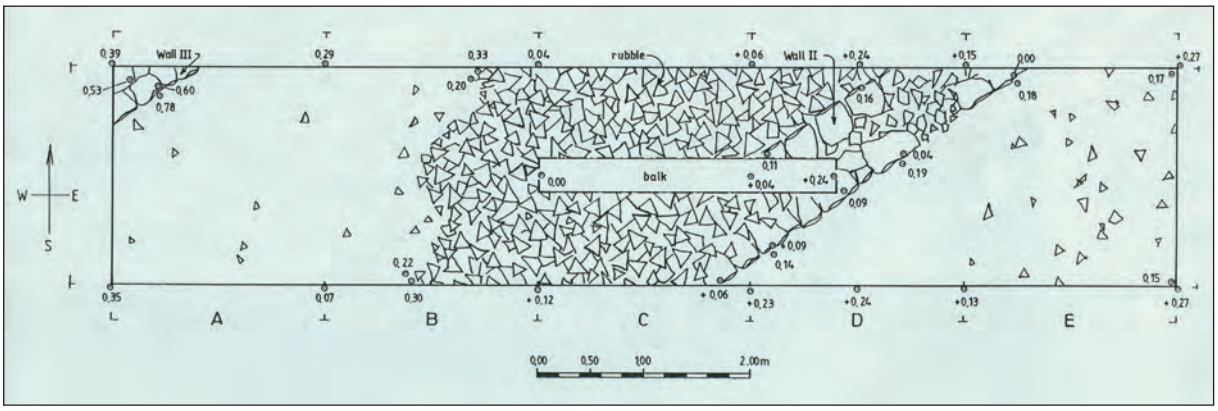


Fig. 8: Upper Planum.

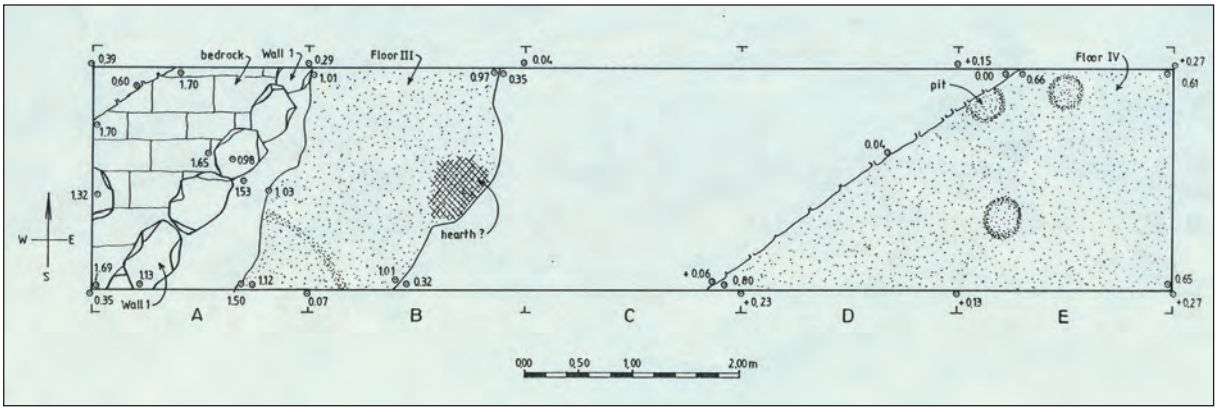


Fig. 9: Lower Planum.

Fig. 10: Exposed strosis.

Fig. 11: Floor construction.

Fig. 12: Final elevation.

IUTRIAL, the lower deposits in segments A and B

Bedrock was reached in a portion of segment A only, at 1.30 m. to 1.35 m. below the modern surface (1.65–1.70 m. below datum). Such bedrock is hard limestone; its exposed surface has the characteristics of in situ chemical weathering (cracks, loose angular gravel immediately on top). It is overlain by a thin (5–8 cm.) horizon of reddish clay, containing much limestone gravel but devoid of cultural residue – clearly, an undisturbed C horizon. In its upper part, the C horizon gives progressively way to a light grey-brown sediment, loosely packed and free of stones, but with sporadic artefacts and charcoal specks (deposit K; 140–160 cm. below datum). In the limited area (ca. 2 m^2) where deposit K was exposed the artefacts were primarily small potsherds, their frequency increasing upward. A concentration of at least three

tiles in a tumble was also noted in the northern scarp; whether they represent secondary refuse or the edge of a collapsed structure immediately to the N of segment A, it will take further excavation to tell. A small piece of a floor, probably still in situ, was also exposed (Floor I) at ca. 150 cm. below datum.

Deposit K in segment A was sealed by a floor, at ca. 1.35–1.40 m. below datum (Floor II). Like Floor I and all floors encountered in IUTRIAL, Floor II was distinguished from sediments above and below by its brighter, yellowish brown colour and its greater compactness. It was 3–5 cm. thick and could be traced over area ca. 1.8 m^2. Upon that floor rested a voluminous pile of limestone boulders and smaller stones in a loosely packed matrix – a light brown sediment also containing many land snails, charcoal, few potsherds and animal bone scraps, and small pieces of red-fired construction clay, some with imprints of twigs on one surface (deposit L; 100–135 cm. below datum). The bulk of the boulders and other stones were removed during the excavation; what was left in place is a line of five boulders, in a single course, running diagonally from the SW to the NE corner of segment A (Wall I). It is not clear at the moment what sort of a structure those boulders once formed; it could have been a massive wall, or a platform. In either case, the boulders left in place appear to form the south-eastern face of that structure. It is also unlikely that the structure was functionally related to the delicately constructed floor (Floor II) on which it was found resting. More probably, the floor and the boulder structure represent two distinct episodes of construction and use.

To the East of the boulder structure and at an elevation even with the tops of the boulders (ca. 100 cm. below datum), lay the remains of yet another floor (Floor III), comparable in its technical features to Floor II described above. A small portion of that floor, in segment B, had been fired to a bright red colour and contained a concentration of charcoal (cross-hatched area in **fig. 9**). There were no structural features associated with the spot, and we cannot therefore guarantee that it was the place of a permanent hearth. In any case, that red-fired spot was identified as the source of the major magnetic anomaly noted in the area of IUTRIAL during the magnetic survey[23]. The exposed part of Floor III (ca. 4 m^2) has been left in place.

The deposit above Floor III and the boulder structure in segments A and B is a light brown silty sediment (lighter toward the bottom), very friable (almost powdery) and free of gravel, containing variable amounts of potsherds, animal bone, charcoal and fragments of red-fired construction clay (deposit M). Its top lies between 60 and 33 cm. below datum, its bottom at ca. 100 cm. It probably resulted from several depositional episodes, spanning a period of time of some length, certainly after Floor III went out of use: sediment from decaying buildings as well as refuse accumulated in an area of little traffic, perhaps the interior of an abandoned / collapsed building. This phase terminated with renewed construction in the area, namely with the laying of stone foundations for one or two buildings. Portions of those foundations were found in the uppermost part of the sequence at IUTRIAL, just below the surface. Before we turn to them, it is necessary to describe the stratigraphic sequence in the eastern portion of IUTRIAL, especially in segments D and E.

IUTRIAL, the lower deposits in segments D and E

In segments D and E excavation reached a depth of ca. 90 cm. below the modern surface (ca. 65 cm. below datum). At that depth an earthen floor was encountered (Floor IV), displaying the familiar technical features – yellowish colour and high cohesion. The floor is continuous throughout, extending beyond the excavated area in all directions (exposed area 5.75 m^2). It has several shallow pits, two or three of which may, on account of their regularity, be related to the use of the floor, the remainder being the result of wear and tear. Nothing like a ›floor‹ or ›pit deposit‹ was identified. The sediment and artefacts accumulated over that floor date instead from a time after its abandonment, the deposit consisting of relatively few potsherds and some

23 Vysotskaja 1979, 102 where she presents her view that at the beginning of the Christian era the quantity of burnished pottery went noticeably down in Neapolis, to be replaced by ›crude vessels, poorly smoothed over‹.

charcoal and animal bones, in a highly friable, powdery, light grey-brown sedimentary matrix, free of stones (Deposit N; cf. Deposit M [West] in segments A and B). Deposition ceased with the construction of another floor (Floor V; ca. 0.45 m. below datum), similar to the one below, but less well preserved. Like its predecessor in segments D and E, Floor V was also abandoned and was succeeded, five centimetres higher, by a third floor of similar construction (Floor VI; 35–40 cm. below datum).

As in the case of Floor IV, no ›floor deposits‹ were present on either Floor V or Floor VI. Moreover, neither of the last two floors extended up to the eastern boundary of IUTRIAL. They terminated instead ca. 0.80 m. from that boundary (see segment E in **fig. 7**), as if they had been cut / penetrated by a pit or ditch of a later date.

It is not likely that any of the floors in segments D and E are to be correlated with the floors found in segments A and B (**fig. 7**: note the difference in elevation). The material accumulated on top of Floor VI was comparable to that of deposit M (West), encountered in segments A and B (cf. above), and has therefore been designated as Deposit M (East). Deposition was interrupted at 14–19 cm. below datum with the construction of the stone building(s) already mentioned, the remains of which occupy the largest part of IUTRIAL. We turn now to those remains and to the subsequent depositional history at IUTRIAL.

IUTRIAL, the uppermost deposits (all segments)

At elevation 14–19 cm. below datum (i.e. 30–35 cm. below the modern surface) a ca. 0.80 m. wide stone foundation was laid into deposit M in the eastern half of IUTRIAL (**fig. 10** and **fig. 7**: A.B. & Wall II): the wall, running diagonally through segments C and D, is preserved up to 0.23 m. It consists of two courses of field stones (all local limestone), but – to judge from the amount of rubble found on top and immediately to the NW of the preserved part – it must have originally been higher by at least two more courses. It does not appear to be associated with any floors, and may therefore have been intended and used as a fence or yard wall. It collapsed almost exclusively to the NW, onto what was probably an open space (see area covered by rubble in **fig. 12**, and **fig. 7** segments B, C, and D). The remains of that wall, and most of the rubble collapse, have been cleaned and left in place.

Sediment accumulation in the area of IUTRIAL ceased with the collapse of this wall: the thin (ca. 0.15 m.) deposit of turf that covered the wall and its rubble collapse prior to excavation perhaps originated in the superstructure of the wall itself – or in a variety of natural and human actions following the abandonment of the area. In the parts of IUTRIAL which were not covered by rubble from Wall II, the uppermost boundary between deposit M and the turf that today covers Neapolis is still sharp (see top of scarps in **figs. 10–12**). Like elsewhere at the site, that turf contained many artefacts of the modern era, in addition to ancient ones.

A second wall foundation was identified at the northwest corner of IUTRIAL (**fig. 7**, segment A, Wall III). It is of similar construction and orientation as Wall II, and, like the latter, it was founded into deposit M, at elevation ca. 0.80 m. below datum (i.e. 0.35–0.40 m. below the modern surface). In spite of the difference in absolute elevation (60–65 cm.), Wall III may belong to the same building complex as Wall II. But this proposition can only be negotiated by further excavation.

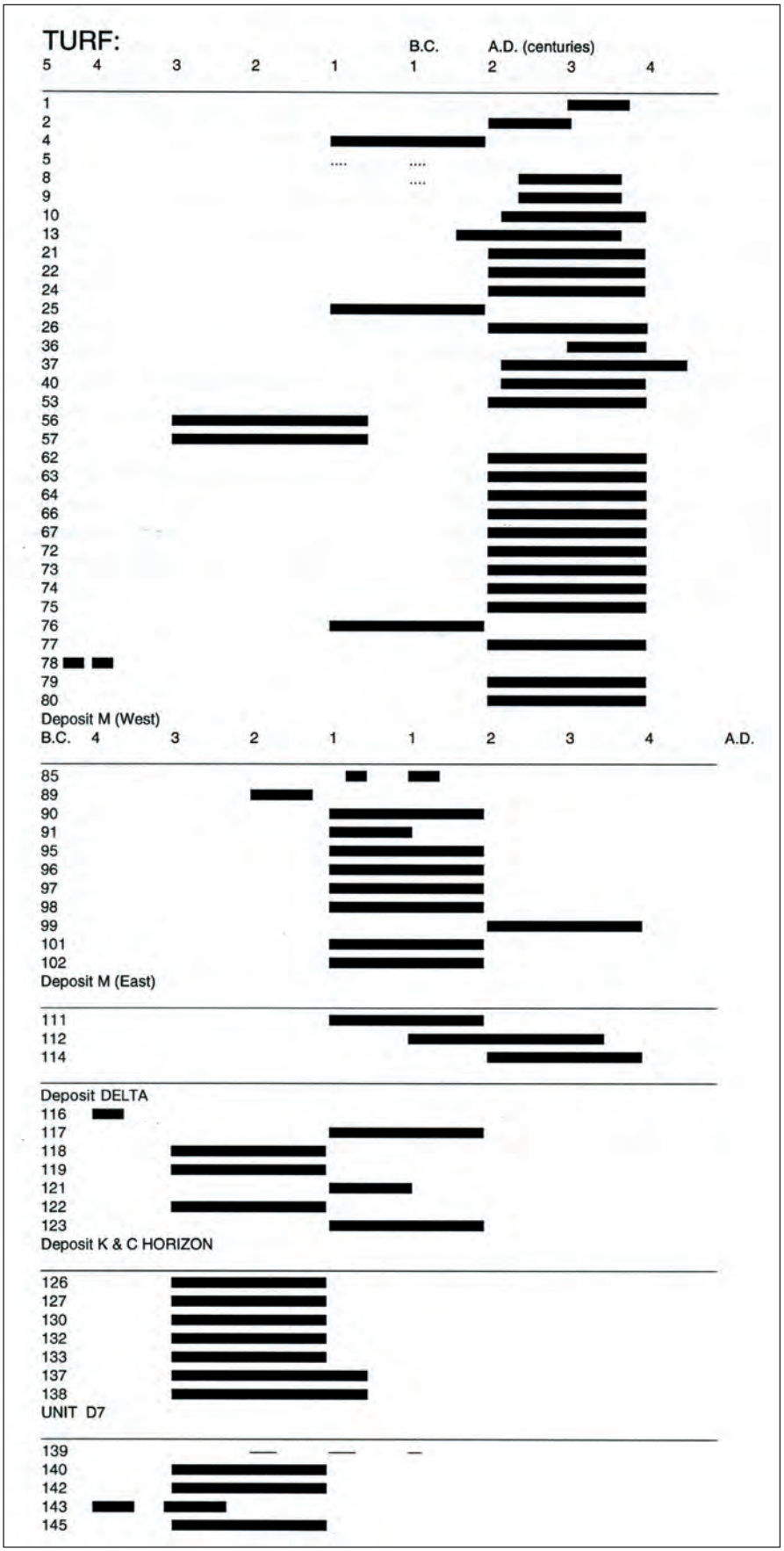
M.F

IUTRIAL Chronology

The chronology indicated by the ceramic finds from Neapolis Scythica represents – for want of numismatics or amphora stamps – the best method to arrive at a time-related sequence for the settlement phases identified in the excavation (**graph 2**).

The latest phase, here identified as ›Turf‹, encompasses activities of the 2nd and 3rd centuries CE. During that time, judging from the accumulation of debris in this stratum, activities were both rather heavy as well as extending over an extended time period. No clear

Graph 2. Chronology of trial trench 1993



separation of levels is apparent in the materials. Elements – such as catalogue nos. **4**, **56**, **57** or **77** – which reflect activities of the transitional period approximately the 1st century BCE – 1st century CE most likely have been intrusive or indicate an interface from an earlier phase. The core of activities, as evidenced by comparable ceramic material lies solidly with the Roman Imperial period from ca. Trajan well onto the end of the Severan dynasty. The end of life for Neapolis as an active city is demonstrated with the interruption of this level of activity, none seems to be shown for the later Roman or Medieval periods.

The preceding stratum of activity, marked by Deposit M (East) and by Deposit M (West), also exhibits signs of interfacing, i.e. remains which may indicate a later level of activity, i.e. that of stratum ›Turf‹. For Deposit M (West) the overwhelming majority of the datable pottery finds indicates concentrated activity in the 1st century BCE – 1st century CE.

For the second segment of this deposit (East) the indication is less clear. It may well have been that activities there, on the other side of the big wall, were somewhat later than on the western side.

In Deposit DELTA one anomaly occurs: the fragment of a 5th century BCE black-glazed skyphos. It remains just that, a stray that signals the presence of earlier activities at the site. But the core of the finds here indicates a peak during the 3rd to 2nd centuries BCE. The widely scattered pattern of dates for this level is difficult to interpret; possibly major work took place during the 2nd into the 1st centuries BCE.

The concentration of dates for Deposit K and C Horizon clearly indicates activities only during the beginning and middle Hellenistic period. This may well be the deposition of materials which was generated by the presumed installation of a major settlement in this location. Likewise, the finds from Unit D7 bespeak an activity related to the establishing of a major settlement on the plateau.

The Finds

The Ceramics: Physical Distribution

The following matrix was developed to serve as a guide for the placement of finds, especially of the ceramics in relation to each other (**graph 2**; **diagrams A–B**)[24].

Ceramics: Statistics

The volume of pottery from the trench was greatest in the upper strata. Fragments occurred in different densities in various parts of each excavated unit. The small size of the trench did not allow for any clues as to the activities connected with these ceramics.

A survey of finds, ceramics as well as bone and stone fragments from units with finds of a statistically significant number is given below. The fragments found are given in total numbers without reference to size which ranges from more than ten centimetres to less than one centimetre for both bones and pottery. The few worked stone fragments fall outside our range.

The arrangement in the tables is by pottery category, listing the totals for Fine Ware, Plain Ware and Coarse Ware. Plain Ware has further been subdivided by adding the important category of Amphorae. Pottery fragments not identifiable as belonging to a category are listed as unidentified (UnId). In addition, when possible, fragments were separated out as to whether they belonged to open or closed vessels. Thus, the first number in each ware category connotes the open vessels, the second the closed ones. Bone and Stone stand by themselves.

24 See also above section 3.

Diagram A
Finds statistics

1. TURF

Unit	Fine	Plain	Amph.	Coarse*	UnId	Bone**	Stone
A–E1	1/–	1/2	12	3/44	–	16/1	–
A2	6/–	–/25	36	2/210	–	7/2	1
BC2	1/3	–/–	13	1/24	1	14/–	–
D2	1/27	–/–	3	2/35	–	16/–	1
E2	2/3	–/2	17	?/4	1	–/–	–
Total Ceramics	11/33 = 44	1/29 = 30	78 = 78	8/317 = 325	2 = 2	53/3	2
% 482 = 100	9.1	6.2	16.2	66.7	0.4	n.a.	n.a.

2. DEPOSIT M (West)

Unit	Fine	Plain	Amph.	Coarse*	UnId	Bone**	Stone
A3	–/1	–/–	14	2/26	6	6/1	–
B3	–/1	–/–	3	2/12	–	–/–	–
AB4	1/–	–/–	1	–/4	–	–/–	–
AB5	–/–	–/–	3	1/11	–	–/–	–
Total Ceramics	1/2 = 3	= 0	21 = 21	5/53 = 58	6 = 6	6/1	–
% 88 = 100	3.3	0	23.9	65.9	6.6	n.a.	n.a.

3. DEPOSIT M (East)

Unit	Fine	Plain	Amph.	Coarse*	UnId	Bone**	Stone
DE4	–/–	–/–	3	–/13	–	–/–	1
Total Ceramics	0	0	3	13	0	–/–	1
% 16 = 100	0	0	18.8	81.2	0	n.a.	n.a.

4. FLOOR VI

Unit	Fine	Plain	Amph.	Coarse*	UnId	Bone**	Stone
E6	–/3	–/–	0	?/5	–	–/–	–
Total Ceramics	3	0	0	5	0	–/–	–
% 8 = 100	37,5	0	0	62.5	0	n.a.	n.a.

5. FLOOR V

Unit	Fine	Plain	Amph.	Coarse*	UnId	Bone**	Stone
E7	–/1	–/–	8	1/18	–	–/–	–
Total Ceramics	1	0	8	19	0	–/–	–
% 28 = 100	3.6	0	8	67.9	0	n.a.	n.a.

6. DE 5

Unit	Fine	Plain	Amph.	Coarse*	UnId	Bone**	Stone
DE5	–/–	–/?	43	?/20	–	–/–	1
Total Ceramics	0	0	43	?/20 = 20	0	–/–	1
% 63 = 100	0	0	68.3	31.7	0	n.a.	n.a.

7. DEPOSIT DELTA

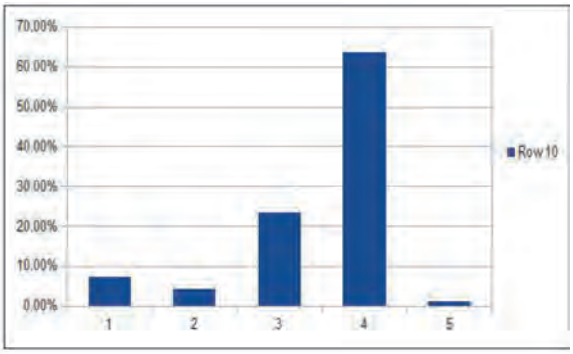
Unit	Fine	Plain	Amph.	Coarse*	UnId	Bone**	Stone
A6	1/–	–/–	13	?/10	–	–/–	–
Total Ceramics	1	0	13	?/10 = 10	0	–/–	–
% 24 = 100	4.2	0	54.2	41.6	0	n.a.	n.a.

* Precise distinctions between open and closed fragments are often complex to be made in this category. If open shapes are indicated these have been determined through rim fragments. The number of fragments listed under closed shapes may then well include fragments from open coarse ware vessels, as these wall parts are often not identifiable as such.

** The first number indicates the number of bone fragments found, the second the number of teeth identified.

Diagram B
Summary Statistics of Ceramics in Diagram A, 1–7

Unit	Fine	Plain	Amph.	Coarse	UnId
1. Turf	44	30	78	325	2
2. M (West)	3		21	58	6
3. M (East)			3	13	
4. Floor VI	3			5	
5. Floor V	1		8	19	
6. DE5			43	20	
7. Delta	1		13	10	
TOTAL	52	30	166	450	8



Ceramics: General Remarks

The distribution peak in **diagram B** lies with the coarse ware, next to which the other categories appear of very low importance. Noticeable, too, is the presence of plain ware only in the upper most level, it seems to have a much lower presence in the earlier strata of the settlement. This may be due in part to the fact that some body fragments of plain ware possibly have been misidentified and were subsumed under amphorae, but even an error margin of three to five percent would hardly change the picture. If amphorae and plain ware were combined, their total of 28.1 % would still be well less than half that.

It is assumed that coarse wares were locally made, either in the Crimea or even in Neapolis itself[25]. The repertoire contains both open and closed forms, although the former occur rather infrequent[26]. As the various samples in the catalogue below demonstrate, the level of variation among the shapes is considerable, more so than among the closed vessels. Given the lack of full vessel profiles from the trial trench, observations can be preliminary only. But the closed vessels from the site seem to prefer a collar-type of rim, coupled with an often voluminous, bulging body. Handle shapes may vary widely, again, the available evidence does not allow for further conclusions[27]. These daily use ceramics are made with great skill, some of them quite beautiful with their carefully worked surfaces and pleasing, highly functional shapes.

Fine wares in terms of numbers, too, play a very limited role, and then mostly for the layer Turf, encompassing the 3rd and 2nd centuries BCE. Their presence in the ceramic assemblage resembles that of exotic birds: their presence is noted more quickly, because of their relative scarcity which sets them apart from the rest[28]. In daily life they seem to have played a much less obvious role, too, than amphorae, for example. The repertoire, as far as it can be read from the few existing fragments, is fully in keeping with what is known about the terra sigillata industries of the later Hellenistic through Roman periods, using mostly open shapes, and some closed ones as well. For the latter, however, precise form parallels are

25 Vysotskaja 1979, 111 mentions the excavations of kilns at Gorodishe Krasnoe and at Neapolis.

26 With regards to the picture of pottery types and their distribution some observations can be made. A perusal of the illustration material in Dashevskaya 1991, passim displays the materials arranged by the various geographical regions of the Crimea, central Crimea, north western Crimea etc. Some slight typological difference seems apparent in the coarse ware materials, but without autopsy any further assessment needs to wait.

27 Noticeable, for example, is the absence of handmade ceramics with applied surface ornamentation, which, according to Vysotskaja 1979, 109 (see also fig. 41, p. 108) were widespread in the Crimea during the first centuries CE.

28 And, with an eye towards the history of scholarship and the training the authors have received, one is trained to recognize such things more quickly and – *horribile dictu* – to imbue them with an automatic and higher value.

difficult to determine. Fine wares reflect how the Crimea, in particular Neapolis, participated in the exchange of ceramic goods during the Hellenistic and Roman periods. Open remains the questions whether local factories may have played a major role.

Both amphorae and fine ware have in common, however, that they provide chronological benchmarks by means of their specific and typological precise ways of manufacture. Due to their nature of preservation, though, the amphorae fragments found deliver only general indications of chronological periods, all the more, as one of the most precise dating instrument, amphora stamps, has not been found. On the other hand, the shapes of the handles, rims and feet place the finds within certain periods.

The piece-meal nature of the amphora fragments did not invite a closer study as to the various manufacturing places, but it appears that the amphorae mostly came from places in the eastern Pontic region, especially the cities of the Crimea and the Caucasus shores. Some others appear to have been brought from further afield. The amphorae demonstrate how the settlement at Neapolis had widespread contacts throughout the Pontic sea region and possibly even further afield[29].

Summary: IUTRIAL, general remarks

Quite clearly, the area where IUTRIAL was sunk has been one of intense, if discontinuous, activity in antiquity, an urban space built and rebuilt many times. At least six phases can be distinguished in segments A and B, and another six (perhaps completely unrelated to the first) in segments D and E. Of the six phases in each area, four correspond to building episodes, the remainder to times of abandonment. To this correspond four principal phases of ceramic chronology, encompassing 1. Turf, 2. Deposit M, both East and West, 3. Deposit Delta and 4. Deposit K and C Horizon as well as Unit D7. This phasing reflects probably poorly the life of the people at the site, but it gives some impression of their lively activities which kept them attending to their daily needs in a multitude of ways.

Floors probably mark moments when the area was enclosed, covered rooms; they were carefully constructed to a uniform thickness (ca. 5 cm.) with select, freshly excavated earth, originating in an area beyond the inhabited space of Neapolis (note that very few, if any, artefacts were embedded in them). To extend to which such moments correspond to historical events eludes us right now. But the shifting from the Scythian to a Sarmatian population, for example, is probably reflected here.

Foundations of walls were built with locally outcropping limestone. It is impossible to tell at this time to what sort of buildings those foundations belonged, and the same holds for the intriguingly massive feature Wall I, the concentration of large boulders in segment A. The approximately uniform orientation of the stone foundations, enduring through time, also is intriguing; it is suggestive of ›close quarters‹, an area of continuously dense habitation in the urban core of Neapolis – if not of a regular city design. It may well have been that in the enormous size of the plateau – the ›mesa‹ – at Simferopol-Neapolis a system of cohabitation and cooperation existed which – while maybe drawing on models of Greek cities – was adapted to serve the need of the local population, long familiar with the land and the climate.

29 See the two maps Vysotskaja 1979, 146 fig. 70 (Hellenistic times) and 149 fig. 71 (Roman times) with which the author illustrates her view of the trans-oceanic relations of Neapolis.

Catalogue of Finds

Measurements are given in centimetres unless otherwise indicated. When no diameter is given it was not defined.

Turf
(Units: A–E1, A2, BC2, D2, E2)

***Fine ware – open shapes* (fig. 13)**

1 Dish
H. 1.4.
Lip of a terra sigillata plate. Rim projecting outward in shallow angle, widely rounded, underside straight. 2.5YR/ 5/7.5; A–2/3, glaze thin, reddish orange, slightly worn. (A2)
Formally this fr. as well as **2** – **3** show some relation to Hayes 1972, 52–54 fig. 9 Form 31: early to mid-3rd c. CE.

2 Bowl or dish with high rim
H. max. 1.5.
Rim fr. of small red slip bowl. Rounded lip, steep wall, shallow groove on outside. Terra sigillata red, glaze worn. 2.5YR 6/8; A–B/3 (A–E1).
Cf. above no. **1**. Also Silanteva 1958, 294 fig. 8, 1: 2nd c. CE; Dashevskaya 1991, pl. 56, 3.

3 Bowl with incurving rim
H. max. 1.35.
Wall fr. Yellow slip inside and out. On the outside a double frieze of rouletting: on top a series of slanted, slender lance-tip like impressions, below a shallower broader rouletting. 2.5YR 6/8; A/3. (A–E1)
Cf. possibly Dashevskaya 1991, pl. 35, 7–9.

4 Skyphos
H. 3.5; L. thumb-rest 2.2.
Handle. External curve of lip visible. Wide curve, handle pentagonal in section with high central ridge. The top thumb-plate oblong hour-glass (rounded, not angular) stamped into it a faint design. 7.5YR 7.5/3; A-2/3. The glaze is thin, red-brown, slightly worn. (A2)
Compare: Knipovič 1952, 315, fig. 9.5: ca. 1st c. BCE / 1st c. CE; similar also the glazed version: Dashevskaya 1991, pl. 33, 1.

5 Skyphos (?), not illustrated
L. max. 2.5; D. ca. 1.5.
Handle fr., round in section. Part of handle root with smear mark from attachment process. Traces of red, thin wash-glaze visible. 10YR–7.5; A#–1/2. Red-brown glaze, brush-marks. (D2)
Possible from a similar vessel as **4**.

6 Skyphos or bowl (?) with vertical rim
H. max. 1.35; D. ca. 12–15.
Rim fr. Sharp, evenly rounded, narrow rim, tapering towards lip which is tightly rounded. On exterior, close under lip, fine groove. Surface uneven, pitted, but traces of reddish colour still visible. 7.5YR 6.5/3; A–1/2, with surface treated. Thin, red-brown surface wash, as undercoat for terra sigillata red, one small speck preserved. (D2)
Possibly similar to Dashevskaya 1991, pl. 35, 16–17.

7 Cup or bowl with flaring rim
H. max. 2.65; D. est. 10–12.
Rim fr. Lip evenly rounded with sharp edge on exterior. 10R 6/8; B–1/2. Surface treated with thin reddish-brown slip. Thicker, dark-brown glaze with fine whitish chalk-like points breaking through the surface. (D2)
Compare to Dashevskaja 1991, pl. 35, 6. 20–21.

8 Bowl with incurving rim
H. max. 2.5; D. ca. 12–15.
Rim fr. Wall of even thickness, lip even rounded on top. Reddish-orange terra sigillata glaze, densely applied with drip-traces and finger marks from smoothing. 2.5YR 8/6; A–1/2. (E2)
Compare: Knipovič 1952, 315 fig. 11.3–4, ca. 1st c. BCE / 1st c. CE; Hayes 1972, 49–51 fig. 8 Form 27: ca. 160–220 CE; Dashevskaya 1991, pl. 35, 7. 9; also pl. 57, 17 with lip slightly thickened; For the shape see also the terra sigillata types: Vysotskaja 1979, 143 fig. 66, 13.

9 Bowl with incurving rim
H. max. 2.2.
Wall fr. Similar to **8**. Wall thickening in up-curve. Reddish-orange terra sigillata glaze, densely applied with finger marks from smoothing, overall worn. 2.5YR 8/5; A–1/2. (E2)
Cf. above **8**.

***Fine ware – closed shapes* (fig. 13)**

10 Jar / Jug / Oinochoe
H. max. 2.1; D. ca. 5.0–7.0.
Foot fr. Ring foot, exterior twice carinated, interior in convex curve rising towards floor. Underside floor set off by groove, sagging slightly. Wall rising under ca. 45°, barely curved. Traces of red, thin wash-glaze, both on exterior and interior of foot and on outside wall. Interior body unglazed. 2.5YR 6/8; A–2/3, very dense. Light red-brown glaze, brush-marks. (D2)
For the shape see: Knipovič 1929, pl. III, 41–42; Dashevskaya 1991, pl. 35, 28. 30. 32.

11 Oinochoe or bottle (lekythos), not illustrated
L. max. 8.1.
Two joining wall fr. Probably oinochoe. Segment of prominently bulging wall. Interior with pronounced ridges. Exterior: lower section reserved – lower portion of foot – above wall covered with evenly applied black glaze. The colour is black to dark-brown with brown undertones. Slightly metallic sheen throughout, matt in reflection. 3.75YR 6/8; A–2/3. (D2)
The glaze is applied with a brush; along the lower edge a finer, light brown line indicates the brush's side. The evenness of the application, too, attests to this.

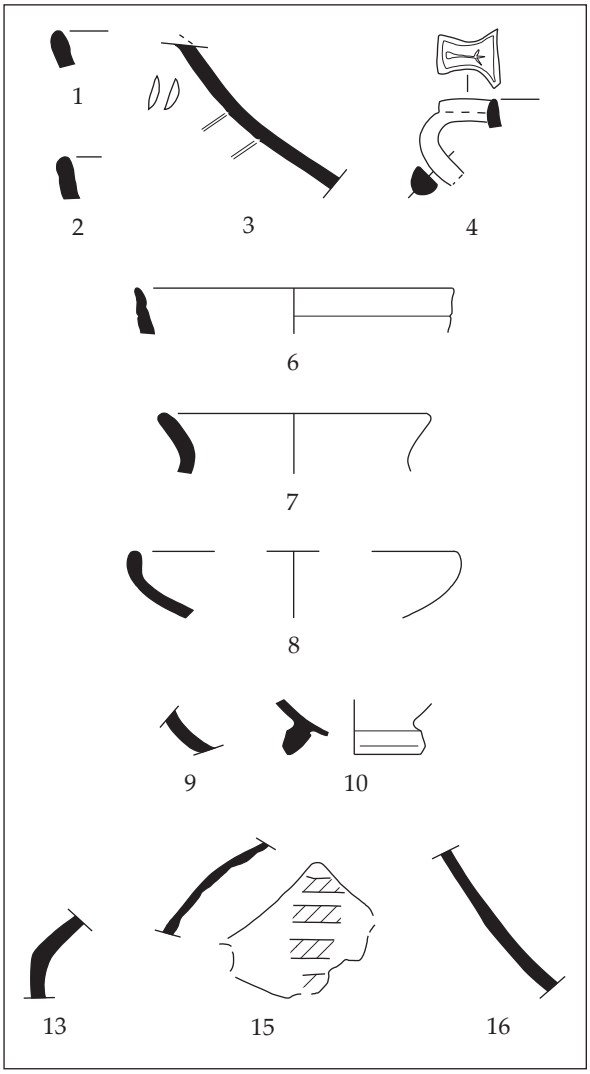


Fig. 13: Turf – Fine wares. (M 1 : 3)

12 Oinochoe or bottle (lekythos), not illustrated
L. max. 5.0.
Wall fr. Probably oinochoe. Segment of central body. Interior with pronounced ridges. Exterior: light reddish-brown glaze, worn. Across the wall two parallel shallow grooves, carefully applied. 5YR 7.5/6; A–2/3. (D2)

13 Jug / pitcher (?)
L. max. 6.5.
Two joining fr. Probably jug with carinated shoulder area. 5YR 7/5; B–C/3 with some inclusions of grog. Fox-brown, thin glaze. (A2)
Possibly from a oinochoe such as Dashevskaya 1991, pl. 35, 30 which seems to stand in the tradition of the Hellenistic lagynos bottle.

14 Lagynos (?), not illustrated
L. max. 4.5.
Lower wall fr. Lagynos (?) or related vessel shape. Interior with careless ridges. Exterior carefully smoothed and in part covered with red-orange irregularly outlined glaze. 5YR 5/6; B–C/3 with some inclusions of grog. Fox-brown, thin glaze. (A2)
Cf. above **13**.

15 Oinochoe/pitcher
L. max. 4.8.
Upper body-lower shoulder area wall-fr. Gentle, full curve. Egg-shell thin wall, very hard firing. Interior with pronounced ridges. Exterior with high sheen. Medium brown surface colour, with darker brown to black even stripes, banding the whole surviving fr. 2.5YR 5/6; A–3, glaze thin, red-brown, slightly worn. (BC2)
Rounded shoulder fr. indicating a vessel such as Dashevskaya 1991, pl. 35, 23 or 32.

16 Oinochoe
L. max. 5.8.
Lower wall fr. Probably fairly large oinochoe. The wall rises swiftly, bulging outwards slightly in lower third of body below widest diameter. Interior with pronounced ridges, some also on exterior.
Exterior: lower section with light fox, reddish brown slip. Portion above covered with brushed on brown-black glaze with clouding in spots. Slightly metallic sheen throughout, matt in reflection, some scaling apparent. 2.5YR 6/8; A–2/3. (E2)
The glaze is applied with a brush; along the lower edge a finer, light brown line indicates the brush's side. The evenness of the application, too, attests to this.

***Plain ware – open shapes* (fig. 14)**

17 Basin or lekane
L. max. 5.3; H. 2.6; D. 38.
Rim fr. Rim flat, broad with a gentle groove running in the centre, slight moulding at ext. edge. Outer edge recessed under 45 degrees, edge slightly undercut ending against gutter shaped groove. Slight ridge at beginning of wall, no traces of latter preserved, but the interior curve of rim suggested a gently bulging, rather steep (vertical) wall. 10R 5.5/1; /H1–2 in layers, small inclusions. Red-brown slip, grainy surface. (A2)

***Plain Ware – closed shapes* (fig. 14)**

18 Jug/pitcher
H. max. 3.0.
Neck fr. Rising upwards, gently inclined. The thickness of the wall and the circumference of the neck point out that the fr. belonged to a household pitcher or jug. Traces of finger smoothing on exterior. D/2–3; 2.5YR 6/8. (D2)

19 Amphora
H. max. 4.3; D. of mouth ca. 12.
Rim. Wide curve, Evenly rounded on top, wall thinning below. Low ridge at exterior. 2.5YR 5/7; H/2–3. (A2)
Cf. Zeest 1960, pl. 90.

20 Amphora
H. 3; D. 10.
Rim fr. Lip bulging outwards, thickened in interior. Wall tapering evenly below. Slight ridge

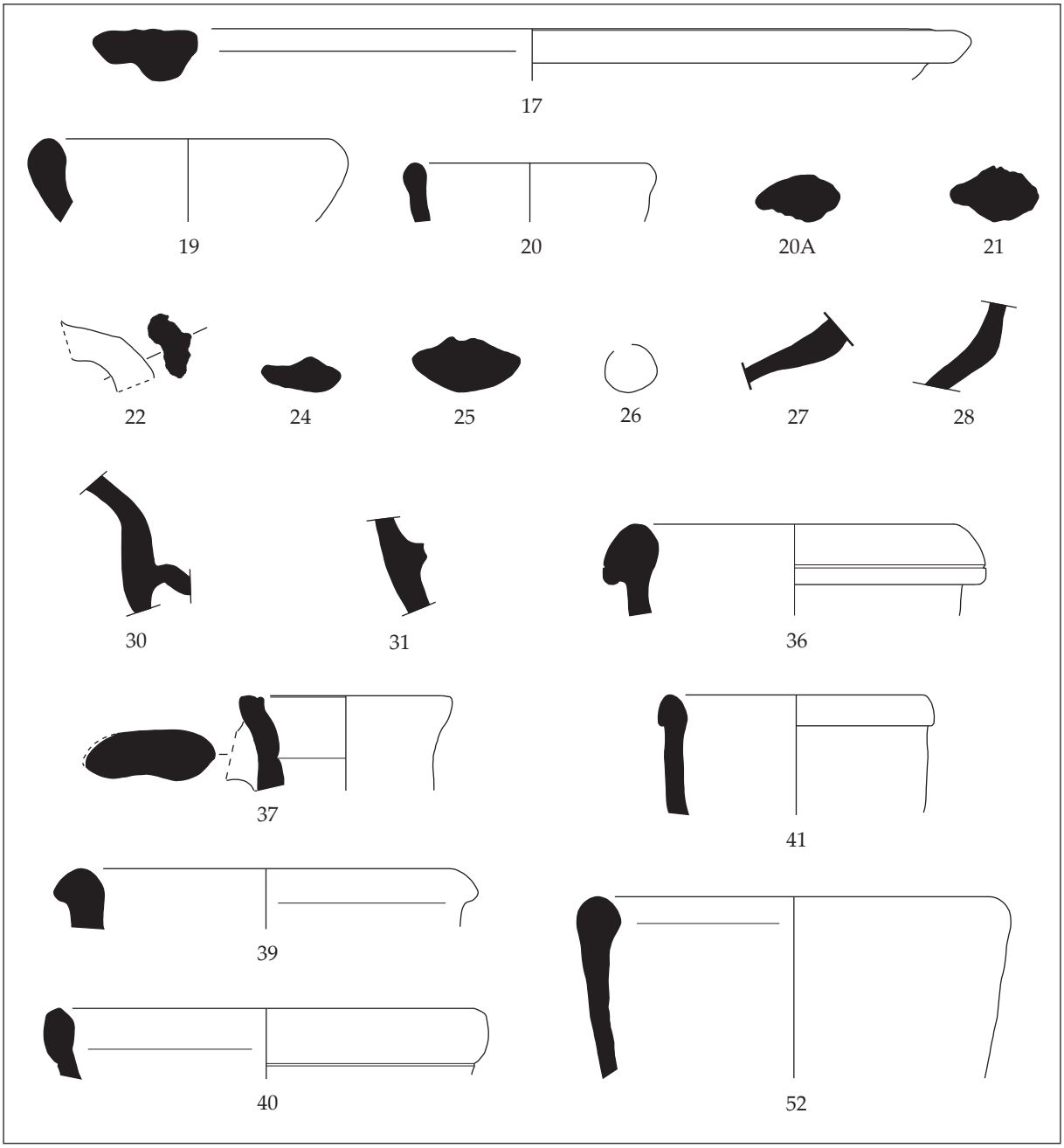


Fig. 14: Turf – Plain wares. (M 1 : 3)

on top of neck, finger marks. Reddish brown slip. 2.5YR 5/8; D–E/2. (A2)

20A Amphora (from the same vessel)
D. max 4.2 by ca. 2.2;
Handle fr. Straight segment, compressed ovoid in section. (A2)
Possibly Thasos? cf. Lomtadze – Žuravlev 2014, handle-section(s) p. 179 fig. 3, 2. 3, 3rd c. BCE.

21 Amphora
Th. 2.8; W. 4.4.
Handle fr. Segment of neck attachment with top-curve. Broad ovoid shape with two pronounced ridges on one side. 2.5YR 5/8; D–E/2, very similar to that of **20** and **20A**. (A2)
Cf. Zeest 1960, 172 pl. 26, 86, a–b: 2nd–3rd c. CE; Dashevskaya 1991, pl. 28, 18: 2nd–3rd c. CE.

22 Amphora
Th. 2.0; D. 3.2.
Handle fr. Segment beginning with remnants of handle root and part of top-curve. Broad ovoid shape with five ridges, central one slightly pronounced. 2.5YR 4.5/7; E/2. (A2)
Cf. Zeest 1960, 166 pl. 30, 72a. 73e: 2nd–3rd c.CE; Dashevskaya 1991, pl. 28, 19: 2nd–3rd c. CE.

23 Amphora, not illustrated
L. max. 7.5.
Neck and handle fr. Rather narrow neck, handle rounded ovoid, smooth. 7.5YR 4.5/6; E–F/2. (A2)

24 Amphora
Th. 2; W. 4.4.
Handle fr. Handle flattened ovoid, large ridge slightly off-centre, broad groove concave and wider, other side gently convex. Overall section asymmetrical. 5YR 7.5/4; E–F/2. (A2)
Cf. above **22**.

25 Amphora
Th. 2.4; W. 4.5.
Handle fr. lower portion over shoulder attachment. Handle flattened ovoid, prominent double ridge in centre. Overall section asymmetrical. 10YR 7.5/3; E–F/2. (A2)
Dashevskaya 1991, pl. 29, 21: 1st c. BCE– 1st c. CE.

26 Amphora
D. ca. 2.2.
Handle fr., central portion. Handle round in section. 10YR 7.5/4; E-F/2. Clay rather gritty, with inclusions spaced evenly throughout. (A2)
Cf. Zeest 1960, 165 pl. 29, 67b; 172 pl. 36, 89,b: 2nd–3rd c. CE.

27 Amphora / Jug (?)
L. max. 4.8.
Shoulder / neck fr. Shoulder evenly curved, continuing into broadly ascending neck. Sharp double groove at top of shoulder. A yellowish buff engobe on exterior. Wall rather thin, medium to smallish vessel. 10R 5.5/7; C/2–3. (A2)

28 Amphora
L. max. 4.4.
Shoulder / neck fr. Neck rising steeply from shoulder. Remains of whitish to buff engobe on exterior. Clay in structure between plain and coarse. Interior with finger ridges. 2.5YR 4/0; B/2–3. (A2)

29 Amphora, not illustrated
L. max. 8.
Two joining lower wall fr. Segment with carination on exterior and carination. 2.5YR 3.75/1; C–D/2–3. (A2)

30 Amphora
H. 5.9; D. above foot ca. 4.
Lower wall fr. Segment off wall curving out sharply towards beginning of body. Remains of counter-curved bottom. 2.5 YR/5/2.5; C–D/2–3. Clay body gritty, with partly large inclusions (A2).
Cf. Zeest 1960, 174 pl. 38, 94a–b (from Neapolis). 95 (from Tonkostennije).

31 Amphora
L. max. 4.
Lower wall / foot fr. Segment of wall and attachment of bottom. 10R 5.5/8 C–D/2–3 gritty, with some very large inclusions / 2–3. (A2)

32 Amphora, not illustrated
L. max. 3.5; D. above foot ca. 4.
Lower wall fr. Segment of wall and ridge of bottom attachment, similar to **31**. 10R 5/7; C–D/2. (A2)

33 Amphora, not illustrated
L. max. 10.5.
Wall fr. Segment of shoulder curve from wall. Broad ridges on wall, sharp combed ware pattern on shoulder. Yellowish-white engobe. 2.5YR 5/6; C–D/2–3. (A2)

34 Amphora, not illustrated
L. max. 6.5.
Wall fr. Segment of shoulder. Broad combing ridges. Yellowish-white engobe. 2.5YR 5/6; C–D/2–3, gritty, with some very large inclusions / 2–3. (A2)
Cf. **33**.

35 Amphora, not illustrated
L. max. 7.
Wall fr. Segment of shoulder. Broad combing ridges. Yellowish-white engobe. 2.5YR 5.5/7; C–D/2–3. (A2)

36 Amphora
H. max. 3.9; D. 14.
Rim fr. Exterior well rounded, pointed rounded moulding in section. Lower ledge undercut with half-round groove. Interior sloping inwards. Throw ridges throughout, fine white-ivory slip. 2.5YR 5/7; E–/2–3. (BC2)
Cf. Zeest 1960, 171 pl. 35, 84a (from Ilurata). b (from Kimmerik): 3rd c. CE.

37 Amphora
L. max. 4.1; D. mouth 9; Handle: Th. 2.2; W. ca. 5.5.
Rim fr. and handle root. Lip narrow, flattened on top, groove on interior side. Handle pulled close to rim underside, rim area wall thinner than rest of neck. Interior lip set off by low moulding, wall vertically down to a low ledge. There clay shaped into small rounded protrusions, set off by well-scalloped divisions. Neck curving inwards and thickened. Handle broadly oval in section, gently upwards curved. 2.5YR 4.5/8; E–F/2 with numerous inclusions and mica. (BC2)
Cf. Zeest 1960, 170 pl. 34, 83s (from Tanais): 2nd–4th c. CE; Tsetskhladze – Vnukov 1992, 371 fig. 12, 2–6. This is a variant C amphora of the brown-clay Colchian vessels, end of the 1st c. CE to beginning of 2nd c. CE.

38 Amphora, not illustrated
L. max. 5.2; D. shoulder-groove ca. 10.
Wall fr. of shoulder / neck section. Medium to small vessel size. Similar to previous, wall thinner. Shoulder sloping steeply, neck set of by slight step below. Yellowish slip, brush marks. Some throw-ridges. 5YR 1.5/6; C–D/3, rather tight clay body with some inclusions –2/3. (BC2)

39 Amphora
H. max. 2.5; D. mouth ca. 16.
Rim fr. Exterior sharply, moulding-like projecting, ledge undercut with half-round groove. Lip fairly low, broadly rounded, continuing evenly

into interior. Traces of dark reddish brown slip. E–F/1–2; 5YR 7/6.5. (D2)

40 Amphora
H. max. 2.8; D. 18.
Rim fr. Exterior evenly curving upwards to tightly turned lip. Interior lip with berm smoothed, portion below gently convex. Lip set off by small groove below. Traces of a rather dense, dark brown-reddish glaze on interior and exterior. E/2; 2.5YR/5.5/7 with inclusions. (D2)
Zeest 1960, 166 pl. 30, 73s: 2nd–3rd c. CE.

41 Amphora
H. max. 4.8; D. 11.
Rim fr. Top of neck slightly bulging. Lip shallow, but sharply set off with undercut below. Exterior evenly curving upwards to tightly turned lip. Interior lip with berm smoothed, portion below gently convex. Lip set off by small groove below. Traces of a rather dense, dark brown-reddish glaze on interior and exterior. E–F/1–2; 10R/2.5YR 6/8 with inclusions, gritty structure. (D2)

42 Amphora, not illustrated
H. max. 5.5.
Neck fr. Gently curving upwards, three grooves pressed into exterior. Traces of a slightly grainy reddish-brown glaze on interior and exterior. E–F/2–3; 1.5YR 6/8 with whitish inclusions, gritty structure. (D2)

43 Amphora, not illustrated
H. max. 3.5.
Shoulder fr. Gently rising, three grooves very similar to **42**. Traces of a whitish slip. Possibly from same vessel as above? E–F/2–3; 2.5YR 6/8 with inclusions, gritty structure. (D2)

44 Amphora, not illustrated
L. max. 14.2; D. shoulder ca. 30+.
Shoulder fr. Body portion rising steeply, pronounced carination under shoulder, a second one at the top of the handle root. Wall thinner below, thickened in shoulder region. Root of a broad, flat-oval handle preserved, rising slightly outwards inclined. Traces of a slightly grainy reddish fox-brown wash in mottled patches over the surface. E–F#/1–2; 2.5YR 6/8 exterior, 10R 6/8 in interior (shoulder region), body with whitish and grog inclusions throughout, some over 0.25 mm. (D2)

45 Amphora, not illustrated
L. max. 5.
Shoulder fr. from transition to neck, ascending gently. Three precise grooves on shoulder preserved, as is whitish engobe throughout. Character of grooves similar to (D2) with one side sharply cut in, the other ascending more slowly. E–F#/1–2; 2.5YR 5.75/7.5 with whitish inclusions. (D2)

46 Amphora, not illustrated
L. max. 4.9.
Shoulder fr. from transition to neck, ascending gently. Three precise grooves on shoulder preserved, as is whitish engobe throughout. Grooves of character wash-board like and evenly ridged. E–F#/1–2; 3.75YR 6/5.5. (D2)

47 Amphora, not illustrated
L. max. 6.8; H. pres. 4.1.
Wall fr., steep ascend. Three wide and deep grooves preserved, as is whitish engobe throughout. Grooves regularly undulated, wall relative thin. E–F/1–2; 2.5YR 6.5/4. (D2)

48 Amphora, not illustrated
L. max. 7; H. pres. 4.1.
Wall fr., steep ascent. Three wide, shallow grooves preserved with flat rounded tops in between. Whitish-cream engobe throughout. Wall relatively thin. E–F/1–2; 10R 8/4.5. (D2)

49 Amphora, not illustrated
L. max. 4.9; H. pres. 3.4.
Wall fr., steep ascent. Two wide grooves preserved, as is whitish engobe throughout. Grooves regularly undulated, lower than previous. Wall thin. E–F/1–2; 2.5YR 7/5/5 inclusions large and frequent (up to 0.3). (D2)

50 Amphora, not illustrated
L. max. 6.9; H. pres. 5.6.
Wall fr., steep ascent, beginning of shoulder bend. Two narrow grooves preserved, light reddish-brown slip on exterior. E–F/1–2; 2.5YR 7/5.5. Evenly interspersed grog. (D2)

51 Amphora, not illustrated
L. max. 7.8; H. 3.7.
Wall fr., steep ascent, off-set moulding at shoulder bend. Ivory-yellow slip on exterior. E–F/1–2; 2.5YR 7/6. Evenly interspersed grog, rather small inclusions. (D2)

52 Amphora
H. max. 7.5; D. 17.
Rim fr. Exterior steeply rising, wall gently curved. Lip thickened inwards, slight outcropping on exterior. 5YR 5/7; E–F/2 with inclusions. (E2)

***Coarse ware – open shapes* (fig. 15)**

53 Conical bowl
H. 11.3; D. lip 18; D. foot 10.2.
The majority of the fr. comes from the uppermost unit A–E, one joining rim fr. comes from unit A2. Full profile. Handmade. The flat base is hollowed underneath. The foot area is marked on the outside by a small vertical stretch. Above it the wall rises steeply, bulging out slightly. It thickens towards the shoulder, and becomes thinner again at the lip. The latter is flattened, otherwise unpronounced. The clay is coarse with small inclusions of minerals, and on the outside it is gently burnished, leaving a slight reflection in some spots still. The interior is rougher, with some ridges from the building up still visible. 2.5YR 2.75/0; H–J#/1–2 (A–E1; A2).
Cf. Kruglikova 1970, 29 fig. 21, 10; the similar bowl Vysotskaja 1979, 101 fig. 34, 23 is placed in the Hellenistic period. The overall proportions seem to indicate a different time of manufacturing. In her discussion of later pottery in Vysotskaja 1979 passim, this type does not seem to have received attention. Dashevskaya 1991, pl. 16, 15–16. 20

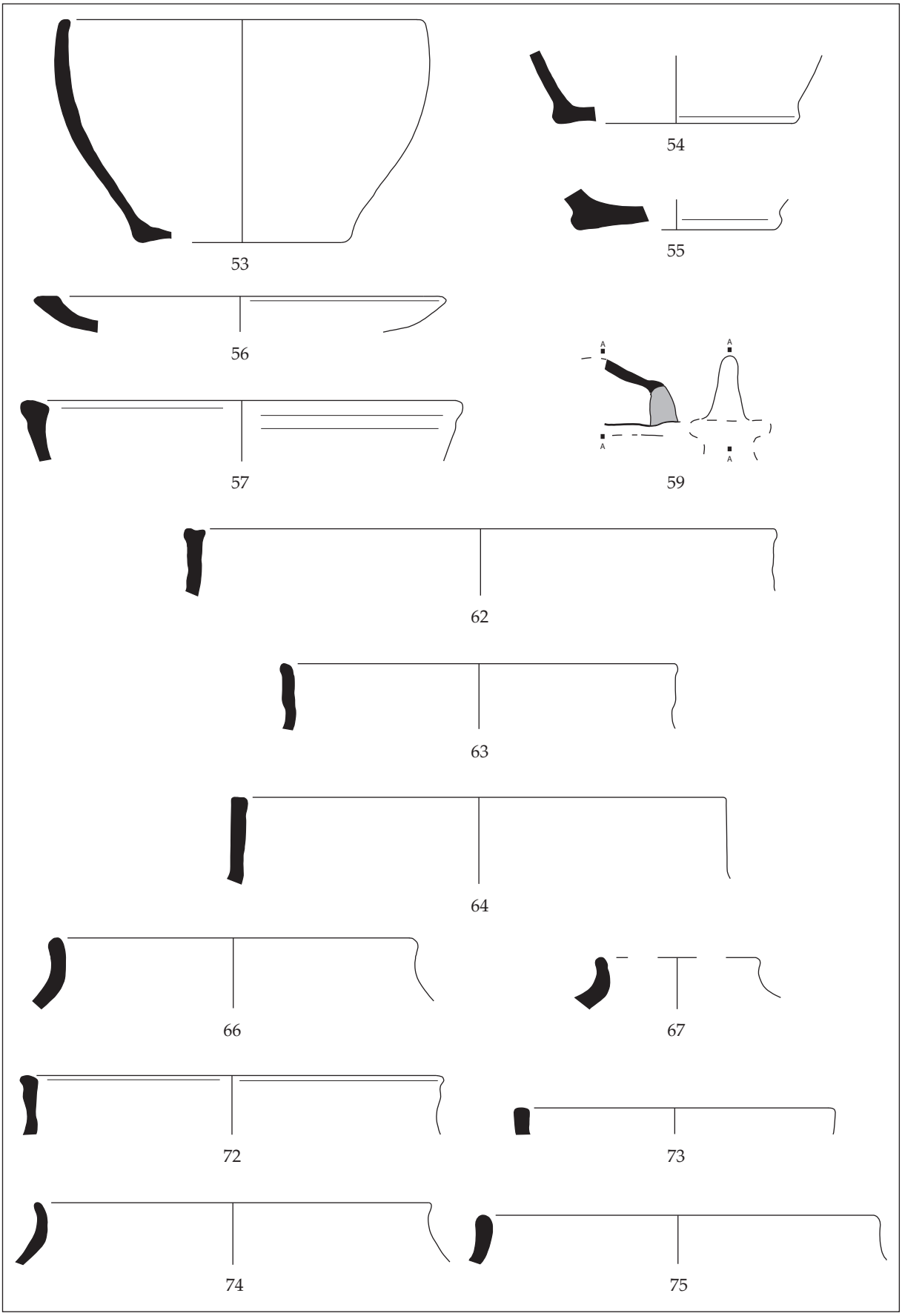


Fig. 15: Turf – Coarse wares. (M 1 : 3)

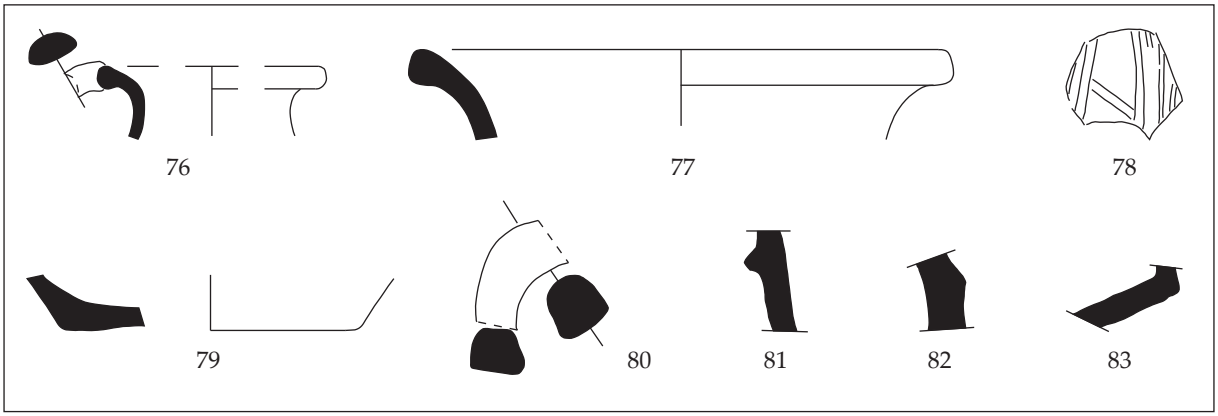


Fig. 16: Turf – Coarse wares. (M 1 : 3)

depicts bowls of the same type, but somewhat heavier in their make from the central Crimea, dating 2nd–3rd c. CE. Samples from the north-western Crimea ibid. pl. 24 nos. 1–2 are closer in their formal specifics. These too, are dated 2nd–3rd c. CE.

54 Conical bowl
H. 3.6; D. lip n.a.; D. foot ca. 12.
Floor and lower wall profile. Handmade. Very similar to no. 53, but larger. Base is hollowed underneath. The foot area is marked on the outside by a small bulge. 2.5YR 2.75/2; H–J#/1–2. (A2)

55 Conical bowl
H. 11.3; D. lip n.a.; D. foot 10.
Floor and lower wall profile. Handmade. Very similar to previous. The flat base is hollowed underneath. The foot area is marked on the outside by a small bulge. 10R 1/3.5; H#/1. (A2 16)

56 Shallow plate
H. pres. 1.6; L. max: 3.4; D. ca. 21.
Rim / wall fr. Rim rising gently towards lip, latter slightly outwards bulging, flattened on top, rounded within. Highly burnished with strokes of fine modelling implement on both exterior and interior. Top of lip also buffed. J/1–2; 2.5YR 2.5/0. Coarse clay body, remnants of organic inclusions. (D2)
Cf. Vysotskaja 1979, 101 fig. 34, 22, second from right: Hellenistic period.

57 Bowl
H. pres. 2.8; L. max. 2.8; D. 22.
Lip / wall fr. Lip broad and rounded, curving on top, rounded within. Wall descending under 45o. Surface finger smoothed. 2.5YR 1/3.5; J/1–2. Coarse clay body, remnants of organic inclusions, inclusions through. Finger smoothed surface, brown surface slip. (D2)
Cf. Vysotskaja 1979, 101 fig. 34, 22: Hellenistic period.

***Coarse ware – closed shapes* (figs. 15–16)**

58 Jug / vessel, not illustrated
Measurements n. a.
Neck fr. Wall rising in gentle curve, from above shoulder. Surface smoothed, traces of a yellowish, creamy slip, compacting the surface. Interior rougher, with traces of throw-process. 2.5YR 0/2.5; J/1–2. With pores, coarse matter, some inclusions. (BC2)

59 Jug / vessel
L. max. 3.5; H. 3.2; Th. max. 2.1.
Lug-handle fr. Roughly formed: horizontally set against body, running more or less horizontally. Slowly curving away from vessel. Outer edge rounded-rectangular. Surface compacted, but uneven. Along break smooth, prepared surface from joining. 3.75YR 0.5/4; H#/1–2. With large pores, and very coarse matter, some organic(?) inclusions. (BC2)

60 Jug / vessel, not illustrated
L. max. 3.5.
Handle fr. Roughly formed: irregular square outline, slightly raised and compressed edges, area in between finger smoothed. Under side smoothed, rough with protrusions of inclusions. 2.5YR 3/1 to 3/4 on surface. H/1–2. With large pores and very coarse matter, some organic(?) inclusions, unstable structure. (BC2)

61 Cooking plate (?), not illustrated
L. max. 6.
Wall fr., slightly curved. Rough, gently undulating surface. Exterior soot-black, slightly shiny, with traces of finger ridges from smoothing. Traces of a red-fox brown colouring agent on interior. 10R 2.5/01; H–J/2–3. With large pores and very coarse matter, some organic(?) inclusions, unstable structure. (BC2)

62 Collar-necked vessel[30]
H. pres. 3.3; L. max. 3.6; D. ca. 30.
Rim / wall fr. Rim vertical, lip slightly projecting, flattened on top. Interior vertical. Exterior curving out slightly, indicating joining with shoulder. Finger smoothed surface, brown surface slip. 2.5YR 4/8 exterior, interior 2.5YR 5/0. J#/1–2. Coarse clay body, remnants of organic inclusions. (D2)
Vysotskaja 1979, 106 fig. 39, 12: 1st c. CE; Dashevskaya 1991, pl. 24, 11: 2nd–3rd c. CE.

63 Collar-necked vessel
H. pres. 3.3; L. max. 2.8; D. 20.
Rim fr. of a pot. Similar to preceding, but rim thinner and less even. Lip smoothed and compacted with straight edged instrument. Exterior curving out slightly, indicating joining with shoulder. Interior dark grey-black, exterior light red-brown slip. J/1; 2.5YR 5.5/0; H/3. Coarse clay body, remnants of organic inclusions. Finger smoothed surface. (D2)
Cf. **62**.

64 Collar-necked vessel
H. pres. 4.6; L. max. 5.2; D. 25.
Rim fr. Similar to preceding. Lip smoothed unevenly. Exterior curving out slightly at foot of rim towards join with shoulder. Finger smoothed surface. Interior and exterior light red-brown slip. Exterior: 2.5YR 4/8 to 5/0, interior 10R 5/8 to 10R 1/5 (grey) in core H–J/1. Very coarse clay body, remnants of organic inclusions. (D2)
Cf. **62**.

65 Collar-necked vessel, not illustrated
H. pres. 2.6; L. max. 2.35.
Rim fr. Rim flaring out gently, lip rounded, smoothed unevenly. Exterior curving towards join with shoulder below. Interior and exterior grey slip. 10R/2.5YR 0/3; J/1–2. Coarse clay body, with inclusions, some over 0.2 cm. Finger smoothed surface with light buffing. (D2)

66 Collar-necked vessel
H. pres. 4.9; L. max. 3.6; D. 18.
Rim fr. Rim flaring out gently, lip rounded, smoothed unevenly. Exterior curving into shoulder below. Interior and exterior grey. 3.75YR 0/4.5–1/4.5; J/1–2. Evenly gritty clay body, with inclusions, some over 0.2. Finger smoothed surface with light buffing and three irregular lines of burnishing. (D2)
Cf. generally: Dashevskaya 1991, pl. 24,7: 2nd–3rd c. CE.

67 Collar-necked vessel
H. pres. 2.2; L. max. 3.
Rim fr. Rim curving out, lip rounded, smoothed unevenly. Interior and exterior grey. 10R 0/3.5; J/1–2. Evenly gritty clay body, with inclusions and remnants of organic material. Finger-smoothed surface with light buffing. (D2)
Cf. Dashevskaya 1991, pl. 26, 2: 2nd–3rd c. CE. The lip flares a bit more sharply.

68 Collar-necked vessel, not illustrated
H. pres. 2.3; L. max. 2.
Rim fr. Rim straight, lip rounded, smoothed unevenly. Interior and exterior light grey to brown with slip. 2.5YR 7/4; J/1–2. Evenly gritty clay body, with inclusions and remnants of organic material. Finger smoothed surface. (D2)

69 Pot or basin, not illustrated
H. pres. 2.85; L. max. 3.15.
Wall fr. A thick wall rising very steeply. In interior sharply off-set slightly undercut ridge, from there flares outwards what appears to be the rim. Exterior of wall curving out slowly. Interior and exterior light brown slip. 3.75YR 0–1/4; J/1–2. Very gritty clay body, with inclusions and remnants of organic material. Finger-smoothed surface. (D2)

70 Collar-necked vessel, not illustrated
H. pres. 2.85; L. max. 3.15.
Wall fr. of a pot or basin. A shoulder rising swiftly to beginning of rim. Interior and exterior with light grey cover. 5YR 2/3; J/1–2. Very gritty clay body, brittle, with inclusions throughout. Finger-smoothed surface. (D2)

71 Collar-necked vessel, not illustrated
H. pres. 6.15; L. max. 3.8.
Wall fr. of a large, round bellied pot. A shoulder rising swiftly into rim. Interior and exterior with light grey to brownish cover. 5YR 1.5/4.5; J/1–2. Gritty clay body, with inclusions throughout. Finger-smoothed surface. (D2)

72 Collar-necked vessel
H. max. 3.1; D. ca. 20–22.
Fr. of vertical rim, widening slightly to top, rounded above. Interior wall vertical with light grey to brownish cover. 2.5YR 4/8; J/1–2. (A2)
Dashevskaya 1991, pl. 24, 11: 2nd–3rd c. CE.

73 Collar-necked vessel
H. max. 1.3; D. 16.
Fr. of vertical rim, lip rounded above. 2.5YR 5/8 to 4.5/2; J/1–2. (A2)
Cf. Dashevskaya 1991, pl. 24, 8: 2nd–3rd c. CE.

74 Collar-necked vessel
H. max. 3.2; D. 20.
Fr. of shoulder and vertical rim, the latter rising continuously from body. Lip narrow, slightly rounded, and projecting outwards. 5YR 5.5/3.5; J/2–3. (A2)

30 The term ›collar-necked vessel‹ describes such pots which have a clearly set-off rim area. The rim may stand vertical, flare outward or even be inclined inwards to a small degree. These vessels are always handmade, and their degree of typological precision various considerably from that of wheel-made pottery. The definition is applied to a majority of fragments found in the trial trench, since this formal occurrence was apparently a very common one in the handmade ceramics of the Crimea through time. The individual body shapes of the vessels – which varied considerably in size – may have been very different.

Dashevskaya 1991, pl. 26, 2 or 13: both 2nd–3rd c. CE. Conceivably this was an open pot.

75 Collar-necked vessel
H. max. 2.5; D. ca. 20.
Fr. of top of shoulder with continuous rim. Lip broad, well rounded on top. 5YR 2.75/1; J/2–3. (A2)
Dashevskaya 1991, pl. 29, 9: 2nd–3rd c. CE.

76 Collar-necked vessel
H. max. 2.8.
Fr. of lip and handle of small pot or pitcher. Neck rising vertically, opening into trumpet-mouth. Lip flaring prominently, thickened and rounded throughout. Oval, compressed handle attached to lip, smoothed down and narrowed at attachment. 2.5YR 3/0; J/2–3. (A2)
Cf. Dashevskaya 1991, pl. 76, 12; pl. 21, 1: both 1st c. BCE–1st c. CE. Reflect the type, although our sample seems lighter and carefully made.

77 Collar-necked vessel (bowl?)
H. max. 3.2; D. ca. 18–20.
Fr. of thick, broadly flaring rim. Lip thickened, outer edge almost vertical. 2.5YR 2.75/0; J#/1. (A2)
Cf. Dashevskaya 1991, pl. 27, 17: 2nd–3rd c. CE. Gives a possible shape sample for this fr.

78 Collar-necked vessel
L. max. 3.8.
Fr. of wall, gently rounded. Wall rather thin, surface well burnished with mottling from light brown-beige to black-brown. A pattern of converging lines, creating a triangular pattern, is engraved in the surface. 2.5YR 2.75/0; J#/1–2. (A2)
Vessels with such decoration are typical of the Kital-Koba (spelling) culture of the 7th through 6th c. BCE. This sherd seems clearly intrusive into the topmost stratum of this trench, but it is another token for early activity at the site.

79 Collar-necked vessel (open pot?)
H. max. 2.3; D. foot ca. 11.
Fr. of base and beginning of wall. Base flat, slightly hollowed underneath, wall rising under approx. 45°. Vertical burnishing strokes on exterior, interior finger smoothed. Exterior with grey cover and interior with grey to brownish coloration. 2.5YR 3/0; H/1–2. Gritty clay body, with inclusions throughout. (D2)
Cf. bases Dashevskaya 1991, pl. 26, 5. 11–13: 2nd–3rd c. CE.

80 Handle
D. 2.2; L. max. 6.
Fr., broken off on one side. It curves in a low arch, originally set horizontally against the vessel. It is irregular rounded-rectangular in section, finger smoothed, and well compacted. Exterior with light cinnamon-to-brown cover and interior with grey to brownish coloration. 10R 1/2.7; 5J/1–2. Gritty clay body, with inclusions and organic remnants throughout. (D2)
No specific type is indicated, but handles of this form are quite common in the repertoire of handmade ceramics of the 2nd–3rd c. CE in the Crimea, see for example Dashevskaya 1991, pls. 24–25. 27 passim.

81 Basin
H. max. 3.8; Th. ca. 1.
Wall fr. of large conical vessel, roughly formed, handbuilt. On the outside a sharp ridge runs around the vessel. Exterior with red-brown coloration, interior with grey to brownish coloration. 2.5YR 6/6; J/1–2. Very gritty clay body, with considerable inclusions and organic remnants throughout. (A2)

82 Basin
H. max. 3; Th. ca. 1.5.
Wall fr. of large conical vessel (or bowl?), roughly formed, handbuilt. At the top of the fr. the wall angles outwards, set-off by a sharp carination inside, a lesser curve on the exterior. 5YR 4.5/1; J/1–2. Gritty clay body, with considerable inclusions and organic remnants throughout. (D2)

83 Closed vessel
H. max. 4.5.
Shoulder, rising gently, breaking upwards sharply into rim. Exterior well burnished. 5YR 4/1; J#/1–2. (E2)

Deposit M West
(Units A3, B3, AB4, AB5)

***Fine ware – open shapes* (fig. 17)**

84 Bowl with incurving rim (?), not illustrated
H. max. 2.
Wall fr. Wall splintered. Reddish-orange terra sigillata glaze, densely applied with brush marks from smoothing. 2.5YR 8/6; A–1/2. (B3)

85 Bowl or skyphos
H. max. 2.2; W. 2.6; D. lip 12.
Rim fr. Wall rising steeply under 45°. The exterior is even, the lip very narrow on top. In the interior it is thickened with a prominent, drop-shaped moulding undercut below. Exterior covered with dark-brown glaze, scaled in places, the interior is covered with a lighter terra sigillata red-brown. Lip worn, clay colour. 2.5YR 8/5.5; B/2–3. (AB4)
Distantly related the shape of: Hayes 1972, 46 fig. 7; 47 Form 23 type A: early to mid-2nd c. CE.

***Fine ware – closed shapes* (fig. 17)**

86 Oinochoe
H. max. 4.3.
Neck fr. with beginning of a broad strap-handle's root attachment. Fairly wide, conical shape with fine ridges on the exterior, interior with rougher finger marks. Surface covered with thin terra sigillata glaze. From top of mouth drops of brown glaze dripped down. B–C/3; 3.0YR 7/5.5. (A3)

87 Oinochoe or pitcher
L. max. 5.4.
Shoulder fr. of medium size vessel. Shoulder sloping slowly upwards, thin wall. Step sets off neck, which is wide and probably rather squat. Interior with light buff to greenish slip, exterior

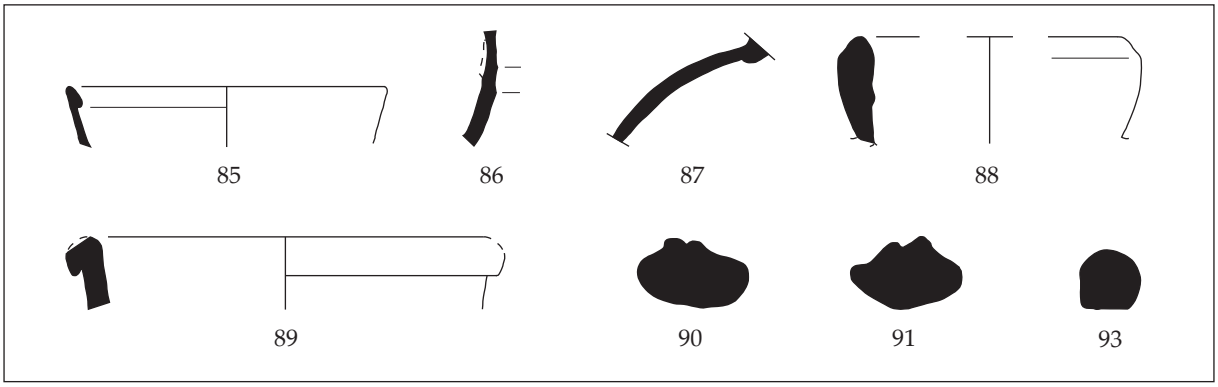


Fig. 17: Deposit M West – Fine and plain wares. (M 1 : 3)

mottled surface from light to dark brown in irregular patches of glaze. Slightly metallic sheen in spots. D/3; 3.75YR 3/5.5. (B3)
The shoulder form as well as the type of clay and the glaze with its irregular, often thin application strongly resemble late Hellenistic lagynoi from the Pontic basin and the Aegean. The exact form remains undetermined, and the date can range from the last two c. BCE to the early Imperial period. The place of manufacture remains undetermined, but may well be local.

***Plain ware – closed shapes* (fig. 17)**

88 Amphora
H. max. 4.
Rim fr. Lip integrated continuing evenly into neck. Traces of ivory light slip. E–F/2; 10R–2.5YR 8/5.5. (B3)

89 Amphora
H. max. ; D. ca. 15–16.
Rim fr. Exterior evenly curving upwards to tightly turned lip. Interior lip with berm smoothed, portion below gently convex. Lip set off by small groove below. Traces of a rather dense, dark brown-reddish glaze on interior and exterior. E/1–2; 10YR/6/3; very highly condensed clay. (A3)
Zeest 1960, 159 pl. 23, 49b: 2nd c. BCE.

90 Amphora
L. max. 5.6; W. 4.1; Th. max. 2.4.
Handle, central segment with portion of zenith curve. Section asymmetrical, basic shape oval. Off centre on top two ridges, one small, the other large. F/1–2; 7.5YR 7/5. (A3)
Cf. Vnukov 1988, 199 fig. 1 Type CIIIA and CA: 1st c. BCE–early 1st c. CE.

91 Amphora
L. max. 6.9; W. 4.3; Th. max. 2.9.
Handle, central segment. Similar to **90**. Section asymmetrical, basic shape oval. Next to centre on top two ridges, only slightly different in size. F/1–2; 7.5YR 7/6. (B3)
Zeest 1960, 164 pl. 28, 64b: 1st c. BCE.

92 not given

93 Hydria (?)
L. max. 6.9; D. 2.
Handle, about one third. The handle was part of a ›double barrel‹ handle, whose underside was flattened. Horizontally mounted. Surface covered with an ivory slip. F/1–2; 2.5YR 5/6. (AB4)

Implement:

94 Clay roundel, not illustrated
D. max. 4.6; Th. 1.
A fr. of an amphora shoulder with the neck-shoulder joint apparent – was roughly cut into a circular shape. D&F/2–3; 2.0YR 5.5/7. (AB4)

***Coarse ware – open shapes* (fig. 18)**

95 Open vessel, not illustrated
H. max. 3.6; W. 3.
Wall fr., vessel possible conical in shape. Handmade. The fr. is burnished on both sides: The interior shows a grey colour with brownish undertones and slight undulation of the surface from the ceramic construction. The shiny exterior is highly burnished in a beige to fox-brown with burnish stripes, creating an irregular stroke pattern. Clay F&J/2; 2.5YR 6/3.5, very gritty but well compacted.
Among the finds from this trial trench this fr. represents probably the finest burnished pottery. The wall is rather thin and well built up; the pot could have served well in the table service of a household. The shape remains ambiguous, but a general conical form, possibly with an integrated lip, is assumed. The time period is most likely Hellenistic or the transitional period – 1st c. BCE–1st c. CE, when such wares, according to Vysotskaja[31], were much more popular than later on.

96 Large bowl
H. max. 6.5; D. ca. 19–20.

31 Vysotskaja 1979, 102, where she presents her view that at the beginning of the Christian era the quantity of burnished pottery went noticeably down in Neapolis, to be replaced by ›crude vessels, poorly smoothed over‹.

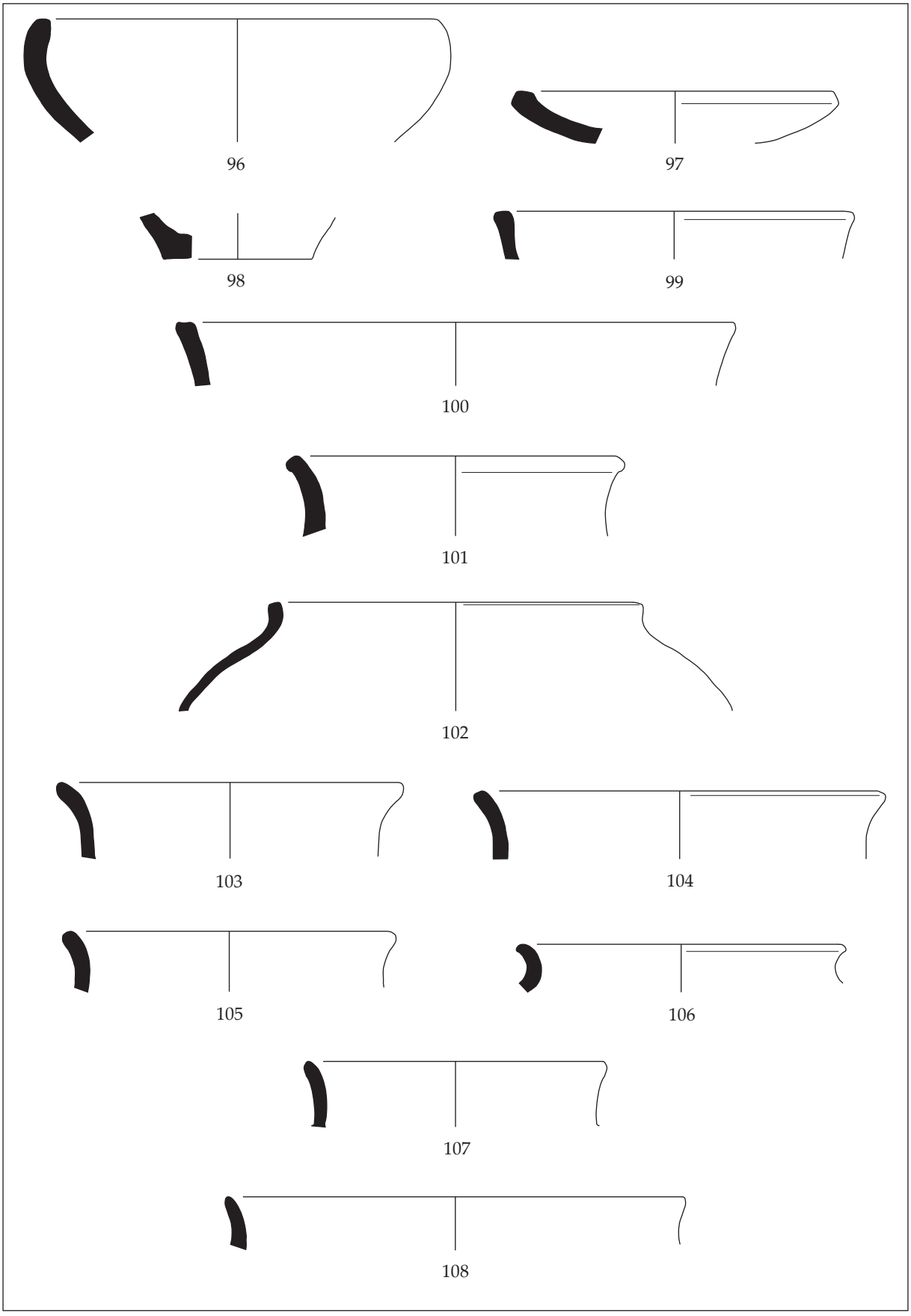


Fig. 18: Deposit M West – Coarse wares. (M 1 : 3)

Wall fr. of hemispherical, thick-walled bowl, curving evenly upwards. The rim turns inwards; the lip is flattened on top and slanted towards interior of bowl. 2.5YR 5/3; H–J/2, very coarse throughout. (AB5)
Dashevskaya 1991, pl. 13, 5. 7: 1st c. BCE–1st c. CE.

97 Plate
H. max. 2.6; D. 16.
Rim fr. of widely spreading plate. Rim curving upwards lightly, exterior of lip off-set, top flattened and set off against interior with sharp edge. 2.5YR 3.75/0.5; H–J/2, very coarse throughout, but well compacted. (A3)
For a somewhat related dish see Dashevskaya 1991, pl. 13, 10: 1st c. BCE–1st c. CE.

98 Open pot
H. max. 2.2; D. foot ca. 8.
Foot fr. Underside of base slightly hollowed, set off from wall with sharp edge. Wall rising steeply, curving slightly outwards. 10R 8.5/4; H–J#/2. (AB5)
Bases such as these are very common and lack mostly shape specific characteristics, such as ring foot, moulding etc. A sample for an open vessel from which this fr. might have come from is Dashevskaya 1991, pl. 13, 3: 1st c. BCE–1st c. CE.

***Coarse ware – closed shapes* (fig. 18)**

99 Round bellied pot
H. max. 2.5; D. ca. 18.
Rim fr. of vessel with more or less vertical rim. Lip slightly thickened, flattened-round on top. 2.5YR 3/2; H#/1-2. Very gritty clay body loose in structure. (B3)
Related: Dashevskaya 1991, pl. 14, 9: 2nd–3rd c. CE.

100 Vessel
H. max. 3.2; W. 5; D. ca. 28.
Rim fr. (tureen?), vessel possible conical in shape. Handmade. Surface inside and out is rough and lightly compacted, finger marks. H#/1–2; 2.5YR 5.5/8. Very gritty clay body loose in structure. (B3)
Cf. **99**.

101 Vessel with collar neck
H. max. 3.9; L. max. 5.5; D. 16.
Rim fr., rising steeply. Lip thickened outwards. Surfaces inside and out rough and uneven. Smoothed, traces of a whitish slip. H@/1; 5YR 6.5/6; clay with pores, coarse matter, and inclusions. (AB4)
Cf. Dashevskaya 1991, pl. 19 no.: 1st c. BCE–1st c. CE.

102 Collar-necked vessel
H. max. 6; L. max. 7.1; D. 18.
Rim and wall, approximately half profile. Rounded shoulder, spherical body, shape of base unknown. Rim rising almost vertically, lip rounded. Exterior finger marks, compacted, grey to brown, some mottling. Interior with burnishing pattern, especially directly under lip. Grey-brown to light brown surface. 2.5YR 2.75/1; J#/1–2; Soft clay body, very coarse matter, some organic(?) inclusions. (AB4)
Cf. Dashevskaya 1991, pl. 19, 2; see also ibid. pl. 18, 2–3, all: 1st c. BCE–1st c. CE.

103 Collar-necked vessel
H. max. 3.6; L. max. 4.3; D. 17.
Rim, similar to no. 102. Rim flaring lightly rounded. 2.5YR 2.75/2; J#/1-2. Soft clay body, very coarse matter, some organic(?) inclusions. (AB5)

104 Collar-necked vessel
H. max. 3.6; L. max. 3.7; D. 20.
Rim, similar to no. 102. Rim flaring lightly rounded. Light burnishing of surface, compacted. Lip flattened, burnish marks. 2.5YR 2.75/2; J#/1–2. Soft clay body, very coarse matter, some organic(?) inclusions. (AB4)

105 Collar-necked vessel
H. max. 2.9; L. max. 4.9; D. 16.
Rim, similar to no. 102. Rim flaring, lip lightly rounded. Interior with finger marks, compacted. Exterior finger-smoothed, brown to grey and black-soot, mottled. H#/1–2; 2.5YR 0/2.5. Coarse clay matter. (AB5)

106 Collar-necked vessel
H. max. 2.6; L. max. 3.6; D. 16.
Rim, similar to preceding. Rim rather low, flaring, lip bent out and rounded. 5YR 5/6; H#/1–2. Sandy clay structure, fine inclusions. (B3)

107 Collar-necked vessel
H. pres. 3.2; L. max. 4.7; D. 15.
Rim fr. Rim vertical, lip thickened and slightly projecting, flattened on top. Interior nearly vertical. Bottom rim turning out into shoulder rise. Finger-smoothed surface, brown surface slip. 2.5YR 5/3; J/2. Coarse clay body, remnants of organic inclusions. (A3)

108 Collar-necked vessel
H. pres. 2.7; L. max. 2.5; D. 23.
Rim fr., vertical, lip thickened and slightly projecting, flattened on top. Interior nearly vertical. Bottom rim turning out into shoulder rise. 7.5YR 6.5/6; H/2. Finger-smoothed surface, brown surface slip. (AB5)

109 Collar-necked vessel, not illustrated
H. max. 6; L. max. 7.1; D. 16.
Rim, rising almost vertically, concave, rising steeply. Lip narrow and ridged on top. Finger marks on exterior, interior compacted. 2.5YR 5/6; H/2. Clay body firm, inclusions of pebbles and grog. (A3)

Stone objects

110 Grindstone, not illustrated
L. max. 11.1; W. 5.3; Th. 3.5.
Hand-size grindstone, part of one side with corner broken off. The original shape was broadly drop-shaped, with the lower wider end fitting well inside the palm. Underside is flat, the narrower end blunted, as if used for hammering. The wider end is sloping some and overall rounded. Lime

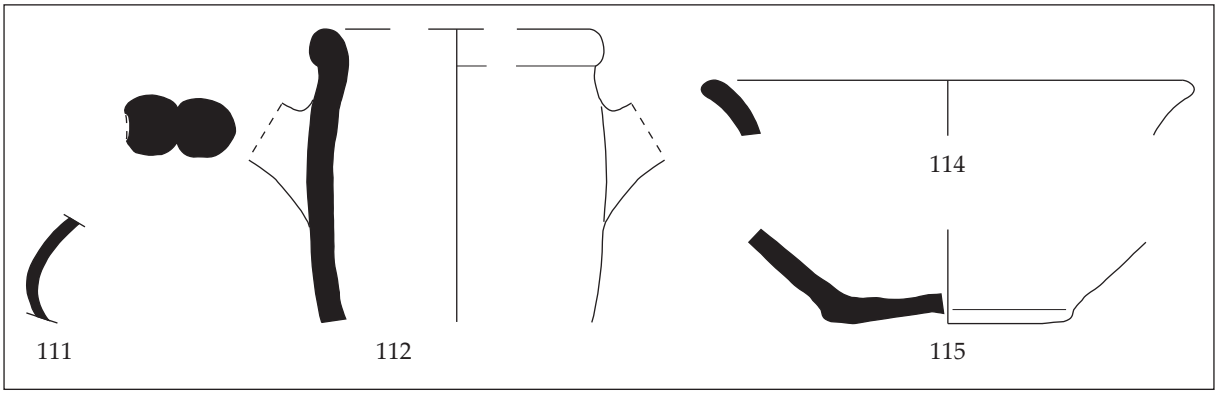


Fig. 19: Deposit M East. (M 1 : 3)

incrustation over much of the surface. Hard sandstone. (DE4)

Deposit M – East

***Fine ware – closed shapes* (fig. 19)**

111 Oinochoe
H. max. 3.9; L. max. 4.7; D. not defined.
Lower wall fr. Probably fairly large oinochoe. The wall rises swiftly, bulging outwards lightly in lower third of body below widest diameter. Interior with pronounced ridges, some also on exterior.
Exterior: lower section with light fox, reddish brown slip. Portion above covered with brushed on brown-black glaze with clouding in spots. Slightly metallic sheen throughout, matt in reflection, some scaling apparent. 2.5YR 6/5.5; B/1–2. (DE4)
This fr. comes from a rather small vessel, probably a type of round bodied, narrow necked jar or lekythos. It most likely dates to the late Hellenistic period, and is of uncertain, probably local, i.e. Crimean, manufacture.
Cf. for possible shape Dashevskaya 1991, pl. 34, 7: 1st c. BCE–1st c. CE.

***Plain ware – closed shapes* (fig. 19)**

112 Amphora
H. max. 10.2; W. 7; D. mouth.
Neck and rim. Neck cylindrical, slightly bulging. Round, rolled and projecting lip, undercut by shallow groove. A short distance below the lip a handle attachment. 'Double-barrel' handle of two rounded straps. 4.5YR 6/6; Clay F/2–3. The body is very gritty with large amounts of finely ground grog. (DE4)
Cf. Vnukov 1988, 199 fig. 1 Type CI: ca. 1st–early 2nd c. CE; Dashevskaya 1991, pl. 31, 1 (from Ust-Alemnskoje Gorodische) and 2 (from Alma-Kermen): 1st–3rd c. CE.

Coarse ware – open shapes

113 Hemispherical(?) bowl, not illustrated
L. max. 80; W. 5; D. not established.
Wall fr. Probably hemispherical bowl. Handmade. Evenly curving body, rising from what must have been a rounded base. The interior is well compacted with finger marks, the exterior is nicely burnished with mottling ranging from grey-black to light brown. 2.5YR 0/4.5; H@/1–2. (DE4)

***Coarse ware – closed shapes* (fig. 19)**

114 Round-bellied pot
H. pres. 2.5; L. max. 3.5; D. mouth 18.
Rim fr., flaring out gently, concave. Handmade. Lip rounded, slightly flattened. Exterior brown with soot-like black in places. Interior greyish-dirty slip. 2.5YR 0/4; J/1–2. Coarse clay body, with inclusions. Finger-smoothed surface with light buffing. (DE4)
Cf. Dashevskaya 1991, pl. 15, 8–9 (from Neapolis): 2nd–3rd c. CE.

115 Flat based vessel/jug(?)
H. pres. 4.6; W. 5.7; D. foot 9.
Base fr. Handmade. Base flat, exterior set off by small moulding. Underside almost flat, slightly uneven. Bottom rather thin, wall heavy, rising under ca. 45°, running almost straight. Slight undulation in the wall from coil-building. Clay 2.5YR 0/3.5; D&F/2. Coarse and uneven clay body with large pores and inclusions. (DE4)

Deposit Delta (Unit A6)

***Fine ware – open shapes* (fig. 20)**

116 Skyphos, Attic type
H. 2.3; L. max. 2.6; D. 14.
Rim fr. Wall rising, gently convex. Lip rounded off-centre. Wall even. Glaze black and deeply saturated with even metallic sheen. Partly flaking, worn on top of lip. A/1–2 8.75YR 6/3 with some darker shades inside body. (A6)
The manufacture of the fr. could be Attic, although local, i.e. Crimean or Pontic manufacture remains a distinct possibility.
This fr. is the single find of Greek black-glazed ware from this trial trench. It is the lip segment of an Attic type skyphos, a leading form of Greek 5th c. BCE ceramics. The careful forming of the wall and the dense lustre of the black-blueish glaze are also typical for manufacture in the 5th c. The shape can be compared to a series from the Athenian Agora: Sparkes – Talcott 1970, 259 pl. 16, 4 no. 340: ca. 480–470 BCE; no. 341: ca. 480–

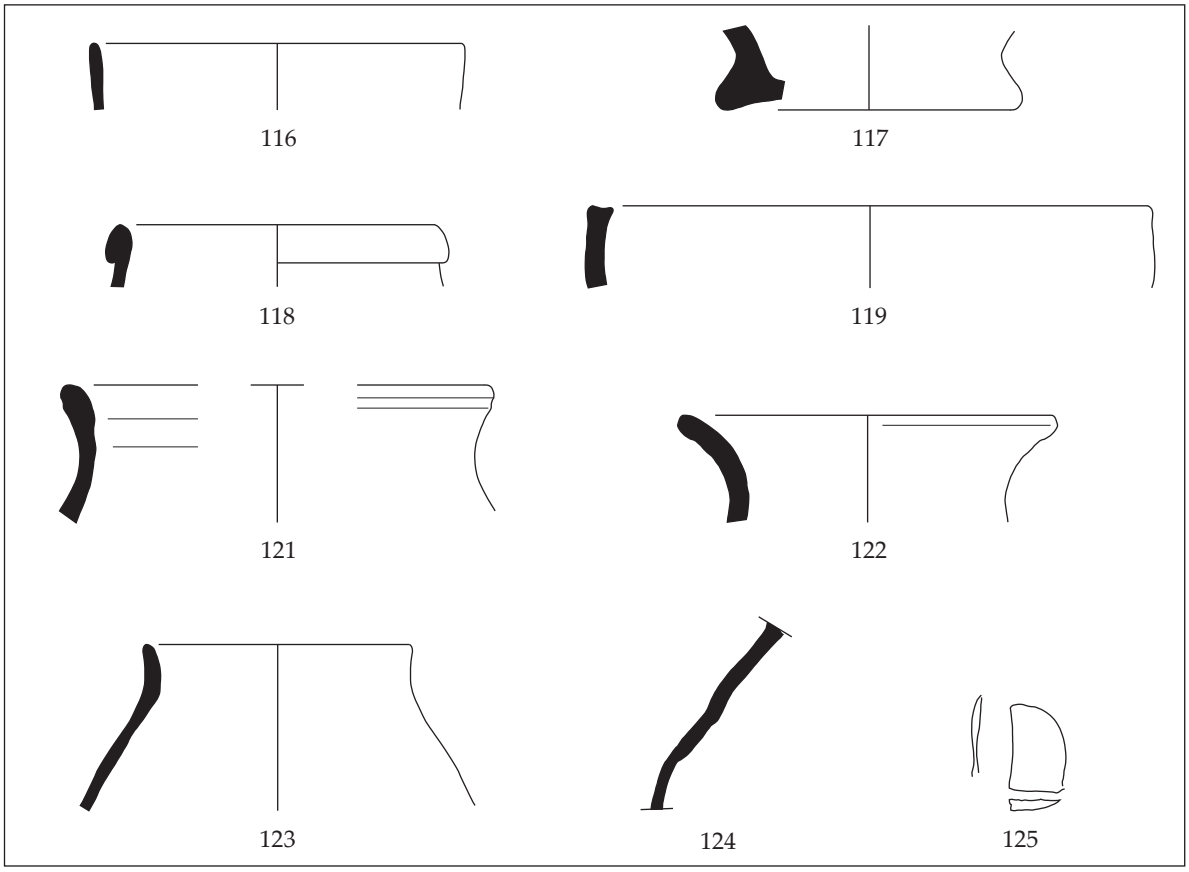


Fig. 20: Deposit Delta. (M 1 : 3)

450 BCE; no. 342: ca. 470–460 BCE; no. 343: ca. 460–440 BCE; no. 440–425 BCE.

***Plain ware – closed shapes* (fig. 20)**

117 Pitcher / Jug
H. max. 3.4; D. base 11.
Foot fr. Foot projecting, rounded with groove on outside. Narrow curved resting surface, underside evenly hollowed. Floor thin. Wall thick, rising steeply, set off by irregular ridge against foot. Buff wash. 9.0YR 5/7; C/2–3. (A6)
A general comparison can be made with such vessels as Dashevskaya 1991, pl. 54, 13 (from Neapolis, Mausoleum): 1st c. BCE–1st c. CE.

118 Amphora
H. max. 2.2; D. ca. 12.
Rim fr., neck bulging, slightly curving inwards. Lip rounded above, well moulded, sharply set off by undercutting. 10R/2.5YR 6/8; C–F/2. With inclusions, gritty structure. (A6)
Zeest 1960, 160 pl. 24, 52a (from Kos): 3rd–2nd c. BCE.

***Coarse ware – open shapes* (fig. 20)**

119 Hemispherical bowl
H. max. 2.7; D. rim 21.
Rim fr., rising steeply, little curved. Handmade. Lip rounded-square in section, slight moulding on exterior. Burnished with vigorous strokes, creating a pattern of vertical-slanted ripples on the exterior. Lighter coloration on the lip and top of interior. H/2–3; 10R 1/2.5. (A6)
Cf. Dashevskaya 1991, pl. 11, 12. 15: 3rd–2nd c. BCE.

120 Hemispherical bowl, not illustrated
L. max. 9.9.
Bottom fr. Evenly curved, thick wall. Handmade. Semi-burnished with densely compacted interior surface. Exterior rough and gritty with mottling from brown to grey/dark grey. Finger marks. 5YR 6/6 exterior, 7.5YR 6/3 interior; H/2–3. (A6)

***Coarse ware – closed shapes* (fig. 20)**

121 Collar-necked vessel
H. pres. 3.9; L. max: 10.4; D. mouth.
Rim fr., flaring out evenly. Handmade. Lip slightly thickened and rounded, smoothed unevenly. Interior and exterior grey to black. H–J/1–2; 10R 0/3.5. Evenly gritty clay body, with inclusions. Finger smoothed and compacted surface. (A6)
Vysotskaja 1979, 106 fig. 39, 12: ca. 1st c. CE.

122 Collar-necked vessel
H. pres. 3.4; L. max. 5; D. mouth ca. 14.
Rim fr., similar to preceding (A6) flaring widely in trumpet-mouth fashion. Handmade. Lip rounded, and little thickened underneath, smoothed

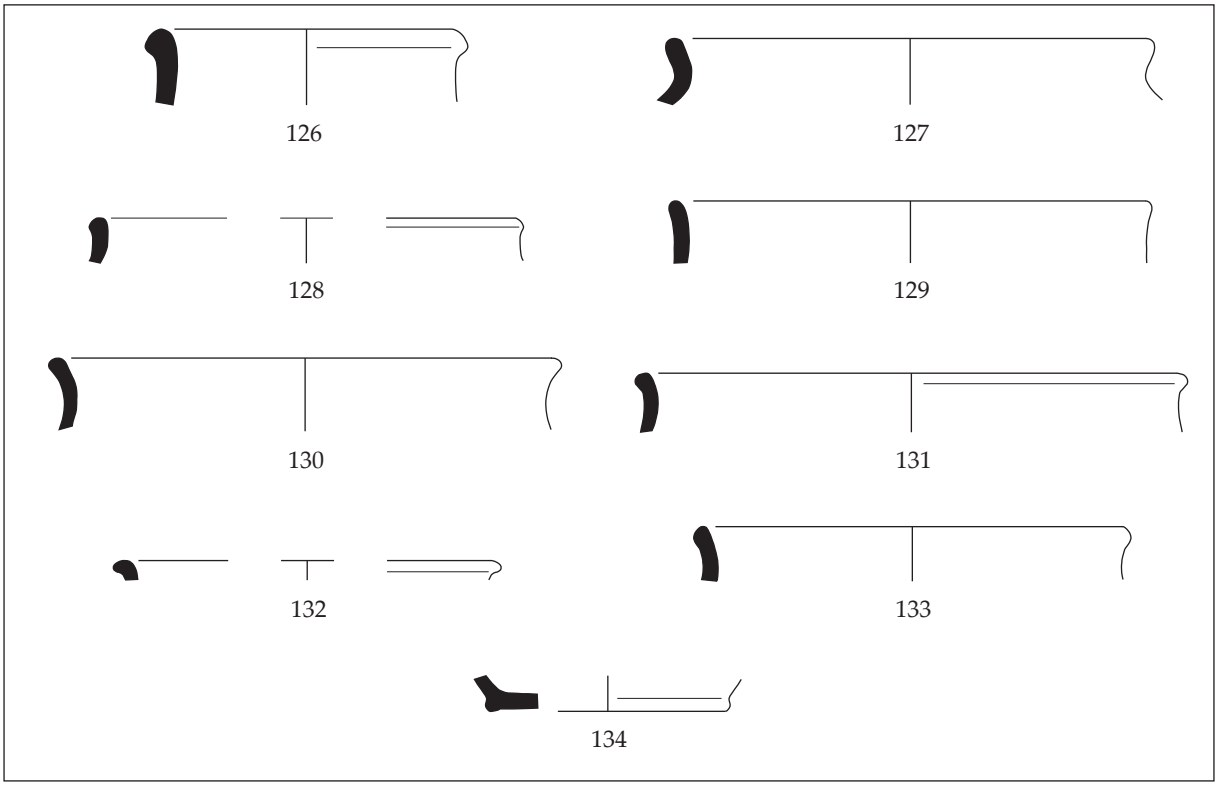


Fig. 21: Deposit K and C horizon. (M 1 : 3)

unevenly. Interior and exterior light grey to black, with mottled effect. 10R 0/3.5; H–J/2. Evenly gritty clay body, with inclusions. Finger-smoothed and compacted surface. (A6)
Vysotskaja 1979, 106 fig. 34, 6: Hellenistic period; Dashevskaya 1991, pl. 17, 7: 3rd–2nd c. BCE.

123 Collar-necked vessel
H. pres. 6.1; L. max. 4.1; D. mouth 10.
Rim and shoulder fr., rising evenly. Handmade. Lip thin and rounded on top smoothed unevenly. Wall thin. Exterior mottled fox-brown to black, the latter possible trace of fire. Finger smoothed and compacted surface. Interior grey. Clay body fired in two colours: exterior 2.5YR 5/5; interior 2.5YR 0/4.5; H–J/2. Evenly gritty clay body, with inclusions. (A6)
Cf. Dashevskaya 1991, pl. 12, 14: 1st c. BCE–1st c. CE.

124 Collar-necked vessel
H. pres. 8.5.
Shoulder fr., rising evenly. Handmade. Overall similar to no. 123. Wall thin. Exterior and interior grey to black. Wavy surfaces from coil-building. 10R 0/3.5; H–J/2. Evenly gritty clay body, with inclusions. Finger-smoothed surface. (A6)

***Stone objects* (fig. 20)**

125 Grindstone
L. max. 3.2; W. 2.1; Th. 0.3.
A sliver like fr. of a grind implement of a dense stone. Surface evenly worked. The stone probably was hand-sized originally with corners evenly rounded. (A6)

Deposit K and C Horizon[32]
(Units A7, A8)

***Plain ware – closed shapes* (fig. 21)**

126 Amphora
H. max. 4.3; L. max. 5.5; D. mouth ca. 11.
Rim fr., neck vertical. Lip a round moulding, projecting prominently. 10R/2.5YR 6/8; C–F/2 with inclusions, gritty structure. (A7)
Zeest 1960, 160 pl. 24, 51a (from Kos): 3rd–2nd c. BCE.

***Coarse ware – closed shapes* (fig. 21)**

127 Collar-necked vessel
H. pres. 3.4; L. max. 5.2; D. mouth 18.
Rim / shoulder fr., rising vertically, concave. Handmade. Lip slightly thickened and rounded, smoothed unevenly. Finger smoothed and compacted surface. Exterior black-grey to reddish brown, mottled, interior grey to brownish. 10R 0/3.5; H–J/1–2. Evenly gritty clay body, with inclusions. (A7)
Cf. Dashevskaya 1991, pl. 10, 11 (from Neapolis): 3rd–2nd c. BCE.

32 Among the body sherds of transport amphorae one large body lower segment shows traces of overfiring. The surface turned slightly vitreous and the wall began to buckle. It is uncertain, though, whether this is part of a still usable vessel or the remains of a firing mishap, executed on the acropolis of Neapolis.

128 Collar-necked vessel
H. pres. 2.4; L. max. 1.9.
Rim fr., rising vertically, gently concave. Handmade. Lip slightly thickened, flat-rounded, smoothed unevenly. Exterior black-grey, interior grey to brownish. 10R 0/3.5; H–J/1–2. Gritty clay body, with inclusions and pores. (A7)

129 Collar-necked vessel
H. 2.7; L. max. 2.4; D. (est.) 18.
Rim profile, flaring out widely. Handmade. Lip's edge folded over in building process. Finger marks on the exterior, the interior patted with some finger traces. 2.5YR exterior 5/8 interior 3.5/0; H#/1–2. (A8)

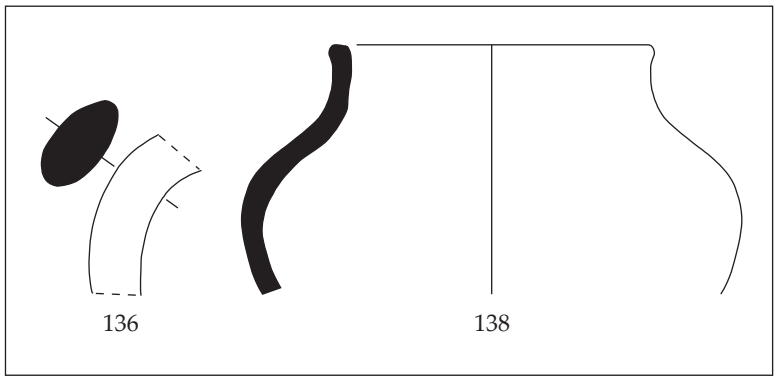


Fig. 22: Floor V. (M 1 : 3)

130 Large collar-necked pot
L. max. 4.0; H. 3.3; D. (est.) 19.
Rim fr. Handmade. Rim flaring outwards, lip moulded and projecting on exterior, flattened on top with implement. Finger striations on exterior, interior uneven and compacted. Finger-smoothed surface, brown surface slip. 2.5YR; exterior 5.5/4; interior 4.5/0; 2.5 H–J/2. Coarse to medium clay body, remnants of organic inclusions. (A8)
Cf. Dashevskaya 1991, pl. 10, 22: 3rd–2nd c. BCE.

131 Collar-necked pot
H. pres. 2.8; L. max. 2.9; D. ca. 20.
Very similar to preceding, but smaller. Handmade. Rim flaring more pronouncedly, lip thicker, moulded and projecting on exterior. Finger smoothed surface, brown surface slip. Finger striations on exterior and interior. 2.5YR 5/6 exterior, interior 2.5YR 5/0; H–J/2. Coarse, but rather compact clay body, remnants of organic inclusions. (A8)

132 Collar-necked vessel
H. max. 1.0.
Rim fr. Handmade. Rim flaring out, lip fully moulded and angling outwards. Grey to dark-grey surface inside and out. 2.5YR interior 2.5YR exterior 5/6 3/0; H–J#/2. Coarse and gritty clay body, two layers separated from firing. (A8)
Cf. Dashevskaya 1991, pl. 10, 8 (from Neapolis): 3rd–2nd c. BCE.

133 Collar-necked vessel
H. pres. 2.5; L. max. 3.4; D. ca. 16.
Rim / top of shoulder fr. Handmade. Rim leaning outwards a little, lip hardly emphasized. Top of lip undulating with small scalloped shape areas gauged out. Surface demi-burnished and finger compacted. Dark-grey brownish in colour inside and out. 2.5YR 5/6 exterior, interior 2.5YR 5/0; H–J#/2. Coarse and gritty clay body, two layers separated from firing. Possible surface slip(?). (A8)
Cf. Dashevskaya 1991, pl. 10, 3 (from Neapolis): 3rd–2nd c. BCE; Vysotskaja 1979, 104 nos. 1–2. According to Vysotskaja p. 102 such vessels occur, but rarely, during the Hellenistic and late Hellenistic periods.

134 Collar-necked vessel
H. pres. 1.6; L. max. 5.1; D. foot 9.
Fr. of base and beginning of wall. Handmade. Base flat wall rising very steeply. Exterior with light reddish-brown cover, interior grey. H#/1–2; 3.75YR 5/0.5. Very gritty clay body, with inclusions throughout. (A8)

Floor VI
(Units D6 and E6)

135 Round-bellied pot, not illustrated
H. pres. 2.7; L. max. 3.7.
Rim fr. Handmade. Rim flaring outwards. Lip as wide as wall, evenly rounded. Wall thin. Surface highly burnished with dense gloss, deep black. 2.5YR 5/6 exterior, interior 2.5YR 5/0; H–J#/2. Coarse clay body, brittle, some layering. (E6)

Floor V
(Unit E7)[33]

***Plain ware – closed shapes* (fig. 22)**

136 Amphora
L. max. 7.5; H. handle 2.2; W. handle 3.8.
Handle fr., curved section. Handle oval-pointed in section. Clay with finely ground grog evenly inter-spaced. 5YR 8/4; C–D/2. (E7)

137 Amphora, not illustrated
L. max. 12.0.
Shoulder / wall fr. Evenly curved. Clay with frequent mica. Ivory slip on exterior. 5YR 6/4; C–D/1–2. (E7)
Probably Hellenistic.

***Coarse ware – closed shapes* (fig. 22)**

138 Round-bellied pot
H. pres. 10.3; L. max. 7.9; D. mouth 12.

33 In addition, body fr. of amphora is worth mentioning. It comes from the lower segment of an amphora body and is of a a light brown clay carrying purple tint. A fair amount of mica is evident, as well as finely ground ceramic additions.

Rim and wall, full profile preserved to inward curve of base. Collar rim, vertical and gently concave. Lip rounded, smoothed unevenly. Interior dark in bottom area, brownish towards top, exterior soot-black. Finger marks on exterior, interior compacted, light buffing on top of lip. 10R/2.5YR 0/3; J/1–2. Coarse clay body, with inclusions. (E7)
For general typology compare Dashevskaya 1991, pl. 17, 2. 6: 3rd–2nd c. BCE.

Passa D7

Fine ware – open shapes

139 Bowl / dish, not illustrated
L. max. 4.0.
Lower wall fr., spreading sideways. Wall rather thick. On exterior traces of terra sigillata, interior brownish-red slip. Clay fired unevenly, B/1–2; exterior 2.5YR 5/7, interior 2.5YR. Fine turning grooves on exterior. (D7)
The thickness of the wall points to a rather large bowl or plate, which dates probably from the Hellenistic period.

Coarse ware – open shapes

140 Bowl, not illustrated
H. 3.8; L. max. 6.4; D. ca. 30.
Rim fr., rising steeply. Handmade, uneven. Lip wider, bulging inwards, raised at outer edge and rounded forward. Top undulating, exterior wall also uneven. H/1–2; exterior 2.5YR 5/6, interior 2.5YR 0/4. Buff, greyish yellow slip, surface carefully smoothed, possibly to emulate plain ware. (D7)
Cf. the bowls Dashevskaya 1991, pl. 10, 15. 16. 20 (all from Neapolis): 3rd–2nd c. BCE.

141 Bowl, not illustrated
H. 1.4; L. max. 2.8; D. ca. 20.
Handmade, uneven. Rim rising steeply, flaring out. Lip rounded inwards. Surface gritty, rough finger marks on exterior. Interior smoothed and compacted. 2.5YR 5/4.5; H/1–2. (D7)

Plain ware – closed shapes

142 Round-bellied pot, not illustrated
H. 3.9; L. max. 2.9; D. ca. 22.
Handmade, uneven. Shoulder rising steeply into collar neck. Lip rounded, at interior set off by ridge. 6.75YR 5/6; H/1. Surface roughly smoothed with finger marks on exterior and interior. (D7)
Cf. Dashevskaya 1991, pl. 10, 22: 3rd–2nd c. BCE.

Implement:

143 Burnishing tool, not illustrated
L. max. 4.5; W. max. 4.2; Th. 2.2.
This amphora handle fr. is cut across on either end, giving it an approximately the form of a parallelogram. Objects like this were used to burnish the surface of vessels, and maybe in the processing of leather or similar materials as well. The current form shows clearly the result of the rubbing action, creating some facetted surfaces at either end. 5YR 6/6; F/2. (D7)
For the handle shape cf. Zeest 1960, 158 pl. 22, 43: 4th c. BCE.

Deposit N
(Unit E8)

Plain ware – closed shapes

144 Pitcher, not illustrated
H. pres. 2.4; D. base 11.8; Th. floor 1.9.
Base fr., probably of a pitcher. The heavy disk-foot is set off from the body's wall by a half-round moulding projection. The underside consist of a broad, slowly rounded resting surface, the centre is hollowed. The interior of the vessel is stepped down to the centre. The wall was very thin in relation to the wall. 2.5YR 5.5/6; D&F/1–2. The clay has a tight, compacted sand-like structure. (E8)
In this pouring vessel the contrast between the heavy bottom and the wall is striking. The reason might have been that in practical terms, though, such weight distribution will make the pot stand more firmly on the ground or table.

145 Hemispherical bowl, not illustrated
L. max. 8.5.
Bottom fr. Evenly curved, thick wall. Handmade. Burnished with densely compacted interior surface, creating a mottling effect from slate-grey to grey-brown. Exterior well-polished and lightly burnished in brown to almost dark mottling effect. 2.5YR 3/1; H/1–2 I.T. (E8)
Cf. for a possible comparison: Dashevskaya 1991, pl. 11, 15: 3rd–2nd c. BCE.

Other remains:

Deposit M: East

In the soil debris of a mud-brick construction and waddle-and-daub came to light, partly still covered with carefully prepared white lime-plaster adhering to them. On several of these fr. impressions of wood or reed have been preserved, their D. ranges from 0.4 to more than 1.8 cm. The size of the wooden inserts lies in the range of ca. 1 to over more than 2 cm, but as unworked wood was used the variations of size seem to be considerable. Not enough has been preserved to gauge the frequency or the density of these insertion rods both length or crosswise. The thickness of the wall, too, eludes us at this point.

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